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SESSIONAL PAPERS

VOLUME 9

FIRST SESSION OF THE NINTH PARLIAMENT

OF THE

DOMINION OF CANADA

SESSION 1901

5366F
7/2/02



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(This volume is bound in two parts.)

1. Report of the Auditor General for the year ended 30th June, 1900. Presented 15th February, 1901, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 2.

2. Public Accounts of Canada, for the fiscal year ended 30th June, 1900. Presented 11th February, 1901, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*
3. Estimates of sums required for the service of Canada, for the year ending on the 30th June, 1902. Presented 11th February, 1901, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.
4. Supplementary Estimates for the year ending 30th June, 1901. Presented 19th February, 1901, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*
5. Further Supplementary Estimates for the year ending 30th June, 1901. Presented 9th April, 1901, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*
- 5a. Supplementary Estimates for the year ending 30th June, 1902. Presented 10th May, 1901, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*
- 5b. Further Supplementary Estimates for the year ending 30th June, 1901. Presented 14th May, 1901, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*
- 5c. Further Supplementary Estimates for the year ending 30th June, 1902. Presented 18th May, 1901, by Hon. W. S. Fielding...*Printed for both distribution and sessional papers.*
6. List of Shareholders of the Chartered Banks of Canada, as on the 31st December, 1900. Presented 26th March, 1901, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*
7. Report of dividends remaining unpaid and unclaimed balances and unpaid drafts and bills of exchange in the Chartered Banks of Canada, for five years and upwards prior to 31st December, 1900. Presented 20th May, 1901, by Hon. W. S. Fielding...*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 3.

8. Report of the Superintendent of Insurance, for the year ended 31st December, 1900.
Printed for both distribution and sessional papers.
9. Abstract of Statements of Insurance Companies in Canada, for the year ended 31st December, 1900. Presented 2nd April, 1901, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 4.

10. Report of the Department of Trade and Commerce, for the fiscal year ended 30th June, 1900. Presented 12th March, 1901, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 5.

11. Tables of the Trade and Navigation of Canada, for the fiscal year ended 30th June, 1900. Presented 18th February, 1901, by Hon. W. Paterson.....*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 6.

12. Inland Revenues of Canada. Excise, etc., for the fiscal year ended 30th June, 1900. Presented 11th February, 1901, by Hon. M. E. Bernier*Printed for both distribution and sessional papers.*
13. Inspection of Weights, Measures, Gas and Electric Light, for the fiscal year ended 30th June, 1900. Presented 11th February, 1901, by Hon. M. E. Bernier.
Printed for both distribution and sessional papers.
14. Report on Adulteration of Food, for the fiscal year ended 30th June, 1900. Presented 22nd February, 1901, by Hon. M. E. Bernier.....*Printed for both distribution and sessional papers.*
15. Report of the Minister of Agriculture, for the year ended 31st October, 1900. Presented 11th February, 1901, by Hon. S. A. Fisher*Printed for both distribution and sessional papers.*
16. Report of the Directors and Officers of the Experimental Farms, for the year 1900. Presented 4th March, 1901, by Hon. S. A. Fisher....*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 7.

17. Criminal Statistics for the year 1900*Printed for both distribution and sessional papers*
18. Report on Canadian Archives, 1900.....*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 8.

19. Report of the Minister of Public Works, for the fiscal year ended 30th June, 1900. Presented 11th February, 1901, by Hon. J. I. Tarte.....*Printed for both distribution and sessional papers.*
20. Annual Report of the Department of Railways and Canals, for the fiscal year ended 30th June, 1900. Presented 18th February, 1901, by Hon. A. G. Blair.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 9.

21. Report of the Department of Marine and Fisheries (Marine), for the Fiscal Year ended 30th June, 1900. Presented 11th February, 1901, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.
- 21a. Annual Report of the Geographic Board of Canada, 1900.
Printed for both distribution and sessional papers.
22. Report of the Department of Marine and Fisheries (Fisheries), for the fiscal year ended 30th June, 1900. Presented 11th February, 1901, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.
23. Report of Harbour Commissioners, etc., 1900.....*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 10.

24. Report of the Postmaster General, for the year ended 30th June, 1900. Presented 11th February, 1901, by Hon. W. Mulock*Printed for both distribution and sessional papers.*
25. Annual Report of the Department of the Interior, for the year 1900. Presented 11th February, 1901, by Hon. C. Sifton.....*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 11.

26. Summary Report of the Geological Survey Department for the year 1900. Presented 11th April, 1901, by Hon. C. Sifton*Printed for both distribution and sessional papers.*
27. Annual Report of the Department of Indian Affairs, for the year ended 30th June, 1900. Presented 11th February, 1901, by Hon. C. Sifton.....*Printed for both distribution and sessional papers.*
28. Report of the North-west Mounted Police. Parts 1 and 2, 1900. Presented 27th February, 1901, by Sir Wilfrid Laurier *Printed for both distribution and sessional papers.*
- 28a. Report of the North-west Mounted Police. Part III, 1900. Presented 28th March, 1901, by Sir Wilfrid Laurier..... *Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 12.

29. Report of the Secretary of State of Canada, for the year ended 31st December, 1900. Presented 19th February, 1901, by Sir Wilfrid Laurier.....*Printed for both distribution and sessional papers.*
30. Civil Service List of Canada, 1900. Presented 22nd February, 1901, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.
31. Report of the Board of Civil Service Examiners, for the year ended 31st December, 1900. Presented 21st March, 1901, by Sir Wilfrid Laurier.....*Printed for both distribution and sessional papers.*
32. Annual Report of the Department of Public Printing and Stationery, for the year ended 30th June, 1900. Presented 21st March, 1901, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.
33. Report of the Joint Librarians of Parliament for the year 1900. Presented 7th February, 1901, by the Hon. The Speaker *Printed for sessional papers.*
34. Report of the Minister of Justice as to Penitentiaries of Canada, for the year ended 30th June, 1900. Presented 12th February, 1901, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.
35. Report of the Department of Militia and Defence of Canada, for the year ended 31st December, 1900. Presented 1st March, 1901, by Hon. F. W. Borden.
Printed for both distribution and sessional papers.
- 35a. Supplementary Report of the Department of Militia and Defence:—Organization, equipment, despatch and service of the Canadian Contingents during the war in South Africa, 1899-1900. Presented 23rd May, 1901, by Sir Richard Cartwright.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 13.

36. Return of the Ninth General Election for the House of Commons of Canada, held on the 30th day of October, 1900, and the 7th day of November, 1900, by H. G. LaMothe, Esq., Clerk of the Crown in Chancery for Canada. Presented 19th April, 1901, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.
37. Detailed statement of all bonds or securities registered in the department of the secretary of state of Canada, since last return, 6th February, 1900, submitted to the parliament of Canada under section 23, chapter 19 of the Revised Statutes of Canada. Presented 11th February, 1901, by Sir Wilfrid Laurier.....*Not printed.*
38. Return showing the expenditure on account of unforeseen expenses from the 1st July, 1900, to the 5th February, 1901. Presented 11th February, 1901, by Hon. W. S. Fielding*Not printed.*
39. Statement of Governor General's Warrants issued since the last session of parliament, on account of the fiscal year 1900-01. Presented 11th February, 1901, by Hon. W. S. Fielding..... *Not printed.*
40. Statement of all superannuations and retiring allowances in the civil service during the year ended 31st December, 1900, showing name, rank, salary, service, allowance and cause of retirement of each person superannuated or retired, also whether vacancy filled by promotion or by new appointment, and salary of any new appointee. Presented 11th February, 1901, by Hon. W. S. Fielding.
Not printed.
41. Statement in pursuance of section 17 of the Civil Service Insurance Act for the year ending 30th June, 1900. Presented 11th February, 1901, by Hon. W. S. Fielding.....*Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

42. Statement of receipts and expenditure of the Ottawa Improvement Company, for the year ended 30th June, 1900. Presented 12th February, 1901, by Hon. W. S. Fielding *Not printed.*
43. Annual return under chapter 131 (R.S.C.) intitled: "An Act respecting Trade Unions." Presented 12th February, 1901, by Sir Wilfrid Laurier. *Not printed.*
44. Return of over-rulings by the treasury board of the auditor general's decisions between the commencement of the session of 1900 and the session of 1901. Presented 13th February, 1901, by Hon. W. S. Fielding. *Not printed.*
45. Copy of an order in council relative to the issue of licenses to United States fishing vessels. Presented 18th February, 1901, by Sir Louis Davies. *Not printed.*
46. Return of the names and salaries of all persons appointed to, or promoted in the civil service during the calendar year 1900. Presented 19th February, 1901, by Sir Wilfrid Laurier. *Not printed.*
47. Statement in reference to fishing bounty payments for the year 1899-1900. Presented 19th February, 1901, by Sir Louis Davies. *Not printed.*
48. Return to an order of the House of Commons, dated 12th February, 1901, for a report of the engineer who surveyed the Napanee river in 1900, and for a return showing the names of the persons employed, length of employment and the sums paid to each person, and giving details of all other sums paid, with names of persons to whom payments were made on account of the said survey. Presented 21st February, 1901.—*Mr. Wilson.* *Not printed.*
49. Return to an order of the House of Commons, dated 12th February, 1901, for a certain report made in June, 1900, respecting Toronto harbour by engineers W. T. Jennings and Joseph R. Roy. Presented 21st February, 1901.—*Mr. Kemp* *Not printed.*
50. Return of all lands sold by the Canadian Pacific Railway Company, from the 1st October, 1899, to the 1st October, 1900. Presented 25th February, 1901, by Hon. C. Sifton. *Not printed.*
- 50a. Return of correspondence, etc., respecting the affairs of the Canadian Pacific Railway Company, which the department of the interior has had since the previous return was presented to parliament under the resolution of the 20th February, 1882. Presented 25th February, 1901, by Hon. C. Sifton *Not printed.*
- 50b. Return to an address of the House of Commons, dated 14th February, 1901, for copies of all applications, documents, papers and correspondence by or between the Canadian Pacific Railway Company and the government, or the minister of railways and canals, whereby the Canadian Pacific Railway Company applied for and obtained permission to cross, or continue to cross, certain streets in the western part of the city of Ottawa. Presented 25th February, 1901, by Hon. A. G. Blair *Not printed.*
51. Return showing reductions and remissions made under section 141 as added to the Indian Act by section 8, chapter 35, 58-59 Victoria, for the year ended 30th June, 1900. Presented 25th February, 1901, by Hon. C. Sifton *Not printed.*
52. Return of orders in council published in the *Canada Gazette*, in accordance with the provisions of section 46 of the North-west Irrigation Act. Presented 25th February, 1901, by Hon. C. Sifton. *Not printed.*
53. Return of orders in council published in the *Canada Gazette*, in accordance with the provisions of clause 91 of the Dominion Lands Act, chapter 54 of the Revised Statutes of Canada. Presented 25th February, 1901, by Hon. C. Sifton. *Not printed.*
54. Return of orders in council published in the *British Columbia Gazette*, in accordance with the provisions of subsection (d) of section 38 of the regulations for the survey, administration, disposal and management of Dominion lands within the 40-mile railway belt in the province of British Columbia. Presented 25th February, 1901, by Hon. C. Sifton. *Not printed.*
- 54a. Return to an order of the House of Commons, dated 22nd April, 1901, for statements showing amount outstanding on account of pre-emptions, grazing leases and upon timber, mineral and other Dominion lands. Presented 22nd April, 1901.—*Hon. C. Sifton.* *Not printed.*
55. Return to an order of the House of Commons, dated 13th February, 1901, showing: 1. The amount of the bonuses or subsidies voted by parliament each year to railways during the years 1896-7-8-9 and 1900, inclusive. 2. The names of all railways to which bonuses or subsidies were voted by parliament during each of the said years, and the amount voted to each railway. 3. The amount of such bonuses or subsidies paid to each of the said railways, or to each and every company or

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individual who may have become vested with the said bonuses or subsidies by transfer or otherwise, during each of the said years, and the conditions of such payments. 4. On what part or parts of the said bonuses or subsidies voted during the said years was interest payable, and how much of each of the said bonuses or subsidies on which interest is payable has been paid, giving details with reference to each railway. 5. The amount of interest paid during each of the said years by each of the said railways on the bonuses or subsidies they have received. 6. What railways to which bonuses or subsidies have been voted by parliament during each of the said years, and paid wholly or in part with the condition that interest should be payable, have paid interest on the bonuses or subsidies received by them, and how much interest has each railway receiving such bonuses or subsidies paid each year. Presented 25th February, 1901.—*Mr. Wilson.*

Not printed.

56. Return to an address of the House of Commons, dated 12th February, 1901, for copies of the address presented by the citizens of Dawson to his excellency the governor general on the occasion of his excellency's visit to that city in 1900, all orders in council, correspondence and papers in any way connected with the said address and the requests and representations contained therein. Presented 26th February, 1901.—*Sir Charles Hibbert Tupper.* *Not printed.*
57. Return to an order of the House of Commons, dated 12th February, 1901, for copies of all papers, instructions, tenders, contracts, specifications, correspondence, reports in any way relating to the construction of a dwelling for the officers of the government or staff in Dawson city. Also all instructions, papers, tenders, contracts, correspondence, reports in any way relating to the construction of public buildings under contract awarded to William Rourke. Also all instructions, papers, tenders, contracts, specifications, reports in any way relating to the construction of a bridge leading from the barracks and other public buildings to the main part of the town in Dawson. Presented 26th February, 1901.—*Sir Charles Hibbert Tupper.* *Not printed.*
58. Ordinances of the Yukon Territory for 1900, pursuant to 61 Victoria, chapter 6, section 7. Presented 28th February, 1901, by Hon. C. Sifton *Not printed.*
- 58a. Return to an order of the House of Commons, dated 12th February, 1901, showing an itemized statement of the number of gallons of spirituous and malt liquors taken into the Yukon District since the period covered by return (1900) the number of permits issued therefor, name and post office address of those persons or companies to whom permits were granted, and the amount paid therefor, and all correspondence in connection therewith. Presented 28th February, 1901.—*Sir Charles Hibbert Tupper.* *Not printed.*
- 58b. Return to an order of the House of Commons, dated 12th February, 1901, for copies of all reports from Mr. Ogilvie, commissioner of the Yukon district, not already brought down, together with such information as is available respecting the report referred to on page 5025 *Hansard*, May 10, 1900, and the delay in sending it forward. Presented 4th March, 1901.—*Sir Charles Hibbert Tupper.* *Not printed.*
- 58c. Return to an order of the House of Commons, dated 18th February, 1901, of all reports made by Mr. Charleson respecting telegraph construction work formerly or now under his charge; showing also the names of men employed under him between Bennett and Dawson and the nationality of each so far as possible; the wages and allowances for each man so employed; particulars as to any strikes on the part of the men for higher wages; the names of parties who supplied the poles for the telegraph wire, and copies of all contracts and correspondence respecting the same; whether standing trees en route have been used for stringing wires, and if so, for what distance approximately, in comparison with the distance where poles were used; how many poles were paid for, how many of those paid for were not used for the telegraph line; whether the linemen employed at Dawson, Ogilvie, Selwyn, Selkirk, Five Fingers, Lower LeBarge and Tagish are British subjects, and if not, the nationality of each; the names of sub-contractors for the supply of poles and the residence of each sub-contractor, and all contracts respecting the same; the terms of charter of ss. *W. S. Stratton*, the charterer's name and all papers respecting the same; the name of her master and acting master and his nationality; the terms of the charter party; the use made of this steamer, whether she was used for supplies or otherwise, and what boats other than scows were so used; how many scows were used and on what terms; the amount charged or paid for transportation by water outside of the ss. *Stratton*; the length of time during construction Mr. Charleson was actually present with the construction party; the particulars as to purchase of ss. *Lullie C.*, the purchase, disposal or sale or transfer of the boat and the terms thereof respectively; copies

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- of all reports and correspondence respecting the same; the arrangement for supplies made and with whom; the arrangement at Bennett respecting pay for men's time returning from Dawson; the amount already paid for the line under Mr. Charleson's charge; copies of accounts rendered and of accounts paid in connection with this telegraph work, the rate of pay first and now allowed A. Boyer, assistant to Mr. Charleson; also a statement showing where Mr. Charleson places his orders in Vancouver in this connection and on what terms, and what commissions, if any, are paid on these supplies and to whom; the name of Mr. Charleson's agent at Vancouver in this connection; the quantity of supplies obtained by Mr. Charleson from the United States; whether Mr. Charleson's son was paid \$350, or other amount or amounts for expenses of a trip to Ottawa or otherwise, and whether he is or was then an employee of the government; whether Mr. Charleson awards contracts to his foreman, and whether the foreman's expenses were paid into the locality of operations at government expense, and whether tenders are asked for in this connection; and all contracts, reports, and papers respecting contracts let by Mr. Charleson or under his supervision in connection with the telegraph line from Bennett to Dawson. Presented 5th March, 1901.—*Sir Charles Hibbert Tupper* *Not printed.*
- 58d. Supplementary return to 58a. Presented 5th March, 1901. *Not printed.*
- 58e. Regulations governing the issue of permits to take liquor into the Yukon territory. Presented 8th March, 1901, by Hon. C. Sifton. *Not printed.*
- 58f. Return to an order of the House of Commons, dated 13th March, 1901, for a copy of the correspondence relative to the Huston liquor permit. Presented 13th March, 1901, by Hon. C. Sifton. *Not printed.*
- 58g. Return to an order of the House of Commons, dated 18th February, 1901, in tabular form, showing the names of all cases in which an appeal has been taken to the hon. the minister of the interior (past and present) under the mining regulations, the date when each appeal was perfected, heard and decided. Presented 18th March, 1901.—*Sir Charles Hibbert Tupper* *Not printed.*
- 58h. Return to an order of the House of Commons, dated 18th March, 1901, for copies of all correspondence and papers relating to the issue of an order for the suppression of theatres and gambling houses in Dawson city. Presented 18th March, 1901.—*Hon. C. Sifton* *Not printed.*
- 58i. Return to an order of the House of Commons, dated the 21st February, 1901, for copies of all despatches, letters, telegrams, correspondence, reports respecting the subjects included in the following telegram of August 2nd, 1900: "Ottawa, Ont., Aug. 2, via Bennett, Aug. 7. F. C. Wade, Dawson,—Sir Wilfrid has handed me your message. Am endeavouring to remove difficulties caused by delays in answering communications addressed to other departments. Superintendent Taché, of the public works department, is now en route to Dawson, with orders for the construction of trails and public buildings. Government considering plan of readjustment of royalty which will lighten tax and, we think, prove generally satisfactory. Order granting representation in local council takes effect immediately. Ryley, of mining branch, en route to Dawson. Will report amendments to mining laws. Careful consideration, letters and petitions received here, convinces me every reasonable request regarding mining laws can be met in near future. Impossible for me to visit Yukon now. Hope to get there before many months. CLIFFORD SIFTON." Presented 25th March, 1901.—*Sir Charles Hibbert Tupper* *Not printed.*
- 58j. Return to an order of the House of Commons, dated 7th February, 1900, for copies of all applications, records, reports, letters and memoranda relating to claims No. 18 and 26 and 16B referred to on pp. 197, 204, including the letter from Alexander McDonald to Major Walsh, pp. 197, 198 (pages refer to Blue-book Yukon evidence presented to parliament during session of 1899). Also the records of papers showing the dates when royalties became due, and when royalties were collected in the Yukon district in 1897 and 1898, in the case of Alexander McDonald's claims and mining interests. (b) Alexander McDonald's letter of 20th July, referred to at p. 211 (Yukon Blue-book of evidence, 1899). (c) Return of Report of Major Walsh *re* royalties (referred to on page 211, Yukon Blue-book evidence, 1899). (d) Reports and papers relating to the case of Jenkin Llewellyn, referred to on pp. 211, 212, 213 (Yukon Blue-book above). (e) Reports and papers relating to cases dealt with under Judge Maguire's ruling, referred to on p. 246 (Yukon Blue-book above). (f) Reports and papers relating to Phil. Miller's case, p. 247 (Blue-book above). (g) Reports and papers relating to Murphy's case, 247 (Blue-book above). Presented 22nd April, 1901.—*Sir Charles Hibbert Tupper* *Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

- 58k. Return to an address of the House of Commons, dated 4th March, 1901, for copy of the memorial to his excellency the governor general and any communications to the government of Canada, or any member thereof, respecting the requirements of the Yukon territory, and all reports, communications and orders in council respecting the same or any subject of the said memorial. Presented 22nd April, 1901.—*Sir Charles Hibbert Tupper*.....*Not printed.*
- 58l. Return to an order of the House of Commons, dated 23rd May, 1901, for copies of the original statement of Mackenzie, Mann & Co., in connection with the construction of the Canadian Yukon Railway. Presented 23rd May, 1901.—*Sir Wilfrid Laurier*.....*Printed for distribution.*
59. Copy of an agreement dated the 16th day of January, 1901, made between the government of the colony of New South Wales by the Honourable Henry Copeland, agent-general for New South Wales, of the first part, and the Eastern Extension Australasia and China Telegraph Company, Limited (hereinafter called "the Extension Company"), of the second part. Presented 1st March, 1901, by Hon. W. Mulock.....*Printed for both distribution and sessional papers.*
- 59a. Return to an address of the Senate, dated 11th March, 1901, for copies of all tenders received for the laying of an electric cable from Canada to Australia; a copy of the contract entered into for the construction and laying of said cable: together with a copy of all correspondence and documents relating to the nationalization of the telegraphics of the Empire, to include papers not already laid before the house, and all contracts or other papers relating thereto. Presented 16th April, 1901.—*Hon. Sir Mackenzie Bowell*.....*Printed for both distribution and sessional papers.*
60. Return to an order of the House of Commons, dated 18th February, 1901, showing the amount of the rebate paid on agricultural implements exported from Canada for the fiscal year ending June 30, 1896, 1897, 1898, 1899 and 1900, specifying amount paid to each firm in each of those years. Presented 5th March, 1901, by Mr. Roche (Marquette).....*Printed for sessional papers.*
61. Supplementary return to an address of the Senate, dated 25th April, 1899, for a return showing: 1. The number of acres of land set apart for the purpose of education in the province of Manitoba and in the North-west Territories, respectively, under the authority of chapter 54, Revised Statutes of Canada, section 23. 2. The number of acres sold in Manitoba and the North-west Territories, the amount received in payment therefor, and the amount now due thereon. 3. The total sum now at the credit of said fund held by the Dominion of Canada, how invested, and the rate of interest thereon. 4. The amount advanced out of said principal sum in aid of education in the province of Manitoba and the North-west Territories. 5. The sum recouped to the said principal out of the proceeds of the sale of lands set apart for the purpose of education, and the amount now due to said principal sum. 6. And all correspondence relating to any further advance or advances out of said school fund, either to Manitoba or the North-west council. Presented 6th March, 1901.—*Hon. Sir Mackenzie Bowell*.....*Printed for sessional papers.*
62. Statement of affairs of the British Canadian Loan and Investment Company (Limited) for the year ended 31st December, 1900. Also a list of the shareholders on 31st December, 1900. Presented (Senate) 6th March, 1901, by the Hon. The Speaker.....*Not printed.*
63. Return to an order of the House of Commons, dated 4th March, 1901, for a certain report, with the evidence, presented to the department of the interior by the commissioners appointed on June 19th last to audit all accounts and investigate and report upon all matters connected with the administration and sale by the trustees of the town sites of Viriden, Qu'Appelle, Regina and Moosejaw. Presented 8th March, 1901.—*Mr. Osler*.....*Not printed.*
64. Return to an address of the Senate, dated 20th June, 1900, showing: 1. Which of the cars enumerated in the return to an address of the Senate, dated 7th May, 1900, as having "arrived at Halifax and St. John, respectively, previous to the 10th April last and which had not been unloaded at that date," have been since unloaded. 2. Dates upon which such cars were severally unloaded. 3. Amount of demurrage collected on each car. Presented 8th March, 1901.—*Hon. Mr. Wood*.....*Not printed.*
65. Order of the House of Commons, dated 13th March, 1901, for a copy of the correspondence relative to applications to purchase the Indian reserve at Sydney, Cape Breton. Presented 13th March, 1901, by Hon. C. Sifton.....*Not printed.*
66. Return to an Order of the House of Commons, dated 4th March, 1901, for copies of all circulars, papers and instructions sent out by the inland revenue department during the past year in reference to certain brands of baking powder being condemned by the department, and notifying merchants to cease their sale under penalty. Presented 13th March, 1901.—*Mr. Roche (Marquette)*.....*Not printed.*

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67. Return to an address of the House of Commons, dated 21st February, 1901, for copies of all correspondence, telegrams and reports that have passed since March, 1900, between the Dominion government and the Imperial government and between the Dominion government and the Provincial government of British Columbia in regard to Mongolian immigration into Canada. Presented 13th March, 1901.—*Mr. Prior*..... *Printed for sessional papers.*
68. Return to an order of the House of Commons, dated 4th March, 1901, of all correspondence, petitions or other documents between the Indian department and Alexander Marchel, chief of the band of Micmac Indians residing on the Indian reserve, Saint Ann de Restigouche, P.Q., for years 1900 and 1901, relative to the Indian agent or his duties in connection with the said band. Presented 14th March, 1901.—*Mr. Sprule*.....*Not printed.*
69. Return to an order of the House of Commons, dated 18th February, 1901, for a list of all railway corporations now doing business in Canada under charter of the Dominion parliament, which have received subsidies by cash or land grants, or are entitled thereto, and the amount of such subsidy attached to each. Presented 18th March, 1901.—*Mr. Smith (Vancouver)*.....*Not printed.*
70. Return to an order of the House of Commons, dated 13th February, 1901, showing: 1. The dates of the erection of the Dominion grain elevators at St. John, N.B., and at Halifax, and the cost of each. 2. The amount of grain handled during each year since said elevators were built, giving the amount of each kind of grain handled by each elevator each year, and how much of each kind of grain was received at each elevator each year for export and exported. 3. The number of officials employed at each elevator each year and their salaries. 4. All other expenses paid each year on account of each of the said elevators. 5. The gross cash receipts at each of the said elevators during each year since they have been built. Presented 18th March, 1901.—*Mr. Wilson*.....*Not printed.*
71. Return to an order of the House of Commons, dated 18th February, 1901, for copies of all papers, telegrams, etc., respecting the pay of the men of "C" battery, Canadian artillery, which served in South Africa; or respecting the deduction of any portion of the pay of the men or any of them. Presented 21st March, 1901.—*Mr. Clarke*.....*Not printed.*
- 71a. Supplementary return to No. 71. Presented 11th April, 1901.....*Not printed.*
72. Return to an order of the House of Commons, dated 25th March, 1901, for a copy of the correspondence and memorandum concerning changes in quarantine of animals between the United States and Canada. Presented 25th March, 1901.—*Hon. S. A. Fisher*.....*Printed for sessional papers.*
73. Extract from a report of the committee of the hon. the privy council, dated 19th July, 1900, respecting the arbitration of the claim preferred by the province of Nova Scotia against the government of the Dominion for a refund with interest of moneys expended by the said provincial government upon that part of the Intercolonial Railway between New Glasgow and the Straits of Canso, formerly known as the "Eastern Extension Railway," and also the report of the arbitrators. Presented 27th March, 1901, by Sir Wilfrid Laurier.....*Printed for both distribution and sessional papers.*
- 73a. Return to an order of the House of Commons, dated 25th April, 1901, for a copy of the evidence taken before the arbitrators with respect to the Eastern Extension Railway's claims between the province of Nova Scotia and the Dominion of Canada. Presented 25th April, 1901.—*Sir Wilfrid Laurier*..... *Not printed.*
- 73b. Extract from a report of the committee of the hon. the privy council, dated 17th February, 1900, respecting the claim preferred by the province of New Brunswick against the Dominion government for moneys alleged to be justly due and owing the province arising out of the construction of that portion of the Intercolonial Railway formerly known as the Eastern Extension Railway, and the award of the arbitrators, dated the 27th October, 1900. Presented 17th May, 1901.—*Hon. W. S. Fielding*..... *Printed for both distribution and sessional papers.*
74. Extract from a report of the committee of the hon. the privy council, dated 23rd March, 1901, on a memorandum from the minister of inland revenue submitting herewith the report of the commissioners appointed under date of 2nd January, 1901, to investigate, inquire into and report upon certain complaints made with regard to the inspection of grain at the port of Montreal, etc. Presented 27th March, 1901, by Sir Wilfrid Laurier.....*Printed for sessional papers.*
75. Return to an address of the House of Commons, dated 21st February, 1901, for copies of the complaints, pleas, convictions, notes of judgment and all other papers, correspondence, etc., relating to the case of *Cinqmars vs. Senecal*, decided by the court of queen's bench (crown side), on the 17th of December, 1900. Presented 27th March, 1901.—*Mr. Fortin*..... *Not printed.*

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76. Return to an order of the House of Commons, dated 12th February, 1901, for a list of school lands sold at public auction in Manitoba during last year, place of sale and name of auctioneer and other officials in charge of the sale. The name of the purchaser, with the description and acreage of the respective lots purchased, price of sale per acre and amount paid on account. A list of the lots adjudicated but which were subsequently resold, name of first purchaser, price bid and at which adjudication was made; also price at which sale of same lot was subsequently made, with name of purchaser. Presented 28th March, 1901.—*Mr. LaRivière*..... *Not printed.*
- 76a. Return to an order of the House of Commons, dated 22nd April, 1901, for a copy of the reports of His Honour Judge Pendergast, on his investigations of the alleged irregularities in connection with the auction sales of school lands, held in the province of Manitoba during the month of June, 1900. Presented 22nd April, 1901.—*Hon. C. Sifton*..... *Not printed.*
77. Return to an order of the House of Commons, dated 29th March, 1901, for a copy of the correspondence between Lord Strathcona and the minister of agriculture re cost of space in the various imperial buildings and cost of the Trocadero and Vincennes buildings, together with reports and minutes from February, 1898, to June, 1900. Presented 29th March, 1901.—*Hon. S. A. Fisher*..... *Not printed.*
- 77a. Return to an order of the House of Commons, dated 18th February, 1901, for copies of all correspondence, telegrams, letters, notes and memoranda exchanged between the Canadian commissioner at the Paris exhibition, or any member of the Canadian commission and Lord Strathcona or the royal commission or the colonial secretary, in relation to the representation of Canada at the exhibition. Presented 3rd April, 1901.—*Mr. Bourassa*..... *Not printed.*
78. Return to an order of the House of Commons, dated 11th March, 1901, showing; (a.) Net receipts and expenditures of the Intercolonial Railway for each month from 30th June, 1899, up to the first day of March, 1901. (b.) The expenditure on capital account with respect to the Intercolonial Railway for each month from 30th June, 1899, up to the first day of March, 1901. Presented 29th March, 1901.—*Mr. Borden (Halifax)*..... *Not printed.*
79. Return to an order of the House of Commons, dated 21st February, 1901, for copies of each of the hydraulic mining leases mentioned on page 65 of the annual report of the department of the interior, 1900; also showing what conditions or terms of these leases have been complied with respectively; also copies of all reports, letters and communications respecting each lease. Presented 1st April, 1901.—*Sir Charles Hibbert Tupper*..... *Not printed.*
80. Return to an order of the House of Commons, dated 13th March, 1901, for copies of all letters, papers and other correspondence between the department of marine and fisheries and J. Albert Brennan, of Tignish, Prince county, Prince Edward Island, regarding the payment of a fishing bounty cheque, made in favour of one Joseph Reilly, and for which the said J. Albert Brennan held the order of the payee. Presented 2nd April, 1901.—*Mr. Hackett*..... *Not printed.*
- 80a. Return to an order of the House of Commons, dated 11th March, 1901, for copies of all rules and regulations and all correspondence in the department of marine and fisheries relating to fishing berths and the shore fishery in West Halifax, more especially within the polling district of Prospect and Dover. Presented 2nd April, 1901.—*Mr. Roche (Halifax)*..... *Not printed.*
- 80b. Return to an order of the House of Commons, dated 4th March, 1901, for copies of all correspondence, letters, papers and documents relating to the alleged interference with the fishing berths of the members of the Shad and East Dover Fishing Association in the county of Halifax, and all letters and communications to the government or department of marine and fisheries from the said association, or from any person on its behalf relating to the matters aforesaid. Presented 2nd April, 1901.—*Mr. Borden (Halifax)*..... *Not printed.*
81. Return to an order of the House of Commons, dated 21st February, 1901, for copies of all correspondence, papers, tenders, returns and other documents relating to the government wharf at or near the ferry, East River, Sheet Harbour, in the county of Halifax, Nova Scotia, showing the title of the crown, if any, to this wharf and the use which has been made thereof since 1st January, 1897. The person or persons in charge of the wharf on behalf of the government since 1st January, 1897. The moneys which have been expended by the government thereon since 1st January, 1897. The dates when the same were so expended, whether the same were expended by public contract or how otherwise; also all such papers aforesaid as show the amount collected or received by the government, or by any person or persons on its behalf, for use of such wharf since 1st January, 1897. Presented 2nd April, 1901.—*Mr. Borden (Halifax)*..... *Not printed.*

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82. Return to an order of the House of Commons, dated 12th February, 1901, showing: 1. When J. R. Thompson was appointed an official of the department of interior, outside service. 2. His duties and his salary. 3. Whether he ever acted in any other capacity than a homestead inspector, and if so, in what capacity or capacities, and for what length of time. 4. When he was dismissed. Date of notice of dismissal. At what date he would, if on duty as homestead inspector, probably have received it. 5. The date to which he was paid. If engaged by month, whether he was entitled to his pay up to the end of January, 1901. And if not, why not. 6. Whether it is not customary, in dismissing officials of several years' standing, to pay them a gratuity in proportion to their length of service. Whether it has been done in similar cases. If so, why not in his. 7. The cause of his dismissal. 8. What charges were made against him, and whether he was given an opportunity to reply to them. 9. Copy of notices issued by Mr. Burley. 10. Copy of Mr. Burley's instructions. 11. The name of the person at whose instance Mr. Burley issued such notices, and if on his own responsibility, whether Mr. Burley's action was approved or censured. 12. Whether it is customary for the department of interior to advertise for parties to come forward and make complaints against the officials of that department. If not, why was that course followed in this case? 13. The result of said investigation. Whether the investigation was adjourned to enable the complainant to secure evidence, and how long the investigation lasted. 14. Whether Thompson was ever notified of the finding of the investigation. 15. A copy of this notification. 16. The date of Mr. Burley's investigation and the date of his report. 17. Whether the files of the department in the case under investigation furnished the complainants. 17a. Whether it is customary in such cases to hand over the files of the department to the complainants. 18. Whether Mr. Thompson requested the department to furnish him certain papers on the files furnished the complainants as having any bearing on the complaint. 19. Whether he made this request more than once; if so, how many times did he do so? What reply was given him in each case? 20. The name of the party or parties appointed in his place. 21. The qualification of his successor or successors for the position. 22. His or their experience to qualify him or them for the said position, and of what has such experience consisted. At what date were such appointments made and on what recommendations. 23. At time of Thompson's dismissal the amount of work on hand requiring attention by him or some one acting in the same capacity. 24. A comparative statement of the last two years of the duties performed by him and all the other homestead inspectors and forest rangers where the duties of both offices are performed by the one official. 25. The number of inspections made during the twelve months ending 30th Nov. in years 1896-97-98-99 by all parties acting as homestead inspectors and the number of days in each year they were employed making inspections. The number of days in each year they receive pay, and during the time they were under pay, what other duties as homestead inspectors were they engaged at. Also the number of applications for patents received by each during the same period and the fees the department received for such applications. 26. The date when the charges were made against Thompson which were investigated by Mr. Burley. 27. The date of Mr. Burley's report. 28. Whether any further charges have been made. 29. If so, by whom and their nature. 30. When Thompson was apprised of them and asked to disprove or reply to them. 31. Whether it is not the custom of the department to give all officials an opportunity to reply to any charges or insinuations against their conduct. 32. The duties of Mr. Burley prior to the investigation of charges against Mr. Thompson. 33. How long Mr. Burley had been in the employment of the department of the interior; his calling or business prior to appointment to investigate such charges, and what was his salary. 34. Whether, at the date of such investigation, Mr. Burley was considered Mr. Thompson's superior officer. 35. Who recommended Mr. Burley's appointment as investigator or commissioner into the charges against Mr. Thompson. 36. Was there any protest, verbal or written, against the appointment of Mr. Burley by any official of the department or any other person? 37. How long the investigation lasted. 38. What it cost the department. 39. What the department paid the witnesses brought by the complainant. 40. Did the department pay any of the legal expenses of the complainant? 41. Did the department pay the legal expenses of said Thompson in the case? 42. Was the department asked to do so, and to what amount? 43. If so, what reason was given for declining to or refusing such request? Presented 3rd April, 1901.—*Sir Charles Hibbert Tupper*.....*Not printed.*
83. Return to an order of the House of Commons, dated 13th March, 1901, for copies of all petitions, papers, directions, letters and other correspondence relating to the change in the situation of the Pearl street sub-post office in Hamilton, or to the age and reputation of the late postmaster, Mr. Hull, or to the situation of the new post office and the appointment of Mr. McDonnell; also for

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- copies of all communications and papers which led the inspector to make inquiry with regard to any of these matters. Presented 3rd April, 1901.—*Mr. Barker*.....*Not printed.*
84. Return to an order of the House of Commons, dated 21st February, 1901, showing the names and addresses of all parties tendering (where tenders were called for) for coal and wood, or either, for the uses of the government of Canada since 1st July, 1899; copy of the tender put in by each party tendering, copy of the specification issued in each case where tenders were called for, name and address of the successful tenderer in each case, together with the kind, quality and quantity of coal and wood, or either, tendered for; also the kind, quality and quantity of coal and wood, or either, for which tenders were accepted in each case, and the prices paid; also the location of each government building or institution supplied with coal and wood, or either, the quantity and quality and sizes of coal and wood, or either, supplied to each and the price in each case. Also the names and addresses of all parties supplying coal and wood, or either, without tender since the above date to the government of Canada, the kind, quality and quantity supplied in each case by each person, the prices paid in each case, and the location of the building or institution supplied. Presented 3rd April, 1901.—*Mr. Clarke*.....*Not printed.*
85. Return to an order of the House of Commons, dated 12th February, 1901, showing: 1. The number of immigration agents employed by the government of Canada in the United States of America for each of the calendar years 1894-5-6-7-8-9 and 1900, together with the names of each of such agents, date of appointment of each, the location of each during each of said years, the salary of each during each of said years, number of days spent by each in his office, each year, amount of rent paid by each agent for offices during each of said years, number of days spent by each agent in travelling and amount of travelling expenses of each during each of said years, and amount allowed during each of said years to each or any of the said agents for board or lodging, or for both, the amount of help employed by each agent during each of said years, together with the amounts paid by each agent each year for such help, giving the names of persons employed, number of days employed each year and amounts paid each year to each person employed, and showing all other expenses in connection with these agents and their work. Date of leaving or dismissal from the service of the Dominion government. If still in the employment of the government, where, and the salary for the present year, and the number of emigrants reported by each agent during each of the said years as having emigrated to Canada from the district in which he was working. 2. The number of agents employed by the government of Canada in the United States of America for each of the calendar years 1894-5-6-7-8-9 and 1900, who were paid by commission, the manner of determining the commission to be paid each agent, the amount paid to each during each of said years, the amount of all other expenditure incurred by the government of Canada during each of said years on account of immigration agents employed in the United States of America on commission, and the work done by each of such agents during each of said years. 3. The names of all other immigration agents employed during the calendar years 1894-5-6-7-8-9 and 1900 by the government of Canada, the date of appointment of each, the location of each during each of said years, the salary of each during each of said years, the number of days spent by each in travelling and the travelling expenses of each during each of the said years, the number of days spent by each in his office during each of said years and amounts paid by each for office rent and hired help, in detail, during each of said years, amount allowed to each for board and lodging during each of said years, and amount of all other expenses during each of said years of each such agents in connection with his office and charged to the government of Canada. 4. Date of appointment of W. T. R. Preston, his salary, his duties, his travelling expenses, amount he charged the government of Canada for board and lodging and other expenses in connection with his office, during each year since his appointment. Presented 9th April, 1901.—*Mr. Wilson*.....*Not printed.*
86. Return to an order of the House of Commons, dated 13th February, 1901, for copies of the evidence, exhibits and report of the inquiry held at Inverness, in the county of Megantic, by Hon. Mr. Justice White, of Sherbrooke, in the matter of the post office of Kinnear's Mill. Presented 9th April, 1901.—*Mr. Turcot*.....*Not printed.*
87. Return (in part) to an address of the House of Commons, dated 3rd April, 1901, for copies of all correspondence, telegrams and messages in the government labour bureau between the department and all persons referring to the labour strike at Valleyfield, in Beauharnois county, province of Quebec, during the month of November last; also copies of all letters, telegrams and messages exchanged between the militia department and the municipal authorities at Valleyfield, or any justice of the

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- peace, the military authorities at Montreal or any other persons relating to the said strike, and the calling out or payment of the troops in connection therewith; also a statement showing expenses incurred by the Dominion government in reference to said strike. Presented 11th April, 1901.—*Mr. Monk* *Printed for sessional papers.*
- 87a. Supplementary return to No. 87. Presented 26th April, 1901 *Printed for sessional papers.*
88. Return to an order of the House of Commons, dated 3rd April, 1901, for a statement showing the receipts and expenditure of the Montreal Turnpike Trust, and a copy of the annual statement furnished the bondholders of the said corporation by the Montreal Turnpike Trust for the past ten years. Presented 12th April, 1901.—*Mr. Monk*..... *Not printed.*
89. Return to an order of the House of Commons, dated 19th April, 1901, for copies of the forms of oaths administered and circulars issued in connection with the census of 1901. Presented 19th April, 1901.—*Hon. S. A. Fisher* *Not printed.*
90. Return to an order of the House of Commons, dated 19th April, 1901, for copies of tenders for supplies for Indians of Manitoba and the North-west Territories for the fiscal year 1899-1900. Presented 19th April, 1901.—*Hon. C. Sifton*..... *Not printed.*
91. Return to an address of the House of Commons, dated 3rd April, 1901, showing copies of all memorials, replies thereto and correspondence between the government of the North-west Territories, and any member thereof, and the government of Canada, and any member thereof, on the subject of the financial and constitutional status of the said North-west Territories. Presented 22nd April, 1901. *Mr. Scott* *Printed for sessional papers.*
92. Return to an order of the House of Commons, dated 23rd April, 1901, for a copy of the agreement with steamship companies for cold storage service during the years 1900 and 1901. Presented 23rd April, 1901.—*Hon. S. A. Fisher*..... *Not printed.*
93. Return to an order of the House of Commons, dated 3rd April, 1901, showing the cost of construction of the bridge built by the government across the Lachine canal at Côte St. Paul, also estimated cost of strengthening or rebuilding said bridge, if such estimate has been made, and copies of all petitions and correspondence had with the government of Canada upon this subject. Presented 24th April, 1901.—*Mr. Monk*..... *Not printed.*
- 93a. Return to an address of the Senate, dated 9th May, 1901, for the original papers comprising books 1st, 2nd and 3rd, on the substructures of the two bridges over the Lachine canal at Wellington street, Montreal, with the accompanying drawings and appendix. Presented 13th May, 1901.—*Hon. Mr. O'Donohoe*..... *Not printed.*
94. Return to an order of the House of Commons, dated 11th March, 1901, for copies of all correspondence with the department of railways relative to the building of a line of railway between Sydney and East Bay, in the county of Cape Breton, and copies of any reports made to the department having reference to this matter. Presented 24th April, 1901.—*Mr. Johnston (Cape Breton)*..... *Not printed.*
95. Return to an order of the House of Commons, dated 11th March, 1901, showing the quantity of Servis railroad tie plates purchased by the government since June 30, 1887, the persons or companies from which the purchases were made, the quantities purchased, prices paid, dates of contracts and times of delivery. Presented 24th April, 1901.—*Mr. Fowler*..... *Not printed.*
96. Return to an order of the House of Commons, dated 11th March, 1901, for copies of all contracts connected with the improvements at Sydney railway yard and at north Sydney Junction; also a statement of all prices paid per cubic yard for earth (different kinds) and rock (different kinds), and for borrowing for embankment under said contract and in connection with said improvements; also how much was paid for ditching, clearing and close-cutting and grubbing, per acre or per hundred feet; also for culvert masonry, retaining walls, cattle guards and crossings, fencing and gates. Presented 24th April, 1901.—*Sir Charles Hibbert Tupper*..... *Not printed.*
97. Return to an order of the House of Commons, dated 3rd April, 1901, showing the number of leases of water power granted on the Welland canal and feeder; the names of the lessees; the quantity of power granted in each lease, and the location of such power; the consideration named in each lease, and the length of the term granted; the names of the present holders; the amount of consideration in arrears, if any, on each lease, and the number of years during which such arrears have been accumulating. Presented 24th April, 1901.—*Mr. German* *Not printed.*

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98. Return to an address of the House of Commons, dated 4th of March, 1901, for copies of all accounts, agreements, receipts and vouchers in connection with the settlement of the petition of right, *Pictou Harbour Commissioners vs. the Queen*, which was completed by payment in 1898. Presented 24th April, 1901.—*Mr. Bell (Pictou)*..... *Not printed.*
99. Return to an address of the House of Commons, dated 11th March, 1901, for copy of all correspondence between the Canadian and British governments, relating to commissions to be granted Canadian officers in the British army. Presented 25th April, 1901.—*Mr. Bourassa* *Not printed.*
- 99a. Supplementary return to No. 99. Presented 22nd May, 1901..... *Not printed.*
100. Return to an address of the House of Commons, dated 11th March, 1901, for copies of all orders in council, regulations and other documents since the first day of January, 1897, presenting or showing what percentage or proportion of value of goods entitled to the advantages of the preferential tariff could be created in foreign countries, and what percentage or proportion of such value must be created in the United Kingdom; and also setting forth and showing what declarations, statements, affirmations or oaths must be made, declared or sworn to by exporters or other persons consigning such goods to Canadian importers, or by persons in Canada importing such goods from Great Britain and Ireland. Presented 26th April, 1901.—*Mr. Clarke*..... *Printed for sessional papers.*
101. Copy of the joint report of W. F. King, chief astronomer of the department of the interior, and Otto H. Tittman, of the United States coast and geodetic survey, the commissioners appointed under the *modus vivendi* agreed to between Great Britain and the United States on the 20th October, 1899, to report in regard to the provisional boundary between the territory of Alaska and the Dominion of Canada, about the head of Lynn canal; also maps accompanying the said report, and copy of order in council of the 20th February, 1901, in which it is provided that copies of this report be laid before parliament. Presented 20th May, 1901.—*Hon. C. Sifton* *Printed for distribution.*
102. Return to an order of the House of Commons, dated 11th March, 1901, for copies of all papers, correspondence and claims made in connection with the alleged non-observance of the fair-wage clause in the contract for the construction of the St. Andrews locks. Presented 3rd May, 1901.—*Mr. Puttee*..... *Not printed.*
103. Return to an order of the House of Commons, dated 11th March, 1901, for a return of all correspondence between the government or any officer thereof, and Col. Van Wagner, relating to the retirement of that officer from the command of the Hamilton field battery; and also the authority for considering Col. Van Wagner as a "commanding officer" and thus bringing that officer under the operation of the "five years tenure of command law." Presented 8th May, 1901.—*Mr. Hughes (Victoria)*.
Not printed.
104. Extract from a report of the committee of the honourable the privy council with respect to a memorial of the government of Prince Edward Island; praying for a certain payment to the island of a sum of money as compensation for an alleged non-fulfilment by the government of Canada of its obligations under the terms of union made in 1873, between the Dominion and the province, to provide and maintain efficient steam communication between the island and mainland both winter and summer, &c. Presented 8th May, 1901, by Hon. W. S. Fielding *Not printed.*
105. Return to an address of the Senate, dated 16th April, 1901, giving the names and addresses of all fishermen in Queen's county, P. E. I., who claimed bounty and received the same, for season 1900, with the amount paid to each. Presented 2nd May, 1901.—*Hon. Mr. Ferguson*..... *Not printed.*
106. Return to an order of the House of Commons, dated 11th March, 1901, for copies of all correspondence, reports and certificates in regard to the application of Robert Gray, late lighthouse keeper at Entrance Island, British Columbia, for superannuation; also statement showing for how long and what amounts he had paid into the superannuation fund. Presented 9th May, 1901.—*Mr. Prior*.
Not printed.
107. Return to an address of the Senate, dated 2nd May, 1901, showing how many Doukhobors have made homestead entries of 160 acres of land each, and in what particular district of the North-west Territories they have made such entries, and who own or have entries for the land the villages are built on. Also how many permits have been granted to the Doukhobors, and the quantity permitted to each Doukhobor, and the particular section of the North-west Territories such permits have been granted. And further, how many wood permits have been granted to the Doukhobors and the number of cords or quantities given each person as may be designated. Presented 15th May, 1901.—*Hon. Mr. Perley*..... *Not printed.*

 CONTENTS OF VOLUME 13—*Concluded.*

108. Return to an address of the Senate, dated 15th April, 1901, showing the number of tenders received by the post office department for the carrying of the mail from Coe Hill Mines, in the north riding of the county of Hastings, to Apsley, in the east riding of the county of Peterboro'; the names of the persons who tendered, the sum asked for the conveyance of such mails, and the name of the person to whom the contract was awarded. Presented 13th May, 1901.—*Hon. Sir Mackenzie Bowell*..... *Not printed.*
109. Return to an address of the Senate, dated 18th April, 1901, for copies of all reports and maps made by engineers, or any other employee of the government, who have surveyed and examined that portion of the province of Ontario lying between Rice Lake and Port Hope, or some points adjacent thereto, for the purpose of ascertaining whether a feasible route exists for the construction of and making the southern terminus of what is known as the Trent Valley canal, at or near Port Hope, on the north shore of Lake Ontario. Presented 20th May, 1901.—*Hon. Sir Mackenzie Bowell*.....*Not printed.*
110. Return to an address of the House of Commons, dated 27th February, 1901, for a copy of all correspondence between the Italian consul for Canada and the prime minister or the minister of trade and commerce, respecting proposed improvement of the trade relations between Canada and Italy, and of all correspondence leading up to the placing of Canadian goods by Italy upon its general tariff. Presented 23rd May, 1901.—*Mr. Monk*.. ..*Not printed.*

THIRTY-THIRD ANNUAL REPORT

OF THE

DEPARTMENT OF MARINE AND FISHERIES

1900

MARINE

PRINTED BY ORDER OF PARLIAMEN



O T T A W A

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST
EXCELLENT MAJESTY

1901

*To His Excellency the Right Honourable SIR GILBERT JOHN ELLIOT, EARL OF MINTO,
Governor General of Canada, etc., etc.*

MAY IT PLEASE YOUR EXCELLENCY :

I have the honour to submit herewith, for the information of Your Excellency and the Legislature of Canada, the Thirty-Third Annual Report of the Department of Marine and Fisheries, Marine Branch.

I have the honour to be,

Your Excellency's most obedient servant,

LOUIS HENRY DAVIES,

Minister of Marine and Fisheries.

DEPARTMENT OF MARINE AND FISHERIES,

OTTAWA, December 31, 1900.

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PART I.

THE REPORT OF THE DEPUTY MINISTER—THE REPORT OF THE
CHIEF ENGINEER IN DETAIL RELATING TO CONSTRUCTION
AND REPAIRS TO LIGHTHOUSES, HYDROGRAPHIC
SURVEY AND TIDAL SURVEY.

REPORT OF THE DEPUTY MINISTER.

To the Honourable

SIR LOUIS H. DAVIES, K.C.M.G., &c.,
Minister of Marine and Fisheries.

SIR,—I have the honour to report on the transactions of the Marine Branch of this department for the fiscal year ended June 30 last, and to give an account of a portion of the business up to date.

In Part I. of this report will be found the detailed report of the chief engineer on Construction and Maintenance of Lighthouses and other aids to navigation, and references to the reports of the chairman of the Board of Steamboat Inspection, Chairman of the Board of Examiners of Masters and Mates, the inspectors of Live Stock Shipments, the director of the Meteorological and Magnetic Service, the inspector of Signal Service, and the reports on Life-Boat Stations and Rewards for Humane Service.

A short account of the work of the Dominion steamers is given and the expenditure in connection therewith, the buoyage of the coast, harbours and inland waters, the purchase of oil for the use of lighthouses, the marine hospitals in the Dominion, certificates to masters and mates, wrecks and casualties.

In Part II. the reports from which the synopses have been made will be found *in extenso*, also statements of expenditure, revenue, sick mariners dues, wharfage, wrecks and casualties, steamboat inspection, and a list of light-keepers.

The amount expended on the various branches of the public service comprised in the Marine Branch of this department, during the fiscal year ended June 30 last, was \$919,616.94 ; the expenditure for the previous year was \$1,020,259.93. The expenditure for civil government, including the Marine and Fisheries branches amounted to \$54,368.71, and for civil government contingencies \$8,962.60.

The amount voted by parliament for the different branches of the Department of Marine and Fisheries, not including the departmental salaries, was \$951,626.41. It will thus be seen that the expenditure for the fiscal year was \$32,009.47 less than the amount voted by Parliament.

The whole number of persons in the outside service of the Marine Branch at the date of this report is 1,910.

During the past fiscal year the expenditure for maintenance of lighthouse and coast service amounted to \$456,254.48 ; construction, \$60,239.92 ; total for maintenance and construction \$516,494.40 ; while for the previous year the expenditure for the lighthouse and coast service, including construction was \$537,457.56 ; showing a decrease of expenditure for the year ending June 30, last, of \$20,963.16.

The appropriation for this service was \$533,458.87, the expenditure being \$16,964.47 less than the appropriation of parliament for the fiscal year.

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LIGHTHOUSE SERVICE.

The lighthouse service of the Dominion is divided as follows:—The Ontario division, embracing all lights from Montreal westward to the North-west Territories; the Quebec division extending below Montreal and including the river and gulf of St. Lawrence and strait of Belle-Isle; the Nova Scotia division including St. Paul's Island, Cape Breton, Sable Island and Cape Race, Newfoundland; the New Brunswick division; the Prince Edward Island division and the British Columbia division, each including lights within the provincial boundaries. The total number of light stations, light-ships and fog alarm stations in the Dominion on June 30, 1900, was 693, and lights shown 869; the number of steam whistles and fog-horns, bells and guns 88; the number of light-keepers and engineers of fog alarms with masters of light-ships was 693.

The report of the chief engineer relating to light-house construction, repairs, hydrographic and tidal surveys, &c., will be found in part I. The principal repairs, changes and improvements at existing stations are referred to in his report, also new aids to navigation. The work done at fog alarm stations in connection with steam whistles, compressed air horns and explosives, are dealt with under their proper headings. Information is also given respecting the extent of repairs and some account of the repairs in detail, under the head of the station.

CORRESPONDENCE.

The correspondence branch of the department is under the control of Mr. John Hardie, chief clerk of the department. About 17,103 letters, exclusive of telegrams, were received in the department during the fiscal year. The correspondence was carefully examined and replied to as far as necessary. About 14,000 letters were sent out during the same period. Forms, reports, circular letters, notices inviting tenders are not included in the number of letters addressed to this department or sent out.

These forms, &c, are numerous, and require special attention, as the matters to which they refer are important.

In the Records Branch of the department the letters received are carefully examined, entered in the record book, placed on file, and the copy of the reply attached, so that the letters and the answers can readily be seen, and any subject easily followed up.

MERCHANT SHIPPING.

Reports relating to merchant shipping for the calendar year of 1900 have not been received from the registrars of shipping in the various ports of the Dominion. The reports are made up to the end of the calendar year, and therefore, will not be received until some time after the month of January, as provided by the Canadian Shipping Act.

The statements showing the number of vessels on the registry books of the Dominion December 31, 1900, will appear in supplement No. 1 of this report. The number of new vessels built and registered will also be shown, and also a comparative statement of the tonnage of new vessels built and registered from 1874 to 1900, both inclusive.

SESSIONAL PAPER No. 21

Mr. W. L. Magee, chief clerk, attends to all matters in connection with merchant shipping.

BUOYS AND BEACONS.

The extended coast line of Canada, and numerous bays, inlets, rivers, lakes, harbours, and other navigable waters require a large number of buoys, which are maintained at an average cost of \$55,000 per annum. For the fiscal year ending June 30 last, the service cost \$66,980,48. The cost of this service is increased in years when new contracts are given for steel signal and other coast buoys.

The chief engineer in his report relating to buoyage, points out that the department has been substituting steel coast buoys for wooden buoys with favourable results. The districts now buoyed in all parts of the Dominion, number over three hundred, and the buoys number over three thousand. A record of the names of shoals, dangers, reefs and various points in channels, harbours, &c., where the buoys are placed, is carefully maintained; this enables the department to immediately locate the buoys when any reference is made to them in the correspondence.

The contract system has been found to work most economically and efficiently; in the majority of instances the contracts are immediately under the supervision of departmental officers, whose duty it is to report to the department any neglect of work on the part of the contractors. There are now existing about 275 contracts, some of which will shortly expire but new contracts will be entered into in the spring. The contractors are paid semi-annually upon the certificate of the superintending officer. There are, however, some districts not under contract; the work is being attended to by the harbour masters. In these cases it has been found more advantageous to place the work immediately in the hands of these officers.

A large number of whistling, bell and other iron buoys are maintained along the coasts of the several provinces by Dominion steamers, particularly the Nova Scotia, New Brunswick and British Columbia coasts. The cost of this maintenance by the steamers is not charged directly to the buoy service, but is included in the cost of maintenance of steamers which frequently perform the double duty of attending to lighthouses and the coast buoy service on the same trip.

The expenditure in connection with the buoy service for the year ended June 30, 1900, was as follows:—

For the province of Quebec, including the port of	
Montreal.....	\$ 30,527 61
Above Montreal, including Ontario.....	7,489 58
Nova Scotia.....	11,067 28
New Brunswick.....	9,390 82
British Columbia.....	6,111 60
Prince Edward Island.....	2,393 59
	<hr/>
Total.....	\$ 66,980 48

In addition to the buoys for marking dangers, there are eleven gas buoys below Quebec and one spare buoy, also gas works and supply tanks, &c. Two gas buoys are maintained in Pelee Passage, Lake Erie, and three in Parry Sound, Ontario. All of these buoys assist vessels at night by their light.

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The steam barge *Shamrock*, built in 1898, was engaged in the buoy service in the ship channel between Montreal and Quebec, and was immediately under directions from the department in carrying out the work of buoying the channel. The buoys were increased in number and various changes and improvements were made, especially in the stretches of the dredged channel improved by the Public Works Department. The changes are referred to in detail in the report of the chief engineer of this department.

Tenders were invited and contracts entered into for the following steel buoys during the year, viz., three whistling buoys, two bell buoys, four conical buoys and nine can buoys for the Nova Scotia agency; eighteen conical buoys for the New Brunswick agency, and two conical buoys for the Quebec agency.

OIL FOR USE OF LIGHTHOUSES.

The contract for supplying lighthouse oil was carried out by the Imperial Oil Company, of Sarnia, for the season of 1900.

The specification upon which tenders were invited requires the oil to weigh at 62° Fahr., not less than 7·85, nor more than 8·20 lbs. per gallon, and to withstand a flash test of 115° Fahr.

The quantity of oil supplied lights above Montreal during the season of 1900, was 22,545·77 gallons imperial measure, which cost \$3,846·92; to the lights in the Quebec district, 26,488 gallons, which cost \$4,429·67; to the lights in the Nova Scotia district, 31,296·18 gallons, which cost \$6,650·44; to the New Brunswick district, 10,000 gallons, costing \$2,125; to the Prince Edward Island district, 4,170 gallons, costing \$917·40.

In addition to this the department purchased from the Standard Oil Co., of New York, 7,000 gallons of American oil for the Nova Scotia district, at a cost of 17½ cents a gallon in New York; for New Brunswick, 4,500 gallons at 17½ cents a gallon; for the district above Montreal, 1,150 gallons at the same price in New York. The freight was paid by the department. In addition to this, 7,000 gallons of American oil was purchased for the British Columbia district at 21½ cents per gallon.

The list of prices according to contract is as follows:—

Delivered at.	Per gall.	Per gall.
	in barrels.	in case.
	Cts.	Cts.
Sarnia.....	14½	19
Hamilton.....	15	19½
Kingston.....	15½	20½
Montreal.....	16½	20½
Quebec.....	16½	21½
St. John, N.B.....	16½	21½
Pictou, N.S.....	16½	21½
Halifax, N.S.....	16½	21½
Charlottetown, P.E.I.....	17½	22

DOMINION STEAMERS.

'NEWFIELD.'

The *Newfield* is an iron steamer, commanded by Captain John H. Campbell, and has a crew of thirty-three men. Her dimensions are: length, 206 feet; breadth, 29 feet; depth of hold, 16 feet; tonnage, 785 gross and 509 registered.

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The steamer *Newfield* was engaged in landing coal and building materials at stations between Canso and Halifax from the 1st to the 4th of July. Stores and lamps were then taken on board, and she proceeded to Egg Island and put in operation a new light, the old one having been destroyed by fire.

A trip was then made in the lighthouse and buoy service along the east coast of Nova Scotia, Cape Breton and to Sable Island. Passengers and ponies were brought to Halifax on the return trip. A supply of coal and a steam fog-alarm boiler were then taken to Cross Island, and the ship returned to Halifax on July 30.

The *Newfield* was prepared for cable work, in which service she continued until November 8. The cable gear was then landed and the lighthouse and buoy work again taken up.

On December 1, the ship made a trip to Sable Island, and from there went to Louisbourg and loaded with coal, returning to Halifax on December 12. From that date until the end of January the steamer was engaged in general lighthouse and buoy work.

The vessel was undergoing general repairs at the Marine and Fisheries wharf at Halifax, from February 1 until April 1. The crew was shipped April 2, and a trip was made eastward in lighthouse and buoy service, and Sable Island was visited. The superintendent of lights was on board during the trip. The general lighthouse and buoy service was continued until June 12. On that date the steamer left Halifax to supply stations at Cape Sable, around the Island of Cape Breton, St. Pauls and Cape Race. The superintendent of lights was on board. The steamer returned to Halifax June 21, and was then prepared to resume the cable service.

' ABERDEEN.'

The *Aberdeen* is an iron screw steamer 180 feet long, 31 feet broad, and 16 feet deep; her tonnage is 674 gross and 266 net. Her captain is Sigismund Belanger, and her crew consists of 35, all told.

This steamer made a trip from Quebec to Pictou for coal, arriving at that place July 2, and served a number of lights in the province of Quebec on the return trip. A trip in the lighthouse service was then made to Belle Isle. From there the ship went to Pictou for coal, and then returned to Quebec, supplying lighthouses on the way. She arrived at Quebec August 10.

The steamer was then placed in the Russell dock for repairs. Considerable repairs were made and additions made to her deck structures. A new cabin was built on deck and the afterhold made larger, thereby increasing her carrying capacity about 150 tons. With these repairs and alterations the vessel is much better fitted for the Quebec lighthouse service. This work cost in the vicinity of \$6,000. The ship came out of the dock October 4.

The *Aberdeen* then left on another lighthouse supply trip to Belle Isle, calling at Cape Bauld, Cape Norman and several other stations on the way. Mr. Noble was taken on board at Belle Isle and conveyed to Flower Cove to put up the lantern. The vessel proceeded from Belle Isle to Sydney for coal. She visited Bird Rocks and several stations in the Gulf and River St. Lawrence, and returned to Quebec, arriving there on November 23.

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The lightship and buoy service was then taken up and the *Aberdeen* was engaged in this service until she was laid up for the winter on December 2.

On April 27, 1900, the *Aberdeen* started to place lightships and buoys in the St. Lawrence River and was engaged in this work until May 1. On the 9th of the same month the ship left Quebec with a fog-alarm boiler for Cape Rosier and from that station proceeded to Gaspé Basin to break up the ice. From that place she proceeded to Sydney for coal and returned to Quebec on May 18, when coal was landed and the ship cleaned and painted.

The *Aberdeen* then entered upon the lighthouse service and was still engaged in it on June 30.

‘QUADRA.’

The *Quadra* is an iron steamer, 174 feet long, 31·1 feet in breadth, 13·6 feet in depth. Her gross tonnage is 573·30 tons and her registered tonnage 265·25. This steamer is commanded by Captain Jno. T. Wallbran, and has a crew of 21 all told.

The steamer was engaged in the regular lighthouse and buoy service of the British Columbia agency from July 1, until December 30, when she was put out of commission and the crew employed to overhaul, clean and paint the hull and overhaul the machinery.

The steamer went into commission in March, 1900, and entered the graving dock to receive the annual overhauling and painting. The bottom of the ship was found to be in very good condition, the Rathjen's paint used last season having formed a splendid enamel.

The *Quadra* then entered upon the buoy service, after which the work of constructing a wave-break at Egg Island was attended to, also the construction of Walter Rock and Enterprise beacons. The steamer continued in the lighthouse and buoy service until the latter part of June. Two weeks were then spent investigating the fisheries of the northern parts of the province.

The vessel then returned to Victoria reaching that port on July 12, when the work of constructing cabins to be used by His Excellency the Governor General and suite, to and from Skagway, was commenced.

‘MINTO’.

The *Minto* is a new iron steamer 225 feet long, breadth 32·6 feet, and depth 20·6, gross tonnage 1,089, net tonnage 371; indicated horse power, 2,900, and nominal horse-power, 216. This steamer is commanded by Captain Allan Finlayson and has a crew of 35 in all.

The steamer left Dundee, where she was constructed, on September 14, 1899, and arrived in Charlottetown on the 25th of that month, having experienced a rough passage.

The ship proceeded to Pictou for coal on September 27, and from there made a trip to Sable Island, returning to Charlottetown on October 11.

The *Minto* left for Pictou on December 18 to coal up for the winter service and entered upon this work on January 2, when the steamer left Charlottetown for Pictou. One round trip was made on this route, but on returning from Pictou the second time the captain deemed it unsafe to enter Hillsboro Bay on account of the

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condition of the ice, and went to Georgetown. The steamer continued on the Pictou-Georgetown route until April 6, 1900, on which date she went to Charlottetown. The Charlottetown-Pictou route was resumed and she continued until April 16, when she was withdrawn from the service.

On May 30, the *Minto* left for Pictou to go on the slip to have the bottom cleaned and painted, this work was completed about the end of May and the ship returned to Charlottetown, where she was laid up at the wharf. She was still there at the end of the fiscal year, overhauling gear, painting, &c.

The gross earnings of the steamer *Minto* amounted to \$11,654.56. She made 81 trips and carried 2,104 passengers and 89,626 packages of goods, besides doing mail service the whole winter, there was therefore no necessity for opening the mail service between Capes Traverse and Tormentine in the small ice boats as usual in former years.

‘LANSDOWNE.’

The *Lansdowne* is a wooden steamer commanded by Captain Geo. W. J. Bisset, and has a crew of 34 men in all. Her dimensions are 188 feet in length, 32 feet in breadth and 15 feet in depth; gross tonnage 680, and registered tonnage 463.

This steamer was employed in the lighthouse and coast service of the New Brunswick agency from July 1 to 15, on which date she made a trip to Sable Island with coal and continued in the Nova Scotia agency supplying lighthouses until July 21.

The *Lansdowne* then resumed the lighthouse and coast service of the New Brunswick agency. On July 30, she was laid up in St. John for a few days to have some repairs made to the boiler and the plates on the side of the ship.

On August 7, the steamer again took up the lighthouse and buoy service of the Nova Scotia agency. On October 22, a trip was made to Sable Island, where Colonel Anderson was taken on board.

The *Lansdowne* on November 18, returned to the New Brunswick agency and was employed in the lighthouse and buoy work up to January 28, with the exception of two trips to Seal Island about the end of November.

The steamer arrived at Brier Island, bound for Halifax on January 28, but owing to stormy weather she did not reach that place until February 7. She continued in the Nova Scotia coast service up to April 19, when she returned to New Brunswick.

On May 2, the *Lansdowne* was laid up in St. John Harbour for repairs and was not put into commission again until June 21. From that date until June 30, she was engaged in the lighthouse and buoy service in the New Brunswick agency.

‘STANLEY.’

The *Stanley* is an iron steamer, commanded by Captain Angus Brown, and has a crew of 35 all told. Her dimensions are: length 207 feet, breadth 32 feet, and depth of hold 19 feet; tonnage 914 gross and 395 register.

The *Stanley* was laid up at Charlottetown on June 15, for overhauling and was not engaged in any work until August 15, on which date she left for Pictou to coal. On

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her return to Charlottetown she towed the dredge *Prince Edward* to Cascumpec and returned to Charlottetown, where she was again laid up until September 14. The steamer then left to search for the West Point buoy, which had gone adrift. The buoy was picked up on September 17, and the steamer returned to Charlottetown where she was again laid up.

On November 7, a trip was made to Pictou for coal, and on the 20th of the same month the steamer entered upon the coast buoy service, in which she was engaged up to November 25. She was then laid up at Charlottetown until November 30, on which date she left for Georgetown to be in readiness for winter service, if necessary.

The *Stanley* left her winter quarters on March 19, 1900, and proceeded to Pictou to coal up for the mail service, and entered upon this service running between Charlottetown and Pictou. She continued on this route until April 7, when the steamer made a trip to Summerside, and then returned to Charlottetown.

On April 14, the vessel made a trip to the Magdalen Islands with mails and freight, returning to Charlottetown on the 23rd of the same month, where she laid up until May 11. From that date until May 15, the ship was engaged in the coast buoy service. Starting on the 23rd of that month, she made three round trips between Charlottetown and Pictou for the Steam Navigation Company. This service was again taken up on June 4, and continued until the 7th of that month, while the ss. *Northumberland* belonging to the Steam Navigation Company was on the slip.

The *Stanley* left Charlottetown for Pictou on June 12, and went on the slip, and when she came off proceeded to Halifax and entered upon the lighthouse service of the Nova Scotia Agency, in which work she was engaged on June 30.

The earnings of the steamer amounted to \$1,691.95. The vessel carried 140 passengers and 15,407 packages of goods, besides doing some mail service. These figures are of course very small compared with those of last year, as the bulk of the winter service was performed by the steamer *Minto*.

' DRUID.'

The *Druid* is an iron screw steamer of 161 feet in length, 21 feet breadth, and 9 feet in depth. Her tonnage is 239 tons gross and 166 tons net. The vessel is commanded by Captain Charles Koenig and has a crew of twenty.

On July 1, the *Druid* left Quebec with Colonel Anderson and J. U. Gregory on board for the Traverse, to assist in the work of sinking the pier for a permanent lighthouse. The Deputy Minister of Marine and Fisheries went aboard at St. Jean Port Joli, and remained for a few days. The steamer left for Quebec on July 8.

The lightship and gas buoy service was then entered upon and the *Druid* was principally engaged in this service up to August 22. Several trips were made to the Traverse, however, during this time in connection with the construction of the permanent lighthouse there, and the steamer also made a number of trips to Grosse Isle in connection with quarantine work.

The steamer was placed in the Russell floating dock on August 22, to have the bottom scraped and painted and some small repairs made. This work was completed

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on August 27, when a trip was made down the river with the Deputy Minister aboard attending to wharfage business, after which the lightship and buoy service was resumed.

From September 13, until November 20, the steamer was engaged in the lightship and buoy service, and assisting in the work of constructing the Traverse Light. She also made a few trips to Grosse Isle. The Hon. Sir Wilfrid Laurier and party went on board on September 26.

The *Druid* was taken to the wharf of M. G. T. Davies at Lévis, for repairs on November 20, and the crew was paid off.

The *Druid* resumed work on April 28, 1900, when the buoy service was entered upon. On May 24, a trip was made to Grosse Isle. The steamer was otherwise engaged in the regular lightship and buoy service up to June 30.

'BRANT.'

The *Brant* is a wooden steamer 100 feet long over all, 19 feet in breadth and 8 feet deep; her tonnage is 141 gross and 57 net; she is commanded by Captain D. MacKinnon and has a crew of 12 all told.

This new steamer was put in commission for the first time on September 5, 1899, and was engaged in lighthouse work until October 5, when she entered upon fishery protection work. On November 19, she resumed lighthouse and buoy service and was kept in commission until December 20, when the vessel was laid up for the winter. The lighthouse and buoy service was resumed on May 18, 1900, and continued until July 17.

The cost and maintainance of this steamer was charged to maintenance of lights account.

'SHAMROCK.'

The *Shamrock* is a steam barge 117 feet long, 25 feet in breadth, and 9 feet 7 inches in depth; her gross tonnage is 237, and net tonnage 161. The *Shamrock* has a crew of 12 all told, including Mr. U. P. Boucher, who is in charge of the steamer and directs her movements. The sailing captain is S. Savaugau.

This steamer is used entirely in the buoy service in the ship channel between Montreal and Quebec; she was constructed specially for this service by Mr. J. C. Kaine, of Quebec, formerly buoy contractor, and was launched in 1898. She was purchased in the spring of 1899.

The steamer was engaged in buoy work in the St. Lawrence river from April 22, 1900, until December 5, when she was placed in winter quarters at Sorel, P. Q.

'BAYFIELD.'

The *Bayfield* is a wooden steamer 110 feet long, 18 feet wide and 9 feet deep. Mr. W. J. Stewart is in charge of the Hydrographic Survey, and has as his assistants Messrs. F. Anderson and R. E. Tyrwhitt. Captain A. M. McGregor is the sailing master of the *Bayfield*, and the crew consists of 19 men in addition.

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The steamer resumed the survey on May 2, 1900, and ended the season on October 25. The *Bayfield* was employed in surveying on the east shore of Lake Huron, during the whole of the season.

Slight repairs were made to the *Bayfield* in the spring.

OTHER STEAMERS.

The *Acadia*, *Petrel*, *Curlew*, and *La Canadienne*, are engaged in fisheries protection work and reports concerning them will be found in the Fisheries Report of this department.

STATEMENT showing cost of maintaining Dominion Steamers from 1884 to 1900.

Year.	Cost of Maintenance.		Year.	Cost of Maintenance.	
	\$	cts.		\$	cts.
1883-84.....	122,816	25	1892-93.....	146,521	77
1884-85.....	148,864	26	1893-94.....	142,487	42
1885-86.....	130,759	83	1894-95.....	129,899	80
1886-87.....	141,424	42	1895-96.....	150,519	41
1887-88.....	150,659	19	1896-97.....	136,940	11
1888-89.....	126,629	33	1897-98.....	117,644	39
1889-90.....	114,959	20	1898-99.....	145,270	75
1890-91.....	111,437	03	*1899-1900.....	180,975	45
1891-92.....	127,406	28			

* Which includes outfit and stores to steamer *Minto* in Scotland, which properly belongs to construction, also alteration of ss. *Aberdeen*.

CERTIFICATES TO MASTERS AND MATES.

The report of Captain W. H. Smith, R.N.R., Chairman of the Board of Examiners of Masters and Mates, forms Appendix No. 13 of this report.

During the fiscal year the Board of Examiners of Masters and Mates held examinations at Halifax 13 times, at St. John 6 times, at Yarmouth 3 times, but none at Quebec, making 22 times in all. There were also 5 examinations held at Victoria, B. C., the papers and problems were forwarded to the Agent at that place and returned to Halifax, for inspection of the Chairman of the Board.

At Halifax, nine applications were made for foreign-going certificates of competency as master, and 11 for coasting and inland; 8 foreign-going and 8 coasting and inland masters received certificates; 14 applications were made for foreign-going certificates of competency as mate, and 3 for coasting and inland; 11 foreign-going and 3 coasting-mates received certificates.

At St. John, 6 applications were made for foreign-going certificates of competency as master, and 4 foreign-going masters received certificates; 7 applications were made for foreign-going certificates as mate, and 7 mates received certificates; 5 applications were made for coasting certificates as master, and three as mate; 3 coasting masters received certificates, and 1 mate.

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At Yarmouth, 3 applications were made for foreign-going certificates as master, and 2 foreign-going masters received certificates; 1 application was made for a foreign-going certificate as mate, and 1 mate received a certificate.

At Victoria, B.C., one application was made for foreign-going certificates as master and one foreign-going master received a certificate; five applications were made for foreign-going certificates as mate, and five mates received certificates.

In supplement No. 1 to this report will be found a list of all who have obtained certificates of competency and service, either as master or mate, during the year ended June 30, 1900.

INLAND AND COASTING CERTIFICATES.

During the twelve months ended June 30, 1900, the number of candidates in the Dominion who have passed and obtained master's certificates of service was eleven, and one mates' certificate of service has been issued the amount paid for these certificates was ninety-two dollars.

The number of certificates of competency as master was 185, as mate eighty-nine, and the amount paid for these certificates was \$3,193. The amount received for renewed certificates of competency and service was \$110, making a total of \$3,395, received for master's and mate's inland and coasting certificates.

A list of certificates issued during the twelve months ended June 30, 1900, will be found in supplement No. 1 to this report.

The total amount of fees received on account of certificates of competency and service, sea-going and inland coasting, during the fiscal year ended June 30, 1900, was \$4,221.50, and the amount in detail expended on account of the service as will be seen by reference to Appendix No. 1, to this report was \$3,750.69, leaving a balance to the credit of this service of \$470.81. The vote for this service was \$5,000, and the sum expended to June 30, 1900, \$3,750.69, leaving an unexpended balance of \$1,249.31.

The following statement shows the total receipts and expenditure on account of masters and mates since 1871:—

—			—		
	Ex- penditure.	Receipts.		Ex- penditure.	Receipts.
	\$ cts.	\$ cts.		\$ cts.	\$ cts.
For the fiscal year ended June 30, 1871.	1,410 45		For the fiscal year ended June 30, 1889.	4,331 04	2,202 00
" " 1872.	4,312 07	1,344 00	" " 1890.	4,117 83	2,186 00
" " 1873.	6,466 18	4,963 00	" " 1891.	4,255 24	2,586 00
" " 1874.	4,520 19	2,995 00	" " 1892.	4,363 88	2,194 00
" " 1875.	5,696 62	2,715 00	" " 1893.	4,116 99	2,484 00
" " 1876.	4,672 08	2,021 87	" " 1894.	3,721 33	2,907 04
" " 1877.	4,050 00	1,740 50	" " 1895.	3,758 29	3,974 50
" " 1878.	4,249 76	1,296 50	" " 1896.	4,062 82	2,307 50
" " 1879.	4,250 12	1,334 50	" " 1897.	3,536 29	3,754 00
" " 1880.	4,253 43	1,547 00	" " 1898.	3,335 40	4,800 00
" " 1881.	3,888 41	1,333 50	" " 1899.	3,568 26	4,486 50
" " 1882.	3,965 19	1,152 50	" " 1900.	3,750 69	4,221 50
" " 1883.	4,021 20	1,314 00			
" " 1884.	3,909 59	9,437 50	Expenditure.....	126,119 72	81,739 71
" " 1885.	4,324 15	2,897 00	Receipts.....	81,739 71	
" " 1886.	5,245 28	2,152 00			
" " 1887.	4,855 98	2,172 00	Excess of expenditure over receipts.....	44,380 01	
" " 1888.	5,060 96	3,220 80			

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WRECKS AND CASUALTIES.

The total number of casualties to British and Canadian sea-going vessels reported to the department, as having occurred in Canadian waters and to Canadian sea-going vessels in waters other than those of Canada, during the twelve months ended June 30, 1900, was 151, representing a tonnage of 59,066 tons register, and the amount of loss both partial and total, to vessels and cargoes as far as ascertained, was \$356,848. The number of casualties to inland vessels, so far as have been reported, were slight and unimportant.

The number of lives reported lost in connection with the casualties was 74. A statement of the wrecks and casualties will be found in supplement No. 1 to this report.

SICK AND DISTRESSED MARINERS.

MARINE HOSPITALS.

Under the provisions of chapter 76, Revised Statutes, a duty of two cents per ton register is levied on every vessel arriving in any port in the province of Quebec, Nova Scotia, New Brunswick, Prince Edward Island and British Columbia, the money thus collected forming the Sick Mariners' Fund. Vessels of the burden of 100 tons and less pay the duty once in each calendar year, and vessels of more than 100 tons, three times in each year.

By an amendment of this Act passed at the session of parliament in 1887, 50-51 Victoria, chapter 40, it is provided that no vessel, which is not registered in Canada and which is employed exclusively in fishing or on a fishing voyage, shall be subject to the payment of this duty.

The receipts for the fiscal year ended June 30 last, amounted to \$59,954.50, being an increase of \$2,588.71 as compared with the preceeding year. The increase and decrease in receipts for sick mariners' dues in the various provinces were as follows:— Nova Scotia, increase \$1,905.73; Quebec, decrease \$843.17; New Brunswick, increase \$744.71; Prince Edward Island, decrease \$20.34; British Columbia, increase \$831.40.

The Sick Mariners' Act does not apply to the province of Ontario, and consequently no dues are collected from vessels in that province, although a small expenditure is incurred on account of sick seamen. An appropriation is made by parliament to cover the expenditure at Kingston and St. Catharines, where general hospitals have been established and sick seamen are attended. During the fiscal year ended June 30 last, sick seamen were paid for at a per diem rate of 90 cents.

In the province of Quebec the expenditure on account of sick seamen amounted to \$7,515.17, being \$836.28 less than the previous year. The total collections for the entire province amounted to \$16,635.24, being \$843.17 less than in the previous year.

At the port of Montreal, sick seamen are cared for at the General Hospital and at Notre Dame Hospital, under an arrangement made by the department, by which 90 cents per diem is paid for board and medical attendance of each seaman. The sick mariners' dues collected at the port of Montreal during the fiscal year ended June 30, amounted to \$7,702.00.

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At the port of Quebec sick seamen are cared for at the Jeffery Hale and the Hotel Dieu hospitals, the sum of 90 cents per diem for each seaman is allowed in return for medical attendance and board. The sick mariners' dues collected at Quebec amounted to \$5,986.12.

The expenditure on account of sick seamen in the province of New Brunswick for the fiscal year amounted to \$6,482.08, being \$1,229.85 more than the preceding year, and the collection of dues to \$11,282.95, or \$744.71 more than the previous year. Marine hospitals have been maintained at Miramichi, Richibucto and Bathurst.

The Sackville hospital has been leased to Mr. Bradford Carter for a term of years from 1892, at a nominal rental. The terms of the lease require Mr. Carter to keep the building in repair, and if the department should require the hospital at any time it is to be handed over on notice being given.

In the province of Nova Scotia, marine hospitals are maintained at the ports of Yarmouth, Pictou, Sydney, Lunenburg and Point Tupper. The total expenditure on account of sick seamen in the province of Nova Scotia for the fiscal year amounted to \$16,360.30, and the receipts to \$22,625.15.

At Halifax, provision is made for the care of sick seamen at the Victoria General Hospital, under arrangements made with the managers, by which the sum of 90 cents per diem is allowed for board and medical attendance to sick seamen.

In the province of Prince Edward Island the sum expended on account of sick and disabled seamen during the fiscal year was \$1,111.20, and the receipts from sick mariners' dues were \$362.76.

Sick seamen are cared for at the Charlottetown and Prince Edward Island hospital, under arrangements made with the managers of these institutions, at the same rate that is paid to the public hospitals in other parts of the Dominion.

In the province of British Columbia the sum of \$4,193.74 was expended for sick and disabled seamen, while the receipts from the collection of sick mariners' dues amounted to \$9,078.02.

The marine hospital at Victoria has in attendance a medical superintendent with a salary of \$300 per annum, a keeper whose salary is \$500 per annum. He is also allowed a rate of \$5 per week for board and attendance of each seaman. The keeper procures fuel, light, bedding, &c., at his own expense.

At ports where no hospitals are established in the province of Quebec, Nova Scotia, New Brunswick, British Columbia and Prince Edward Island, sick seamen are cared for under the chief officer of Customs, when the vessel to which the seamen belong have paid their dues according to law. A circular to collectors of Customs was issued February 7, 1891, permitting sick seamen to be attended to at the port of arrival of a vessel, provided that the regular dues were previously paid at some port.

During the fiscal year the sum of \$1,738.26 was expended for shipwrecked and distressed seamen, under the provisions of the Sick and Distressed Mariner's Act.

The total expenditure on account of sick and disabled seamen and marine hospitals amounted to \$36,005.04, and the appropriation by parliament for this service was \$36,000. The dues collected amounted to \$59,954.50. It will be seen that the receipts exceed the expenditure \$23,949.46.

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The receipts and expenditure in connection with sick and distressed seamen from the year 1869 were as follows :—

	Receipts.		Expenditure.	
	\$	cts.	\$	cts.
For the fiscal year ended June 30, 1869.....	31,353	78	26,987	64
" " " 1870.....	31,410	46	27,029	34
" " " 1871.....	29,683	41	28,971	22
" " " 1872.....	34,911	64	34,947	60
" " " 1873.....	37,136	10	41,016	43
" " " 1874.....	41,500	16	59,778	90
" " " 1875.....	37,801	46	50,684	76
" " " 1876.....	41,287	66	48,828	49
" " " 1877.....	43,739	21	51,647	94
" " " 1878.....	44,665	07	43,780	90
" " " 1879.....	37,779	57	42,729	36
" " " 1880.....	42,523	20	42,160	91
" " " 1881.....	49,779	72	40,667	52
" " " 1882.....	45,951	47	39,359	11
" " " 1883.....	45,573	42	36,249	65
" " " 1884.....	48,667	07	39,553	58
" " " 1885.....	39,068	39	44,501	57
" " " 1886.....	40,848	05	50,377	62
" " " 1887.....	42,334	92	37,447	35
" " " 1888.....	41,669	64	36,447	85
" " " 1889.....	39,306	29	41,320	59
" " " 1890.....	47,881	75	41,729	11
" " " 1891.....	43,829	68	35,155	12
" " " 1892.....	45,381	92	33,498	83
" " " 1893.....	46,190	69	55,052	37
" " " 1894.....	49,105	40	38,403	94
" " " 1895.....	42,815	74	38,332	55
" " " 1896.....	45,751	61	36,683	36
" " " 1897.....	54,358	10	35,931	19
" " " 1898.....	54,552	31	34,526	83
" " " 1899.....	57,365	79	37,353	29
" " " 1900.....	59,971	84	32,743	30
Total.....	1,394,196	02	1,266,904	92
Deduct expenditure from receipts.....	1,266,904	92		
Excess of receipts over expenditure.....	127,291	10		

STEAMBOAT INSPECTION.

The total number of steamboats reported in the several districts in the Dominion is 1,491; of this number 106 are new vessels, the gross tonnage being 244,401. Fees were collected for inspection amounting to \$35,465.83; the fees from engineers for certificates amounted to \$809, and fees for inspection of tow barges to \$200, making the total receipts from steamboat inspection and engineers' certificates \$36,474.83, but out of this amount refunds were made to date which should have come out of former years receipts. The receipts for the previous year from these sources amounted to \$32,814.45; it will thus be seen that the receipts of the fiscal year ending June 30, 1900 exceed the receipts of the proceeding year by \$3,660.38. Owing to the increase of tonnage of steamers, mainly caused by the Yukon trade, and the additional work of inspecting steamers without certificates, not registered in the Dominion, the work of inspection has been increased in most of the divisions.

The total expenditure in connection with inspection was \$27,965.92, a decrease of expenditure for the last fiscal year of \$69.57.

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The consolidated laws relating to steamboat inspection came into force on the 1st day of January, 1899.

The report of the Chairman of the Board of Steamboat Inspection forms an appendix to this report.

The following is a comparative statement of the receipts and expenditure in connection with Steamboat Inspection :—

	Receipts.		Expenditure.	
	\$	cts.	\$	cts.
For the fiscal year ended June 30, 1870.....	12,521	29	7,379	18
" " 1871.....	10,369	96	8,321	00
" " 1872.....	11,710	43	8,500	00
" " 1873.....	15,412	75	11,205	54
" " 1874.....	15,603	19	10,291	58
" " 1875.....	15,011	90	12,199	81
" " 1876.....	13,811	24	13,081	86
" " 1877.....	15,858	42	12,073	01
" " 1878.....	12,431	25	13,228	28
" " 1879.....	12,331	16	13,076	46
" " 1880.....	15,424	02	11,854	34
" " 1881.....	16,905	49	12,211	65
" " 1882.....	15,277	78	14,835	97
" " 1883.....	12,577	36	16,209	02
" " 1884.....	15,371	79	21,893	28
" " 1885.....	13,343	66	23,235	04
" " 1886.....	14,087	76	21,775	57
" " 1887.....	12,701	20	22,837	80
" " 1888.....	12,550	14	21,430	45
" " 1889.....	12,576	18	22,313	03
" " 1890.....	19,859	18	20,989	52
" " 1891.....	21,644	72	22,183	76
" " 1892.....	20,994	84	22,736	59
" " 1893.....	25,295	35	24,386	95
" " 1894.....	24,835	47	25,061	36
" " 1895.....	24,630	56	26,385	88
" " 1896.....	24,002	32	26,321	27
" " 1897.....	25,094	95	26,837	83
" " 1898.....	31,525	40	26,342	29
" " 1899.....	33,854	45	28,035	49
" " 1900.....	36,474	83	27,965	92
	563,928	99	577,119	73
Deduct receipts from expenditure.....			563,928	99
Balance to debit of fund.....			13,199	74
Refunds.....			2,652	82
			15,843	56

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The following list contains the names of the inspectors of boilers and machinery and hulls and equipments of steamboats, viz :—

Name.	Position.	Address.
Edward Adams.....	Chairman of Board of Steamboat Inspection.....	Ottawa.
M. P. McElhinney ..	Inspector of Hulls and Equipments.....	"
I. J. Olive	"	St. John, N.B.
S. R. Hill.....	"	Halifax, N.S.
William Evans.....	"	Toronto, Ont.
P. D. Brunelle.....	"	Quebec.
R. Collister.....	"	Victoria, B.C.
John Dodds.....	Inspector of Boilers and Machinery.....	Toronto, Ont.
E. W. McKean.....	"	"
T. P. Thompson.....	"	Kingston, Ont.
Wm. Laurie.....	"	Montreal, P.Q.
L. Arpin	"	"
J. Samson	"	Quebec, P.Q.
J. P. Esdaile	"	Halifax, N.S.
W. L. Waring	"	St. John, N.B.
J. A. Thomson	"	Victoria, B.C.
G. P. Phillips.....	"	Rat Portage, Ont.
Frank M. Richardson...	"	Vancouver.

OUTSIDE SERVICE, MARINE BRANCH.

The number of persons employed in the Outside Service on June 30, 1900, was as follows :—

Superintendent of lights and light-keepers, &c., in Ontario and above Montreal.....	184
Officers of agency in the city of Quebec and light-keepers, fog-whistle-keepers, crews of light-ships, &c., at and below Montreal, in the province of Quebec.....	175
Agent, clerk, messenger, superintendent of lights, light-keepers, fog-whistle-keepers, attendants at humane establishments, &c., in Nova Scotia.....	220
Agent, clerk, messenger, superintendent of lights, light-keepers, fog-whistle-keepers, &c., in New Brunswick.....	117
Agent, foreman of works, messenger and light-keepers, in Prince Edward Island.....	48
Agent and light-keepers in British Columbia.....	32
Officers and crews of Dominion steamers and vessels, including Fisheries Protection Service.....	420
Coxswains of life-boats	23
Inspectors of steamboats.....	22
“ shipments of live stock	4
Examiners of masters and mates, and clerk to chairman of Board	19
Officers and servants in marine hospitals.....	20
Shipping masters.....	34
Harbour masters	202

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Officers of observatories, meteorological observers, &c., receiving pay.....	163
Hydrographers and engineers at Ottawa.....	7
Receivers of wrecks	46
Wharfingers.....	174
· Making a total of.....	<u>1,910</u>

For the previous year the number was 1,907. In addition to the 1,910 mentioned above, there are 71 registrars of shipping, who act under the direction and control of this department, but are, at the same time, collectors of customs at various ports of registration, and receive no salary or fee in their capacity of registrars. There are 95 measurers and surveyors of shipping throughout the Dominion who act as officers of this department, and are remunerated from their fees of office, although in addition to such office, many of them hold positions in the customs service. Also, in addition to the above by Orders of Council of April 21, and December 2, 1874, the chief officer of customs at each port in the provinces of Quebec, Nova Scotia, New Brunswick, British Columbia and Prince Edward Island, where no separate shipping office has been established, is to be held and deemed a shipping master, is to receive the fees, make the yearly returns to the department, and act in that capacity under its directions.

LIVE STOCK SHIPMENTS.

In last year's report the statements furnished by Messrs. George Pope and E. B. Morgan, inspectors at Montreal, contained the total number of live stock shipped from the port of Montreal for the season of 1899. [The returns show that the total number of cattle shipped from Montreal during the season of 1900 was 92,180, an increase of 10,376 over 1899. The total number of sheep shipped during the same time was 34,833, a decrease of 23,444 from the shipments of 1899. The number of horses shipped from Montreal during 1900 was 2,833, being 1,906 less than last year. From St. John, N.B., 15,472 cattle, 1,263 sheep and 501 horses. From Halifax 5 horses were shipped. The total number of United States cattle in bond shipped from Canada numbered 5,688. Total from all these ports 107,652 cattle, 36,096 sheep, and 3,339 horses, not including United States cattle in bond.]

The shipments in detail will be found in the appendix to this report under the head of Live Stock Shipments.

METEOROLOGICAL SERVICE.

Efforts have been made to bring the monthly weather review of this service up to date. The monthly review gives a short description of the weather and brief articles on climatology. Four new stations were established in British Columbia, six in the Northwest Territories, four in Ontario and two in Quebec. One station that had been discontinued in New Brunswick was resumed.

The Departments of Agriculture in Ontario, Manitoba and British Columbia realize the importance of reliable meteorological data in connection with statistics of crops, acreage under cultivation, &c. Monthly charts containing notes on the leafing of trees

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and flowering of plants and other information are published. In August, 1896, the publication of a daily weather chart was commenced, containing information gathered from meteorological observations taken each day at 8 a.m. This chart is displayed in Toronto at the Board of Trade, harbour master's office, and at some of the public schools. Private individuals obtain the chart, paying for it \$4 per annum. The forecasts of the weather are telegraphed to thirty-six ports in the maritime provinces, two in British Columbia, and also to all the principal ports on the great lakes. The value of these forecasts will be seen by reading the report of the director.

SIGNAL SERVICE.

The reports of the superintendents of Signal Service at Quebec and Halifax contain information valuable to mariners. Mr. J. U. Gregory is superintendent of this service at Quebec, and Major H. B. Roberts, of the Royal Engineers, at Halifax.

Arrangements have been completed between the government of Canada and the Society of Lloyd's, whereby the following signal stations, maintained by the Dominion of Canada, have been included in Lloyd's system of reporting stations. Orders forwarded to Lloyd's can be notified to vessels by means of these signal stations on the same terms and conditions as observed at Lloyd's signal stations, and vessels signalling to these Canadian signal stations will be reported to Lloyd's for insertion in the Lloyd's List and Shipping Gazette, and daily press, in the same manner as reports from Lloyd's signal stations.

LIST OF STATIONS.

Cape Ray, Newfoundland.	South West Point, Anticosti.
St. Pauls Island, Cape Breton.	West Point, "
Cape St. Lawrence, "	Cape Rosier, Gaspé Coast.
Heath Point, Anticosti.	Fame Point, "
South Point, "	Cape Magdalen, "
Amherst Island, Magdalen Islands.	

The government telegraph system was, during the past season, extended along the north coast of the Gulf of St. Lawrence to the Strait of Belle Isle, and it was intended to connect Belle Isle, last fall, with the shore telegraph system by a cable, but the loss of the *Newfield* has postponed the completion of this work.

Lloyd's have been in communication with this department on the subject of establishing one of their reporting stations on Belle Isle, and have been offered the active assistance of this department in doing so. They are also considering the feasibility of connecting Belle Isle with the main land by a system of aerial telegraphy, so that communication would not be interrupted by a break in the cable.

Arrangements have been completed by the Department of Marine and Fisheries whereby all inward bound vessels showing their official numbers will be reported from marine signal stations in the river and gulf of St. Lawrence immediately, and all reports will be promptly posted on the bulletin board of the Great Northwestern Telegraph Company's office in St. Peter street, Quebec, and on that of the Board of Trade in Montreal.

Weather and ice reports will be forwarded twice a day, as formerly, and similarly posted.

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Arrangements have also been made for repeating all reports received to the pilot station at Father Point, so that pilots will be promptly advised of the locality of inward bound vessels.

REMOVAL OF OBSTRUCTIONS TO NAVIGATION.

The sum of \$1,000 was appropriated by parliament for the removal of obstructions to navigation. By reference to the statement of expenditure it will be seen that the sum of \$252.19 was expended for the fiscal year. A statement in detail will be found in the report of the chief engineer of this department under the heading of Removal of Obstructions. The expenditure is given in detail for the amount that has been expended during the calendar year, and therefore includes payments which have been made since the ending of the fiscal year.

COASTING TRADE OF CANADA.

By the provisions of chapter 83, Consolidated Statutes of Canada, being an Act respecting the Coasting Trade of Canada, no goods or passengers can be carried by water from one port in Canada to another except in British ships, but the Governor in Council may, from time to time declare that the Act shall not apply to ships or vessels of any foreign country in which British ships are admitted to the coasting trade of such country, and to carry goods and passengers from one port or place to another in such country. The parliament of Canada was empowered to pass the Act alluded to, under the provisions of the Imperial Act, 32 Vic., chap. 11, intituled: An Act for amending the Law relating to the Coasting Trade and Merchant Shipping in British Possessions, which came into operation in this country on its proclamation by the Governor General on October 23, 1869.

It was ascertained that the following countries, viz., Italy, Germany, the Netherlands, Sweden and Norway, Austro-Hungary, Denmark, Belgium, and the Argentine Republic, allowed British ships or vessels to participate in their coasting trade on the same footing as their own national vessels—the ships of Italy by Order in Council of August 13, 1873; those of Germany by Order in Council of May 14, 1874; those of the Netherlands by Order in Council of September 9, 1874; those of Sweden and Norway by Order in Council of November 5, 1874; those of Austro-Hungary by Order in Council of June 1, 1876; those of Denmark by Order in Council of January 25, 1877; those of Belgium by Order in Council of September 30, 1879; and those of the Argentine Republic by Order in Council of May 18, 1881, were admitted to the coasting trade of Canada.

LEGISLATION.

During the season of 1900, the following Acts were passed:

Safety of Ships Amendment Act, 1900.

An Act to amend the Pilotage Act, chapter 80, Revised Statutes of Canada.

F. GOURDEAU,

Deputy Minister of Marine and Fisheries.

DEPARTMENT OF MARINE AND FISHERIES,

OTTAWA, December, 1900.

ANNUAL REPORT OF THE CHIEF ENGINEER OF THE DEPARTMENT OF MARINE AND FISHERIES

The Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit a report of the work done in the several services under the supervision of this office during the eleven months ended on November 30, 1900.

This embraces most of the technical work at departmental headquarters, including the construction and maintenance of lighthouses, light-ships, fog-alarms, buoys and beacons; the supervision of construction and repairs of lifeboats; the administration of the vote for the removal of wrecks and obstructions in navigable waters; tidal and current surveys; hydrographic surveys, and the publication, examination and correction of hydrographic charts; construction of and repairs to fish hatcheries and refrigerators; engineering points in connection with the construction and maintenance of fish-passes; supervision of surveys of oyster beds; examinations of applications for foreshore, wharf and water lots as they affect the interests of navigation: preparation and publication of notices to mariners and hydrographic notes, &c.

There are special staffs appointed for the tidal observation work and for the hydrographic survey work; the remainder of the work of the branch is attended to by the general staff of the office.

STAFF.

I am pleased to be able to report that my staff has worked to my entire satisfaction throughout the past exceedingly busy season, and the record of work done testifies to their industry.

Mr. B. H. Fraser has been sent out on outside work and inspection more than in former years. The placing and maintenance of the Parry Sound gas buoys has been under his charge; he unloaded and shipped to British Columbia the Brotchy ledge cable; repaired the Snake island pier, and filled the Green shoal pier with concrete amongst other outside work. During my absences he has been in charge of my office.

Mr. J. M. O'Hanly is in charge of the records and plans in the draughting room, and has been very busily employed throughout the year.

Mr. J. F. Fraser, since my last report, has been wholly employed in connection with the construction of fish-bait freezers, and has been throughout the year absent in the maritime provinces.

Mr. H. E. Fosbery, who has had experience as a draughtsman in an architect's office, was employed temporarily as a draughtsman on June 27, 1900, and is yet employed.

Mr. W. B. Lindsay, a graduate of the Royal Military College, was employed temporarily as a draughtsman on July 23, 1900, and is yet employed.

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Mr. W. H. Noble has been employed on construction work in Ontario exclusively, throughout the year. Last winter he rebuilt the lighthouse at Green shoal, in the Ottawa river, on a steel and concrete pier; he also built a lighthouse on Snake island pier in Kingston harbour. In the spring he erected three new range light towers in Midland harbour, and succeeded in the difficult task of removing a lighthouse, all standing, from Gin rock to Brébeuf island; he then arranged for the erection of a lightkeeper's dwelling on Flower Pot island, and finally took charge of the construction of the foundation of the large new lighthouse to be built on Pelee passage middle ground, and had the caisson ready for sinking before the close of navigation. I wish to bear special testimony to Mr. Noble's energy and integrity in carrying out these works, some of which involved much responsibility and anxiety.

OFFICE WORK.

A large proportion of the work done by the general staff of the branch consists in the construction and maintenance of light buildings, fog-alarms, buoys, beacons and other aids to navigation. Full details of the work done in this connection last year are contained in a separate report prepared by me, and attached hereto. (Inclosure A.)

Plans and specifications for all important new buildings and repairs are made or approved in this office.

The following table indicates the work done in the draughting office during the eleven months ending November 30, 1900 :—

Description of work.	Plans designed.	Plans received.	Copies made.
Lighthouse towers and dwellings.....	23	6	70
Details.....	18	1	41
Wharfs, piers, &c.....	3	4	8
Outbuildings.....	2	.....	11
Buoys and apparatus.....	9	5	59
Machinery.....	.....	6	.....
Lanterns.....	1	1	4
Fish hatcheries.....	3	.....	16
Steamers.....	5	1	49
Land surveys.....	.....	24	44
Charts.....	.....	5	5
Charts under construction.....	1	.....	.....
Miscellaneous.....	15	57	85
Plans relating to foreshore.....	.....	88	.....
	80	198	392

Total plans for eleven months from January 1 to November 30, 1900.....	670
Charts received and recorded.....	129
“ “ entered in chart book.....	32
Photographs received and recorded.....	149
Specifications written.....	31
Notices to Mariners issued (comprising 230 subjects).....	101

The work of examining applications for water lots in public harbours, which is always a tedious and intricate matter, increased very much during the past year, until it seriously interferes with the prompt despatch of more purely engineering work. It is proper that the plans and descriptions should be checked in this office, but most of

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the work involved in preparing the cases for consideration is of a strictly legal character, upon which I often feel at a loss to report. There should be an official in the department with some special legal knowledge to whom the investigation of titles, the legal status of conflicting interests, and other legal and notarial work required in the department, could be entrusted.

Another branch of work which has greatly increased of late years is the preparation of notices to mariners. During the past eleven months, 101 notices, embracing 230 different subjects, have been issued, and the checking of the information and comparison with charts, &c., involve a great deal of clerical labour and correspondence. It seems to be almost necessary to allot a man with special hydrographic knowledge to attend to this particular work. To do the work as carefully, correctly, and promptly as it ought to be done would require a large proportion of the time of one man.

An attempt is made to publish, as well as purely Canadian work, any information obtained respecting waters contiguous to the International boundary line, or respecting routes frequented by Canadian shipping, but this has only been imperfectly done.

During the past eleven months foreign notices were issued covering 6 items relating to Newfoundland and the French Islands in the Gulf, one item relating to the Atlantic, 45 to the inland, and 11 to the Pacific waters of the United States, as well as eight notices describing transatlantic and transpacific aids.

The usual annual edition of the list of all the lights and fog signals on the coasts, rivers and lakes of the Dominion, corrected to April 1, 1900, was published on July 10.

PERSONAL INSPECTIONS.

During the past year the demands of the executive work of the office were so urgent that I was unable to do as much outside inspection as was desirable.

I visited the Traverse pier on two or three occasions, examined the bottom for scour, and started the work on the tower; also took soundings in the channel there; at St. Thomas, where ships had complained of striking, and above Quebec; and inspected the new range lights at Pointe à Basile and Ste. Croix.

I visited Pelee passage several times, and surveyed the Middle ground for a site for the new lighthouse, supervised the construction of the caisson at Amherstburg, and incidentally did much work in the neighbourhood.

In September, I inspected all aids to navigation from Blind river to Michipicoten harbour, in Algoma, and arranged for many improvements in aids to navigation, which are described in the detailed report (Inclosure A).

It is desirable that I should inspect next season all lights on the lower St. Lawrence route, in Cape Breton, and in the Bay of Fundy.

REMOVAL OF OBSTRUCTIONS.

There were no heavy demands during the past eleven months, on the vote for removal of obstructions, administered by this branch, but considerable useful work was done and a consistent effort is being made to compel the owners to incur the expense of protecting navigable waters by caring for their own wrecked property. Whenever an opportunity occurred, government steamers were utilized to remove wreckage.

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The following statement shows work done on wrecks, so far as it has come under the official notice of this department.

Obstruction.	Locality.	Work done, &c.	Cost to government.
			\$ cts.
Schr. <i>Cornet</i> sunk.....	Port Credit, Ont.....	Wreck removed by John Miller of Port Credit.....	25 00
Schr. <i>Safeguide</i> sunk.....	Hillsborough Bay, P.E.I.....	Towed out and beached by D.G. S. <i>Brant</i> . Afterwards disappeared.....	None.....
Logs and snags.....	Jemseg, Grand Lake & Salmon River, N.B.	Removed by Str. <i>May Queen</i>	25 00
Crib in dock.....	Port Arthur, Ont.....	Dredged out by the Department of Public Works.....	120 00
Coal barge <i>Annie L. Taylor</i> sunk.....	Halifax Harbour, N.S.....	Removed by owners.....	None.....
Schooner sunk.....	Off Low Point, C.B.....	Broken up by D. G. S. <i>Gladiator</i>	None.....
Tug <i>Ruby</i> beached.....	Port Stanley Harbour, Ont.....	Towed outside by D. G. S. <i>Petrel</i>	None.....
Piles.....	" "	Removed by Lake Erie R.R. Co.	None.....
Schr. <i>E. M. D. Hardy</i> sunk.....	Louisbourg Harbour, N.S.....	Mariners warned.....	None.....
Old wreck in entrance.....	" "	Disappeared.....	.....

CLOSE OF NAVIGATION.

In consequence of the large quantity of freight seeking shipment quite up to the close of navigation, urgent demands were made on the department to leave the buoys and lightships in the upper lakes and river St. Lawrence in position later in the fall than has been our practice, and the exceptionally mild weather of the early winter encouraged shippers to hope for a particularly late close of navigation. The result, from the department's point of view, has not been encouraging; two out of three gas buoys at the entrance to Parry sound were driven from their positions and wrecked; many of the buoys between Montreal and Quebec were carried away by the ice, and their recovery will give rise to some expensive claims for salvage; the lower Traverse lightship was driven from her position by ice and forced to take shelter at Les Eboulements, where she will have to winter instead of being brought to Quebec for the usual winter overhaul. The steamer *Druid*, in recovering some of the gas buoys, was caught by the ice and her hull considerably damaged.

Under these circumstances, it appears to me necessary that the department should take in the buoys earlier than was done this season; in other words, that we should go back to the practice of previous years. It is hopeless to attempt to maintain an efficient buoy service after ice begins to form on our coasts, and if the necessities of commerce compel vessels to navigate later, they ought to so time their departures that they can get through critical points in daylight, with the help of permanent shore marks.

The establishment of a permanent lighthouse at the upper end of the Traverse has proved a great boon in the navigation of the St. Lawrence below Quebec, as it enabled vessels to go through the Traverse after the lightship had been driven from her station.

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BUOYAGE.

The number of buoys maintained in Dominion waters steadily increases from year to year. Applications were received for new buoys from many localities. In some cases new buoys were added to the number in districts formerly buoyed, and in other cases new districts were buoyed for the first time.

There are now about 330 districts including harbours, bays, rivers, and lakes buoyed with over 3,000 buoys.

The Montreal ship channel buoys were efficiently maintained during the past year, and very few complaints were made respecting buoys being out of position. They were, however, left out very late this fall to aid the *Paliki* to go to sea, and in consequence were caught in the ice, and the wooden spar buoys were so much cut up that Mr. Boucher, engineer in charge of the service, reports that a third of the wooden buoys will require to be renewed next spring. Many of the steel buoys, including the two gas buoys, were carried away from their stations by the ice. This damage shows once more the necessity of removing the buoys from the river in good season every autumn.

All the large buoys on the more exposed portions of the coast and all the gas buoys in Quebec, whistling buoys and bell buoys and a number of can and conical buoys are maintained by this department, the government steamers under the control of our agents being utilized as buoy tenders. In Quebec over fifty buoys, including eleven gas buoys, are so maintained; in Nova Scotia thirty-three signal buoys are kept in position and about thirty steel can buoys, directly under the agency; in New Brunswick ten signal buoys are directly under the agency; in Prince Edward Island three signal buoys; and in British Columbia about sixty large buoys of various descriptions are maintained by the agency; in Ontario four bell buoys and five gas buoys are maintained. It will be seen by reference to my detailed report that a large number of additional steel buoys, including heavy signal buoys, were installed during the past season in the maritime provinces. I would draw attention to the fact that the number of buoys of this class looked after by the government steamers has now become so large that the steamers cannot give them prompt and proper attention, and consequently numerous losses occurred this fall. Next year it will be necessary either to put on additional steamers to attend to the buoy service, or to limit the number of buoys maintained directly by the agencies of the department.

In some districts the harbour masters attend to the buoyage, in others the buoys are under the control of local harbour boards. In the remaining cases, buoys are maintained under a contract system, the contractors undertaking to maintain the buoys according to a strict specification for a bulk sum per annum. The contracts usually run for a period of three years. There are now about 150 contracts in force, a number having recently expired. The office work in connection with the maintenance of the buoy service and preparation of contracts is attended to by Mr. W. W. Stumbles. This involves an immense amount of detail, and the work has been very conscientiously performed.

Appended (inclosure B) is a list of the buoys in the Dominion under departmental control.

In addition to the buoys there are a large number of unlighted day beacons on our coasts, a list of which has not yet been prepared.

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In that part of the river St. Lawrence, between Kingston and Montreal, which is in alternate stretches of river navigation and of canals, the maintenance of aids to navigation is under divided control, this department maintaining some of the lights and buoys, and the Department of Railways and Canals maintaining others. It is evident that such a division of control is fatal to efficiency, and I think that if the department of Railways and Canals intend to continue the maintenance of the lights and gas buoys which they established last year, it would be well for them to take over also the maintenance of at least the spar buoys now kept by us under contract. I am satisfied that with the importance of the 14 foot channel, the contract system of maintenance is no longer suitable for these buoys. I understand the Railways and Canals department have built a steam tender for the maintenance of the new gas buoys. They would therefore be in a better position to maintain the whole service efficiently than this Department now is. If this department undertakes this service, a steam buoy tender and the services of a buoy engineer will be required, the same as in the river between Quebec and Montreal.

I would again draw your attention to the increased efficiency that would result from the maintenance of a serviceable lighthouse and buoy steamer on the upper lakes. With the rapid increase of steam traffic in these waters and the development of industries at all Canadian lake ports the necessity for this change in our system becomes yearly more urgent.

GEOGRAPHIC NAMES.

Several questions with reference to the allotment, etymology, &c., of names of geographical features on our coasts were referred by this department to the Geographic Board for decision, and the help given by the board will doubtless lead to uniformity of usage, and prevent much confusion. Whenever any of these decisions affected existing charts, they were embodied in notices to mariners. The annual report of the Geographic Board, with a list of all decisions, is published as a supplement to the annual report of this department.

HYDROGRAPHY

The hydrographic survey of the Canadian shores of the Great Lakes has made fair progress during the past season. Mr. Stewart with his assistants, Messrs. F. Anderson and R. E. Tyrwhitt, on the steamer *Bayfield*, completed the east shore of lake Huron from Stokes bay to Clark point, county Bruce.

I submit herewith (Inclosure C) his report of progress to October 31.

The steamer underwent no repairs last spring and is reported unfit for the exposed work on the lakes.

Last winter two fair sheets of the work completed between Duck islands and cape Hurd were prepared and sent to the hydrographer of the Admiralty for engraving. Owing to great pressure of work at the Hydrographic office, London, none of the new work on lake Huron has yet been published, although it has been used for correcting the general charts of the lake.

With any sort of reasonable weather there should be no difficulty in completing the survey of lake Huron this coming season.

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The new edition of the Georgian Bay and North Channel Pilot, referred to in last year's report, was issued August 15 last.

Mr. Stewart prepared hydrographic notes and sailing directions] of the careful surveys he made of Southampton and Pine Tree harbours, and these were embodied in notices to mariners. After the completion of his work on lake Huron this year he proceeded to North channel, where an uncharted rock had been reported by the keeper on Clapperton island. An examination of the locality showed that the reported new danger was an extension eastward of Robertson rock, already charted.

A plan of the entrance to South Baymouth, Manitoulin island, made from Mr. Stewart's hydrographic survey, was furnished the hydrographer of the United States navy, in July last, to show them the position of the South Baymouth range lights. They had this published as a neat plan in their notice to mariners No. 29 of 1900.

A chart of the west end of the Bay of Quinte, made from the undersigned's survey of 1893, was published last winter by the Admiralty, and with the sheet of the east end published the previous year, completes the large scale chart of this inside channel, from Kingston to Presqu'île. The long delay in publishing this chart was owing primarily to the pressure of work in the draughting room here; when the fair sheet was sent to England it was lost in the wreck of the *Labrador*; and lastly the cartographers of the Admiralty are always crowded with work.

Hydrographic notes respecting the following localities were published during the past year :—

Atlantic coast—Lunenburg harbour.—Shoal found and surveyed by Capt. S. Rolleston, H.M.S. *Tribune*.

Canso harbour, N.S.—Shoal discovered by ss. *Minia*.

Louisburg.—Corrections to St. Lawrence pilot, made by U. S. Hydrographer; notes respecting buoyage; also sailing directions for new range lights.

Strait of Belle isle. Shoal off Lark island searched for by Staff-Commander W. Tooker, H.M.S. *Gulnare* and reported non-existent.

Gulf and river St. Lawrence.—Dalhousie, N.B.—Position of buoys and churches, reported by Capt. F. R. Pelly, H.M.S. *Psyche*.

St. Lawrence ship channel.—Increase in width of dredged portions, between Ste. Croix and Cap Santé; and near Three Rivers; also lumps found in Lake St. Peter, reported by the Public Works Department after tests had been made by Mr. F. W. Cowie.

Inland waters.—Upper entrance to Soulanges canal described by the undersigned.

Port Dalhousie.—Compass-swinging ranges established by Staff-Commander Boulton not in existence.

Port Colborne.—Description of dredging under charge of W. G. Thompson, Esq.

West end of lake Erie.—Positions of two wrecks located by the undersigned.

Pacific Coast.—Telegraph Cove, Vancouver Island.—Surveyed by Capt. Walbran, D.G.S. *Quadra*.

Inner waters of British Columbia.—Notes made by Capt. Walbran.

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Benmohr rock, Trincomali channel, B.C., discovered by ss. *Benmohr*.

Stuart channel.—Details respecting False Reef reported by Capt. Walbran.

Off Entrance Island, B.C.—Shoals described by Commander C. H. Simpson, H.M.S. *Egeria*.

Seymour narrows.—Depth on Ripple rock, reported by Commander Simpson.

Johnstone strait.—Rocks in Blinkinsop bay, located by Commander Simpson.

Broughton strait.—Rock off Nimpkish bank, surveyed by Commander Simpson.

Bering sea.—Position of ice, reported by Captain Bucholz, ss. *Alpha*.

SURVEY OF TIDES AND CURRENTS

Mr. W. B. Dawson's report of progress for the past year is annexed to this report. (Inclosure D)

In this survey the series of principal stations has been maintained; and a further year of tidal record has been secured at seven commanding points on our eastern coasts, as well as from two tidal stations in British Columbia.

Tide tables have been prepared and issued as before, but with several noteworthy improvements. With the tide tables for our principal harbours, a full series of tidal differences for the bay of Fundy is now included, which enables the time of the tide to be correctly found in a region where navigation is largely dependent upon it. The tide tables for Charlottetown and Pictou, in the Northumberland strait, have been extended to include the whole year, instead of eight months as formerly; which will be of benefit to winter navigation. This change may also induce almanacs to reprint them, in place of the very inaccurate tables often published in the past. Tide tables for 1901 are about to be issued for two ports in British Columbia; based upon tidal record which has been in hand for some time, as the expense of making the necessary analysis and calculations could not before be met. These tables are for Victoria in the strait of Fuca; and Sand Heads at the mouth of the Fraser river, which is centrally situated in the strait of Georgia, and well adapted to serve as a port of reference for the harbours in that region. In this way, much better results will be secured than any heretofore available.

The accuracy of the tide tables for Quebec and St. Paul island have been improved by utilizing further records to extend the basis from which they are calculated. Several tide tables of local importance are also prepared annually.

A summary of the information regarding currents secured by the tidal survey during three seasons, was issued in June last, as a pamphlet entitled 'Currents in the Gulf of St. Lawrence, including the Anticosti region and Belle isle and Cabot straits.' This is divided into two parts, (1) a description of the currents on the surface, as a mariner may expect to find them in each locality; and (2) the causes, as far as ascertained, which influence the currents in moving as they do; and the general circulation of the water in the gulf of St. Lawrence. This pamphlet was widely circulated, and 264 additional copies were also sent on request.

During the summer months, from May to October, tidal investigations were carried on by Mr. Dawson along the lower St. Lawrence from Quebec to Point de Monts. Six tidal stations were maintained during the season in that region, in addition to the two

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principal stations at Quebec and Father Point. The more important relations between the rise and fall of the tide and the turn of the strong tidal currents on the lower St. Lawrence have already been ascertained during the recent re-surveys of that region, on which the latest charts are based. The information obtained this season regarding the tide itself will now enable the time of the turn of the current to be determined also; as without this, the relations referred to could not be practically utilized. It is in this that the work of this season will be chiefly valuable to navigation. With this object also, further observations of the currents were made at three important points in the vicinity of the Traverse, where they are strongest.

Respectfully submitted,

WM. P. ANDERSON,

Chief Engineer.

December 20, 1900.

[INCLOSURE A.]

CHIEF ENGINEER'S DETAILED REPORT ON CONSTRUCTION AND MAINTENANCE OF LIGHTHOUSES AND OTHER AIDS TO NAVIGATION UP TO NOVEMBER 30, 1900.

To the Deputy Minister
of Marine and Fisheries.

SIR—I have the honour to submit the usual annual report of work done in the construction and maintenance of aids to navigation for the eleven months ended November 30, 1900.

Lighthouses, fog alarms, buoys, beacons, and other aids to navigation throughout the Dominion of Canada are administered by the Department of Marine and Fisheries. The construction of new buildings and the more important repairs are under my direct supervision, the maintenance of existing stations is controlled by the several agents of the department, and the periodical inspection of the stations is made by inspectors resident in the different provinces, the agents in Prince Edward Island and British Columbia fulfilling the double duties. Much of the information contained herein is compiled from the annual reports of these officers.

The numbers and distribution of the several aids to navigation throughout the Dominion are shown in the following table:

DISTRICT.	Light-stations.	Lights.	Keepers.	Fog-whistles & sirens.	Fog-horns.	Fog-bells.	Fog-guns or bombs.	Whistling-buoys.	Bell-buoys.	Gas-buoys.
Province of Ontario.....	204	267	187	2	12	4	.....	.....	5	5
Light-ships.....	3	3								
Province of Quebec.....	123	172	145	4	8	1	8	.....	.....	11
Light-ships.....	7	7	.....	3						(4with bells.)
Province of Nova-Scotia.....	181	193	191	10	6	2	1	21	17	
Fog-alarms.....	3									
Light-ships.....	1	1								
Province of New-Brunswick.....	99	124	95	4	8	1	1	5	4	
Fog-alarms.....	3									
Light-ships.....	2	2								
Province of P. E. Island.....	39	67	45	.....	1	.....	.....	3	1	
Light-ships.....	23	33	30	1	5	6	.....	.....	1	
Province of British Columbia.....										
	693	869	693	24	40	14	10	29	28	16

* Light-ships and fog-alarms where there are no lights are in this column included in the total number of light-stations in the Dominion.

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Supplies for the lighthouse services are purchased in bulk, under contract, except in the case of articles of which only small quantities are required, in which case they are purchased locally in the open market. These supplies are distributed from the stores at each district headquarters, usually under the personal supervision of the Inspectors of Lights, who inspect the stations when delivering the supplies. They also arrange for all small ordinary repairs and the periodical painting of the buildings. These routine duties are not alluded to in describing the repairs executed at the several stations.

Work of construction and extensive repairs are usually executed under contract; minor repairs are done under the light-keepers' supervision, or by foremen employed in the several districts.

Light-keepers and fog-alarm engineers are expected to make any small repairs that can be reasonably expected of unskilled workmen, without charge, and are also called upon to do all painting required at their stations, being allowed some assistance when the buildings are so high as to require hanging scaffolds.

ONTARIO LIGHTHOUSE DIVISION.

This division includes the lighthouses and other aids to navigation in that part of the province of Quebec lying west of Montreal, all those in the province of Ontario, and those on lake Winnipeg, in the province of Manitoba. It is under the direct management of the headquarters staff at Ottawa.

The number of lighthouses, lighted beacons and lightships maintained by the Dominion in the Ontario division, as above described, is 270, located at 207 different stations.

The number of light-keepers in this division paid directly by the government is 187, but in several cases assistants are employed by keepers and paid by them out of the allowance made by the government for that purpose.

There are in Ontario 2 fog-whistles, 12 steam fog-horns and 4 fog-bells, operated by machinery, all located at light-stations, as well as 5 bell-buoys and 5 gas-buoys.

Besides the lights maintained by this department as above described, there are in Ontario the following aids to navigation: three lights on swing bridges, a system of lights on the Murray canal, maintained by the Department of Railways and Canals, 5 pairs of range lights on the Detroit and St. Clair rivers, maintained by the American vessel owners principally interested, 12 wharf lights maintained by the municipalities or corporations to which the wharfs belong, and two range lights maintained by local interests at Pine Tree harbour.

Six of these last described stations are aided by this department to the extent of being furnished with the necessary oil for their maintenance.

A steamer is chartered yearly for the supply of the light-stations on the river St. Lawrence and the great lakes, between Montreal and the head of lake Superior, and the lighthouses are supplied and the stations inspected on this trip, which occupies about seven weeks, by Mr. Patrick Harty, Superintendent of Lights. The lights on the Ottawa river and a few small lights on isolated waters, including lake Temiskaming, lake Nipissing, lake Simcoe and the bay of Quinte, were not inspected. The lights on Lake of the Woods have been superintended by Mr. M. Kyle, local agent of this department at Rat Portage.

NEW AIDS TO NAVIGATION.

Upper entrance to the Soulanges canal.

Canal lights.—The piers at the upper entrance and the whole length of the canal along the north bank, are lined by bright electric arc lights, each of 2000-candle power, suspended from white poles at intervals of 400 to 480 feet.

Temporary range lights.—On the south extremity of the west pier, elevated 12 feet above the ground, and 18 feet above the ordinary lake level, a fixed red light has

been established. On the east side of the south end of the guard lock, 1,400 feet N. 38° E. from the front light, a similar light elevated 20 feet above the ground and 26 feet above the ordinary lake level, has been established. Both lights are shown from locomotive headlight lanterns standing on skeleton-framed towers.

The points of the shoals running out from the Coteau landing shore are being dredged off, and as the dredging progresses the back light will be moved eastward until, when the dredging is completed, it will stand 1,550 feet N. 51° E. from the front one and indicate the west edge of the dredged approach to the canal. It is intended to replace these temporary lights by lights shown from permanent iron towers.

Red buoys.—Two red spar buoys have been moored in 18 feet water to mark the easterly edge of the shoal water on the west side of the approach. These buoys will be moved further west as the dredging progresses.

Black buoys.—Two black buoys have been established in 19 feet water to mark the north and south extremities of a shoal on the east side of the approach. It was proposed to remove the shoal marked by these buoys to canal depth when the buoys would be removed.

The above lights and buoys were established and are maintained by the Department of Railways and Canals.

Toronto East Gap Fog Bell.

A fog bell, operated by machinery, was last spring established at the front range lighthouse tower marking the east entrance into Toronto harbour.

The bell and striking apparatus stand on a platform fixed to the framework on the lake side of the tower, under the lightroom floor, at an elevation of twenty-five feet above the water level. The bell sounds single strokes with intervals of three seconds between them, or twenty strokes every minute.

The apparatus was purchased from Mr. W. E. Decrow, of Boston, Mass., and is of a new self contained type, the clockwork machine giving 10,000 strokes with a single winding.

The machine cost \$350, and the cost of setting it up, etc., was \$118.95.

Temporary Lights at Port Burwell.

The breakwater piers at the entrance of Port Burwell, on the north shore of lake Erie, are being extended by the Department of Public Works, and it is understood that while the work is going on, temporary lights are being maintained on the outer end of both piers; that on the west pier is shown from a lantern suspended from a post at a height of eight feet above the level of the lake; the other is maintained at a height of five feet above the lake level over a sunken crib which forms the sub-structure of the pier extension.

It is intended to keep the lights in position during the continuance of the work. In very stormy weather it may not be possible to light the lamps.

Lighting of Pelee Passage.

The lighthouse and fog alarm at Pelee spit (the dummy), in the westerly part of Lake Erie, were destroyed by fire on April 17, 1900. The fire is thought to have been set by a lamp thrown down by displacement of the wall of the fog alarm building by the weight of a heavy sea running at the time. The principal keeper was temporarily pinned down by fallen timbers, and he and his assistant narrowly escaped destruction. On April 21 a temporary fixed white light, shown from an anchor lantern, hoisted thirty-seven feet above the lake on a mast, was shown from the wreck of the lighthouse pier, and has since been maintained, but has not been satisfactory, as it was often impossible to land on the pier, and the station is a considerable distance from the track taken by modern deep draught steamers. Although the steel and concrete pier was left by the fire in fairly good condition it was thought best not to repair it to receive another

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lighthouse, as a new pier erected either on South-east shoal or on the Middle ground would be better located to meet the requirements of lake shipping.

Plans were accordingly prepared for the construction of a pier to receive a lighthouse, on the middle ground of Pelee passage, and the work of building was begun at Amherstburg in August. The foundation will be a frustum of a cone in steel, filled with stone and concrete, and protected by a polygonal oak crib. It stands on a grillage, and is ready for sinking on the opening of navigation next year. The work has been done under supervision of Mr. W. H. Noble, by days' labour, and the expenditure to date has been \$10,429.79.

The middle ground was selected by the department as the site for the new lighthouse in preference to South-east shoal, because vessels can shape a course directly for it from both directions, and because it is doubtful if a stable foundation could be obtained on the shifting sand of South-east shoal.

Light on Stag island shoal.

A pole light, established on the south end of Stag island shoal, River St. Clair, was put in operation in July, 1900.

The light is shown from a lens lantern, hoisted on a mast with a small shed at its base, the mast and shed painted white; they stand upon a platform, built on a pile foundation. The platform is elevated 4 feet above the summer level of the river, and the mast is 7 feet high. The piles are driven in 8 feet water a short distance north of the spot hitherto marked by the United States lighthouse board by a middle ground spar buoy.

The light is fixed white, elevated 10 feet above the level of the river. The illuminating apparatus consists of a pressed glass lens.

The piles were driven and the post erected under contract by Mr. J. N. Gibb, of Wallaceburg. His contract price was \$92.75.

Midland Range Lights.

The two pairs of beacons described in last year's report as leading into Midland harbour, were last summer replaced by two pairs of range lights, as follows:—

Brebeuf range front light.—This is shown from the tower removed from Gin island, which is no longer lighted, as previously indicated.

The lighthouse tower is a square wooden building with sloping sides, painted white, surmounted by a polygonal iron lantern painted red. It is 36 feet high from its base to the ventilator on the lantern. It stands on the north end of Brébeuf island, the site being a bare rock 8 feet above the water.

The light is a fixed white catoptric light, elevated 40 feet above water level.

Brebeuf range back light.—This light is shown from a tower erected on the west shore of Beausoleil island, 2,400 feet S. 86° E. from the front one.

The tower is a square wooden building with sloping sides, painted white, with a red roof. The light is shown from a window at the top of the tower. The building is 42 feet high from its sills to the top of the ventilator on the lantern. The light is a fixed white catoptric light, elevated 40 feet above water level.

The above described two lights in one, lead in from outside Bennet bank to the alignment of the Midland point range, leading 750 feet south of the black buoy off Giants Tomb lighthouse, and 500 feet north of the red buoy off Sawlog point.

Midland point range front light.—This is a fixed white light elevated 31 feet above water level. The illuminating apparatus is dioptric of the seventh order.

The light is shown from a tower erected upon the site of the beacon which it replaces on the beach 6 cables S. 54° E. from Sucker creek point, and northerly from Midland point.

The tower stands on a cribwork pier 4 feet high, and is a square wooden building with sloping sides, painted white, surmounted by a square wooden lantern painted red. It is 33 feet high from its base to the ventilator on the lantern.

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Midland point range back light.—This is a similar light to the front one, shown from a similar tower, erected upon the site of, and replacing, the back range beacon, on the beach, 3,000 feet S. 17° E. from the front one. The tower is 43 feet high and the light is elevated 41 feet above water level, and should be visible 11 miles from all points of approach by water.

These two lights in one lead in, from the intersection with the alignment of the Brébeuf range lights to within half a mile of the front tower, where the lights should be opened on the starboard hand. The shore here is bold and may be kept close aboard until Midland point is rounded.

The above work was carried out by day's labour, under the supervision of Mr. W. H. Noble, at a total cost of \$4,137.65.

Re-establishment of light on Michael point.

On June 1 the light formerly maintained at Michael point, south shore of Manitoulin Island, lake Huron, and which was discontinued in 1899, was again put in operation.

The lighthouse stands on the west extremity of the point forming the south shore of Michael bay. It is a square wooden building, painted white, surmounted by an octagonal iron lantern painted red. It is 25 feet high from its base to the vane on the lantern.

The light is a fixed white catoptric light, elevated 40 feet above the level of the lake, and should be visible 11 miles from all points of approach.

A hand fog horn will be used at the lighthouse, to answer signals from vessels.

Blind River range lights.

Two range lights to lead in to the wharfs and mills at Blind river, on the north shore of the North channel, lake Huron, in the district of Algoma, were put in operation on October 24, 1900. The lights are red incandescent electric lights, strengthened by reflectors in small head light lanterns. In the event of failure of electric supply at any time, they will be replaced temporarily by oil lights exhibited from square tubular lanterns.

The front light is located on the sand beach, east of the wharfs. The lantern stands on top of a post 15 feet high. The light is elevated 16 feet above the level of the water.

The back lantern stands on a shelf on a post of the veranda of the office of the Michigan Land and Lumber Company, and is distant 730 feet N. 24° W. from the front light. It is elevated 27 feet above the water.

The two lights in one lead into Blind river clear of Campana shoal on the port hand, and clear of all shoals in the approach. There are 11½ feet of water with soft bottom everywhere and a wide channel on the line of range.

The outer end of the east wharf is indicated by a fixed white incandescent electric light shown from a similar lantern, erected on a pole maintained by the Michigan Land and Lumber Company. As soon as this light bears north-west, vessels can head for the wharfs inside of Suzanne island. There are 10½ feet water at the wharf head.

These lights were established under an arrangement made between the Chief engineer of this department, who visited the place and located the lights, and the Michigan Land and Lumber Company. They furnish the poles and wiring for \$20, and receive \$80 per annum for maintaining the two lights. The light on the wharf they maintain at their own expense.

Stribling point range lights.

On October 10, 1900, range lights were established at Stribling point, on the north end of St. Joseph island, in the district of Algoma, to replace the private lights heretofore maintained by the Lake Carriers' association.

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The lights are fixed white catoptric lights, shown from lanterns placed in front of the day beacons already in existence.

The targets of the day beacons are diamonds or lozenges, 6 feet square, painted white. The front target has a vertical black stripe through the middle of the diamond. It stands just inside the shore line, on low land.

The light is elevated 11 feet above the water.

The back light is situated on the hillside, 1,446½ feet S. 68° 17' 40" E. true from the front light. It is elevated 44 feet above water.

The two lights in one, bearing S. 68° 17' 40" E. true, lead through the middle of the dredged channel of the Middle Neebish from its intersection with the alignment of the lower Hay lake range lights to its intersection with the alignment of the Harwood point range lights.

The arrangements for assuming the care of these lights were made by the Chief Engineer, when he inspected the river in September, and were carried out by Mr. J. C. Boyd, Superintendent of the Canadian canal at the Sault, to whom this department is indebted for valuable assistance.

The cost of establishing these lights was \$83.50.

IMPROVEMENTS AND PRINCIPAL REPAIRS AT EXISTING STATIONS.

Lake St. Louis.—The names of the three lightships have been painted on their topsides, in white letters, as follows:—On No. 1, the name "Lachine"; on No. 2, "Lake St. Louis No. 2"; on No. 3, "Chateauguay."

Green Shoal.—As indicated in last year's report, this lighthouse in the Ottawa river, and the pier on which it stands, have been completely rebuilt. The new pier, which is built on the foundation of the old one, is a frustum of a cone, of steel, filled with concrete and stone, and is painted brown. It is 20 feet in diameter at base, 14 feet in diameter at top, and rises 23 feet above summer level of the river. On it stands a square wooden tower, with sloping sides, painted white, surmounted by a square wooden lantern painted red. The tower is 21 feet high from the deck of the pier to the vane on the lantern.

The light is a fixed white light, elevated 38 feet above the summer level of the river. The illuminating apparatus is dioptric of the seventh order.

The work was done by the department, by day labour under the foremanship of Mr. W. H. Noble, during the winter and spring of 1900. The filling of the pier with concrete was postponed until the river had reached its lowest stage in the autumn of 1900, and was done under the supervision of Mr. B. H. Fraser.

The total cost of the work has been \$2,480.60.

Gananoque Narrows.—A hand fog horn has been established at this light station, to answer signals from steamers in the vicinity of the station in thick weather.

Snake island.—The lighthouse referred to in last year's report was put in operation on the opening of navigation, 1900, and the old stone lighthouse has been taken down.

The new tower is an octagonal wooden building with sloping sides, painted white, and surmounted by an octagonal iron lantern painted red. It is 39 feet high from its base on the pier to the ventilator on the lantern, and the top of the steel pier is 6 feet above the level of the water.

The light is fixed red, elevated 38 feet above the level of the lake. The illuminating apparatus is dioptric of the 7th order.

Port Dalhousie illuminating apparatus.—It has been impossible yet to complete arrangements for the occulting light proposed to be established at this station, and the light still remains fixed red. Last season, this fixed red light was improved by substituting a dioptric lens of the 7th order, strengthened in the line of range by a lamp and reflector, for the smaller dioptric apparatus temporarily used. Negotiations are in progress with the local producers of electric light for the installation of an occulting light at the station.

Kingsville.—In consequence of the temporary demolition of the outer end of the east breakwater pier, in connection with repairs now in progress, it was found necessary,

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on October 17, 1900, to temporarily discontinue the exhibition of the fixed red light which formed the outer light of the range.

Pine Tree harbour.—The private range lights established in 1895, at Pine Tree harbour, on the lake Huron shore of the county of Bruce, have been improved by the substitution of inclosed towers for the masts previously used.

The towers are square wooden buildings and are painted white with red tops. The front range building is 28 feet, the back one 34 feet, high, from base to vane. The lights are fixed white, catoptric, the outer one elevated 26 feet, the back one 32 feet, above the level of the lake. They should be visible 10 miles in the line of range.

The front tower is built on a rock on the north-east side of the harbour, opposite the saw mill; the back one stands on shore, 350 feet N.E. $\frac{1}{2}$ N. from the front one.

The work was done by the Southampton Lumber Company, who maintain the lights at their own expense, this department furnishing the illuminating apparatus and oil.

Flower Pot island.—A dwelling house for the keeper was built last summer, by day labour, under the foremanship of Mr. C. Dobson, of Penetanguishene, and under the general supervision of Mr. W. H. Noble. The dwelling house and other work done cost \$1,396.93 and complete the equipment of the station.

French River.—On August 15, 1900, the light shown from the lighthouse on Lefroy island, being the front light of the French river range, Georgian bay, was changed in character from fixed white to fixed red, so that it might be distinguishable from the bright electric lights at the mills. A seventh-order dioptric lens was at the same time substituted for the inferior lens previously used.

Sailors Encampment.—The two red lights, hitherto maintained in the axis of the old cut at Sailors Encampment, known as Sailors Encampment upper range (Canadian) lights were, on September 17, 1900, discontinued, and the axis of the Sailors Encampment new cut, marked at its lower end by the Pilot island (United States) range, was marked at the upper end by two fixed white lights established on the sites of the day beacons on Rains hill, St. Joseph island, at the upper end of the cut.

The front light is situated on the east side of the shore road, about 600 feet S. 30° E. true from the old front light, and is shown from a lantern elevated fifty feet above the water on a mast. The illuminating apparatus is catoptric.

At the foot of the mast, which is seventeen feet high, is a diamond shaped day beacon painted white, with a vertical black strip through the middle of it.

The back light is situated 648 feet N. 14° 35' E. true from the front light, and is shown from a similar lantern elevated seventy feet above the water. At the foot of the mast, which is twenty-two feet high, is a diamond shaped day beacon painted white. Going up the river, these two range lights kept in one ahead, indicate the middle of the dredged channel from Mud lake turning gas buoy to the alignment of Point of Woods range lights.

This change was made at the request of the Lake Carriers' association, to mark an improved cut dredged by the United States government.

This change in channel will render it unnecessary for us to continue the maintenance of the pair of range lights on St. Joseph island known as the Sailors Encampment lower range, and although they were kept in operation up to the close of navigation in 1900, they will not be relit next spring.

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MINOR REPAIRS at Stations in Ontario, 1900.

Light Station.	Repairs.	Cost.
Allumette island.....	New boat.....	\$ 40 00
Aylmer island.....	Repairs.....	6 60
Baskins wharf.....	Cutting brush between range lights and building a small shelter shed.....	44 15
Battle island.....	Shingling dwelling house and kitchen.....	37 71
Bois Blanc.....	New boat.....	50 00
Beauharnois.....	Painting range lights.....	8 00
Belleville.....	" tower.....	16 25
Burlington Beach.....	Repairs to light, towers and dwelling.....	16 42
	" boat.....	10 00
Caribou island.....	General repairs to fog-horn and pier.....	91 00
Cape Robert.....	Repairs to tower and dwelling.....	99 85
	New boat.....	34 00
Chantry island.....	Whitewashing tower and dwelling.....	45 00
	Repairs to boat.....	12 00
	Boat rollers.....	5 00
Christian island.....	Repairs to tower and dwelling.....	15 28
Clapperton island.....	New boat.....	35 00
Cape Robert.....	Repairs to lighthouse and dwelling.....	71 10
False Ducks.....	Whitewashing tower.....	10 00
Flower Pot island.....	Repairs to tower and building fence.....	52 00
Gananoque Narrows.....	New boat.....	47 00
Goderich.....	".....	30 00
Great Duck island.....	".....	150 00
Hooper island.....	Repairs.....	28 15
Jones island.....	" to tower.....	9 20
Killarney.....	" dwelling.....	20 60
Kincardine.....	" lighthouse and dwelling.....	276 78
Barrie field.....	" tower.....	25 70
Lachine lightship.....	Lettering lightship.....	4 20
	Repairs.....	11 00
Lightship No. 2.....	Repairs to vessel.....	19 50
	Lettering.....	8 90
	New boat.....	18 00
Chateauguay lightship.....	Repairing vessel.....	17 00
	Lettering vessel.....	6 60
	New boat.....	18 00
Middle island.....	Painting lighthouse and dwelling.....	24 00
Mohawk island.....	Repairs to tower and dwelling.....	8 64
Mississagi island.....	Painting lighthouse and dwelling.....	7 00
	Repairs to light and dwelling.....	100 52
McKies point.....	Repairs to dwelling and lighthouse.....	20 50
McTavish point.....	Repairs to pier and light.....	27 00
Nigger island.....	New boat.....	30 00
Peninsula harbour.....	Painting.....	8 75
	Repairs.....	15 90
Pelee island.....	Painting.....	5 00
	Repairing boat.....	5 00
Point à Cadioux.....	" dwelling.....	6 94
	" boat.....	5 00
Point au Baril.....	" light and dwelling.....	51 00
Point aux Anglais.....	" light tower.....	86 00
Pelee reef.....	Repair to light tower and pier.....	144 90
Pont Pleasant.....	Repairs to lighthouse, dwelling house and barn.....	80 21
	Painting light tower.....	25 00
Port Colborne.....	Repairs to fog horn and light tower.....	25 41
Port Credit.....	" light tower.....	54 58
Presquile, Main.....	Painting tower.....	9 75
Rondeau.....	Repairs to breakwater.....	18 38
Rosseau.....	" lighthouse and pier.....	105 44
	New boat.....	32 00
Salmon point.....	Repairs to dwelling.....	24 58
Sault Ste. Marie range.....	Painting lights.....	28 00
St. Anicet.....	Repairing boat.....	3 55
St. Placide.....	Painting towers.....	7 50
Strawberry island.....	Repairs to light and dwelling.....	14 33
Boyd island.....	Repairs to dwelling house foundation.....	125 00
	Balance on breakwater.....	30 00
Sulphur island.....	Repairing dock and building boat-house.....	25 00
	Repairs to boat.....	7 00
Snug harbour.....	Repairing light tower and dwelling.....	9 00

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MINOR REPAIRS at Stations in Ontario, 1900.

Light Station.	Repairs.	Cost.
South Baymouth.....	New boat.....	\$ 33 00
Thunder cape.....	Painting.....	6 00
	New boat.....	135 00
Thessalon.....	Building boat-house.....	7 00
	New boat.....	40 00
South Bay point.....	".....	30 00
Wellers bay.....	Repairs to dwelling.....	46 65
Wolfe island.....	" " and tower.....	11 95
Western islands.....	Repairing fog horn building.....	87 25
	Painting.....	15 00
Bainford ".....	Repairing light and dwelling.....	4 06
Port Dalhousie.....	" light tower.....	25 00
Red Rock.....	" light and dwelling.....	127 48
River Thames.....	" dwelling house.....	19 00
	" boat.....	18 00
Cove island.....	Whitewashing.....	20 50
	Repairing lighthouse.....	42 05
Channel island.....	Hardware.....	117 44

BUOYS AND BEACONS.

Detroit river.—During the past season the buoys maintained in river Detroit were damaged by passing steamers to an extent previously unknown, and it is probable that, in consequence of the increase in number and size of steamers navigating the river this additional expense and difficulty in maintaining the service efficiently will increase rather than diminish. The chief engineer tried to secure the co-operation of pilots in protecting the buoys through the Lake Carriers' Association and the columns of the Marine Review. These buoys are maintained by the light-keeper at Bois Blanc island, and although the cost may be somewhat greater than if the work were done by contract, the promptness with which losses are made good, and buoys kept accurately in place, gives great satisfaction to mariners.

The gas buoys in Pelee passage were placed, tended and removed as in previous years by the D.G. fisheries cruiser *Petrel*, and were replenished with gas as required by the U. S. lighthouse tender *Haze*, by an arrangement made by the Lake Carriers' Association.

A tow line from the ss. *Queen City*, carried away the superstructure and lantern of the south-east shoal gas buoy, which were replaced at a cost of \$627.64. A bill for this amount was paid by the owners of the steamer immediately on presentation, a recognition of responsibility by a foreign owner deserving of all commendation.

Limekiln crossing—In September, 1900, the eastern edge of the dredged cut through Limekiln crossing, in the river Detroit, above Amherstburg, was marked by three red spar buoys moored respectively at the upper end, in the middle and at the lower end of the Canadian side of the dredged deep channel. The buoys are moored in 20 feet of water, as close to the rock side of the cut as possible, and this side of the cut should be favoured by upward bound vessels.

These aids were placed for the benefit of the heavy draught vessels using the channel, at the request of the Lake Carriers' Association, and will be maintained by the lightkeeper at Bois Blanc island, who maintains all our Detroit river buoys.

Southampton—The following spar buoys have been placed in Southampton harbour by Mr. W. J. Stewart to mark dangers found by him during his hydrographic survey of the harbour :

A red spar buoy moored in 15 feet water, close on the west side of a boulder, with 8½ feet water upon it. It bears S.W. ½ S. 3,400 feet from the outer end of the railway pier or short pier on the east side of the harbour.

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A black spar buoy, moored in 15 feet water close on the east side of a boulder with 9 feet water upon it. It bears N.W. $\frac{1}{4}$ W. 775 feet from the west end of the railway pier.

Midland—A notice to mariners was issued fully describing all the buoys in the approaches to Midland from the main waters of Georgian bay.

Lone rock bell bouy—This buoy broke from its moorings in October, 1900, and will not be replaced till the opening of navigation in 1901.

Seguin bank bouy—The gas buoy on Seguin bank, a very exposed situation in the Georgian bay outside of Parry Sound, was dismantled by ice in the autumn of 1899, and could not be made ready for placing on the opening of navigation this year. It was therefore temporarily replaced by a large black spar buoy until it was placed on its station on May 23, 1900.

After giving excellent service all season it was driven from its station by storm on November 14. New moorings and illuminating apparatus will be required before it can be placed next spring.

Hooper island gas bouy—This buoy was carried away by the violent storm of November 21; it was immediately recovered and replaced.

Day marks on Rainy river.—The channel of Rainy river, which forms part of the International boundary line between the district of Rainy river, Algoma, Ontario, and the state of Minnesota, has been marked in the stretch between the Long Sault rapids and Fort Frances, by fourteen pairs of day beacons and nineteen spar buoys.

The beacons consist of wooden posts, with targets attached, either diamond shaped or square, painted either white or white and black. They are placed in pairs, each pair showing the alignment of the middle of the channel in its vicinity. Two pairs of these beacons were erected, some years ago, at Long Sault rapids, by the owners of the *Keenora*; the pair at the wing dam was established by the Department of Public Works; all the other beacons and buoys were established this year by this department.

The buoys are wooden spars, coloured to correspond with International rules governing buoyage.

This work was done, under contract, by Captain Clifford Lewis, for the sum of \$200.

QUEBEC LIGHTHOUSE DIVISION.

This district extends from Montreal to the end of the strait of Belle Isle, covering a coast and river service of over 1,200 miles, comprising all the lighthouses in the Richelieu river and Lake Memphremagog, as well as all aids to navigation in the river St. Lawrence, Saguenay river, Baie des Chaleurs, gulf of St. Lawrence, strait of Belle isle, north and west coasts of Newfoundland and Labrador.

This division is under the control of Mr. J. U. Gregory, agent of the Department of Marine and Fisheries, at Quebec, who is also shipping master, attends to the requirements of the British Board of Trade in matters of shipwrecked and distressed seamen and casualties at sea, is receiver of wrecks, supervisor of wharfs, a fisheries officer for the province of Quebec, and superintendent of the signal service.

The agent's staff consists of Mr. L. A. Blanchet, chief clerk and accountant, and deputy shipping master, Mr. Geo. D. O'Farrell, lighthouse inspector, Mr. Alphonse Hamel, clerk and Mr. L. L. Dubé, storekeeper and wharfinger.

The workshops with a large stock of models of various kinds needed for the service, are under Mr. Ernest Roy, master carpenter, and Mr. Narcisse Dufour, master-ship-smith. The gas works are under Mr. G. Bélanger.

The steamers at the disposal of this agency during the past year were the *Druid*, which attended to gas and other buoys, as well as beacon service below Quebec as far as Father point, and the steamer *Aberdeen* which supplied the lights in the river and gulf of St. Lawrence, strait of Belle isle and Baie des Chaleurs. The lights above Quebec are supplied by passenger steamers or by rail as proves most economical and convenient.

There are in this division 179 lights, at 123 stations, 7 lightships, 3 of which are supplied with powerful steam fog whistles, one powerful first order siren blown by

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compressed air, 8 explosive bomb signal stations in connection with lights, 4 steam fog whistles and 8 steam fog horns; 11 gas buoys, 4 of which are supplied with bells, 170 wooden buoys and 59 beacons.

NEW AIDS TO NAVIGATION.

Pointe à Basile Range Lights.

Two range light buildings have been erected at Pointe à Basile, on the south shore of the river St. Lawrence, above Quebec, which, in one, give the best channel from Pointe Aubin to Confederation point, and give a good lead over St. Augustin shoal with a least depth of $24\frac{1}{2}$ feet water. Pending the completion of the range light buildings temporary lights, put in operation for the first time on October 31, 1900, were maintained.

The front light was shown from an anchor lens lantern standing on the framework of the front range light tower, which is being built on the high ground of Pointe à Basile, 260 feet east from the extremity of the point.

It was elevated about 80 feet above high water mark, and should be visible 10 miles from all points of approach by water.

The back light was shown from a reflector lantern standing on the framework of the back range light building, which is erected 4,100 feet E. $\frac{1}{2}$ S., from the front one. It is elevated about 200 feet above the water, and should be visible 10 miles in the line of range.

Permanent lights will be shown from the new light buildings on the opening of navigation next year.

The buildings were put up by days' labour, under the supervision of Mr. E. Roy, foreman carpenter of the Quebec agency, at a cost of \$1,076.97.

Range Lights at Oak Point.

The range lights formerly maintained on Oak point, Restigouche river, below Campbellton, in the county of Bonaventure, were re-established on June 30, 1900, to accommodate the increase of shipping using the Restigouche.

They are fixed white catoptric lights, shown from white square wooden towers with sloping sides, each 22 feet high from the base to the ventilator on the lantern.

The front tower stands on Oak point, near its west extremity. The light is elevated 52 feet above high water mark.

The back range tower stands on the hill, 2,231 feet N. $68^{\circ} 30'$ E. from the front light. The light is elevated 121 feet above high water mark.

The two lights in one, bearing N. $68^{\circ} 30'$ E. lead from the intersection with the alignment of the Campbellton range on the south, or New Brunswick side of the river, diagonally across the river to the channel on the north or Quebec side.

The channel across the middle ground, marked by the range, is partly dredged, and the ruling depth on it is 11 feet at low, or 21 feet at high water, ordinary spring tides. It is intended to increase this depth 6 feet by dredging.

AID TO NAVIGATION DISCONTINUED.

Pointe aux Originaux.—From the opening of navigation this year the hand fog-horn maintained previously at this station was discontinued.

PRINCIPAL REPAIRS AT EXISTING STATIONS.

Anticosti, South-west point.—The house of refuge for wrecked mariners and the oil-store were repaired and painted. The tower was also painted two coats, the work being done by a workman sent from Quebec, as authorized, after he got through with repairs authorized at the West Point lighthouse.

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On October 25, 1899, Mr. J. A. Tremblay, provincial land surveyor, acting on instructions from the Department of Public Works, surveyed an acre of land around the lighthouse. The Public Works Department bought an acre of land at this station in November, 1889, from the proprietors of Anticosti, for telegraph purposes, which had not been located. They have a house situated about 600 feet from the lighthouse, built in 1881, for a telegraph station, where, their acre should have been placed; at present, their house is not on the acre surveyed. The agent suggests that the Public Works Department obtain this lot from Mr. Menier in place of the other, an exchange that should be easily effected.

Anticosti, West Point.—The repairs authorized at this station, viz., new floors in dwelling, repairing and reglazing windows, etc., were attended to by a workman sent from Quebec for the purpose, who also repaired the explosives magazine and stairs in the tower, and assisted the keeper to paint the tower and additional buildings. Some iron protection straps were bolted on the corners of the wharf, the necessary material having been purchased locally.

During a severe storm in April, 1900, the residence caught fire, caused by a defective chimney, but the fire was extinguished with little damage. The keeper was allowed \$10 for repairing same, as well as refastening shingles on buildings. Total expenditure, \$165.

Mr. Menier, proprietor of the Island of Anticosti, has had a surveyor mark off the government property at this place, which is one acre purchased by the Department of Public Works. The magazine for storing explosives, the house of refuge for wrecked mariners and one store-house, are outside the limit of the government property marked off by the surveyor.

This same remark is applicable to South-west Point, South Point and Heath Point of Anticosti light stations, where, according to Mr. Menier's surveyor, some government buildings are beyond the government property.

Bird Rocks.—The coal supplied to this station was formerly conveyed in barrels and piled up on the island; it was subject to exposure, as the barrels became decayed by alternate drying and wetting, and some of the coal scattered about, especially during stormy weather, and the keeper experienced considerable difficulty in collecting it in winter, when covered with snow.

A coal shed, 12 feet by 17 feet, to put it under cover, was built in our shops in Quebec, and erected by the keeper; cost, \$100.

A new block for the hoisting gear, and a new hoisting box, were also supplied. Sundry small repairs to the tower and other buildings were attended to by the keeper, with help of his assistants, and material landed from the supply steamer.

Cape Bauld.—A water tank, and a chimney cap for the chimney of the dwelling were sent down to this station by the supply steamer.

A new flag staff was also sent to this station and erected by the keeper, with help of the crew of the *Aberdeen* as authorized.

Balance of repairs commenced last season, viz.: repairs to the fog alarm building, which was also painted; as well as the tower, dwelling and new oil store, also repairs to the engine house, doors and windows begun last year were completed by a workman sent from Quebec for that purpose. Total expenditure, \$106.

Cape Norman.—A small building 28 x 12 feet, for sheltering coal, was purchased in the locality by the keeper, and erected near the fog alarm building. This building, in addition to the present coal bin and coal shed, will afford ample room for the ordinary coal supply. One hundred and twelve tons have been delivered by a schooner from Sydney, C.B.

Some repairs to the fog alarm building were attended to at a cost of \$12.

A new flag staff was made in the department workshop, in Quebec, and sent down by the supply steamer to the station, where it was erected by the crew of the *Aberdeen*. The keeper has reported that the signal flags, supplied him last season, proved quite useful in answering inquiries from passing steamers, especially in the case of the steamer *Scotsman*, wrecked on Belle Isle, some of the cargo of which floated around the vicinity.

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The authorized repairs, viz. : wainscoting of rooms and new floors were attended to by the keeper, with local assistance. Total expenditure, \$119.

Cape Kay.—The following repairs were made at this station, under the supervision of the light keeper, Mr. E. H. Rennie, viz. : wainscoting rooms in dwelling, new floor placed in oil store, and repairs made to the one in the fog alarm building. The road leading to the lighthouse was also repaired, and side drains cleared away. The tower and other buildings were painted by the keeper with local assistance ; the necessary material having been sent by the supply steamer from government stores in Quebec. Total expenditure \$76.80.

Cape Rosier.—With reference to the operation of the fog alarm at this station, the keeper stated that, by actual testing, the whistle is much stronger than the horn. Under the circumstances, the use of the whistle for the regular alarm has been decided upon, reserving the horn in case of accident to the whistle.

A new boiler has been provided for this station, to replace the whistle boiler. Arrangements are being made to have the two good boilers placed in the same building and have them fitted so that either boiler may be used with either sound producing apparatus.

Owing to some delay on the part of the contractors to deliver the new boiler in time for the last trip of the *Aberdeen* in the fall of 1899, the lighthouse keeper, Mr. Eugène Costin, who is a practical engineer and boiler-maker, repaired the old boiler so as to enable it to serve until this summer's first trip, which was very satisfactory under the circumstances, and is another evidence of the great necessity of having practical mechanics in charge of steam fog-alarms.

The keeper was allowed \$4 to put sky-lights in the roof of the fog alarm building, and \$18 to procure in the locality the necessary material to repair the building itself ; the labour having been performed by the keeper and his assistant. A sum of \$4 was also authorized to repair the ceiling in one of the rooms of the dwelling ; \$10 for a strong new door in the fog alarm building, and \$4 for shingling. A new smoke-stack for the alarm boiler was made in the department's shop in Quebec, and sent down by the supply steamer. Total expenditure \$87.29.

Caribou River.—The front range lighthouse was destroyed by fire on July 7, 1900. It was at once replaced by a temporary pole light. The back range lighthouse was upset by a gale on September 3, 1900, but immediate steps were taken for continuing the maintenance of the light.

Crane Island.—Considerable trouble with the spring of the flashing apparatus in use at Crane Island lighthouse was experienced early in the spring of 1900. A mechanic from Quebec was sent down on the D. G. S. *Druid* to remedy the trouble ; but the light soon became defective again. This light is eclipsed by a revolving plate run by clockwork, the principal spring of which was the cause of the trouble ; and, as it was liable to give out at any moment, a complete set of new springs was procured from Messrs Chance, Bros. & Co., the makers of the apparatus, and the light put in order.

Eboulements.—The illuminating apparatus was improved by installing a pressed glass lens with duplex lamp in the place of the ordinary tin lantern previously used.

Etang du Nord.—The following repairs were made at this station, during last season, viz. :—The tower, dwelling and other buildings were painted by the keeper, with local assistance, at a cost of \$15. The dwelling, was reshingled, and a new floor was laid in the kitchen annex ; the new porch and portion of the store-house were also reshingled ; new doors and windows put in, &c. The necessary material was sent from Quebec by the *Aberdeen*, and the work done by the keeper with the assistance of a local carpenter at a total cost of \$91.84.

Green Island.—This is the oldest station in the whole district, and it is not surprising that repairs should be needed to such portions as give out from time to time. The dwelling was much in need of repairs, and it was decided to clapboard the same, as well as the kitchen annex ; also putting in two new floors in rooms and passage. The work was done by contract by Mr. Zephirin Ouellet, for \$171.30.

Greenly Island.—The steam piston of one of the fog-horns was brought up to Quebec, trued up, and the whistle valve also repaired, and returned to the station by the supply steamer.

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The lake supplying water to the tanks for the fog alarm becomes dry during the summer, but a large wooden tank and the two large iron tanks recently taken down to the station will prevent any shortage of water.

A new flag-staff was procured and erected by the keeper for the sum of \$25; some of the guys of the old mast being utilized for the new one. A small building was made in the department's shops in Quebec and sent down by the *Aberdeen*. The keeper put it up at the foot of the signal mast to keep the flags in, and as a shelter.

Another small building, about 8 x 10 feet, was also required by the keeper. It was made in panels in our shops, sent down by the supply steamer, and erected by the keeper.

The tower, dwelling and other buildings were painted by the keeper, with local assistance, and the work satisfactorily performed, the necessary material having been forwarded from Quebec by the supply steamer. Total expenditure \$251.53.

Ile à la Bague.—The pier under the movable tower at Ile à la Bague was much injured by the ice in the spring of 1900, necessitating the renewal of the top tier of timber, also deal sheathing and iron strapping. The work was done under contract by Mr. O. Mercier, for \$196.

Lower Traverse Lightship.—This vessel was hauled up on the marine ways during the winter of 1899-1900, and her bottom was scraped and painted.

The boiler and fog whistle machinery were examined by Mr. Stevens, inspector of government steamers. The boiler was found in good condition for its age. The iron pipes leading from boiler to top and bottom of gauge glass and test cock column were worn out and required to be renewed. The only other repairs were the usual overhauling and touching up of the cocks and valves.

The operating engine and pumps were thoroughly overhauled and parts adjusted. Total expenditure \$647.26.

Maquereau Point.—A sum of \$100 was allowed for the boring of a well, as there was much difficulty experienced in carting the water required to the lighthouse. The work was entrusted to Mr. H. Robichaud, of L'Anse aux Griffons, and satisfactorily carried out.

The dwelling required reshingling. The keeper procured the necessary material on the spot, and was allowed \$5 for assistance to do the work. One of the rooms in the dwelling was wainscotted, and the oil store repaired. Total expenditure \$157.55.

Matane.—A portion of the clapboarding of the lighthouse was renewed at a cost of \$16.25. A stable and barn have been built by the keeper at his own expense, on the government property, as authorized.

The former keeper, Mr. Desjardins, last fall removed from the government property the buildings belonging to him.

A new lantern has been provided for the pole light.

Perroquets.—A suitable boat was provided for this station. Being unable to procure one on the Labrador Coast, the keeper was authorized to purchase one at the Magdalen Islands, the cost of which, including rigging complete, amounted to \$60.50.

With regard to the renewal of floors in the dwelling, the keeper could not get a man in the locality to do the work. Consequently, a carpenter from Quebec was sent down by the supply steamer.

Pointe aux Trembles en haut.—An iron skeleton tower with a wooden top has been erected at this station to replace the building destroyed by fire, as mentioned in last year's report.

The tower is 63 feet high from base to vane; the upper 23 feet being inclosed and painted white.

The building was erected by day labour under the supervision of Mr. E. Roy, the steel frame having been provided under contract by the Gould Shapley & Muir Co., of Brantford. The total cost of the new tower was \$909.

Red Island Lightship.—The boiler, machinery and fresh water tanks of this vessel were thoroughly repaired and overhauled this spring.

The only repairs to the boiler consisted of a little cleaning up, overhauling and touching up of the cocks and valves, which was attended to by the ship's engineer.

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The operating engine was found in good condition by Mr. Stevens, who made his annual inspection of this vessel in the fall of 1899, requiring nothing beyond the usual overhaul. The steam and water cylinders of donkey pump were badly cut and worn out, as well as the pistons. The cylinders were bored and pistons replaced by new ones. A new top was required for a 2in. globe valve; four feet of copper pipe from donkey pump to boiler renewed; steam bilge siphon overhauled and put in good condition; heaters in cabin repaired, leaks stopped and one coil renewed. The work in connection with the cylinders, pistons, copper pipe, siphon and steam coil was done in Mr. F. X. Drolet's workshop, in Quebec, and the other work attended to by the ship's engineer.

The twelve fresh water tanks were found leaking at the bottoms. They had been built in the vessel, and it would have been a very difficult and expensive job to take them out and put in new tanks; as it would have been necessary to remove a portion of the deck houses, deck beams and decks. It was not considered advisable under the circumstances to renew them at present. The bottoms of the six forward tanks, which were not so bad as the after ones, were covered with cement, and the sides touched up. The after tanks were bricked around for 15 to 18 inches in height, and the bottoms coated with cement to a depth of about 2 inches, with good fresh Portland cement. The bricks were laid in cement and cemented over. The tanks are now fit for service for some years to come.

A two-inch pipe was fitted from the water-ways on each side of the deck to the boiler feed-tank for the purpose of filling the tank with rain water. During a rain fall, the scuppers are plugged up, and the water runs into the tank, supplying sufficient fresh water to the boiler to avoid the use of sea water, which is injurious to boilers. Total cost of repairs: \$983.03.

St. Thomas.—The outer range has been changed to show as a fixed red light, not only in the line of range but on all other bearings on which it is visible.

The inner range light, visible over a small arc on each side of the line of range only, has been changed in colour from fixed white to fixed red, to distinguish it from the electric lights in the vicinity.

The lenses formerly used have been replaced in both lighthouses by catoptric illuminating apparatus.

Saint Antoine.—The upper light at this station, shown from an anchor light lantern, hoisted on a pole above the permanent light, to clear trees down stream, has been raised 10 feet by lengthening the pole, and is now 20 feet above the lower light and 116 feet above high water mark.

Sainte Emélie.—These range lights, built in 1880, but lit only on October 26, 1898, required urgent repairs to their foundations. This work was done by a mason sent from Quebec, and satisfactorily carried out. They were also painted by the keepers with local assistance, at a cost of \$6 each. Total expenditure \$68.05.

Upper Traverse.—The new pier stood the ice of its first winter in such away as to prove its success, as no settlement or derangement was found in it in the spring. It proved, however, the strength of the ice by the fact that the sides where not protected by iron, even above high water mark, were badly cut into. The whole of the noses and sides were covered this year, well above high water level, with steel plate, and no further damage from ice is anticipated.

The bottom in the neighbourhood of the pier, is being carefully watched, with a view to prevent the beginning of any scouring action, and as a precautionary measure, some stone was put in last season, about the pier.

A lighthouse tower, with keeper's dwelling attached, was built on the pier this year and a temporary fixed white catoptric light is now shown from a temporary wooden lantern on the tower. The light is elevated 47 feet above high water mark. It is intended to replace this temporary light next season by a permanent occulting light shown from a larger iron lantern.

The two pole lights previously used were discontinued when the light now shown from the lantern on the tower was established.

A bell, suspended 6 feet above the deck of the pier on a post rising above the north bulwark is rung by hand during thick weather.

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The lighthouse is a rectangular wooden building, painted white, with a red roof. The tower is square, rises above the roof from the north west corner of the building, and is painted white. The temporary wooden lantern, which surmounts it, is painted red. The height of the tower from the deck of the pier to the vane on the lantern is 42 feet, making the vane 56 feet above high water mark.

The work at this station was done by days' labour, under the supervision of Mr. E. Roy, foreman carpenter of the Quebec agency, and cost \$6,641.65 in addition to the sum mentioned in last year's report.

White Island Reef Lightship.—Considerable repairs were made to this vessel, during last winter. A new deck was laid by carpenters from agency shops, and the lumber imported from British Columbia. Part of the ship's railing was renewed, general spring overhauling and painting, as usual.

The boiler, machinery, &c., was inspected by Mr. Stevens, inspector of government steamers, in the fall of 1899. Nearly all the water tubes in the boiler had been removed and the boiler properly scaled and cleaned out. The lever safety valve required a new brass seat and valve. The donkey pump, and the steam and water pistons, being a little worn and leaky, were touched up and made tight. Three 2-in. globe valves renewed; one length of 1½-in. copper steam pipe also renewed; steam siphon overhauled and one length of the pipe renewed. A 2-in. pipe was laid from the water-ways on each side of deck to the feed water tank to catch the rain, as done in the case of Red Island Lightship.

The steam windlass and hawse pipes were completely overhauled and repaired.
Total expenditure, \$1,524.65.

MINOR REPAIRS at Quebec Stations during year ended June 30, 1900.

Station.	Nature.	Cost.
Amherst Island.....	Assistance painting.....	\$ 12 00
Anticosti:—Heath Point	".....	25 00
South Point.....	".....	15 00
	Materials for wainscotting.....	54 25
	Landing repaired.....	18 75
	New boat.....	18 00
Ash and Bloody Islands.	Assistance painting.....	17 00
	New boat.....	40 00
Baie St. Paul.....	New floor.....	15 00
	New boat supplied from stores.....	
Bellechasse.....	Repairs to boats.....	8 00
Belleisle.....	Buildings painted and stone foundations repaired.....	199 00
Bicquette.....	Concrete floor of fog alarm renewed.....	
Brandy Pots.....	Chimney cap replaced.....	
	Winter canoe supplied.....	21 00
Cape Chatte.....	Assistance painting.....	13 65
	Telescope supplied.....	
Cape Despair.....	Assistance painting.....	12 00
	Sundry repairs and supplies.....	41 00
Cape Gaspé.....	Reglazing lantern.....	5 00
	Reshingling tower.....	23 00
Cape Madeleine, Upper Range.....	Assistance painting.....	15 00
Cape Madeleine, Lower Range.....	".....	13 00
Cape Magdalen.....	".....	15 00
Carleton Point.....	New boat.....	25 00
Contrecoeur back tower..	Lantern recovered.....	30 00
	Assistance painting.....	12 00
Chicoutimi Ranges.....	".....	39 15
Egg Island.....	Wood sheds.....	18 00
	Assistance painting.....	15 00
	Sundry repairs.....	22 00
Enty Island.....	Assistance painting.....	12 00
	Sundry repairs.....	22 30
Fame Point.....	".....	37 60

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MINORS REPAIRS at Quebec Stations—*Concluded.*

Stations.	Nature.	Cost.
Father Point.	Small repairs.....	\$ 9 00
Ile à la Pierre.....	Assistance painting.....	7 00
Ile aux Prunes.....	Iron plates repaired.....	7 00
	New boat.....	14 60
	Oil store.....	7 00
Ile aux Raisins.....	Assistance painting.....	20 00
Isle de Grace.....	Repairs to pier.....	72 00
Ile Ste. Thérèse.....	Small repairs.....	
Kamouraska.....	Sundry repairs.....	53 00
	Assistance painting.....	7 00
Lake Meinphremagog..	Boat for witch rock.....	15 00
	Riprap at Leadmine.....	8 00
	Repairs to boat Molson's rd.....	7 00
	Sundry repairs.....	24 25
Lake Islet.....	Boat.....	19 00
Lavaltrie.....	Repairs to piers.....	50 00
	Shelter shed repaired.....	10 00
Martin River.....	New camps provided.....	
Newport.....	New boat.....	16 00
Percé.....	Repairs to lantern.....	10 00
Pilgrims.....	Repairs.....	55 00
	New flag pole.....	40 00
Pillars.....	New sails for large boat.....	
	New canoe and repairs.....	101 92
Plateau.....	Wanscotting.....	10 00
	Assistance painting.....	15 00
Platon.....	".....	8 00
Pointe aux Citrouilles..	".....	8 00
Portneuf (En Haut).....	Repairs to foundations.....	10 00
Port St. François.....	Repairs to piers.....	109 75
	New roof, &c., to front tower.....	27 00
St. Valentin.....	Top of lantern renewed.....	25 00
Sorel.....	Painted by P. W. D.....	51 87

CHANGES IN BUOYS AND BEACONS.

Gulf Beacons.—Commander Wakeham, of the Fisheries Protection Service, having reported that the top marks on the beacons on Whale island, entrance to Bonne Espérance harbour, and on Flat island, off Great Meccatina island, on the north shore of the gulf, were bent over, it was decided to remove these top marks, and each of the beacons will hereafter consist of a steel framed tripod, 30 feet high, with slatted sides, painted white.

The beacon on outer island, entrance to Coacocho bay, on the same coast, has been destroyed and will require to be rebuilt.

Barrett Ledge Gas Buoy.—On the opening of navigation in 1900 the cylindrical buoy was replaced by a pillar buoy with a bell.

Vache patch.—At the same time the red and black banded can buoy marking this shoal, in the entrance to the Saguenay, was replaced by a red conical steel buoy.

Marmen Rock.—About June 10 last, the can buoy marking this danger was changed in colour from black to red and black in alternate horizontal bands, to indicate that the rock is a middle ground.

Demers Rock.—At the same time the red can buoy was changed in colour, and made a middle ground buoy for the same reason.

Pilgrim Shoal Gas Buoy.—On the opening of navigation in 1900 the spherical buoy was replaced by a pillar buoy with a bell.

Can Buoy 23 Q.—The black can buoy, No. 23, Q., marking the north edge of the middle ground below Pointe aux Trembles gas buoy, was last season moved about 670 feet S. 73° E. from its former position, at the suggestion of the pilots.

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In its new position it is about 250 feet north of a spot with only 19 feet water on it. There is a shoulder with $27\frac{1}{2}$ feet water on it where the buoy was previously moored, and deep draught vessels should give the buoy a berth of at least a cable.

Trembles Shoal Gas Buoy.—The pillar buoy with a bell was on the opening of navigation in 1900, replaced by a spherical buoy without a bell. Pilots complained frequently of the light shown from this buoy, although the lantern was exactly the same as on the buoy displaced. It is probable that the smaller buoy did not ride as steadily as the large bell buoy, and that consequently the full effect of the light was lost.

Ste. Croix Gas Buoy.—On the opening of navigation in 1900 the pillar buoy with a bell was replaced by a cylindrical buoy without a bell. About October 1 this buoy was moved 650 feet S. E. by S. $\frac{3}{8}$ S. from its former position, to mark the north edge of the dredged cut at its lower end, as completed by the Department of Public Works.

Three Rivers.—To mark the edge of the ship channel, as widened this year by the Public Works Department, the following changes were made in the buoyage:—black spar buoy, No. 55 C, was moved 350 feet S. $52^{\circ} 22'$ E. to mark the south edge of the channel at the north edge of the most easterly of three shoals partially removed below Three Rivers.

A new black spar buoy, to be known as No. 57 C, was placed 3,580 feet S. $69^{\circ} 45'$ W. from the new position of buoy No. 55 C, to mark the south edge of the channel at the north edge of the middle shoal. This buoy also indicates the width of 1,200 feet for steamships turning at Three Rivers, and has been greatly appreciated by pilots.

Black spar buoy No. 57 C, now known as buoy No. 59 C, was moved 290 feet S. 30° E. from its old position to mark the south edge of the channel at the north edge of Three Rivers shoal, the most westwardly of the three shoals above mentioned.

NOVA SCOTIA LIGHTHOUSE DIVISION.

This division, in charge of Mr. J. Parsons, agent of the department in this province comprises 191 lighthouses, exhibiting 203 lights, 1 light vessel, 16 steam fog-alarms 1 explosive fog-alarm station, 30 hand fog-horn stations, 2 fog-bells, 21 automatic whistling buoys, 17 automatic bell buoys, 119 iron or steel buoys, about 800 spar and other small buoys, 9 stationary beacons, 16 life-saving stations, 3 humane establishments, 4 signal stations and 1 steamship, the *Newfield*.

The stations have been inspected by Mr. C. A. Hutchins, superintendent of lights, the boilers and machinery at the fog-alarm stations by Mr. D. Stevens, inspector of government steamboats, and the life saving stations by Capt. B. Douglas, R.N.R., naval assistant.

All the automatic buoys (bell and whistling) have been placed and cared for by the *Newfield* aided during part of the winter by the Dominion Government Steamer *Lansdowne* and later by the *Stanley*. About 50 of the spar buoys and 75 iron cans are placed and replaced directly by us; the others in the different harbours are cared for and kept in position by persons holding three year contracts obtained by public competition.

NEW AIDS TO NAVIGATION.

Coal Wharfs Range Lights in Louisbourg Harbour.—Two fixed red electric lights have been established by the Dominion Coal Company, limited, in the northern portion of the harbour to lead to the company's coal wharfs from the intersection of their alignment with the alignment of the government range lights on the east shore of the harbour.

The front light is shown from a lamp on a white pole standing on the outer end of the more easterly of the two long coal wharves. It is elevated 43 feet above high water mark.

The back light is shown from a lamp on a white pole erected on the north side of the railway track, 2,060 feet N. $33^{\circ} 45'$ E. from the front light. It is elevated 85 feet above high water mark.

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Little Loran light.

A lighthouse, erected on the extremity of the western headland (locally known as Black head) at the entrance to the harbour of Little Loran, on the eastern coast of Cape Breton island, was put in operation on May 1, 1900.

The building is an octagonal tower with sloping sides, painted white, surmounted by an octagonal iron lantern, painted red. The tower is 32 feet high from its base to the vane on the lantern, and stands 50 feet back from the extremity of the head, on ground 50 feet above high water mark.

The light is a fixed white light, elevated 76 feet above high water mark. The illuminating apparatus is dioptric, of the 7th order.

This light was established for the convenience of local fishermen, and will be maintained only from May 1, to December 1, of each year.

The building was erected under contract by Mr. Jas. Dowd, of Louisbourg, whose contract price was \$300. The total cost of establishing this new light was \$878.66.

Inner Sambro Island Pole Light.

A pole light, established on the western extremity of Inner Sambro island, in the county of Halifax, was put in operation on January 3, 1900.

The light is shown from a lens lantern hoisted on a mast 17 feet high, painted white, which stands on ground 30 feet high above high water mark and 100 feet back from the water's edge.

The light is fixed white, elevated 45 feet above high water mark, and should be visible 8 miles from all points of approach. This light is intended principally for the guidance of fishermen of Sambro and adjacent harbours, and will be maintained only from December 1, to April 30, in each year.

This work was done under the superintendence of the officers of the department at Halifax, at a cost of \$527.61.

Woods Harbour Lighthouse.

A lighthouse erected on Big ledge in Woods harbour, Cockerwit passage, in the county of Shelburne, was put in operation on September 1, 1900.

The light is a fixed red light elevated 27 feet above high water mark, and should be visible 8 miles all around the horizon. The illuminating apparatus is dioptric of the seventh order.

The lighthouse is a square wooden building with sloping sides, painted white, surmounted by an octagonal iron lantern painted red, and stands upon a concrete pier built on the highest part of the ledge, which is covered at high water. The height of the tower from the pier to the vane on the lantern is 28 feet.

A hand fog horn, established at the light-station, is sounded in answer to signals from vessels.

This light was built by days' labour, under the supervision of Mr. Amos McLellan, and cost \$1,478.10. It has been found necessary to protect the foundation from the sea by a breakwater, which will also answer as a boat harbour. The work will be done during the coming season.

Margaree Harbour Lights.

Two new range light buildings were established on the mainland opposite the entrance to the channel leading into the harbour, to replace the light heretofore shown from a small tower on the breakwater. They consist of two small square wooden towers with sloping sides.

Materials were sent from Halifax and the work done by local workmen under the supervision of foreman McLellan of this department.

The lights have not yet been put in operation.

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Hand fog horns at light stations.

During the past season hand fog horns were established at the following light stations in this agency, which are used whenever the fog signals of vessels are heard:—

- Fort Point, Lahave ;
- Isaac harbour ;
- Crow harbour, (Queensport).

PRINCIPAL REPAIRS AT EXISTING STATIONS.

Battery Point.—Roof of kitchen reboarded and shingled. Door fitted to entrance of dwelling and nine storm sashes fitted.

Country Harbour.—A new brick tank was built in cellar and a new door was fitted to porch. Two rooms were sheathed and the buildings painted.

Cranberry Island.—A brick filter was built in cistern and the front door steps renewed. The chimney flue was repaired and also the boat. Binocular glass supplied and fog-alarm buildings, oil store and boat-house painted.

Cape La Ronde.—Purchased store at landing and had it repaired for temporary storage of supplies and empties to be returned. The buildings were painted.

Cheticamp.—Floor of dwelling repaired, kitchen flue repaired, buildings painted and new copper ventilator fitted to lantern.

Chebucto Head.—A new lantern replacing the old wooden lantern was erected. Half of foundation walls under lighthouse taken down and rebuilt with concrete. New front porch built, roof of light-house and other parts overhauled and repaired. New sills and joints in oil store. Work done under supervision of Foreman McLellan employing local labour.

Coffin Island.—New store built at landing for temporary storage of supplies, buildings painted.

Cape Fourchu.—Repairs were made to dwelling house by Mr. A. Cook, as follows : Portion of west sills renewed, wall shingled, new foundation, masonry wall under entire length, foundation wall under porch pointed, new sashes and frames in cellar, front wall reshingled, six new sashes and frames fitted, new corner board, porch, new steps, new sills, new door and frame and walls and roof reshingled, new cornice and gutters and six lower courses of shingles renewed, new sill east side, sixteen feet foundation wall relaid.

Cape Race.—Roof of engineer's dwelling partly reshingled and store room sheathed with G. and T. lining. Tramway at coal shed at landing replanked.

Devil's Island.—Reset all panes in both lanterns (21) with rubber instead of putty. Lantern of west tower had six panes and thirty brass studs broken. Lantern of east tower had seven panes and twenty-five studs broken.

East tower : spliced four deck beams, renewed one third deck planking and canvas covering, renewed steps and hand rails to entrance of porch.

West tower : spliced four deck beams, renewed half of deck planking, canvas on deck and repaired steps. All new work painted two coats. New boat slip 72 feet long built and new door fitted to oil store.

Egg Island.—Removed stones from boat landing, repaired breakwater, reshingled east side of boathouse, repaired oil store walls and boat-slip.

Repairs to dwelling house, south side of roof reshingled, new floor laid in kitchen, sills, floor and door casings of porch renewed. W.C. removed from dwelling house and built outside.

Port Point.—Roof of lantern reboarded and shingled, chimney taken down and rebuilt. Plank drain laid from kitchen sink.

Jeddore.—Fitted partition at stair head, new beams on landing stage, boathouse and wharf raised and new supporting posts fitted, reshingled roof of boathouse, new floor laid in store, and buildings painted.

Liscomb.—Two rooms sheathed with G. & T. lining and chimney repaired, new copper ventilator fitted to lantern.

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Louisburg.—New window sashes fitted, binocular glass supplied, repaired rail around lantern deck, roof and sides of barn patched, buildings painted.

Petit de Grat.—North-west side of boat-slip faced with logs to protect from ice, top covered with plank, storm door fitted, brick tank built in cellar.

Port Hood.—An addition built to keeper's dwelling, 25 feet long by 14 feet wide, new chimney built, new floor laid in kitchen.

FOG-ALARMS.

Brier Island.—Crosby automatic whistle valve repaired. Two leaky water space screw stays in boiler bored out and replaced by larger stays. Leaky seam in bottom of boiler shell chipped and caulked.

Cape Fourchu.—A new chimney was built and the smoke boxes were altered and lengthened to enter chimney, leg of left-hand boiler was patched, a new set of grate bars supplied and some pipes and fittings renewed.

Cape Roseway.—A new reed box was fitted and six new reeds supplied, two patches placed on bottom of furnace, steam chest jointed, air cylinder of fog-trumpet overhauled, a new boiler fitted up with new connections, some fittings on boiler renewed.

Cape d'Or.—Globe valves and nipples renewed.

Cape Sable.—Two large patches put on furnace, leaky seams caulked inside furnace and outside of shell, eleven joints about boiler renewed.

Chebucto Head.—Crosby automatic machine repaired, one new 10-inch whistle supplied, old whistle sent to Halifax to be repaired, several small leaks in boiler caulked.

Cranberry Head.—Six new trumpet reeds supplied, a few leaky joints renewed.

Cross Island.—Old boiler stripped and removed, new boiler and fittings put up, steam pump overhauled and other machinery put in good working condition.

Cape Race.—Two 10-inch whistles repaired, a small patch fitted on the leg of each boiler, and the donkey hoisting winch repaired.

Meagher's Beach.—Trumpet repaired and set of reeds supplied, new globe valve fitted on donkey steam pipe, water gauge glasses supplied.

Point Prim.—New fittings connecting boiler to winch.

Scatarie.—Two new bells fitted to fog-whistle, one new Crosby automatic whistle, valve and metropolitan injector fitted, 15 feet of suction pipe and check valve to boiler renewed.

St. Paul's Island.—New Crosby automatic whistle machine set up and the old one sent to Halifax for repairs, new fresh water tank built, set of taps and dies and pipe-cutters supplied, some pipe fittings renewed on the old boiler, water gauge glasses supplied.

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MINOR REPAIRS AT NOVA SCOTIA LIGHT STATIONS, 1900.

Station.	Nature of Repairs.
Arichat	Buildings painted.
Argyle	Dwelling reshingled, winch repaired and glass put in lantern.
Beaver island	New boat, boat slip built and building painted.
Beaver island pole	Shed and mast painted.
Bon portage	Porch reshingled.
Bunker island	Inside of pier painted, boat, dory and water barrels repaired and chimney rebuilt.
Brier island	Wire guys to lighthouse repaired.
Burntcoat	Buildings painted.
Canso harbour	Four new lamps and new boat supplied, buildings painted.
Crichtons head	Breakwater repaired, cellar door repaired and buildings painted.
Cape St. Lawrence	Cleared away stones from landing slip.
Caveau point ranges	Lots inclosed by picket fences.
Cariboo	Outside storm door fitted.
Carters island	Landing slip repaired and buildings painted.
Cape Roseway	New dory supplied.
Candlebox	Material landed for breakwater to be built next summer.
Cape Sharp	Boat tramway and road leading to lighthouse repaired.
Georges island	Fog bell repaired and reflectors resilvered.
Gull rock	New boat, boat slip repaired and east side of tower reshingled.
Horton bluff	Ladder supplied and new locks fitted to doors.
Ingonish island	Materials landed to repair lantern and buildings painted.
Louisburg range	Laid plank walk between lights.
Low point	New door and sill, and roof of coal shed reshingled.
Little Narrows	Renewed posts under sill of lighthouse.
La Have	Porch reshingled and front steps renewed.
Little Hope	Landing slip repaired.
Main à Dieu	Landed materials for repairs to foundation to be made next spring.
Margaree harbour	New capstan fitted in boathouse, buildings painted, reflectors replated.
Medway head	Two new panes lantern glass refitted.
Pope harbour	Boathouse reshingled and buildings painted.
Point Tupper	Chimney and foundation repaired.
Pugwash	A water closet built clear of buildings.
Port Mouton	Buildings painted.
Port Hebert	Buildings painted.
Peases island	Part of roof reshingled and buildings painted.
Sand point	All lantern glass reset and cracked panes renewed.
Scattarie	Repairs made to fencing.
Sydney harbour	New lamp supplied.
St. Anns	Buildings painted.
Sambro	Repairs made to foundation wall of rocket building.
Sand Spit	Buildings painted.
Seal island	Tower and dwelling painted.
Stoddard island	Building painted.
Wolf point	Boathouse built at inner landing, and buildings painted.
Wedge island	Boat winch supplied and new floor laid in oil store.
Whitehead	Buildings painted.

BUOY SERVICE.

Lunenburg Automatic.—This buoy sank at its moorings about February 23 last, and a new buoy was placed on April 27.

Rock Head Iron Can Buoy with cage.—In February last this buoy was driven ashore on Thrumcap and was recovered without the moorings.

Yarmouth Fairway Automatic.—Was picked up two miles out of position on October 30 1899, and replaced.

S. W. Breaker Sambro Can Buoy.—This buoy was picked up by S. S. *Anita* and brought in with 23 fathoms of chains and mooring stone missing.

Pollock Shoal Conical Buoy.—Went adrift and was picked up without the mooring stone.

Black Point—This spar buoy, 45 feet long, disappeared on April 23 last and was not recovered.

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The Sisters, Bell Buoy.—The *Lansdowne* recovered this buoy adrift 20 miles S. E. from Sambro, with loss of all moorings excepting 10 fathoms chain.

Pennant Point, Automatic.—This buoy was picked up adrift on May 10 last by the tug *A. G. Whitney*, and brought in with part of the moorings lost.

St. Johns Ledge.—The bell buoy heretofore maintained off St. Johns ledge, on the south-west coast will be discontinued and a conical steel buoy, painted red, has been moored in 9 fathoms water, $\frac{1}{2}$ mile W. S. W. from the middle of the ledge.

Louisbourg.—To accommodate the colliers visiting the harbour, the red conical buoy maintained on the extremity of the shoal extending out from Nag rock, known as 'the turning buoy,' will not, hereafter, be maintained, having been rendered unnecessary by the establishment of the Coal wharves range lights. Pilots, however, claim that this buoy should be retained.

The six spar buoys in the harbour are hereafter to be maintained throughout the year.

The bell and whistling buoys, outside the harbour, will, as heretofore, be removed for the winter. If possible, their positions will be marked by winter spar buoys, but mariners must not depend on finding buoys in position in winter in stations so exposed.

Little Hope Shoal.—A whistling buoy on the Courtenay principle was moored on August 28, in 14 fathoms water $\frac{1}{2}$ mile south (true) from the middle of this shoal, in Queens county. The buoy is a red conical buoy with 'Little Hope Shoal' marked in white letters on the side, and is surmounted by a ten-inch whistle.

Peters Island Reef.—An iron spindle to mark the end of the reef extending north-east-ward from Peters island, Grand passage, Digby county, was erected August 24, 1900. The spindle is 33 feet from base to top and consists of an iron upright, surmounted by a spherical iron cage, the whole painted black. It is set 684 feet from high water mark. This spindle was erected by the crew of the D.G.S. *Lansdowne*, and cost \$30.

Gull Ledge.—The red steel can buoy, heretofore maintained on Gull ledge, Yarmouth county, was on September 8, 1900, replaced by a red conical buoy, in accordance with regulations for shapes of buoys adopted by the International conference.

Black Rock.—The spar buoy heretofore maintained on the north extremity of the shoal has been replaced by an iron can buoy painted black.

Canso Harbour Fairway.—The iron can buoy established in 1898, off the northern entrance to Canso harbour, to guide vessels into the harbour through the northern entrance between outlying shoals has been replaced by a bell buoy.

The buoy is moored in 13 fathoms water, $1\frac{1}{8}$ miles N. $\frac{1}{2}$ E. from Hart island light, is painted in alternate black and white vertical stripes, and is surmounted by a bell rung by the motion of the buoy on the waves.

Beaver Harbour.—A bell buoy was established in July last, off Beaver harbour, on the southern coast of Nova Scotia.

The buoy is painted in black and white vertical stripes, surmounted by a bell rung by the motion of the buoy on the waves, and moored in 30 fathoms water in the fairway to the harbour.

Fourché.—The bell buoy, heretofore maintained at the entrance to Fourché inlet, south coast of Cape Breton, was, on July 3, 1900, moored in a new position in $12\frac{1}{2}$ fathoms, $\frac{1}{2}$ mile south from the extremity of Fourché head, at the request of local fishermen.

Marie-Joseph.—The entrances to this harbour in the county of Guysborough, have been marked by spar buoys, as follows :—

Red buoy on south-western extremity of spit off Frenchman rock, and red buoy off western extremity of Siteman rock, in the western entrance, and black buoy on northern extremity of Pan shoal, black buoy on eastern extremity of Turner shoal, and red buoy on southern extremity of Middle ground; all in the eastern entrance.

Lurcher Shoal.—The whistling buoy, marking the position of the shoal, was reported missing from its station, at the end of February, 1900, and was replaced by a new buoy on March 22.

North-west Ledge.—The bell buoy moored off this ledge was reported last winter to have disappeared from its station, and the report was advertised, but it was found later that the information was erroneous.

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NEW BRUNSWICK LIGHTHOUSE DIVISION.

The New Brunswick division comprises all the lighthouses and other aids to navigation within the boundaries of the province, both on the Bay of Fundy and on the Gulf of St. Lawrence coast. The large buoys maintained by the Government on the Nova Scotia coast of the Bay of Fundy are attended to by the steamer *Lansdowne*, under the direction of the New Brunswick agent, but are otherwise under the control of the Nova Scotia agent.

This division is under the charge of Mr. F. J. Harding, agent of the department at St. John, N. B.

The lights, &c., were inspected by Mr. John Kelly, inspector of lights.

There are in this agency 123 lighthouses, 2 light-ships and 12 steam fog-alarms.

The number of keepers and engineers in connection with the lighthouses and fog-alarms, is as follows: 88 light-keepers, 7 light-keepers and engineers of fog-alarms, 12 engineers and 6 assistant engineers—112 in all.

The method of supplying the lights varied in accordance with locations. The supplies for the St. John river, Grand lake and Washademoak lake lights were shipped by regular local steamers and a separate bill of lading furnished for each station.

The supplies for the Miramichi river lights were sent by the bay lightship and by regular lines of steamers or schooners trading to the different points.

The Bay of Fundy lights were supplied by the steamer *Lansdowne*, and those in the Baie des Chaleurs district were supplied by rail. In all cases the supplies have been delivered in the most convenient and economical way.

NEW AIDS TO NAVIGATION.

Greys Point Light.—A mast light, at Greys point, at the head of Belleisle bay, in Kings county, was put in operation on May 30, 1900.

The mast is 36 feet high, and has a shed at its base. Both mast and shed are painted white. It stands on a crib work pier built on the shore line, 335 feet south from the N. W. corner of the government wharf.

The light is a fixed white light, shown from a lens lantern hoisted 46 feet above the ordinary summer level of the bay.

The light is exactly in the alignment of the Hatfield point range lights, on the north or opposite shore of the bay, about 2,400 feet distant, and answers as a leading light through the dredged channel S.S.W., from Hatfield point wharf.

The work was done by Mr. Kelly, inspector of lights, under the direction of the agent, and cost \$25.50.

Hampstead Wharf Light. A mast light was put in operation on October 29, 1900, on the public wharf of the parish of Hampstead, Queens county, west side of the river St. John.

The light is shown from a lens lantern, hoisted on a mast 31 feet high, with a shed at base, the whole painted white and standing on the wharf near its outer end.

The light is fixed white, elevated 36 feet above high water mark. It is intended to guide river traffic to the public wharf.

This work was done under the immediate supervision of the agent, at a cost of \$35.43.

Hand Fog Horns at Lightstations.

During the past season hand fog horns were established at the following lightstations in this Agency, which will be used whenever the fog signals of vessels in the vicinity of the stations are heard:

Southwest head, Grand Manan.	Dipper harbour, Bay of Fundy.
Grand harbour, " "	Musquash, " "
Swallow Tail, " "	Cape Spencer, " "

South-west Wolf island, Bay of Fundy.	Quaco pier, Bay of Fundy.
Fundy.	Andersons hollow, "
St. Andrews sand reef; Passamaquoddy bay.	Fort Folly point, "
Bliss island, Bay of Fundy.	Green head; River St. John.
Pea point, "	Cassie point; Northumberland strait.
Drews head, "	Portage island mouth of Miramichi river.
	Big Shippegan: Gulf of St. Lawrence.
	Pokesudie; Chaleur bay.

IMPROVEMENTS, REPAIRS, &c., AT EXISTING STATIONS.

Anderson Hollow.—During the storm of December last the shingles were torn off the eastern and southern sides of this lighthouse. Instead of reshingling, the ends were sheathed up with matched boards and two (2) 8 inch knees, 8 feet in length with an arm of three feet, were firmly placed and bolted to the tower as well as to the timbers of the wharf.

Beaver Harbour.—A new abutment, 60 feet in length, 15 feet high and 12 feet wide was erected around this light station, the old one having become completely decayed. A railing and new planking were placed on top at a cost of \$227.35.

The lantern door, also the trap door were repaired. The lantern was painted outside, as well as in, this year.

Bliss Island.—The lighthouse has been painted inside and out, this year.

The eastern side of the roof of the keeper's dwelling was resingled, also the ell.

The ceiling of the sitting-room was sheathed and a wainscoting 30 inches in height placed around the room. The ceiling of hall on the second floor was also sheathed. Two rooms were papered and the dwelling painted inside and out. Three (3) outside sashes were also furnished.

Big Duck Island.—The water tank or reservoir at this fog alarm station was thoroughly repaired, the inside of same being rebuilt with new brick and cement.

The old boiler had new tubes placed in it by Mr. Coleston.

A new 15 foot boat was furnished for the keeper's use at a cost of \$45.

Campbellton.—The back range lighthouse, on Mr. Kilgour Shives' wharf, has been raised 15 feet higher than it was previously, by building under it a crib work block. The work was done by Mr. Shives, under an agreement made with the chief engineer of this department

Cape Enrage.—The clapboards on the eastern side of the lighthouse tower were found to be decayed, also the sheathing on the posts, all were removed and renewed, and the building painted from dome to sills.

Two (2) new panes of glass were placed in the lantern. A new flag-pole was erected.

The keeper's dwelling was painted outside, and two rooms papered. The out-buildings were whitewashed.

A new spare boiler has been furnished this station. The repairs are now going on and will appear in next year's report.

Flewelling Landing.—The intensity of the light shown from the mast on the wharf here has been increased by substituting a lantern with a dioptric lens of the 7th order, and a large lamp, for the pressed lens lantern formerly in use. The light remains fixed red as heretofore. It is elevated 25 feet above high water mark. The mast is 19 feet high.

Gannet Rock.—Extensive repairs have been made at this station during the past season, as follows:

The sea wall has been thoroughly overhauled and largely rebuilt, and a new tramway, 65 feet long, connecting the high water landing with the lighthouse has been built. Three additional guys have been placed from the lighthouse to the rock and various minor repairs have been made. The total cost was \$314.

Grindstone Island.—A new spare boiler and a donkey feed pump were supplied this year. The pump is connected with both boilers. Where any pipes were found

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defective, they were removed and new ones supplied. New brass unions were put in the main steam pipes, new valves and check valves to feed pipes.

The legs of old boiler were found to be leaking badly and the defective places in water space of legs were patched and Portland cement was mixed thin and poured into the water space four (4) inches above lower plug holes; new plug holes were put in, in order to clean and examine the interior of boiler. The opening at water line was covered securely with plates.

The foundation under the trumpet was rebuilt with stone and cement. All the old timber was removed and the floor of engine house was cemented.

Harper Point.—The mast has been increased 10 feet in height and is now 35 feet high; and on June 18, the intensity of the light was increased by substituting a lantern with a dioptric lens of the 7th order for that with a pressed glass lens formerly in use.

The light remains fixed white, as formerly, and is elevated 48 feet above high water mark.

Hatfield Point Range.—These lights were rearranged, to increase their efficiency.

The front light is shown from a lantern hoisted on a mast, standing on a crib-work block built in the angle of the ell (L) at the outer end of Hatfield point public wharf. The mast is 40 feet high. The fixed white light is elevated 41 feet above high water mark.

The back light is shown from a lantern hoisted on a mast, standing near Mr. Israel Noble's dwelling house, and is distant 160 feet N.N.E. from the front light. The mast is 38 feet high. The fixed red light is elevated 36 feet above high water mark.

The lights are visible between the bearings of N. E. through N. to S. W. In one they show the middle of the dredged channel S.S.W., and lead to Gray's wharf on the south side of the bay. The sides of the channel are balized, and a black can buoy is moored at the south end of the dredged cut.

Letete.—During the year a new boiler has been set up at this fog-alarm station and new pipes and fittings placed where required. The old boiler was an upright one, and the new one is a locomotive boiler.

Owing to the small dimensions of the building it was found necessary to move the boilers around in order to place the new one in position, also to remove a chimney and break an opening in the building on the western side to get the new boiler in.

A new window frame and sash was placed in the end of the building opposite the boiler to allow cleaning the tubes.

New tubes were put in the old boiler. A new donkey pump was furnished this year at a cost of \$120. The roof of keeper's dwelling was shingled.

Machias seal Island.—The eastern light tower lantern was partially reglazed.

The old lamp with three duplex burners was removed and replaced with a new Miller lamp, which, is giving good satisfaction. The large boiler had a brass $\frac{5}{8}$ inch plug put in the tube sheet, the old tubes were taken out and a new set put in. Mr. W. J. Coleston made the repairs at a cost of \$93.50 for labour and expenses.

The reservoir 20 x 40 was replanked with three inch deals, and new posts placed under the centre sill.

The iron tramway was repaired where large drift timber had got caught under the rail, breaking same and bending the braces.

The reservoir and tramway repairs were made by Mr. M. F. Ritchie at a cost of \$265.87 for labour on tramway and \$43.90 on reservoir.

Miramichi Bay Lightship.—The schooner *Frederick Gerring*, used for this service was before the opening of navigation caulked where required and the bottom painted with copper paint. The usual spring painting was done.

On October 11, she was blown from her station by a heavy gale and stranded on Bay du Vin island, whence she was floated under the supervision of Mr. John Kelly, at a cost of \$591.69, in November. She was not replaced on her station up to the close of navigation.

Partridge Island.—The tower on the fog-whistle building was lowered about eight feet.

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A new boiler, which cost \$895, was installed here, and new pipes and fittings were necessary to connect it.

The steam whistle which leads out through the top of the building has been lowered, and appears to give better results.

A new brick chimney, 45 feet in height, was erected instead of the low chimney and smoke-stack which was formerly here. The new chimney gives a fine draught and excellent satisfaction. The cost of labour on chimney was \$163.10.

Repairs have been made to the road leading to the alarm building, and the top of the wharf leading to the road has been raised about three feet, thus making the grade longer and easier.

Richibucto.—The entrance to this harbour in the vicinity of the lights was examined by Mr. J. F. Fraser, on request of interested parties, and it is the intention of the department to establish two new ranges on the opening of navigation in 1901. The present back light will at the same time be discontinued.

St. John Harbour.—A few small repairs were made to the block of the Beacon light, during the past year, viz.:—Some of the timbers have been respiked, some new plank in the eastern side and ten (10) new steps built. The iron hand rail was also repaired. A new winch was furnished for the derrick.

The three duplex burner lamp formerly in use at this station has been replaced by a new Miller lamp.

The building has been painted inside and out, and the abutment whitewashed.

Repairs are now being made to the western side of the block.

The fog bell broke in November, 1900, and for the few days during which a new bell was being cast, it was necessary to discontinue the operation of the fog-alarm.

South-west Head, Grand Manan.—The road leading to the lighthouse has had repairs costing \$100, the provincial government paying one half this amount and this department the balance.

Swallow Tail.—A brick chimney on the outside of the kitchen was removed and a new one erected inside. The roof of dwelling-house was reshingled.

The cellar wall and floor had some new brick put in it and cemented.

By a storm early last spring, the derrick platform was very much damaged, three iron standards were destroyed and all the planking carried away, also the lower part of tramway. The material for repairs was sent to the station, and the keeper made all the repairs himself.

The duplex burner formerly used at this station has been removed, and a Miller lamp substituted therefor.

Zephyr Rock Lightship.—The lightship maintained last autumn to mark Zephyr rock, in Shediac harbour, principally to facilitate the passage of the mail steamers running to Prince Edward Island, was again placed in position October 1, 1900. She was blown off her station by the gale of October 11, but was again replaced and maintained until the close of navigation.

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MINOR REPAIRS in New Brunswick, 1900.

Station.	Work.	Cost.
Bridges point	New boat.....	10 00
Cape Spencer	Revolving machine repaired.....	
	New reflector furnished.....	
Cassie point	Foundation repaired.....	
	Oil shed removed from edge of rock and shingled.....	
Cox Point.....	Ice breaker repaired.....	
Escuminac.....	8 new tubes in boiler.....	
Musquash.....	New derrick erected.....	
Gagetown.....	Riprap provided.....	5 00
Goose lake.....	Repairs to tower.....	
	Brush protection.....	92 00
	New boat.....	20 00
Grand Manan, N. head.....	Repairs to water tanks.....	38 00
Head harbour.....	Lantern partly reglazed.....	
	Boat house repaired by crew of <i>Lansdowne</i>	
	Breakwater being rebuilt.....	
	New water pipe to engine.....	109 70
	New donkey pump supplied.....	
Hendry point.....	Door repaired.....	
Hay Island.....	New slip provided.....	
Musquash Island.....	New boat.....	35 00
Negro point.....	Repairs to piers.....	16 65
	Repairs to breakwater.....	260 00
Neguac.....	Brush laid and small repairs.....	27 37
Oak Point.....	New site purchased.....	150 00
Portage island.....	Dwelling reshingled.....	
	New floor laid in kitchen.....	
Lepreaux.....	Blacksmith shop built.....	28 17
Pea point.....	Sundry small repairs.....	
Passamaquoddy bay.....	Pier deck renewed.....	
	Boat repaired.....	
	Chimney ventilator provided.....	
Point Brulé.....	Sand bank in front cut down 4 feet.....	
Quaco west head.....	New derrick erected and repaired.....	70 65
	New stone reservoir.....	235 00
Shippegan.....	Small porch built.....	
Tracadie.....	Brush protection.....	57 00

BUOY SERVICE.

The buoys under contract in the various districts have been well maintained, fewer complaints being made than in former years.

The coast buoys of the New Brunswick district, and of that part of Nova Scotia that lies in the Bay of Fundy, were attended to by the D. G. S. *Lansdowne*.

St. John Harbour Bell Boat.—Some small repairs were made by Mr. James O'Donnell at a cost of \$29.02.

The gong strikers were repaired by Mr. W. J. Coleston. The total cost of repairs, boating to and from and pumping out water, during the year, was \$62.77.

The agent reports this bell boat completely worn out.

Quaco.—When the bell buoy, marking the end of the reef running out from Quaco head, was placed this spring, its position was changed so as to better mark the extremity of the reef. It is now moored in 10 fathoms water, 100 yards outside the line of 4 fathoms at low water, at the south-east extremity of the reef. The buoy will, in future, be maintained on this spot instead of in the old position.

The buoy on Quaco shoal was also changed in shape from can to conical, to make it conform to the International rules for buoyage.

Grindstone Island.—The red iron can buoy heretofore maintained on the tail of Grindstone island reef, has been replaced by a conical buoy, to conform to the regulations for shapes of buoys adopted by the International conference.

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The new buoy is painted red, with Grindstone island in white letters on it and is moored in 5 fathoms water, $\frac{1}{2}$ mile W.S.W from the lighthouse.

Miramichi River.—Five of the wooden can buoys heretofore maintained were replaced by 5 iron can buoys, on the opening of navigation last year.

Two Rivers Harbour.—Two beacons, consisting of masts bolted to rocks on the sides of the channel, surmounted by triangular slatwork tops, have been established at the entrance to Two Rivers harbour, New Horton, on the north shore of Chignecto channel, Bay of Fundy.

One of the beacons stands on the starboard side of the channel, on a rock elevated 13 feet above low water mark. The mast is 26 feet 6 inches high, painted red.

The other beacon is on the port side of the channel, distant 90 feet northwardly from the starboard one. The mast is 22 feet high, and stands on a rock 20 feet above low water mark.

Two Rivers is a high-tide harbour, and is dry at low water. There is a narrow channel, leading from the deep water of Chignecto channel to the government wharf at the head of the harbour, which follows the west shore at a distance of about 100 feet therefrom. The bottom of this channel is about 7 feet above low water mark.

The beacons were erected under the supervision of Mr. J. Kelly, at a cost of \$41.98.

The following work was done on Important Buoys in this Agency :—

Name.	Nature of Work.	Cost.	
		\$	cts.
Black point whistling. . .	Placed January 11, 1900.		
	Placed August 9, 1900.		
Blonde rock whistling. . .	94 lbs. shackles furnished by Jas. O'Donnell.	10	34
	Lifted and placed December 22, 1899.		
Beaver harbour whistling	Lifted and replaced August 13, 1900.		
Chebogue ledge.	Lifted and placed December 21, 1899.		
Cat rock bell.	" " September 8, 1900.		
	Placed December 21, 1899.		
Buck rock can.	Placed August 30, 1900.		
	Repairs made by Jas. O'Donnell.	37	10
Point prangle can.	Chain from T. McAvity & Sons.	140	31
Big duck island can.	Changed September 14, 1900.		
St. John's ledge.	" " 1900.		
	" " 1900.		
Lurcher whistling.	Lifted and replaced November 25, 1899.		
	" " August 31, 1900.		
North-west ledge.	Repaired by Jas. O'Donnell.	9	38
	Lifted and placed in position December 23, 1899.		
Old man can	Went adrift in February, 1900.		
	Salvage paid Str. <i>Westport</i>	150	00
Peases ledge.	Placed March 22, 1900.		
	Preparing moorings, &c.	28	25
Peases island fairway bell	Freight on anchor.	7	50
	Advertising.	7	40
Lepreau whistling.	New whistle placed June 20, 1900.		
	Went adrift in November, 1899.		
Old woman can.	Salvage paid Str. <i>Westport</i>	100	06
	Replaced November 22, 1899.		
Peases ledge.	Lifted and replaced August 21, 1900.		
	Advertising.	23	29
Old man can	Repairs by Jas. O'Donnell.	167	65
	Lifted and replaced November 28, 1899.		
Old woman can.	" " September 8, 1900.		
	Repairs.	39	49
Peases ledge.	Lifted and replaced November 27, 1899.		
	" " September 8, 1900.		
Peases island fairway bell	Changed from can to conical June 5, 1899.		
	Lifted and replaced September 8, 1900.		
Lepreau whistling.	" " November 27, 1899.		
	" " September 8, 1900.		
Whistle changed September 15, 1900	Reported out of position, December 11, 1899.		
	Placed in position 15th January, 1900.		
Shackles.	Lifted and replaced 13th August, 1900.		
	Whistle changed September 15, 1900.		
	Shackles.	8	91

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Important Buoys—Continued.

Name.	Nature of Work.	Cost.
Quaco buoys.....	Ledge buoy displaced September 6, 1899.....	
	Reef buoy upset September 20, 1899.....	
	Both placed by <i>Lansdowne</i>	
	Ledge buoy adrift December, 1899.....	
	Salvage paid Str. <i>Evangeline</i>	110 00
Roaring bull conical.....	Repairs.....	27 76
	Advertising.....	9 50
	Repairs.....	15 59
	Lifted and replaced December 21, 1899.....	
Split rock whistling.....	New chain.....	72 04
	Lifted and replaced March 22, 1900.....	
	" " September 7, 1900.....	
	Reported adrift November, 1899.....	
	Replaced November 14, 1899.....	
South wolf whistling.....	Paid Str. <i>Neptune</i> for placing.....	65 00
	Removed and replaced November 30, 1899.....	
	" " January 13, 1900.....	
	Drifted 3 miles March 5, 1900.....	
	Replaced March 6, 1900.....	
	Paid Str. <i>Neptune</i> for placing.....	60 60
Trinity ledge bell.....	Lifted and replaced August 9, 1900.....	
	Repairs and supplies, Jas. O'Donnell.....	50 68
	Other expenditures on buoy.....	25 00
	Lifted and replaced January 24, 1900.....	
	" " April 30, 1900.....	
	" " August 20, 1900.....	
Yarmouth bell.....	" " " 29, 1900.....	
	Reported missing September 5, 1900.....	
	New buoy placed September 13, 1900.....	
	Went adrift in storm November 10, 1900.....	
	Buoy fittings, Jas. O'Donnell.....	25 91
	Chain, T. McAvity & Sons.....	250 40
N.W. whistling.....	Lifted and replaced December 17, 1899.....	
	" " March 15, 1900.....	
	Went adrift, March, 1900.....	
	Salvage paid Str. <i>Westport</i>	150 00
S.W. whistling.....	Chain.....	433 94
	Other expenses.....	35 81
	Lifted and replaced November 28, 1899.....	
N.W. whistling.....	" " August 22, 1900.....	
	" " December 21, 1898.....	
S.W. whistling.....	Found out of position and replaced 22nd March, 1900.....	
	Lifted and replaced August 22, 1900.....	
	" " October 31, 1899.....	
	" " April 20, 1900.....	
S.W. whistling.....	Reported out of position May 14, 1900.....	
	Replaced May 28, 1900.....	
	Towing, &c., Hugh Cairn & Son.....	67 00

PRINCE EDWARD ISLAND LIGHTHOUSE DIVISION.

The division is under the charge of Mr. Artemas Lord, who is agent of the department at Charlottetown, and also acts as inspector of lights for the district which embraces the whole province. The general routine of the office work has been, as formerly, performed by the agent, assisted by Mr. H. W. Mutch, as clerk and messenger. The work of building new lighthouses and superintending the more extensive repairs at existing stations has been done under the personal superintendence of Mr. M. Walsh, as foreman of works. Under the agent's instruction, Mr. Walsh is also warehouseman for the lighthouse stores in Charlottetown.

There are in the division 67 lights at 39 stations, and one fog horn, under the charge of 45 keepers. There are three automatic whistling buoys and one bell buoy. The majority of lights are situated on headlands and serve the general purposes of

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navigation, the remainder being harbour lights intended particularly for the benefit of fishermen. There are thirty harbours buoyed under the system of three year contracts, and seven in which buoys are maintained by the department under the local harbour masters.

All the stations on the island were inspected by the agent on the annual supply trip last summer which was made on the D.G.S. *Brant*.

DAMAGE BY STORM.

Brighton Beach.—On October 11, 1900, the back range light tower was blown down in a heavy gale.

A temporary light was immediately put in operation shown from a lantern hoisted between two poles.

Tracadie.—The tower, from which the back light was exhibited was upset by a gale on October 11, 1900. A temporary red light, hoisted on a mast, is maintained pending the re-erection of the tower.

Annandale.—The back range light tower was blown down by the gale of October 11 1900, and on November 20 it was found necessary to discontinue the exhibition of all the lights at this station for the remainder of the season to prevent confusion.

PRINCIPAL REPAIRS AT LIGHT STATIONS.

Miminegash.—The range lights heretofore shown from lanterns on masts, to indicate the entrance to Miminegash, in the Gulf of St. Lawrence, have been improved by substituting lights shown from inclosed towers for the exposed lanterns, and by changing the positions of the lightbuildings.

The front light is now shown from a square wooden tower, with sloping sides, surmounted by a square wooden lantern, the whole painted white, standing on the outer end of the south breakwater at the entrance to the pond. The building is 17 feet high from the pier to the ventilator on the lantern.

The light is a fixed catoptric light elevated 17 feet above high water mark. The light shows red over an arc of 135° between the bearings of N. E. round through E. to S., covering Miminegash reef, and white from S. to S. 41° W., over an arc of 41° , which includes the line of range.

The back light is a fixed white catoptric light, elevated 28 feet above high water mark, visible over a small arc on each side of the line of range.

It is shown from a square wooden tower, with sloping sides, surmounted by a square wooden lantern, the whole painted white. The building is 27 feet high, from its base to the ventilator on the lantern, and stands on a cribwork block on the beach of the pond, 720 feet S. 11° W. from the front tower.

The lights in one, lead to the entrance to the pond between the breakwaters, clear of all outlying dangers.

The towers were built last winter by days' labour, under the supervision of Mr. Milton Walsh, and cost \$254.30.

Cape North.—Extensive repairs and additions were made to the dwelling at this station, cost \$251.40.

Revolving gear having gone out of order, the whole machinery was removed and sent to the departments work shop at Charlottetown, where it was thoroughly cleaned and set up and tried, then taken back to station and set up and operated by Mr. Walsh. It has since been working in good order.

CHANGE IN RANGE LIGHTS AT CASCUMPEC.

The range lights hoisted on masts to indicate the channel over the bar at the entrance to Cascumpec harbour, on the north coast of the island, established last year,

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were this year replaced by better lights shown from towers, and the masts have been taken down.

The front tower stands on the sand hills south of the entrance, near the beach, 2,700 feet 22° E. from Cascumpec main lighthouse. It is 18 feet high from its base to the vane on the lantern, and is painted white. It consists of a square wooden lantern, standing on an open framework base, with the side of the framework facing the channel slatted to make it more conspicuous as a daymark.

The light is a fixed white light, elevated 20 feet above high water mark. The illuminating apparatus is dioptric of the seventh order.

The back tower stands on the sand hills, 611 feet S. 59° W. from the front one. It is a similar building, but is 23 feet high.

The light is a fixed white catoptric light, elevated 26 feet above high water mark.

These two range lights in one show the best water to cross the bar outside the sand hills at the entrance to Cascumpec harbour.

The buildings were erected by the agent, under supervision of Mr. Milton Walsh, at cost of \$183. The total expenditure on work at the station during the year was \$357.54.

MINOR REPAIRS.

Name.	Nature.	\$ cts.
Orwell.....	Moving light.....	12 00
Leard's front range.....	Repairs to deck.....	10 95
Grand river.....	General repairs.....	21 78
Little channel.....	Moving light.....	5 00
Murray harbour.....	General repairs.....	116 23
" (outer).....	Repairs to breakwater.....	76 00
New London.....	Protection.....	50 00
Savage harbour.....	Moving light.....	45 69
Souris, east.....	New fence.....	37 26
St. Peter's island.....	New sails for boat.....	38 33
West point.....	Repairs to woodshed.....	71 20
Darnley point.....	Moving back tower.....	10 00

BUOY SERVICE.

West Point—It was found necessary to remove the whistling buoy earlier than usual this season, in consequence of the difficulty of procuring a steamer that could handle so large a buoy. The maintenance of this buoy has always been attended with great difficulty.

Summerside—A cask, painted red, has been moored as a buoy in 20 feet water, 300 feet N.E. $\frac{1}{2}$ E. from Indian point lighthouse, to mark the end of the spit running out beyond the lighthouse.

BRITISH COLUMBIA LIGHTHOUSE DIVISION.

This division comprises all Canadian waters on the Pacific coast and the inland navigation systems of British Columbia, and is under the charge of Captain James Gaudin, agent of the department at Victoria, who also acts as inspector of lights.

There are in this province twenty-eight light-stations, at six of which are steam fog-alarms, and at six others bells are rung by machinery. There are three beacon lights in Victoria harbour, and one similar light in Nanaimo harbour, which, as aids to navigation, are highly appreciated.

The lights are in charge of thirty light-keepers, some of whom supply assistance out of the salaries allowed.

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The lights are supplied by the Dominion steamer *Quadra*, Capt. J. T. Walbran, master, and the fog-alarm machinery at the several stations was periodically inspected by the engineers of the *Quadra*.

NEW LIGHTS ESTABLISHED.

Brotchy Ledge Beacon Lighted—Brotchy ledge beacon, off the entrance to Victoria harbour, built in 1898, was made more conspicuous at night by showing from a square structure with sloping sides inclosed and painted white, standing eight feet above the deck of the beacon, a light, first established in February, 1900, as a white light occulted at short intervals. It is elevated eighteen feet above high water mark. The illuminating apparatus was a pressed glass lens.

The lamp was a thirty-one day oil lamp, on the Wigham principle, which would burn without constant attendance. It was found that the automatic occulting apparatus, which was designed to be turned by the heat of the flame, did not revolve properly, and this was consequently removed, and the light continued as a fixed white light until an electric cable, ordered from England, reached Victoria, in November, 1900. It was successfully laid by the crew of the *Quadra* in the same month, and a much more powerful fixed white light consisting of five incandescent electric lights substituted for the oil light. In the event of temporary failure of the supply of electricity the oil light will be shown.

It is proposed, ultimately, to make the light on this beacon an occulting light and to establish an electric horn as a fog signal.

Walker Rock Light.

A provisional stake light has been established on Walker rock beacon, Trincomali channel.

The light is a fixed white light, elevated fifteen feet above high water mark, and should be visible 5 miles all around the horizon. The light is shown from a small dioptric lantern. It is proposed to replace this by a more permanent arrangement.

Improvements and repairs at existing stations.

Ivory Island.—A new boathouse was built at a cost of \$89, and a new boat, costing \$45.00 supplied.

Dryad Point.—An addition has been built to the lighthouse to afford better accommodation for the keeper, at a cost of \$441.46.

Egg Island.—A breakwater to protect the lighthouse was constructed at a cost of \$188.24.

Cape Mudge.—Some large trees that endangered the safety of the buildings were felled at a cost of \$30. Outbuildings costing \$44 were erected.

Point Atkinson.—A new boathouse and barn were erected at this station. Total cost \$201.

Active Pass.—An addition was built to the dwelling at a cost of \$95.

Bare Point.—A floating landing was constructed at a cost of \$36.

Fiddle Reef.—Considerable protection work was placed around the boathouse and a new slip laid. Cost \$61.

Carmanah Point.—The reservoir at this station was enlarged and the tramway partly rebuilt and strengthened. Cost \$357.

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MINOR REPAIRS.

Name.	Nature.	Cost.
Pointer island.....	New boat.....	\$45 00
Entrance island.....	" fence.....	70 00
Prospect point.....	Clearing.....	30 00
Brockton point.....	New boathouse.....	100 00
Race rocks.....	Repairs to reservoir..	72 00

BUOYS AND BEACONS.

Disappearance of Sturgeon Bank Beacons.—The middle and north beacons on Sturgeon bank, at the mouth of the Fraser river, Strait of Georgia, British Columbia, have been carried away by the sea. It is not the present intention of this department to replace them.

Comox.—Captain T. P. Walker, R. N., H. M. S. *Warspite* reported on September 12, 1900, that the beacon on Grassy point, at the entrance to Port Augusta, had disappeared.

Benmohr Rock.—A wooden cage buoy has been placed on a rock in Trincomali channel, discovered by the *SS. Benmohr* and afterwards located by Capt. Walbran, of the D.G.S. *Quadra*

Kelp Bar.—Owing to the difficulty of maintaining the western beacon, it has been replaced by a spar buoy.

Sturgeon Bank.—The black pile beacon marking the outer edge of Sturgeon bank, off Sand Head lighthouse, disappeared in October, 1900. In consequence of severe weather it was found impossible to replace it promptly, and, pending the erection of a beacon, a red can buoy, surmounted by a cage, has been placed to mark the edge of the bank near where the beacon stood.

Sydney Spit.—The wooden day beacon marking the north-west extremity of the spit, was blown down by a gale on October 27, 1900. It is proposed to rebuild the beacon, at an early date.

Ganges Harbour.—A steel can buoy, painted black, has been moored in 8-foot water on the one fathom patch, in Ganges harbour, Admiral island.

False Reef, Stuart Channel.—A steel can buoy, painted black and red in horizontal bands, has been moored in 14 fathoms, 350 feet southward of the extremity of this reef, entrance to Preedy harbour.

White Rock.—A large steel can buoy, surmounted by a cage, the whole painted red, has been moored in 6 fathoms on the extremity of the reef extending north-west wardly from White rock, at the junction of Trincomali and Stuart channels, on which the S.S. *Miami* stranded.

Canoe Reef, Portier Pass.—A steel can buoy, painted black, was, last spring, established off the south-east point of Canoe reef, Portier pass.

Enterprise Reef.—The beacon erected in 1887 on Enterprise reef, off the west entrance to Active pass, east of Vancouver island, has been replaced, by a more conspicuous beacon. The new structure of stone, surmounted by a wooden lattice work tripod and ball, stands on the site of the old beacon. The stonework is painted black and the tripod and ball white. The top of the beacon shows 20 feet above high water.

This work was done by the crew of the *Quadra* with outside help, and cost \$319.50.

[Inclosure B.]

LIST OF BUOYS MAINTAINED BY THE DEPARTMENT OF MARINE AND FISHERIES IN CANADIAN WATERS IN 1900.

ONTARIO.

No. of buoys.		No. of buoys.	
Amherstburg, including Bois Blanc.....	44	Pembroke.....	20
Bay of Quinte (three contracts).....	32	Point Pelee, gas buoys.....	2
Burlington Bay.....	1	Port Rowan.....	10
Collingwood.....	14	River Thames.....	7
Fiddlers Elbow.....	1	Rondeau.....	6
Gananoque Narrows.....	5	Lake Nipissing.....	32
Georgian Bay.....	11	Sault Ste. Marie.....	20
Green Shoal.....	1	" " canal approaches.....	25
Grecian Shoal.....	1	South Baymouth.....	4
Grosse Point.....	6	Lake Superior.....	7
Kaministiquia.....	19	Trenton.....	11
Kennedy Shoal.....	1	Point au Baril.....	4
Kingston.....	19	Surprise Shoal, bell buoy.....	1
Little Current.....	6	Penetanguishene.....	10
Lake of the Woods.....	144	Red Horse Rock.....	1
Lone Rock, bell buoy.....	1	St. Joseph Channel.....	4
Midland.....	7	Port Arthur.....	1
Murray Canal and Presqu'île Bay.....	23	Lake Simcoe.....	1
North Sisters Rock, Ont.....	4	Pancake Shoal, bell buoy.....	1
Napanee.....	14	Tin Cap Shoal.....	2
Niagara, bell buoy.....	1	Byng Inlet.....	7
Orilia.....	6	Stokes Bay.....	6
Parry Sound.....	24	Bears Rump.....	1
" gas buoys.....	3		

QUEBEC.

No. of buoys.		No. of buoys.	
House Harbour, Magdalen Islands.....	6	St. Ann River.....	1
Bersimis and Outard Bay.....	10	St. Thomas.....	8
Cap Chatte.....	1	St. Placide, stakes.....	40 or 50
Carleton Point.....	1	St. Adelaide de Pabos.....	1
Chicoutimi.....	13	North Channel, Island of Orleans.....	10
Cock Point.....	1	Cape Cove.....	1
Fox River.....	1	Bonaventure.....	1
Gaspé.....	5	St. Lawrence River between Montreal and Quebec.....	258
Lachine and Lake St. Louis.....	23	Eschourie Rock.....	2
Lake St. Francis.....	36	Grand Entry.....	5
Matane.....	3	Amherst Harbour.....	8
New Richmond.....	4	Richelieu Rapids, bushes.....	1
Paspebiac.....	1	Maintained by Agency, gas buoys.....	11
Percé.....	2	" " smaller buoys.....	40
Richelieu River (two contracts).....	47		
Rivière des Prairies.....	10		

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LIST of Buoys maintained by the Department of Marine and Fisheries, &c.—Continued.

NEW BRUNSWICK.

	No. of buoys.		No. of buoys.
Bathurst.....	26	Napan River, 24 stakes.....	3
Bay Verte.....	36	Oak Bay and Restigouche.....	6
Beaver and Blacks Harbour.....	9	Oromocto.....	7
Bay du Vin.....	4	Pisarinco.....	2
St. John River.....	68	Pokemouche.....	5
Black Brook, Miramichi River.....	3	Quaco.....	3
Black Land Gully.....	12	Richibucto and Albion.....	28
Buctouche.....	16	Richibucto, Kingston and Brown's Yard..	30
Campobello.....	10	Shediac.....	11
Caracquet.....	20	Shippegan.....	19
Cocagne, stakes, 50.....	11	St. Andrews.....	15
Dalhousie and Restigouche.....	10	St. Croix Ledge.....	11
Didgequash.....	5	Tabusintac.....	17
Dorchester.....	3	Tracadie.....	19
Grand Lake and Salmon River.....	73	Washadamoak.....	2
Grand Manan.....	30	West Isles..... (4 spindles)	23
Great Shemogue.....	7	Maquapit and French Lakes.....	24
Harvey.....	7	Grande Anse.....	4
Letete and Back Bay.....	21	Petit Rocher.....	3
Lepreaux.....	3	North-west Arm, Miramichi.....	6
Little Shemogue.....	6	Marsh Point.....	1
Little Shippegan and Miscou.....	12	Dipper Harbour.....	3
Magagnadavic.....	13	Buctouche River.....	18
Miramichi.....	18	Tynemouth Creek.....	3
Musquosh.....	7	Maintained by Agency, signal buoys..	9
Negnac.....	19	" can and conical buoys.....	10

PRINCE EDWARD ISLAND.

	No. of buoys.		No. of buoys.
Bay Fortune.....	3	Montague.....	6
Beach Point.....	3	Murray Harbour.....	33
Bedeque.....	11	New London.....	11
Cardigan, Lower.....	5	Orwell and Vernon River.....	6
" Upper.....	11	Pinette.....	5
Casumpec.....	14	Port Hill.....	9
Charlottetown.....	42	Pownal.....	7
Cove Head.....	2	Rollo Bay.....	3
Crapaud.....	6	Rustico.....	5
East River (Hillsboro').....	17	Savage Harbour.....	2
Egmont Bay.....	10	Souris.....	4
Georgetown.....	13	St. Peters Harbour.....	8
Goose Harbour.....	2	Summerside.....	11
Grand River.....	12	Tracadie.....	3
Grand River, lot 14.....	8	West Point.....	1
Indian Rocks.....	1	Wood Island.....	1
Malpeque.....	16	Egmont Bay.....	2
Miminegash.....	3	Brae Harbour.....	5
Little Channel.....	3	Maintained by Agency, signal buoys.....	3

LIST of Buoys maintained by the Department of Marine and Fisheries, &c.—*Continued*

NOVA SCOTIA.

	No. of buoys.		No. of buoys.
Advocate Harbour.....	5	Monsellier	10
Apple River.....	8	McKinnon's Harbour.....	4
Arichat.....	16	Musquodoboit.....	7
Argyle River and Sound.....	10	Northport.....	12
Avon River	5	North Sydney.....	5
Barrington.....	35	Parrsboro.....	7
Bear River.....	12	Petit de Grat.....	10
Beaver Harbour.....	2	Pictou.....	3
Birehton.....	5	Popes Harbour.....	3
Bridgewater.....	10	Port Hood.....	7
Canso and St. Andrew's Passage.....	28	Port Le Tour.....	11
Cape Negro or North-East Harbour.....	14	Port Medway.....	9
Caribou.....	6	Port Morien.....	2
Cheticamp.....	12	Pubnico.....	16
Chezetcook and Petpiswick.....	6	Pugwash.....	8
Christinas Island and Barra Strait.....	11	Prospect, Lower.....	10
Clarks Cove, West Bay.....	3	River John.....	3
Clarks Harbour.....	17	St. Anns.....	2
Cockerwit Pass and Woods Harbour.....	15	St. Marys River.....	8
Crow Harbour.....	3	St. Peters Bay.....	16
D'Ecousse.....	8	St. Peters Inlet.....	11
Chester.....	5	Sambro.....	9
Digby and Annapolis.....	7	Shag Harbour.....	12
Dover.....	4	Sheet Harbour.....	9
Dipper Harbour.....	3	Shelburne.....	10
Great Bras d'Or.....	7	Tatamagouche.....	18
Guysborough.....	3	Terrence Bay.....	3
Hay Cove.....	8	Tor Bay.....	19
Harbour au Bonche.....(6 stakes)	4	Three Fathom Harbour.....	5
Ingonish, South Bay.....	8	Tidnish.....	5
Isaacs Harbour.....	1	Tusket.....(3 spindles)	23
Janvrin.....	4	Upper Prospect.....	4
Jeddore.....	11	Wallace.....	5
Judique.....	1	West Bay.....	3
Ketch Harbour.....	13	Westport.....	3
L'Ardoise.....	2	Weymouth.....	13
La Have.....	8	Whitehead.....	9
Lennox Passage.....	17	West Dublin and Crooked Channel.....	13
Little Narrows.....	10	Yarmouth.....	50
Liverpool.....	3	Smith's Island.....	1
Lockeport.....	6	Ship Rock.....	1
Lunenburg.....	9	Sydney.....	2
Lunenburg, Back Cove.....	9	Shulee.....	8
Lunenburg, Middle South.....	16	East Bay Bras d'Or.....	2
Louisbourg.....	7	Port Félix.....	7
Mabou.....	12	Chester Martin's Pt.....	3
Mahone Bay and Chester.....	12	Gillis Point, Boulacett Harbour.....	1
Main-à-Dieu.....	6	Tangier.....	4
Margree Harbour.....	9	Maintained by Agency..(Whistling buoys)	21
Martins Brook.....	6	" " (Bell buoys)	17
Merigonish.....	6	" " (Can buoys)	25

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List of Buoys maintained by the Department of Marine and Fisheries, &c.—Continued.

BRITISH COLUMBIA.

	No. of buoys.		No. of buoys.
Benmohr Rock.....(Platform and cage)	1	Village Point, Baynes Sound.....(Spar)	1
Gossip Reef.....(Wooden can)	1	Victoria Harbour.....(Wooden cage)	2
False Reef.....(Iron can)	1	" ".....(Spar)	1
Lighthouse Island.....(Conical)	1	Esquimalt Harbour.....(")	2
Point Grey.....(Iron can)	1	" ".....(Conical)	1
Six Fathom Patch.....(")	1	Nanaimo.....(Platform wooden cage)	8
Hodgson Reef.....(")	1	Sand Heads, Fraser River (1 bell & 13 iron)	14
Horsewell Reef.....(Conical)	1	Black Rock.....(Spar buoy)	1
Reef Point, M. I.....(")	1	Rosdale Reef.....(Large steel ")	1
Clarke Rock.....(Wooden can)	1	Johnson Reef.....(Small steel ")	1
Ledge Point.....(" spar)	1	Celia Reef.....(" ")	1
Burnaby Reef.....(" ")	1	Virago Reef, Portier Pass....(Spar buoy)	1
Dall Patch.....(Cage)	1	Indian Island.....(Can ")	1
Alford Reef.....(Can)	1	First Narrows.....(Spar ")	1
Houston.....(")	1	West Rock.....(Large can)	1
Clayquet Sd.....(Small ")	2	" ".....(Spar)	1
Cortez Isd.....(")	1	Canoe Islet.....(Can)	1
Entrance Pt.....(Spar)	1	" Pass.....(Spar 13 and can)	1
Miami Reef.....(Can with Cage)	1	Rosenfelt Reef.....	1
Sparrowhawk Rock.....(Spar)	1	Pt. Saturna.....(Conical)	1
Kelp Point, Baynes Sound.....(Conical)	2	Kootenay Lake.....(Platform)	11

(Inclosure C.)

ANNUAL REPORT OF THE OFFICER IN CHARGE OF THE HYDROGRAPHIC SURVEY OF THE GREAT LAKES.

HYDROGRAPHIC SURVEY,

OTTAWA, December 3, 1900.

The Chief Engineer,
Department of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to report as follows, upon the work of the Hydrographic Survey during the past year :—

Last winter a fair copy of the work done between Duck islands, Lake Huron and Cove island, including Manitoulin gulf was forwarded, in two sheets, to the Hydrographer of the Admiralty for engraving and publication. Owing to a great pressure of work at the Hydrographic Office, London, no sheets have yet been issued for Lake Huron, but I understand the western one should be ready for distribution before the opening of navigation, 1901.

Owing to the first complete edition of the Georgian Bay and North Channel Pilot having been entirely exhausted, a new one was prepared and issued last April.

The *Bayfield*, with the usual complement of officers and men, left Owen Sound on May 2, but had to return on the 5th for repairs to the main steam pipe. On the 8th a second start was made and work resumed at Lyal island, Lake Huron. At the close of the season Clark point was reached, 60 miles from the starting point for the season. Off this shore soundings were carried an average distance of 12 miles to deep water. The area surveyed was 750 square miles, 1,100 miles of sounding were done from the deck of the steamer in the deeper water, and 1,100 miles from the boats over the shallow areas. 110 miles of traversing was done.

A thorough survey of the water around the Indian or Fishing islands was made, showing several good anchorages for small craft, but they are not of much use to strangers in their present unbuoyed state. Large vessels seeking shelter near this shore

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must proceed to Stokes bay. Harbour surveys were made of Saugeen river, Port Elgin, Kincardine and Southampton. The first three harbours are small with shallow entrances and cannot be entered in stormy weather. Southampton is a harbour of refuge but the anchorage space is very limited, dangerous boulders are scattered about, and the present range lights lead over dangerously shoal water at a mile from the breakwater. A large sum of money has been spent to give protection here, but much more is needed both for dredging and breakwaters. I placed two spar buoys upon two very dangerous boulders lying in the track of vessels.

Outside the dangerous reefs, that front most of the shore for, often, more than a mile, no outlying dangers were discovered. The water gradually deepens, sometimes to 80 fathoms at the outer ends of the sounding lines off Chantry island and sometimes to only 20 fathoms, north of Clark point.

Careful observations, for the variation of the magnetic needle, were made with a unifilar magnetometer, at several points along the shore. A full list, of all the variations obtained, since the acquisition of a magnetometer in 1896, is annexed.

The latitude of Chantry island lighthouse was obtained by sextant and artificial horizon. North and south culminating stars were observed upon 9 nights and the mean result ($44^{\circ} 29' 23''.08$ N.) accepted.

The longitude of the same point was derived, from the triangulation and azimuths observed during the season, from both Cove island lighthouse and Goderich court house. It is $81^{\circ} 24' 08''.55$ West.

The triangulation was again carried along shore by using the steamer for the off shore vertices of the triangles. The distance from Cove island light-house to Goderich court-house thus found was very nearly that obtained geodetically.

Of Lake Huron, only about 60 miles of shore line, still remains to be surveyed. This piece of shore is nearly straight and has no off lying shoals, so that it is not very important.

The weather during the past season was not favourable for surveying work. The ice did not leave the shore till May 13. After that for a couple of weeks the weather was stormy, cold and damp. The middle of the season was very hot and the air full of haze that compelled us to keep within a couple miles of shore. The autumn was about average.

During the coming winter fair copies of the work from Cove island to Clark point will be prepared for the Hydrographer of the Admiralty and sailing directions for the Canadian shore of Lake Huron written.

Upon the completion of the survey of Lake Huron during the coming season, Lake Superior should be started, and for such a large lake the old *Bayfield* is both too weak and too slow as well as being too hard on fuel, that will be difficult to obtain. She was built of wood in 1863, and until the department purchased her in 1884 was engaged in heavy towing operations on the lakes. In 1883 a new boiler was placed in her and it is still doing service. Her engine is the one originally placed in her, is high pressure, hard on fuel, and not powerful enough. In 1893 the Steamboat Inspector condemned her, but as no one made an offer to buy her, when advertised for sale, she was put in service with orders to use only in fine weather. Where harbours were plentiful and easy of access as in Georgian bay this was all right, but on the east shore of Lake Huron it is difficult to keep out of the way of storms. For work upon the shores of the lakes now unsurveyed, principally Lake Superior, a larger, stronger and faster vessel is urgently required, or the important work will have to be abandoned.

To my assistants Messrs. F. Anderson and R. E. Tyrwhitt, the officers of the steamer, Capt. A. M. MacGregor and First Engineer, John Nisbet, my thanks are tendered for their close attention to duty at all times during the past season.

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

WM. J. STEWART,
Officer in charge of Hydrographic Survey.

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CANADIAN HYDROGRAPHIC SURVEY—MAGNETIC OBSERVATIONS.

MEAN of Eastern and Western Elongations.

Name of Station.	Latitude, N.	Longitude, W.	Date.	Observed Declination.	Observer.
	° ' "	° ' "		° ' "	
Port Colborne.....	42 52·8	79 15·6	Oct. 9, 1896..	5 22·6	W. J. Stewart.
"	42 52·8	79 15·6	" 10, 1896..	5 21·3	"
"	42 52·8	79 15·6	" 11, 1896..	5 26·8	"
Long Point (Lake Erie).....	42 33·7	80 07·5	" 7, 1896..	3 54·7	"
"	42 33·7	80 07·5	" 8, 1896..	3 55·2	"
Reid Island (Parry Sound).....	45 19·3	80 16·5	Apr. 27, 1898..	6 38·3	F. Anderson.
"	45 19·3	80 16·5	" 29, 1898..	6 37·6	"
Owen Sound	44 34·2	80 55·5	Oct. 26, 1897..	5 25·5	J. F. Fraser.
"	44 34·2	80 55·5	" 27, 1897..	5 27·9	"
"	44 34·2	80 55·5	" 28, 1897..	5 26·2	"
Burke Island.....	44 46·0	81 18·6	" 17, 1900..	5 41·2	F. Anderson.
"	44 46·0	81 18·6	" 18, 1900..	5 42·3	"
Garden Island (Stokes Bay)....	44 59·5	81 22·8	" 14, 1899..	5 54·5	"
"	44 59·5	81 22·8	" 15, 1899..	5 54·1	"
"	44 59·5	81 22·8	" 16, 1899..	5 54·5	"
Chantry Island.....	44 29·7	81 24·4	" 9, 1900..	5 54·1	"
"	44 29·7	81 24·4	" 10, 1900..	5 52·0	"
"	44 29·7	81 24·4	" 11, 1900..	5 53·8	"
Club Island.....	45 33·6	81 35·73	" 23, 1900..	6 34·2	W. J. Stewart.
"	45 33·6	81 35·73	" 24, 1900..	6 29·8	"
Kincardine	44 10·7	81 37·1	Sept. 13, 1900..	4 46·5	F. Anderson.
"	44 10·7	81 37·1	" 14, 1900..	4 45·7	"
"	44 10·7	81 37·1	" 15, 1900..	4 43·8	"
Warner Bay.....	45 11·2	81 38·2	Aug. 18, 1899..	6 25·2	"
Tobermory Harbour.....	45 15·55	81 40·7	July 9, 1899..	6 44·1	W. J. Stewart.
Rattlesnake	45 31·9	81 42·8	Oct. 23, 1899..	6 22·7	F. Anderson.
Cove Island.....	45 19·0	81 43·8	" 23, 1897..	6 52·0	W. J. Stewart.
"	45 19·0	81 43·8	" 24, 1897..	6 53·3	"
"	45 19·1	81 43·9	" 22, 1897..	6 57·6	"
"	45 19·6	81 44·2	June 30, 1898..	6 53·0	F. Anderson.
"	45 19·6	81 44·2	July 3, 1898..	6 53·4	"
"	45 19·6	81 44·2	" 6, 1898..	6 52·7	"
S. W. Pt. Fitzwilliam Island ..	45 26·2	81 48·55	Oct. 24, 1899..	4 30·5	W. J. Stewart.
Pt. aux Pins (Lake Erie)	42 15·5	81 52·2	" 1, 1896..	2 07·4	"
"	42 15·5	81 52·2	" 2, 1896..	2 06·2	"
"	42 15·5	81 52·2	" 3, 1896..	2 07·7	"
Little Current	45 59·05	81 55·25	" 20, 1900..	4 28·1	F. Anderson.
"	45 59·05	81 55·25	" 21, 1900..	4 24·7	"
"	45 59·05	81 55·25	" 22, 1900..	4 17·5	"
South Bay Mouth.....	45 34·0	82 00·4	" 18, 1898..	3 52·8	"
"	45 34·0	82 00·4	" 19, 1898..	3 46·5	"
"	45 34·0	82 00·4	" 20, 1898..	3 44·7	"
"	45 34·0	82 00·4	" 21, 1898..	3 46·2	"
"	45 34·0	82 00·4	June 12, 1899..	3 45·8	"
"	45 34·0	82 00·4	" 13, 1899..	3 47·7	"
"	45 34·0	82 00·4	" 14, 1899..	3 47·6	"
Misery Bay.....	45 47·1	82 44·6	Aug. 9, 1898..	3 18·6	"
"	45 47·1	82 44·6	" 10, 1898..	3 17·3	"
Outer Duck Island.....	45 39·2	82 55·5	Sept. 7, 1897..	2 05·3	J. F. Fraser.
"	45 39·2	82 55·5	" 8, 1897..	2 07·7	"
"	45 39·2	82 55·5	" 9, 1897..	2 09·4	"
Great Duck Island.....	45 39·3	82 56·0	Oct. 6, 1897..	2 00·0	"
"	45 39·3	82 56·0	" 7, 1897..	2 00·4	"
Burnt Island.....	45 49·2	82 57·1	Sept. 19, 1897..	3 07·7	"
"	45 49·2	82 57·1	" 20, 1897..	3 08·8	"
"	45 49·2	82 57·1	" 21, 1897..	3 05·1	"
Little Cockburn Island.....	45 54 45	83 29·85	Oct. 19, 1897..	3 30·1	"
"	45 54 45	83 29·85	" 20, 1897..	3 30·8	"
"	45 54 45	83 29·85	" 21, 1897..	3 24·8	"

WM. J. STEWART,
Officer in charge Hydrographic Survey.

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(Inclosure D.)

SURVEY OF TIDES AND CURRENTS IN CANADIAN WATERS.

OTTAWA, December 20, 1900.

W. P. ANDERSON, Esq., C.E.,
Chief Engineer, Department of Marine and Fisheries.

SIR,—I have the honour to submit the following Report on the progress of this Survey. The principal tidal stations have been maintained in continuous operation throughout the year, and progress has been made in the reduction of the results, and in the use made of them to improve the tide tables, now regularly issued. During the summer season, a series of tidal stations was established throughout the Lower St. Lawrence, from Quebec to Cape Chatte. For these stations, points were selected which would secure the greatest amount of information regarding the relation between the tidal currents on the St. Lawrence, and the tides themselves. Some direct observations of the currents were also made in the Traverse. Another important step, is the calculation and publication of tide tables for British Columbia.

Progress in these directions has been made possible by the increased amount of the appropriation for this Survey. As soon as the increase was decided upon, the tidal records from British Columbia, which had been reduced to figures in tabular form and had been lying in readiness for some time back, were at once sent forward to London, where the analysis of the record is made. Through this promptitude, it was possible to secure tide tables for 1901 in time for publication before the close of the present year. These will be of much service to navigation on our west coast.

In the last report on this Survey, full comparative statements were given, to show the improvement in the accuracy of tide tables which had already been secured by the investigations made. Comparative tables were also given to show the difference still outstanding between the improved tide tables now issued by this Survey, and the tides themselves as observed. From these comparisons, it appeared that the greatest difference between the two, or the greatest outstanding error, occurred at Quebec. It was therefore deemed to be of the most service, to reduce two additional years of the tidal record from that harbour, in order to extend the basis from which the Quebec tide tables are calculated, from two years of observation to four years. This will be of permanent benefit to these tide tables in all future years. The expenditure required for this, amounts to \$450 which the Survey could not afford until now. This again illustrates the way in which any increase in the appropriation for this Survey can at once be applied to practical advantage.

This is as much as could be done in one year in this direction; but for other harbours in their turn, a similar improvement will be secured as means are available. In the office work of this Survey, and in the erection of the summer tidal stations, I have had the assistance of Mr. R. Angus and Mr. S. C. Hayden.

The total expenditure on this Survey during the fiscal year from June 30, 1899, to June 30, 1900, was \$4,343.10. This includes an amount of \$378.08 properly chargeable to the tidal observations on the Lower St. Lawrence during this season.

Applications for Information.—As the Survey becomes more widely known, the requests for information and the correspondence resulting, continue to increase. Without attempting to enumerate all the requests for copies of reports and tide tables, the following applications for information may deserve mention:—

The Superintendent of the United States Coast Survey in acknowledging the report of progress containing tidal constants for three of our harbours, for which request had been made, writes as follows:—‘Your valuable report was received too late to

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benefit our 1900 tables; but use will be made of the data given there, in our Tide Tables for 1901, and acknowledged to your survey.'

The Consul for Sweden and Norway made request for a number of sets of Tidal Survey reports for distribution amongst Norwegian steamers employed in the coal trade between Montreal and the Lower Provinces. A sufficient number of reports were sent in reply; as well as further information asked for, regarding Belle Isle strait and the Bay of Fundy. In acknowledging these the Consul says:—'I shall make it part of my duty, as far as lies in my power, to distribute these amongst Norwegian steamers to whom they may be of the greatest interest.'

On request of the secretary of the Pilotage Commissioners of St. John N. B., thirty copies of the tide tables in which St. John is included, were sent for the information of the pilots at that port.

The tide-levels, which have always to be carefully worked out for the reduction of the tidal observations, often prove of important service also, in connection with harbour works; as the following requests for correct tidal levels will indicate:—

Mr. A. J. Stevens, I. C. R. engineer, in determining the depth required for the Intercolonial railway docks at Richmond, and the Deep Water terminus at Halifax, makes request for: 'A low water datum which can be relied upon for security to ships, by shippers and the railway alike. These docks are used by the largest ships upon the Atlantic. They must never touch bottom.'

Major Roberts, superintendent of signals at Halifax, required to carry the low-water datum over to St. George's island; and also desired information from which to make a table of the half-hourly height of the tide; which was supplied.

Mr. C. E. W. Dodwell, Resident Engineer of Public Works for Nova Scotia, applied for the elevation of high water at ordinary spring tides, at Windsor, N. S.; for reference in connection with works in progress for the improvement of that port.

On application from Mr. E. T. P. Shewen, Resident Engineer of Public Works at St. John, N. B., some three hundred readings of the height of the tide have been supplied to him, from the tide gauge at St. John; in addition to the series mentioned in a former report. These were required for the reduction of soundings taken for the survey of that harbour.

These may serve as examples of the accessory ways in which this Survey often proves of value, in addition to its direct service to the shipping interest.

THE PRINCIPAL TIDAL STATIONS.

These stations have been in continuous operation throughout the past year, with some minor exceptions. The stations at Forteau bay in Belle Isle strait, and at St. Paul island, Yarmouth, Father Point and Quebec, were inspected this season by myself or Captain Douglas; and some important work done, which will better insure the continuity of the tidal record, and enhance its value.

At Forteau bay in Belle Isle strait, the tide house had settled when the gauge was damaged by a gale in November, 1897; and it was afterwards levelled up, when the new crib-work was built in September, 1898. The levels being thus disturbed, there was no longer the means of reducing the observations to a uniform datum. Even the wharf-gauge scale itself had been altered in elevation, in making the necessary repairs. The distance from Ottawa to Forteau bay has now been reduced from 2,100 miles to 1,600 miles, by the new route via North Sydney and the west coast of Newfoundland; but owing to the steamer connections being out of order this season, through an accident to one of the vessels in the service, a full month was taken up, after reaching North Sydney, to secure ten days at Forteau bay. It is thus something of an undertaking to visit this station, as it breaks into the time in the most important part of the year.

Owing to uncertainty in the levels, because of the changes above noted, the tidal record at Forteau bay for a period of two years, was deprived of nearly half its value. The special object in visiting the station was, therefore, to re-determine the levels as far back as 1898, and thus to restore the continuity of the datum. It was a problem

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complicated by the inter-relations of the various changes that had taken place; but technical difficulties need not be explained here, though it may be in place to remark that trouble of this character is always likely to arise when the tide gauges have to be placed on crib-work or other timber-work, which is liable to displacement or settlement. When they have to be so built, owing to the want of masonry on which to set them, the closest watchfulness is necessary; and instrumental levels have to be repeated at frequent intervals, with check calculations in the office. Otherwise a uniform datum level, which is essential for the observations, cannot be maintained.

As a precautionary measure, to enable any settlement to be detected more readily, a bronze bolt was let into a vertical face of rock at about half-tide. This rock forms a reef in the vicinity of the gauge, which is covered at high water. The reading on the wharf scale when the water is at the level of this bolt, is posted up in the tide-house for reference. An improvement in the sight-gauge has also been made by using wooden rods for the connection between its scale and the float which rises and falls with the tide. This is to avoid the possibility of alteration in its length; and it has now been carefully adjusted to standard length. Several other minor improvements were also made.

At St. Paul island similar difficulty has been met with, in maintaining a uniform datum level. A scale of feet was originally cut on the face of the rock for reference; but this has been effaced by the heavy ice of winter. It is seldom in any case that there is not too heavy a swell to obtain satisfactory readings on such a scale. Entire dependence has therefore to be placed on the sight-gauge, to furnish the datum level. The tide-house had to be raised twenty-four feet above high water, to prevent it from being carried away in winter storms; and this makes the length of the sight-gauge too great to use wooden rods for the connection between its scale and the tide-float. For this connection, heavy nickel wire, made up into chain of 6-inch links, has now been adopted. This gives every promise of success; as it had already proved satisfactory throughout the previous winter at the Halifax gauge.

The rock of which the cliffs are composed and against which the tide gauge is set, is so crumbling that reference marks for the levels are soon lost. A bronze bolt has therefore been drilled into the rock for this purpose; and by these improvements it is hoped that a uniform datum will be more certainly and conveniently maintained; and that the amount of office work required for the reduction of the observations to datum, will be appreciably decreased.

The diploidoscopes, which give the correct time from the sun, were adjusted by astronomical observations at both Forteau bay and St. Paul island. The barographs, which give a continuous record of the height of the barometer, were also adjusted at both stations.

At Father Point, extended observations were taken in August to compare the actual rise and fall of the tide on the open beach, with the record given by the instrument; as this gauge works by siphoning through an inlet pipe nearly 400 feet long. Simultaneous comparisons were made every two or three minutes for several hours at a time, on fine days during the time of the spring tides. The results need not here be detailed. When compiled with the similar observations obtained the year before, they afford a table of correction to be applied to the height of the tide, to allow for the siphoning action of the gauge. This is essential in the reduction of the observations.

At Quebec, a favourable opportunity was taken to secure a further series of comparisons, to determine the relation between the zero of the tide gauge and the scale of feet cut on the masonry of the dry dock on which the gauge stands.

TIDAL RECORD OBTAINED AT THE PRINCIPAL STATIONS.

The record obtained has been practically continuous during the year, at the seven east coast stations, as well as at the two tidal stations in British Columbia. The causes of interruption may be cited briefly, as examples of the nature of the difficulties to be met, against which foresight is required.

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The gauge at Yarmouth, N.S. was fitted up originally in 1898 as a summer station without any provision for heating in winter, as the climate is milder there than at any of the other principal stations. (See comparative temperatures given in last year's report.) Some special precautions were taken to prevent the formation of ice in winter, as explained in last report; but notwithstanding these, more than a month of record was lost during the first winter, in February of 1899. During the past winter however, the only loss on account of frost was from February 5 to 7, and from February 28 to March 5, 1900; a total of nine days.

At St. John, N.B., there was repeated trouble between January and April, on account of the breakage of the fine platinum wire which connects the tide-float with the mechanism of the recording instrument. The trouble was finally remedied; but there remains much office work to be done, in filling in the parts of the tide-curves which are thus missing. The gaps can better be made up in this way, than by calculation.

At Halifax, the hair-spring of the driving clock of the gauge broke twice, in the months of June and July. Some spare hair-springs had been obtained from the makers of the gauge in Glasgow, and placed in charge of a leading watch-maker in Halifax; and because of this precaution, the interruption from these accidents was limited to one or two days on each occasion.

At Father Point, at the end of July, choakage occurred in the intake pipe that admits the water to the gauge, by which five days record was lost. To remedy this, the outer end of the pipes had to be disconnected; and it was not until the low spring tides of the middle of August, that they could be re-laid. During the interval, the record of some low waters was lost, as the pipes did not then reach to the lowest tides.

At the other principal tidal stations, namely, Quebec, St. Paul island, and Forteau bay, there was no interruption in the record obtained.

The total amount of tidal record obtained at the principal stations up to the end of 1898, was given in a summary form in Table D, appended to last year's Report of Progress.

TIDE TABLES FOR 1900 AND 1901. IMPROVEMENTS, PUBLICATION, &c.

Several improvements on previous years have been made in the preparation and publication of the tide tables issued by this Survey. A considerable part of the advantage of the work which has now been done, will appear when the tide tables for 1901 are issued; whereas the reduction of additional record and its analysis to extend the basis from which the tide tables are calculated, will first benefit the tables for 1902. The progress made may be best explained, therefore, under the heading of the years in which the tide tables will be improved by the work now done.

Tidal differences in the Bay of Fundy.—In the tide tables of 1900 for the harbours of Quebec, Halifax and St. John, N. B., a slip was inserted giving the preliminary results of the tidal observations, in the Bay of Fundy. A complete set of tidal differences for the whole of this bay has now been prepared, which will appear in the tide tables for 1901. They are based upon a comparison of the tidal observations obtained at the stations of 1898, with the 'Establishments' as already determined by the Admiralty for intermediate points. This comparison affords a valuable check upon the Establishments themselves; and places the time of the tide throughout this bay upon a reliable basis. The importance to navigation of a correct knowledge of the tide in this bay is evident, when the range of the tide is so great. In addition to the tidal differences which enable the time of the tide to be found, the available draught of water at spring and neap tides is given, for points in the upper part of the bay. Navigation may there be said to be entirely dependent on the tide, as the wharfs do not extend beyond half-tide mark, and vessels can therefore only reach their berths at high water.

New Tide Tables for British Columbia.—These are based upon the record obtained from registering tide gauges erected in 1895 by the Department of Public Works. One of these is at Sand Heads at the outlet of the Fraser river, on the coast of the Strait of Georgia. It is thus centrally situated in that strait for comparison with the time of the tide at the harbours around it. Another tide gauge was originally placed at Victoria, in 1895; where two full years of tidal record have been secured. This gauge was

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afterwards removed to the Dry Dock at Esquimalt, in May, 1897 ; where it has been in continuous operation to date.

Duplicate copies of these records were furnished to this Survey in the form of blue prints ; but the whole set was lost in the fire in the departmental buildings in February, 1897. A second set from the Department of Public Works was fortunately obtained before the whole of the original record was destroyed in the extensive fire at New Westminster, in August, 1898. This emphasises the risk run, in allowing a record of such value to stand over for so long, before it is submitted to analysis. It is therefore reassuring to report that there are now three years of this record from which tidal constants have been determined ; which thus places the results from this portion of it, in a position of equal security with the movements of the sun and moon themselves.

The length of record on which these tide tables are now based, is as follows :—
Victoria, on one full year, from April 1, 1895, to April 30, 1896.

Sand Heads, Fraser river, on two years, from May 1, 1895, to May 31, 1896 ; and from October 1, 1896, to October 28, 1897.

These tables will be of much service to our west coast, because of the complication of the tides there, which results from the large diurnal inequality. Heretofore, the best approximations available were those given in the tide tables of the United States Coast Survey ; where the tides in the Strait of Georgia are referred to Port Townsend at the mouth of Puget Sound, and the tides at Victoria are deduced from Galveston on the Gulf of Mexico.

The tides at Victoria apparently, cannot be referred to the United States tidal station at Port Townsend, and the results obtained for the Strait of Georgia have been far from satisfactory ; which in all probability is due to an alteration in the character or type of the tide after it enters the Strait of Fuca. This change is made clear now that the tidal constants have been obtained, as a comparison of the leading harmonic components given below will show. The progress of the tide is in the order of the columns. While there is a general increase in the values, in correspondence with the increase in the range of the tide itself, the proportions between the diurnal and semi-diurnal components are profoundly modified.

Symbol.	Tidal Component.	VICTORIA. (Strait of Fuca.)	PORT TOWNSEND. (Puget Sound.)	SAND HEADS. (Strait of Georgia.)
M ₂	Lunar semi-diurnal	1·23 feet.	2·22 feet.	2·81 feet.
S ₂	Solar semi-diurnal	0·33 "	0·55 "	0·68 "
K ₂	Luni-solar semi-diurnal.....	0·08 "	0·16 "	0·22 "
K ₁	Luni-solar diurnal	2·05 "	2·51 "	2·70 "
O	Lunar diurnal.....	1·24 "	1·45 "	1·48 "
P	Solar diurnal.....	0·62 "	0·80 "	0·80 "

In following the onward progress of the tide, it is thus necessary to take the Victoria tide as the type for the Strait of Fuca, while Port Townsend is probably typical of the Puget Sound region. The tide is then further modified in its passage through a network of narrow channels, in reaching the Strait of Georgia. In these circumstances, constant differences in time do not hold, as they usually do when a tide progresses evenly along a channel or strait. The only way to meet the difficulty is to secure tidal data for the Strait of Georgia itself, as has now been done.

With the tide tables now issued, tidal differences are given which enable the time of the tide to be found approximately for Esquimalt, Vancouver, New Westminster and Nanaimo. An explanation is given in the tide tables themselves, of the data on which these differences are based.

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Quebec, Halifax and St. John, N.B.—The tide tables for these principal harbours remain, up to 1901, without further improvement in their accuracy; being still based upon the same length of tidal record as before. These tables give the time and height of the tide, the depth of the water on dock sills, &c.; and they are accompanied by tidal differences, by which the time of the tide at a large number of other ports becomes known. The chief improvement in this set of tables, is the addition of the tidal differences for the Bay of Fundy, as above explained.

These tide tables were again supplied to the leading British and Canadian Almanacs, for 1900, as far as they were willing to publish them. Some improvements in this respect may be noted. In McMillan's Almanac, the St. John tables for 1900 are printed in full, the height of the tide as well as the time being given, which is important in a harbour where the range of the tide is over thirty feet. The newspapers have also done a little better on the whole, in making the tide tables known. The St. John papers have not published them as fully as in former years; but on the other hand, in Quebec, the *Chronicle* and the *Soleil* have published the tide tables for that harbour pretty regularly throughout the season, giving two or three days at a time; and have made acknowledgement to this Department for them. The *Quebec Telegraph* also gave occasionally the tides for the following day.

The almanacs in which the tide tables appear in whole or in part are as follows:—
 Canadian Almanac.—All the above, in full.—The Copp, Clark Co., Toronto.
 Greenwood's Almanac.—“ “ —Capt. W. N. Greenwood, Lancaster, Eng.
 Brown's Almanac.—Halifax tide tables.—Messrs. J. Brown & Son, Glasgow and L'pool.
 Belcher's Almanac.—Halifax tide tables.—The McAlpine Publishing Co., Halifax.
 McMillan's Almanac.—St. John tide tables in full.—Mrs. J. & A. McMillan, St. John.
 Cogswell's Almanac.—(Discontinued. Did not appear for 1900.)
 Moore's Tide Tables.—Quebec; time only.—Messrs. T. J. Moore & Co., Quebec.

These tide tables were again reprinted from Greenwood's Almanac; the reprints including the tables for St. Paul island also, with tidal differences for the south-west coast of the Gulf of St. Lawrence. Of these, nearly 500 copies were widely distributed. In this way all applications for the tables have been met; forty-nine copies having been sent in reply to requests for them. The number of these reprinted copies ordered for 1901 has been increased to 600.

Charlottetown, Pictou and St. Paul Island.—These tide tables are computed by this Survey and printed by the Department. A step in advance has been made, in preparing them earlier in the year, and also in extending them to include the whole year, instead of only eight months as formerly. To do this, it was of course necessary to compute two sets of tables during the one year; and to facilitate the extra work, a tidal-difference machine was devised by me, by which variable differences in the time of the tide can be run off with the same facility as a constant difference. The series of differences used in the successive computation of this set of tables, from the principal tidal station at St. Paul island, was also revised and slightly modified. (For explanation of the method used, see Report of Tidal Survey, December, 1898, pages 8 and 9.)

The extension of these tables to include the whole year, will be of service to the winter navigation in Northumberland strait. Also, by preparing them early in the year, the almanacs were supplied with copies for 1901 in good time, and it is thus hoped that they will be induced to publish them. It would be an important improvement if they would publish the tide tables prepared by this Survey; because any other tide tables, as formerly published for Charlottetown and Pictou, have been quite incorrect; or the tidal difference given by which to compute them, has been misleading. The reasons for this, which are attributable to the character of the tides, have been explained in Reports of Tidal Survey, December 1898, page 7; and December, 1899, page 11; where examples are given in illustration. It was chiefly in the hope of replacing this inaccurate information with reliable tide tables that the effort was made to issue them in the spring, amongst the press of other preparations in leaving for the work of the summer season.

Already, during 1900, the *Charlottetown Patriot* has published the tide tables of this Survey, one month at a time, with the full explanation accompanying them. The *Examiner* has also given them correctly for the later months of the year. At Summer

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side, P.E.I., the *Journal* was found to be publishing tables for that harbour which were inaccurate; and the tide tables of this Survey, with the correct difference in time from Charlottetown, were therefore sent to it. The Pictou and New Glasgow papers have also been supplied with this set of tide tables; which the Pictou *Advocate* and the New Glasgow *Enterprise* published when they were first issued in 1897 and 1898.

Ste. Croix Bar.—Tide tables were again computed for this locality, as it is still the shallowest point in the Ship channel between Quebec and Montreal; and the difference in time for St. Augustin Bar is also given. An improvement in the accuracy of these tables has been secured, by working up the observations recorded by the semaphore operator at Cap Santé, opposite Ste. Croix Bar. The additional record thus utilized, extended from June 9 to November 26 in 1898.

These tide tables are published in company with the tide tables for Quebec, by the Montreal Harbour Commissioners; in the publication they prepare annually for the information of the St. Lawrence pilots.

Father Point.—Prepared in manuscript only; and posted at the lighthouse at Father Point. As this is the Pilot Station for the Lower St. Lawrence, they are there accessible to the pilots.

Tadoussac, Cacouna and Little Metis.—Tide tables for the months of July, August and September were computed for these sea-side resorts to meet the demand of the summer residents and tourists. This was done by a little extra work, without expense; as the tide tables were prepared in manuscript only, and posted at the leading hotels.

TIDE TABLES FOR 1902.

These are now in hand for calculation, and will be ready in the early part of next year. An improvement in the accuracy of the tide tables for Quebec will be secured; as the basis from which they are calculated will be extended from two to four years of observations, by the analysis of two additional years of tidal record; namely, from February 1, 1896, to February 28, 1898.

Similarly, the accuracy of the St. Paul Island tide tables will be improved by extending their basis from one to two years, by the analysis of one year of additional record; namely, from December 12, 1897, to December 31, 1898. On St. Paul island, the tide tables for Pictou and Charlottetown in Northumberland strait, are dependent; as well as the south-west coast of the Gulf of St. Lawrence and the north shore of Prince Edward Island, for which tidal differences from St. Paul island are given.

The tide tables for St. John and Halifax will remain on the same basis; and also those for British Columbia for 1902, which will be calculated from the same record that serves as the basis of the tide tables now prepared for 1901.

TIDE CURRENTS.

Currents in the Gulf of St. Lawrence, including the Anticosti region, and Belle Isle and Cabot Straits.—A pamphlet with this title was prepared, and published by order of the Minister in June last. The information it contains is derived from the investigations in the Gulf of St. Lawrence made by this Survey during the summer months of 1894, 1895 and 1896; supplemented by information collected by myself from captains of vessels, fishermen and others, having a long experience in the Gulf. For greater clearness, no reference is made to the methods and appliances employed in these investigations; although some of them were used for the first time at sea, or were devised to meet the special conditions in the Gulf.

In condensing this information from the Reports of Progress already issued by this Survey, a division of the subject into two parts was made, as follows:—Part I. Description of the currents on the surface, as a mariner may expect to find them in each locality. Part II. The causes, as far as ascertained, which influence the currents in moving as they do; and the general circulation of the water in the Gulf of St. Lawrence.

This second part is also of value to mariners, in showing the usual direction in which the water tends to move, when undisturbed. It is added for the benefit of those who

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may desire to obtain some intelligent grasp of the conditions in the Gulf area, and the causes which influence the currents in moving as they are found to do; and who may wish to know something of the general relation of the waters in the Gulf area to the St. Lawrence river and the ocean; on which the work of this Survey has thrown considerable light.

This pamphlet was widely distributed, being sent to all those who usually receive "Notices to Mariners" for the Atlantic coast of Canada; as well as to the foreign consuls, harbour boards, corporations of pilots, port-wardens, &c.; and to thirty-six shipping firms and agents of steamship lines. Several appreciative letters were received in reply from these firms; and the following additional copies were sent on request, which were desired chiefly for distribution to the captains of vessels:—

	Copies.
The High Commissioner for Canada, London, England.....	50
The Imperial German Consulate.....	4
The Consul for Sweden and Norway, for the captains of Norwegian vessels.....	36
Messrs. H. & A. Allan, Allan Line, Montreal.....	25
Messrs. D. Torrance & Co., Dominion Line, Montreal.....	8
Messrs. Elder Dempster & Co ..	20
The Robert Reford Co., Donaldson and Thomson Lines.....	36
Messrs. McLean, Kennedy & Co., Ulster S.S. Co.....	24
The Hamburg-American Line.....	20
Messrs. Carbray, Routh & Co., Dene Line.....	12
The Quebec Steamship Co.....	5
Messrs. Furness, Withy & Co., Furness Line, Halifax.....	6
Messrs. Pickford & Black, Halifax and W. I. Lines.....	6
The Newfoundland Railway and Steamship Co., St. John's,	12

Note on Chart of the Gulf of St. Lawrence.—On the latest editions of the general chart of the Gulf, Admiralty chart No. 2516, the following note appears with respect to the currents, which embodies an outline of the results arrived at, in the investigations made by this Survey:—

"In the Strait of Belle Isle the currents are principally tidal, the west-going stream predominating; but wind has a great influence both in direction and force. Cross currents here appear to be rare.

"In Cabot strait the currents, although influenced by winds and tides, usually set to the north-westward round Cape Ray on the Newfoundland side, and to the southward on the Cape Breton side, this last current sometimes extending nearly across the whole width of the strait."

"On the main steamship route between the Strait of Belle Isle and Anticosti, and over most of the open area of the Gulf of St. Lawrence, the current is very variable, its rate seldom exceeding one knot per hour; and its direction, apparently, principally governed by winds. Its uncertainty renders it necessary for the mariner to exercise much caution.

"The only currents in the Gulf which run with any constancy, in the season of navigation, are:—A north-easterly set, of less than one knot per hour, off the west coast of Newfoundland, between Bonne Bay and Rich Point, and the easterly current between the entrance of the river St. Lawrence and the west end of Anticosti, turning to the southward round Cape Gaspé; but these currents are retarded, and may even be reversed, by strong contrary winds."

Tidal currents of the Lower St. Lawrence.—Some relations between the turn of the current and the time of high and low water, have been ascertained while the surveys for the Admiralty charts were being made. But unfortunately the time of the tide itself has not been known with sufficient accuracy to make these relations with the current practically available to mariners. The tidal observations of the present season will afford the information required, and will thus enable the turn of the current to be readily computed also.

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The relations referred to, as noted on the St. Lawrence charts, when put in tabular form, are as follows:—

Tidal Streams in the offing of Localities given.	Flood Stream begins after L. W.		Ebb Stream begins after H. W.		Duration of Flood Stream.		Duration of Ebb Stream.	
	H.	M.	H.	M.	H.	M.	H.	M.
After low water and high water by the shore—								
Quebec.....	1	10	1	05	5	00	7	30
Ste. Anne de Beaupré.....	0	45	1	00	5	10	7	15
St. Laurent, Orleans Island.....	0	55	1	10	5	00	7	25
Berthier.....	1	10	1	05	5	05	7	20
Grosse Isle.....	1	00	1	05	5	10	7	10
L'Islet.....	0	30	0	30	5	30	6	50
After low water and high water at Orignaux Point—								
In Upper Traverse.....	2	05	1	30	5	25	7	00
In Lower Traverse.....	1	55	1	45	5	45	6	45
Orignaux Point.....	0	30	1	10	5	55	6	30
After low water and high water at Rivière du Loup—								
In Brandy Pot Channel.....	1	05	0	50	6	05	6	20
Green Island.....					6	00	6	24
Tadousac.....					6	08	6	15
Bic Island.....					5	50	6	34
Port Neuf (north shore, opposite Bic).....					6	07	6	18

Current observations on the St. Lawrence in 1900.—With the object of obtaining further simultaneous comparisons where the currents are strongest, arrangements were made this season for observation of the turn of the current at L'Islet, and in the Upper and Lower Traverse. The current there attains a speed of $7\frac{1}{2}$ knots during spring tides. The pier recently placed at the edge of the channel in the Upper Traverse, was made use of for these observations; and in the Lower Traverse, two miles below, the swing of the light-ship enabled the turn of the current to be noted at both day and night tides. The observers were instructed to take the corresponding moment in the turn of the current at both places. They also noted the swing of the buoys on the opposite side of the channel, so that the turn of the current in mid-channel might be correctly deduced from the double observations.

The chief essential was to obtain correct time for these observations. The observer on the Traverse Pier was provided with a chronometer, and he gave a time signal to the light-ship by lowering a flag at the moment of nine o'clock; as at that hour the direction of the sunlight is the most favourable for seeing the signal from it. To simplify matters for the observer, the face reading of the chronometer was taken without correction throughout the season; and its error was ascertained by time comparisons made at two different dates when the locality was visited by myself or my assistant. The total accumulated error amounted only to $2\frac{1}{2}$ minutes, at the close of the season, which is hardly appreciable in observations of this character, but has nevertheless been allowed for.

The observations of the turn of the current which were secured at the three localities, extended over the following periods:—

L'Islet.....Observer, R. Pelletier...May 14 to October 1, 1900.
 Upper Traverse... Observer, A. Fournier...May 16 to September 15.
 Lower Traverse...Observer, E. Lebel....May 16 to September 15.

These observations, when brought into relation with the time of high and low water as ascertained by the tidal observations of this season, will evidently afford information of permanent value regarding the turn of the current.

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TIDAL OBSERVATIONS IN THE SUMMER SEASON OF 1900.

Summer stations on the Lower St. Lawrence below Quebec.—The two permanent tidal stations in the St. Lawrence region, are at Quebec itself, and at Father Point, 180 miles below ; and the chief object of the observations at other places in this region, is to obtain 'tidal differences' by which the time of the tide may be correctly computed for them. The information which exists with respect to the turn of the strong tidal currents of the Lower St. Lawrence, will become practically available when once the time of the tide itself can be definitely computed. This has been explained above where the currents are referred to.

The difference in the time of high water and low water, between Father Point and Quebec, has now been determined from two complete years of simultaneous record. The average values which result for the whole period are as follows, in absolute time :—

4 ^h 20 ^m	for the difference of the time of High Water.
5 ^h 29 ^m	“ “ “ “ Low Water.

The time taken by individual tides in running up the estuary from Father Point to Quebec, varies appreciably from these mean values, during the course of the month. It appears probable that this variation occurs chiefly in the upper part of the run of the tide, towards Quebec. Father Point is in the middle of the open estuary, at only seven miles from the 100-fathom line in the offing ; while Quebec is in reality in the river, above the true head of the estuary, which must properly be considered as being below Orleans island. It is there also that the tide has its maximum range ; which corroborates this view.

An effort was accordingly made to erect as early as possible in the season the tide gauges at Grosse Isle and L'Islet, below Orleans island. A better and longer series of comparisons with Quebec was thus obtained, especially as the early months of May and June are less disturbed by storms than the later months of autumn. It is hoped that these comparisons will enable the greater part of the variation between Father Point and Quebec to be accounted for, when the observations are worked out.

Other work then made it necessary for me to return to Ottawa ; especially the arrangements required in order to close the financial year. The gauge at Orignaux Point was next established, as soon as the hotel there was opened for the summer season. The manager of the hotel acted as tidal observer ; as none of the few residents at the Point was capable of taking the necessary observations. Gauges were next erected at Rivière du Loup Point, and at Tadousac. In the choice of these tidal stations, the first consideration was given to points at which relations to the tidal currents had already been obtained, as above mentioned.

The permanent station at Father Point comes next in order ; and below that, it was important to establish a tidal station in a position to command the mouth of the estuary at its narrowest part, in the vicinity of Point de Monts. This must properly be considered as the dividing line between the estuary and the Gulf of St. Lawrence, the length of the true estuary from the lower end of Orleans island to Point de Monts being 230 miles.

After considerable inquiry, the best position available in this vicinity, where the advantage of a wharf could be had, was found to be at Cape Chatte River. A steamer calls fortnightly in this offing ; but to save time it was found best to go overland 80 miles from Little Metis on the Intercolonial railway. This last tidal station was in working order by July 17, when the whole series of eight stations gave simultaneous returns. The observations were continued till the middle of October, with the exception of Tadousac and Orignaux Point, where difficulties arose which made it necessary to close the stations a month earlier.

The whole series of stations, with the length of tidal record secured at each, and the names of the observers, are as follows:—

Quebec.....	Permanent tidal station....	Continuous record.
Grosse Isle.....	Captain C. Langlois.....	May 4 to Oct. 15
L'Islet.....	Réal Pelletier.....	" 12 to " 15
Orignaux Point.....	T. Grindrod.....	June 22 to Sept. 11
Rivière du Loup.....	M. McCarthy.....	" 30 to Oct. 17
Tadousac.....	L. N. Catellier.....	July 6 to Sept. 15
Father Point.....	Permanent tidal station ..	Continuous record.
Cape Chatte.....	J. S. Russell.....	July 17 to Oct. 1

Equipment of the Tidal Stations.—All the stations were provided with self-registering gauges of the Richard type. The gauges were fitted with a pulley-wheel of special diameter, to adapt the scale to the height of the tide in this region, and bring it within the range of the instrument. The total range thus provided for, was 24 feet; and diagrams with corresponding graduations were specially printed. The accuracy of the scale was checked by a direct test before the instruments were used.

The gauge was actuated by a float, six inches in diameter, which rose and fell with the tide within a column of planking, of which the inside dimensions were 10 inches by 14 inches. This gave room enough for the protection of the counterweight, on a line with the off-side of the pulley-wheel of the instrument. The column was built in 12-foot lengths, and set against the side of a wharf, in a truly vertical position. The necessity for its being vertical, usually made substantial bracing necessary; as the batter of the side of the wharf gave the column an off-set of two or three feet at the upper end. It was often difficult to find a position where the column would not be struck by vessels using the wharf; and at the same time to place it far enough out towards the head of the wharf, to secure a sufficient depth of water. Special care was given to the design of the inlet which admitted the water at the bottom of the column, and to such other details as would prevent wave-motion within the column, which has always proved so troublesome in rough weather. The means adopted to this end were eminently successful, the details often requiring adaptation to local conditions; but they need not here be described at length.

Correct time for the observations.—It is very evident that correct time for these observations was essential, when one of the primary objects was to obtain time-differences with relation to the tide. Where there is any uncertainty in the accuracy of the time used, the tidal record itself becomes valueless for its chief purpose. In the extensive series of simultaneous observations in the Bay of Fundy, there was practically more loss of record from this cause, than from interruptions through damage by storms or in any other way. This experience emphasised the need of making effective provision to secure correct time.

It might seem at first sight, that no special arrangements to secure correct time would be needed in this region. On the Intercolonial Railway, running parallel to the south shore of the estuary, a time signal is transmitted every day at the moment of noon; and there is also a telegraph line along each shore. Practically however, the tidal gauges nearest to the railway, were at four to six miles distant from the railway stations; and some were on islands or in isolated positions. The expense of hiring conveyances to take advantage of the railway signals, would therefore be considerable; as time comparisons would be required at least twice a week during the season. It was therefore found best to supply most of the tidal stations with chronometers. With one already belonging to this Survey, five additional ones were found sufficient. They were carefully rated in advance; and if the rate was at all large, the observer was given a table of corrections to apply to the face reading during the season. Their rate was also checked during the season, by exchange of time by telegraph with the observatory at Quebec, which the meteorological observer, M. Arthur Smith, kindly undertook to transmit whenever desired. A watch of high grade, running at a steady rate, was also used to carry the time from place to place, when the stations were visited for inspection during the season. These were the arrangements adopted in general, with modifications adapting them to local circumstances, which need not be detailed.

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To this use of chronometers, the success of the season's work is largely due; and no part of the tidal record had to be rejected as unreliable through uncertainty in the time. The time used throughout, was Eastern Standard, for the 75th meridian. All the time-differences between stations are thus in absolute time.

Supervision.—The instructions drawn up for the observers, provided for observations of such a character as to secure an independent check on the working of the recording instrument. The correct setting of the instrument at the time, can thus be verified afterwards in the office. A further advantage as regards supervision, was secured by making Rivière du Loup headquarters for the season. It is situated in the middle of the region; and being a divisional point on the railway, the trains in both directions are convenient; and the river steamers also call at the wharf. The tidal returns were sent there; and any want of accuracy could be detected at the time, or a station could readily be visited if trouble occurred. The full advantage of this arrangement was not obtained however; as it was necessary for me to leave for a month in the middle of the season to visit one of the principal tidal stations at Forteau bay in Belle Isle strait. Mr. Hayden, who had assisted me in the erection of the tidal gauges, was left in charge at Rivière du Loup during my absence. We were also both absent for a week in August, while taking the special observations at Father Point, already referred to; which it was convenient to secure while in this region.

Results.—When the observations now secured are fully worked out, there will result in the first place, trustworthy tidal differences by which the time of the tide along the Lower St. Lawrence will be correctly known. This will then enable the time of the turn of the strong tidal currents to be determined also, as already explained; and it is in this that the chief value of the work to navigation, will consist.

The tide-levels, which have to be worked out in the reduction of the observations, will also be of practical service. These levels have been referred to the original Admiralty bench marks; a list of those on the Lower St. Lawrence being kindly furnished by the Hydrographer to the Admiralty. The primary importance of these bench marks is very evident; as the low water datum of the charts is thus permanently recorded. The tide-scales of the gauges erected this season, were connected with the bench marks by means of instrumental levels; and the tidal observations themselves, are thus brought into direct relation with the chart soundings, the depth on shoals, &c. The points at which the bench marks have thus been made use of, are at Quebec, Grosse Isle, L'Islet, Orignaux Point, and Rivière du Loup; as well as the Tidal Survey bench mark at Father Point.

The total cost of the summer observations from May to October, including the salaries of observers, was \$1,241.06. This comprises six tidal stations for periods varying from three to five months, and three stations at which observations of the current were obtained. The average cost of each of the six tidal stations, including its erection, the salary of the observer, the cost of obtaining correct time, and travelling expenses, was \$192.00. This amount does not include the salary of the Engineer in charge, or of his assistant, during the time the work was in progress.

I have, sir, the honour to remain,
Your obedient servant,

W. BELL DAWSON,
In charge of Tidal Survey.

PART II

STATEMENT OF EXPENDITURE—STATEMENT OF REVENUE—METEOR-
OLOGICAL SERVICE—MAGNETIC OBSERVATORIES—SIGNAL
SERVICE—BOARD OF EXAMINERS OF MASTERS AND
MATES—LIVE STOCK SHIPMENTS—STATEMENT OF
WHARFS—LIFE-BOAT STATIONS—STATEMENT
OF SICK MARINERS DUES—REWARD FOR
HUMANE SERVICE—STEAMBOAT IN-
SPECTION—LIST OF LIGHT-
KEEPERS AND LIGHT
STATIONS.

APPENDIX No. 1

GENERAL SUMMARY of Expenditure for Fiscal Year ended June 30, 1900.

Service.	Amount.	Total.
	\$ cts.	\$ cts.
Ocean and River—		
Maintenance and repairs to Dominion steamers.....	180,430 65	
Construction of steamer "Minto" (balance).....	41,951 88	
Examination of masters and mates.....	3,750 69	
Rewards for saving life, &c.....	7,007 97	
Investigations into wrecks.....	773 06	
Registry of shipping.....	266 43	
Tidal service.....	4,372 18	
Removal of obstructions in navigable rivers.....	252 19	
Winter mail service.....	1,503 70	
Marine biological station.....	739 61	
Export cattle trade.....	2,762 24	
Unforeseen expenses.....	3,452 21	
		247,262 81
Lighthouse and Coast—		
Salaries and allowances of lightkeepers.....	210,199 61	
Agencies, rents and contingencies.....	16,959 08	
Maintenance and repairs to lighthouses.....	229,095 79	
Construction of lighthouses.....	60,239 92	
Signal service.....	5,906 83	
Repairs to wharfs.....	697 87	
		523,090 10
Scientific Institutions—		
Observatory, Toronto.....	2,707 81	
Meteorological service.....	67,692 42	
Hydrographic survey.....	12,600 98	
		83,001 21
Marine Hospitals—		
Treatment of sick and disabled seamen.....	36,005 04	
Shipwrecked and distressed seamen.....	1,738 26	
		37,743 30
Steamboat inspection.....		27,965 72
Parliamentary returns.....		158 52
Civil government salaries.....	54,368 71	
" " contingencies.....	8,962 60	
		63,331 31
Total marine.....		982,561 97
FISHERIES.		
Salaries and disbursements of fisheries overseers.....	85,151 45	
Fish breeding.....	38,070 12	
Fisheries protection service.....	97,370 11	
Fishing bounty.....	160,000 00	
Miscellaneous.....	30,386 06	
		410,981 29
Total marine and fisheries.....		1,303,543 26

A. W. OWEN,
*Accountant.*F. GOURDEAU,
Deputy Minister of Marine and Fisheries

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APPENDIX No. 2.

STATEMENT of Revenue of Marine and Fisheries Department for Fiscal Year ended
June 30, 1900.

Service.	Refunds.		Amount.	
	\$	cts.	\$	cts.
Harbours, piers and wharfs.....	9,071	54	31	50
Dominion steamers.....				
Examinations, masters and mates.....				
Fines and forfeitures.....	226	00	100	00
Cattle inspection.....	2,000	25	52	69
Steamboat inspection fund.....	36,474	83	2,861	78
" engineers' certificates.....				
" inspection of barges.....				
Sick mariners' fund.....	59,984	12	12	28
Marine registry searches.....				
Signal station service.....				
Shipping forms.....				
Casual revenue, sundries.....	5,759	60	5	92
FISHERIES.				130,228 52
Ontario.....				
Quebec.....				
Nova Scotia.....	5,494	49	10	00
New Brunswick.....	12,015	27	0	90
Prince Edward Island.....				
Manitoba.....				
North-west Territories.....				
British Columbia.....				
				79,788 99
Licenses to United States fishing vessels.....				
				8,617 60
				88,406 59

RECAPITULATION.

Marine revenue.....	\$130,228 52
Fisheries revenue.....	88,406 59
	\$218,635 11

A. W. OWEN,
*Accountant.*F. GOURDEAU,
Deputy Minister of Marine and Fisheries.

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APPENDIX No. 3.

STATEMENT of Steamboat Inspection Dues collected during the Fiscal Year ended June 30, 1900.

Amount.		Amount.	
	\$ cts.		\$ cts.
<i>Ontario.</i>			
Amherstburg.....	42 80	St. Stephen.....	118 16
Belleville.....	47 03		
Brockville.....	145 24	<i>Nova Scotia.</i>	
Collingwood.....	1,165 00		2,027 88
Cornwall.....	154 52	Amherst.....	30 84
Deseronto.....	165 12	Annapolis.....	7 56
Fort Erie.....	204 16	Arichat.....	10 28
Goderich.....	248 96	Barrington.....	11 92
Hamilton.....	288 82	Canso.....	28 56
Kingston.....	1,743 60	Halifax.....	2,858 48
Lindsay.....	171 04	Kentville.....	486 72
Morrisburg.....	137 88	Liverpool.....	33 80
Napanee.....	20 68	Lunenburg.....	28 64
Ottawa.....	871 24	North Sydney.....	254 00
Owen Sound.....	1,180 37	Pictou.....	107 44
Peterboro'.....	155 52	Port Hawkesbury.....	54 52
Pictou.....	206 48	Sydney.....	98 84
Port Arthur.....	519 16	Weymouth.....	16 48
Prescott.....	405 88	Windsor.....	41 12
St. Catharines.....	286 60	Yarmouth.....	390 02
St. Thomas.....	297 76		
Sarnia.....	775 44	<i>Manitoba.</i>	
Sault Ste. Marie.....	466 96		4,450 22
Simcoe.....	35 40	Winnipeg.....	284 08
Stratford.....	105 36		
Toronto.....	2,074 30	<i>British Columbia.</i>	
Wallaceburg.....	94 04		
Windsor.....	1,679 91	Kaslo.....	30 68
		Nanaimo.....	48 86
<i>Quebec.</i>		Nelson.....	864 40
	13,689 32	New Westminster.....	525 32
Cookshire.....	19 16	Vancouver.....	974 72
Montreal.....	4,234 52	Victoria.....	3,744 20
Quebec.....	1,571 52		
St. Hyacinthe.....	6 04	<i>Prince Edward Island.</i>	
St. Johns.....	23 72		6,188 18
Sorel.....	121 84	Charlottetown.....	317 88
Stanstead.....	11 15	Summerside.....	7 64
Three Rivers.....	31 28		
		<i>North-west Territories.</i>	
<i>New Brunswick.</i>			325 52
	6,019 23	Calgary.....	17 32
Bathurst.....	20 64	Dawson.....	3,464 08
Chatham.....	179 20		
Dalhousie.....	150 40		3,481 40
Fredericton.....	52 68		
Moncton.....	7 00	Total.....	36,474 83
Newcastle.....	67 84	Less refunds.....	2,861 78
Sackville.....	7 00		
St. John.....	1,424 96	Grand total.....	33,613 05

APPENDIX No. 4.

METEOROLOGICAL SERVICE.

METEOROLOGICAL OFFICE,

TORONTO, November 8, 1900.

Major F. GOURDEAU,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit the twenty-ninth annual report of the Meteorological Service of Canada, this report being for the fiscal year July 1, 1899, to June 30, 1900, with Appendices A and B, reports of the Quebec and St. John observatories.

The number of persons in receipt of pay from the Meteorological Service on June 30, for various duties performed in connection therewith was 163. Of this number twenty are employed in the central office, and with a few others at outside stations devote their whole time to the work; others are occupied in observing during only a short period of each day, and a third portion is employed only to attend to the display of storm signals when notified. To the number thus employed must be added 255 voluntary observers scattered throughout the various provinces, who make regular meteorological returns to the central office without remuneration. Without the assistance of these latter observers it would be impossible to study properly the climatic conditions of this country, and it is with much pleasure that I again record my acknowledgment of their valuable co-operation.

Since issue of my last annual report the following stations have been opened:—

BRITISH COLUMBIA.

- Class III.—Vancouver, J. T. Brown.
“ II.—Rossland, F. C. Moffat.
“ III.—Naas Harbour, C. B. Deaville.
“ III.—Port Essington, D. Jennings.

NORTH-WEST TERRITORIES.

- Class II.—Moosomin, Marshall Smith.
“ II.—Athabasca Landing, Richard Cox.
“ III.—Regina, J. R. C. Honeyman.
“ II.—Crane Lake, D. N. Andrews.
“ III.—Beaver Hills, Wilhelm Honne.
“ III.—Crescent Lake, Frank Baines.

ONTARIO.

- Class II.—Sturgeon Falls, Vaughan Roberts.
“ III.—N. Williamsburg, D. L. Collinson.
“ II.—Rat Portage, L. C. Charlesworth.
“ II.—Dunnville, M. R. Reid.

QUEBEC.

- Class II.—Ste. Agathe des Monts, The Superintendent, Sanitorium.
 “ I.—Ste. Anne de la Pocatière, Prof. L. M. Destroismaisons.

NEW BRUNSWICK.

- Class I.—Bathurst, J. C. Meahan, M.D. (resumed).

The following stations in different provinces have ceased to be operative from various reasons:—British Columbia—Abbotsford, Clinton, Saltspring Island, Atlin. North-west Territories—Duck Lake. Manitoba—Foxton, Pilot Mound. Ontario—Galt, Roy Mines, Niagara, Port Rowan. Nova Scotia—Bridgetown. P. E. Island—Port Hill.

The only change in the staff of the Central Office was the appointment of Mr. Frank O'Donnell to a clerkship in the place of Mr. J. F. Carroll, deceased. The publication of monthly weather reviews and monthly and daily charts has been continued with regularity, but I regret to report that practically no progress is being made in bringing the annual climatological reports up to date. This may probably be due to pressure of work in the Department of Printing. The manuscript of two of these reports, namely, those for 1898 and 1899, is ready for the printer, and I shall like to see better progress made.

STORM WARNINGS AND DAILY FORECASTS.

There are now in the Dominion 69 storm signal display stations, 36 of which are in the Maritime Provinces, 31 on the lakes and 2 in British Columbia and throughout the year warnings of approaching storms have, when it has been deemed necessary, been despatched to these stations and signals have been duly displayed.

There cannot be any doubt but that the storm signals are the means of saving much life and property; during the Autumn many vessel masters never leave port without consulting the Meteorological Office and repeated assurance has been given that shipping people generally consider the meteorological warnings of great value. The *St. John Globe* on 28th February last, speaking of the unusually stormy weather of the month just closing says editorially ‘The gales of the month were severe and of frequent occurrence, but were not attended by disaster to shipping on our coast. The good work of the Canadian Meteorological Service in giving timely warning of these storms is highly commendable. Not only have the Toronto forecasts—which are published every evening in the *Globe*—been very accurate, but the value of the service rendered mariners in giving warning of these storms would be difficult to estimate.’ Regular forecasts have as heretofore been issued twice daily and distributed widely in all parts of the Dominion reached by telegraph. The morning forecasts issued from Toronto at 10 o'clock and covering the current and following day is telegraphed to all the more important ports and is posted at one or more points where it may be seen by fishermen and shipping people generally; it is moreover published in the majority of the afternoon papers.

For several years special information and forecasts have been telegraphed to Halifax and St. John, and during the past year there has been a much increased circulation of these bulletins, and now nearly all public buildings, shipping offices, hotels, &c., are supplied with a copy. It is proposed within the next few weeks to inaugurate the same system of special information in Quebec, Montreal, Ottawa, Hamilton and London. In Toronto 80 copies of the morning chart are printed each day at the central office and these are distributed widely in the city and some few copies are forwarded by mail to neighbouring towns.

The second forecast issued at 10 p. m. is disseminated very widely by the various telegraph companies and is supposed to be posted up at every telegraph office in the

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Dominion, and is printed generally in a conspicuous place in nearly all the daily morning journals.

It was decided to discontinue the train signals this year as it has been doubtful whether several factors do not tend to make their value insufficient to warrant the expenditure involved.

The British Columbia forecasts have as during the preceding year been issued from Victoria, and it is hoped notwithstanding the difficulties peculiar to a western coast line, to be contended against, that fair progress has been made and that the Service is growing in popularity.

In August last the Meteorological Service took possession of three rooms in the upper story of the Government Building, Victoria, and the accommodation has proved to be admirably adapted for the work to be performed. In addition to the offices, the service has been permitted to place thermometers, rain gauge, and storm signal mast on the flat roof of the building—a most desirable arrangement and one also very convenient, as the morning observations are taken at 4.45 o'clock to synchronize with the 7.45 o'clock observations of the Eastern United States and Canada. A special endeavour has been made in this as in other years to warn the various railroads of approaching snow storms, and shippers of perishable goods of expected cold waves, and doubtless very large losses have been prevented by discreet attention to warnings received

TABLE I.—The following table shows the total number of warnings issued and the percentage verified.

Years.	Number Issued.	Number Verified.	Percentage Verified.
1877.....	743	510	68.6
1878.....	860	673	78.3
1879.....	712	591	83.0
1880.....	889	736	82.8
1881.....	854	727	85.1
1882.....	841	658	78.2
1883.....	1,085	858	79.1
1884.....	798	663	83.2
1885.....	830	741	89.3
1886.....	906	799	88.2
1887.....	1,093	972	88.9
1888.....	897	758	84.5
1889.....	1,126	926	81.3
1890.....	1,199	987	82.3
1891.....	1,017	826	81.2
1892.....	1,161	888	80.7
1893.....	1,317	1,118	84.9
1894.....	1,333	1,149	86.2
1895.....	1,307	1,168	89.4
1896.....	1,181	1,015	85.9
1897.....	1,368	1,248	91.2
1898.....	1,230	1,039	84.5
1899.....	1,127	913	81.1
1900 six months, January 1 to June 30.....	255	233	91.4

TABLE II.—METEOROLOGICAL SERVICE—Number of forecasts and percentage of fulfilment in each district, in each month and in the year July, 1899, to June, 1900, inclusive.

MONTH.	MANITOBA.				LAKE SUPERIOR.				GEORGIAN BAY.				LOWER LAKE REGION.				OTTAWA VALLEY.								
	Number of Forecasts.	Verified.			Number of Forecasts.	Verified.			Number of Forecasts.	Verified.			Number of Forecasts.	Verified.			Number of Forecasts.	Verified.							
		Number fully.	Number partly.	Number not.		Percentage.	Number fully.	Number partly.		Number not.	Percentage.	Number fully.		Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.				
1899.																									
July	91	60	25	6	79.7	103	74	19	10	81.1	114	80	25	9	81.1	116	87	17	12	82.3	103	80	11	12	83.1
August	99	80	10	9	85.9	111	90	18	3	89.2	113	103	5	3	95.1	115	107	8	...	96.5	105	97	3	3	94.8
September	87	73	9	5	89.1	111	79	23	9	81.5	119	79	25	15	75.9	119	79	20	20	74.8	103	70	21	12	78.2
October	91	63	20	8	80.2	102	64	26	12	75.5	117	79	24	14	77.8	118	82	24	12	79.1	99	75	15	9	83.3
November	93	76	11	6	87.6	110	75	29	6	81.4	113	90	14	9	83.8	113	91	14	8	86.7	90	74	4	12	84.4
December	93	73	14	11	81.6	114	80	25	9	81.1	115	80	20	15	78.3	120	84	22	14	79.2	104	73	19	12	79.3
1900.																									
January	88	66	14	5	83.0	82	63	16	3	86.6	102	79	18	5	86.3	107	88	14	5	88.8	102	77	15	10	82.8
February	75	65	5	5	90.0	79	60	13	6	84.2	98	75	11	12	82.1	97	74	11	12	82.0	89	75	5	9	87.1
March	87	70	3	14	82.2	88	68	10	83.0	118	87	18	13	81.3	120	99	15	6	88.8	117	94	13	10	85.9	
April	79	71	2	6	91.1	88	75	2	11	86.4	87	76	4	7	89.7	92	72	13	7	85.3	80	69	2	9	87.5
May	93	83	2	8	90.3	95	72	10	13	81.1	102	88	5	5	88.7	101	80	5	7	90.6	96	75	8	13	82.3
June	87	71	5	11	84.5	113	77	23	13	79.2	106	88	8	10	86.8	106	80	10	7	89.2	95	85	8	2	92.7
Totals	1,068	851	120	97	85.3	1,196	877	214	165	82.3	1,304	1,006	177	121	83.9	1,324	1,041	173	110	85.2	1,183	944	126	113	85.1

TABLE II.—METEOROLOGICAL SERVICE.—Number of forecasts and percentage of fulfillment in each district, in each month, and in the year July, 1899, to June, 1900, inclusive—Continued.

MONTH.	UPPER ST. LAWRENCE VALLEY.				LOWER ST. LAWRENCE VALLEY.				GULF.				MARITIME.				TOTAL.								
	Verified.		Number of Forecasts.	Percentage.	Verified.		Number of Forecasts.	Percentage.	Verified.		Number of Forecasts.	Percentage.	Verified.		Number of Forecasts.	Percentage.	Verified.		Number of Forecasts.	Percentage.					
	Number fully.	Number partly.			Number fully.	Number partly.			Number fully.	Number partly.			Number fully.	Number partly.			Number fully.	Number partly.			Number fully.	Number partly.	Number fully.	Number partly.	
1899.																									
July.....	75	19	8	82.8	97	70	15	12	80.0	98	72	22	4	84.7	105	77	23	5	84.3	923	675	176	78	82.1	
August.....	105	95	6	4	93.3	112	102	7	3	94.2	120	106	12	2	93.3	120	102	17	1	92.0	1,000	884	88	28	92.8
September.....	103	75	18	10	81.6	99	76	15	8	84.3	105	79	15	11	82.4	112	78	21	13	79.0	958	688	167	103	80.5
October.....	102	74	21	7	82.8	104	67	25	12	76.4	99	65	21	5	76.5	105	71	16	18	75.2	937	649	192	105	78.5
November.....	90	73	4	13	83.3	96	73	18	5	85.4	113	93	15	5	88.9	112	93	15	4	89.7	930	738	124	68	86.0
December.....	104	67	28	9	77.9	103	71	21	11	79.1	109	79	18	12	80.3	118	62	38	18	68.6	985	669	205	111	78.3
1900.																									
January.....	99	75	18	6	84.8	93	76	12	6	87.6	100	84	9	7	88.5	131	102	19	10	85.1	904	710	134	60	86.0
February.....	88	70	13	5	86.9	90	73	10	7	85.6	88	71	11	6	86.6	90	69	10	11	82.2	794	632	80	73	85.2
March.....	116	92	15	9	85.8	112	94	11	7	88.8	109	80	20	9	82.6	118	99	10	9	88.1	985	783	115	87	85.3
April.....	80	69	4	7	88.7	86	71	6	9	86.0	105	72	15	18	75.7	113	73	16	24	71.7	810	648	64	98	84.0
May.....	96	76	8	12	83.3	109	86	9	14	83.0	111	90	10	11	85.6	112	85	17	10	83.5	915	744	74	97	85.4
June.....	95	83	11	1	93.1	97	79	4	14	83.5	98	76	8	14	81.6	101	82	11	8	86.6	898	730	88	80	86.2
Total.....	1,180	924	165	91	83.30	1,198	938	152	108	84.6	1,255	967	176	112	84.1	1,337	993	213	131	82.2	11,045	8,541	1,516	988	83.3

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LIBRARY.

The number of publications received during the year was 327, being for the most part annual, quarterly, monthly, weekly, and daily reports and periodicals, from the principal astronomical, meteorological, and magnetical observatories of the world.

PUBLICATIONS.

Eight hundred and eighteen copies of the Monthly Weather Review and seven hundred and fifty copies of the Toronto General Meteorological Register were distributed to all parts of the world. Five hundred copies of the Monthly Weather Chart were distributed to persons in Canada and the United States each month, and eighty copies of the Daily Weather Chart were distributed each day.

UNITED STATES WEATHER BUREAU.

The Chief of the United States Weather Bureau has continued to interchange reports with this office, and I desire to express my warm appreciation of the uniform courtesy that characterized all communications from that office.

INSPECTION OF STATIONS.

During the fiscal year the Director visited fourteen of the telegraph reporting stations in North-western Canada and also paid brief visits to five stations where observations are taken by volunteer observers. In the majority of instances, everything was found in good order. In a few cases, however, it was found necessary to clean the mercury in the barometers and call attention to an evident want of care in looking after wet bulb thermometers. The new location of the instruments at Calgary is very satisfactory and it seems likely that good work will be done by Mr. Braden. The instruments at Kamloops were removed from the old site to the residence of Mr. Charles S. Stevens, a newly appointed observer who has since proved himself a most intelligent and good observer, but the unfortunate fact remains that he has no very suitable place for the instruments which are certainly very badly located. At Medicine Hat permission was given Mr. Drinnan to remove the instruments to a site near the railway bridge which will certainly be an advantageous change.

Twenty-four stations were inspected by B. C. Webber, who reports that barometers were cleaned and adjusted at nearly all the stations visited where barometers were in use, the mercury in many of these instruments having become very dirty. The signal masts at Owen Sound and Tobermory were found to be rotting badly. Collingwood will give closer attention to storm reports in future. At Spence the instruments, all but one thermometer were found to be broken and the station was closed. Electric lamps should be substituted at Sault Ste. Marie for the night storm signals as a brilliant electric light alongside the mast quite eclipses the coal oil lamps now in use; the change can be made at small cost. The anemometer exposure at White River is practically useless. A marked improvement was noticeable in the general work at Winnipeg. The anemometer was worn out at Qu'Appelle. At Swift Current a change of barometers was made with the view to obtaining more accurate readings. At Medicine Hat the thermometer and rain gauge exposure has been much improved. At Calgary a new anemometer was placed in position. At Edmonton everything was found to be in very bad shape; the observer, however, was absent in hospital owing to ill health. The volunteer observers at Pincher Creek and Nelson have consented to recommence observations. Rossland was furnished with a full set of instruments excepting an anemometer, the observer who is quite an expert meteorologist being very willing to do the work, and owing to the peculiar topographical situation of this station the reports should be both valuable and interesting. Vernon has been closed and the instruments moved to Coldstream Ranche. At Agassiz the minimum thermometer was faulty and a new one was supplied. At Chilliwack several repairs were found necessary. The time service

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at Vancouver is running smoothly and is much appreciated; the charge of powder used in the gun was, however, insufficient; it has been doubled and the report can now be heard throughout the city.

Mr. H. V. Payne inspected twenty-two stations and reports as follows:— At St. Andrews the mast required painting and a new signal shed was considered necessary; all signals were in good order. At Grand Manan the anemograph was not working satisfactorily, and I would recommend that the position of the anemometer be changed to a more suitable place. At Quaco the signals were all in good order, but it was necessary to alter the hoisting gear. At St. John some slight repairs were necessary to the signals, otherwise everything was in good order. The volunteer observer at Sussex is doing good work and asks for an anemometer and barometer. At Digby some slight repairs were necessary to the signals. At Brier Island the signals required some repairs and a signal shed is much needed. At Yarmouth all instruments, &c., were in good order, the rain gauge was moved to a more exposed position. At Bridgetown the volunteer observer being unable to attend to the observations, a new volunteer observer was obtained and it was ordered that the instruments be handed over to him. At Liverpool some repairs were necessary to day signals and signal house. The observations to be taken by Judge Forbes were started with the necessary instructions. The telegraph service is not good, there being often delay in delivering warning messages. At Halifax complaint was made of the delay in receipt of morning forecasts. The anemograph was not working satisfactorily and results are broken. Military duties at the Citadel cause too frequent changes of observer; all the other instruments were working properly. At Port Hastings it was ordered that the mast be moved to another position, as a new railway cutting interfered with it. A new signal shed is required here and it was pointed out that more particulars were necessary in reports and rain observations. At Liscomb new halliards were necessary. At Canso a signal house was required. Signals were rotting on the ground, and lamps were very ill kept. At North Sydney it was necessary to fence in the signal plot, as the public made a practice of damaging the appliances and it was also necessary to have better stays to the mast. At Sydney the anemograph was not working properly and requires replacing. The wind exposure is not good and the premises are not suitable for wind observations, being too low. At Louisbourg the signals were in good order, but the signal house required painting. At Glace Bay the mast will require to be replaced, as it is rotten at the base. At Port Morien the mast required painting and a new arm at the top, also new check timbers. I would recommend that the mast be moved to a better position at the head of the Government wharf. At Ingonish a shed for signals is required and the mast should be properly set up. I consider the agent lives too far away to attend properly to the signals. At Pointe du Chêne the mast required painting and setting up properly. The agent offers to take observations of rainfall and temperature. At Port Colborne the new agent was instructed in his duties and supplies, &c., transferred to him. The mast requires replacing at once, as it is rotten. I would suggest that an iron mast be placed here. The mast would be in a better position if placed further south.

TIME SERVICE.

During the year ending June 30, 1900, one hundred and five meridian observations for time were made with the transit instrument, in which 211 standard stars were observed—one solar observation was taken. The position of the stars used were those given in the 'Berliner Jarrbuch.'

The collimation error of the transit instrument has been determined frequently from micrometrical measurements on the collimating telescope and by reversals on Polaris. This error together with the azimuth and level errors have varied very little during the year.

Sunspot observations have been continued throughout the year with the equatorial telescope; maps of the sun's surface 4 inches in diameter showing the spots and faculæ markings, were made on 174 days, and of this number there were 74 days on which no spots were visible.

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The time exchanges with Montreal, Quebec and St. John have all been registered on the chonograph at Toronto. The errors of the Toronto clock and of the timepieces used by the different observatories elsewhere are computed from the latest observations.

The mean time clock of the Toronto observatory has continued to show absolute standard time of the 75th meridian. The means of keeping it to this adjustment has been described in the preceding annual report.

The different electrical attachments to this clock and the sidereal clock have given great satisfaction. Time has been given weekly to the Magnetical Observatory at Agincourt.

A large *Seconds Electric Clock* showing the hour, minutes and seconds has been constructed and put up in the hall of the observatory. It is controlled by the standard mean time clock in the clock room by means of a make circuit contact worked by the swing of the pendulum.

The time service under control of the meteorological service comprises in addition to the striking of the fire alarm bells in Toronto at 11.55 a.m. daily, the dropping of time-balls at Quebec and St. John and the firing a gun at Vancouver. Serious complaint was made during the past summer of the manner in which the time-ball at Quebec was attended to and inattention to duty on the part of the agent was proven. Everything has now been placed in good order and there is little likelihood of further trouble. The fault of the local agent being in allowing the apparatus at the Citadel to get out of order—not in failing to keep the correct time as this has been done with commendable accuracy.

The time signal on Deadmans Island, Vancouver, has been changed from a dynamite cartridge to a gun, it having been found that the former did not make sufficient noise to be heard in the further parts of the city; it is reported that the signal gives much satisfaction.

The following table shows the difference between the time by 'Standard Observer' and that given at the various exchanges.

The sign † indicates that the time as sent from the various observatories is faster than by the 'Standard Observer.'

The arithmetical mean of the times determined at Toronto and Montreal is the time by 'Standard Observer.'

	Toronto.	Montreal.	Quebec.	St. John.
1899.	Seconds.	Seconds.	Seconds.	Seconds.
July 14.....	+0.17	-0.17	-0.48	
" 31.....	0.00	0.00	+0.46	-1.73
August 18.....	+0.06	-0.06	-0.40	+0.82
" 31.....	-0.23	+0.23	-0.29	+2.38
September 15.....	0.00	0.00	-0.39	+0.61
October 6.....	+0.08	-0.08	-0.71	
" 20.....	-0.02	+0.02	-0.95	+0.78
November 3.....	0.00	0.00	+0.51	+0.95
" 17.....	-0.24	+0.24	-0.18	+0.81
December 8.....	-0.25	+0.25	+1.16	+0.75
" 29.....	-0.03	+0.03	+0.16	+1.29
1900.				
January 30.....	-0.50	+0.50	+0.31	+0.20
February 16.....	+0.43	-0.43	-0.04	+0.11
March 9.....	-0.10	+0.10	+1.89	
" 23.....	+0.23	-0.23		+1.86
April 6.....	+0.30	-0.30	+0.56	+0.42
" 20.....	+0.07	-0.07	+0.37	+0.14
May 4.....	-0.24	+0.24	+0.93	+0.33
" 18.....	-0.23	+0.23	+0.12	+0.05
June 1.....	-0.06	+0.06	-0.28	+0.44
" 15.....	-0.05	+0.05	+0.09	+0.52

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The solar eclipse of May 28, 1900, was observed with the equatorial telescope and the times of the beginning, and ending noted, these times differed only by a few seconds from the computed predicted times. The full aperture of 6 inches being used with a power of 35. Eleven photographs were taken during the progress of the eclipse, the aperture being reduced to 3 inches, using the same power. An image of the eclipsed sun was secured of 2.9 inches in diameter.

SEISMOLOGY.

The seismographs at Toronto and Victoria have been kept in operation and many most interesting records of distant earthquakes have been recorded and very flattering comments on the results obtained in Canada have been made by the Committee of Seismological Research of the British Association for the Advancement of Science. It is satisfactory to find that Canada was one of the first countries to take part in a seismological survey of the world, a survey in which nearly every British colony has since joined. Perhaps the most interesting among the records obtained were those of the great quakes in Alaska in September, when much damage was wrought by sea-waves and land-slides—the shake was registered in all parts of the world, clearly showing that important earthquakes shake the whole globe.

Respectfully submitted,

R. F. STUPART,
Inspector.

APPENDIX A.

QUEBEC OBSERVATORY,

QUEBEC, July 26, 1900.

To the Director,
Meteorological Service,
Toronto.

SIR,—I have the honour to transmit my annual report for the fiscal year ending June 30, 1900.

During the year certain repairs and alterations were made to the building at this station.

The two clocks were cleaned and a new stand made for one of them.

The correct time was given daily as formerly, and several chronometers were rated at this observatory.

I began to drop the time ball at the opening of navigation and then put the same together with the electric apparatus in good working order.

As I am directly responsible for the good working of this service, I think it would be much better to give the signals from the top of the observatory, where I could see whether the ball is dropped at the exact time given by me or not.

All the meteorological observations were taken daily as heretofore, and a report on the condition of the crops was sent at the end of each month during the summer season.

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

ARTHUR SMITH,
Director.

APPENDIX B.

ST. JOHN OBSERVATORY,
ST. JOHN, N.B., November 31, 1900.

R. F. STUPART, Esq.
Director, Meteorological Service,
Toronto, Ont.

SIR,—I have the honour to present my annual report on the St. John Observatory for the fiscal year ending June 30, 1900.

The meteorological work has been continued without change in the instrumental equipment. Since April 1 last the hours of observation have been 8 a.m., 2 p.m. and 8 p.m. standard time of the 75th meridian.

The issue of the morning weather bulletin has been increased and will have to be still further increased to meet additional applications. Reports of prevailing weather at coast stations, the forecasts and synopses contained in the bulletin, are of great value to those interested in shipping as well as being of much use to the public generally. The bulletin continues to be posted in public places, is published by our evening papers and postal facilities are made use of as far as possible in distributing the bulletin to outlying points.

The morning forecasts are telephoned to St. Martins and are publicly posted at the telephone exchange there. Storm warnings are also telephoned and signals displayed at Quaco lighthouse.

Information from the office records is frequently called for; considerable time is taken to prepare statements and answer these requests.

The reliability of the forecasts and storm warnings have received frequent and favourable comment; they are of inestimable value to mariners and others in this district.

Observations of stars with the transit instrument for the establishment of clock errors and rates have been made at frequent intervals.

The daily time signal has been given to the shipping and others by dropping the time ball at 1 p.m. local time.

The standard sidereal clock ordered from the makers in July, 1898, arrived on September 14, 1899. Through the courtesy of the Astronomer Royal, this clock was tested at the Royal Observatory, Greenwich, before shipment.

The clock was made by Victor Kullberg, London. It is of best construction and has the zinc and steel compensated pendulum.

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

D. L. HUTCHINSON,
Director, St. John Observatory.

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MAGNETIC OBSERVATORY.

TORONTO, November 8, 1900.

Major F. GOURDEAU
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit herewith the annual report of this observatory for the fiscal year ended June 30, 1900.

It has now been clearly and satisfactorily demonstrated that the new magnetic observatory at Agincourt, Ont., is well located; there is not the slightest indication of any electric tramway effect shown on the photographic records, and I am also pleased to say that the topography of the surrounding country is such as recent experiments in Europe have shown to be the very best for stopping electric tramway currents: that is several valleys in which are streams, intervene between the city and the observatory. The magnetic instruments have been kept in operation throughout the year and the results obtained will be practically a continuation of the old Toronto Observatory series. Mr. Menzies who has local charge of the observatory continues to reside in a rented house at Agincourt; should it be that the owner of the house wants to re-occupy her dwelling I shall have to recommend the building of a small house near the observatory. I personally visit the observatory as frequently as duties at the central meteorological office will allow and on two days each month make the absolute determinations of the magnetic horizontal force.

Scientific men of to-day are becoming more and more convinced of the paramount importance of a knowledge of the laws which govern terrestrial magnetism and one by one the various civilized countries are organizing to vigorously attack the problem and it will not be long before this country will be asked to make a complete magnetic survey of the Dominion. Our stationary magnetic observatory will most certainly play an important role in such a survey.

Respectfully submitted,

R. F. STUPART,
Director.

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APPENDIX No. 5.

SIGNAL SERVICE, CANADA,
OFFICE OF THE SUPERINTENDENT,
QUEBEC, QUE., November 15, 1900.

JOHN HARDIE, Esq.,
Acting Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to inclose herewith the annual report for the Signal Service for the year ending June 30, 1900.

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

J. U. GREGORY,
Agent, Department Marine and Fisheries.

QUEBEC, November 14, 1900.

As in preceding seasons, reports have been received from the stations in the lower part of the river and gulf, recording the weather, wind, condition, location and movement of the ice during the winter and spring months, and during the season of navigation all inward and outward bound vessels as signalled when passing each station.

From the 1st to the 20th of April, three reports per week were obtained and forwarded to the Board of Trade, Montreal, St. John, N.B., and Quebec, and to the Chamber of Commerce, Halifax, N.S., also to the press of Montreal and Quebec, to the agent of the department, Quebec, to the custom-house and immigration agent, to the agents of steamship lines, tug owners, to the pilots for below and above Quebec, also to Messrs. H. Fry & Co., Lloyds agents, Quebec.

From the 21st April reports were received daily and forwarded as above.

The Chief Superintendent of the Quarantine Station at Grosse Isle is also supplied with full information as to weather, wind, and the incoming of all transatlantic or foreign vessels.

The quarantine doctor at Rimouski is also supplied with a report of the incoming mail steamers, name of station and hour of passing being given when vessel was first signalled.

Information was supplied from the bureau here, as in past seasons, to the agents at Anticosti, Magdalen Islands, Meat Cove, C.B., Cape Ray and Cape Race, Newfoundland, from the 13th April, as to weather, wind, movement and condition of the ice in the Gulf and River St. Lawrence up to Montreal for the guidance of any vessel calling for information.

Information as to wind, weather and ice in the vicinity of Anticosti, Magdalen Islands, Meat Cove, St. Pauls Island, and Cape Ray, Newfoundland, is also sent to Point aux Esquimaux in March for the guidance of the sealing fleet.

Grosse Isle quarantine station reported all transatlantic vessels, which has proved very satisfactory to the shipping interests.

These reports are free to the department, being transmitted over the government telegraph line to Quebec.

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IMPROVEMENT IN GULF SIGNAL SERVICE.

Very much satisfaction has been expressed by the shipping upon learning that arrangements had been completed by the Department of Marine and Fisheries whereby all inward bound vessels showing their official numbers will be reported from marine signal stations in the River and Gulf of St. Lawrence immediately, and all reports will be promptly posted on the bulletin board of the Great North-western Telegraph Company's office in St. Peter street, Quebec, and on that of the Board of Trade in Montreal.

Weather and ice reports will be forwarded twice a day as formerly, and similarly posted.

Arrangements have also been made for repeating all reports received to the pilot station at Father Point, so that pilots will be promptly advised of the locality of inward bound vessels.

NAVIGATION.

LAST OUTWARD BOUND VESSELS—1899.

November 23, 1899.—The last Royal Mail steamer, the ss. *Lake Ontario*, sailed on this date.

November 25, 1899.—The last passenger steamer, the ss. *Laurentian*, sailed on this date.

November 30, 1899.—The last freight steamer, the ss. *Mayflower*, sailed on this date.

FIRST INWARD BOUND VESSELS—1900.

April 23, 1900.—The ss. *Amasis* arrived on this date.

April 24, 1900.—The ss. *Vancouver* arrived on this date.

April 25, 1900.—The ss. *Lake Megantic* and ss. *Jacona* arrived on this date.

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

JOHN U. GREGORY,
Agent, Department of Marine and Fisheries.

APPENDIX A.

Report on Ice, &c., in the Straits of Belle Isle and Coast of Newfoundland, as noted by the Agents of the Department at Belle Isle, Cape Bauld, Cape Norman and Greenly Island.

BELLE ISLE.

December 17, 1899.—First slab ice came out from the north-east and west of the island. The winds this month were mostly variable.

January, 1900.—The first half of this month was cold with light north-westerly winds prevailing, very little ice made its appearance. During the remainder of this month, south and south-west winds prevailed with a great deal of rain, and a great deal of open water was to be seen at all times, the ice was mostly sheet ice.

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February, 1900.—This month the weather was mild, the thermometer averaging about 23 degrees. The prevailing winds were mostly south and south-east, very little ice was seen this month.

March, 1900.—This month the weather was very mild with the exception of a few days when the thermometer registered below zero. Not much ice made its appearance and a great deal of fog and rain prevailed. Schooner *Fidelle*, of Change Islands, arrived on the 24th to land fishing crew and reported not much ice south. Mostly south and south-west winds prevailed.

April, 1900.—The weather was very mild this month. A considerable amount of heavy close packed ice made its appearance and the straits were blocked on several occasions, north-east and north-west winds mostly prevailing.

May, 1900.—From the 1st to the 12th the Straits were blocked with heavy ice, south east winds prevailing. From the 15th on, the ice gradually disappeared, north-west winds prevailing.

June 4, 1900.—Straits clear of ice. On the 6th inst. the tug *Ingram* of St. Johns, went to the wreck of the *Scotsman*. On the 11th instant some scattered ice made its appearance to the eastward. On the 14th a two-masted German steamer passed outward. On the 20th one Head line steamer passed inward at 9 p.m.

CAPE BAULD, NEWFOUNDLAND.

As stated in previous reports, the distance from Belle Isle being but 14 miles, the observations as to wind, weather &c., vary but little with the latter place.

December, 1899.—Light winds prevailed this month mostly variable, snow fell on one or two occasions.

January, 1900.—Strong variable winds prevailed this month, very little snow fell, and hardly any ice made its appearance.

February, 1900.—A large quantity of snow fell this month, but very little ice was seen.

March, 1900.—This month was rather mild and quite a lot of rain and fog prevailed, snow fell on several occasions, a large quantity of heavy close-packed ice made its appearance towards the latter part of the month.

April, 1900.—This month was fine and mild, snow fell on one or two occasions; an average of five icebergs seen daily from here.

May, 1900.—Strong gales of north-west winds prevailed this month, about two icebergs seen daily.

CAPE NORMAN, NEWFOUNDLAND.

October, 22, 1899.—First snow fell on this date. One iceberg was sighted daily this month. Fine weather generally prevailed.

November, 1899.—Snow fell on ten occasions this month, north and north-east winds prevailed. Twelve icebergs were sighted during the month.

December, 1899.—Snow fell on six occasions, east winds prevailed. First ice made its appearance on the 7th inst. Only two icebergs sighted this month.

January, 1900.—A very large quantity of snow fell this month, west and south-west winds prevailed, light close-packed ice in shore throughout the month.

February, 1900.—Snow fell on five occasions this month, variable winds prevailed, heavy close-packed ice in shore throughout the latter part of the month; only two icebergs were sighted.

March, 1900.—Snow fell on several occasions this month, and south and south-west winds prevailed.

April, 1900.—Not much snow fell this month, north-east winds prevailed. A considerable amount of ice remained in shore throughout the month.

May, 1900.—Snow fell on three occasions; north-west winds prevailed; one iceberg was seen daily.

June, 1900.—Very little ice seen this month. Three icebergs seen daily.

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GREENLY ISLAND.

November 2, 1899.—First snow fell on this date and the first ice formed on the January 15, 1900, and from this date, heavy open ice filled the Strait until about the end of May, when it all disappeared.

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

J. U. GREGORY,
Agent, Department of Marine and Fisheries.

APPENDIX B.

THERMOMETER Readings at Belle Isle, from December 1, 1899, to April 30, 1900.

Date.	Degrees.	Date.	Degrees.	Date.	Degrees.	Date.	Degrees.
1899.		1900.		1900.		1900.	
December 1.....	24	February 1.....	29	March 1.....	10	April 1.....	20
" 2.....	24	" 2.....	16	" 2.....	3	" 2.....	16
" 3.....	30	" 3.....	7	" 3.....	12	" 3.....	14
" 4.....	26	" 4.....	10	" 4.....	24	" 4.....	19
" 5.....	27	" 5.....	6	" 5.....	10	" 5.....	16
" 6.....	8	" 6.....	20	" 6.....	16	" 6.....	24
" 7.....	4	" 7.....	17	" 7.....	9	" 7.....	16
" 8.....	12	" 8.....	14	" 8.....	8	" 8.....	26
" 9.....	10	" 9.....	20	" 9.....	14	" 9.....	31
" 10.....	5	" 10.....	24	" 10.....	0	" 10.....	30
" 11.....	20	" 11.....	20	" 11.....	10	" 11.....	26
" 12.....	18	" 12.....	20	" 12.....	16	" 12.....	22
" 13.....	27	" 13.....	20	" 13.....	17	" 13.....	19
" 14.....	11	" 14.....	25	" 14.....	29	" 14.....	22
" 15.....	7	" 15.....	5	" 15.....	34	" 15.....	24
" 16.....	17	" 16.....	10	" 16.....	35	" 16.....	15
" 17.....	3	" 17.....	20	" 17.....	33	" 17.....	19
" 18.....	8	" 18.....	20	" 18.....	28	" 18.....	30
" 19.....	13	" 19.....	19	" 19.....	17	" 19.....	27
" 20.....	13	" 20.....	17	" 20.....	22	" 20.....	33
" 21.....	13	" 21.....	14	" 21.....	17	" 21.....	32
" 22.....	19	" 22.....	10	" 22.....	20	" 22.....	29
" 23.....	25	" 23.....	12	" 23.....	21	" 23.....	30
" 24.....	23	" 24.....	30	" 24.....	21	" 24.....	28
" 25.....	33	" 25.....	22	" 25.....	22	" 25.....	33
" 26.....	33	" 26.....	20	" 26.....	21	" 26.....	36
" 27.....	33	" 27.....	0	" 27.....	22	" 27.....	35
" 28.....	30	" 28.....	5	" 28.....	29	" 28.....	32
" 29.....	20	" 29.....		" 29.....	30	" 29.....	34
" 30.....	24	" 30.....		" 30.....	29	" 30.....	34
" 31.....	23			" 31.....	20		

Lowest temperature in December, 1899, 17th December; highest, 26th and 27th December. Lowest in February, 1900, 4th February; highest 1st February. Lowest in March, 6th March; highest, 16th March. Lowest in April, 3rd April; highest, 26th April.

Respectfully submitted,
(Signed.) MICHAEL COLTON,
Lightkeeper.

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

J. U. GREGORY,
Agent, Department of Marine and Fisheries.

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SIGNAL STATION, CITADEL.

HALIFAX, N.S., August 27, 1900.

J. PARSONS, Esq.,
Agent Marine and Fisheries,
Halifax, N.S.

SIR,—I have the honour to forward herewith a return of the number of vessels reported at this station during the twelve months ending June 30, 1900.

The service has been carried on satisfactorily on the whole, though considerable inconvenience is experienced by reason of the frequent changes in the personnel of the signal staff, which are necessary to regimental requirements. There is no doubt that this inconvenience would be considerably reduced if a permanent hand could be employed at Camperdown. The desirability of this was pointed out in the annual report for the last two years (I believe steps are being taken to carry out this recommendation). Practically the whole of the personnel of the signal station, both the Citadel and Camperdown staffs, is now composed of men of the 3rd Royal Canadian Regiment, who have gradually replaced men of the Royal Garrison Artillery. The few remaining numbers (three) of the latter regiment will shortly be relieved, when the signal staff will consist entirely of men of the 3rd Royal Canadian Regiment.

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

(Sgd.) H. B. ROBERTS, Major,
Superintendent of Signals.

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PORT OF HALIFAX, N.S.

PARTICULARS of Vessels Signalled during

MONTH.	English Men of War and Troopers.			Foreign Men of War.			Steamers, 1st Class.			Steamers, 2nd Class.		
	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.
1899.												
July	3	3	0	0	0	0	23	18	5	76	75	1
August.....	3	3	0	1	1	0	24	22	2	77	75	2
September.....	5	5	0	1	1	0	20	9	11	80	79	1
October.....	4	4	0	0	0	0	25	20	5	67	63	4
November.....	3	3	0	0	0	0	32	26	6	63	59	4
December.....	0	0	0	0	0	0	39	33	6	63	59	4
1900.												
January.....	0	0	0	0	0	0	40	35	5	61	57	4
February.....	0	0	0	0	0	0	40	35	5	52	48	4
March.....	0	0	0	0	0	0	39	34	5	53	50	3
April.....	0	0	0	0	0	0	40	36	4	62	57	5
May.....	4	4	0	1	1	0	30	17	13	64	62	2
June.....	6	6	0	0	0	0	22	14	8	77	71	6
Totals.....	28	28	0	3	3	0	374	229	75	975	754	41

N.B.—Besides those sailing vessels reported, a large number arrived during the night of which no

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SIGNAL SERVICE.

the Year ending June 30, 1900.

Ships.			Barques.			Barquentines.			Brigs.			Brigantines.			Schooners, 3-masted or wearing Private Signals.			Monthly Totals.		
Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.
0	0	0	3	2	1	1	1	0	0	0	0	0	0	0	4	4	0	110	103	7
0	0	0	7	6	1	2	2	0	0	0	0	1	1	0	3	3	0	118	113	5
0	0	0	7	7	0	2	1	1	0	0	0	1	1	0	6	6	0	122	109	13
0	0	0	4	2	2	0	0	0	0	0	0	0	0	0	2	2	0	102	91	11
0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	100	90	10
0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	105	94	11
0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	102	93	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	83	9
0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	3	3	0	98	90	8
0	0	0	2	2	0	1	1	0	0	0	0	1	1	0	2	2	0	108	99	9
0	0	0	10	10	0	1	1	0	0	0	0	3	1	2	5	5	0	118	101	17
1	1	0	5	5	0	2	2	0	1	1	0	0	0	0	4	4	0	118	104	14
1	1	0	38	34	4	13	12	1	2	2	0	9	7	2	30	30	0	1293	1170	123

notice was taken.

(Sgd.) H. B. ROBERTS, Major, R.E.,
Superintendent of Signals.

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65	29	Hurona.....	London.....	333		508	11 48	44											
66	"	Lycia.....	Bristol.....	280		280	4 20												
67	"	Roman.....	Liverpool..	1,389		622	18 68	49											
		Total for June.....		4,817		14,151	270 07	672											
		Previously reported.....		2,314		11,426	219 35	727											
		Total to date.....		7,131		25,577	489 42	1,399											
75		Same date, 1899.....		11,835		28,837		1,553											
85		" 1898.....		2,682		28,899		2,884											
81		" 1897.....		6,566		37,011		3,032											
71		" 1896.....		9,063		28,780		4,715											

POPE & MORGAN,
Inspectors.

MONTREAL, June 30, 1900.

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101	"	27..	Etolia.....	Bristol.....	298	4 47						12
102	"	28..	Strathnevis.....	London.....	309	4 64						12
103	"	29..	Kildona.....	".....	361	7 47	41					16
			Total for July.....		14,235	25682	2 52		4,291,355	795,975	611	1,003
			Previously reported.....		23,577	48949	13 94		7,036,372	2,195,108	1129	2,510
			Total to date.....		39,812	74624	16 51		11,327,727	2,991,083	1740	*3,513
114			Same date 1899.....		43,526		23 53					11,077
132			" 1898.....		44,885		36 65					1,343
129			" 1897.....		56,647		47 88					
112			" 1896.....		44,499		59 59					

*2453 horses shipped by the British Government up to date of which we have no account they not having reported to us.

POPE & MORGAN,
Inspectors.

MONTREAL, July 31, 1900.

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137	"	23.	Buenos Ayrean	Glasgow	326	5 99	22	15	69
138	"	23.	Alcides	"	394	5 91		15	
139	"	24.	Lake Superior	Liverpool	457	7 86	20	16	
140	"	25.	Man. Trader	Manchester	388	5 82		16	
141	"	25.	Monteagle	Bristol	300	4 50		12	
142	"	26.	Fremont	London	435	7 53	20	18	
143	"	28.	Armagh	"	255	4 64		12	
144	"	29.	Ontarian	Glasgow	245	4 68	20	11	96
145	"	30.	Kastalia	"	412	7 08	18	14	
146	"	31.	Lake Ontario	Liverpool	150	2 95	14	8	
147	"	31.	Degant	Bristol	210	3 15		8	
			Total for the month		16,685	295 89	597	716	649
			Previously reported		39,812	99 746 24	1,651	1,740	3,513
			Total to August 31		56,498	1,042 13	2,248	2,456	4,162
152			Same date, 1899		56,240	1,155 12	4,312		11,636
176			"		59,580	1,180 13	6,389		4,533
174			"		73,176	1,405 22			8,942
156			"		62,312	1,145 24			

POPE & MORGAN,
Inspectors.

MONTREAL, August 31, 1900.

64 VICTORIA, A. 1901

RECORD of Live Stock shipped from Port of Montreal during Month of September, 1900.

Number.	Date.	Steamer.	Destination.	SHEEP.		CATTLE.			HORSES.		SWINE.		Hay for Feed.	Grain for Feed.	Number of Men.	United States Cattle.	Horses for South Africa.
				Shipped.	Lost.	Pat.	Stockers.	Total.	Lost.	Shipped.	Lost.	Shipped.						Lost.
	1900.																
148	Sept. 1.	Rapidan	London					678									
149	"	Lavonian	Liverpool	499				453									
150	"	Maur. City	Manchester	510				1080									
151	"	Sarunatian	Glasgow					243		21						*19	
152	"	Kildona	London					282									
153	"	Lake Huron	Liverpool					128									
154	"	Lakonia	Glasgow					404									
155	"	Ottoman	Liverpool	1,546				472								100	
156	"	Montfort	"					724									
157	"	Efolia	Bristol					177								136	
158	"	Larne	Cardiff					249									
159	"	Roman	Liverpool	1,148				690									
160	"	Monte Videan	London					168									
161	"	Pomeranian	Glasgow					257		21						36	
162	"	Iona	London					396									
163	"	Montreal	"	1,337				761		24							
164	"	Amarynthia	Glasgow					362		18							
165	"	Lycia	Bristol					300									
166	"	Lake Champlain	Liverpool					213									
167	"	Jacona	Newcastle					389									
168	"	Nunndian	Liverpool					213								48	
169	"	Man. Commerce	Manchester					370									
170	"	Brazilian	Glasgow					331		23							
171	"	Huron	London					400									
172	"	Rosarian	"					254									
173	"	Tritonia	Glasgow	635				337		18						36	*592
174	"	Lord Iveagh	Cardiff					350									
175	"	Corinthian	Liverpool					540		14							
176	"	Memnon	Bristol	290				270									
177	"	Boliviana	London	1,908				400									
178	"	Man. Corporation	Manchester					370									
179	"	Concordia	Liverpool					540									
180	"	Orcadian	London					276									+706
181	"	Aleides	Glasgow					338		1							

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182	"	27.	Buenos Ayrean.									10	
183	"	28.	Lake Superior	261	3 91	33						20	
184	"	28.	Monteagle.	503	7 55						15	
				.....	350	6 84	.....						
			"	Liverpool	.....	.....						
			"	Bristol	.....	.....						
			Total to date.	.....	13,718	250 93	173	.....	4,393,505	326,925	593	505	1,298	
			Previously reported	.....	56,498	1,042 13	2,248	26	10,677,636	3,580,218	2,456	4,162	2,458	
			Total to date.	.....	70,216	1,293 06	2,421	.....	21,071,141	3,907,143	3,049	4,667	3,751	
186			Same date, 1899	.....	65,494	1,386 83	3,695	.....	.....	.....	.....	11,698	.....
214			"	1898	.....	72,471	4,909	.....	.....	.....	.....	4,961	.....
220			"	1897	.....	91,396	7,938	.....	.....	.....	.....	10,356	.....
194			"	1896	.....	95,075	8,858	.....	.....	.....	.....	.....	.....
188			"	1895	.....	75,870	9,832	.....	.....	.....	.....	.....	.....

POPE & MORGAN,
Inspectors.

MONTREAL, September 30, 1900.

SESSIONAL PAPER No. 21

216	" 30	Huron.	London.	490	7 65	6	.....	.....	.....	20	.....
217	" 31	Monteagle.	Bristol.	300	4 80	6	.....	.....	.....	13	.....
		Total for the month.	.....	11,760	219 55	289	.....	3,892,026	375,805	515	936
		Previously reported.	.....	70,216	1,293 06	2,421	.....	21,071,141	3,907,148	3,049	4,667
		Total to date.	.....	81,976	1,512 61	2,710	.....	24,963,161	4,282,953	3,564	5,603
215		Same date.	1899.	52,606	1,616 67	4,452	.....	.....	.....	.....	11,745
260		"	1898.	28,900	5,981	.....	.....	.....	.....	.....	3,261
269		"	1897.	54,828	1,727 07	.....	.....	.....	.....	.....	10,742
242		"	1896.	70,112	.....	8,853	.....	.....	.....	.....	.....
224		"	1895.	171,252	.....	10,033	.....	.....	.....	.....	.....
		"	.....	88,460	.....	11,896	.....	.....	.....	.....	.....

* Struck on Isle Ronde. Cattle sent back to yards.

RECORD OF LIVE STOCK SHIPPED FROM PORT OF MONTREAL DURING MONTH OF NOVEMBER, 1900.

Number.	Date.	Steamer.	Destination.	SHEEP.		CATTLE.			HORSES.		SWINE.		Hay for Feed.	Grain for Feed.	Number of Men.	United States Cattle in Bond.	Horses to South Africa.
				Shipped.	Lost.	Fat.	Stockers.	Total.	Fees collected.	Shipped.	Lost.	Shipped.						Lost.
218	Nov. 1.	Buenos Ayrean.	Glasgow					260		3 90					10		
219	" 2.	Aleides	"					278		4 17					11		
220	" 2.	Rosarian	London.					263		3 95					10		
221	" 2.	Lord Iveagh	Cardiff					338		5 07					13		
222	" 2.	Lake Superior	Liverpool.					132		1 98					5		
223	" 2.	Jacona.	Newcastle.					239		3 89					10		
*224	" 4.	Ottoman.	Liverpool					349	15	13 85					34		
225	" 4.	Andoni	London.					263		3 95					11		
226	" 4.	Menmon.	Bristol.					268		4 02					11		
227	" 7.	Ontarian	Glasgow					415		6 22					16		
228	" 8.	Concordia	Liverpool					540		8 10					22		
229	" 9.	Oreadian	London.	172				261		4 78					11		
230	" 10.	Kastalia.	Glasgow					410		6 95					16		
†231	" 13.	Ottoman.	Liverpool.					704		19 05					35		
232	" 13.	Manchester Shipper	Manchester.					386		5 79					15		
233	" 14.	Bellona	Newcastl-					219		3 21					9		
234	" 14.	Sarmatian.	Glasgow					214	20	4 21					11		
235	" 14.	Fremona	London.					400		6 00					16		
236	" 16.	Lord Charlemout	Cardiff					306		4 59					12		
237	" 16.	Montauk	London.					227		3 41					9		
238	" 17.	Montfort	Liverpool					109		1 50					4		
239	" 17.	Roman	"	1,188				677	15	16 85					33		
240	" 18.	Livonian	"					440		6 60					18		
241	" 18.	Pomeranian.	Glasgow.					176		2 64					7		
242	" 19.	Marina.	"	500				375	28	9 27					20		
243	" 21.	Manchester Trader	Manchester.					348		5 22					14		
244	" 21.	Devona	London.	447				569	17	10 72					22		
245	" 23.	Amarynthia	Glasgow					250		3 75					10	51	
246	" 23.	Dagana.	Bristol					259		3 89					10		
247	" 24.	Man. Commerce	Manchester.					398		4 92					13		
†248	" 25.	Etolia.	Bristol					250	2	3 85					10		

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237	For the month.....	5,427	10,204	186 38	123	4,072,540	378,530	452	85
238	Previously reported.	23,411	81,976	1512 61	2,710	24,963,161	4,282,453	3,564	5,608
239	Total for the season	34,838	92,180	1698 99	2,873	29,035,701	4,661,473	4,016	5,088
240	Total shipments 1899.	58,277	81,804	1755 88	4,789				11,745
241	" " 1898.	34,991	99,189	1394 61	5,827				5,719
242	" " 1897.	60,638	117,247	2381 34	10,651				12,221
243	" " 1896.	76,520	96,448	1830 18	10,421				
244	" " 1895.	210,607	94,972	4455 23	13,303				
245	" " 1894.	139,780	86,635	3997 53	5,693				
246	" " 1893.	3,743	83,322	2297 94	1,666				
247	" " 1892.	15,914	98,731	1984 70	1,739				

*Ran into Dobell's wharf, Hochelaga and returned live stock back to yards. †Reshipment of stock returned to yards on the 4th after collision at Dobell's.
 ‡Horses on Lake Champlain.

GEO. H. POPE & E. B. MORGAN,
Inspectors.

MONTREAL, November 26, 1900.

RECORD of Live Stock shipped from Port of Halifax, N.S., during the Year, 1899.

Number.	Date.	Steamer.	Destination.	SHEEP.		CATTLE.			HORSES.		SWINE.		Hay for Feed.	Grain for Feed.	Number of Men.	United States Cattle	Horses for S. Africa.
				Shipped.	Lost.	Pat.	Stockers.	Total.	Lost.	Shipped.	Lost.	Shipped.						Lost.
1889.	April 11.	Scotsman.	Liverpool.							1							
									0 05								

DAVID HUNTER,
Port Warden.

RECORD of Live Stock shipped from Port of Halifax, N.S., during month of March, 1900.

March 27.	Vancouver.	Liverpool.							0 20	4			Sufficient.		4		*
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*The horses are the chargers of the four field officers of the Leincester Regiment which regiment sailed in the *Vancouver*. They were duly inspected by veterinary surgeon.

GEORGE M. VERNON,
Deputy Port Warden.

RECORD of Live Stock shipped from Port of Halifax, N.S., during month of October, 1900.

Oct. 12.	Assyrian.	Liverpool.							0 05	1			Sufficient.		1		*
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*This horse was the property of an officer of the British Army.

DAVID HUNTER,
Port Warden.

SESSIONAL PAPER No. 21

SHIPMENTS OF LIVE STOCK FROM PORT OF ST. JOHN, N.B.

The number of cattle shipped from this port during the season of 1899 and 1900 was as follows:—

Months.	SHEEP.		CATTLE.		Fees.	HORSES.		Hay. For Feed.	Grain for Feed.	Men.
	Shipped.	Lost.	Shipped.	Lost.		Shipped.	Lost.			
1899.					\$ cts.			Lbs.	Lbs.	
November and December.....	183	11	3,079	11	58 57	64	....	872,695	282,204	135
1900.										
January.....	645	9	2,885	15	49 13	52	....	792,955	244,297	121
February.....	....	....	2,965	39	47 94	69	....	847,655	247,881	123
March.....	297	....	3,354	29	59 98	163	....	990,320	307,510	146
April.....	138	2	3,189	1	56 19	153	4	945,265	283,731	133
	1,263	22	15,472	95	271 81	501	4	4,448,890	1,365,623	658

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

F. J. HARDING,
Agent.

64 VICTORIA, A. 1901

APPENDIX

STATEMENT of Expenditure by the Marine Department

	1868.	1869.	1870.	1871.	1872.	1873.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Maintenance of lights—						
Above Montreal.....	40,561 28	42,306 69	46,289 05	44,054 01	57,609 16	61,036 47
Montreal District.....	23,053 56	25,762 54	21,669 49	22,453 52	22,369 00	31,143 14
Below Quebec.....	45,615 35	41,651 73	43,730 61	31,582 75	41,936 00	65,645 00
Nova Scotia.....	46,400 72	56,394 88	43,682 86	76,230 77	67,862 24	100,953 80
New Brunswick.....	20,488 00	23,893 00	27,485 14	20,542 29	23,369 12	29,266 85
Prince Edward Island.....						
British Columbia.....						13,207 09
Construction—						
Above Montreal.....	3,136 15		2,976 83	8,770 55	6,940 45	18,999 38
Quebec.....	7,323 75	7,492 59	1,543 06		57,818 35	39,303 87
Nova Scotia.....	22,041 42	6,905 80	18,967 23	10,948 31	34,760 12	90,181 79
New Brunswick.....			11,555 91	8,735 73	9,561 14	16,691 06
Prince Edward Island.....						
British Columbia.....						
Dominion steamers—						
Quebec.....	69,026 73	37,176 02	34,549 49	59,797 05	47,500 00	51,758 05
Nova Scotia.....	14,778 92	26,603 94	19,759 96	13,139 86	20,999 63	24,999 57
New Brunswick.....						
Prince Edward Island.....						
British Columbia.....					12,115 96	15,984 72
Examinations of masters and mates			908 12	1,407 66	4,312 07	6,466 18
Hudson's Bay expedition			140 00		874 00	1,068 89
Investigations into wrecks.....						
Marine Hospital, Quebec.....	19,977 36	19,221 45	21,618 73	19,823 18	21,000 00	21,000 00
Marine hospitals.....	1,070 86	15,615 71	15,652 62	15,728 93	53,536 16	27,150 43
Meteorological service.....	8,200 00	8,950 00	8,950 00	9,379 82	12,618 15	18,830 54
Registration of Canadian shipping.....						
Removal of obstructions.....			2,350 07	1,000 00		
Rewards for saving life.....					2,284 32	1,975 13
Signal service.....						
Steamboat inspection.....	7,106 93	7,999 00	7,396 96	8,321 00	8,500 00	13,266 00
Survey, Georgian Bay						
Water Police, Montreal.....	27,445 35	10,238 71	9,323 31	8,030 00	10,000 00	14,453 87
" Quebec.....		12,633 59	9,038 62	9,370 73	10,348 00	18,200 00
Civil Government.....	15,083 88	18,064 25	19,401 05	20,220 96	22,644 52	25,336 04
Steam communication—						
Between Quebec and Maritime Provinces.....						
Between Prince Edward Island and Mainland.....						
Purchase of steamer to replace—						
Glendon.....						
Lady Head.....						
Winter mail service, P.E.I.....						
Tidal observations.....						
Gratuities.....						
Survey, Burrard Inlet.....						
Export cattle trade.....						
	371,070 56	360,899 90	367,129 11	389,537 12	518,958 49	706,817 92

SESSIONAL PAPER No. 21

No. 7.

from Confederation to June 30, 1900.

1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
60,798 75	71,937 18	68,344 18	65,421 00	73,175 11	74,587 78	65,518 61	65,541 21	71,048 50
20,939 13	15,000 00	12,999 48	15,998 00	15,996 00	14,917 95	16,523 88	14,326 36	21,643 05
102,056 09	110,362 00	98,792 93	89,980 41	96,904 00	93,178 61	96,703 87	89,781 29	91,098 66
114,711 91	114,344 51	143,125 56	128,496 00	132,888 95	120,951 33	116,189 60	128,918 59	137,845 15
53,459 04	60,119 02	62,551 61	50,998 00	58,989 00	57,499 02	61,252 82	63,921 90	66,073 00
3,357 71	12,584 64	13,730 53	11,817 00	16,986 66	12,158 72	15,288 17	12,997 36	16,985 72
18,519 50	15,983 72	17,175 97	15,853 00	18,948 78	15,152 73	15,576 99	17,570 72	17,803 00
24,461 86	14,286 65	13,320 40	16,267 98	7,207 96	11,993 75	13,297 81	14,180 02	13,581 00
41,950 82	19,325 00	24,336 47	12,945 29	12,776 47	4,154 58	7,797 75	7,539 76	3,731 31
51,867 94	43,898 63	42,214 55	25,550 00	13,500 00	17,386 97	7,069 01	7,757 52	13,355 00
31,572 60	8,842 97	17,819 85	7,083 82	12,028 13	22,598 14	4,985 53	4,578 52	2,253 80
18,519 50	15,983 72	17,175 97	15,853 00	18,948 78	15,152 73	15,576 99	17,570 72	17,803 00
4,353 93	8,799 07	8,477 67	29 66	2,504 47	2,560 88	6,074 50	8,655 39	3,237 90
64,490 00	79,043 70	62,971 49	49,987 66	42,683 00	44,972 79	49,318 93	64,973 00	44,923 98
30,008 99	22,992 62	133,826 08	38,739 39	43,027 00	42,016 53	49,438 93	36,700 00	31,049 74
10,555 67	41,796 74	10,156 56	16,095 90	12,193 40	7,460 68	9,733 34	11,788 09	8,504 61
4,520 19	5,696 62	4,672 03	4,050 00	4,249 76	4,250 12	4,253 43	3,888 41	3,982 00
2,313 31	366 00	466 41	342 65	500 00	1,691 00	676 73	310 48	863 19
20,456 45	21,994 75	23,795 85	19,965 97	19,987 50	20,791 77	12,991 23	19,964 33	19,938 12
45,986 87	37,111 67	37,155 72	42,449 55	37,487 10	37,445 57	33,040 00	32,218 94	33,162 45
36,700 59	33,580 00	45,560 03	44,871 38	46,050 24	45,706 13	45,554 51	46,163 54	47,464 07
272 30	1,096 46	412 06	842 14	1,435 10	239 26	257 75	607 43	2,013 28
4,931 78	3,552 86	2,292 20	1,958 55	4,071 00	305 86	825 00	150 00	1,116 51
1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00	1,000 00
10,291 58	12,200 00	13,081 86	13,073 01	13,228 38	13,076 46	11,854 34	12,211 65	14,835 00
12,370 86	13,395 00	14,090 00	13,524 29	14,062 00	13,462 74	13,131 06	21,953 26	21,994 74
26,526 66	24,500 00	27,136 68	21,482 08	23,498 06	23,023 26	22,094 48	13,497 81	20,221 82
30,087 23	31,326 18	32,789 18	32,304 12	32,682 50	36,610 19	33,083 95	36,447 50	36,789 46
15,000 00	10,000 00	10,000 00						
		750 00						
845,150 09	844,586 09	970,146 27	820,054 38	786,156 23	755,359 47	723,360 89	761,730 62	774,831 53

64 VICTORIA, A. 1901

STATEMENT of Expenditure by the Marine Department

	1883.	1884.	1885.	1886.	1887.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Maintenance of lights—					
Above Montreal.....	70,116 68	70,788 27	70,697 89	85,713 98	75,690 74
Montreal District.....	22,260 32	22,946 43	23,262 94	33,289 28	16,735 49
Below Quebec.....	102,784 99	101,302 35	118,856 94	131,095 29	131,540 80
Nova Scotia.....	150,793 17	142,909 72	137,439 40	143,153 24	117,708 53
New Brunswick.....	75,946 92	86,670 70	92,130 28	76,046 63	96,425 28
Prince Edward Island.....	17,907 27	19,059 62	20,218 83	22,282 52	17,852 13
British Columbia.....	18,349 06	18,107 54	15,497 76	14,783 75	16,230 43
Cape Race.....					4,453 25
Construction—					
Above Montreal.....	9,782 27	18,432 63	27,977 42	36,678 16	18,383 20
Quebec.....	9,672 50	3,168 48	4,354 87	5,877 84	1,260 00
Nova Scotia.....	9,422 75	12,489 35	4,352 42	5,905 17	5,330 89
New Brunswick.....	1,022 57	2,868 70	7,667 42	2,421 66	5,280 75
Prince Edward Island.....	1,934 49	2,158 60	879 40		384 60
British Columbia.....	1,005 26	2,830 38	5,223 11	4,942 70	321 84
Queen's Printer.....					26 58
Dominion steamers—					
Quebec.....	45,156 13	43,019 13	51,092 98	51,485 03	50,714 52
Nova Scotia.....	37,841 07	27,726 60	42,921 27	30,283 27	32,287 10
New Brunswick.....				24,633 26	14,337 23
Prince Edward Island.....	19,680 00	19,539 52	33,962 54	20,927 58	19,987 67
British Columbia.....	25,484 00	16,111 83	12,485 07	13,430 69	10,800 07
Department.....					13,288 83
Examinations of masters and mates.....	4,021 20	5,580 79	6,656 44	5,239 28	4,858 98
Hudson's Bay expedition.....		480 69	71,374 69	35,217 10	14,762 61
Investigation into wrecks.....	875 64	830 12	385 15	592 63	520 14
Marine hospital, Quebec.....	19,998 53	19,990 34	19,996 68	16,047 95	19,706 96
Marine hospitals.....	29,880 78	31,401 30	45,371 29	32,229 02	32,545 35
Meteorological service.....	51,990 25	56,418 16	56,625 40	56,898 33	57,140 74
Registration of Canadian shipping.....	168 84	189 27	237 88	157 13	233 13
Removal of obstructions.....	35 80	342 76	2,259 21	1,237 34	4,190 83
Rewards for saving life.....	2,534 60	2,614 91	5,221 15	8,147 22	7,363 94
Signal service.....	3,365 33	6,704 17	3,881 05	4,622 00	5,082 17
Steamboat inspection.....	16,209 00	21,893 28	23,235 04	21,775 57	22,847 80
Hydrographic surveys.....	77 81	26,745 51	20,454 68	17,759 36	21,592 55
Water Police, Montreal.....	15,798 24	19,021 93	17,683 59	20,933 75	17,413 47
" Quebec.....	22,520 41	22,958 79	20,399 33	22,922 82	22,935 65
Civil Government.....	37,988 39	38,775 00	29,900 83	30,453 57	37,193 62
Steam communication—					
Between Quebec and Maritime Provinces.....					
Between Prince Edward Island and Mainland.....					
Repairs to wharf.....					
Purchase of steamers to replace—					
Stanley.....	395 55	56,164 71	47,238 03		
Glendon.....					
Lady Head.....				5,985 42	6,312 93
Winter mail service, P.E.I.....					
Tidal observations.....					
Gratuities.....					
Survey, Burrard Inlet.....					
Export cattle trade.....					
Survey, Bay of Quinté.....					
Relief of distressed Canadians.....					
Manning ships.....					
Widow of late A. Warner.....					
McDonald Bros.....					
Parliamentary Returns.....					
Investigating effect of Chicago drainage canal.....					
John McDonald.....					
Longitude, Montreal.....					
Marine biological station.....					
	825,010 82	927,241 61	1,129,901 14	980,120 59	917,557 31

SESSIONAL PAPER No. 21

from Confederation to June 30, 1889—Continued.

1888.	1889.	1900.	1891.	1892.	1893.	1894.	1895.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
85,588 70	72,721 23	84,035 65	93,180 72	87,033 61	87,598 15	78,090 69	82,541 16	
17,510 17	12,285 79	118,750 70	122,471 89	116,531 27	120,404 19	124,348 80	124,763 81	
108,278 67	112,690 20		139,916 83	148,815 26	150,445 26	137,339 73	140,977 53	
133,009 92	140,197 15	61,608 91	61,089 31	66,886 69	71,079 46	59,917 96	69,654 46	
73,465 49	78,285 79	16,968 80	19,000 46	17,069 98	16,819 64	15,569 39	17,976 67	
14,796 62	19,118 51	16,411 49	19,595 22	26,858 68	24,413 27	27,240 77	21,734 18	
19,604 63	16,877 12							
5,124 20	7,358 01							
6,341 97	8,623 76	23,863 09	9,796 28	21,704 05	8,766 62	12,581 15	2,699 40	
2,287 86	12,203 06		3,723 14	809 27	10,097 18	4,743 13	3,004 14	
5,533 48	6,039 91		4,596 94	1,965 16	4,384 24	3,104 77	4,737 03	
1,542 61	2,966 36		208 16	1,845 35	1,271 15	115 45	1,597 80	
			410 00		1 56		1,604 00	
5,918 00	1,890 00		14,417 25	14,417 25	9,478 81	2,958 61	6,356 43	180 83
	40 14							
150,659 19	126,629 33	114,956 20	111,437 03	145,899 61	163,097 46	178,183 97	169,661 64	
5,063 96	4,381 04	4,117 83	4,255 24	6,363 88	4,116 99	3,745 33	2,757 29	
165 00								
513 91	516 67	888 94	1,172 77	603 21	643 49	850 81	351 15	
18,777 62	18,643 14	10,279 08	751 75					
30,667 67	33,089 20	31,450 03	33,303 37	34,106 83	35,757 07	38,403 94	38,589 05	
59,986 10	58,577 07	58,452 10	62,457 10	67,138 06	64,165 60	66,440 96	64,588 34	
897 02	179 21	647 52	1,207 07	462 59	1,476 19	394 00	207 40	
2,500 94	3,603 65	5,737 26	3,633 65	2,878 68	1,554 53	202 02	2,217 36	
6,825 48	5,503 44	8,150 92	4,952 20	6,398 93	7,432 64	8,014 67	6,591 34	
4,441 59	5,092 54	4,976 80	4,700 79	5,014 42	5,040 58	4,668 93	5,311 74	
21,430 45	22,213 03	20,989 52	22,183 76	22,736 59	24,386 95	25,961 36	26,385 88	
19,424 14	17,808 46	17,969 23	17,677 51	16,451 10	17,542 11	31,461 76	12,653 28	
18,725 95	16,948 82	13,164 00	573 80					
18,553 57	14,698 68	8,620 61	7,279 85	6,161 60	5,436 23			
32,728 78	43,501 96	42,835 78	43,253 67	43,195 31	56,477 23	54,988 88	71,373 82	
	143,505 60							
					84 90	1,007 67	824 38	
7,740 25	1,842 47	2,752 67	7,012 70	3,309 44	4,376 96	6,497 03	6,138 18	
		244 75	1,888 71	711 59	5,099 17	10,172 61	11,507 24	
	200 00	80 00	1,025 00			3,261 32		
			1,690 12	2,580 45				
			520 85	1,411 57	1,711 73	1,350 83	2,268 74	
					2,085 45			
							7 30	
							500 00	
							160 00	
							4,000 00	
883,250 85	1,023,801 34	807,417 53	885,410 11	861,426 80	898,720 03	905,654 34	895,828 28	

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STATEMENT of Expenditure by the Marine Department from Confederation
to June 30, 1900.—*Concluded.*

	1895.	1897.	1898.	1899.	1900.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Maintenance of lights—					
Above Montreal.....	87,256 28	80,961 06	87,841 22	92,751 23	82,810 92
Montreal District.....					
Below Quebec.....	124,143 66	126,186 00	116,279 88	136,134 79	122,112 42
Nova Scotia.....	123,234 65	124,671 19	126,386 00	65,072 35	122,414 86
New Brunswick.....	63,018 64	56,771 02	67,369 98	128,674 15	52,491 93
Prince Edward Island.....	17,988 15	16,429 23	18,112 93	20,589 81	42,878 40
British Columbia.....	24,770 44	25,679 52	26,862 03	29,530 20	33,545 95
Cape Race.....					
Construction—					
Above Montreal.....	11,993 84	9,527 84	6,867 69	3,729 62	7,094 64
Quebec.....	3,300 00	296 26	3,649 90	37,838 80	40,319 03
Nova Scotia.....	1,842 94	61 71	4,067 99	3,123 16	4,884 22
New Brunswick.....	200 00	1 60	1,423 34	91 49	
Prince Edward Island.....		452 90	1,409 60	616 96	5,586 91
British Columbia.....	225 50	569 99	6,414 19	19,305 60	
Queen's Printer.....					
Dominion steamers—					
Quebec.....					
Nova Scotia.....					
New Brunswick.....					
Prince Edward Island.....					
British Columbia.....	145,315 28	136,940 11	117,644 39	145,270 75	180,430 65
Department.....					
Examinations of masters and mates.....	4,062 82	3,536 29	3,335 40	3,568 26	3,750 69
Hudson's Bay expedition.....		19,091 32	27,050 66		
Investigation into wrecks.....	483 98	565 25	312 77	982 17	773 06
Marine Hospital, Quebec.....					
Marine hospitals.....	36,682 96	37,984 71	38,162 56	37,353 29	37,743 30
Meteorological service.....	66,600 29	67,397 71	64,135 71	73,148 05	67,692 42
Registration of Canadian shipping.....	517 60	531 55	818 33	966 48	266 43
Removal of obstructions.....	456 38	631 86	704 17	745 49	252 19
Rewards for saving life.....	8,004 38	5,955 19	5,081 40	7,049 09	7,007 97
Signal service.....	5,338 76	5,986 12	4,993 88	6,067 49	5,906 83
Steamboat inspection.....	26,321 27	26,837 83	26,342 29	28,035 49	27,965 72
Hydrographic surveys.....	15,099 63	12,352 99	15,306 66	13,664 97	12,600 98
Civil Government.....		74,801 37	74,644 05	72,833 97	63,331 61
Repairs to wharfs.....	2,644 69	1,795 56	1,618 97		697 87
Purchase of steamer Minto.....				144,365 26	41,951 88
Winter mail service, P. E. I.....	7,779 69	21,931 05	9,575 31	8,439 70	1,503 70
Tidal observations.....	9,627 45	13,166 20	3,081 45	5,186 35	4,372 18
Gratuities.....					
Export cattle trade.....	2,887 24		2,499 80	2,757 85	2,762 24
Manning ships.....	746 89				
Parliamentary returns.....	291 08				
Investigating effect of Chicago drainage canal.....	2,500 00				
John Macdonald.....	200 00				
Unforeseen expenses.....					3,452 21
Marine biological station.....				5,709 10	739 61
	793,634 49	867,772 90	856,192 50	1,102,601 91	982,561 97

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APPENDIX No. 8.

STATEMENT relating to the Wharfs under the control of the Department, on
June 30, 1900.

Locality.	Wharfinger.	Date of Appointment of Wharfinger.	Remuneration allowed.	Amount deposited to credit of Receiver General.
<i>Ontario.</i>				\$ cts.
Cockburn Island.....	Alfred Monck.....	May 20, 1890.	25 p.c. of collections....	71 99
Goderich.....	W. Marlton.....	Feb. 14, 1894.	25 " ".....	296 90
Hilton, St. Joseph Id., Algoma	E. Stubbs.....	June 20, 1898.	50 " ".....	163 59
Kingsville.....	A. E. Malott.....	Nov. 6, 1895.	25 " ".....	22 83
Morpeth.....	C. Stammers.....	Aug. 1, 1894.	25 " ".....	
Port Rowan.....	John Collett.....	May 2, 1898.	25 " ".....	
Richard's Landing, Algoma	R. Armstrong.....	Mar. 11, 1899.	25 " ".....	239 76
Rondeau.....	W. R. Fellows.....	Dec. 17, 1888.	25 " ".....	83 00
Sault Ste. Marie.....	Geo. A. Boyd.....	April 9, 1897.	\$112 per month during season of navigation... 25 p.c. of collections....	623 63 67 51
Southampton.....	Geo. McVittie.....	Aug. 16, 1895.	25 p.c. of collections....	
Summerstown.....	Under lease.....			
Thessalon, Algoma.....	F. Leighfield.....	May 28, 1897.	25 p.c. of collections....	
Wiarton.....	H. R. A. Ely.....	Dec. 10, 1890.	25 " ".....	151 60
<i>Quebec.</i>				
Total.....				1,720 81
Agnes.....	L. A. Roy.....	Nov. 27, 1891.	25 p.c. of collections....	
Anse St. Jean.....	F. Savoie.....	Mar. 13, 1895.	25 " ".....*	
Baie St. Paul.....	Vacant.....		25 " ".....	
Baie St. Paul, Isolated Block	A. Sinard.....	Aug. 25, 1891.	25 " ".....	
Beauport.....	O. Giroux.....	Nov. 11, 1896.	25 " ".....	75 58
Berthier.....	E. Gaumond.....	July 5, 1897.	50 " ".....	96 25
Cap-à-l'Aigle.....	Jos. Guay.....	Oct. 7, 1896.	25 " ".....	
Carleton.....	Jos. E. Cullen.....	Mar. 25, 1896.	\$50 per annum....	26 89
Cascades.....	Moïse Moreau.....	Oct. 20, 1897.	25 p.c. of collections....	
Cedars.....	J. Reay.....	April 29, 1898.	25 " ".....	52 73
Chicoutimi.....	T. E. Saucier.....	May 16, 1898.	25 " ".....	
Coteau du Lac.....	M. St. Amour.....	Sept. 21, 1896.	25 " ".....	73 56
Coteau Landing.....	J. A. Prieur.....	May 25, 1897.	25 " ".....	
Echo Vale, Lake Megantic...	D. P. Matheson.....	May 16, 1894.	25 " ".....	
Grand River.....	Geo. Beaudin.....	Nov. 16, 1896.	25 " ".....	185 21
Isle aux Grues.....	Jos. Painchaud.....	Feb. 17, 1890.	25 " ".....	0 95
Isle Perrot.....	Roger Leduc.....	Oct. 20, 1897.	25 " ".....	
Knowlton's Landing.....	L. Knowlton.....	Nov. 26, 1897.	25 " ".....	30 00
Lacolle.....	R. J. Robinson.....	Mar. 8, 1894.	25 " ".....	7 88
Les Eboulements.....	M. Tremblay.....	Sept. 4, 1894.	25 " ".....	
L'Islet.....	Octave Morin.....	Feb. 8, 1893.	25 " ".....	
Longueuil.....	Chas. Poirier.....	Oct. 22, 1896.	25 " ".....	12 92
Magog.....	Edward Addy.....	June 20, 1898.	25 " ".....	
Matane.....	David Banville.....	April 29, 1898.	25 " ".....	
Murray Bay.....	Elie Maltais.....	Aug. 15, 1893.	25 " ".....	
New Carlisle.....	John C. Hall.....	June 4, 1889.	25 " ".....	165 08
Percé.....	T. W. Flynn.....	Jan. 19, 1893.	25 " ".....	17 84
Port Daniel.....	John Enright.....	Sept. 11, 1890.	\$50 per annum....	40 57
Port Lewis.....	Sam. Carson.....	" 21, 1899.	25 p.c. of collections....	
Rimouski.....	Chas. Lepage.....	July 24, 1894.	25 " ".....	
Rivière Ouelle.....	J. H. dit Beaulieu.....	Nov. 28, 1892.	25 " ".....	
Rivière du Loup.....	P. E. Tremblay.....	May 26, 1900.	25 " ".....	
St. Anicet.....	S. Dupuis.....	Sept. 14, 1896.	25 " ".....	
St. Alphonse de Fagotville...	Abel Tremblay.....	July 7, 1891.	25 " ".....	6 77

* Commission on collections not to exceed \$200 per annum.

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STATEMENT relating to Wharfs, &c.—Continued,

Locality.	Wharffinger.	Date of Appointment of Wharffinger.	Remuneration allowed.	Amount deposited to credit of Receiver General.
<i>Quebec—Con.</i>				\$ cts.
St. Jean d'Orléans...	L. Lachance	Sept. 26, 1896.	25 p.c. of collections.	100 22
St. Jean Port Joli...	J. Pelletier	Sept. 14, 1896.	25 " "	
Ste. Cécile du Bic...	L. N. Coté	July 20, 1891.	25 " "	449 97
St. Laurent d'Orléans...	Ed. Chabot	Aug. 25, 1894.	25 " "	
St. Thomas de Montmagny...	L. L. Dionne	Oct. 22, 1896.	25 " "	4 16
St. Zotique...	J. M. Leroux	Sept. 21, 1896.	25 " "	
Tadoussac...	A. Christiansen	Oct. 20, 1897.	25 " "	
Trois Pistoles...	D. Damour	May 10, 1895.	25 " "	
Valois Point...	L. Gastonguay	Oct. 20, 1897.	25 " "	
Ville Marie...	Jules Maillaud	Feb. 2, 1899.	25 " "	
			Total.....	1,346 58
<i>Nova Scotia.</i>				
Arisiag...	H. R. McAdam	Dec. 30, 1898.	25 p.c. of collections.	
Avonport...	Robert Shaw	Nov. 23, 1888.	25 " "	
Babbins Cove...	Alex. Thomas	Oct. 20, 1897.	25 " "	4 30
Barrington...	J. H. Christie	Aug. 31, 1896.	25 " "	195 50
Bass River...	Jotham Fulton	Jan. 6, 1898.	25 " "	
Bayfield...	W. McDonald	Oct. 30, 1894.	25 " "	40 23
Belliveau Cove...	St. Clair Thériéau	Nov. 24, 1892.	25 " "	110 42
Broad Cove...	John Teal	June 12, 1893.	25 " "	
Broad Cove Marsh...	Hugh McDonald	Oct. 19, 1892.	25 " "	
Brooklyn...	F. T. Gardiner	" 20, 1882.	20 " "	
Canada Creek...	Henry Dickey	Aug. 12, 1899.	25 " "	0 54
Cape Cove...	J. A. Ellis	May 14, 1897.	25 " "	21 71
Centreville...	Alfred Ward	" 29, 1897.	25 " "	81 55
Chipman's Brook...	Jas. Misaner	Nov. 23, 1888.	25 " "	
Church Point...	Chas. F. Belliveau	Aug. 20, 1892.	25 " "	78 52
Cow Bay...	John McAulay	Dec. 10, 1896.	7½ " "	159 02
Cranberry Head...	Abram Thurston	Feb. 16, 1889.	25 " "	
Cribbens Pier...	A. R. Boyd	Oct. 2, 1895.	25 " "	
Delap's Cove...	R. W. McCaul	Nov. 28, 1889.	25 " "	6 00
Descousse...	John Pertus	Sept. 10, 1898.	25 " "	55 80
Digby...	W. W. Hayden	April 20, 1897.	25 " "	1,728 82
Eagle Head...	Nathan Leslie	" 9, 1889.	25 " "	
East Bay...	Donald McInnis (Ronald's son).	" 5, 1886.	50 " "	
East River, Sheet Harbour...	Malcolm McFarlane	May 20, 1890.	25 " "	
Grand Narrows, Victoria Co.	F. X. McNeil	Nov. 11, 1896.	25 " "	
Grand Narrows, Cape Breton Co.	Neil McNeil, jr.	Aug. 6, 1898.	25 " "	4 38
Hall's Harbour...	T. A. Neville	Jan. 8, 1897.	25 " "	18 48
Hampton...	Judson Foster	Aug. 25, 1888.	25 " "	16 40
Harbourville...	Isaac Cook	May 28, 1897.	25 " "	25 69
Horton Landing...	F. G. Curry	Apr. 30, 1898.	25 " "	4 85
Irish Cove...	Colin Cash	May 28, 1895.	25 " "	18 05
Jordan Bay...	John Fredericks	Feb. 20, 1900.	25 " "	38 63
Kelly Cove...	Jos. B. Huskins	Apr. 11, 1899.	25 " "	
Lismore...	D. A. McKimmon	July 5, 1895.	25 " "	
Maitland, Hants Co.	W. B. Smith	June 8, 1894.	25 " "	
Maitland, Yarmouth Co.	J. Ellis	Dec. 10, 1896.	25 " "	42 24
Margaretsville...	C. S. McLean	May 7, 1897.	25 " "	103 30
Meteghan Cove...	H. F. Robicheau	" 28, 1897.	25 " "	21 59
Meteghan River...	D. D'Entremont	" 14, 1897.	25 " "	58 69
Militia Point...	D. McIntosh	Aug. 25, 1892.	25 " "	
Morden...	John Redgate	Nov. 16, 1893.	25 " "	15 36
Northside, Boularderie...	Dun. McKenzie	" 26, 1897.	25 " "	
Oak Point (Kingsport)...	Rent from Railway Company.			200 00
Ogilvie...	M. Donnellan	July 13, 1893.	25 p.c. of collections.	13 71
Parssboro'	Thompson Tipping	" 26, 1888.	25 " "	
Pickett's Wharf...	Freeman Eaton	Aug. 2, 1899.	25 " "	169 08
Plympton...	Wm. Smith	" 8, 1890.	25 " "	
Point Brulé...	Alex. Craig	Dec. 26, 1898.	25 " "	1 35
Port George...	Outfit Douglas	June 26, 1900.	25 " "	62 98

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STATEMENT relating to Wharfs, &c.—Continued.

Locality.	Wharfinger.	Date of Appointment of Wharfinger.	Remuneration allowed.	Amount deposited to credit of Receiver General.
<i>Nova Scotia—Con.</i>				\$ cts.
Port Hood	Albert Macdounell.	May 22, 1900.	25 p. c. of collections....	
Port Joli	Jos. S. McAdams.	Feb. 5, 1900.	25 "	
Port La Tour	David Sholds.	Feb. 1, 1900.	25 "	4 46
Port Lorne	Freeman Beardsley.	June 27, 1897.	25 "	28 64
Salmon River, Digby Co.	J. M. Deveau.	Nov. 29, 1890.	25 "	
Salmon River, Halifax Co.	H. J. Balcom.	Feb. 17, 1899.	25 "	211 50
Saulniersville	John T. Saulnier.	Aug. 25, 1888.	25 "	25 18
Tancook Island	Amos Stevens.	Mar. 11, 1898.	25 "	
Tidnish	A. E. Sampson.	Aug. 20, 1896.	25 "	
Tracadie	J. M. Hall.	Nov. 6, 1888.	25 "	
Tusket Wedge				
Victoria	William Brown.	Feb. 11, 1889.	25 p. c. of collections....	15 72
Walla e.	Don. McKenzie.	Dec. 16, 1892.	25 "	
Wallace Harbour, South side.	George Boyle.	" 26, 1899.	25 "	
West Pubnico.	Chas. C. D'Entre-			
	mont.	Mar. 28, 1898.	25 "	19 20
West River, Sheet Harbour.	Malcolm McFarlane.	Sep. 3, 1889.	25 "	
White Point	Elisha West.	Jan. 9, 1889.	25 "	
White Waters	C. V. Anthony.	Feb. 14, 1898.	25 "	
<i>New Brunswick.</i>				Total
				3,601 92
Anderson's Hollow	W. C. Anderson.	Feb. 13, 1889.	25 p. c. of collect'ons....	6 12
Black River	Robt. McLeod.	Mar. 28, 1898.	25 "	
Buctouche	J. J. LeBlanc.	May 2, 1892.	25 "	42 48
Campbellton	Alfred J. Venner.	June 10, 1893.	25 "	196 11
Cape Tormentine	E. T. Allen.	Oct. 20, 1897.	25 "	438 41
Clifton, Stonehaven	S. Payne.	Nov. 9, 1894.	25 "	33 05
Dalhousie	W. J. Smith.	June 27, 1891.	25 "	58 59
Edgett's Landing	Thos. Barnett.	July 5, 1895.	25 "	12 79
Gardner's Creek	Robert Wallace.	Dec. 11, 1899.	25 "	
Hopewell Cape	Geo. D. Wilson.	Apr. 10, 1899.	25 "	50 19
Kingston	Jas. Gordon.	" 9, 1898.	25 "	
Neguac	B. Poirier.	June 17, 1897.	25 "	4 31
Quaco	Wellington Vale.	Dec. 19, 1899.	25 "	10 73
St. Louis	C. Frigand.	Oct. 29, 1895.	25 "	
St. Mary's	M. J. S. LeBlanc.	Mar. 1, 1897.	25 "	
Tracadie	Prosper Savoy.	Sep. 23, 1899.	50 "	6 48
<i>Prince Edward Island.</i>				Total
				859 23
Annandale	W. C. Jenkins.	May 4, 1897.	25 p. c. of collections....	41 74
Bay View	Joseph Harrington.	Oct. 2, 1885.	25 "	7 05
Belfast	Thos. McLennan.	July 21, 1890.	25 "	86 82
Brush Wharf	Levi R. Ings.	Sep. 18, 1885.	25 "	109 50
Campbell's Cove	Angus McLntyre.	Oct. 17, 1888.	25 "	
Chapel Point	Roland McCormack.	Sep. 18, 1885.	25 "	11 53
China Point	W. S. N. Crane.	" 18, 1885.	25 "	9 03
Clifton	John Gunn.	May 24, 1900.	25 "	
Cranberry, East River	James Hughes.	Mar. 11, 1898.	25 "	
Crapaud and Victoria Pier ..	E. McKinnon.	July 7, 1897.	25 "	238 77
Georgetown	James Bourke.	" 2, 1885.	25 "	5 98
Haggerty's Wharf	M. Burnett.	Feb. 14, 1898.	25 "	
Hickey's Wharf	Mark Webster.	Oct. 22, 1896.	25 "	12 00
Higgin's Shore	G. G. Henry.	Nov. 9, 1891.	25 "	
Hurd's Point	R. Robblee.	Oct. 6, 1888.	25 "	21 98
Kier's Shore	W. Hodgson.	June 10, 1895.	25 "	74 62
Lambert	Wellington Johnston.	May 3, 1900.	25 "	
Lewis Point	J. G. Scrimigeour.	Oct. 14, 1896.	25 "	
McGee's Wharf	Norman Gallant.	Nov. 9, 1891.	25 "	
Mink River			25 "	
Murray Harbour, North	Jas. P. Clow.	Aug. 25, 1900.	25 "	11 90
Murray Harbour, South	J. McKinnon.	Jan. 27, 1896.	25 "	
Nine Mile Creek	Edward Harrington.	Oct. 29, 1885.	25 "	

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STATEMENT relating to Wharfs, &c.—*Concluded.*

Locality.	Wharfinger.	Date of Appointment of Wharfinger.	Remuneration allowed.	Amount deposited to credit of Receiver General.
<i>Prince Edward Island—Con.</i>				\$ cts.
North Cardigan.	Donald McIntyre ...	July 2, 1885.	25 p. c. of collections....	29 08
Pinette.	A. H. Hubley.	Dec. 18, 1897.	25 "	
Pownal.	M. M. Haley.	Oct. 13, 1896.	25 "	89 73
Red Point.	Arch. Smith.	April 3, 1900.	25 "	
St. Mary's Bay.	John Dickson.	Dec. 10, 1896.	25 "	23 65
South Rustico, Oyster Bed Bridge.	D. Gallant.	Feb. 23, 1895.	25 "	11 98
Stevens and Montague.	Well'gt'n A. Johnston	May 3, 1900.	25 "	44 44
Sturgeon River.	Bernard Kearney ...	Sep. 18, 1885.	25 "	27 44
Tignish.	A. J. Gaudet.	Aug. 28, 1898.	25 "	33 74
Vernon River.	J. G. McKenzie.	Oct. 19, 1885.	25 "	101 02
Wood Island.	Jas. Young.	Apr. 10, 1899.	25 "	17 14
			Total	1,009 14

RECAPITULATION.

	\$ cts.
Ontario.	1,720 81
Quebec.	1,346 58
Nova Scotia.	3,601 92
New Brunswick.	859 23
Prince Edward Island.	1,009 14
Total wharfage dues collected and placed to credit of Receiver General.	8,537 68

ADD—Fees received by undermentioned harbour masters in excess of remuneration allowed :—

Harbour Master—Fort William, Ont.	\$ 94 50
" Midland, Ont.	21 50
" St. Johns, Que.	137 00
" Canso, N. S.	13 00
" International Pier, N.S.	35 00
" Louisburg, N.S.	123 10
" Chatham, N.B.	18 50
" Dalhousie, "	8 92
" Hillsboro' "	82 14
	533 66
Total Revenue from Wharfs and Harbours.	9,071 34

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APPENDIX No. 9.

STATEMENT of Sick Mariners' Dues collected for the fiscal year ended June 30, 1900.

<i>Quebec.</i>	\$ cts.	<i>Nova Scotia—Continued.</i>	\$ cts.
Gaspé	157 17	Liverpool.....	56 62
Montreal	7,702 00	Lockeport.....	19 82
Paspébiac.....	350 04	Lunenburg.....	481 32
Percé.....	77 28	Middleton.....	1 22
Quebec.....	5,986 12	North Sydney.....	1,162 40
Rimouski.....	494 52	Parrsboro'.....	735 24
St. Armand.....	22 78	Pictou.....	461 52
St. Johns.....	1,479 98	Port Hawkesbury.....	140 82
Sorel.....	.....	Port Hood.....	12 02
Stanstead.....	0 33	Shelburne.....	145 20
Three Rivers.....	365 02	Sydney.....	5,428 75
Total.....	16,635 24	Truro.....	3 28
<i>New Brunswick.</i>		Weymouth.....	151 20
Bathurst.....	219 81	Windsor.....	967 02
Chatham.....	1,557 58	Yarmouth.....	604 96
Dalhousie.....	979 76	Total.....	22,625 15
Moncton.....	1,536 76	<i>Prince Edward Island.</i>	
Newcastle.....	827 10	Charlottetown.....	285 00
Newcastle.....	275 90	Summerside.....	77 76
St. John.....	5,753 46	Total.....	362 76
St. Stephen.....	132 58	<i>British Columbia.</i>	
Total.....	11,282 95	Nanaimo.....	3,196 62
<i>Nova Scotia.</i>		New Westminster.....	177 38
Amherst.....	568 36	Vanconver.....	1,549 58
Annapolis.....	283 66	Victoria.....	4,154 44
Arichat.....	50 42	Total.....	9,078 02
Antigonish.....	2 38	Total.....	59,984 12
Baddeck.....	2 88	Less—Refunds.....	12 28
Barrington.....	10 78	Grand Total.....	59,971 84
Canso.....	270 46		
Digby.....	165 62		
Halifax.....	10,754 28		
Kentville.....	144 92		

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APPENDIX No. 10.

REPORT ON LIFE-SAVING STATIONS.

HALIFAX, N.S., October 18, 1900.

To the Deputy Minister
Marine and Fisheries Department,
Ottawa.

Sir, I have the honour to submit my annual report on the Life-Saving Stations in the Maritime Provinces, that at Sable Island excepted, as being now by your instructions under the inspection of Mr. C. A. Hutchins, Superintendent of Lights for this province

INSPECTION OF STATIONS.

The whole of the stations have been visited during the year ending June 30 last, from time to time, and it is most satisfactory to me to be able to state that they have been maintained in excellent and efficient order.

SERVICES AT WRECKS.

The only wreck which occurred was that of the ss. *Portia* in June, 1899. The life boat from Duncan's Cove went off to her assistance, but her services were not required.

SEAL COVE, GRAND MANAN.

The station at Seal Cove, Grand Manan, N.B., has been visited by me recently, and commodious ways constructed of railway rails have been laid down, and other appliances established which render the station one of the most effective in the department.

CLARK'S HARBOUR NEAR CAPE SABLE.

The station at Cape Sable has been abandoned under your instructions, and a new life boat on the Beebe-McClellan model, improved by having lower ends, has been built by Mr. John Morrison of Shelburne, and placed at the station now selected at Clark's Harbour.

Mr. Joseph M. Kenny has been appointed as coxswain with an efficient crew of six active boatmen.

A boat house with all necessary appliances has been placed on the Nova Scotia wharf; and arrangements have been made for the use of one of the local steam tugs, in the event of a wreck, or a vessel in distress, requiring assistance at a distance from the station.

DUNCAN'S COVE, CHEBUCTO HEAD.

At Duncan's Cove, near Chebucto Head, a Lyle gun and beach apparatus, has been placed under the charge of Mr. John Holland the coxswain of the station, and he and his crew have been instructed and drilled in its use.

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ST. PAUL ISLAND, CABOT STRAIT.

This station has also been supplied with a Lyle gun and beach apparatus, and placed in the charge of the superintendent of the island, Mr. S. C. Campbell. That officer and his staff have been instructed and drilled by me in the use of the same.

With this apparatus, and the new life-boat placed at this station last year, Atlantic Cove, on the eastern or Atlantic side of the island, the establishment has been made much more efficient, but I would strongly recommend that a good surf boat with a boat house should be established at Trinity Cove on the western side of the island, as the superintendent, Mr. S. O. Campbell, has reported to me that the fog alarm at Atlantic Cove cannot be at all times with easterly winds heard even at short distances by ships bound down the gulf, owing to the high land above it intercepting the waves of sound in a westerly direction. In consequence several ships have grounded on the western side of the island.

I would also recommend that telephonic communication should be established between the main station at Atlantic Cove, and the S.W. and N.E. lighthouses, to enable the keepers at those points to report to the superintendent any cases of wreck on the western side of the island.

Much loss of valuable time, and possibly life, might be saved by having telephonic communication on the island, instead of the only means at present of giving intelligence by messengers on foot from the lighthouses.

HALIFAX.

A Lyle gun and apparatus has recently been established here, but a cart is required to convey the same to any part of the coast where it may be needed. A volunteer crew should also be formed in connection with it.

REMARKS ON THE LYLE GUN APPARATUS.

A somewhat long experience in command of coast guard stations in England and Scotland, and one of H. M. revenue cruisers in the Berwick District, in my earlier career in the service, gave me certain experience and knowledge respecting life saving duties, and I have always been of the opinion that the weight, and bulky nature of the heavy whip, the hawser, and the breeches buoy, have as a rule rendered the assistance to wrecks much more difficult and tardy than necessary.

The Lyle gun, with the sets of lines and ammunition, or a set of rocket apparatus with 6 rockets, frame, and line, could be easily conveyed by a hand truck or barrow over ordinary tracks by 4 men, while the whole apparatus, needs a cart and horse with say 4 men, or 8 or 10 men without a horse, to take it over made or rough roads.

To obviate this I would most respectfully suggest that parliamentary authority should be obtained to render it obligatory for all ships, steam or sailing, over 100 tons register, to be provided with whips, hawsers and breeches buoys.

Every ship in her ordinary equipment has the gear on board to provide sufficient rope for the whip and hawser.

Of course in the excitement caused by disaster, or in the event of heavy seas breaking over a stranded ship, it might be difficult to splice the running gear or ordinary hawsers with which all vessels are provided, sometimes the latter are only in short lengths, and there should be no objection raised by owners to have two spare coils of rope for life saving purposes.

I think it is unfair to seamen and passengers that owners of ships should not be compelled to do their share of the life saving service, when the Government provide life boats, crews, Lyle guns, carriages and an expensive service, without as in Great Britain a dollar being subscribed by the public or the shipping interest.

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BOATS. REMARKS THEREON.

The Dobbin, the Beebe-McClellan, and in a few instances the ordinary surf boat on fine lines, are in use at the life saving stations in the Maritime Provinces and on the Great Lakes.

The Dobbin Boat.

The Dobbin boat is self-bailing and self-righting with high ends to ensure those qualities.

The cost of one of these boats without gear, such as lines, life-jackets, &c., is about \$575.00.

In light winds and smooth water they pull fast, but in head winds and a heavy sea they are slow ; in a heavy gale on shore they would be unserviceable.

The Beebe-McClellan boat.

The Beebe-McClellan boat not being self-righting, has the bow and stern as in ordinary surf boats, but lately a boat with lower ends has been adopted with great success at the St. Paul and Clarke Harbour Stations.

These boats are lighter, equally effective and cost less than half the Dobbin boats. They have been built by Mr. John Morrison of Shelburne, for \$250 each.

In the United States, with the numerous life-saving stations under the effective superintendence of Sumner Kimball, Esq., General Superintendent at Washington, as a rule the Beebe-McClellan and surf boats are used, for the reason I have given in the above remarks.

I would therefore strongly recommend that the Beebe-McClellan type of boat should be adhered to in the future, and that when expensive or extensive repairs are required to the Dobbin boats, that they should be replaced by the Beebe-McClellan class of boats.

In thus advocating the Beebe-McClellan type of boats in preference to the Dobbin model, I am supported by the valuable and reliable opinion of the General Superintendent of the life-saving service in the United States, Mr. Samuel C. Campbell, the superintendent of St. Paul Island, and the coxswains of the life-saving stations, where the Beebe-McClellan boats are stationed.

I have the honour to remain, sir,

Your obedient servant,

BLOOMFIELD DOUGLAS, R. N. R.

Naval Assistant.

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LIFE SAVING STATIONS MAINTAINED BY THE DOMINION GOVERNMENT.

Number.	Stations.	Established.	Coxswain.	Crew.	Coxswain's Salary.	Per Annum.	Pay of Crew.	Description of Boat.	Cost.	Where Built.	Equipment.	Remarks.
1	Bay of Fundy— Seal Cove.....	1898	F. Benson.....	7	75	\$1.50 per drill and extra when engaged saving life.	Beebe-McLellan surf-boat, self-bailing, 25 feet long.	250	Shelburne, N.S.	Full regulation	Iron rails laid in 1890.	
2	Yarmouth.....	1886	A. Cain.....	7	75	" " "	Dobbin's pattern, self-bailing, and self-righting, 25 feet long.	575	Dartmouth.....	"	"	"
3	Mud Island.....	1887	J. Pitman.....	7	80	" " "	Fishing boats and dories	80 p'r an	.....	Ordinary.....	Kept by contract with fishermen	
4	Seal Island.....	1880	H. Hitchins...	7	250	\$100 each per annum.	Beebe-McLellan boat on east side, surf-boat on west side.	375	Halifax.....	Full regulation	"	"
5	Atlantic Coast— Clark's Harbour ...	1900	J. M. Kenny....	7	75	\$1.50 per drill, extra when saving life.	Beebe-McLellan self-bailing, 25 feet long, low ends.	250	Shelburne, N.S.	"	Boat, horse and gear cost \$700.	
6	Blanche.....	1895	W. A. Smith....	7	75	" " "	Dobbin's pattern, self-righting and bailing, 25 feet long.	575	Dartmouth.....	"	"	"
7	Port Monton.....	1889	J. Frausel.....	7	75	" " "	" " "	575	"	"	"	"
8	Duncan's Cove.....	1886	J. Holland.....	7	75	" " "	" " "	575	"	"	"	Lyle gun established here, 1900.
9	Herring Cove. . . .	1885	P. Gorman.....	7	75	" " "	" " "	575	"	"	"	"
10	Devil's Island	1885	G. de Young....	7	75	" " "	" " "	575	"	"	"	"
11	Halifax	1900	.....	.....	.....	No crew here....	" " "	375	"	Ordinary.....	This is a spare boat which can be used with volunteer crew when required.	
12	White Head.....	1890	H. P. Mumro....	7	75	\$1.50 per drill, extra when saving life.	" " "	575	"	Full regulation	Lyle gun.	
13	Sable Island.....	1885	Supt. Humane Establishment.	Paid as island staff.	Two Dobbin's self-righting and bailing boats and one Beebe-McLellan surf-boat, self-bailing.	1,100	Halifax, N.S.	"	Lyle gun and rocket apparatus kept here.	

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LIFE Saving Stations maintained by the Dominion Government—*Concluded.*

Number.	Stations.	Established.	Coxswain.	Crew.	Coxswain's Salary.	Per Annum.	Pay of Crew.	Description of Boat.	Cost.	Where Built.	Equipment.	Remarks.
14	Atlantic Coast— Scatterie Island	1885	F. Martell	7	75	\$1.50 per drill, extra when sa- ving life.	Dobbin's pattern, 25 feet long, self-righting, and bailing.	500	Dartmouth	Full regulation		
15	Gulf of St. Lawrence— St. Paul's Island	1885	Supt. Humane Establishment.				Paid as staff of Humane Estab- lishment.	250	Shelburne.	Full equipment		Lyle gun added in 1900.
16	Picton Island		Alex. Currie	7	75	\$1.50 per drill, extra when sa- ving life.	Dobbin's pattern, self- righting and bailing, 25 feet long.	575	Dartmouth	"		
17	Cape Tormentine	1893	Not organized crew.				Boats of winter mail ser- vice.			Ordinary		
18	Great Lakes— Wellington	1883	" "				Dobbin's pattern, self- righting and bailing.	750	Buffalo, N.J.	Full equipment		Removed from Poplar Point in 1900.
19	Consecon	1898	W. A. Young	7	75	\$1.50 per drill, extra when sa- ving life.	" "	750	"	"		Removed from Wellington in 1893.
20	Cobourg	1882	D. Rooney	7	75	" "	" "	575	Goderich, Ont. .	"		
21	Port Hope	1889	W. T. Clarke	7	75	" "	" "	620	"	"		
22	Toronto Island	1883	Wm. Ward	7	75	" "	" "	600	"	"		New boat 1895.
23	Port Rowan	1883	R. Clark	7	75	" "	Surf-boat	375	Buffalo, N.Y.	"		To be disconti- nued.
24	Port Stanley	1885	Wm. Berry	7	75	" "	Dobbin's pattern, self- righting and bailing, 25 feet long.	575	Goderich, Ont. .	"		Removed from Pelée Island in 1899.
25	Point Pelee	1900	W. A. Grubb, jr. crew	No yet.			" "	575	"	"		
26	Goderich.	1886	J. R. Craigie	7	75	\$1.50 per drill, extra when sa- ving life.	" "	575	"	"		
27	Collingwood	1885	P. Doherty	7	75	" "	Beebe-McLellan self- bailing surf-boat.	375	Collingwood	"		New boat in 1896.

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APPENDIX No. II.

REPORT OF THE CHAIRMAN OF THE BOARD OF STEAMBOAT
INSPECTION.CHAIRMAN'S OFFICE,
OTTAWA, November, 1900.To the Honourable
SIR LOUIS H. DAVIES,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit the annual report of the Steamboat Inspection service for the fiscal year ended June 30, 1900.

Said report contains the general work of the service during the period mentioned, showing the number of steamers inspected with their gross tonnage, and the amount of tonnage dues and fees collected on account of inspection, also a statement of the board meetings held, and the casualties occurring as reported from the several divisions.

In addition to the steamboats inspected, the hoisting gear and ships tackle of 441 vessels, used for the purpose of loading and unloading those vessels, was inspected by Mr. Louis Arpin, who was appointed principally for that purpose.

A.—NUMBER of steam vessels as reported by the Inspectors of Steamboats in the Dominion, and their gross tonnage, for the year ended June 30, 1900. Also the number of vessels inspected but not registered in the Dominion for same date.

Division.	Total number of Dominion steamers.	Gross tonnage of Dominion steamers.	Number of Steamers inspected but not registered in the Dominion.	Gross tonnage of steamers inspected but not registered in the Dominion.
West Ontario.....	381	72,463·00	23	15,425·00
Kingston.....	180	26,066·17	27	4,800·78
Montreal.....	217	22,656·41	1	3,005·59
Quebec.....	148	36,456·00	Nil	.....
Nova Scotia.....	121	23,860·76	18	21,973·35
New Brunswick and Prince Edward Island.....	132	15,540·57	9	5,604·63
British Columbia and Yukon Territory.....	185	40,382·17	32	37,587·20
Manitoba and North-west Territories.....	127	6,976·27	1	12·00
	1,491	244,401·35	116	88,408·55

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B.—NUMBER of Dominion registered steam vessels inspected and their gross tonnage; with the amount of dues and fees collected on account of Steamboat Inspection, during the year ended June 30, 1900.

Division.	Number of Dominion registered steamers inspected.	Gross tonnage of Dominion registered steamers inspected.	Amount of dues and fees collected on account of steamboat inspection.
West Ontario	309	71,232·00	% cts. 8,238 92
Kingston	170	26,440 10	3,202 95
Montreal	183	20,575·39	2,906 64
Quebec	150	30,702·60	3,784 16
Nova Scotia.....	109	21,435·54	4,171 92
New Brunswick and Prince Edward Island.....	124	14,127·05	2,336 20
British Columbia and Yukon Territory.....	174	30,400·76	7,619 17
Manitoba and North-west Territories.....	86	5,257·80	736 38
Inspecting tow barges.....			200 00
Engineers certificates.....			809 00
	1,305	226,170 64	34,029 34

C.—NUMBER of steam vessels added to the Dominion during the year ended June 30, 1900.

Division.	Number of vessels.	Gross tonnage.	Register tonnage.
West Ontario.....	20	1,167·93	703·54
Kingston	22	2,443 10	1,373 60
Montreal	8	406·69	138 02
Quebec	11	1,265·11	727 94
Nova Scotia.....	6	1,331·87	855 66
New Brunswick and Prince Edward Island.....	2	58·75	41 55
British Columbia and Yukon Territory.....	28	3,764·82	2,295 86
Manitoba and North-west Territories.....	9	505·82	297 81
	106	10,944 09	6,432 98

BOARD MEETINGS.

A meeting of a quorum of the Board of Steamboat Inspection was convened at Toronto, January 18, 1900, being for the purpose of examining candidates for the position of steamboat boiler and machinery inspector, the vacancy existing owing to the retirement from the service of Mr. Jas. Johnston on account of his physical condition, "who was a very efficient officer," and whose retirement was deeply regretted.

The members composing the Board, were Mr. John Dodds of Toronto, Mr. T. P. Thompson of Kingston, with the Chairman E. Adams of Ottawa. Mr. E. W. McKean of Hamilton passing a satisfactory examination, was recommended as qualified for the position, and was appointed thereto by order in council of February 22, 1900, with a salary of \$1,000 per annum.

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On account of the retirement from the service August 17, 1899, of Mr. W. A. Russell, at Vancouver, who held the position Steamboat inspector for British Columbia and Yukon Territory, in order to fill the appointment it was necessary to convene a meeting of the Board of Steamboat Inspection, for the purpose of examining candidates for the position.

The meeting was convened at Vancouver, April 2, 1900, the Board being composed of Mr. J. A. Thomson, and R. Collister of Victoria, B. C., with the Chairman, E. Adams, of Ottawa. Mr. Frank M. Richardson of Vancouver passing a satisfactory examination, was recommended for the position and appointed thereto by order in council of May 30, 1900, with a salary of \$1,200 per annum.

It will be noticed from the foregoing, the incidental changes in the personnel of the staff of steamboat inspectors; and in addition, is to be regretted the demise on June 16, 1900, of Mr. Alex. Horn, hull inspector at Kingston. In the meantime the work of that division has been conducted by Captain M. P. McElhinney, Dominion Hull Inspector at Ottawa, pending the inspection work of steamers permitting a meeting of the Board of Steamboat Inspection, for the examination of candidates for the position.

PROSECUTIONS WITH PENALTIES ENFORCED FOR VIOLATION OF THE STEAMBOAT
INSPECTION ACT.

September 12, 1899.—Steamer *Oscar* of Victoria, B.C., certificated as a freight boat, was reported to the collector of customs at Victoria, as having violated the law by carrying passengers; he investigated the matter which was proven as an infraction of section 42 of the Steamboat Inspection Act, and on communication with the Department of Marine, was advised to impose penalty amounting to \$101, which was paid by the owners, together with costs \$2.85, and was forwarded to the department by letter of September 15, 1899, with bank receipt for the amount of penalty inflicted.

October 23, 1899.—Steamer *Hudson* of Ottawa, was reported to the department as being engaged in carrying passengers without having a certificated captain or engineer on board. On communicating with the owners they acknowledged the charge, explaining the conditions under which it occurred, and pleading for leniency not wishing to be prosecuted for the infraction.

On consideration of the facts, they were informed by the department, if a sum of \$25 was deposited to the credit of the Receiver General on account of infraction of the laws, proceedings would not be taken, provided that the laws were immediately complied with, or stop running, to which the owners complied, by sending to the department with letter of November 5, 1899, the sum of \$25 and advising they had stopped running until the law could be complied with.

November 1, 1899.—Complaint was received by the department that the tug *Alfred Morell* of Owen Sound, had, on October 5, carried passengers from Parry Sound to Sturgeon Bay, not holding a passenger certificate for that purpose.

Proceedings were taken to inflict the penalty for so doing, and also, the penalty for not delivering to the collector of customs, a duplicate of the vessel's certificate of inspection.

The case was tried before the magistrate at Parry Sound, December 28, 1899; for neglect to file the certificate the defendant was found guilty, and minimum fine imposed. The witnesses not being forthcoming for the offence of carrying passengers when case was called, the magistrate dismissed the case against the defendants.

An appeal was made from the magistrate's dismissal of the case, which came up for hearing at the quarter sessions, February 6, 1900; the result of the appeal the magistrate's dismissal was set aside, and the defendant fined \$100 and costs.

The defendant also appealed to same court from the conviction for neglect to file the certificate which came on for hearing; when the appeal was dismissed and the conviction sustained.

May 10, 1900.—The department was informed by telegram from collector of customs at Victoria, that the owners of the steamer *J. L. Card* had violated the Steamboat

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Inspection Act by carrying passengers, she not having at the time a passenger license, which was admitted by the owners and master, submitting to penalty to be imposed by the Honourable Minister of Marine and Fisheries.

He was advised to impose a nominal fine of \$100 which was paid by the master of the steamer, and a bank receipt for same was forwarded to the department by letter of May 14, 1900.

CASUALTIES.

The following are the casualties reported from the several divisions as having occurred, for the fiscal year ending June 30, 1900.

West Ontario Division.

August 6, 1899—The G.T.R. car-ferry *Lansdowne* plying between Windsor and Detroit, Mich., collided with the U.S. steamer *H. B. Morley*; the *Morley* sank in mid-stream and the *Lansdowne* sank at the wharf; both vessels were raised and repaired.

August 10, 1899—In a dense fog, the steamer *Ontario* of Sarnia went ashore near Rossport on Lake Superior, the steamer went to pieces, and the boilers and machinery are being removed.

August 26, 1899—Steamer *Sir S. L. Tilley* of St. Catharines was burned near Fairport, Lake Erie; was afterwards repaired, and she is now named the *Advance* of Toronto.

October 18, 1899—The tug *Frank Reid* of Owen Sound ran ashore on Barrie Island, North Channel of Lake Huron, and became a total loss, the boiler and machinery being removed.

November 25, 1899—Steamer *Imperial* of Windsor was partially destroyed by fire at Amherstburg, Ont. Cause of fire unknown.

December 5, 1899—Steamer *Niagara* of St. Catharines on a voyage loaded with shingles from Parry Sound, Ont., for Tonawanda, N. Y., foundered near Long Point, Lake Erie. All the crew were lost.

December 14, 1899—Steamer *Erastus Wiman* of Toronto while lying at the wharf at Huntsville was totally destroyed by fire; the fire extended to the steamer *Sylvester* of Toronto, which was also totally destroyed. Cause of fire unknown.

Kingston Division.

May 5, 1899—Steamer *Mary Louise* at Lindsay whilst lying at her dock was partially destroyed by fire. Cause unknown.

August 4, 1899—At Stony Lake steam yacht *Tramp* was completely destroyed by fire. Cause unknown.

July, 1899—Steamer *Argyle* of Picton while on a voyage from Toronto, Ont., to Charlotte, N. Y., broke the cross-head of the engine, just outside of Charlotte; was towed into the harbour where repairs were made.

August 4, 1899—Steam yacht *Miltonia* whilst lying in her boat house at Milton Island was completely destroyed by fire. Cause unknown.

Montreal Division.

September 19, 1899—Steamer *Garnet* of Cornwall while leaving Lachine, broke her port shaft, was towed down the canal to Montreal, where replaced by a new one.

September 21, 1899—Steamer *Princess Louise* of Kingston while moored to the wharf at Noyan, caught fire and burnt, becoming a total loss. Cause of fire unknown.

May 17, 1900—Steamer *Paul Smith* of Montreal while fitting out in the canal at Lachine, was burnt during the night. Cause of fire unknown.

May 20, 1900—The tug *Kate* of Quebec while going into Ogdensburg Harbour broke her crank shaft. Cause, a flaw in the metal.

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Quebec Division.

August 27, 1899—The ferry steamer *Orleans* when nearing the wharf at Island of Orleans, touched a rock and broke one blade of her propeller; no other damage.

October 20, 1899—Steam tug *Daisy* of Quebec while lying at her wharf took on fire and was totally destroyed.

July 7, 1900—Steamer *Spartan* on coming down Lachine rapids in a storm got unmanageable and ran on a shoal, no damage was done, nor was there any fatalities.

Nova Scotia Division.

September 10, 1899—Steamer *Delta* of Halifax while on a voyage from Sydney to St. John's, Newfoundland, struck a sunken rock near Cape Race, and became a total loss. No loss of life.

January 9, 1900—Steamer *Rimouski* of Ottawa, on a voyage from St. John's, Newfoundland, to Halifax, ran aground near Lunenburg, N.S., and became a total loss. No loss of life.

New Brunswick and Prince Edward Island Division.

No casualties have occurred.

Manitoba and North-west Territories.

Steamer *Red River* of Winnipeg, while on a voyage from Selkirk to Norway House encountered a heavy gale on Lake Winnipeg, and sprang a leak, was towed by steamer *Lady of the Lake* to Georges Island Harbour, and grounded, where she still lies, is not yet known the amount of loss, or if total.

British Columbia Division.

July 12, 1899.—The passenger and freight stern-wheel steamer *Nahleen* of Victoria while fitting out for service on the Yukon River, was destroyed by fire during the night. A total loss. Cause of fire unknown.

September 16, 1899.—Steamer *Barbara Boscowitz* while loading at wharf on Skeena River, at falling tide caught on submerged ice breaker, careened over and filled; when tide came up was discharged and floated, and brought to Victoria where hauled out on marine ways. Damage: several planks, with portion of the keel carried away and vessel twisted two feet six inches, which was thoroughly repaired.

October 5, 1899.—Steamer *Tees* of Victoria on a voyage from Skagway to Victoria, struck on Eldred rock, Lyn Canal. The steamer having a double bottom was brought to Victoria and hauled out on marine slip; damage, several plates and frames broken, which were renewed and vessel put in thorough repair.

January 4, 1900.—Steam tug *Kaslo* laid up at Nelson, Kootenay Lake, no one known to be on board; caught fire, burning all deck-houses and one side of hull, machinery saved, the rest a total loss.

May 25, 1900.—Steamer *Danube* of Victoria, starting on a voyage to Skagway, stranded on Otter rock in Victoria Harbour, owing to the night being very dark, with dirty weather; the cargo was removed, vessel floated, and hauled out on marine ways; damage, four plates fractured, which were removed and vessel placed in thorough repair.

June 1, 1900.—Steamer *Trail* laid up at Robson, Columbia river, caught fire during the night, from spontaneous combustion of jute bagging, used to wipe up some paint oil and turpentine that had been spilled on deck; burned all above the main deck, and some of her deck beams and timbers; may save boilers, the rest a total loss.

I am, sir,

Your obedient servant,

EDWARD ADAMS,

Chairman, Board of Steamboat Inspection

STEAM Vessels Inspected for the Year ended June 30, 1900.

WEST ONTARIO DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900.		\$ cts.	
International.....		Not issued	851	76 08	Twin screw, Sarnia and Port Huron.
Hiawatha.....	300	July 3..	163	21 04	Screw, St. Clair River.
J. C. Clark.....	283	" 4..	145	19 60	" "
Despatch.....	Fish'g tug.	" 4..	33	7 64	" Lake Huron.
John Lee, Sr.....	300	" 4..	88	12 04	" St. Clair River.
City of Dresden.....	100	" 5..	194	23 52	" Lake Erie.
Energy.....	Freight...	" 6..	116	14 28	" "
Scotia.....	40	" 6..	13	6 04	" Amherstburg and Bois Blanc Is'd.
Ripple.....	Tug.....	" 10..	5	5 40	" Georgian Bay.
*Nautilus.....	"	" 17..	9	11 44	" Welland Canal.
Osprey.....	Fish'g tug.	" 18..	6	5 48	" Lake Erie.
Eleanor.....	"	" 18..	26	7 60	" "
*Wm. Wilson.....	"	" 18..	12	11 92	" "
Hazard.....	"	" 19..	34	7 72	" "
Lena.....	Yacht	Not issued	14	6 12	" Long Point Bay.
Ivey, Alderson.....	Fish'g tug.	July 19..	39	8 12	" "
Ella.....	Yacht	Not issued	15	6 20	" "
Majestic.....	400	July 22..	275	30 00	" Montreal and Burlington, Vt.
Germanic.....	500	April 26..	1014	89 12	" Collingwood and Sault St. Marie.
Gilphie.....	Yacht	Aug. 1..	19	6 52	" Lake Huron.
Daisie.....	Tug.....	" 1..	11	5 88	" "
Winnie.....	Yacht	" 2..	14	6 12	" "
Sea Shell.....	Tug.....	" 2..	7	5 56	" "
A. Chambers.....	Fish'g tug.	" 2..	23	6 84	" "
Welcome.....	"	" 2..	21	6 68	" "
Mary Arnott.....	Tug.....	" 3..	8	5 64	" "
Earl.....	Fish'g tug.	" 3..	18	6 44	" "
Frank G. McAulay.....	"	" 3..	43	8 44	" "
John Logie.....	"	" 3..	29	7 32	" "
C. M. Bowman.....	Tug.....	" 4..	88	12 04	" "
Phenix.....	"	" 4..	37	7 96	" "
Snowstorm.....	Fish'g tug.	" 16..	17	6 36	" Lake Erie.
Uncle Tom.....	"	" 17..	8	5 72	" "
Enterprise.....	"	" 17..	18	6 44	" "
Belle.....	"	" 18..	16	6 28	" "
Swan.....	"	" 18..	14	6 12	" "
A. V. Crawford.....	Tug.....	" 18..	51	9 08	" "
Ida Bell.....	Fish'g tug.	" 18..	6	5 48	" "
W. M. German.....	"	July 17..	28	7 24	" "
Mayflower.....	27	Sept. 4..	26	7 08	" Waubausheue & Point aux Barils.
Home Rule.....	Yacht	" 4..	3	5 24	" Muskoka Mills and vicinity.
Stiletto.....	30	" 5..	14	6 12	" Waubansheue and Moose Point.
Gertie C.....	Tug.....	Not issued	15	6 20	" Georgian Bay.
Waubausheue.....	"	Sept. 5..	97	12 76	" "
J. C. Else.....	"	" 5..	33	7 64	" Paddle
Sweet Mary.....	"	" 6..	13	6 04	" Screw
Beaver.....	"	Not issued	29		" "
Margherita.....	Yacht		31		" "
Great Western.....	200	Sept. 22..	1080	94 40	" Paddle, Windsor and Detroit.
Lansdowne.....	209	" 25..	1571	133 68	" "
Ranger.....	Fish'g tug.	" 26..	8	5 64	" Screw, Detroit River.
Monarch.....	330	" 20..	2017	163 36	" Windsor and Daluth..
Wilhe Seigel.....	Tug.....	Oct. 6..	22	6 76	" Wallaceburg and vicinity.
Ripple.....	"	" 6..	15	6 20	" "
Harry Sewell.....	"	" 6..	25	7 00	" "
Nina.....	"	" 7..	11	5 88	" "
Ariadne.....	"	" 7..	38	8 04	" "
City of Mt. Clemens.....	Freight ..	" 7..	162	13 16	" "
Frankie.....	Yacht.....	" 7..	24	6 92	" "

* Dues and fees for 1898 and 1899.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected, &c.—West Ontario Division—Continued.

BOILERS AND MACHINERY—Continued.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900.		\$ cts.	
Hattie Vinton.....	Tug.....	Oct. 14..	55	9 40	Screw, Soo and vicinity.
Siesta.....	Yacht.....	Not issued	99	.....	" "
W. A. Rooth.....	Tug.....	Oct. 16..	52	9 16	" "
Island Belle.....	Tug.....	Not issued	31	7 48	" Soo and vicinity.
Philadelphia.....	32.....	Oct. 17..	148	19 84	" Montreal and Duluth.
Susan C. Doty.....	Fish'g tug.	" 17..	26	7 08	" Soo and vicinity.
Camilla.....	100.....	" 18..	54	9 32	" Pointe aux Pins and Thessalon.
Bertha Endress.....	.....	Not issued	32	7 56	" Michipicoten Harbour.
R. A. McLean.....	Tug.....	Oct. 21..	30	7 40	" Soo and vicinity.
Minnie M.....	.....	Not issued	448	43 84	" "
Jas. McKeon.....	Tug.....	Oct. 24..	36	7 88	" Thessalon and vicinity.
Edgar P. Sawyer.....	".....	" 24..	52	9 16	" "
Alpha.....	".....	" 24..	34	7 72	" "
Stella.....	Fish'g tug.	" 26..	16	6 28	" Spanish River and vicinity.
P. S. Heisordt.....	Tug.....	" 26..	45	9 50	" " "
Fanny Arnold.....	25.....	" 26..	73	12 30	" Soo and Killarney,
Surprise.....	Fish'g tug.	" 27..	19	6 52	" " vicinity.
Scotch Thistle.....	30.....	" 27..	17	6 36	" Killarney and Algoma Mills.
John J. Long.....	65.....	" 27..	201	24 08	" Georgian Bay & Lake Huron ports.
Maggie May.....	40.....	" 28..	46	8 68	" Killarney and Thessalon.
Evangeline.....	Yacht.....	" 28..	24	6 92	" Little Current and vicinity.
Georgia.....	Fish'g tug.	" 28..	28	7 24	" " "
Edwd. Blake.....	Tug.....	" 28..	22	6 76	" " "
Uncle Jim.....	Fish'g tug.	" 28..	11	5 88	" " "
Ethel.....	".....	" 28..	13	6 04	" " "
Creole.....	Tug.....	" 30..	21	6 68	" " "
Gertrude A. Ranney.....	Fish'g tug.	" 30..	14	6 12	" " "
John Harrison.....	Tug.....	" 30..	44	8 52	" " "
Helen S.....	.....	Not issued	86	11 88	" " "
Gordon Gauthier.....	Fish'g tug.	Oct. 16..	26	7 08	" Lake Superior.
Annie Clark.....	".....	" 16..	51	9 08	" " "
Genl. Weitzel.....	Tug.....	" 20..	32	7 56	" Soo and vicinity.
*Elite.....	10.....	Nov. 11..	22	13 52	" Cockburn Island and Killarney.
Huron.....	245.....	Sept. 25..	1,052	92 16	Twin screw, Windsor and Detroit.
Lakeside... {Coasting	524.....	Nov. 29..	348	35 84	Screw, Lake Ontario.
{Lake	349.....				
		1901.			
Michigan.....	500.....	Mar. 20..	1,730	146 40	Paddle, Windsor and Detroit.
Ontario.....	500.....	" 20..	1,615	137 20	" " "
Charlton.....	Tug.....	April 11..	389	36 12	Screw, Lakes.
Danl. Lamb.....	Dredge.....	" 14..	253	25 24	Toronto Bay.
Cuba.....	109.....	" 14..	931	82 48	Screw, Montreal and Toledo.
Melbonrue.....	120.....	" 14..	894	79 52	" " "
Macassa.....	616.....	" 16..	459	44 72	Twin screw, Hamilton and Toronto.
Arabian.....	13.....	" 17..	1,073	93 84	Screw, Quebec and Montreal.
Lake Michigan.....	12.....	" 17..	573	53 84	" Montreal
Albert Wright.....	13.....	" 20..	29	7 32	" Little Current and Thessalon.
Ocean.....	125.....	" 21..	684	62 72	" Montreal and Sarnia.
Minnie M. {Coasting	561.....	" 23..	613	57 04	" Soo and vicinity.
{Lake	466.....				
Persia.....	150.....	" 25..	757	68 56	" Montreal and Hamilton.
Lincoln... {Coasting	498.....	" 25..	337	34 96	" Toronto and St. Catharines.
{Lake	330.....				
Jas. Norris.....	Tug.....	" 26..	50	9 00	" Soo and vicinity.
Augusta.....	".....	" 26..	57	9 56	" Welland Canal.
Heward McMaugh.....	".....	" 26..	42	8 36	" " "
*Jessie L. McEdwards.	".....	" 27..	21	13 36	" " "

*Dues and fees for 1899 and 1900.

64 VICTORIA, A. 1901

STEAM Vessels Inspected, &c.—West Ontario Division—Continued.

BOILERS AND MACHINERY.—Continued.

Name of Vessel.	Numbers of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901.		\$ cts.	
Garden City	{ Coasting 733. } { Lake 500. }	April 27. . .	637	59 04	Paddle, Lake Ontario.
Lillie Smith	Freight	" 30.	275	27 00	Screw, Montreal and Duluth.
United Empire	295.	" 30.	1,961	164 88	" Windsor "
Monarch	330.	" 30.	2,917	169 36	" " "
Saginaw	Tug.	May 1.	357	33 56	" Lakes. "
Wales	"	" 1.	350	33 00	" " "
Onaping	"	" 1.	256	25 48	" " "
Juno	Freight.	" 1.	288	23 04	" Montreal and Duluth.
Home Rule	Tug.	" 1.	81	11 48	" Lakes.
Dominion	Freight.	" 2.	478	43 24	" Duluth and Prescott.
Imperial	220.	" 2.	150	20 00	" Sarnia and Sandusky.
Lurline	Yacht.	" 2.	66	10 28	" Lakes.
Mayflower	900.	" 4.	189	23 12	Paddle, Toronto Bay.
Shamrock	383.	" 4.	154	20 32	" " "
Primrose	900.	" 4.	189	23 12	" " "
Arlington	100.	" 4.	23	6 84	Screw.
D. R. Van Allan	Freight	" 5.	318	30 44	" Duluth and Montreal.
Clark Bros.	40.	" 7.	33	7 64	" Toronto Bay.
Toronto	1000.	" 8.	2779	230 32	Paddle, Toronto and Prescott.
A. J. Tymon	300.	" 9.	194	23 52	Screw, Lake Ontario.
Mary R.	Tug.	" 10.	44	8 52	" Welland Canal.
Escort	"	" 10.	40	8 20	" " "
Inez	"	" 10.	59	9 72	" " "
A. D. Cross	"	" 11.	47	8 76	" " "
Golden City	"	" 11.	35	7 80	" " "
Chas. E. Armstrong	"	" 12.	49	8 92	" " "
Ella Taylor	"	" 12.	34	7 72	" " "
M. R. Mitchell	"	" 12.	40	8 20	" " "
Nellie Bly	Fish'g tug	" 12.	13	6 04	" Lake Ontario.
Acacia	200.	" 15.	107	16 54	" Burlington Bay.
Modjeska	801.	" 15.	678	62 24	Twin screw, Hamilton and Toronto.
Owen	Freight	" 16.	103	13 24	Screw, Chatham and vicinity.
City of Chatham	580.	" 17.	341	35 28	" " and Detroit.
White Star	{ Coasting 705. } { Lake 470. }	" 22.	451	44 08	Paddle, Lake Ontario.
		1900.			
S. Kneeland	Tug.	Dec. 31. . .	46	8 68	Screw, Toronto Bay.
		1901.			
Pittsburg	500.	June 9. . . .	1349	115 92	Paddle, Soo to Cleveland.
*Evelyn	Fish'g tug	" 11.	32	15 12	Screw, Lake Huron.
*Huron	Tug.	" 12.	55	18 80	" " "
John R. Arnoldi	Dredge.	Not issued	116	14 28	Goderich Harbor.
*Geo. Swann	Fish'g tug	June 13 . . .	18	12 88	Screw, Lake Huron.
Maid of the Mist	80.	" 20.	62	9 96	" Niagara River.
Union	300.	" 20.	267	29 36	Paddle, Fort Erie to Buffalo.
Hope	300.	" 21.	170	21 60	Screw " "
Glenora	Fish'g tug.	Not issued	17	6 36	" Lake Erie.
Adrelexa	"	"	15	"	" " "
Abino	40.	June 27. . .	8	5 64	" Niagara River.
Morning Star	Tug.	" 29.	5	5 40	" Toronto Bay.
M. A. Bennet	"	" 29.	34	7 72	" " "
St. Andrew	10.	" 3.	1113	97 04	" Prescott and Duluth.
Total			38660	4011 42	

JOHN DODDS,
Toronto.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected for the Year ended June 30, 1900.

WEST ONTARIO DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900.		\$ cts.	
Ontario.....	Tug.....	July 11...	11	5 88	Screw, Muskoka Lakes.
Bertha May.....	".....	" 11...	20	6 60	" "
Rosseau.....	".....	" 12...	53	9 24	" "
Flyer.....	17.....	" 12...	4	5 32	" "
Onagonah.....	20.....	" 13...	19	6 52	" "
Naiad.....	Yacht.....	" 13...	29	7 32	" "
Maple Leaf.....	".....	" 13...	12	5 96	" "
Ethel May.....	".....	" 14...	13	6 04	" "
Wapenae.....	".....	" 14...	5	5 40	" "
Wanda.....	".....	" 15...	12	5 96	" "
Secret.....	".....	" 15...	9	5 72	" "
Jennie Wilson.....	Tug.....	" 15...	7	5 56	" "
Nymoca.....	40.....	" 17...	25	7 00	" "
Lake Joseph.....	Tug.....	" 17...	28	7 24	" "
Wawonaissa.....	Yacht.....	" 17...	7	5 56	" "
Southwood.....	Tug.....	" 18...	19	6 52	" "
Kate Murray.....	".....	" 18...	3	5 24	" "
Gem.....	40.....	" 20...	9	5 72	Screw, Lakes at Huntsville.
Erastus Wiman.....	Tug.....	" 20...	54	9 32	" "
Lady of the Lakes.....	".....	" 21...	10	5 80	Screw, Lake of Bays.
Mary Louise.....	40.....	" 21...	64	10 12	" Portage Lake.
Florence.....	Tug.....	" 21...	27	7 16	" Lake of Bays.
Equal Rights.....	Yacht.....	" 21...	6	5 48	" "
Empress Victoria.....	100.....	" 22...	106	16 48	" Lakes at Huntsville.
Sylvester.....	Tug.....	" 22...	27	7 16	" "
Conqueror.....	40.....	Aug. 15...	25	7 00	" Lakes Simcoe and Couchiching.
Enterprise.....	305.....	" 15...	148	19 84	" " "
Annie C. Hill.....	Yacht.....	" 16...	14	6 12	" " "
Queen.....	".....	Not issued	7	.....	" " "
*Minota.....	".....	Aug. 17...	29	14 64	" " "
Agnes.....	25.....	" 17...	14	6 12	" Roaches Point to Belle Ewart.
Chub.....	Freight.....	Sept. 23...	57	9 56	" Lake Ontario.
Total.....			873	237 60	

*Dues and fees for 1898-99.

JAS. JOHNSTON,
Steamboat Inspector.

64 VICTORIA, A. 1901

STEAM Vessels Inspected, &c.—West Ontario Division.—Continued.

BOILERS AND MACHINERY.—Continued.

Name of Vessels.	Number of Passengers allowed.	Date Certificate Expire.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901.		\$ cts.	
Ada Alice.....	125.....	April 5.....	60	9 80	Screw, Toronto Bay.
Algonquin.....	10.....	" 18.....	1,806	152 48	" Prescott and Duluth.
Rosedale.....	10.....	" 18.....	1,507	128 56	" " "
Minitaga.....	Tug.....	" 20.....	73	10 84	" The Lakes.
Seguin.....	20.....	" 20.....	818	73 44	" Prescott and Duluth.
Magnolia.....	Tug.....	" 20.....	367	34 36	" The Lakes.
Metamora.....	".....	" 20.....	239	24 12	" " "
D. L. White.....	".....	Not issued	56	9 48	" " "
Telegram.....	200.....	".....	198	23 84	" Lake Superior.
Bob Foote.....	Fish tug.....	April 21.....	39	8 12	" Georgian Bay.
Dalton McCarthy.....	".....	" 21.....	54	9 32	" " "
John J. Long.....	65.....	" 21.....	201	24 08	" Georgian Bay and Lake Huron.
Hugh S.....	Fish tug.....	" 21.....	24	6 92	" Georgian Bay.
Orcadia.....	".....	" 21.....	26	7 08	" " "
Saucy Jim.....	Tug.....	" 23.....	93	12 44	" " "
Severn.....	".....	" 23.....	44	8 52	" " "
Dredge Dalt. McCarthy	".....	Not registered.			
Lillie (of Hamilton).....	Tug.....	April 23.....	50	9 00	" " "
City of Toronto.....	400.....	" 23.....	782	70 56	Paddle, " " "
Atlantic.....	300.....	" 23.....	683	62 64	Screw, Collingwood & Sault Ste. Marie.
Majestic.....	763.....	" 24.....	1,578	134 24	" Collingwood and Duluth.
City of Collingwood.....	407.....	" 24.....	1,387	118 96	" " "
City of Midland.....	375.....	" 24.....	974	85 92	" Ports on all the Lakes.
City of Parry Sound.....	280.....	" 24.....	491	47 28	" Collingwood & Sault Ste. Marie.
Germanic.....	500.....	" 24.....	1,014	89 12	" Ports on all the Lakes.
Britannic.....	277.....	" 24.....	428	42 24	Paddle, Collingwood & Sault Ste. Marie.
Alberta.....	500.....	" 24.....	2,282	190 56	Screw, Owen Sound and Fort William.
Athabasca.....	500.....	" 26.....	2,269	189 52	" " " " "
Manitoba.....	500.....	" 26.....	2,616	217 28	" " " " "
Erin.....	Freight.....	" 25.....	651	57 08	" Ports on all the Lakes.
Amenia.....	".....	" 26.....	624	54 92	" " " "
Agnes.....	Tug.....	" 26.....	23	6 84	" Georgian Bay.
Heather, Beil.....	Fish tug.....	" 26.....	20	5 60	" " "
Dolphin.....	Tug.....	" 27.....	24	6 92	" " "
Thomas Maitland.....	".....	" 27.....	107	13 48	" " "
Dredge No. 9.....	Dredge.....	" 27.....	187	19 96	Dredge, " " "
Island Queen.....	140.....	" 28.....	23	6 84	Screw, Toronto Bay.
Chicora.....	872.....	May 1.....	931	82 48	Paddle, Lake Ontario.
Ongiara.....	244.....	" 1.....	98	12 84	Screw, Lewiston, Queenston & Niagara on Lake.
Corona.....	1456.....	" 1.....	1,274	109 92	Paddle, Lake Ontario.
C. W. Chamberlain.....	Freight.....	" 2.....	385	35 80	Screw, Ports on all the Lakes.
Shawenaga.....	Tug.....	" 2.....	96	12 68	" Georgian Bay.
Fred Davidson.....	".....	" 2.....	43	8 44	" " "
Roy.....	Yacht.....	" 2.....	6	5 50	" " "
Masonic.....	".....	Not issued	39	8 12	" " "
Lillie (of Toronto).....	Tug.....	May 3.....	22	6 76	" " "
Superior.....	".....	" 3.....	89	12 12	" The Lakes.
Waubauskene.....	".....	" 4.....	97	12 76	" Georgian Bay.
J. C. Else.....	".....	" 4.....	33	7 64	Paddle, Waubauskene and Port Severn.
Mayflower.....	27.....	" 4.....	26	7 08	Screw, Waubauskene and Pt.-aux-Baril.
Gertie C.....	Tug.....	Not issued	15	6 20	" Georgian Bay.
Voyageur.....	".....	May 4.....	44	8 52	" " "
Rover.....	".....	" 4.....	51	9 08	" " "
*Siesta.....	Yacht.....	" 7.....	3	10 48	" Muskoka Lake.
Chippewa.....	2000.....	" 9.....	1,514	129 12	Paddle, Lake Ontario.
B. M. Fraser.....	Tug.....	" 10.....	50	9 00	Screw, Georgian Bay.
Luella.....	125.....	" 11.....	38	8 04	" Toronto Bay.
Cleopatra.....	Yacht.....	" 14.....	104	13 32	" Ports on all the Lake.
Hiawatha.....	".....	" 15.....	46	8 68	" Toronto Bay.

* Dues and fees for 1899 & 1900.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected, &c.—West Ontario Division—*Concluded.*

BOILERS AND MACHINERY—*Concluded.*

Name of Vessel.	Number of passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where Employed.
				1900.	
Constance		Not issued	52	9 16	Screw, Muskoka Lakes.
J. V. O'Brien		" "	59	9 72	" Georgian Bay.
Annie, M.	Tug.	May 21..	33	7 64	" " "
Clinton	Freight.	Dec. 31..	430	39 40	" Montreal and Duluth.
				\$	cts.
				1901.	
Cambria	{ Lake Coasting } 400.....	May 23..	937	82 96	Paddle, Lake Ontario.
Thistle	345.....	" 26..	78	11 24	" Toronto Bay.
*Signal	Tug.....	" 29..	94	37 56	Screw, Ports on all the Lakes.
† W. E. Gladstone	" " 29..	" 29..	59	19 44	" " "
Joe. Milton	200.....	" 30..	93	12 52	" Georgian Bay and Lake Huron.
J. H. Jones	35.....	" 31..	152	20 24	" " "
Port Elgin Queen	Tug.....	" 31..	37	7 96	" Georgian Bay.
Oriole		Not issued	75	11 00	" Muskoka Lakes.
Medora		" "	299	31 92	" " "
Nipissing		" "	275	30 00	Paddle " "
Priscilla	Yacht.	June 13..	20	6 60	Screw " "
Kenozha		Not issued	225	26 00	" " "
Muskoka		" "	197	23 76	" " "
Bertha May	Tug.....	June 13..	20	6 60	" " "
Comet	" "	Not issued	20	" "	" " "
Mink	" "	" "	56	9 48	" " "
Ahmic	" "	" "	43	8 44	" " "
Charlie M.	" "	" "	50	9 00	" " "
Queen of the Isles	Tug.....	June 15..	40	8 20	" " "
Nymoca		Not issued	25	7 00	" " "
Gypsy	Tug.....	June 16..	20	6 60	" " "
Lorna Doone	40.....	" 18..	26	7 08	" Point aux Baril and Moose Point.
Geraldine	40.....	" 18..	65	10 28	" Penetanguishene and Pt. aux Baril.
Marie	Tug.....	" 18..	12	6 04	" Georgian Bay.
Carlton	" "	" 18..	8	5 72	" " "
Bertha	36.....	" 19..	18	6 44	" Point aux Baril and Moose Point.
Alfred Morrell	Tug.....	" 19..	40	8 76	" Georgian Bay.
W. S. Oldfield	" "	" 19..	15	6 20	" " "
Emma	150.....	" 19..	75	11 00	" Penetanguishene and Pt. aux Baril.
Edna	122.....	" 20..	55	9 40	" " "
Herold Gauthier	Fish'g tug	" 20..	9	5 72	" Georgian Bay.
Wanita		Not issued	44	8 52	" Magnetawan River.
Wenonah		" "	161	20 88	" and paddle, Burks Falls and Ahmic Harbor.
Glenrosa	Tug.....	June 22..	63	10 04	Screw, Burks Falls and Ahmic Harbour.
Emulator	" "	" 22..	25	7 00	" " "
Van Woodland	102.....	" 23..	37	7 95	" Lakes Simcoe and Couchiching.
Ladysmith	26.....	" 23..	6	5 48	" " "
Longford	150.....	" 25..	53	9 24	" Barrie and Orillia.
Lorna Doone	Yacht	" 25..	5	5 40	" Lakes Simcoe and Couchiching.
United Lumbermen	Freight..	" 25..	399	36 92	" Montreal and Duluth.
Harney Neelon	Tug.....	" 25..	63	10 20	" Georgian Bay.
Sea Gull	" "	" 25..	9	5 72	" " "
† Beaver		Not issued	29	14 64	" " "
City Queen	180.....	June 26..	69	10 52	" Penetanguishene and Pt. aux Baril.
Stiletto	30.....	" 26..	14	6 12	" Waubauskene and Moose Point.
Home Rule	Yacht..	" 26..	3	5 24	" Penetanguishene and Moose Point.
Lillie May	Tug.....	" 26..	10	5 80	" Georgian Bay.
John Lee, sr.	{ Lake Coasting } 200.....	" 27..	88	12 04	" " "
Mizpah	Yacht..	" 27..	18	6 44	" " "
Maud	40.....	" 27..	40	8 20	" Penetang. and Pt. aux Baril, inside.
Mabel G.	Yacht..	" 27..	10	5 80	" Georgian Bay.
Dorothe	" "	" 28..	8	5 64	" " "
Topsy	20.....	" 28..	9	5 72	" Penetang. Bay, inside of Island.
Total			31,699	3,230 54	

64 VICTORIA, A. 1901

STEAM Vessels Inspected in Canada but registered elsewhere, for the year ended
June 30, 1900.

WEST ONTARIO DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900		\$ cts.	
Penns'vania { Coasting Lake... }	1,000 711 }	June 21..	747	67 76	Paddle, Ogdensburg to Duluth.
Chenango No. 1.....		Not issued	1,942		Twin screw, Lake Erie.
Transfer.....	233	Sept. 15..	1,511	128 88	Paddle, Windsor and Detroit.
Michigan Central.....	300	" 18..	1,522	129 76	" " "
Transport.....	256	" 20..	1,595	135 60	" " "
Wyandotte.....	904	" 20..	320	33 60	Screw, Detroit River.
Fortune.....	427	" 22..	200	24 00	" Windsor and Detroit.
Ariel.....	226	" 23..	202	24 16	" " "
Victoria.....	182	" 25..	192	23 36	" " "
Niagara.....	150	" 30..	214	25 12	" Buffalo and Fort Erie.
Grace Dormer.....	162	Oct. 3..	66	7 28	" Sarnia and Port Huron.
Omar D. Conger.....	398	" 4..	347	35 76	" Detroit and St. Clair rivers.
Welcome.....	266	" 6..	213	25 04	" Port Huron and Detroit.
Mascotte.....	498	" 17..	162	20 96	Twin screw, Pt. Iroquois and Thessalon.
International.....	380	" 21..	144	19 52	Screw, Bay Mills and Thessalon.
City of Green Bay.....	84	" 24..	257	28 56	" Sault St. Marie and Michipicoten Island.
		1901			
Tashmoo.....	1,887	April 20..	1,344		Paddle, Lake Erie to Lake Huron.
City of Toledo.....	1,120	" 20..	1,004		" Toledo to Southampton.
Promise.....	1,000	May 1..	473		Screw, Lake Erie to Lake Huron.
Excelsior.....	560	" 2..	229		" Detroit and Windsor.
Sappho.....	700	" 2..	224		" Lake Erie to Lake Huron.
Arundell.....		Not issued	339		" Detroit River.
Greyhound.....	1,353	May 18..	621		Paddle, Sarnia to Toledo.
Idlewild.....	800	June 5..	363		" " "
Pearl.....	845	" 21..	552		" Buffalo and Pt. Colborne.
Penns'vania { Coasting Lake... }	1,000 711 }	" 21..	747		" Ogdensburg and Duluth.
Puritan.....	725	" 22..	409		Twin screw, Buffalo and Crystal Beach
Gazelle.....	512	" 22..	183		Screw " "
Anna F. Onen.....	40	" 28..	50		" Niagara River.
Total.....			16,172	729 36	

JOHN DODDS,
Toronto.

SESSIONAL PAPER No. 21

STEAM Vessels not Inspected, &c.—West Ontario Division.

BOILERS AND MACHINERY.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Remarks. Why not Inspected and Class of Vessel.
Kathleen	110	72	Screw, passenger,
Gertrude	76	51	" "
Queen City	312	209	" "
Odessa	12	8	" "
W. S. Ireland	105	71	" freight.
Maybird	46	32	" "
Meteor	337	181	Paddle, tug.
Luther Westover	127	80	" "
*Allena May	16	11	Screw
John William	14	10	" "
Sea Gull	41	36	" "
Cecebe	11	8	" "
L. Shickluna	16	11	" "
Clara Hickler	42	32	" "
W. L. Davis	46	34	" "
Electric	49	29	" yacht.
Sea Flower	7	5	" "
Abeona	46	31	" "
Sonntag	7	5	" "
Curlew	3	3	" "
A. M. Petrie	20	13	" "
*Viola	68	46	" "
Albani	5	4	" "
*Urania	898	424	Paddle, passenger.
*John Hanlan	37	25	Screw
*Islay	175	119	" "
*Comfort	14	12	" "
*City of Windsor	511	316	" "
*Mazeppa	146	97	" "
LaBelle	75	58	" freight.
*A. H. Jennie	197	121	" "
E. Windsor	86	58	" "
T. J. Collop	63	42	" "
Herbert M.	21	18	" tug.
H. L. Lovering	55	38	" "
St. George	21	14	" "
Ocean Lily	3	2	" "
Iota	6	4	" "
Walter Scott	26	18	" "
Minnie Martin	10	7	" "
*G. P. McIntosh	58	41	" "
Islander	6	4	" "
Delight	26	14	" "
Agnes C	20	10	" "
Yacht Maida	2	2	" "
Tecumseh	10	6	" "
Huron Belle	27	18	" "
James Story	49	33	" "
*Reliance	311	182	" "
A. Seaman	76	52	" "
Rambler	6	4	" "
*Bruce	16	11	" "
Arbutus	49	34	" "
*Eagle	12	9	" "
*Sandford	56	38	" "
*Alert	47	32	" "
*Euna	6	4	" "
*Vick	13	9	" "
J. S. Blazier	89	60	" "
Herbert	21	10	" "
Sarah E. Day	5	4	" "

Not running.

No application.

*Steamers marked thus inspected since June 30, 1900.

64 VICTORIA, A. 1901

STEAM Vessels not Inspected, &c.—West Ontario Division—*Concluded.*

BOILERS AND MACHINERY.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Remarks. Why not Inspected and Class of Vessel.
Advance.....	72	49	Screw, fishing tug.
Shamrock.....	14	10	" " "
Vixen.....	68	53	" " "
*Evelyn.....	32	22	" " "
W. H. Siebold.....	22	15	" " "
*Sea King.....	26	17	" " "
Juno.....	28	19	" " "
Clucas.....	28	19	" " "
Sea Gull.....	19	13	" " "
Killarney Belle.....	28	19	" " "
M. G. McDonald.....	29	20	" " "
Cynthia.....	35	24	" " "
Mascott.....	21	14	" " " } No application.
James Playfair.....	26	18	" " "
Laura M.....	18	12	" " "
Fred. A. Hodgson.....	63	43	" " "
*Maud S.....	14	11	" " "
*Tepiakan.....	29	20	" " "
*Jubilee.....	10	7	" " "
Ida.....	21	6	" yacht.
*Devenish.....	3	2	" " "
Halero.....	8	5	" " "
*Una.....	22	15	" " "
Lillian.....	5	4	" " "

*Steamers marked thus inspected since June 3, 1900.

JNO. DODDS, }
 E. W. McKEAN, } Toronto.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected, for the Year ended June 30, 1900.

WEST ONTARIO DIVISION.

HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900		\$ cts.	
Bertha.....	37.....	July 2..	18	6 44	Passenger, Parry Sound.
Carlton.....	26.....	" 3..	8	5 72	" "
Lorna Doone.....	38.....	" 3..	18	6 52	" "
Maud.....	40.....	" 4..	40	8 20	" Penetang.
Fred Davidson.....	125.....	" 4..	43	8 44	" "
Masonic.....	40.....	" 5..	39	8 12	" "
Odessa.....	30.....	" 5..	12	5 96	" Midland.
Queen City.....	328.....	" 8..	312	32 96	" Toronto.
Scow No. 1.....	100.....	" 10..	16	10 00	" "
J. C. Clark.....	283.....	" 14..	145	19 60	" Sarnia.
John Lee, Sr.....	300.....	" 15..	88	12 04	" Wallaceburg.
City of Chatham.....	580.....	" 16..	341	35 28	" Chatham and Detroit.
Scotia.....	40.....	" 17..	13	6 04	" Amherstburg.
City of Dresden.....	100.....	" 18..	194	23 52	" Windsor and Lake Erie ports.
Adrelexa.....	40.....	" 20..	15	6 20	" Point Abino.
Jubilee.....	40.....	" 20..	10	5 80	" Welland Canal.
Arlington.....	100.....	" 22..	23	6 84	" Toronto.
Conqueror.....	40.....	" 24..	25	7 00	" Lake Simcoe.
Enterprise.....	305.....	" 24..	148	19 84	" "
Islay.....	344.....	" 24..	175	22 00	" "
Longford.....	150.....	" 24..	53	9 24	" "
Stiletto.....	30.....	" 25..	14	6 12	" Waubauskene.
Mayflower.....	27.....	" 25..	26	7 08	" "
Germanic.....	500.....	May 1..	1,014	89 12	" All lakes.
Majestic.....	400.....	July 29..	275	30 00	" Richelieu Rivcr.
John Hanlan.....	100.....	Jan. 1..	37	7 96	" Toronto.
Ontario.....	Freight.....	May 5..	655	57 40	Freight, All lakes.
Juno.....	"	Aug. 7..	288	*28 04	" "
Lillie Smith.....	"	" 14..	275	54 00	" "
Onaganoh.....	20.....	" 28..	19	6 52	Passenger, Muskoka Lakes.
Knozohn.....	363.....	" 28..	225	26 60	" "
Mink.....	40.....	" 28..	56	9 48	" "
Charlie M.....	39.....	" 29..	50	9 00	" "
Oriole.....	97.....	" 29..	75	11 00	" "
Nipissing.....	394.....	" 30..	275	30 00	" "
Medora.....	416.....	" 30..	299	31 92	" "
Ahmic.....	40.....	" 31..	43	8 44	" "
Constance.....	40.....	Sept. 1..	42	8 36	" "
Flyer.....	17.....	Aug. 31..	4	5 32	" "
Gypsy.....	"	Notgra't'd	20	6 60	" "
Nynoca.....	40.....	Sept. 1..	25	7 00	" "
Muskoka.....	301.....	" 1..	197	23 76	" "
Mary Louise.....	40.....	" 2..	64	10 12	" Lake of Bays.
Empress Victoria.....	100.....	" 2..	106	16 48	" Huntsville.
Gem.....	40.....	" 2..	9	5 72	" Port Sydney.
Wanita.....	125.....	" 4..	44	8 52	" Burks Falls.
Wenonah.....	108.....	" 4..	161	20 88	" "
Geraldine.....	40.....	June 30..	65	10 28	" Parry Sound.
Agnes.....	25.....	Sept. 28..	14	6 12	" Lake Simcoe.
Lansdowne.....	200.....	Oct. 5..	1,571	133 68	" Windsor.
Great Western.....	200.....	" 5..	1,080	94 40	" "
Monarch.....	330.....	" 6..	2,017	169 36	" Windsor and Duluth.
Philadelphia.....	32.....	" 16..	148	19 84	" Sault St. Marie.
Camilla.....	100.....	" 18..	54	9 32	" "
Bertha Endress.....	"	Notgra't'd	32	7 56	" Michipicoten River.
Telegram.....	200.....	Oct. 14..	198	23 84	" Lake Superior.
Minnie M.....	"	Notgra't'd	448	43 84	" "
Fanny Arnold.....	25.....	Oct. 20..	73	12 30	" Spanish River.

* Fees and dues for 1898 and 1899.

64 VICTORIA, A. 1901

STEAM Vessels Inspected, &c.—West Ontario Division—*Concluded.*HULL INSPECTION—*Continued.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900		\$ cts.	
City of Windsor	300	Oct. 28	511	48 88	Passenger, Owen Sound and Soo.
Scotch Thistle	30	" 27	17	6 36	" Little Current.
Maggie May	40	" 28	46	8 68	" "
Helen S.	17	" 30	86	11 88	" Collins Inlet.
Elite	10	Nov. 20	22	6 76	" Gore Bay.
Huron	245	Oct. 5	1,052	92 16	" Windsor.
		1901			
Lakeside	524	April 16	348	35 84	" Lake Ontario.
Macassa	616	" 19	459	44 72	" Toronto and Hamilton.
Arabian	13	" 19	1,073	93 94	" All lakes.
Seguin	20	" 20	818	73 44	" "
St. Andrew	10	" 20	1,113	97 04	" "
John J. Long	65	" 21	201	24 08	" Georgian Bay.
City of Toronto	400	" 23	782	70 56	" "
Atlantic	300	" 23	683	62 64	" Collingwood & Soo.
Germanic	500	" 23	1,014	89 12	" " "
Britannic	277	" 24	428	42 24	" " "
Majestic	638	" 24	1,578	134 24	" " Duluth.
City of Collingwood	407	" 24	1,387	118 96	" " "
City of Midland	375	" 24	974	85 92	" " Soo.
City of Parry Sound	280	" 24	491	47 28	" " "
Alberta	500	" 24	2,282	190 56	" Owen Sound & Duluth.
Erin		" 25	651	57 08	Freight, all lakes.
Armenia		" 25	624	54 92	" "
Athabasca	500	" 26	2,269	189 52	Passenger, Owen Sound & Fort William.
Manitoba	500	" 26	2,616	217 28	" " "
Persia	150	" 30	757	68 56	" Montreal & Hamilton.
Chicora	872	" 30	931	82 48	" Lake Ontario.
Algonquin	10	May 1	1,806	152 48	" All lakes.
Rosedale	10	" 1	1,507	128 56	" "
C. W. Chamberlain		" 1	385	35 80	Freight
Monarch	330	" 2	2,017	169 36	Passenger, Windsor & Duluth.
Lillie Smith		" 2	275	27 00	Freight, all lakes.
Hiawatha	300	" 2	163	21 04	Passenger, Sarnia.
Comfort	40	" 3	14	6 12	" Sombra.
Ontario	500	" 3	1,615	137 20	" Windsor.
Imperial	220	" 3	150	20 00	" Sarnia & Sandusky.
Michigan	500	" 4	1,730	146 40	" Windsor.
Luella	125	" 5	38	8 04	" Toronto.
Island Queen	140	" 5	23	6 84	" "
D. R. Van Allan		" 5	318	30 44	Freight, Lake Ontario.
Ada Alice	125	" 5	60	9 80	Passenger, Toronto.
		1900			
Minnie M. { Lake	466	Oct. 30	613	57 04	" Soo and Lake Superior.
{ Coasting	561				
		1901			
Cuba	109	May 9	931	82 48	" Toledo and Montreal.
Primrose	900	" 10	189	23 12	" Toronto.
Mayflower	900	" 10	189	23 12	" "
Shamrock	383	" 10	154	20 32	" "
Ocean	125	" 11	684	62 72	" Montreal and Sarnia.
Garden City { Lake	500	" 11	637	59 04	" Lake Ontario.
{ Coasting	733				
Lake Michigan	12	" 11	573	53 84	" all lakes.
White Star { Lake	470	" 16	451	44 08	" Lake Ontario.
{ Coasting	705				
Corona	1456	" 18	1,274	109 92	" "
Chippewa	2000	" 18	1,514	129 12	" "
Ongiara	244	" 18	98	12 84	" Niagara River.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected, &c.—West Ontario Division—*Concluded.*

HULL INSPECTION—*Concluded.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901		\$ cts.	
Clark Bros.....	66.....	May 19..	33	7 64	Passenger, Toronto.
Hope.....	300.....	" 22..	170	21 60	" Fort Erie.
Maid of the Mist.....	80.....	" 23..	62	9 96	" Niagara Falls.
Thistle.....	345.....	" 23..	78	11 24	" Toronto.
		1900			
Clinton.....		Sept. 20..	430	39 40	Freight, all lakes.
		1901			
Toronto.....	1000.....	May 26..	2,779	230 32	Passenger, Lake Ontario.
Melbourne.....	120.....	" 26..	894	79 52	" Toledo and Montreal.
Acacia.....	200.....	" 28..	107	16 54	" Hamilton.
Modjeska.....	801.....	" 28..	678	62 24	" " Toronto.
A. J. Tymon { Lake { Coast.....	300..... 448.....	June 11..	194	23 52	" Lake Ontario.
Buller.....	17.....	May 30..		10 00	" Stratford Creek.
Union.....	300.....	" 22..	267	29 36	" Fort Erie.
Cambria { Lake { Coasting.....	400..... 600.....	June 11..	937	82 96	" Lake Ontario.
Lincoln { Lake { Coasting.....	330..... 498.....	" 11..	337	34 96	" Toronto and St. Catherines.
United Lumberman.....		" 12..	399	31 92	Freight, all Lakes.
		1900			
Albert Wright.....	13.....	Oct. 30..	29	7 32	Passenger, Little Current.
		1901			
Joe Milton.....	200.....	June 14..	93	12 52	" Georgian Bay.
Mazeppa.....	300.....	" 16..	146	19 68	" Owen Sound.
J. H. Jones.....	35.....	" 15..	152	20 24	" Georgian Bay.
Vanwoodland.....	102.....	July 16..	37	7 96	" Lake Simcoe.
Lady Smith.....	26.....	" 24..	6	5 48	" "
Geraldine.....	40.....	June 22..	65	10 28	" Parry Sound.
Emma.....	150.....	" 22..	75	11 00	" "
Julian V. O'Brien.....		Not granted...	59	9 72	" Byng Inlet.
Bertha.....	36.....	June 22..	18	6 44	" Parry Sound.
Lorna Doone.....	40.....	" 23..	26	7 08	" "
Edna.....	122.....	" 23..	55	9 40	" "
Pittsburg.....	500.....	" 27..	1,349	115 92	" Sault Ste. Marie and Cleveland.
Urania.....	500.....	" 29..	898	79 84	" Lake Erie.
United Empire.....	295.....	May 5..	1,961	164 88	" Windsor and Duluth.

WM. EVANS,
Hull Inspector.

64 VICTORIA, A. 1901

STEAM Vessels Inspected in Canada but Registered elsewhere, for the Year ended June 30, 1900.

WEST ONTARIO DIVISION.

HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
				\$ cts.	
		1900.			
Sappho.....	700	Aug. 7..	224	25 92	Passenger, Detroit.
Excelsior.....	560	" 8..	229	26 32	" "
Victoria.....	182	" 8..	192	33 36	" "
Fortune.....	427	" 8	200	24 00	" "
Primrose.....	1,000	" 9..	473	45 84	" "
Idlewild.....	800	" 9..	363	37 07	" Toledo and Port Huron.
Darius Cole.....	1,088	" 9..	538	51 06	" Lake Erie and Lake Huron.
City of Toledo.....	1,120	" 10..	1004	88 31	" Toledo and Southampton.
Ariel.....	226	" 10..	202	24 16	" Detroit.
Wyandotte.....	904	" 10	320	33 60	" Detroit and Sugar Island.
Transfer.....	233	" 11..	1511	128 88	" Detroit.
Transport.....	256	" 11..	1595	135 60	" "
Michigan Central.....	300	" 11..	1522	129 76	" "
Greyhound.....	1,353	" 12..	621	57 70	" between Lakes Erie and Huron
James Beard.....	66	" 12..	87	8 96	" Sarnia.
Omar D. Conger.....	398	" 14..	347	35 76	" between Lakes Erie and Huron
Grace Dorner.....	162	" 14..	66	7 28	" Sarnia.
Welcome.....	266	" 14..	213	25 04	" Port Huron and Detroit.
Louise.....	154	" 15..	84	11 64	" Lake Erie.
Gazelle.....	512	" 17..	183	22 64	" Crystal Beach.
Pearl.....	845	" 17..	552	52 16	" "
Puritan.....	725	" 17..	409	40 72	" "
Pennsylvania.....	{ Lake 711 } { Coast 1,000 }	" 18..	747	67 76	" Ogdensburg and Duluth.
Niagara.....	150	Sept. 30..	214	25 12	" Fort Erie.
Mascotte.....	498	Oct. 17..	162	20 96	" Sault St. Marie
International.....	380	" 21..	144	19 52	" "
City of Green Bay.....	84	" 24..	257	28 56	" Lake Superior.

WM. EVANS,
Hull Inspector.

STEAM Vessels not Inspected for the Year ended June 30, 1900.

WEST ONTARIO DIVISION.

HULL INSPECTION.

Name of Vessel.	Gross Tonnage.	Reg-istered Tonnage.	Remarks.
			Why not inspected and class of vessel.
Myles.....	1,199	742	No application.
Kathleen.....	110	72	"
Odessa.....	12	8	"
Abino.....	8	5	"
Dominion.....	478	304	"

WM. EVANS,
Hull Inspector.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected for the Year ended June 30, 1900.

EAST ONTARIO DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.		Class of Vessel and where employed.
				\$	cts.	
		1900.				
C. Here.....	25.....	July 4.....	7 40	5 56		Screw, Trenton and Prescott.
Miltonia.....	.....	" 5.....	32 18	7 56	"	Pleasure yacht.
Wattli.....	.....	" 6.....	18 11	6 44	"	"
Iona.....	15.....	" 11.....	231 53	26 56	"	Freight, Lake and River.
Eclipse.....	100.....	" 12.....	17 94	6 44	"	Rice Lake.
Rainbow.....	40.....	" 12.....	25 92	7 08	"	"
City of Peterborough.....	300.....	" 13.....	287 60	31 04	Paddle,	"
Beaver.....	75.....	" 13.....	18 00	6 44	Screw,	"
North Star.....	165.....	" 14.....	39 60	8 20	"	"
Estelle.....	.....	.....	8 23	.....	"	Naptha, Pleasure Yacht.
Majestic.....	185.....	July 15.....	67 77	10 44	"	Cos. Vict. and Peterboro.
Mollie.....	.....	" 17.....	10 72	5 88	"	Pleasure yacht.
Sunbeam.....	210.....	" 17.....	104 92	16 40	"	Cos. Vict. and Peterboro.
Lorlie.....	.....	" 18.....	5 88	5 48	"	Pleasure yacht.
Idle Hour.....	.....	" 18.....	2 40	5 16	"	Tug Cos. Vict. and Peterboro.
Alice Ethel.....	190.....	" 19.....	71 75	10 76	Paddle,	Cos. Vict. and Peterboro.
Express.....	20.....	" 19.....	3 90	5 32	Screw,	Scugog Lake and River.
Crandella.....	400.....	" 20.....	266 20	29 28	Paddle,	Cos. Vict. and Peterboro.
Waterwitch.....	.....	" 20.....	9 20	5 72	Screw,	Tug, Lindsay Waters.
Maple Leaf.....	70.....	" 21.....	26 08	7 08	"	Cos. Vict. and Peterboro.
Marie Louise.....	40.....	" 21.....	39 02	8 12	"	" " "
Victoria.....	.....	.....	3 90	5 32	"	Pleasure yacht.
Comet.....	35.....	July 22.....	7 60	5 64	"	Cos. Vict. and Peterboro.
Greyhound.....	40.....	" 22.....	37 35	7 96	"	" " "
Esturion.....	297.....	" 24.....	139 39	19 12	Paddle,	" " "
India.....	.....	April 15.....	976 49	83 08	Screw,	Freight, all lakes.
Undine.....	22.....	July 26.....	13 81	6 12	"	Cos. Vict. and Peterboro.
Beaver.....	.....	" 26.....	91 50	12 32	Paddle,	Tug, " "
Calumet.....	.....	" 27.....	21 87	6 76	Screw,	Pleasure yacht.
Beaubocage.....	150.....	" 27.....	129 00	18 32	Paddle,	Cos. Vict. and Peterboro.
Lady of the Lake.....	40.....	" 27.....	32 95	7 64	Screw,	" " "
Nouna Roy.....	.....	" 28.....	4 14	5 32	"	Pleasure yacht.
Dawn.....	.....	" 28.....	20 20	6 60	"	Tug, Lindsay Waters.
Minnie May.....	.....	" 29.....	10 20	5 80	Paddle,	Tug, Balsam Lake.
Jeunniac.....	.....	.....	4 68	.....	Screw,	Naptha, Pleasure Yacht.
Enpress.....	200.....	July 31.....	84 48	11 72	"	Cos. Vict. and Peterboro.
Tramp.....	10.....	.....	2 24	5 16	"	" " "
Lenore.....	.....	August 1.....	8 13	5 64	"	Tug, " "
Flash.....	10.....	.....	4 74	5 40	"	" " "
Dickson.....	.....	.....	16 01	6 28	Paddle,	Alligator, " "
Mayflower.....	.....	.....	5 99	5 48	Screw,	Pleasure Yacht.
Wanda.....	15.....	June 1.....	38 61	8 12	"	Trenton and Prescott.
Leone.....	10.....	" 20.....	2 48	5 16	"	Kingston " "
H. F. Bronson.....	.....	April 15.....	*	5 00	T. S.,	River St. Lawrence.
Jopl.....	40.....	August 10.....	10 54	5 88	Screw,	Kingston and Prescott.
Florence.....	.....	" 15.....	3 08	5 24	"	Pleasure Yacht.
Mary Ellen.....	.....	" 18.....	20 22	6 60	"	Tug, Canal and River.
Ivy.....	30.....	" 18.....	7 43	5 56	"	Cornwall and Lake St. Francis.
Princess Louise.....	100.....	" 19.....	26 36	7 08	"	Screw, Kingston and Montreal.
C. F. Dunbar.....	.....	" 19.....	32 86	7 64	"	Tug, Canal and River.
Vesta.....	10.....	" 20.....	7 80	5 64	"	Trenton and Prescott.
Sandy.....	.....	" 22.....	29 57	7 32	"	Tug, Canal and River.
Montmorency.....	.....	" 22.....	17 81	6 44	"	" " " "
W. J. Poupore.....	.....	" 22.....	46 54	8 76	"	" " " "
Grenada.....	175.....	" 23.....	57 00	9 56	"	Kingston and Montreal.
Stranger.....	.....	" 23.....	49 58	.....	"	Tug, Canal and River.
Gacie.....	40.....	" 23.....	10 50	.....	Paddle,	Messena and Valleyfield.
Desisle.....	.....	.....	45 00	.....	Screw,	Tug, Public Works.
Dredge Queen.....	.....	.....	100 00	.....	Spoon	Dredge, " "
Helen.....	.....	.....	1 82	5 16	Screw,	Kingston and Prescott.

* Second inspection.

64 VICTORIA, A. 1901

STEAM Vessels Inspected, &c.—East Ontario Division—*Continued.*BOILERS AND MACHINERY—*Concluded.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900.		\$ cts.	
Dredge D. Stewart.....		Sept. 5...	295·21	28 60	Spoon Dredge, Canal.
Meubria.....		" 6...	42·98	8 44	Screw, Tug, Canal and River.
John Hunter.....		" 6...	32·14	7 56	Screw, Tug, Canal and River.
Dredge Killarney.....					Spoon dredge, Canal.
" Kilkenny.....					" "
Myra.....		Aug. 31...	73·21	10 84	Screw, Tug, River St. Lawrence.
Dredge St. Lawrence.....		Sept. 11...	258·10	25 64	Spoon dredge, Canal.
Mona.....		" 12...	24·87	7 00	Screw, Tug, Canal and River.
Wm. Davis.....		" 12...	40·23	8 20	" "
Dredge Ottawa.....		" 13...	219·95	22 60	Spoon dredge Canal.
Mary.....		" 1...	61·52	9 88	Screw, Tug, River St. Lawrence.
A. B. Cooke.....		" 1...	34·17	7 72	" " "
Dredge Ottomac.....			195·65	20 68	Elevator dredge, Canal.
Beaver.....		" 1...	40·88	8 28	Screw, Tug, River St. Lawrence.
Alaska.....		" 1...	48·74	8 92	" " "
Hubert Larkin.....		" 1...	48·73	8 92	" " "
D. P. Dey.....		" 1...	11·26	5 88	" " "
Dredge No. 4.....		" 21...	175·41	19 03	Spoon dredge, Canal.
Kilbernie.....		" 20...	15·23	6 20	Screw, Pleasure yacht.
Nellie.....	20	" 20...	6·82	5 56	" Kingston and Ottawa.
Commodore.....	25	" 20...	3·06	5 24	" Carleton Place and Innesville.
Lillian, B.....	15	" 20...	3·76	"	" " "
Aberdeen.....	40	" 20...	12·65	6 04	" Kingston and Ottawa.
Eva Belle.....	10	" 20...	10·10	"	" " "
Fearless.....		" 1...	46·38	8 68	" River St. Lawrence.
Prince Edward.....	Ferry	Oct. 11...	18·22	6 44	Centr. Pdle. Tyendinaga & Sophiasburg
Dredge Ontario.....			116·00		Spoon dredge, Public Works.
Tropic.....	15	Sept. 20...	8 86	5 72	Screw, Kingston and Ottawa.
St. Paul.....			45·00		" Tug, Public Works.
		1901.			
Pierrepoint.....	415	April 4...	251·98	28 16	Paddle, Trenton and Prescott.
Tecumseh.....		" 7...	839·67	72 20	Screw, Prescott and Dnluth.
Hero.....	475	" 7...	342·12	35 36	Paddle, Trenton and Montreal.
Ruth.....		" 9...	36·45	7 88	Screw, Tug, River St. Lawrence.
Bannockburn.....	10	" 9...	1619·56	137 60	" all lakes and rivers.
Ella Ross.....	300	" 10...	324·88	34 00	Paddle, Brighton and Prescott.
Nile.....		" 10...	96·30	12 68	Screw, Freight, Canal and River.
Reliance.....	25	" 11...	239·14	27 12	T. S., all lakes and rivers.
Desoronto.....	85	" 11...	54·57	9 40	Screw, Trenton and Prescott.
Resolute.....	25	" 11...	371·86	37 76	T. S., all lakes and rivers.
Rescue.....	25	" 12...	52·29	9 16	Screw, Trenton and Prescott.
Ranger.....	25	" 12...	13·83	6 12	" " " Picton.
Rosemount.....	10	" 13...	1580·37	134 40	" all lakes and rivers.
Glengarry.....		" 13...	732·41	63 56	Screw, Freight, all lakes and rivers.
H. F. Bronson.....		" 13...	137·12	15 96	T. S. Tug, River St. Lawrence.
Chieftain.....		" 14...	434·68	39 80	Paddle, Tug, " "
India.....		" 14...	976·49	83 08	Screw, Freight, all lakes and rivers.
Parthea.....		" 14...	198·13	20 84	Paddle, Tug, River St. Lawrence.
Bothnia.....		" 16...	883·36	71 64	Screw, Freight, all lakes and rivers.
Wm. Johnston.....		" 16...	94·72	12 60	" Tug, River St. Lawrence.
D. D. Calvin, B.....		" 16...	749·53	65 00	" Freight, all lakes and rivers.
Myles.....		" 17...	1198·50	100 92	" " "
Hector.....		" 17...	20·64	6 68	" Tug, River St. Lawrence.
Aberdeen.....		" 18...	141·86	16 36	" Freight, Lake and River.
Alexandria.....	600	" 19...	863·15	77 04	Paddle, Charlotte and Montreal.
Glide.....		" 20...	77·90	11 24	Screw, Tug, River St. Lawrence.
Orion.....		" 20...	846·43	72 68	" Freight, all lakes and rivers.
Saturn.....	15	" 20...	883·09	78 64	" " "
North King.....	525	" 21...	872·95	77 84	Pdle, L. Ontario and R. St. Lawrence.
Active.....		" 21...	301·70	29 16	Screw, Tug, R. St. Lawrence.
King Ben.....		" 23...	145·36	16 60	" Freight, River St. Lawrence.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected &c.—East Ontario Division—*Concluded.*BOILERS AND MACHINERY—*Concluded.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.		Class of Vessel and where employed.
				\$	cts.	
		1901.				
James Swift.....	125	April 23..	265·92	29	28	Screw, Kingston and Ottawa.
Reginald.....		" 24..	186·26	19	88	" tug, Lake and River.
David G. Thomson.....		" 24..	185·05	19	80	" tug, St. Lawrence River.
Frank Jackman.....		" 25..	38·90	8	12	" " "
Jessie Hall.....		" 27..	56·54	9	56	" " "
Valeria.....	135	" 30..	51·55	9	16	" Trenton and Prescott.
Jubilee.....	140	" 30..	53·94	9	32	" Morrisburg and Waddington.
America.....	698	May 1..	520·53	52	24	Paddle, Trenton and Montreal.
John Milne.....		" 2..	108·53	13	72	Screw, freight, Lake and River.
Rival.....		" 3..	125 14	15	00	Paddle, tug, St. Lawrence River.
Dredge Nipissing.....			100·00			Spoon dredge, Public Works.
Where Now.....		May 12..	47·78	8	84	Screw, pleasure yacht.
C. H. Merritt.....	350	" 18..	121·58	17	76	" Brighton and Prescott.
Armenia.....	200	" 19..	109·99	16	80	" Trenton & Dickinson's Land'g
St. Louis.....			22·54	6	84	" pleasure yacht.
Amie Lake.....	38	May 20..	18·52	6	52	" Brighton and Prescott.
Madge.....		" 20..	9·49	5	72	" pleasure yacht.
Jessie Fordward.....	25	" 20..	5·64	5	48	" Trenton and Prescott.
Skylark.....		" 20..	43·29	8	44	" pleasure yacht.
Kismet.....		" 20..	5·42	5	40	" "
Carmana.....		" 20..	56·08	9	48	" "
Argyle.....	750	" 20..	700·29	64	00	Paddle, Toronto and Prescott.
Reindeer.....	160	" 20..	58·29	9	64	Screw, " "
Varuna.....	240	" 20..	134·04	18	72	" Brighton and Prescott.
Donnelly.....	300	June 4..	318·91	30	52	Paddle " "
Edmond.....		" 4..	39·10	8	12	Screw, tug, canal and river.
Blue Bell.....		" 7..	11·97	5	96	" pleasure yacht.
Dorothy.....	30		10·09			" Trenton and Prescott.
Dredge No. 5.....		May 4..	100·00	13	00	Spoon dredge, canal.
Mary A. Laughlin.....		" 4..	22·62	6	84	Screw, tug, St. Lawrence River.
Mabel.....		June 11..	11·24	5	88	" " "
Dredge Central City.....		" 11..	223·62	22	89	Spoon dredge, canal.
Dredge No. 4.....		" 11..	175·41	19	03	" " "
" I. X. L.....		" 12..	100·00	13	00	" " "
Dredge Sir Hector.....		" 12..	355·39	34	40	" " "
Rideau Queen.....	300	" 13..	350·75	36	08	Screw, Kingston and Montreal.
Alberta.....		" 14..	122·43	14	76	" freight, St. Lawrence River.
Soucié.....		" 15..	13·84	6	12	" pleasure yacht.
City of Belleville.....	250	" 19..	101·17	16	08	" Kingston and Prescott.
Lee.....		" 19..	8·73	5	72	" plasure yacht.
Albani.....		" 19..	57·83	9	64	" " "
Brockville.....	375	" 20..	190·75	23	28	" Kingston and Cornwall.
Illecellevait.....		" 21..	15·69	6	28	" pleasure yacht.
Kenneth.....		" 21..	4·11	5	32	" " "
Antelope.....	40	" 20..	24·98	7	60	" Trenton and Prescott.
Dortha.....		" 22..	50·98	9	08	" pleasure yacht.
Corrella.....	18	" 20..	3·81	5	32	" Kingston and Prescott.
International.....	150	" 20..	395·31	39	60	" Prescott and Ogdensburg.
Naiad.....		" 28..	15·41	6	20	" pleasure yacht.
Leone.....	25	" 20..	4·26	5	32	" Kingston and Prescott.
Total.....			26,440 10	2,931	51	

THOS. P. THOMPSON

64 VICTORIA, A. 1901

STEAM Vessels Inspected in Canada but Registered elsewhere, for the Year ended
June 30, 1900.

EAST ONTARIO DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passenger allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessels and where employed.
		1900.		\$ cts.	
Sirius.....	46	July 4..	17.80	6 44	Screw, Kingston and Ft. Covington.
Columbia.....	40	" 11..	26.20	7 08	" Trenton and Ft. Covington.
Algona.....	290	Aug. 16..	92.06	12 36	" Cape Vincent and Ft. Covington.
Henry Plumb.....	237	June 20..	92.78	12 44	" Kingston and Cornwall.
Empire State.....			1,116.53	97 36	" Duluth and Prescott.
Spry.....	25	Aug. 25..	4.39	5 32	" Kingston and Ogdensburg.
Ariel.....	17	" 25..	7.74	5 56	" " "
Gen'l. W. B. Franklin.	25	" 26..	11.35	5 88	" " "
Claude S.....	25	" 26..	15.55	6 28	" " "
Nettie.....	25	" 26..	11.02	5 88	" " "
Badger State.....	404	Sep. 1..	1,115.52	97 28	" Duluth and Prescott.
Nightingale.....	100	" 23..	56.76	9 56	" Trenton and Ft. Covington.
		1901.			
Jessie Bain.....	150	April 4..	44.37	Exempt	" Kingston and Ogdensburg.
New Island Wanderer.	400	" 21..	123.00	"	" " "
St. Lawrence.....	645	May 14..	312.90	"	Paddle, Kingston and Montreal.
Empire State.....	800	" 17..	379.74	"	" Lake Ont. & Riv. St. Lawrence.
New York.....	730	" 18..	294.87	"	" Kingston and Montreal.
Islander.....	416	June 2..	118.61	"	" Kingston and Prescott.
Valetta.....	40		27.84	"	Screw, Kingston and Ogdensburg.
Henry Plumb.....	240	June 20..	92.78	"	" Kingston and Cornwall.
Outing.....	25	" 20..	15.87	"	" Trenton and Morrisburg.
Unique.....	460	" 20..	381.00	"	" " "
Massena.....	250	" 20..	89.67	"	" Kingston and Morrisburg.
Island Bell.....	335	" 20..	89.77	"	" Kingston and Prescott.
Cresco.....	65	" 20..	62.00	"	" Kingston and Cornwall.
Win. Armstrong.....	25	" 20..	181.24	"	" Prescott and Morrisburg.
Milton.....	45	" 20..	19.42	"	" Trenton and Montreal.
Total.....			4,800.78	271 44	

THOS. P. THOMPSON.

SESSIONAL PAPER No. 21

STEAM Vessels not Inspected for the year ended June 30, 1900.

EAST ONTARIO DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	REMARKS.
			Why not Inspected and Class of Vessel.
Dolce.....	4 74	3 22	Screw, passenger.—No application.
Pilgrim.....	262 49	165 37	Paddle, " " "
Rescue.....	7 23	4 92	Screw, " " "
Caribou.....	144 19	97 49	" " " " "
Mary Ethel.....	98 61	56 13	Paddle, " " "
Startled Fawn.....	25 49	17 34	Screw, " " "
Mildred.....	4 50	3 06	" Yacht " " "
Anna.....	7 89	6 49	" Tug " " "
Transit.....	140 81	92 93	Twin screw, passenger " " "
Marumora.....	12 96	8 82	Screw, " " "
Mabel C.....	4 48	3 36	" Yacht " " "
Thistle.....	36 02	24 50	" Fishing tug " " "
Curlew.....	8 55	5 81	" Passenger " " "
Ingomar.....	22 48	2 90	" Yacht " " "
	780 44	492 34	

THOS. P. THOMPSON.

STEAM Vessels Inspected for the Year ended June 30, 1900.

MONTREAL DIVISION

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
Massawippi.....		July 1..	4 00	5 32	Screw passenger, Lake Massawippi.
*Monaco.....		" 12..	9 69	11 60	" pleasure yacht, St. Lawrence R.
R. B. Flower.....		" 12..	14 77	6 20	" tug, St. Lawrence River.
Adonis.....		" 13..	13 99	6 12	" pleasure yacht, Richelieu Riv.
Alexandria.....		" 13..	53 00	9 24	" " " " "
Weslunkoon.....		" 17..	17 00	6 36	Paddle tug, Madawaska River.
Hudson.....	75	" 17..	45 00	8 60	" passenger " " "
Thistle.....	10	" 17..	2 18	5 16	Screw " " " "
River Belle.....		" 17..	14 14	6 12	" tug " " "
Mahigma.....	40	" 18..	20 00	6 60	" pass., Pembroke & Ft. William
Chance.....		" 19..	5 02	5 40	" pleasure yacht, Ottawa River.
Chummy.....		" 19..	5 37	5 40	" tug " " "
Thistle.....		" 19..	4 86	5 40	" pleasure yacht " " "
Mildred.....	25	" 20..	15 22	6 20	" passenger, Lièvres River.
Aid.....		" 20..	25 26	7 00	Paddle tug, Ottawa River.
Nokomis.....		" 20..	25 02	7 00	Screw yacht " " "
Wenoway.....	40	Aug. 3..	98 96	12 92	Paddle passenger, Quinze Lake.
Ballantyne.....		" 3..	13 82	6 12	" tug " " "
Quinze.....		" 3..	32 46	7 56	Screw " " " "
Meteor.....	350	" 4..	299 43	31 92	" pass., Temiscamingue Lake..
F. W. Avery.....		" 7..	14 04	6 12	Paddle tug, Ostoboning Lake.

* Dues and fees for 1897 and 1899.

64 VICTORIA, A. 1901

STEAM Vessels Inspected, &c.—Montreal Division—Continued.

BOILERS AND MACHINERY—Continued.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessels and where employed.
		1900.		\$ cts.	
D. A. Martin.....	40	Aug. 7..	77 '60	11 24	Screw passenger, North River.
R. Hurdman.....	40	" 7..	93 '12	12 44	" " Kippewa Lake.
C. E. Read.....	"	" 7..	12 '56	6 04	Paddle tug " "
Charlotte.....	30	" 8..	13 '86	6 12	Screw passenger " "
Otter.....	"	" 8..	21 '16	6 68	Paddle tug " "
North River.....	"	" 8..	22 '00	6 76	" " " "
Dora.....	25	" 9..	48 '32	8 84	Screw pass., Temiscamingue Lake.
Clyde.....	60	" 9..	29 '16	7 32	" " " "
Argo.....	75	" 9..	154 '06	17 32	Paddle " " "
Beaver.....	"	" 11..	13 '09	6 04	" tug " "
Mink.....	"	" 11..	13 '82	6 12	" " " "
Richelieu.....	40	" 14..	33 '67	7 72	Screw passenger, Richelien River.
Tiber.....	80	" 18..	1735 '86	146 88	" pass. and freight, Gulf Ports.
Tit Willow.....	"	Dec. 30, '99	16 '83	6 36	" pleasure yacht, Ottawa River.
Virginia.....	"	Aug. 25..	145 '96	16 60	" tug, St. Lawrence River.
Mathilda.....	"	" 25..	114 '00	14 12	" " " "
Hiram Robinson.....	"	Dec. 1, '99	60 '90	9 88	" " Upper Ottawa River.
Conqueror.....	"	" 31, '99	233 '04	23 64	Paddle " St. Lawrence River.
Monarque.....	"	Sept. 20..	136 '41	15 88	" " " "
Alycône.....	"	" 25..	38 '44	8 04	Screw pleasure yacht, St. Lawrence R.
W. Ross.....	"	Oct. 13..	14 '19	6 12	" tug " "
Wild Rose.....	"	" 20..	9 '97	5 80	" pleasure yacht " "
		1901.			
Hochelaga.....	300	April 6..	418 '95	41 52	Paddle ferry, Montreal & Boucherville
Cultivateur.....	751	" 6..	362 '00	36 96	" " " St. Helen's Id
Hebron.....	"	" 18..	148 '97	16 92	Screw freight, Lakes and Rivers.
McNaughton.....	"	" 24..	137 '19	15 96	" tug, St. Lawrence River.
Virginia.....	"	" 24..	145 '96	16 60	" " " "
Florence.....	"	" 24..	112 '94	14 04	" " " "
Mathilda.....	"	" 21..	113 '66	14 12	" " " "
Eagle.....	30	" 25..	12 '74	6 04	" passenger, Yamaska River.
E. H. Bronson.....	"	" 26..	285 '22	27 80	Paddle tug, Upper Ottawa.
Alex. Fraser.....	"	" 26..	320 '20	30 60	" " " "
Pembroke.....	"	" 26..	194 '21	20 52	" " " "
D. B. Mulligan.....	40	" 26..	76 '69	11 16	Screw ferry, Pembroke and Desjardins
C. B. Powell.....	"	" 27..	272 '34	26 76	Paddle tug, Upper Ottawa River.
Victoria.....	40	" 27..	187 '58	23 04	" pass., Pembroke & Desjardins
Mahigina.....	40	" 27..	19 '91	6 60	Screw " " Ft. William
Dolphin.....	"	" 28..	69 '66	10 60	" tug, Ottawa River.
Sir Hector.....	"	" 28..	39 '72	8 20	" " " "
Florence.....	"	" 28..	61 '53	9 96	" " " "
G. H. Harris.....	"	April 28..	87 '46	11 96	Screw, tug, Ottawa River.
G. H. Notter.....	"	" 28..	14 '00	6 12	" " " "
Harry Bate.....	40	" 30..	253 '71	28 32	" " " and Montreal.
Olive.....	60	" 30..	213 '00	25 04	" " " "
Welslman.....	25	" 30..	155 '73	20 48	" " " "
Hall.....	50	" 30..	246 '92	27 76	" " " "
Bonito.....	30	May 1..	17 '35	6 36	" ferry, Calumet and L'Original.
Ida.....	140	" 1..	247 '26	27 76	" pass., frt. Ottawa & Montreal.
Rockland.....	"	" 1..	77 '56	11 24	tug, Ottawa River.
Victoria.....	300	" 1..	181 '43	22 48	" pass., Ottawa and Thurso.
Charlemagne.....	"	" 2..	76 '38	11 08	" " St. Lawrence River.
Duchess of York.....	700	" 2..	489 '74	47 20	Paddle " Montreal and Carillon.
Princess.....	443	" 2..	526 '82	50 16	" " " "
Chateauguay.....	40	" 2..	222 '27	25 76	" " " Chateauguay.
Iona.....	"	" 3..	231 '53	26 56	Screw, freight, Lake Ontario.
W. F. McRea.....	"	" 3..	45 '73	8 68	tug, Rivers and Canals.
Nama.....	"	" 3..	41 '86	8 36	" pleasure yacht, St. Lawrence R.
Brothers.....	375	" 8..	545 '50	51 68	Paddle, pass., Montreal and Berthier.
Filgate.....	275	" 8..	425 '00	42 00	" " " Cornwall.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected, &c.—Montreal Division—*Concluded.*BOILERS AND MACHINERY—*Concluded.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901.		\$ cts.	
Sovereign.....	700	May 10..	637 29	58 96	Paddle, pass, Montreal and Carillon.
E. B. Eddy.....		" 16..	78 44	11 24	Screw, tug, St. Lawrence River.
Richelieu.....	100	" 16..	113 38	17 04	Paddle, pass., Montreal & Valleyfield
Empress.....	800	" 17..	677 60	62 16	" " Ottawa and Grenville.
Hamilton.....		" 17..	319 88	30 60	" tug, Chats Lake.
Samson.....		" 17..	15 27	6 20	" " "
J. L. Murphy.....		" 18..	173 05	18 84	Screw " "
Amable du Fond.....		" 18..	17 40	6 36	Paddle " "
Madawaska.....		" 18..	14 57	6 20	" " "
G. B. Green.....	600	" 19..	254 81	28 40	" pass., Deschesnes Lake.
G. B. Pattee.....		" 19..	30 38	7 40	Screw, tug " "
Albert.....		" 19..	216 98	22 36	Paddle " " "
Beatrice B.....	40	" 21..	58 63	9 72	Screw, ferry, Ottawa and Hull.
Marquis of Lorne.....	40	" 21..	20 19	6 60	" " " "
E. G. Laverdure.....		" 21..	54 00	9 32	" tug, Ottawa River.
Ada.....		" 21..	28 52	7 24	" " "
Juno.....		" 22..	17 09	6 36	" pleasure yacht, Deschesne Lake
Col. By.....		" 22..	9 31	5 72	" tug, Rideau Canal.
Tit Willow.....		" 22..	16 83	6 36	" pleasure yacht, Ottawa River.
Mildred.....	25	" 23..	15 22	6 20	" pass., Lièvres River.
Agnes.....	40	" 23..	29 37	7 32	" " "
Leon.....	20	" 23..	14 57	6 20	" " "
T. Osborne.....		" 24..	24 97	7 00	" tug, Ottawa River.
Glyde.....	40	" 24..	80 48	11 40	" pass., Calumet & Hawkesbury
Robineault.....	200	" 26..	332 07	34 56	" " Montreal and Valleyfield.
British Lion.....		June 2..	25 43	7 00	" tug, Ottawa & St. Lawrence R.
*Willie C.....		" 2..	8 23	11 28	" " Chateauguay River.
Dredge No. 4.....		" 2..	100 00	13 00	Dredge, " "
*Cygne.....		" 4..	12 02	11 92	Screw, pleasure yacht, St. Lawrence.
Garnet.....	200	" 5..	152 05	20 16	Paddle, pass., Montreal & Valleyfield.
Maude.....	350	" 6..	269 23	29 52	" " " Ottawa.
Archie Stewart.....		" 7..	79 62	11 40	Screw, tug, Ottawa River.
Sparrow.....	40	" 12..	38 17	8 04	" pass., Lake Nipissing.
Dauntless.....	20	" 12..	7 93	5 64	" " "
Queen.....	40	" 12..	15 37	6 20	" " "
Booth.....	25	" 12..	346 55	32 76	Paddle " "
Ladas.....	40	" 13..	54 47	9 32	Screw " "
Nosbonsing.....		" 13..	24 53	7 00	" tug, Nosbonsing Lake.
Zephyr.....		" 13..	2 78	5 24	" " Lake Nipissing.
Empress.....		" 14..	35 57	7 88	" " "
Shoofly.....		" 14..	9 99	5 80	" " "
Turtle.....		" 14..	33 12	7 64	Paddle " "
Verva.....	40	" 15..	55 54	9 40	Screw, tug, pass., Wahnapitae Lake.
Maid of the Mill.....	20	" 15..	8 18	5 64	" " " "
River Belle.....		" 16..	14 14	6 12	" " Madawaska River.
Hudson.....	75	" 18..	44 81	8 60	Paddle, pas., Barrys Bay & Combermere
Thistle.....	10	" 18..	2 18	5 16	Screw " " "
Minnie Bell.....		" 19..	21 74	6 76	" " Rideau Canal.
Emile.....		Not issued	11 80	5 96	" " Ottawa and vicinity.
Mansfield.....	40	June 22..	169 06	21 52	" ferry, Ottawa & Gatineau Pt.
John.....	30	" 23..	35 17	7 80	Paddle, ferry, Carillon & Pt Fortune.
Robert Anghin.....		" 25..	97 18	12 76	Screw, freight, Ottawa and vicinity.
Laurier.....	40	" 29..	18 66	6 52	" pass., Montreal and Vaudreuil
Total.....			15,792 79	2,020 52	

WM. LAURIE,
Montreal.

64 VICTORIA, A. 1901

STEAM Vessels Inspected for the Year ended June 30, 1900.

MONTREAL DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900.		\$ cts.	
Maggie R. King		Aug. 16.	27.13	7 16	Screw, tug, canals.
Tim Doyle		" 23.	14.84	6 20	" " "
Derrick No. 1		Nov. 2.	100.00	13 00	Derrick, Montreal harbour.
		1901.			
Derrick No. 4		April 12.	100.00	13 00	Derrick, Montreal harbour.
Derrick No. 5		" 12.	100.00	13 00	" " "
Dredge No. 1		" 12.	100.00	13 00	Dredge " "
Dredge No. 3		" 14.	100.00	13 00	" " "
Drill Boat		" 16.	100.00	13 00	Drill " "
Derrick No. 6		" 17.	100.00	13 00	Derrick " "
St. Louis		" 20.	34.00	7 72	Screw, tug " "
Derrick No. 2		" 20.	100.00	13 00	Derrick " "
Dredge Trenton		" 21.	100.00	13 00	Dredge, rivers.
Aurelia		" 21.	32.05	7 56	Screw, tug, rivers.
Aberdeen		" 23.	86.58	11 96	" " "
Plover		" 25.	40.30	8 20	" " canals.
Dredge No. 2		" 26.	100.00	13 00	Dredge, Montreal harbour.
Dredge No. 4		" 27.	100.00	13 00	" " rivers.
Dredge No. 6		" 27.	100.00	13 00	" " "
Ida		" 28.	26.41	7 08	Screw, tug, canals.
Mabel Macdonald		" 28.	41.81	8 36	" " rivers.
Lucia		" 30.	41.07	8 28	" " canals.
St. Peter		May 3.	43.00	8 44	" " rivers.
Antelope		" 8.	82.84	11 64	" " "
Kate		" 9.	61.07	9 88	" " "
Windermere		" 10.	31.17	7 48	Screw, yacht, rivers.
St. George		" 11.	67.85	10 44	" " tug, rivers.
H. Larosée		" 28.	12.69	6 04	" " canals.
Robert Stoker		June 4.	13.72	6 12	" " "
Elevator No. 2		" 5.	170.00	18 60	" " grain elevator, Montreal harb'r.
Elevator No. 10		" 5.	173.00	18 84	" " " "
Elevator No. 7		" 5.	170.00	18 60	" " " "
Elevator No. 14		" 6.	181.00	19 48	" " " "
Elevator No. 4		" 6.	188.00	20 04	" " " "
Elevator No. 6		" 6.	170.00	18 60	" " " "
Elevator No. 1		" 7.	165.00	18 20	" " " "
Elevator No. 9		" 7.	172.00	18 76	" " " "
Elevator No. 11		" 8.	169.00	18 52	" " " "
Elevator No. 12		" 8.	183.00	19 64	" " " "
Elevator No. 15		" 8.	212.60	22 04	" " " "
Elevator No. 16		" 8.	210.31	21 80	" " " "
Elevator No. 8		" 9.	80.00	11 40	" " " "
Elevator No. 13		" 9.	178.00	19 24	" " " "
Elevator St. Lawrence No. 1		" 9.	83.00	11 64	" " " "
* Agnes McMahon			81.48	11 48	" " " "
+ Agnes McMahon		June 11.	54.00	9 32	" " tug, canals.
Elevator No. 5		" 13.	80.00	11 40	" " grain elevator, Montreal harb'r.
Shickluna		" 15.	66.00	10 28	" " tug, canals.
Courier		" 16.	12.48	5 96	" " harbour.
Dana	40	" 16.	54.58	9 40	" " passenger, Montreal & Quebec.
C. W. Dennis		" 18.	16.91	6 35	" " tug, canals.
Nellie Reid		" 26.	55.71	9 48	" " rivers.
Total			4,782.60	637 64	

* "Dues" and "Fees" paid for 1899 on old tonnage.
 + "Dues" and "Fees" paid for 1900 on new tonnage.

LOUIS ARPIN,
 Steamboat Inspector.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected in Canada but Registered elsewhere for the Year ended June 30, 1900.

MONTREAL DIVISION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901.		\$ cts.	
S. S. Symra		May 14..	3,005·59	248 48	Screw, freight, Gulf Ports.

WM. LAURIE, Montreal.

STEAM Vessels not inspected for the Year ended June 30, 1900.

MONTREAL DIVISION.

Name of Vessel.	Gross Tonnage.	Register'd Tonnage.	Remarks. Why not Inspected and Class of Vessel.
High Rock.....	8·00	5·00	Screw, tug, not running.
Gertie.....	17·05	8·97	" " "
Vesper.....	7·93	5·39	" yacht "
Mattawa.....	22·43	15·25	" pass. "
Lottie.....	10·04	8·52	" " "
H. M. Mixer.....	30·00	9·00	" tug "
Hurtubise.....	46·12	42·52	" " "
Frank Perew.....	43·02	23·86	" " "
John Thompson.....	5·16	4·11	" yacht "
H. Trudel.....	13·38	5·65	Paddle, wharf tug "
Nora.....	28·13	19·13	Screw, tug "
Eileen.....	11·00	9·00	" " "
Thurso.....	20·07	9·09	Paddle, ferry "
Union.....	75·04	66·05	Screw " "
Clipper.....	4·00	3·00	" pass. "
Flora.....	5·18	3·96	" " "
Janet Craig.....	11·73	5·91	" " "
St. Michael.....	15·65	9·87	Paddle, tug "
Vesta.....	14·17	7·56	Screw, yacht "
Elsie Ross.....	9·83	7·76	" tug "
Temiscamingue.....	412·89	236·22	Paddle, pass. "
Jeanne.....	16·12	6·28	Screw, yacht "
Little Roxy.....	11·67	6·88	" pass. "
Bonechere.....	13·00	6·00	Paddle, tug "
Owl.....	3·69	2·51	Screw, pass. "
Dredge No. 6.....	100·00	.....	Dredge, no application.
Dredge No. 7.....	100·00	.....	" " "
Ishaway.....	6·76	4·66	Screw, yacht "
Lady of the Lake.....	607·00	369·00	Paddle, pass., not running.
Frolic.....	15·72	10·29	Screw, yacht "
Napierville.....	165·44	112·50	Paddle, ferry "
Annie C.....	6·33	4·30	Screw, pass. "
Bonenfant.....	21·34	11·96	" ferry, undergoing repairs.
John A.....	19·70	13·40	" tug, no application.
Prefontaine.....	433·83	295·11	" freight "
White Squall.....	7·47	5·08	" yacht "
Chaffey.....	42·44	29·31	" pass. "
Russell.....	76·49	44·50	" tug "
Chipmunk.....	37·00	25·00	" yacht "
W. P. Buckley.....	26·83	12·49	" tug "
Winona.....	12·00	8·93	" " "
Total.....	2,533·65	1,474·02	

WM. LAURIE,
LOUIS ARPIN, Montreal.

64 VICTORIA, A. 1901

STEAM Vessels Inspected for the Year ended December 31, 1900.

QUEBEC DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
				\$ cts.	
		1900.			
Beaver	Crew of 9	July 11..	273	26 84	Paddle, tug, Quebec and Montreal.
Fairy	" 2	" 12..	9	5 72	Screw, Quebec Harbour, tug.
L'Ami	" 2	" 25..	16	6 23	" tug on Lake Aylmer.
Campania	" 2	" 26..	23	6 84	" " Megantic.
Macanamac	" 1	" 26..	4	5 32	" pleasure yacht, Spider Lake.
Jubilee	30	" 26..	25	7 00	" passenger, Lake Megantic.
Tese	" 1	" 26..	5	5 40	" pleasure yacht "
Dauntless	" 10	Aug. 1..	81	11 48	" tug, Montreal and Gulf.
Amanda	" 2	" 3..	11	5 88	" Quebec Harbour, tug.
Queen	450	" 4..	367	37 36	" winter ferry, Quebec and Lévis.
Batiscan	" 4	" 5..	40	8 20	Paddle, tug, Batiscan River & Quebec.
Bell	" 5	" 7..	51	9 08	Screw, tug, Saguenay River.
Kingami	" 3	" 8..	21	6 68	" " "
Le Colon	40	" 9..	173	21 84	Paddle, pass., Roberval and Mistasini.
Arthur	" 2	" 10..	15	6 20	Screw, tug, Lake St. John.
Paribonka	40	" 10..	179	22 32	Paddle " "
Undine	" 2	" 9..	17	6 36	Screw " "
Forest	" 3	" 8..	26	7 08	" " Saguenay River.
Marie Louise	40	" 10..	99	12 92	Paddle, tug, Ste. Anne & Chicoutimi.
Thor	" 10	" 10..	323	30 84	" Saguenay River.
Pierre Ville	" 4	" 18..	42	8 36	" Yamaska.
Johana B.	" 2	" 21..	17	6 36	Screw, Harbour, tug.
Robert McKay	" 8	Sept. 14..	129	15 32	" Montreal Harbour, tug.
Frontenac	555	" 8..	304	32 32	Twin screw, ferry, Que. & St. Romuald
Fearless	" 2	" 25..	10	5 80	Screw, tug, Pabos River.
Christina	" 4	" 26..	57	9 56	Paddle, tug, Restigouche River.
Frances	40	" 26..	19	6 52	" ferry, Campbellton & Cross Pt.
Oak Bay	" 3	" 27..	27	7 16	" tug, Restigouche River.
Maggie A	" 2	" 27..	5	5 40	Screw, tug "
Le Brochu	" 2	" 28..	19	6 52	" Lake Metapedia.
Hubert	" 2	" 29..	5	5 40	Paddle, tug, Lake Salmon.
Swallow	" 2	" 12..	9	5 72	Screw, tug, Lake Edward.
Randolph	" 2	" 2..	17	6 36	" Quebec Harbour, tug.
Fabiola	" 10	May 11..	81	11 48	" steam wrecking schooner.
		1901.			
Rhoda	156	May 1..	182	22 56	Paddle, mail tender, Rimouski.
St. Olaf	130	" 1..	305	32 40	Screw, freight & pass., Quebec & Sydney
Campana	400	" 1..	1,697	143 76	Twin screw, pass., Montreal & Quebec
Champion	612	" 1..	482	46 56	Paddle, pass., Quebec and Berthier.
Frontenac	555	" 1..	304	32 32	Twin screw, ferry, Que. & St. Romuald
Orleans	530	" 12..	269	29 52	Screw, ferry, Quebec & Island Orleans
North	450	" 15..	289	31 62	Paddle, ferry, Quebec and Lévis.
South	450	" 15..	349	35 92	" " "
Charlevoix	75	" 15..	212	24 96	Screw, pass., Quebec & Murray Bay.
S-vo y	25	" 15..	348	35 84	" freight & pass., Que. & Anticosti
Lord Stanley	30	" 15..	276	30 38	Twin screw, wrecking steamer in Gulf.
Alice	"	" 10..	67	10 36	Screw, Montreal Harbour, tug.
Asilda	" 4	" 15..	23	6 84	" " "
Dandy	" 5	" 19..	46	8 68	" " "
Ethel	" 8	" 19..	72	10 76	" " "
Julia	" 8	" 20..	91	12 28	" " "
W. F. Loggie	"	" 20..	17	6 36	" " "
T. H. Nasmith	"	" 20..	49	8 92	" " "
W. C. Francis	"	" 23..	37	7 96	" " "
Spray	"	" 23..	107	13 56	Montreal and Quebec, tug.
Sencennes	"	" 26..	228	23 24	Paddle, tug, Montreal and Quebec.
Hudson	"	" 27..	158	17 64	" " "
Berthier	600	" 17..	934	82 72	" pass., Three Rivers & Montreal.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected, &c.—Quebec Division—Continued.

BOILERS AND MACHINERY—Continued.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901.		\$ cts.	
Hosana	185	May 17..	84	11 72	Screw, pass., St. Helen's Id. & Montreal
John Pratt	Crew of 9	" 20..	Public Works		
Honoré	" 3	" 20..	22	6 76	Screw, Sorel and Montreal, tug.
Fire Fly	" 40	" 1..	214	25 12	Paddle, pass., Sorel and Berthier.
Carolina	600	" 1..	977	86 16	" " Montreal & Chicoutimi
Chambly	600	May 15..	535	50 80	Paddle, pass., Montreal and Chambly.
Canada	600	" 15..	1,768	149 44	" " " Chicoutimi.
Longeuil	300	" 15..	365	37 20	" " ferry, Montreal and Longeuil.
Laprairie	350	" 15..	600	56 00	Paddle, pass. ferry, Montreal and Laprairie.
Montreal	800	" 15..	2,068	173 44	Paddle, pass., Montreal and Quebec.
Terrebonne	450	" 15..	636	58 88	" " " Contrecoeur.
Saguenay	443	" 15..	992	87 36	" " " Quebec and Chicoutimi.
Sorel	40	" 15..	158	20 64	" " " Sorel and Montreal.
Daisy	Crew.				Department of Public Works.
Richard	" of 6	May 3..	466	45 28	Screw, freight, Montreal and lakes.
St. Francis					Dept. Public Works, attending dredge
St. James					Department of Public Works.
St. Jean Iberville					" " "
Sensation					" " "
Eureka					" " " Channel.
Victoria	30	May 18..	196	23 68	Screw, frt., Montreal and Chambly.
Dredge No. 4	Crew.	April 30..		5 00	Elevator Dredge.
Polino	" of 25	May 8..	807	72 56	Screw, freight, Montreal and St. John, N.F.
Cartier					Owned by Dept. of Public Works, attending dredge.
St. Louis	514	May 15..	428	42 24	Paddle, pass., Montreal and Quebec.
Ingomar	Crew of 2	" 15..	22	6 76	Screw, Quebec Harbour, pleasure yacht
Algerian	400	" 15..	914	81 12	Paddle, pass., Montreal and Toronto.
Hamilton	375	" 15..	938	83 04	" " " "
St. Antoine	Crew of 3	" 15..	14	6 12	Screw, pleasure yacht.
Etoile	591	" 15..	560	52 80	Paddle, pass., Montreal and Quebec.
St. Croix	550	" 15..	506	48 48	" " " "
Lillie H.	Crew of 3	" 25..	19	6 52	Screw, Quebec Harbour, tug.
Alaska	" 2	" 1..	51	9 08	" " " barge.
Shamrock					Dept. of Marine, laying of buoys.
Fabiola	Crew of 9	May 15..	81	11 48	Screw, wrecking schooner, Gulf St. Lawrence.
Florence	" 9	" 15..	133	15 64	Screw, wrecking schooner, Gulf St. Lawrence.
Columbian	400	" 16..	704	64 32	Twin screw excursion steamer.
Corsican	400	" 16..	946	83 68	Paddle, pass., Montreal and Toronto.
Caspian	400	" 16..	968	85 44	" " " "
Quebec	800	" 17..	2,656	220 48	" " " Quebec.
Bohemian	375	June 2..	628	58 24	" " " Prescott.
Greetland	40	May 22..	1,091	95 28	Screw, Montreal and foreign ports.
Ivan R.	40	" 23..	18	6 44	" pass., Grand Piles & La Tuque.
Florence	Crew.	" 24..	18	6 44	" tug, " "
High Rock					Return of fee not received, E. O. Hector notified.
St. Maurice	Crew.	May 24..	45	8 60	Screw, tug, Grand Piles & La Tuque.
Swallow	"	" 27..	9	5 72	" " Lake Edward.
Grace	"	" 27..	4	5 32	" pleasure yacht, Lake Edward.
Rivière du Loup	40	June 2..	199	23 92	Paddle, pass., Three Rivers and Cape Magdalen.
Spartan	400	May 31..	946	83 68	Paddle, pass., Montreal and Toronto.
Island Queen	250	" 31..	98	12 84	Screw, pass., Three Rivers & Batiscan.
Trois Rivières	1,161	June 1..	1,552	132 16	Paddle, " Montreal and St. Anne.
Two Brothers	Crew of 2	" 4..	23	6 84	Screw, Quebec Harbour, tug.
Diver	" 9	" 4..	86	11 88	" steam wrecking schooner, Gulf and river.

64 VICTORIA, A. 1901

STEAM Vessels Inspected, &c.—Quebec Division—*Concluded.*BOILERS AND MACHINERY—*Concluded.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901.		\$ cts.	
Kathleen.....		June 7..			Agricultural Dept., Quarantine service.
Batiscan.....	Crew of 3	" 8..	40	8 20	Paddle, tug, Quebec and Batiscan.
Contest.....	150	" 9..	274	29 92	" " and classed for pass. case of want.
Kinogami.....	Crew of 2	" 13..	21	6 68	Screw, tug, Chicoutimi river.
Paribonca.....	" 6	" 14..	179	22 32	Paddle, " Lake St. John.
Undine.....	" 2	" 14..	17	6 36	Screw, " "
Thor.....	" 10	" 18..	323	30 84	Paddle, " Saguenay river.
Mistassini.....	40	" 16..	249	27 92	" pass., Roberval & G'd Discharge.
Marie Louise.....		" 19..	99	12 92	" ferry, St. Anne & Chicoutimi.
Dauntless.....		" 21..	81	16 48	Screw tug, Montreal and Gulf.
Victor.....		" 21..	35	7 80	" " Quebec Harbour.
Alma.....		" 21..	12	5 96	" " "
M. E. Hacket.....		" 22..	78	11 24	" " "
Randolph.....	Crew of 2	" 22..	17	6 36	" " "
Marie Josephine.....	" 9	" 22..	117	14 36	" steam wrecking schooner, Gulf.
St. Roch.....	" 2	" 23..	18	6 44	" tug, Quebec Harbour.
St. George.....	" 2	" 23..	12	5 96	" " "
Dream.....					Owned and used for Custom H'se, Dept'
Spray.....	Crew of 2	June 25..	24	6 92	Screw, Quebec Harbour tug.
Hope.....	" 2	" 25..	19	6 52	" " "
Johnnie H.....	" 2	" 25..	14	6 12	" " "
Bella Ritchie.....	40	" 28..	69	10 52	Paddle, pass., Three Rivers & Champ'n.
Bourgeois.....	40	" 28..	94	12 52	" " " Laval.
Beatrice.....	Crew of 1	" 28..	40	8 20	" " tug, Three Rivers & St. Maurice.
Blanford.....	" 3	" 29..	65	10 20	" " " "
Glacial.....	100	" 29..	109	16 72	Screw, ferry, " St. Angèle.
Cono.....	40	" 29..	75	11 00	Paddle, " " Nicclet
St. Anne.....		" 30..	14	6 12	Screw.
Arthur.....		" 30..	78	11 24	Paddle, tug, Sorel & Three Rivers.
Rodolphe.....		" 30..	116	14 28	" " " "
Polaris.....		" 25..	533	50 64	Screw, Quebec and Levis ferry.
Pilot.....		" 26..	426	42 08	" " " "
Adriatic.....		" 16..	156	20 48	" Port Mulgrave ferry.
Wanderer.....		" 26..	565	53 20	" pass., Montreal and Gaspé.
Forest.....			26	7 08	
Island Queen.....			98	12 84	
Marie Louise.....			6	5 48	
St. Antoine.....			8	5 64	
Arizona.....			9	5 72	
Total.....			36,702	3,784 16	

JOS. SAMSON,
Boiler and Machinery Inspector.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected for the Year ended June 30, 1900.

QUEBEC AND MONTREAL DIVISION.

HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1899.		\$ cts	
Contest.....	150	July 3..	274	29 92	Pad., pass. and tug, Montreal and Gulf.
City of London.....	125	" 8..	.....	Paid in Kingston.	Screw, pass., Montreal and Gaspé.
Richelieu (of Montreal)	40	" 13..	34	7 72	" " St. John and Lacolle.
Napierville..	40	" 14..	165	21 20	Pad., ferry, Verdun and C. Ste. Catherine
Glacial.....	100	" 15..	109	16 72	Screw, ferry, Three Rivers & St. Angele.
Bourgeois.....	40	" 15..	94	12 52	Pad., ferry, Three Rivers & St. Grégoire.
Conno.....	40	" 15..	75	11 00	" " Nicolet.
Richelieu (of Ottawa)..	40	" 15..	113	17 04	Pad., pass., Montreal and Valleyfield.
Arizona.....	25	" 19..	9	5 72	Screw, pass., waters of Lake St. Joseph.
Owl.....	10	" 24..	4	5 32	" Newport and Magog.
Jubilee.....	30	Aug. 14..	25	7 00	" Megantic and Oben.
Tiber.....	80	" 16..	1,736	146 88	" & ft., Montreal and Halifax.
Marie Louise.....	40	Sept. 12..	99	12 92	Pad., ferry, Chicoutimi and Ste. Anne.
Peribonca.....	40	" 13..	179	22 32	Pad., pass., Roberval and Mistassini.
Le Colon.....	40	" 14..	173	21 84	" " " "
Undine.....	40	" 15..	17	6 36	Screw, pass. " G'de Décharge.
Frances.....	40	" 17..	19	6 52	Pad., ferry, Campbellton and Cross Point
M. E. Hacket.....	40	" 19..	78	11 24	Screw, Harbour tender.
Ivan R.....	40	" 21..	18	6 44	" pass., Grand Pelle & LaTuque.
Polaris.....	450	" 22..	533	50 64	" ferry, Quebec and Lévis.
Pilot.....	450	" 23..	426	42 08	" " " "
Queen.....	450	" 23..	367	37 36	" " " "
Frontenac.....	555	Oct. 6..	304	32 32	Screw, pass., Quebec and St. Romuald.
		1900.			
Rhoda.....	150	April 16..	182	22 56	Pad., pass., Quebec and Rimouski.
Lord Stanley.....	30	" 30..	276	30 08	Screw, wrecker, Montreal and Gulf.
Prefontaine.....	40	" 20..	434	42 72	" pass., Montreal and Quebec.
Laprairie.....	350	" 23..	600	56 00	Pad., ferry, Montreal and Laprairie.
Berthier.....	600	" 23..	934	82 72	" pass., Montreal and Three Rivers.
Chambly.....	600	" 23..	535	50 80	" " " Chambly.
Carolina.....	600	" 23..	977	86 16	" " " Chicoutimi.
Montreal.....	800	" 24..	2,068	173 44	" " " Quebec.
Sorel.....	40	" 24..	158	20 64	" Sorel and St. Thomas.
Terrebonne.....	450	" 24..	636	58 88	" Montreal and Sorel.
Eagle.....	30	" 24..	23	6 84	Screw, pass., St. Hyacinthe & St. Cesaire.
Polino.....	30	" 27..	807	72 56	" & ft., Montreal & St. John, Nfd
Campana.....	400	" 30..	1,697	143 76	" " " Pictou.
Orleans.....	530	" 30..	269	29 52	Screw, ferry, Quebec and Isle of Orleans.
Frontenac.....	555	" 30..	304	32 32	" " " St. Romuald.
Champion.....	612	" 30..	482	46 56	Pad., pass., Quebec and Berthier.
Charlevoix.....	75	May 1..	212	24 96	Screw, pass., Quebec and Murray Bay.
St. Olaf.....	130	" 1..	305	32 40	" & ft. Quebec and Netasquan.
Saguenay.....	443	" 1..	992	87 36	Pad., pass., Quebec and Chicoutimi.
Contest.....	150	" 1..	274	29 92	" " " Gulf.
North.....	450	" 4..	289	31 12	Pad., ferry, Quebec and Lévis.
South.....	450	" 4..	349	35 92	" " " "
Etoile.....	491	" 5..	560	52 80	Pad., pass., Quebec and Montreal.
Ste. Croix.....	550	" 5..	506	48 48	" " " Ste. Croix.
St. Louis.....	514	" 5..	428	42 24	" " " Montreal.
Algerian.....	400	" 9..	914	81 12	" " " Montreal and Toronto.
Caspian.....	400	" 9..	968	85 44	" " " "
Hamilton.....	375	" 9..	938	83 04	" " " Hamilton.
Hosana.....	185	" 9..	89	12 12	Screw, ferry, Montreal and Longueuil.
Cultivateur.....	751	" 9..	362	36 96	Pad., ferry, Montreal and Isd. St. Helen.
Ste. Anne.....	40	" 9..	14	6 12	Screw, ferry, Sorel and Berthier.
Fire Fly.....	40	" 9..	214	25 12	Pad., ferry, Sorel and Berthier.
Longueuil.....	300	" 9..	365	37 20	" " " Hochelaga and Longueuil.
Hochelaga.....	300	" 9..	419	41 52	" " " Hochelaga and Boucherville.

64 VICTORIA, A. 1901

STEAM Vessels Inspected, &c.—Quebec and Montreal Division.—*Concluded.*HULL INSPECTION.—*Concluded.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where Employed.
		1900.		\$ cts.	
Columbian.....	950	May 19..	704	64 32	Screw, pass., Montreal and Toronto.
Mansfield.....	60	" 21..	169	21 52	" ferry, N. Edinburg and Gatineau Pt
Empress.....	800	" 21..	677	62 16	Pad., pas., Ottawa and Grenville.
Victoria.....	300	" 21..	181	22 48	Screw, pass., Ottawa and Thurso.
Beatrice B.....	40	" 21..	59	9 72	" ferry, Ottawa and Hull.
Marquis of Lorne.....	40	" 21..	20	6 60	" "
Emilie.....		" 22..	12	5 96	Not running.
G. B. Green.....	600	" 22..	255	28 40	Pad., pass., Aylmer and Chats Rapids.
Harry Bate.....	40	" 22..	254	28 32	Screw, pass. and ft., Ottawa and Montreal.
Hall.....	50	" 22..	247	27 76	" "
Olive.....	60	" 22..	213	25 04	" "
Agnes.....	40	" 23..	29	7 32	Screw, pass., Buckingham and High Falls.
Mildred.....	25	" 23..	15	6 20	" "
Léon.....	20	" 23..	15	6 20	Screw, pass., High Falls & N.-Dame du Laus.
Glide.....	40	" 24..	80	11 40	" Calumet and Hawkesbury.
Boneto.....	30	" 24..	17	6 36	" Calumet and L'Original.
Princess.....	443	" 25..	527	50 16	Pad., pass., Montreal and Carillon.
Duchess of York.....	700	" 25..	490	47 20	" "
Ida.....	140	" 25..	247	27 76	Screw, pass. and ft., Montreal and Ottawa.
Island Queen.....	250	June 1..	98	12 84	Screw, ferry, Montreal and Longueuil.
Quebec.....	800	" 1..	2,656	220 48	Pad., pass., Quebec and Montreal.
Bohemian.....	375	" 1..	628	58 24	" Montreal and Prescott.
Corsican.....	400	" 1..	946	83 68	" Montreal and Toronto.
Trois Rivieres.....	1,161	" 1..	1,552	132 16	" Montr'l & Ste-Anne de Beaupre.
Ivan.....	40	" 1..	18	6 44	Screw, pass., Grand Piles and Latuque.
Richelieu of Ottawa.....	100	" 1..	113	17 04	Pad., pass., Montreal and Valleyfield.
Richard.....	6	" 1..	466	45 28	Screw, pass. & ft., Quebec & Upper Lakes.
Victoria.....	30	" 11..	196	23 68	" pass. & ft., Montreal & St. Johns, Que
Sparrow.....	40	" 12..	38	8 04	" pass, Callender and Frank Bay.
Dauntless.....	20	" 12..	8	5 64	" on waters of Lake Nipissing.
Queen.....	40	" 12..	15	6 20	" on waters of North Bay.
Booth.....	25	" 12..	347	32 76	Pad., pass., Muscovassa & Sturgeon Lake.
Ladas.....	40	" 13..	54	9 32	Screw, pass., Callendar and Chaudière.
Maid of the Mills.....	20	" 15..	8	5 64	" on Wahnapita Lake.
Verve.....	40	" 15..	55	9 40	" "
Mahagama.....	40	" 15..	20	6 60	" Pembroke & Des Joachims.
A. D. Mulligan.....	40	" 15..	77	11 16	Screw, ferry, Pembroke & Allumet Island.
Hudson.....	75	" 16..	45	8 60	Pad. ferry on Barry's Bay.
Thistle.....	10	" 17..	2	5 16	Screw, pass. on Barry's Bay.
Chateauguay.....	40	" 19..	222	25 76	Pad., pass., Montreal and Chateauguay.
Maud.....	350	" 19..	269	29 52	" Montreal and Ottawa.
Garnet.....	200	" 19..	152	20 16	" Montreal and Valleyfield.
Brothers.....	375	" 19..	546	51 68	" Montreal and Berthier.
Filgate.....	295	" 19..	425	42 00	" Montreal and Cornwall.
Sovereign.....	700	" 19..	637	58 96	" Montreal and Carillon.
John.....	30	" 20..	35	7 80	Pad., pass., Carillon at Pt. Fortune.
Dama.....	40	" 20..	55	9 40	Screw, pleas., Montreal and Quebec.
Laurier.....	40	" 20..	19	6 52	" pass., Montreal and Vaudeuil.
Robinault.....	200	" 20..	332	34 56	" Montreal and Valleyfield.
Welshman.....	25	" 20..	156	20 48	Screw, pass. & ft., Montreal and Ottawa.
Spartan.....	400	" 21..	946	83 68	Pad., pass., Montreal and Toronto.
Canada.....	600	" 21..	1,768	149 44	" Montreal and Chicoutimi.
Wanderer.....	100	" 25..	565	53 20	Screw, pass., Montreal and Gaspé.
Adriatic.....	300	" 15..	156	20 48	" ferry, Port Mulgrave & Pt Tupper.
Victoria.....	400	" 15..	188	23 04	" pass., Ottawa & Thurso.
Savoy.....	25	" 5..	348	35 84	" pass. & ft., Quebec and Anticosti.

PIERRE D. BRUNELLE,
Hull Inspector.

SESSIONAL PAPER No. 21

Tow Barges Inspected for the Year ended June 30, 1900.

QUEBEC AND MONTREAL DIVISION.

HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Remarks.
		1901.		\$ cts.	
Chaudière	150	June 12		10 00	
A. D. Smith.....	40	" 16..		10 00	
Total.....				20 00	

PIERRE D. BRUNELLE,
Hull Inspector.

STEAM Vessels not Inspected for the Year ended June 30, 1900.

QUEBEC AND MONTREAL DIVISION.

BOILER AND MACHINERY.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Remarks. Why not inspected and class of vessel.
Admiral.....	682	408	Inspected since.
Nil.....	27	19	Not in commission.
Alleghenay.....	5	3	Not running.
Le Nord.....	6	4	Inspected since.
Maud	50	34	
Jessie Hume	58	40	Not running.
Victory	55	37	"
Neptune.....	11	8	"
Commodore H.....	10	3	"
Dot.....	10	7	"
Eva	4	3	"
Five Brothers	11	7	"

HULL AND EQUIPMENT.

Thurso.....	20	9	Laid up.
Mistassini.....	249	157	Inspected since.
Rivière du Loup.....	199	129	Not employed.
Lady of the Lake.....	607	369	Inspected since.
Anny C.....	6	4	"
Mississippi	4	2	"
Greetland.....	1,091	702	"
Bonenfant.....	31	21	"
Bella Ritchie.....	69	42	"
	3,205	2,008	

JOS. SAMSON,
Boiler and Machinery Inspector.
PIERRE D. BRUNELLE,
Hull Inspector.

64 VICTORIA, A. 1901

STEAM Vessels Inspected for the Year ended December 30, 1900.

NOVA SCOTIA DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Express	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
1900.					
Léon.....		July 3..	19 82	6 60	Screw, tug, coasting.
Victor.....		" 3..	9 62	5 80	" " "
Star.....	15	" 4..	6 07	5 48	Screw, passenger, Wallace Harbour.
Eldon.....	40	" 5..	37 91	8 04	" " Strait of Canso.
Mulgrave.....	250	"* 6..	484 86	Gov. pro'ty	" " "
Alpha.....		" 13..	61 20	9 88	" tug, coasting. "
1899.					
David Duncan.....		Dec. 31..	20 59	6 68	" " "
1900.					
Centreville.....		July 13..	59 71	9 80	" " "
Yuba.....	25	" 15..	12 04	5 96	" pass., Barrington, Cape Island.
Aid.....		" 17..	98 55	12 84	" reeking tug, coasting.
St. Michael.....	15	" 17..	39 20	8 12	" tug and passenger coasting.
Trusty.....	150	" 17..	57 60	9 64	" passenger, La Have River.
Fairy.....		" 18..	15 55	6 28	" tug, Lunenburg Harbor.
Maggie.....	40	" 18..	19 26	6 52	" pass., Lunenburg and South.
Carrie.....	40	" 18..	14 82	6 20	" " Mahone and Chester.
Eleanor M. Cates.....		" 25..	58 81	9 72	" tug, coasting.
Vesta.....		" 25..	9 21	5 72	" passenger, Mira River.
Lennox.....	20	" 27..	66 29	10 28	Paddle, ferry, Lennox passage.
Malcom Cann.....	115	" 27..	211 81	24 76	Screw, passenger, coasting.
Elsie.....		Aug. 4..	22 14	6 76	" tug, coasting.
L. Boyer.....	100	" 15..	60 00	9 80	" passenger, Halifax Harbour.
Collector.....	75	" 14..	52 02	9 16	" " "
Delta.....	12	" 14..	873 21	77 84	" " and freight Foreign
Bessie and Harry.....		" 16..	22 00	6 76	" water boat, Halifax Harbor.
Anticosti.....		" 1..	19 00	6 52	" freight, coasting.
Henry Hoover.....	75	" 21..	54 64	9 40	" tug and pass, Halifax Harbour
Commodore.....	30	" 23..	12 84	6 04	" passenger, Halifax Harbour.
Mascotte.....	18	Sept. 13..	35 40	7 80	" " "
Annie.....		Oct. 10..	42 12	8 36	" water boat.
La Have.....		" 13..	49 27	8 92	" tug, coasting.
Wilfred C.....	60	" 26..	99 26	12 92	" passenger.
Bridgewater.....	225	" 27..	207 79	24 64	" " "
Goliah.....	20	Oct. 30..	146 83	19 76	" tug and passenger coasting.
Edna R.....		Nov. 7..	49 66	8 92	" " coasting.
Wanda.....		" 7..	38 48	8 04	" " "
Nereid.....		" 8..	12 24	5 96	" fishing boat, coasting.
Westport.....	21	" 8..	80 09	11 40	" passenger, coasting.
Halifax.....	250	" 10..	338 42	35 04	Paddle, ferry, Halifax Harbour.
Lady Glover.....	25	" 29..	137 51	19 04	Screw, freight and passenger coasting.
Ralph E. S.....		Dec. 2..	27 82	7 24	" fish boat, coasting.
J. L. Nelson.....		" 27..	37 84	8 04	" " "
1901.					
Newfoundland.....		Feb. 7..	918 75	78 52	" freight "
Harlaw.....	60	" 17..	451 36	44 08	" passenger coasting.
Louisburg.....		Mar. 24..	1,815 60	150 28	" freight, foreign.
Lenore.....		" 24..	15 23	6 20	" fish boat, coasting.
Florence C.....		" 27..	28 98	8 12	" " "
Aneta.....		April 4..	26 50	7 16	" " "
Helen May Butter.....		" 4..	66 98	10 36	" " "
Cacouna.....		" 20..	1,450 78	121 08	" freight, foreign.
Cape Breton.....		" 21..	1,764 19	146 12	" " "
Coban.....	37	" 26..	1,063 30	93 04	" freight and passenger, foreign.
Yarmouth.....	450	" 18..	1,451 92	124 16	" passenger, foreign.
John L. Cann.....	123	" 13..	165 55	21 28	" " coasting.
Island Gem.....		" 18..	15 62	6 28	" fish boat, coasting.
Percy Cann.....	35	" 18..	80 06	11 40	" passenger "

SESSIONAL PAPER No. 21

STEAM Vessels Inspected, &c.—Nova Scotia Division—*Concluded.*

BOILER AND MACHINERY—*Concluded.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901.		\$ cts.	
Gertrude M.	35	April 17	47 58	8 84	Screw, passenger, coasting.
Bonavista	50	" 26	1,306 33	112 48	" freight and passenger, foreign.
Lunenburg	200	" 27	265 55	29 28	" " " coasting.
Halifax	500	May 2	1,738 45	147 04	" passenger, foreign.
Marion	40	" 3	11 57	5 96	" " Pictou Harbour.
Arcadia	40	" 4	61 64	9 96	" " coasting.
May Queen	25	" 4	35 92	7 88	" " Pictou Harbour.
Diamond		" 4	22 65	6 84	" tug, coasting.
Douglas H. Thomas	15	" 5	211 91	24 96	" " and passenger, coasting.
Chester		May 7	79 50	11 40	Screw, tug, coasting.
Avon	100	" 7	64 66	10 12	" passenger, Avon River.
W. M. Weatherspoon		" 7	59 29	9 72	" tug "
Falmouth		" 7	43 03	8 44	" " "
Carrie	40	" 8	14 83	6 20	" pass. Chester and Mahone.
Ulala		" 16	13 70	6 12	" yacht, Halifax Harbour.
Peerless	300	" 21	94 27	12 52	" passenger, Sydney Harbour.
Hygeia	190	" 22	57 69	9 64	" " " "
Weymouth	40	Jan. 1	153 93	20 32	" " coasting.
C. M. Winch		May 22	87 72	12 04	" tug "
Gipsev		" 22	16 70	6 36	" " Sydney Harbour.
Acadia	225	" 23	74 21	10 92	" passenger "
Marion	400	" 23	478 49	46 24	Paddle " Sydney and Mulgrave.
Gladiator		Jan. 1	70 40	10 60	Screw, tug, coasting.
Zaidee		May 23	18 63	6 44	" water boat, Sydney Harbour.
Daisy		" 23	10 74	5 88	" " "
Zulieka		" 33	12 38	5 96	" yacht " "
Sea Bird		" 24	41 28	8 28	" fish boat, coasting.
Blue Hill	140	" 24	195 83	23 68	" pass., Sydney and Mulgrave.
Merrimac	15	" 24	85 80	11 80	" pass. & tug "
Active		" 25	59 91	9 80	" " coasting.
Vulcan		" 25	18 40	6 44	" " " "
Meadow Flower		" 25	6 56	5 56	" water boat, Canso Harbour.
Shannon		" 1	75 11	11 00	" tug coasting.
Vega	90	" 26	132 22	18 56	" pass., Sydney & Mulgrave.
Petrel	20	" 30	6 36	5 48	" " Halifax Harbour.
Dartmouth	300	" 9	311 23	32 88	Paddle, ferry "
Robbie Burns	200	June 12	88 95	12 12	Screw, excursion barge, Halifax Har.
Highland Mary	150	" 13	73 73	10 92	" " " "
Rescue		" 12	124 09	14 92	" tug, coasting.
Ida Lue	21	" 14	44 51	8 60	" pass. " "
Boston	550	" 16	1,694 50	143 52	" " " foreign.
Junio	40	" 15	9 29	5 72	" pass., Yarmouth Harbour.
Dolphin		" 15	6 07	5 64	" fish boat, coasting.
Freddie V.		" 15	26 69	7 08	" tug "
Tourist	38	" 20	4 42	5 32	" pass., Yarmouth Harbour.
Yuba	25	" 20	12 04	5 96	" " Barrington "
Glencoe	40	" 21	32 21	7 56	" " Annapolis River.
Marina	40	" 21	32 46	7 56	" " " "
Beaver	160	" 22	84 73	11 80	" " coasting.
Pastime	150	" 27	67 71	10 44	" excursion barge, Halifax Har.
A. C. Whitney	100	" 29	62 67	10 04	" pass. and tug "
Lion		" 28	19 82	6 60	" tug, coasting.
Dolphin		" 28	12 78	6 04	" " " "
Star	15	" 29	6 07	5 48	" pass., Wallace Harbour.
Totals			21,43 554	2,275 92	

JOHN P. ESDAILE,
Steamboat Inspector, Halifax, N.S.

64 VICTORIA, A. 1901

STEAM Vessels Inspected in Canada but registered elsewhere, for the Year
ended June 30, 1900.

NOVA SCOTIA DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessels and where employed.
		1900		\$ cts.	
Tyrian	30	July 12..	1038·57	91 12	Screw, passenger, foreign.
Bruce	300	" 22..	1154·59	100 40	" " "
Orinoco	115	Aug. 15..	1863·63	157 12	" " "
Chebucto	232	" 12..	578·48	54 24	" ferry, Halifax Harbour.
City of Ghent	70	" 22..	198·64	23 92	" passenger, coasting.
Beta	75	Sept. 12..	1086·67	94 96	" " foreign.
Prince Edward	400	" 15..	1413 74	121 12	" " "
Prince George	500	Nov. 13..	2040·14	171 20	" " "
		1901			
City of Monticello	350	April 23..	1033·65	90 72	Paddle, passenger, coasting.
City of Ghent	60	" 28..	198·64	23 92	Screw " " "
Silvia	109	May 5..	1707·70	144 64	" " foreign.
Amelia	250	Jan. 1..	356·54	36 48	" " coasting.
Pawnee	450	May 22..	106·80	16 56	" " "
Elaine	400	" 23..	272·08	29 76	" " "
Florida	200	June 5..	1786·30	150 88	" " foreign.
Prince Arthur	600	" 19..	2041·44	171 28	" " "
Evangeline	160	" 22..	78·74	11 32	" " coasting.
La Grande Duchesse ..	700	" 27..	5017·00	409 36	" " foreign.
Total			21973·35	1,899 00	

JOHN P. ESDAILE,

Steamboat Inspector, Halifax, N.S.

STEAM Vessels not Inspected for the Year ended June 30, 1900.

NOVA SCOTIA DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Remarks.
			Why not Inspected and Class of Vessel.
Tusket	3·04	2·00	Laid up tug.
Alida	64·18	29·52	" "
Scotia	41·58	28·27	" "
Gen	4·68	2·12	" fishing boat.
Havana	470·18	245·86	" passenger.
Maple Leaf	129·06	81·31	" ferry boat.
Volunda	29·80	13·96	" yacht.
City of St. John	709·12	446·75	" passenger.
Jessie Gray	76·01	47·93	" lighter.
Bessie	10·45	5·74	" passenger.
Mic-Mac	150·63	102·30	" ferry boat.
Salvor	44·93	34·90	" lighter, for new boiler.
Alpha	306·91	211·54	" passenger.
Mayflower	392·05	235·78	" "
Rob Roy	13·97	9·52	" tug.
Albatross	31·38	18·25	" yacht.
Total	2,477·98	1,515·75	

JOHN P. ESDAILE,

Steamboat Inspector, Halifax, N.S.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected for the Year ended June 30, 1900.

NOVA SCOTIA.

HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate expires.	Gross tons.	Tonnage dues and inspection fees paid.		Class of Vessel and where employed.
				\$	cts.	
1900.						
Boston.....	550	July 14.	1694'50	143	52	Screw, passenger and freight, Yarmouth and foreign.
St. Michael.....	15	" 17.	39'20	8	12	" " tug, Liverpool and shore ports.
Trusty.....	150	" 18.	57'60	9	64	" " " Bridgewater & LaHave Rv.
Maggie.....	40	" 18.	19'26	6	52	" " " Lunenburg and south.
Carrie.....	40	" 18.	14'83	6	20	" " " Mahone Bay and Chester.
Mulgrave.....	250	" 26.	484'86	.....		Government Steamer, Strait of Canso.
Malcom Cann.....	115	" 27.	211'81	24	96	Screw, passenger, Mulgrave and Coastwise.
Yuba.....	25	" 15.	12'04	5	96	" " " Barrington passage.
Vesta.....	.....	.....	9'21	5	72	No certificate issued, want of equipment.
Lennox.....	20	July 26.	66'29	10	28	Paddle, passenger, Lennox passage.
Collector.....	75	Aug. 14.	52'02	9	16	Twin screw, passenger barge, Halifax Harbour.
L. Boyer.....	100	" 15.	60'00	9	80	Screw, passenger and tug, Halifax Harbour.
Henry Hoover.....	75	" 22.	54'64	9	40	" " " " "
Commodore.....	30	" 1.	12'84	6	04	" " " " "
Delta.....	12	" 15.	873'21	77	84	Screw, passenger and freight, Home and foreign.
Mascotte.....	18	Sept. 13.	35'40	7	80	" " " Halifax Harbour.
Wilfred.....	60	Oct. 26.	99'26	12	92	" " " and freight, Halifax and Coast.
Bridgewater.....	225	" 27.	207'79	24	64	" " " " " "
Goliah.....	20	" 30.	146'83.	19	76	" " " " " "
Westport.....	21	Nov. 8.	80'09	11	40	" " " " " Yarmouth and Coast.
Halifax.....	250	" 22.	338'42	35	04	Paddle, ferry, Halifax and Dartmouth.
Lady Glover.....	25	" 28.	137'51	19	04	Screw, passenger and freight, Halifax and Coast.
Merrimac.....	15	May 25.	85'80	11	80	" " " tug, Strait of Canso.
1901.						
Newfoundland.....	.....	Feb. 22.	918'75	78	52	Screw, freight, Halifax and Coast.
Louisburg.....	.....	Mch. 31.	1815'60	150	28	" " " " "
Yarmouth.....	450	Apr. 17.	1451'92	124	16	" passenger and freight, Home and foreign.
John L. Cann.....	125	" 18.	165'55	21	28	" " " Mulgrave and Coast.
Percy Cann.....	35	" 18.	80'06	11	40	" " " " Yarmouth and Coast.
Gertrude M.....	35	" 18.	47'58	8	84	" " " " " "
Cape Breton.....	.....	" 24.	1164'19	146	12	" freight, Home and foreign. " "
Cacouna.....	.....	" 25.	1450'78	121	08	" " " " " "
Coban.....	37	" 25.	1063'30	93	04	" passenger and freight, Home and foreign.
Bonavista.....	50	" 26.	1306'33	112	48	" " " " " "
Harlaw.....	60	" 25.	451'36	44	00	" " " " Halifax and Coasting.
Lunenburg.....	200	" 28.	265'55	29	28	" " " " " "
Halifax.....	500	May 1.	1738'45	147	04	" " " " " "
Arcadia.....	40	" 3.	61'64	9	96	" " " " tug, Pictou and Coasting.
May Queen.....	25	" 3.	35'92	7	88	" " " " " harbour and rivers.
Marion.....	40	" 4.	11'57	5	96	" " " " " " "
Avon.....	100	" 8.	64'66	10	12	" " " " " river Avon and Parrsboro. "
Douglas H. Thomas.....	15	" 10.	211'91	24	96	" tug and passenger, Halifax and Coast.
Weymouth.....	40	Jan. 1.	153'93	20	32	" passenger and tug, Sydney and Coast.
Hygiea.....	190	May 22.	57'69	9	64	" ferry, Sydney and North Sydney.
Peerless.....	300	" 22.	94'27	12	52	" " " " " "
Marion.....	400	" 23.	478'49	46	24	Paddle, pass. and fr., Sydney and Bras d'or Lakes.
Acadia.....	225	" 23.	74'21	10	92	Screw, ferry, Sydney and North Sydney.
Blue Hill.....	140	" 24.	195'83	23	68	" pass. and freight, Baddeck and Grand Lakes.
Merrimac.....	15	" 25.	85'80	11	80	" tug and pass., Sydney Harbour & Str. of Canso.
Vega.....	90	" 25.	132'22	18	56	" pass., Strait of Canso and Bras d'or Lakes.
Petrel.....	20	" 29.	6'86	5	48	" ferry, Richmond and Dartmouth.
Dartmouth.....	300	" 9.	311'23	32	88	Paddle, ferry, Halifax and Dartmouth.
Ida Lue.....	21	June 14.	44'51	8	60	Screw, tug and passenger, Yarmouth and Coast.
Juno.....	40	" 15.	9'29	5	72	" ferry, Yarmouth and Bay View.
Boston.....	550	" 15.	1694'50	143	52	" passenger and freight, Home and foreign.
Yuba.....	25	" 23.	12'04	5	96	" ferry, Barrington Passage.
Tourist.....	38	" 23.	4'42	5	32	" " " Yarmouth Harbour.
Marina.....	40	" 26.	32'46	7	56	" tug and passenger, Annapolis Basin.
Glencee.....	40	" 26.	32'21	7	56	" ferry, Annapolis River.
Beaver.....	160	" 26.	84'73	11	80	" pass., and freight, Canning and Bay of Fundy.
Highland Mary.....	150	" 29.	73'73	10	92	Twin screw, excursion, Halifax Harbour.
Robbie Burns.....	200	" 26.	88'95	12	12	" " " " " "
A. C. Whitney.....	100	" 26.	62'67	10	04	" " " " " "
Pastime.....	150	" 30.	67'71	10	44	" " " " " "

64 VICTORIA, A. 1901

STEAM Vessels Inspected in Canada but Registered Elsewhere, for the year ended June 30, 1900.

NOVA SCOTIA DIVISION.

HULL INSPECTION.

Name of Vessel.	Number of passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessels and where Employed.
				§ cts.	
Tyrian	30	July 12.	1038·57	91 12	Screw, passenger and freight, Canada and foreign.
Bruce	300	" 22.	1154·59	100 40	" pass. and fr. Nov. Scotia and Newfoundland.
Orinoco	115	Aug. 15.	1863·63	157 12	" " Home and foreign.
Chebucto	232	" 10.	578·48	54 24	Twin screw, ferry, Halifax and Dartmouth.
City of Ghent	70	" 22.	198·64	23 92	Screw, passenger and freight, Halifax and Coastwise.
Beta	75	Sep. 13.	1086·67	94 96	" " " Home and foreign.
Prince Edward	400	" 15.	1413·74	121 12	" " " "
Prince George	500	Nov. 13.	2040·14	171 20	" " " "
		1901.			
City of Monticello.	350	Apr. 23.	1033·65	99 72	Paddle, " " Halifax and Coast.
City of Ghent	60	" 27.	198·64	23 92	Screw " " " "
Pawnee	450	May 23.	106·80	16 56	" " " Sydney and Bras d'Or
Elaine	400	" 23.	272·08	29 76	" " " " [Lakes.
Annelia	250	Jan. 1.	356·64	36 48	" " " Pictou and Coastwise.
Florida	200	June 4.	1786·30	150 88	" " " Home and foreign.
Sylvia	109	May 14.	1707·70	144 64	" " " " "
La Grand Duchesse	700	June 27.	5017·00	409 36	" " " " "
Prince Arthur	600	" 22.	2041·44	171 28	" " " " "
Evangeline	160	" 26.	78·74	11 32	" " " Kingsport, Parrsboro.

S. R. HILL,

Inspector of Hulls and Equipment, Halifax.

STEAM Vessels not Inspected for the Year ended June 30, 1900.

NOVA SCOTIA DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Remarks. Why not Inspected and Class of Vessel.
Havana	470·18	245·86	Laid up, passenger and freight.
Maple Leaf	129·06	81·31	" Ferry boat.
City of St. John	709·12	446·75	" passenger and freight.
Bessie	10·45	5·74	" " "
Mic Mac	150·63	102·30	" Ferry boat.
Alpha	306·91	211·54	" passenger and freight.
Mayflower	392·05	235·78	" " "

S. R. HILL,

Inspector of Hulls and Equipment, Halifax, N. S.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected for the year ended June 30, 1900.

NEW BRUNSWICK AND PRINCE EDWARD ISLAND.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where Employed.
				\$ cts.	
1900.					
St. Lawrence.....		July 4..	50.82	9 08	Screw, tug, Bathurst.
Borrioboola Gha.....			95.77	12 68	Paddle, " Dalhousie.
Eva.....		June 22..	18.01	6 44	Screw, ferry "
Henrietta.....		July 5..	19.12	6 52	" tug "
Nellie H.....		" 5..	7.52	5 64	" fish boat "
Victor.....	35	June 22..	45.51	8 68	Paddle, tug, Campbellton.
Squirrel.....		July 6..	13.11	6 04	Screw, " Dalhousie.
Calluna.....		" 15..	22.26	6 76	" " Richibucto.
Frederick A.....	25	" 15..	31.11	7 48	" " "
Alice.....		" 17..	15.77	6 28	" " Buctouche.
Annie Currier.....		June 8..	10.56	5 88	" " Fredericton.
Springhill.....	100	July 20..	189.05	23 12	" pass. and tug, St. John.
Amanda Green.....		" 28..	19.63	5 60	" tug "
Arbutus.....	86	Aug. 7..	46.76	8 76	" pass., St. Croix River.
Calla.....	30	" 8..	9.79	5 80	" " "
Marguerite.....		" 9..	19.66	6 60	" yacht "
Dream.....		" 14..	44.51	8 60	" " St. John River.
Cricket.....		" 18..	4.85	5 40	" " "
Elliot.....		" 25..	367.50	34 36	" freight, Charlottetown.
Western Extension.....	280	Sept. 16..	424.89	41 92	Paddle, ferry, St. John.
Nautilus.....		" 28..	26.56	7 16	Screw, yacht, St. Croix River.
Vacunna.....		Oct. 4..	9.52	5 80	" tug, Vanceboro.
Aberdeen.....	400	" 4..	243.86	27 52	Stern-wheel, pass., St. John River.
Delta.....	40	" 10..	19.93	6 60	Screw, pass., Hopewell Cape.
Beryl Essie.....		" 11..	23.83	6 92	" tug, Tignish.
Wenola.....		" 11..	25.10	7 00	" " Port Elgin.
St. Andrew.....		June 23..	76.64	11 16	" " Miramichi.
Kingsville.....		Nov. 2..	36.59	7 96	" " St. John.
La Tour.....	70	" 7..	154.43	20 32	" " pass. Coasting.
Ouangondy.....	208	" 28..	294.75	31 60	Paddle, ferry, St. John.
1901.					
Storm King.....	40	Feb. 20..	107.87	16 64	Screw, pass., St. John.
Hercules.....		" 23..	87.11	11 96	" tug "
E. Ross.....	40	Mar. 8..	29.63	7 40	" ferry "
Wm. H. Murray.....	40	" 21..	72.55	10 84	" pass. and tug, St. John.
Maggie M.....		" 21..	65.78	10 28	" tug, St. John.
Northumberland.....	350	" 28..	1,255.46	108 40	Twin-screw, pass., P. E. I.
Princess.....	350	" 28..	541.79	51 36	Screw, pass., P. E. I.
Jacques Cartier.....	300	" 28..	379.96	38 40	Paddle " "
Hillsborough.....		Not issued	228.67	26 32	" ferry "
Elfin.....	70	Mar. 29..	122.42	17 76	" " "
Captain.....		April 4..	68.43	10 44	Screw, tug, St. John.
Sea King.....		" 4..	128.63	15 32	" " "
Springfield.....	170	" 4..	232.73	26 64	Stern-wheel, pass., St. John.
Fanchon.....	40	" 5..	110.61	16 88	Paddle, pass and tug, "
G. K. King.....		" 5..	45.48	8 60	Screw, tug, St. John.
Admiral.....		" 5..	158.20	17 64	Paddle, tug "
Hero.....		" 5..	127.63	15 24	" " "
Fred Glasier.....		" 6..	10.39	5 80	Screw " "
David Weston.....	450	" 6..	765.15	69 20	Paddle, pass. "
Hampstead.....	150	" 6..	234.52	26 80	Screw " "
Nereid.....		" 9..	30.03	7 40	" tug "
Leader.....		" 9..	29.32	7 32	" " "
Serene E.....		" 9..	24.94	7 00	" " Coasting.
Lilly Glassier.....		" 16..	209.31	21 72	Paddle " St. John.
Winnie.....		" 16..	12.46	5 96	Screw " "
Victoria.....	680	" 16..	1,001.93	88 16	Paddle, pass. "
Star.....	300	" 16..	461.03	44 88	" " "
Bismark.....	40	" 19..	49.04	8 92	" " "
Fannie.....		" 19..	33.44	7 64	Screw, tug "
May Queen.....	321	" 19..	539.40	51 12	Paddle, pass. "
Joseph.....		" 19..	53.75	9 32	Screw, tug "
G. D. Hunter.....		" 19..	67.97	10 44	" " "
Maggie Miller.....	150	" 20..	104.66	16 40	Paddle, ferry "

64 VICTORIA, A. 1901

STEAM Vessels Inspected, &c.—New Brunswick and P. E. Island Division—*Concluded.*BOILERS AND MACHINERY—*Concluded*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901		\$ cts.	
Clifton.....	200	April 20..	138·21	19 04	Stern-wheel, pass., St. John.
Champion... ..		" 20..	190·14	20 20	Paddle, tug, St. John.
Ernest.....		" 23..	12 58	6 04	Screw " "
Viking.....	150	" 30..	127·70	18 24	" passenger, St. Croix River.
Hope.....		May 2..	305·77	29 48	Paddle, tug, St. John.
Peri.....		" 2..	11·77	5 96	Screw " "
Bessie Ardella.....		" 4..	17·44	6 36	" fish boat, Deer Island.
Martello.....		" 5..	33·65	7 72	" tug, St. John.
Wee Laddie.....		" 7..	16·60	6 36	" " "
Flushing.....	140	" 10..	177·65	22 24	" passenger, St. John.
Montague.....	75	" 14..	129·55	18 32	Paddle, ferry, Georgetown,
Electra.....	40	" 14..	106·96	16 56	Screw, passenger " "
Lottie.....		" 14..	5·00	5 40	" fish boat " "
Fred M. Batt.....		" 15..	59·90	9 80	" tug, Charlottetown.
Nelson.....		" 16..	32·90	7 64	" " "
Alameda.....	40	" 15..	62·59	10 04	" passenger " "
T. A. Stewart.....		" 17..	35·94	7 88	Twin-screw, tug, " "
Frank C. Batt.....	40	" 16..	32·90	7 64	Screw, ferry, Summerside.
Lillie.....	65	" 21..	71·64	10 76	" tug and passenger, St. John.
Prince Rupert.....	850	" 21..	1,158 44	100 64	Paddle, passenger, St. John.
Mildred.....		" 22..	40·11	8 20	Screw, tug " "
Tangent.....		" 25..	35·74	7 88	Twin-screw, tug " "
Ada.....		" 28..	3·66	5 32	Screw, yacht, Fredericton.
Meta.....		" 28..	5·05	5 40	" " " "
Anna Currier.....		" 28..	10·56	5 88	" tug " "
Carrie Knight.....		" 28..	5·88	5 48	" " " "
Quiddy.....		" 28..	30·59	7 40	Paddle " " "
Randolph.....		" 29..	8·71	5 72	Twin screw, yacht " "
Eva Johnson.....		" 29..	15·77	6 28	Screw, tug " "
Electric.....		" 29..	3·74	5 32	" " " "
Borriboola Gha.....		June 20..	95·77	12 68	Paddle " Dalhousie
Mary Odell.....	90	" 20..	28·92	7 32	Screw, ferry " "
Squirrel.....		" 20..	13·11	6 04	" tug " "
Atlas.....		" 20..	15·79	6 28	" " New Mills.
Nyanza.....	150	" 21..	83·21	11 64	" pass. and tug, Bathurst.
St. Lawrence.....		" 21..	50·82	9 08	" tug " "
Florence.....		" 22..	19·33	6 52	" yacht, Newcastle.
Rustler.....	200	" 23..	101·54	16 16	Paddle, passenger " "
Lady Dufferin.....	40	" 23..	47·48	8 76	" ferry " "
Laura.....		" 23..	13·55	6 12	Screw " " "
Bessie.....		" 23..	5·18	5 40	" fish boat " "
Loyalist.....		" 23..	17·57	6 44	Paddle, tug " "
Irene.....		" 23..	10·29	5 80	Screw " " "
Zulu.....		" 23..	17·60	6 44	Paddle " " "
Bridgetown.....		" 23..	14·66	6 20	Screw " " "
Nelson.....	100	" 25..	64·34	10 12	" passenger, Chatham.
St. George.....	200	" 25..	277·78	30 24	Paddle " " "
Marietta.....	25	" 25..	7·04	5 56	Screw, yacht " "
Edith.....		" 25..	21·55	6 76	" tug " "
Grip.....		" 25..	4·81	5 40	" " " "
Arthur.....		" 25..	4·99	5 40	" yacht " "
Jubilee.....		" 25..	16·52	6 36	" fish boat " "
Miramichi.....	100	" 26..	78·18	11 00	" passenger " "
Sybella H.....	40	" 26..	70·68	10 68	Paddle, ferry " "
St. Isidore.....		" 26..	141·75	16 36	" tug " "
Lina.....		" 26..	26·40	7 08	Screw " " "
Eva.....		" 26..	18·01	6 44	" " " "
Sarcella.....		" 26..	21·86	6 76	" " " "
St. Kilda.....		" 26..	55·64	9 48	Paddle " " "
St. Nicholas.....		" 27..	62·20	9 96	Screw, passenger " "
St. Andrew.....		" 27..	76·64	11 16	" tug " "
Total.....			14,127·05	1,830 72	

W. L. WARING, *Steamboat Inspector.*

SESSIONAL PAPER No. 21

STEAM Vessels Inspected in Canada but registered elsewhere, for the Year ended
June 30, 1900.

NEW BRUNSWICK AND PRINCE EDWARD ISLAND DIVISION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees paid.	Class of Vessel and where employed.
		1900.		\$ cts.	
General Leavitt.....	40	Aug. 8..	22'65	6 84	Screw, ferry, Lubec.
Lubec.....	95	" 8..	50'94	9 08	" "
Alice.....	45	" 8..	12'14	5 96	" "
Geanette.....	105	" 9..	73'64	10 92	" passenger, St. Stephen.
Rose Standish.....	325	" 9..	384'93	38 80	Paddle " "
St. Croix.....	400	.....	1993'58	167 52	Screw " Boston.
		1901.			
Cumberland.....	550	March 9..	1605'92	136 48	Paddle, passenger, Boston.
State of Maine.....	550	June 6..	1409'99	120 80	" " "
Lubec.....	95	" 7..	50'94	9 08	Screw " Lubec.
			5604'63	505 48	

W. L. WARING,
Steamboat Inspector.

STEAM Vessels not inspected for the Year ended June 30, 1900.

NEW BRUNSWICK AND PRINCE EDWARD ISLAND DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Gross Tons.	Registered Tonnage.	Remarks. Why not Inspected and Class of Vessel.
City of Monticello.....	1,033'65	565 62	Out of District, paddle.
Ada G.....	102'08	30 55	Laid up, paddle.
Lotus.....	5'00	5 00	" screw.
Tourist.....	16'15	10 98	Out of District, screw.
Mascott.....	70'50	47 49	Laid up, screw.
Aleyone.....	15'05	10 73	Out of District " "
Francis.....	26'34	17 91	" " "
Southport.....	239'92	186 15	Not called for, paddle.
Wm. Aitken.....	74'87	51 19	Laid up, screw.
May Queen.....	35'92	17 94	Out of District, screw.
Flash.....	5'59	2 82	" " "
Gipsy.....	16'70	11 37	" " "
Derby.....	11'66	8 66	Laid up, paddle.
Utopia.....	25'00	17 00	" screw.
	1678'43	983 41	

W. L. WARING,
Steamboat Inspector.

64 VICTORIA, A. 1901

STEAM Vessels Inspected for the Year ended 30th June, 1900.

NEW BRUNSWICK AND PRINCE EDWARD ISLAND DIVISION.

HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900.		\$ cts.	
Rustler.....	200	June 20..	101.54	16 16	Paddle, pass., Newcastle.
Nyanza.....	150	July 5..	83.21	11 64	Screw " Petitecodiac River.
Frederick A.....	25	" 15..	31.11	7 48	" " Richibucto.
Springhill.....	100	" 20..	189.05	23 12	" " Basin of Minas.
Arbutus.....	86	Aug. 7..	46.76	8 76	" " St. Croix River.
Calla.....	30	" 8..	9.79	5 80	" " "
Elliot.....		" 25..	367.48	34 36	" freight, coasting.
Western Extension.....	280	Sept. 16..	424.89	41 92	Paddle, ferry St. John.
Aberdeen.....	400	Oct. 4..	243.86	27 52	Stern-wheel, pass., St. John.
Delta.....	40	" 10..	19.93	6 60	Screw, Hopewell.
La Tour.....	70	Nov. 7..	154.43	20 32	" " St. John.
Quangondy.....	208	" 8..	294.75	31 52	Paddle, ferry, St. John.
		1901.			
Storm King.....	40	Feb. 20..	107.87	16 64	Screw, pass., St. John.
E. Ross.....	40	Mar. 8..	29.63	7 40	" ferry " "
Wm. H. Murray.....	40	" 21..	72.55	10 84	" pass. " "
Northumberland.....	350	" 28..	1255.46	108 40	Twin-screw, pass., North'd Straits.
Jacques Cartier.....	300	" 28..	379.96	38 40	Paddle " " "
Princess.....	350	" 28..	541.79	51 36	Screw " " "
Fanchon.....	40	April 5..	110.61	16 88	Paddle " " St. John.
Hampstead.....	150	" 6..	234.52	26 80	Screw " " "
Springfield.....	170	" 4..	212.73	26 64	Stern-wheel " " "
Star.....	300	" 16..	461.03	44 88	Paddle " " "
Maggie Miller.....	150	" 20..	104.66	16 40	" ferry, Millidgeville.
Clifton.....	200	" 19..	138.21	19 04	Screw, pass., St. John.
David Weston.....	450	" 6..	765.15	69 20	Paddle " " "
May Queen.....	321	" 18..	539.40	51 12	" " " "
Victoria.....	680	" 19..	1001.93	88 16	" " " "
Bismark.....	40	" 19..	49.04	8 92	" " " "
Viking.....	150	" 30..	127.70	18 24	Screw " " St. Croix.
Flushing.....	140	May 10..	177.65	22 24	" " " St. John.
Electra.....	40	" 14..	106.96	16 56	" " " Charlottetown, P.E.I.
Alameda.....	40	" 15..	62.59	10 04	" " " "
Elfin.....	70	" 15..	122.42	17 76	Paddle, ferry " " "
Montague.....	75	" 14..	129.55	18 32	" " " Georgetown, P.E.I.
Frank C. Batt.....	40	" 16..	32.90	7 64	Screw " " Summerside "
Prince Rupert.....	850	" 21..	1158.44	100 64	Paddle, pass., St. John.
Lillie.....	65	" 21..	71.64	10 76	Screw " " "
Victor.....	35	June 20..	45.51	8 68	Paddle " " Campbellton.
Mary Odell.....	90	" 20..	28.92	7 32	Screw " " Dalhousie.
Nyanza.....	150	" 21..	83.21	11 64	" " " Bathurst.
Lady Dufferin.....	40	" 21..	47.48	8 76	Paddle, ferry, Newcastle.
Rustler.....	200	" 21..	101.54	16 16	" pass. " "
Nelson.....	100	" 22..	64.34	10 12	Screw " " Chatham.
Miramichi.....	100	" 22..	75.18	11 00	" " " "
St. George.....	200	" 22..	277.78	30 24	Paddle " " "
Sybella, H.....	40	" 22..	70.68	10 68	" ferry " "
Marietta.....	25	" 22..	7.04	5 56	Screw, pass. " "

I. J. OLIVE,
Hull Inspector, &c.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected in Canada but Registered elsewhere, for the Year ended June 30, 1900.

NEW BRUNSWICK AND PRINCE EDWARD ISLAND DIVISION.

HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessels and where employed.
		1900		\$ cts.	
Rose Standish	325	Aug. 9.	384.93	38 80	Paddle, passenger, Calais, Me.
General Leavitt.	40	" 8..	22.65	6 84	Screw " Lubec "
Lubec	95	" 8..	50.94	9 08	" " " "
Jeanette	105	" 9..	73.64	10 92	" " Calais "
Alice	45	" 8..	12.14	5 96	" " Eastport, Me.
St. Croix	400	Dec. 9..	1,993.58	167 52	" " St. John & Boston
		1901			
Cumberland	550	Mar. 5..	1,605.82	136 48	Paddle " "
State of Maine.....	550	June 6..	1,409.99	120 80	" " " "
Lubec	95	" 7..	50.94	9 08	Screw " Lubec, Me.

I. J. OLIVE,
Hull Inspector, &c.

STEAM Vessels not Inspected for the Year ended June 30, 1900.

NEW BRUNSWICK AND PRINCE EDWARD ISLAND DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Remarks. Why not inspected and class of vessel.
Hillsborough.....	228.17	66.13	Not applied for; paddle, passenger.
Southport	239.92	156.13	" " " "
St. Nicolas	62.20	42.30	Not in Port; screw.
Wm. Aitken	74.87	51.19	Not ready " "
Eva	18.01	12.25	Not applied for; screw.
Total	623.17	328.00	

I. J. OLIVE,
Hull Inspector, &c.

64 VICTORIA, A. 1901

STEAM Vessels Inspected for the year ended June 30, 1900.

BRITISH COLUMBIA DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fee Paid.	REMARKS.
		1899.		\$ cts.	
Flyer.....		July 4..	47·64	8 84	Screw tug.
Star.....		" 5..	13·50	6 04	" " "
St. Clair.....		" 4..	68·12	10 44	" " "
Olive.....		" 4..	71·32	10 68	Stern-wheel freight.
Selkirk.....		" 11..	58·49	9 64	" " yacht.
Duchess.....	40	" 12..	145·48	19 60	" " freight and passenger.
Hyak.....	20	" 13..	39·04	8 12	" " " "
Victoria.....	30	" 14..	106·60	16 56	" " " "
Archer.....		" 15..	15·32	6 20	Screw tug.
Lardeau.....	15	" 15..	9·60	5 80	" passenger.
Slocan.....	300	" 16..	578·03	54 24	Stern-wheel freight and passenger.
Wm. Hunter.....	25	" 16..	50·67	9 08	Twin screw " "
Sandon.....	50	" 17..	96·22	12 68	Screw " "
Alert.....	12	" 17..	3·11	5 24	" passenger.
International.....	300	" 18..	525·55	50 08	Stern-wheel, freight and passenger.
Rossland.....	300	" 18..	883·55	78 72	" " " "
Illicillewaet.....	30	" 18..	97·92	12·84	" " " "
Kokanee.....	200	" 19..	347·50	35 84	" " " "
Surprise.....		" 19..	14·80	6 12	Screw tug.
Alberta.....	200	" 19..	508·15	48 64	Stern-wheel, freight and passenger.
Kaslo.....		" 20..	51·17	9 08	Screw tug.
Moyie.....	250	" 20..	834·81	74 80	Stern-wheel, freight and passenger.
Angerona.....		" 20..	13·79	6 12	Screw tug.
Marion.....	15	" 20..	14·78	6 20	Stern-wheel, freight and passenger.
Ymir.....		" 20..	69·74	10 60	Screw tug.
Denver.....		" 20..	8·51	5 72	" " "
Hercules.....	50	" 21..	64·68	10 20	" " freight and passenger.
Nelson.....	125	" 21..	496·01	47 68	Stern-wheel, " "
Kootenay.....	300	" 21..	1,117·09	97 36	" " " "
Lytton.....	100	" 21..	451·66	44 16	" " " "
Minto.....	250	" 21..	828·91	74 32	" " " "
Trail.....	50	" 21..	662·77	61 04	" " " "
Red Star.....		" 22..	14·81	6 20	Screw tug.
Haylis.....		" 23..	43·81	8 52	" " "
Columbia.....		" 23..	49·84	9 00	" " "
Penticton.....		" 24..	49·69	9 00	Twin screw tug.
Aberdeen.....	250	" 24..	554·04	52 32	Stern-wheel, freight and passenger.
Maude Moore.....		" 25..	8·64	5 72	Screw, yacht.
Louise.....		" 26..	3·00	5 24	" " "
Ethel Ross.....	12	" 28..	82·05	11 56	Stern-wheel, freight and passenger.
Thompson.....		" 28..	149·80	20 00	" " freight.
Bristol.....		Aug. 1..	1,983·15	166 64	Screw, freight.
Joan.....	400	" 3..	821·21	73 68	Twin screw, freight and passenger.
Islander.....	500	" 7..	1,495·09	127 60	" " " "
Albion.....	30	" 9..	88·11	12 04	Screw, freight and passenger.
Defiance.....	39	" 9..	89·88	12 20	" " " "
Clayoquot.....	12	" 9..	87·18	11 96	" " " "
Mannie.....	12	" 21..	89·60	12 20	" " " "
Danube.....	300	" 23..	886·89	78 96	" " " "
Empress.....		" 24..	3·39	5 24	Screw, tug.
Willapa.....	100	" 9..	373·09	37 84	" freight and passenger.
Sunbury.....	20	June 26..	37·72	8 04	" " " "
Queen City.....	100	Sept. 11..	391·21	39 28	" " " "
Tees.....	125	" 12..	679·15	62 32	" " " "
Belle.....	12	" 13..	66·62	10 36	" " " "
Royal City.....	39	Aug. 10..	200·46	24 00	Stern-wheel, freight and passenger.
Mystery.....	20	Sept. 20..	64·80	10 20	Screw, freight and passenger.
Pilot.....	22	" 19..	279·05	30 32	" " " "
Senator.....	30	" 15..	27·63	7 24	" " " "
Leonora.....		" 20..	33·00	7 64	Screw, tug.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected, &c.—British Columbia Division—*Continued.*BOILERS AND MACHINERY—*Continued.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Remarks.
1899.					
Tyee.....		Sept. 21..	31.53	7 56	Screw, tug.
Fraser.....		" 22..	36 20	7 88	" freight.
Alpha.....	400	April 13..	653.46	8 00	Screw f. & p., spec'l insp. for incr. of p.
Etta White.....	15	Oct. 12..	97.35	12 76	" " "
Hattie Young.....	39	" 13..	131.75	18 56	Stern wheel "
Mable.....		" 14..	5.28	5 40	Screw tug.
Charmer.....	500	" 26..	1,044.41	91 52	" freight and passenger.
Kildonan.....		Nov. 14..	51.41	9 08	" tug.
Hong Kong.....		" 14..	35.76	7 88	" " "
Halifax.....		" 15..	28.19	7 24	" " "
Saturna.....		" 15..	22.05	6 76	" " "
Maude.....		" 21..	174.99	22 00	" freight.
Delta.....		" 22..	25.20	7 00	" " "
Princess Louise.....	98	Dec. 13..	931.76	82 56	Paddle freight and passenger.
Active.....	20	Jany. 3..	171.74	21 76	Screw "
1900.					
Staffa.....		June 26..	51.30	9 08	" freight.
Bonanza.....		Jany. 3..	109.04	22 44	" " two years dues.
Swan.....		" 4..	16.65	7 72	" tug "
Alarm.....		" 5..	33.91	7 72	" " "
Sadie.....	25	" 10..	49.30	8 92	" freight and passenger.
J. L. Card.....		" 19..	141.06	16 28	" freight.
Vulcan.....		" 26..	76.79	11 16	" tug.
Brunette.....		" 26..	37.03	7 96	" " "
Iris.....		" 26..	37.70	8 04	" " "
Esperanza.....		Feb. 5..	30.88	7 48	" " "
Stella.....		" 6..	16.32	6 28	" " "
Alice.....		" 6..	34.62	7 80	" freight.
Robt. Dunsmuir.....	50	" 6..	231.75	26 56	Twin screw freight and passengers.
Antolycus.....	10	" 7..	25.47	7 00	Screw "
Capilano.....	25	" 16..	231.14	26 48	" " "
Coquitlam.....	75	" 17..	256.33	28 48	" " "
Lorne.....	20	" 23..	287.96	31 04	" " "
Ba. Boscowitz.....	125	" 27..	337.92	35 04	" " "
Alpha.....	268	Mar. 3..	653.46	60 24	" " "
Tepic.....	15	" 5..	70.87	10 68	" " "
Selkirk.....	35	" 5..	141.63	19 36	" " "
Czar.....		" 6..	152.18	17 16	" tug.
Chieftain.....		" 14..	64.80	10 20	" " "
Lois.....	10	" 16..	25.15	7 00	" freight and passenger.
Defiance.....	39	" 16..	89.88	12 20	" " "
Burt.....	25	" 17..	50.41	9 00	Twin screw "
Comox.....	140	" 17..	101.17	16 08	Screw "
Constance.....	12	" 20..	49.52	9 00	" " "
Thistle.....		Feb. 27..	222.36	25 76	" " "
Amur.....	228	Mar. 9..	907.17	80 56	" " "
Troubadour.....		" 23..	17.61	6 44	" tug.
Iroquois.....	39	April 1..	195.49	23 60	" freight and passenger.
Vera.....		" 5..	5.86	5 48	" tug.
Native.....		" 6..	51.51	9 16	" " "
Courser.....	39	" 6..	160.79	20 88	Stern wheel freight and passenger.
Winetta.....		" 11..	23.53	6 92	Screw tug.
Hope.....	12	" 21..	78.49	11 32	" freight and passenger.
Royal City.....	39	" 25..	200.46	24 00	Stern wheel "
North Vancouver.....	144	May 5..	103.83	16 32	Screw "
R. P. Rithet.....	.81	" 10..	816.69	73 36	Stern wheel "
Argenta.....	40	" 16..	206.32	24 48	" " "
Mermaid.....	100	" 19..	128.55	18 32	Twin screw "
Alert.....		" 19..	43.81	8 52	Screw tug
Swan.....		" 19..	12.27	5 96	" " "

64 VICTORIA, A. 1901

STEAM Vessels Inspected, &c.—British Columbia Division—*Concluded.*

BOILERS AND MACHINERY—*Concluded.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Remarks.
		1900.		\$ cts.	
Yosemite.....	500	May 19..	1,525·03	130 00	Paddle freight and passenger.
Oscar.....		" 26..	95·42	12 60	Screw freight.
Glenora.....	100	" 28..	542·15	51 36	Stern wheel freight and passenger.
Vancouver.....		" 30..	49·96	9 00	Screw tug.
Bessie.....		Mar. 1..	10·90	5 88	" "
Bristol.....	30	June 9..	1,983·15	166 64	" " freight and passenger.
Daisy.....		Mar. 28..	60·10	9 80	" tug.
City of Nanaimo.....	500	June 22..	761·37	68 88	Twin screw freight and passenger.
Sunbury.....		" 23..	37·72	8 04	Screw tug.
Cleeve.....		" 26..	35·94	7 88	" " [\$8 of amount are special
Monte Christo.....	60	" 24..	265·77	37 28	Stern wheel fg't. & p. inspect. fees.]
			32,335·01	3,358 80	

J. A. THOMSON,
Steamboat Inspector, Victoria, B.C.

STEAM Vessels Inspected in Canada, but Registered elsewhere, for the Year ended June 30, 1900.

BRITISH COLUMBIA DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessels and where employed.
				\$ cts.	
City of Puebla.....	511	July 9..	2,623·88	217 92	Screw, freight and pass., North Pacific
Flirt.....		" 19..	3·58	5 32	" yacht, Kootenay Lake.
Garland.....	50	Aug. 6..	166·61	21 36	" freight and pass., Puget Sound
Rosalie.....	127	" 10..	318·51	33 52	" " Alaska & Victoria
Dirigo.....	240	" 20..	843·55	75 52	" " " " "
Victorian.....	500	" 29..	1,503·64	128 32	" " Puget Sound
Milos.....	962	Apr. 21..	2,766·00	224 48	" " Pacific Ocean
Walla Walla.....	401	May 9..	3,069·76	253 60	" " " "
City of Seattle.....	592	" 12..	1,111 05	120 88	" " Alaska & Victoria
Queen.....	402	June 5..	2,727·80	226 24	" " " "
Umatilla.....	400	" 13..	3,069·76	253 60	" " North Pacific
North Pacific.....	200	" 16..	488·73	47 12	Paddle " Puget Sound
Cottage City.....	273	" 18..	1,885·11	158 80	Screw " Alaska & Victoria
Total.....			20,817 98	1,766 68	

J. A. THOMSON,
Steamboat Inspector, Victoria, B.C.

SESSIONAL PAPER No. 21

STEAM Vessels not Inspected for the Year ended June 30, 1900.

BRITISH COLUMBIA DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Remarks. — Why not Inspected and Class of Vessel.
Horsa	741·00	459·00	Freight and passenger, taken to Mexico.
City of Tipella	18·89	12·01	Fishing tug, no application.
Willie	82·60	55·94	Freight and passenger, no application.
Water Lilly	73·81	50·20	Water boat, no application.
Mist	28·64	19·50	Tug, laid up.
Rothesay	538·11	348·46	Freight and passenger, laid up.
Lottie	29·24	11·12	Tug, no application.
Mischief	65·49	44·54	Sold to United States.
Casca	589·73	455·15	Freight and passenger, laid up.
Total	2,182·51	1,455·92	

J. A. THOMSON,
Steamboat Inspector, Victoria, B.C.

64 VICTORIA, A. 1901

STEAM Vessels Inspected for the year ended June 30, 1900.

BRITISH COLUMBIA AND YUKON DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Remarks.
		1899.		\$ cts.	
Joseph Clossett.....	100	July 1..	147 05	19 76	Yukon river, freight and passenger.
Columbian.....	200	" 4..	716 42	65 28	" " "
Clara.....		" 5..	144 48	19 56	" freight.
Gov. Pingree.....	230	" 6..	466 03	45 28	" freight and passenger.
Victorian.....	200	" 7..	716 39	65 28	" " "
Flora.....	75	" 7..	100 93	16 08	" " "
Canadian.....	200	" 11..	716 42	65 28	" " "
Florence S.....	50	" 11..	100 20	16 00	" " "
Gold Star.....	135	" 12..	168 36	21 47	" " "
Ora.....	75	" 19..	100 93	16 08	" " "
W. K. Meristine....	90	" 19..	229 00	26 32	" " "
Yukoner.....	250	" 22..	781 31	70 48	" " "
Lightning.....	45	" 29..	556 91	52 56	" " "
Philip B. Lowe.....		Aug. 7..	466 03	45 28	" " "
Willie Irving.....	100	" 3..	101 90	16 16	" " "
		1900.			
Chehalis.....	15	May 4..	53 75	10 76	British Columbia waters, tug and pass.
Swan.....		Not issued	36 32		" " tug.
*Nora.....		May 23..	19 43	8 20	" " "
*Advance.....		" 23..	35 75	10 76	" " "
San Juan.....		" 26..	21 40	6 68	" " "
*Strathcona.....	200	" 24..	596 28	103 40	Skeena river, freight and passenger.
Florence.....		" 26..	30 41	7 40	British Columbia waters, tug.
Donney.....		June 7..	14 64	6 17	" " "
Dreadnought.....		" 11..	32 84	7 64	" " "
Spray.....		" 13..	7 36	5 64	Yacht.
Delta.....		" 14..	14 90	6 20	British Columbia waters, tug.
Erie.....		" 14..	26 74	7 16	" " "
Nagasaki.....		" 14..	15 13	6 28	" " "
Stranger.....		" 14..	21 26	6 68	" " "
May Queen.....		" 15..	14 10	6 12	" " "
North Star.....		" 18..	8 11	5 64	" " "
Wellington.....		" 15..	16 03	6 28	" " "
Magnet.....		" 18..	23 72	6 92	" " "
Clara T. Young.....		" 18..	30 75	7 48	" " "
Reliance.....		" 18..	36 14	7 88	" " "
Starling.....		" 20..	7 67	5 64	" " "
Winnefred.....		" 20..	12 97	6 04	" " "
Beaver.....	150	" 18..	545 44	51 60	Fraser river, freight and passenger.
Ramona.....	75	" 18..	250 79	28 08	" " "
Transfer.....	120	" 20..	264 16	29 12	" " "
Surrey.....	50	" 23..	263 26	29 04	" ferry.
Sea Gull.....	12	" 30..	2 52	5 24	Burrard Inlet, passenger.
Champion.....		" 28..	99 54	13 00	British Columbia waters, freight.
Fearless.....		" 29..	52 97	9 24	" " tug.
Totals.....			8,065 75	971 16	

*These steamers paid for two years.

F. N. RICHARDSON, R.N.P.,
Steamboat Inspector, Vancouver.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected in Canada but registered elsewhere, for the Year ended June 30, 1900.

BRITISH COLUMBIA AND YUKON DIVISION.

BOILERS AND MACHINERY.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Remarks.
		1900.		\$ cts.	
Louise	70	July 7..	717'19	65 43	Freight and passenger, Yukon River
Susie	225	17..	1,211'28	104 88	" " "
John Cudahay	190	19..	819'64	73 60	" " "
Portius B. Wear	185	20..	400'00	40 00	" " "
Mary F. Graff	190	21..	719'42	65 52	" " "
John J. Healey	220	21..	550'00	52 60	" " "
T. C. Powers	120	22..	819'64	73 60	" " "
Hannah	200	24..	1,211'28	104 88	" " "
St. Michaels	170	25..	718'69	65 52	" " "
Monarch	190	27..	463'16	45 04	" " "
Robert Kerr	180	Aug. 2..	718'68	65 62	" " "
Sarah	225	4..	1,211'28	104 88	" " "
Leah	115	4..	477'89	46 24	" " "
Linda	190	5..	692'40	63 36	" " "
Sovereign	125	8..	326'41	54 08	" " "
Milwaukie	125	8..	396'22	39 68	" " "
Lotta Talbot	29	16..	342'92	35 36	" " "
Seattle No. 3.	160	8..	548'12	51 84	" " "
		1901.			
Tartar	950	May 11..	4,425'00	362 00	Freight and pass., Canada & foreign.
Total			16,769'22	1,513 53	

F. N. RICHARDSON, R. N. R.,
Steamboat Inspector, Vancouver.

STEAM Vessels not Inspected for the Year ended June 30, 1900.

BRITISH COLUMBIA AND YUKON DIVISION.

Name of Vessel.	Gross Tons.	Registered Tonnage.	Remarks. Why not Inspected and Class of Vessel.
Westminster	18'00	14'00	Laid up.
Caledonia	569'00	358'00	Out of reach.
Morris	11'66		"
Fingal	90'69	59'75	To be inspected later.
Clansman	72'40		" "
City of Tipella	18'89		" "
On Time	10'70		" "
Total	791'34		

F. N. RICHARDSON, R. N. R.,
Steamboat Inspector, Vancouver.

64 VICTORIA, A. 1901

STEAM Vessels Inspected for the Year ended June 30, 1900.

BRITISH COLUMBIA DIVISION.

HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
1900.					
Bristol.....	None.....	Aug. 1..	1,983·15	166 64	Screw, freight.
Joan.....	400	" 3..	821·21	73 68	" " and passenger.
Islander.....	500	" 7..	1,495·09	127 60	Twin screw, freight and passenger.
Clayoquot.....	12	" 9..	87·18	11 96	Screw " "
Albion.....	30	" 9..	88·11	12 04	" " "
Defiance.....	39	" 9..	89·88	12 20	" " "
1899.					
Transfer, No. 1.....	120	Aug. 26..	772·86	10 00	Scow " "
1900.					
Mamie.....	12	Aug. 21..	89·60	12 20	Screw " "
Danube.....	300	" 23..	886·89	78 96	" " "
Willapa.....	100	" 9..	373·09	37 84	" " "
Queen City.....	100	Sept. 11..	391·21	39 68	" " "
Tees.....	125	" 12..	679·15	62 32	" " "
Belle.....	12	Aug. 6..	66·62	10 36	" " "
Royal City.....	39	" 10..	200·46	24 00	Stern wheel " "
Senator.....	30	Sept. 15..	27·63	7 24	Screw ferry " "
Pilot.....	22	" 19..	279·05	30 32	" tug " "
Mystery.....	20	" 20..	64·80	10 20	" " "
Sunbury.....	20	June 26..	37·72	8 08	" freight " "
Alpha.....	400	Sept. 9..	653·46	8 00	Special " "
Etta White.....	15	Oct. 12..	97·35	12 76	Screw, tug " "
Hattie Young.....	39	" 13..	131·75	18 56	Stern wheel, freight " "
Charmer.....	500	" 26..	1,044·41	91 52	Screw " "
Maude.....	None.....	Nov. 21..	174·99	22 00	" " "
Princess Louise.....	98	Dec. 13..	931·76	82 56	Paddle " "
1901.					
Active.....	20	Jan. 3..	171·74	21 76	Screw, tug " "
Sadie.....	25	" 10..	49·30	8 92	" " " "
Robert Dunsmuir.....	50	Feb. 7..	231·75	26 56	Twin screw, freight " "
Autolycus.....	10	" 7..	25·47	7 00	Screw " "
Copilano.....	25	" 16..	231·14	26 48	" " " "
Coquitlam.....	75	" 17..	256·33	28 48	" " " "
Lorne.....	20	" 23..	287·96	31 04	" tug " "
Barbara Boscowitz.....	125	" 27..	337·92	35 04	" freight " "
Alpha.....	268	Mar. 3..	653·46	60 24	" " " "
Tipic.....	15	" 5..	70·87	10 68	" tug " "
Selkirk.....	35	" 5..	141·63	19 36	" freight " "
Amur.....	228	" 9..	907·17	80 86	" " " "
Lois.....	10	" 16..	25·15	7 00	" tug " "
Burt.....	25	" 17..	50·41	9 00	" freight " "
Comox.....	140	" 17..	101·17	16 08	" " " "
Thistle.....	50	" 27..	222·36	25 76	" " " "
Constance.....	12	" 20..	49·52	9 00	" tug " "
Defiance.....	39	" 16..	89·88	12 20	" freight " "
Iroquois.....	39	Apr. 1..	195·49	23 60	" " " "
Courser.....	39	" 6..	160·79	20 88	Stern wheel " "
Hope.....	12	" 21..	78·49	11 32	Screw, tug " "
Royal City.....	40	" 25..	200·46	24 00	Stern wheel, freight " "
Chehalis.....	15	May 1..	53·75	9 32	Screw, tug " "
North Vancouver.....	144	" 4..	103·83	16 32	" freight " "
R. P. Rithet.....	81	" 10..	816·69	73 36	Stern wheel " "
Yosemite.....	500	" 19..	1,525·03	130 00	Paddle " "
Mermaid.....	100	" 19..	123·55	18 32	Twin screw, tug " "
Glenora.....	100	" 23..	542·15	51 36	Stern wheel, freight " "
Bristol.....	30	June 9..	1,983·15	166 64	Screw " "
Surrey.....	50	" 19..	263·26	29 04	Paddle " "
Ramona.....	75	" 19..	250·79	28 08	Stern wheel " "
Transfer.....	120	" 20..	264·16	29 12	" " " "
Beaver.....	150	" 25..	545·44	51 62	" " " "
Monte Christo.....	60	" 24..	265·77	27 28	" " " "
City of Nanaimo.....	500	" 22..	761·37	68 80	Twin screw " "

R. COLLISTER, Hull Inspector.

SESSIONAL PAPER No. 21

STEAM Vessels Inspected in Canada but Registered elsewhere, for the Year ended
June 30, 1900.

• BRITISH COLUMBIA DIVISION.

HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900.		\$ cts.	
City of Puebla.....	511	July 9..	2,623·88	217 92	Screw, Canadian and foreign ports.
Garland.....	50	Aug. 6..	166·61	21 36	" " "
Rosalie.....	127	" 10..	318·51	33 52	" " "
Dirigo.....	240	" 20..	843·55	75 52	" " "
Victorian.....	500	" 29..	1,503·64	128 32	" " "
		1901.			
Milos.....	962	April 21..	2,706·00	224 48	" " "
Walla Walla.....	401	May 9..	3,069·76	253 60	" " "
Tartar.....	950	" 11..	4,425·00	360 00	" " "
City of Seattle.....	502	" 12..	1,411·05	120 88	" " "
Queen.....	402	June 5..	2,727 80	226 24	" " "
Umatilla.....	400	" 13..	3,069·76	253 60	" " "
North Pacific.....	200	" 16..	488·73	47 12	Paddle " "
Cottage City.....	273	" 18..	1,885·11	158 80	Screw " "

R. COLLISTER,
Hull Inspector.

STEAM Vessels not Inspected for the Year ended June 30, 1900.

BRITISH COLUMBIA DIVISION.

HULL INSPECTION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Remarks. Why not inspected and class of Vessel.
Horsa.....	741·00	459·00	Freight and pass., taken to Mexico.
Willie.....	82·60	55·94	" " no application.
Rothsay.....	553·11	348·46	" " laid up.
Caska.....	589·73	455·15	" " "
Telephone.....	80 66	50·82	" " no application.
Cutch.....	675·85	363·66	" " to be inspected when she returns to Vancouver.
Mischief.....	65·49	44·54	Freight and pass., sold to United States.

R. COLLISTER,
Hull Inspector.

64 VICTORIA, A. 1901

STEAM Vessels Inspected for the Year ended June 30, 1900.

KEEWATIN, MANITOBA AND NORTH-WEST TERRITORIES DIVISION.

BOILERS, MACHINERY AND HULL INSPECTION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
1900					\$ cts.
City of Alberton.....	40	May 30..	67.72	10 44	Screw, pass. & frt., Lake of the Woods.
Maple Leaf.....	40	July 4..	81.84	11 56	" " Rat Portage & Ft. Francis
Ethel.....	"	" 10..	20 20	6 60	" tug, Lake of the Woods.
Undine.....	"	" 8..	9.46	5 72	" priv. yacht, Lake of the Woods
Queen.....	"	" 10..	31.56	7 56	" tug " "
Squaw.....	15	" 15..	21.60	6 76	" pass. & frt. " "
Majestic.....	40	" 22..	135.22	15 80	" " Rainy Lake. "
Mohican.....	"	Not issued	34.20	8 34	" tug " "
Gale.....	"	"	2.62	5 24	" " Grassy Lake
May Carter.....	"	"	6 12	5 48	" " Bad Vermillion Lake.
Rover.....	"	July 20..	7.82	5 64	" " Rainy Lake.
Minnewaukie.....	"	Not issued	4.61	"	" yacht pass., Banff Park.
Otter.....	"	"	78.99	11 32	Stern paddle, tug, Saskatchewan Riv.
Minnow.....	"	"	20.05	6 60	" " " "
Ethel Barming.....	"	Aug. 12..	37.54	8 04	Screw, tug, Lake of the Woods.
Cruiser.....	"	" 14..	26.92	7 16	" " " "
Widgeon.....	"	May 30..	2.29	5 16	" " " "
Aurora.....	"	Not issued	224.50	"	Side paddle, tug, Lake Winnipeg.
Silver Spray.....	"	"	1.53	"	Screw, pass., Pellican Lake.
Lady Allen.....	"	Aug. 30..	18.57	6 52	" fish tug, Lake Winnipegosis.
Ospray.....	"	Sept. 8..	21.22	6 68	" " " "
Mocking Bird.....	"	" 9..	38.02	8 04	" " " "
Iona.....	"	" 12..	39.15	8 12	" " " "
Petrel.....	"	" 12..	166.98	18 36	" freight, Lake Manitoba.
Isabell.....	"	Jan. 30..	60.90	9 88	" fish tug " "
William Cross.....	"	Sept. 20..	21.66	6 76	" tug, Lake Manitou
Rocket.....	"	" 14..	55.61	9 48	" fish tug, Lake Winnipeg.
Minneola.....	"	Not issued	9.20	"	" " Lake Manitou.
Dolphin.....	"	Sept. 21..	12.63	6 04	" tug, Lac des Mille Lacs.
Rambler.....	"	" 30..	6.14	5 80	" " " "
Sport.....	"	Oct. 9..	16.26	6 28	" " Winnipeg River.
1901					
Phantom.....	"	April 18..	55.86	9 48	Screw, ferry, Rat Portage & Keewatin.
Balmoral.....	30	" 26..	36.94	7 96	" pass. & frt., Lake of the Woods
Monarch.....	"	" 20..	113.09	14 04	Side-paddle, tug, " "
Ethel Barming.....	"	" 20..	37.54	8 04	Screw, tug " "
Catherine S.....	35	" 26..	66.60	10 56	" pass. " "
Keenora.....	500	May 1..	486.34	46 88	" " Rat Portage & Ft. Francis.
Lotta S.....	15	April 26..	48.03	8 84	" " Lake of the Woods.
Cruiser.....	"	" 30..	26.92	7 16	" tug " "
Kenmina.....	"	" 30..	41.86	8 36	" " " "
Mikado.....	10	" 30..	24.92	7 00	" pass. & frt. " "
Josie.....	"	" 30..	12.42	5 96	" tug " "
Alma T.....	"	" 30..	15.78	6 28	" " " "
Spray.....	"	" 27..	8.96	5 72	" fish tug " "
Undine.....	"	" 28..	9.46	5 72	" private yacht " "
Heather Bell.....	20	" 28..	21.18	6 68	" pass. & frt. " "
Clipper.....	40	May 1..	52.95	9 24	" " " "
City of Selkirk.....	75	" 14..	457.82	44 64	" " Lake Winnipeg.
Rocket.....	"	" 14..	55.61	9 48	" fish tug " "
Idell.....	"	" 14..	53.92	9 32	" " " "
Sultana.....	"	Not issued	277.75	"	" pass. & frt. " "
Lady of the Lake.....	20	May 14..	201.43	24 08	" " " "
Premier.....	60	" 14..	413.99	41 12	" " " "
Fisherman.....	"	" 14..	44.22	8 52	" fish tug " "
Highlander.....	"	" 14..	58.84	9 72	" " " "
Angler.....	"	" 14..	16.16	6 28	" " " "
Frank Burton.....	10	" 14..	52.00	9 16	" pass. & frt. " "
quaw.....	"	" 14..	40.28	8 20	" " Rat Port. & Ft. Francis

SESSIONAL PAPER No. 21

STEAM Vessels Inspected, &c.—Keewatin, Manitoba and North-West Territories Division—*Concluded.*

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1901		\$ cts.	
Sultana.....		May 2..	3 35	5 24	Screw, priv. yacht, Lake of the Woods.
Daisy Moore.....		" 3..	38 31	8 04	" tug " "
Keewatin.....		" 5..	41 25	8 28	" " " "
Shamrock.....	40	" 3..	79 84	11 40	Screw, pass., Lake of the Woods.
Mary Hatch.....		" 4..	121 18	14 68	" tug " "
Maple Leaf.....	40	" 12..	81 84	11 56	" pass., Rat Port'ge & F. Francis
Chieftain.....		" 12..	36 26	7 88	" tug, Lake of the Woods.
Queen.....		" 12..	31 65	7 56	" " " "
Empress.....		" 14..	129 28	15 32	" " " "
Pastime.....		June 5..	4 00	5 32	" priv. yacht, Lake of the Woods
Rambler.....	30	" 22..	25 83	7 08	" tug, Lake of the Woods.
Hudson Bay Messenger.....		" 22..	5 29	5 40	" priv. yacht, Lake of the Woods
Gertie H.....	150	" 5..	90 95	15 28	Stern paddle, Red River.
Chieftain.....		Not issued	60 85	.....	Screw. tug, Lake Winnipeg.
Miles.....		June 31..	63 04	10 04	" " " "
Villeneuve.....	30	" 31..	27 56	7 24	" pass., Lake of the Woods.
Gordon M.....		" 5..	3 01	5 24	" tug " " "
W. C. Van Horn.....		" 7..	59 91	9 80	" " " "
Irène.....	20	" 7..	9 71	5 80	" pass. " " "
Princess.....		" 7..	7 83	5 64	" tug " " "
Gale.....		" 14..	2 62	5 24	" " Grassy Lake.
May Carter.....		" 14..	6 12	5 48	" " Bad Vermillion Lake.
Rover.....		" 18..	7 82	5 64	" " Rainy Lake.
Mohican.....		" 18..	34 20	7 72	" " " "
Cecila B.....		" 18..	13 65	6 12	" " " "
Edna Brydges.....		Not issued	176 05	.....	" pass., Rat Port'ge & F. Francis
Pearl.....		June 21..	10 00	5 80	" tug, Lake of the Woods.
Argyle.....		Not issued	77 70	.....	" ferry, Rat Portage & Keewatin
Total.....			5,237 80	760 42	

GEO. P. PHILLIPS,
Steamboat Inspector, Rat Portage.

STEAM Vessels Inspected in Canada but registered elsewhere, for the Year ended June 30, 1900.

KEEWATIN, MANITOBA AND NORTH-WEST TERRITORIES DIVISION.

Name of Vessel.	Number of Passengers Allowed.	Date Certificate Expires.	Gross Tons.	Tonnage Dues and Inspection Fees Paid.	Class of Vessel and where employed.
		1900		\$ cts.	
Seagul.....	33	July 20..	12 00	5 96	Screw, Rainy Lake, passenger.

GEO. P. PHILLIPS,
Steamboat Inspector, Rat Portage.

64 VICTORIA, A. 1901

STEAM Vessels not Inspected, for the Year ended June 30, 1900.

KEEWATIN, MANITOBA AND NORTH-WEST TERRITORIES DIVISION.

BOILERS, MACHINERY AND HULL INSPECTION.

Name of Vessel.	Gross Tons.	Registered Tonnage.	Remarks. Why not Inspected and Class of Vessel.
Sparrow	49·28	27·90	Screw, pass., McKenzie river, too far to go.
Wrigley	104·59	66·92	" " " "
St. Alphonse	24·54	14·92	" " " "
Graham	360·19	223·51	Stern paddle, pass., Slave river, " "
St. Joseph	27·06	16·06	Side " " " "
Alpha	7·50	4·98	Screw, pass., " " " "
Lillian B.	4·05	1·80	" " " "
Athabasca	166·73	125·85	Stern paddle, pass., Athabasca river, " "
D. L. Mather	103·32	70·26	Screw, not in commission.
Mimitonka	68·34	46·47	" " " "
Lily	1·61	1·01	" " " "
May	11·08	7·12	" " " "
Gem.	11·08	7·20	" " " "
Unia	19·42	11·50	Stern paddle, " "
Aurora	224·50	141·43	Side paddle, " "
Caro	14·47	9·84	Screw, " "
Harry Montgomery	3·65	2·94	" " " "
Nora	20·23	13·67	" to be inspected.
Sunbeam	2·86	1·94	" " " "
Beaver	34·51	22·21	" " " "
Ninongus	7·60	5·20	" " " "
Widgeon	7·95	6·09	" " " "
William Whyte	17·81	12·36	" " " "
Galetea	46·10	30·26	" " " "
Annie Mc	13·42	11·10	" " " "
Forrester	5·23	2·83	" " " "
Klondyke	8·05	4·00	" " " "
Northern Bell	6·79	3·85	" " " "
Hazel	7·52	5·11	" " " "
Circe	2·83	1·95	" " " "
Minnehaha	2·42	·64	" " " "
Zena	6·60	5·00	" " " "
Josie	25·04	16·88	" " " "
Mille Howell	24·11	16·39	" " " "
Georgina	43·78	29·78	" " " "
Siskewett	47·17	34·27	" " " "
Jenny Lind	5·87	4·37	" " " "
Mary Ann	86·86	57·86	" " " "
James Mayhew	16·94	11·64	" " " "
Oreadia	23·16	15·51	" " " "
Minota	34·95	23·17	" " " "
Ida	19·37	13·57	" " " "
Maud C.	5·16	3·25	" " " "
Rosey May	3·64	1·74	" " " "
Kate Marks	54·15	43·09	" " " "
W. J. Akins	41·82	25·00	" " " "
Herbert	21·13	9·93	" " " "
Brothers	17·50	11·96	" " " "
Total	1,862·38	1,225·28	

GEO. P. PHILLIPS,

Steamboat Inspector.

SESSIONAL PAPER No. 21

STATEMENT of the number of Steam Vessels added to the Dominion during the Year ended June 30, 1900; their Class and Horse-power; whether of Wood or Iron; their Gross and Registered Tonnage; where built; and where and how employed.

Name of Vessel.	Horse-Power.	Class.	Wood, Iron or Steel.	Gross Tonnage.	Registered Tonnage.	Where Built.	Where and How Employed.
B. M. Fraser.	20·96	Screw	Wood	50	34	Owen Sound..	Georgian Bay, tug.
Annie M.....	8·16	"	"	33	22	Collingwood..	" " "
W. E. Gladstone	29·96	"	"	59	40	Warton.....	" " "
W. S. Oldfield.	2·70	"	"	15	10	"	" " "
Van Woodland	3·33	"	"	37	24	Orillia.....	Lakes Simcoe and Couchiching, passenger.
Ladysmith....	2·70	"	"	6	4	"	" " "
City Queen....	10·66	"	"	69	42	Midland.....	Georgian Bay, passenger.
Dorothe.....	0·67	"	"	8	6	Penetang.....	" " yacht.
Ella.....	2·13	"	"	15	10	St. Williams..	Long Point Bay, "
Majestic.....	32·66	"	Steel.	275	156	Toronto.....	Montreal & vicinity, passen.
Germanic.....	71·53	"	Wood	1,014	676	Collingwood...	Collingwood and Sault Ste. Marie, passenger.
Gertie C.....	3·33	"	"	15	10	Fesserton.....	Georgian Bay, tug.
Beaver.....	8·40	"	"	29	12	Midland.....	" " "
Marguerita....	7·76	"	"	31	15	"	" " yacht
R. A. McLean.	8·53	"	"	30	14	Not on register	Sault Ste. Marie & vicin., tug.
Minnie M.....	38·00	"	"	613	276	Detroit, Mich.	" " passenger.
Helen S.....	17·36	"	Steel.	86	58	Collins' Inlet.	Collins' Inlet & vicin. "
Gen. Weitzel..	4·80	"	Wood	32	24	Buffalo, N. Y.	Sault Ste. Marie & vicin., tug.
Jno. R. Arnoldi	6·53	"	"	116	68	Tenaw'da, N. Y	Goderich Harbour, dredge.
Glenora.....	1·87	"	"	17	10	Fort Erie.....	Lake Erie, fishing tug.
Total.....	273·04			2,560	1,511		

JOHN DODDS,
E. W. McKEAN. } *Toronto.*

STATEMENT of the Number of Steam Vessels added to the Dominion, &c.—Continued.

Name of Vessel.	Horse-Power.	Class.	Wood, Iron or Steel.	Gross Tonnage.	Registered Tonnage.	Where Built.	Where and How Employed.
Watiti.....	8·60	Screw	Wood	18·11	12·32	Kingston, Ont.	Pleasure yacht.
Victoria.....	0·83	"	"	3·90	2·66	Lindsay "	" " "
India.....	117·60	"	"	976·49	572·82	Garden I'd "	Great Lakes, freight boat.
Minnie May..	0·83	P'd'l.	"	10·20	8·04	Coboconk "	Balsam Lake, tug.
Jennemac....	0·83	Screw	"	4·68	3·18	Peterboro "	Pleasure yacht.
Empress.....	13·50	"	Composite	84·48	57·48	Lakefield "	Cos. Vict. & Peterboro, pass.
Tramp.....	0·30	"	Wood	2·24	1·70	Peterboro "	" " "
Flash.....	0·30	"	"	4·74	3·23	"	" " "
Dickson.....	2·70	P'd'l.	"	16·01	10·09	Simcoe "	" " alligator tug.
Mayflower....	0·53	Screw	"	5·99	4·08	Peterboro "	Pleasure yacht.
Wanda.....	5·41	"	"	38·61	26·25	Kingston "	Trenton & Prescott, passeng.
Leone.....	0·60	"	"	2·48	1·69	Rockport "	Kingston & Prescott "
Helen.....	1·73	"	"	1·82	1·24	"	" " "
D. Stewart...	8·75	Non-prop.	"	295·21	126·35	Cardinal "	Canal, spoon dredge.
Killarney...	13·06	"	"			Welland "	" " "
Kilkenny....	13·06	"	"			Buffalo, N. Y..	" " "
Ottawa.....	6·53	"	"	219·95	129·60	Cornwall, Ont.	" " "
Ottamac.....	9·60	"	"	195·65	89·72	Montreal, Que.	" " elevator dredge.
No. 4.....	6·53	"	"	175·14	102·91	"	" " spoon dredge.
St. Louis....	2·13	Screw	"	22·54	15·33	Kingston, Ont.	Pleasure yacht.
Rideau Queen.	22·52	"	"	350·75	159·50	"	Kingston & Montreal, pass.
Souché.....	3·53	"	"	13·84	9·41	"	Pleasure yacht.
Total.....	239·47			2,443·10	1,373·60		

THOS. P. THOMPSON,

64 VICTORIA, A. 1901

STATEMENT of the Number of Steam Vessels added to the Dominion during the Year ended June 30, 1900, their Class and Horse-power, whether of Wood or Iron, their Gross and Registered Tonnage, where built, and where and how employed.

Name of Vessel.	Horse-Power.	Class.	Wood, Iron, or Steel.	Gross Tonnage.	Reg. Tonnage.	Where Built.	Where and how Employed.
Courier.....	2·7	Screw....	Composite	12·48	8·49	Montreal.....	Montreal Harbour, tug.
Derrick No. 1.	9·6	Derrick...	Wood....	100·00	.....	".....	" " " "
Dredge No. 4.	3·2	Spn dr'dge	".....	100·00	.....	Not known...	River and Harbour, dredging.
Willie C.....	3·1	Screw....	".....	8·25	5·60	".....	" " " "
Eagle.....	1·6	".....	".....	12·74	8·66	St. Hyacinthe.	Yamaska River, passenger.
R. B. Flower..	2·1	".....	".....	14·77	10·04	Not known...	River, tug.
Hudson.....	2·4	Paddle...	".....	44·81	36·51	Barry's Bay..	Madawaska River, passenger.
Mathilda.....	20·8	Screw....	Steel.....	113·66	68·72	Sorel.....	St. Lawrence " tug.
Total.....	45·5			406·69	138·02		

MONTREAL.

WM. LAURIE.
LOUIS ARPIN.

QUEBEC DIVISION STEAM VESSELS ADDED.

Name of Vessel.	Horse-Power.	Class.	Wood, Iron, or Steel.	Gross Tonnage.	Reg. Tonnage.	Where Built.	Where and how Employed.
Foam.....	2·70	Screw....	Wood....	15·52	6·81	Quebec, 1900..	Quebec, Harbour, tug.
Alpha.....	11·23	".....	".....	20·34	6·57	St. Joseph, 1900	" " " "
Alaska....	2·13	".....	".....	51·11	45·47	St. Nichl's, 1899	Open deck batteau used as lighter
Adriatic....	38·29	".....	".....	153·03	87·29	Levis, 1900...	Ferry, pass., at Port Mulgrave.
Bella.....	5·40	Paddle...	".....	42·90	29·40	Cross Pt., 1900	Ferry, pass., bet. Cross Pt., P.Q. and Campbellton, N.B.
Kathleen....	45·20	".....	".....	280·38	176·64	Quebec, 1900..	Employed at quarantine service at Gross Isle.
Loon.....	5·06	Screw....	".....	20·96	14·25	Bristol, U.S. '93	Pleasure yacht, Quebec and Bic.
Wanderer...	26·66	Twinscr'w	".....	565·03	282·80	Phild., U.S. '79	Fgt. and pass., Mont. & Gaspé.
St. Maurice..	3·33	Screw....	".....	44·72	30·41	Gr'ds Piles, '00	Tug and freight, Grandes Piles and La Tuques.
Marie Alma..	5·66	Twinscr'w	".....	52·28	35·55	Lake St. Jn, '00	Lake St. Jn., empl'd as tug and ft.
Honfleur....	3·57	Screw....	".....	18·77	12·75	" " '00	" " " "
Total.....	148·03			1265·11	727·94		

JOS. SAMSON,
Boiler and Engine Inspector.
PIERRE D. BRUNELLE,
Hull Inspector.

SESSIONAL PAPER No. 21

STATEMENT of the number of Steam Vessels added to the Dominion during the Year ended June 30, 1900, their Class and Horse power, whether of Wood or Iron, their Gross and Registered Tonnage, where built, and where and how employed.

NOVA SCOTIA DIVISION.

Name of Vessel.	Nominal Horse power.	Class.	Wood, Iron or Steel.	Gross Tonnage.	Reg. Tonnage.	Where Built.	Where and how employed.
Delta	56·55	Screw	Iron.....	873·21	549·71	Glasgow G. B.	Freight and pass. foreign.
Lady Glover..	66·60	.....	Wood*..	137·51	93·51	Preston G. B..	" " coasting.
J. L. Nelson..	8·16	.....	" .....	37·84	19·46	Yarmouth, U.S.	" " "
H. May Butler	15·20	.....	" .....	66·98	45·55	W. Mystic, "	Fishing boat "
D. H. Thomas	57·75	.....	Steel.....	211·91	144·10	Maryland, U.S.	Tug and passenger "
Tourist.....	83	.....	Wood....	4·42	3·33	Yarmouth, N.S.	Passen. Yarmouth Harbour
Total. ...	205·09			1331·87	855·66		

JOHN P. ESDAILE,

Steamboat Inspector, Halifax, N. S.

STATEMENT of the Number of Steam Vessels added to the Dominion, &c.—*Continued.*

NEW BRUNSWICK AND P. E. I. DIVISION.

Name of Vessel.	Horse power.	Class.	Wood, Iron or Steel.	Gross Tonnage.	Reg. Tonnage.	Where Built.	Where and how employed.
Joseph.....	16·6	Screw tug.	Wood....	53·75	36·55	St. John, N. B.	Tug St. John River.
Lottie.....	25	" F. Boat	"	5·00	5·00	Geor'to'n, P.E.I	Fish b. Georgetown, not reg-
Total.	16·85			58·75	41·55		

W. L. WARING,

Steamboat Inspector.

64 VICTORIA, A. 1901

STATEMENT of the number of Steam Vessels added to the Dominion during the Year ended June 30, 1900, their Class and Horse power, whether of Wood or Iron, their Gross and Registered Tonnage, where built, and were and how employed.

BRITISH COLUMBIA DIVISION.

Name of Vessel.	Horse power.	Class.	Wood, Iron or Steel.	Gross Tonnage.	Reg. Tonnage.	Where Built.	Where and how employed.
Flyer.....	13·5	Screw...	Wood....	47·64	32·40	Vancouver....	Cannery Service Fraser Rv.
Olive.....	3·3	Stern wh'l	"....	71·32	44·94	Westminster...	Freight " " "
Victoria.....	4·3	"..	"....	106·60	67·16	Trout Lake City, B.C....	" and passenger Trout Lake, B.C.
Alert.....	1·0	Screw...	"....	3·11	2·12	New Denver, B.C.....	Passenger Slocan Lake.
Maude Moore.	1·2	"..	"....	8·64	5·88	Peterborough, O	" Dog Lake.
Albion.....	24·0	"..	"....	88·11	59·92	Vancouver....	Cannery Service Fraser Rv.
Defiance.....	11·2	"..	"....	89·88	61·12	Tacoma, U.S.A	Freight and passen. Inland Water, B.C.
Tyce.....	10·6	"..	"....	31·53	18·45	Westminster..	Cannery Service Fraser Rv.
Mabel.....	1·0	"..	"....	5·28	3·60	Vancouver....	Tug, Logging Camps.
Vulcan....	16·6	"..	"....	76·79	52·22	Westminster...	" B.C. Waters.
Iris.....	2·1	"..	"....	37·70	24·20	"..	" Fraser River.
Alice.....	6·0	"..	"....	34·62	23·54	Vancouver....	Fr. Inland Waters, B.C.
Iroquois....	19·5	"..	"....	195·49	94·38	Pt. Moody, B.C.	Freight and passen. Inland Waters, B.C.
Vera.....	2·4	"..	"....	5·86	3·98	Birkenhead, En	Cannery Service, Skeena R.
Native....	13·0	"..	"....	51·51	35·55	Westminster...	Tug Fraser River.
Argenta....	4·3	Stern wh'l	"....	206·32	129·99	Kaslo, B.C....	Freight & pass. Duncan Riv.
Monte Christo.	6·6	"..	"....	265·77	155·73	Pt. Essington, B.C.....	" " Skeena river
N. Vancouver.	16·5	Screw...	"....	103·83	70·60	Vancouver....	" " Ferry Burrard Inlet.
Total....	180·1			1430·00	885·78		

J. A. THOMSON,

Steamboat Inspector, Victoria, B. C.

STATEMENT of the Number of Steam Vessels added to the Dominion, &c.—Continued.

BRITISH COLUMBIA AND YUKON DIVISION.

Name of Vessel.	Nominal Horse Power.	Class.	Wood, Iron or Steel.	Gross Tonnage.	Registered Tonnage.	Where Built.	Where and how employed.
W. Ogilvie...	6·6	Screw....	Wood....	81·69	55·55	Bennett.....	Lake Bennett, freight & pass.
Zelandain...	6·6	Stern wh'l	"....	179·82	141·18	".....	Yukon River " "
J. P. Light...	26·6	"..	"....	718·68	409·06	Seattle.....	" " " "
Gold Star....	6·6	"..	"....	168·36	98·98	St. Michael's..	" " " "
Eldorado....	17·	"..	"....	466·03	260·48	Seattle.....	" " " "
Bonanza King.	17·	"..	"....	466·03	260·48	Dutch Harb'r.	" " " "
Clara.....	8·	"..	"....	144·48	109·52	San Francisco.	" " " "
Champion....	12·9	Screw....	"....	99·54	67·69	Vancouver....	B. Columbia waters, freight.
Sea Gull....	2·8	"..	"....	2·52	1·72	".....	Burrard Inlet, passenger.
Starling....	2·3	"..	"....	7·67	5·22	Port Guichon.	British Columbia waters, tug.
* Total....	106·4			2,334·82	1,409·88		

F. N. RICHARDSON,

Steamboat Inspector Vancouver.

SESSIONAL PAPER No. 21

STATEMENT of the number of Steam Vessels added to the Dominion during the Year ended June 30, 1900, their Class and Horse power, whether of Wood or Iron, their Gross and Registered Tonnage, where built, and where and how employed.

KEEWATIN, MANITOBA AND NORTH-WEST TERRITORIES.

Name of Vessel.	Nominal Horse Power.	Class.	Wood, Iron or Steel.	Gross Tonnage.	Registered Tonnage.	Where Built.	Where and how employed.
Arbyle	16·6	Screw....	Wood	77·70	53·18	Keewatin, Ont	Ferry, Rat Portage and Keewatin, Lake of the Woods.
Chieftain.....	6·3	"	"	60·85	28·32	Selkirk, Man..	Tug, Lake Winnipeg.
Nettie	3	"	"	3·34	1·58	Rosport, Ont..	Fish tug, Lake Superior.
Irine	1·2	"	"	9·71	6·20	Rat Portage, O	Pass., Lake of the Woods.
Gertie H	9·6	Stern Pdle	"	90·95	68·79	Winnip'g, Man	" Red River.
Petrel	6·3	Screw.....	"	166·98	93·76	Westbourne "	Freight, Lake Manitoba.
Silver Spray ..	3	"	"	1·53	0·93	Brandon "	Yacht, Pelican Lake, Man.
Iona	3·5	"	"	39·15	24·00	Westbourne "	Tug, Lake Winnipegosis,
Rocket.....	6·3	"	"	55·61	21·05	Selkirk "	" " Winnipeg.
Total	50·4			505·82	297·81		

GEO. P. PHILLIPS,
Steamboat Inspector.

STATEMENT of Steam Vessels lost, broken up or laid up, &c.

WEST ONTARIO DIVISION.

Name of Vessel.	Where and How last employed.	Gross Tonnage.	Class of Vessel and Reason of Unfitness.
Niagara.....	Lakes, freight	468	Screw, foundered.
Ontario	" "	655	" " "
R. Kendrick.....	Lake Simcoe, freight.....	15	" dismantled.
Elmer	Lake Huron, tug.....	38	" " "
John Harrison.....	" "	44	" " "
Frank Reid	" "	34	" " "
Grace Darling.....	" "	26	" " "
Lake Joseph	Muskoka Lakes, tug.....	28	" " "
Susan C. Doty.....	Lake Superior, fishing tug.....	26	" " "
Purvis	" Huron "	13	" " "
Erastus Wiman	Muskoka Lakes, tug	54	" burned.
Sylvester.....	" " "	27	" " "
		1,428	

JOHN DODDS,
E. W. McKEAN,
Toronto.

64 VICTORIA, A. 1901

STATEMENT of Steam Vessels lost, broken up or laid up as unfit for service, in the Dominion during the Year ending June 30, 1900, and where and how employed.—*Continued.*

EAST ONTARIO DIVISION.

Name of Vessel.	Where and How last employed.	Gross Tonnage.	Class of Vessel and Reason of Unfitness.
Outlet Queen.....	Passenger, Rice Lake.....	18·45	Screw, hull unfit for service.
C. Here.....	" Trenton & Prescott.	7·40	" enlarged and name changed.
Sophy.....	" ".....	25·73	" injured by fire; name changed.
Miltonia.....	Pleasure yacht.....	32·18	" destroyed by fire.
		83·76	

THOS. P. THOMPSON,
Steamboat Inspector.

STATEMENT of Steam Vessels lost, broken up or laid up, &c.—*Continued.*

MONTREAL DIVISION.

Name of Vessel.	Where and How Last Employed.	Gross Tonnage.	Class of Vessel and Reason of Unfitness.
M. P. Davis.....	Montreal Harbour, tug.....	11·00	Screw, hull unfit for service.
Princess Louise.....	Richelieu River, passenger.....	114·88	" destroyed by fire.
J. R. Booth.....	St. Lawrence, tug.....	131·58	" hull unfit for service.
D. McLachlin.....	Chats Lake warp tug.....	22·08	Paddle " "
		279·54	

WM. LAURIE,
LOUIS ARPIN,
Montreal.

SESSIONAL PAPER No. 21

STATEMENT of Steam Vessels lost, broken up or laid up, as unfit for service, in the Dominion during the Year ending June 30, 1900, and where and how employed.—*Continued.*

QUEBEC DIVISION.

Name of Vessel.	Where and How Last Employed.	Gross Tonnage.	Class of Vessel and Reason of Unfitness.
Georgiana.....	In sorel used as a Montreal and Harbour, tug.....	53 54	Screw tug, decayed would have cost more than she was worth to repair.
Levis.....	Used as a ferry steamer between Quebec and St. Romuald.....	156 55	Screw ferry, unfit for service decayed.
Francis.....	Used as a ferry steamer between Crosspoint and Campbellton, N.B.....	19 28	Paddle ferry, unfit for service decayed.
Temiscouata.....	Employed in Quebec as a Harbour tug.....	10 41	Decayed, not worth repairing.
Daisy.....	Employed on Lake Edward towing logs.....	4 31	Burnt down while at her wharf, on Lake Edward last fall.
Conkoo.....	In Chicoutimi employed as a tug.	6 03	Decayed not worth repairing.
		250 12	

PIERRE D. BRUNELLE,
Hull Inspector.

JOS. SAMSON,
Boiler and Machinery Inspector.

STATEMENT of Steam Vessels lost, broken up or laid up, &c.—*Continued.*

NOVA SCOTIA DIVISION.

Name of Vessel.	Where and How Last Employed.	Gross Tonnage.	Class of Vessel and Reason of Unfitness.
Mary Jane.....	Freight and fishing, coastwise.	25 86	Sold to foreigners.
Nereus.....	Yacht, coastwise.....	16 39	" "
Rimouski.....	Passenger, coastwise.....	124 70	Wrecked near Lunenburg, N.S.
Delta.....	Freight and passenger, foreign.	873 21	" " Newfoundland.
Evangeline.....	" " coastwise.....	78 74	Sold to foreigners.
Arrow.....	Yacht, Halifax Harbour.....	10 02	Broken up, machinery in Oneita.
		1,128 92	

JOHN P. ESDAILE,
Steamboat Inspector, Halifax, N.S.

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STATEMENT of Steam Vessels lost, broken up or laid up, as unfit for service, in the Dominion during the Year ending June 30, 1900, and where and how employed.—*Continued.*

NEW BRUNSWICK AND PRINCE EDWARD ISLAND DIVISION.

Name of Vessel.	Where and How Last Employed.	Gross Tonnage.	Class of Vessel and Reason of Unfitness.
Nil			

W. L. WARING,
Steamboat Inspector.

STATEMENT of Steam Vessels lost, broken up or laid up, &c.—*Continued.*

BRITISH COLUMBIA DIVISION.

Name of Vessel.	Where and How Last Employed.	Gross Tonnage.	Class of Vessel and Reason of Unfitness.
Spratts Ark	Freight, coast, B.C.		Twin screw, unfit for service.
Kaslo	Kootenay Lake, tug		Screw, burnt.
Trail	Columbia River		Stern wheel, burnt.
Glad Tidings	Missionary yacht		Boiler requires extensive repairs.
Nell	Freight, coast B.C.		" condemned.
Wm. Hunter	Freight and pass., Slocan Lake		" requires extensive repairs.
Rainbow	" " coast B.C.		Dismantled.
Nahleen	Freight and pass.		Fitting out, burnt.

J. A. THOMSON,
Steamboat Inspector, Victoria, B.C.

STATEMENT of Steam Vessels lost, broken up or laid up, &c.—*Continued.*

BRITISH COLUMBIA AND YUKON DIVISION.

Name of Vessel.	Where and How Last Employed.	Gross Tonnage.	Class of Vessel and Reason of Unfitness.
Domville	Yukon river, freight and pass.	485·96	Stern wheel, sunk.
W. Irving	" "	101·90	" " ice pack.
Reindeer	" "		" " burnt.
W. J. Stratton	" "	100·20	" " ice pack.
Florence S.	" "	100·20	" " sunk,
Linderman	" "	54	" " "
Alert	Lake Bennett, tug	7	Screw, sunk.
Bonanza	British Columbia waters, freight	109·04	" broken up.
		958·30	

F. M. RICHARDSON, R.N.R.,
Steamboat Inspector, Vancouver.

SESSIONAL PAPER No. 21

STATEMENT of Steam Vessels lost, broken up or laid up, &c.—*Concluded.*

KEEWATIN, MANITOBA AND NORTH-WEST TERRITORIES DIVISION.

Name of Vessel.	Where and How Last Employed.	Gross Tonnage.	Class of Vessel and Reason of Unfitness.
Regina.	Lake of the Woods, passenger.	678	Screw, hull condemned.

GEO. P. PHILLIPS,
Steamboat Inspector.

List of Certificates of Competency and Temporary Certificates granted to Engineers of Steamboats during the year ended June 30, 1900.

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	1899.					\$ cts.
2504	July, 5.	Albert Michaud.....	4th Class.....	Village Bienville, Que. . .	Quebec	5 00
2505	" 5.	Chas. Eryon.....	Temporary.....	Georgeville, Que.....	Owls Head.....	2 00
2506	" 5.	John A. Comber.....	"	"	Georgeville, Q.	2 00
2507	" 5.	C. H. LeBaron.....	"	North Hatley.....	Nth. Hatley, Q.	2 00
2508	" 7.	John W. McMillan.....	"	Niagara, Ont.....	Niagara on Lak.	2 00
2509	" 7.	Eleazar Nickerson.....	"	Barrington Passage, N.S. . .	Halifax, N.S.	2 00
2510	" 10.	Cléophas Dubois.....	4th Class.....	Sorel, Que.....	Montreal, Q.	5 00
2511	" 10.	Daniel A. Morrison.	Temporary.....	Port Hawkesbury, N.S. . . .	Mulgrave N.S.	2 00
2512	" 10.	Daniel O'Donnell.....	"	Belleville, Ont.....	Belleville, O.	2 00
2513	" 10.	John E. Ball.....	"	Caesarae, Ont.....	Lindsay, O.	2 00
2514	" 10.	John Gonyea.....	"	Smiths Falls, Ont.	Kingston, O.	2 00
2515	" 10.	Robert Waterspoon.....	"	Cornwall, Ont.....	Cornwall, O.	2 00
2516	" 11.	Joseph H. Daball.....	3rd Class.....	Parry Sound, Ont.....	Parry Sound	5 00
2517	" 11.	Wm. Parker Collings.....	4th "	Halifax, N.S.	Halifax, N.S.	5 00
2518	" 18.	Andrew W. Lokerbie.....	Temporary.....	Rat Portage, Ont.....	Rat Portage.	2 00
2519	" 21.	Alex. Coutts.....	"	"	"	2 00
2520	" 21.	Hercule St. Louis.....	"	Montreal, Que.....	Montreal, Q.	2 00
2521	" 22.	Joseph Lepage.....	3rd Class.....	Village Bienville, Que.....	Quebec.....	5 00
2522	" 22.	Adolphe Côté.....	3rd "	Sorel, Que.....	"	5 00
2523	" 26.	Wm. Thomas Windsor.....	Temporary.....	Callender, Ont.....	Callender, O.	2 00
2524	" 26.	Martin Graber.....	"	Pembroke, Ont.....	Pembroke, O.	2 00
2525	" 27.	Joseph Coventry.....	3rd Class.....	Callender, Ont.....	Callender, O.	5 00
2526	" 27.	George Francis Martin	4th "	Merrickville, Ont.....	Montreal, Q.	5 00
2527	Aug. 1.	Peter Bow.....	Temporary.....	Lake Megantic, Que.....	Lake Megantic	2 00
2528	" 1.	Joseph Fitzgerald.....	"	Quebec.....	Quebec.	2 00
2529	" 1.	David H. Judd.....	"	Lake Megantic, Que.....	Lake Megantic	2 00
2530	" 14.	Maxime Lapiere.....	"	Amherstburg, Ont.....	Amherstburg.	2 00
2531	" 14.	Wm. Franklin Cook.....	"	New Denver, B.C.	New Denver	2 00
2532	" 14.	C. Charles Kurtz.....	"	Kaslo, B.C.	Nelson, B.C.	2 00
2533	" 14.	Daniel Kane.....	"	"	"	2 00
2534	" 14.	Geo. Henry Mitchell.....	"	"	Kaslo, B.C.	2 00
2535	" 14.	Geo. Henry Whitney.....	"	Kingston, Ont.....	Kingston, O.	2 00
2536	" 18.	Wm. Hungerford.....	"	Lindsay "	Lindsay, O.	2 00
2537	" 18.	John Davis.....	"	Kingston "	Kingston, O.	2 00
2538	" 18.	Henry Good.....	"	Napanee, Ont.....	"	2 00
2539	" 18.	Walter A. Stewart.....	"	Carleton Place, Ont.....	"	2 00
2540	" 18.	Martin L. Crandall.....	"	Port Perry, Ont.....	"	2 00
2541	" 18.	Mitchell Kinville.....	"	Brockville, Ont.....	"	2 00
2542	" 22.	Frank Fitzgerald.....	"	Quebec.....	Quebec, Q.	2 00
2543	" 22.	Ovide Bonin.....	"	Sorel, Que.....	"	2 00

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LIST of Certificates of Competency granted to Engineers of Steamboats, &c.—*Con.*

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	1899.					\$ cts.
2544	Aug. 23.	Louis Lacombe	4th Class.	Sorel, Que	Sorel, Q.	5 00
2545	" 23.	F. X. Banfort	4th "	St. Valier, Que	Quebec, Q.	5 00
2546	" 24.	Joseph Gouin	4th "	Sorel, Que	"	5 00
2547	" 24.	Emile Laliberté	4th "	Montreal, Que	Montreal, Q.	5 00
2548	" 24.	Elzear Beaudoin	3rd "	Village Lauzon, Que	Quebec, Q.	5 00
2549	" 25.	Geo. F. Beaumont	Temporary	Braacebridge, Ont	Port Carling O.	2 00
2550	Sept. 19.	Henry C. Cummins	4th Class.	Balfour, B.C.	Nelson, B.C.	5 00
2551	" 19.	Joseph Gervin	Temporary	Billings Bridge, Ont.	Ottawa, O.	2 00
2552	" 19.	Edmond Gervais	4th Class.	Sorel, Que	Montreal, Q.	2 00
2553	" 21.	John Donovan	Temporary	Rat Portage, Ont.	Rat Portage, O.	2 00
2554	" 22.	John Scott	"	Pictou, N.S.	Halifax, N.S.	2 00
2555	" 22.	Frank Kraive	"	Cape Sable Island, N.S.	Barrington NS	2 00
2556	" 23.	Joseph L. Phillips	"	Mira Gut, C.B.	Louisburg, C.B.	2 00
2557	" 25.	Jonathan Hymers	"	Parry Sound, Ont	Parry Sound, O.	2 00
2558	Sept. 29.	George Moreau	Temporary	Waubaushe, Ont	Waub'shene, O	2 00
2559	Oct. 2.	Herbert Johnson	"	Rat Portage, Ont	Rat Portage, O	2 00
2560	" 3.	John Hy. Gray	2nd U. K.	Victoria, B.C.	Victoria, B.C.	*
2561	" 3.	Wm. Henry Salter	1st U. K.	Hoboken, N.J., U.S.	Halifax, N.S.	5 00
2562	" 3.	James T. Eldridge	Temporary	Rat Portage, Ont	Rat Portage, O	2 00
2563	" 3.	James T. Eldridge	4th Class	"	"	*
2564	" 3.	Lemuel Winchester	4th "	Charlottetown, P.E.I.	St. John, N.B.	*
2565	" 3.	Frank Payne	4th "	"	"	5 00
2566	" 3.	Henry McElroy	3rd "	Kaslo, B.C.	Nelson, B.C.	5 00
2567	" 4.	Cleophas Girard	4th "	Sorel, P.Q.	Sorel, P.Q.	5 00
2568	" 4.	George Stewart	4th "	Victoria, B.C.	Victoria, B.C.	5 00
2569	" 4.	John R. Young	3rd "	Nelson, B.C.	"	5 00
2570	" 11	Frank C. Ward	4th "	Halifax, N.S.	Quebec, P.Q.	5 00
2571	" 14.	P. Laparière	4th "	Village Bienville, P.Q.	"	5 00
2572	" 14.	Joseph Cantin	4th "	"	"	5 00
2573	" 14.	Andre Donaldson	Temporary	Paribonka, Que	Roberval, Que.	2 00
2574	" 14.	Cleophas Barras	2nd Class.	Village Lauzon, Que	Quebec, Que.	5 00
2575	" 23.	John J. McLaren	4th "	Montreal, Que.	Montreal, Que.	2 00
2576	Nov. 14.	Walter F. Boyden	Temporary	Michipicoten Hbr, Ont.	Michipic. H., O	2 00
2577	" 18.	John Kelly	3rd Class	Vancouver, B.C.	Vanc'vr, B.C.	5 00
2578	" 18.	James Cobain	4th "	Victoria, B.C.	Victoria, B.C.	5 00
2579	" 18.	John A. Heritage	1st U. K.	"	"	5 00
2580	" 18.	Exavier Fournier	3rd Class	Quyon, Que	Montreal, P.Q.	5 00
2581	" 18.	Hugh M. Steward	1st U. K.	Quebec, P.Q.	Quebec, P.Q.	5 00
2582	" 24.	John E. Angus	Temporary	Gore Bay, Ont.	Gore Bay, Ont	2 00
2583	" 24.	Joseph, Nadon	3rd Class	Monte Bello, P.Q.	Montreal, P.Q.	5 00
2584	" 24.	Wm. Powles	Temporary	Tyendinaga, Ont.	Kingston, Ont	2 00
2585	Dec. 6.	Jas. Edward Langley	3rd Class	Victoria, B.C.	Victoria, B.C.	5 00
2586	" 6.	Chas. Henry Waller	4th "	"	"	5 00
2587	" 7.	James Bertram Job	4th "	Toronto, Ont	Toronto, Ont.	5 00
2588	" 18.	Henry F. McKay	2nd U. K.	New Glasgow, N.S.	Halifax, N.S.	5 00
2589	" 18.	Robert J. Parsell	2nd Class.	Toronto, Ont	Toronto, Ont.	5 00
2590	" 18.	George Edwards	Temporary	Annapolis, N.S.	Halifax, N.S.	2 00
2591	" 23.	Robert Thomas Beeles	4th Class	Toronto, Ont	Toronto, Ont	5 00
2592	" 28.	Thos. Joseph Noonan	4th "	Hamilton, Ont.	"	5 00
2593	" 28.	John Morse Morris	4th "	Toronto, Ont.	"	5 00
	1900.					
2594	Jan. 5.	Thomas Service	2nd U. K.	Halifax, N.S.	Halifax, N.S.	5 00
2595	" 9.	Edwd. J. Turbett	4th Class	Kingston, Ont.	Kingston, Ont.	*
2596	" 9.	Wm. Tracy	Temporary	Barrie, Ont.	Toronto, Ont.	2 00
2597	" 12.	Bert. James Mitchell	4th Class	Toronto, Ont	"	5 00
2598	" 12.	Geo. Ambrose Sauve	4th "	Garden Island, Ont.	Kingston, Ont	5 00
2599	" 12.	Simon Jas. Young	4th "	Harver, Ont.	Toronto, Ont.	5 00
2600	" 12.	Thomas K. Abra	4th "	Vancouver, B.C.	Victoria, B.C.	5 00
2601	" 12.	John E. Angus	Temporary	Gore Bay, Ont	Gore Bay, Ont	2 00
2602	" 18.	John Leonard	"	St. John, N.B.	St. John, N.B.	2 00

* Exchanged certificate.

† Second examination.

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LIST of Certificates of Competency granted to Engineers of Steamboats, &c.—*Con.*

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was passed.	Fee.
	1900					\$ cts.
2603	Feb. 22.	Win. D. Chrysler.....	4th Class.....	Owen Sound, Ont.....	Toronto, Ont..	5 00
2604	" 22.	Frank Goodwin.....	4th ".....	Baxter, Ont.....	"	5 00
2605	" 22.	John McH. Donaldson.....	2nd ".....	Toronto, Ont.....	"	5 00
2606	" 22.	John Wilkie Taylor.....	2nd ".....	Collingwood, Ont.....	"	5 00
2607	" 22.	William Harman.....	3rd ".....	".....	"	5 00
2608	" 22.	George Caister.....	3rd ".....	Dresden, Ont.....	"	5 00
2609	" 22.	Jos. Alex. Kerby.....	3rd ".....	".....	"	5 00
2610	" 23.	Geo. Henry Eisner.....	2nd U. K.....	Halifax, N.S.....	Halifax, N.S..	5 00
2611	" 23.	Dougald Campbell.....	3rd Class.....	Louisburg, C.B.....	"	5 00
2612	" 23.	David Leslie.....	3rd ".....	Kingston, Ont.....	Kingston, Ont.	5 00
2613	" 23.	Thomas Naas.....	Temporary.....	Lunenburg, N.S.....	Halifax, N.S..	2 00
2614	July 23.	Stephens H. Gucker.....	3rd Class.....	Lindsay, Ont.....	Kingston, Ont.	5 00
2615	" 26.	August Pendola.....	2nd " U. K.....	Vancouver, B.C.....	Victoria, B.C.	5 00
2616	" 26.	Alphonse Hamelin.....	3rd ".....	Montreal, Que.....	Montreal, Que.	5 00
2617	" 26.	William Roe.....	4th ".....	Victoria, B.C.....	Victoria, B.C.	5 00
2618	" 26.	Geo. Royal McBain.....	4th ".....	Vancouver, B.C.....	"	5 00
2619	" 26.	James Hannan.....	1st " U. K.....	Paisley, England.....	St. John, N.B.	5 00
2620	Mar. 2.	Henry Howe.....	3rd ".....	St. John, N.B.....	Halifax, N.S..	5 00
2621	" 3.	Edward Seymour Meehan.....	2nd " U. K.....	Halifax, N.S.....	"	5 00
2622	" 3.	John Alfred O'Brien.....	2nd " U. K.....	".....	"	5 00
2623	" 3.	William Ford.....	4th ".....	".....	"	5 00
2624	" 5.	John Scott.....	Temporary.....	Pictou, N.S.....	"	2 00
2625	" 6.	Achille Carrier.....	4th Class.....	Village Lauzon, Que.....	Quebec, P.Q..	5 00
2626	" 6.	Alexander Zwicker.....	4th ".....	Bridgewater, N.S.....	Halifax, N.S..	5 00
2627	" 6.	Richard John McGuire.....	4th ".....	Elgin, Ont.....	Kingston, Ont.	5 00
2628	" 6.	Peter William Lyon.....	2nd ".....	Barrie, Ont.....	Toronto, Ont..	5 00
2629	" 6.	Chas. Achers Shephard.....	2nd ".....	Georgeville, Que.....	Montreal, Que.	5 00
2630	" 6.	Peter Donaldson.....	4th ".....	Owen Sound, Ont.....	Toronto, Ont..	5 00
2631	" 6.	Frank Krafoe.....	Temporary.....	Barrington, N.S.....	Halifax, N.S..	2 00
2632	" 6.	Joseph Lapointe.....	4th Class.....	Village Lauzon, Que.....	Quebec, P.Q..	5 00
2633	" 7.	Alcime Beaudet.....	4th ".....	St. Jean Deschailion, Que.....	"	5 00
2634	" 7.	Willie A. Lebeau.....	4th ".....	Sorel, Quebec, Que.....	Sorel, P.Q....	5 00
2635	" 7.	Danl. D. Kane.....	Temporary.....	Kaslo, B.C.....	Victoria, B.C.	2 00
2636	" 27.	John McGraw.....	1st Class U. K.....	Victoria, B.C.....	"	5 00
2637	" 37.	James Wallace.....	1st " ".....	".....	"	5 00
2638	" 27.	James Evans.....	4th ".....	Kingston, Ont.....	Kingston, Ont.	5 00
2639	" 27.	George Lucas.....	4th ".....	Victoria, B.C.....	Victoria, B.C.	5 00
2640	" 27.	Edward Wm. Maloney.....	4th ".....	Deseronto, Ont.....	Kingston, Ont.	5 00
2641	" 27.	Charles Napper.....	3rd ".....	Kingston, Ont.....	"	5 00
2642	" 27.	Henry T. Plett.....	3rd ".....	Victoria, B.C.....	Victoria, B.C.	5 00
2643	" 27.	John Hyslop Alexander.....	3rd ".....	".....	"	5 00
2644	" 27.	Clarence Arthur.....	3rd ".....	Vancouver, B.C.....	Vancouver....	5 00
2645	" 27.	Robert Ryder.....	3rd ".....	".....	"	5 00
2646	" 27.	James Gallivan.....	3rd ".....	Kingston, Ont.....	Kingston, Ont.	5 00
2647	" 29.	Fred'k. Marie Young.....	Temporary.....	Young's Point, Ont.....	"	2 00
2648	" 29.	John James Coones.....	".....	Bridgenorth, Ont.....	"	2 00
2649	" 29.	Andrew Lajeunesse.....	".....	Peterboro, Ont.....	Peterboro, Ont	2 00
2650	" 30.	Thos. Wilbert Whiteley.....	".....	Sombra, Ont.....	Sombra, Ont..	2 00
2651	" 30.	Scott W. Clark.....	".....	Little Current, Ont.....	Little Current.	2 00
2652	April 12.	Alexander Zwicker.....	".....	Bridgewater.....	Halifax, N.S..	2 00
2653	" 10.	Wm. James McIntyre.....	".....	Port Sydney, N.S.....	Toronto, Ont..	2 00
2654	May 31.	Hedley Vicar Pye.....	".....	Hopewell Cape, N.B.....	St. John, N.B.	2 00
2655	" 31.	Walter F. Boydon.....	".....	Michipicoten Hbr., O.....	Michipicoten..	2 00
2656	" 31.	William A. Dawson.....	".....	Napanee, Ont.....	Kingston, Ont.	2 00
2657	" 31.	James Logan.....	".....	Peterboro, Ont.....	"	2 00
2658	" 31.	George Henry Whitney.....	".....	Brockville, Ont.....	"	2 00
2659	" 31.	Emery Scott.....	".....	Rat Portage, Ont.....	Rat Portage, O	2 00
2660	" 31.	Alfred McCall.....	".....	".....	"	2 00
2661	" 31.	Alfred Edward Booker.....	".....	".....	"	2 00
2662	" 31.	Rosario Derry.....	".....	".....	"	2 00
2663	" 31.	John Martin Donovan.....	".....	".....	"	2 00
2664	" 31.	Gabriel Bellefeuille.....	".....	".....	"	2 00
2665	" 31.	Willis F. Cook.....	".....	New Denver, B.C.....	Victoria, B.C.	2 00
2666	" 31.	Christian C. Kurtz.....	".....	Nelson, B.C.....	"	2 00

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LIST of Certificates of Competency granted to Engineers of Steamboats, &c.—*Con.*

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was passed.	Fee.
	1900.					\$ cts.
2667	May 31..	Danl. A. Morrison.....	Temporary ...	Port Hawkesbury, N.S..	Halifax, N.S..	2 00
2668	" 31..	George Thos. Leach	"	Montreal, Que.	Montreal, Que.	2 00
2669	" 31..	Frederick W. Richardson.	"	Lord's Cove, N.B.	St. John, N.B.	2 00
2670	" 31..	Edgar P. Strang.	"	Charlottetown P.E.I.	"	2 00
2671	June 1..	Irene Rivard	"	Grandes Piles, Que.	Gra. Piles, Q..	2 00
2672	" 1..	George Rivard	"	"	"	2 00
2673	" 1..	William Campbell	"	Pictou, N.S.	Pictou, N.S..	2 00
2674	" 1..	Arthur McCann	"	Wallace, N.S.	Halifax, N.S..	2 00
2675	" 1..	Alexander Duprey	"	Pictou, N.S.	Pictou, N.S..	2 00
2676	" 1..	Edward Cowan	"	Halifax, N.S.	Halifax, N.S..	2 00
2677	" 1..	John Hy. Kennedy	"	Wine Harbour, N.S.	"	2 00
2678	" 2..	Malcolm McP. Kirk	3rd Class.	Kingston, Ont.	Kingston, Ont.	5 00
2679	" 2..	Harry A. Armstrong	3rd "	Morrisburg, Ont.	"	5 00
2680	" 2..	Reese Binch.	3rd "	Toronto, Ont.	Toronto, Ont..	5 00
2681	" 2..	Thos. Henry McMurray ..	3rd "	Collingwood, Ont.	"	5 00
2682	" 2..	Joseph Henry Loudon	3rd "	Toronto, Ont.	"	5 00
2683	" 4..	Morgan Ernest Jones	3rd "	Ottawa, Ont.	Montreal, Que.	5 00
2684	" 4..	Joseph Poitras	3rd "	Thurso, Que.	"	5 00
2685	" 4..	Alphonse Samson	3rd "	Village Bienville, Que.	Quebec, Que..	5 00
2686	" 4..	George Lemelin	3rd "	Village Lauzon, Que.	"	5 00
2687	" 4..	Lewis Smith.	3rd "	Halifax, N.S.	Halifax, N.S..	5 00
2688	" 4..	Chas. McSorley	2nd "	Kingston, Ont.	Kingston, Ont.	5 00
2689	" 4..	George Sylvester	2nd "	Collingwood, Ont.	Toronto, Ont..	5 00
2690	" 4..	Wm. Edwd. Sutherland	1st U. K.	Lonisburg, N.S.	Halifax, N.S..	5 00
2691	" 4..	Alfred Larocque	4th Class.	Killarney, Ont.	Toronto, Ont..	5 00
2692	" 4..	Thos. Cauldwell McArn ..	4th "	Toronto, Ont.	"	5 00
2693	" 4..	Geo. Smith Muir	4th "	Victoria, B.C.	Vancouver, B.C.	5 00
2694	" 4..	David McKechnie	4th "	Winnipeg, Man.	Winnipeg, M..	5 00
2695	" 4..	George Birmie	4th "	Holland, Man.	Rat Portage, O.	5 00
2696	" 4..	Théophile Côté	Temporary	Grandes Piles, Que.	Gra. Piles, Q..	2 00
2697	" 4..	Joseph Fournier	"	Lake Edward, Que.	L. Edward, Q..	2 00
2698	" 4..	Joseph Michael Carr	3rd Class.	Port Dalhousie, Ont.	Toronto, Ont..	5 00
2699	" 4..	Lorne McMillan	4th "	Owen Sound, Ont.	Owen Sound, O.	5 00
2700	" 4..	Geo. K. Richardson	4th "	Toronto, Ont.	Toronto, Ont..	5 00
2701	" 4..	James Gregg	3rd "	Owen Sound, Ont.	Owen Sound, O.	5 00
2702	" 4..	Wm. John Woolner	4th "	Collingwood, Ont.	Collingwood, O.	5 00
2703	" 4..	Vincent Robison	4th "	Toronto, Ont.	Toronto, Ont..	5 00
2704	" 7..	Clifton Kingsley	Temporary	Rat Portage, Ont.	Rat Portage, O.	2 00
2705	" 7..	Jonathan Hymers	"	Parry Sound, Ont.	Parry Sound, O.	2 00
2706	" 9..	Henry Stanley Dewar	4th Class.	Selkirk, Man.	Selkirk, Man.	5 00
2707	" 9..	T. Ferguson McKechnie ..	2nd U. K.	Nelson, B.C.	Victoria, B.C.	5 00
2708	" 9..	Henry William Clark	2nd Class.	St. John, N.B.	St. John, N.B.	*
2709	" 9..	Daniel O. Donnell	Temporary	Belleville, Ont.	Belleville, O..	2 00
2710	" 9..	John Franklin Robbin	"	"	"	2 00
2711	" 11..	Wm. F. Brown	"	Winnipeg, Man.	Winnipeg, M..	2 00
2712	" 11..	Francis Vignaux	"	Oxbow Farm, Que.	N. D. Gardé, Q.	2 00
2713	" 11..	John Paul	"	Newboro, Ont.	Kingston, O..	2 00
2714	" 11..	Augusta Fortin	"	Rat Portage, Ont.	Rat Portage, O.	2 00
2715	" 11..	Geo. Cranston Brownlee ..	2nd U. K.	Victoria, B.C.	Victoria, B.C.	5 00
2716	" 11..	James Hopkins	Temporary	Toronto, Ont.	Toronto, Ont..	2 00
2717	" 11..	Hermidas Houle	4th Class.	Sorel, Que.	Sorel, Que..	5 00
2718	" 13..	George Moreau	Temporary	Wanbaushene, Ont.	Wanb'shene, O.	2 00
2719	" 13..	Cléophas Girard	"	Sorel, Que.	Montreal, Que.	2 00
2720	" 13..	Herbert Johnson	"	Rat Portage, Ont.	Rat Portage, O.	2 00
2721	" 20..	George Miles	"	Bobcaygeon, Ont.	Kingston, Ont.	2 00
2722	" 20..	John Edward Ball	"	Caesarea, Ont.	Lindsay, Ont.	2 00

* Second examination.

SESSIONAL PAPER No. 21

APPENDIX No. 12.

STATEMENT giving Names and Stations of Light-Keepers, &c., in the Dominion.

ABOVE MONTREAL.

Name.	Station.	Appointed.	Salary.
Acton, Jas. A.	Burnt Island	April 12, 1890	250 00
Armstrong, John	Kaministiquia River	" 28, 1894	200 00
Alexander, Andrew	Lamb Island	May 1, 1897	400 00
Aitken, Jas. H.	Stonehouse	July 25, 1900	250 00
Baker, Henry F.	Clapperton Island	December 2, 1895	350 00
Boyd, Robert P.	Cole Shoal	April 9, 1884	250 00
Boyd, Wm. S.	Griffith Island	May 14, 1889	350 00
Burlingham, James	Point Peter Light and Fog Alarm	" 1, 1876	†650 00
Butler, Silas L.	Port Dover	July 15, 1897	300 00
Baxter, Wm. I.	Gin Rock	November 23, 1885	300 00
Borron, Edward	French River	September 13, 1875	500 00
Beaulieu, Octave	Point à Cadieux	July 26, 1892	150 00
Boucher, François	Aylmer Island	November 17, 1882	175 00
Bamford, Robert	Wilson's Channel, Algoma	June 21, 1888	250 00
Bertrand, Felix	Lower End Coulonge Lake	March 16, 1885	100 00
Boyd, Wm. M.	Kagawong	April 13, 1893	72 00
Boyer, Napoléon	Lake St. Louis Light-ship No. 3	" 13, 1898	300 00
Boyter, A. B.	Narrow, Island	January 3, 1898	200 00
Brown, Adam	Red Rock, Parry Sound	May 25, 1899	450 00
Ball, J. H.	Manitoulin Island Light and Fog Alarm	" 7, 1900	600 00
Belanger, Adrian	Light-ship No. 1, Lake St. Louis	July 27, 1900	250 00
Campbell, Thos	Burlington Beach	April 1, 1875	350 00
Collins, Allen	Christian Island	March 25, 1831	*425 00
Cross, Manly R.	Gananoque Narrows and Jack Straw Shoal	August 25, 1896	480 00
Campbell, Robert	Goderich	June 9, 1886	400 00
Currie, Geo.	Isle of Coves	April 1, 1878	†650 00
Craig, Wm	Thunder Cape	May 17, 1892	600 00
Cook, Seldon B.	Long Point Light and Fog Alarm	June 9, 1897	700 00
Campbell, John	McTavish Point	November 18, 1896	100 00
Clark, Arthur Geo	Nottawasaga Island	July 5, 1890	500 00
Crevier, Dolphis	Point Claire	May 11, 1888	200 00
Cartier, H. J.	River Thames	October 19, 1884	425 00
Cooper, John	Prince Arthur's Landing	" 14, 1882	300 00
Cosgrove, George	Victoria Island, Lake Superior	November 14, 1889	350 00
Columbus, Christopher	Penetanguishene and Whisky Island	March 18, 1893	300 00
Conover, Forrest H. C.	Leamington	April 24, 1883	150 00
Covert, John	Belleville	June 1, 1881	200 00
Cox, John	Morrison's or Hawley's Island	" 22, 1887	100 00
Chabot, Joseph	Papineauville Range Lights	" 17, 1897	100 00
Connors, Frank	Point Pleasant	October 13, 1898	200 00
Chase, H. J.	Weller's Bay	November 4, 1898	150 00
Davieux, Joseph	Corbay Point, Batchewana	May 27, 1890	350 00
Durnan, George	Gibraltar Point	" 31, 1854	625 00
Daoust, Daniel	Lake St. Louis Light-ship No. 2	October 20, 1897	300 00
Dickinson, Wm. E.	Long Point, West End	September 30, 1879	*400 00
Davieau, Hyacinth	Michipicoten Island	July 1, 1881	400 00
Daoust, Dosithée	McKie's Point	September 22, 1893	175 00
Davis, John H.	Pidgeon Island	May 16, 1896	350 00
Dick, Andrew	Point Porphyry	August 10, 1880	400 00
Dutcher, Samuel	Meaford	May 7, 1877	150 00
Davis Henry B.	Tobermory	November 23, 1895	130 00
Darling, Thomas	Nipissing, South-east Bay Beacon Light	July 1, 1890	60 00
Dixon, Joseph G.	Lake Rosseau	" 21, 1890	100 00

*Allowance \$10. †Allowance \$100. ‡Appointed engineer fog alarm March 26, 1891.

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STATEMENT giving Names and Stations of Light-keepers, &c.—Continued.

ABOVE MONTREAL—Continued.

Name.	Station.	Appointed.	Salary.
			§ cts.
Dempsey, J. Frank.....	Potter's Island Pole Light.....	June 14, 1892.....	*10 00
Demers, Wilbrod.....	Caribou Island, Lake Superior.....	May 10, 1899.. . . .	800 00
Ead, Mrs. C.....	Port Stanley.....	August, 1890.. . . .	300 00
Ely, Henry R. A.....	Warton Pole Light.....	September 14, 1891..	75 00
Felan, Maurice.....	Oakville Pier.....	April 28, 1894.	150 00
Fortier, David H. A.....	Port Colborne Range Lights and Fog Alarm	" 11, 1865.....	550 00
Fellowes, W. R.....	Rondeau Harbour.....	December 18, 1888..	300 00
Filiatrcault, Thomas.....	Coteau Landing.....	May 27, 1890.....	140 00
Grignon, Xavier.....	Beauharnois.....	March 16, 1885.....	†200 00
Gloude, Benjamin.....	Pointe Clair.....	September 7, 1872..	300 00
Grubb, W. A.....	Point Pelee Reef Light and Fog Alarm.....	October 21, 1893.....	700 00
Gillespie, Wm.....	Wolfe Island.....	March 16, 1885.....	250 00
Gauthier, Charles.....	St. Placide.....	May 1, 1874.....	140 00
Gordon, Robert.....	Cobourg Pier.....	" 16, 1883.....	180 00
Griffith, Alfred H.....	Giant's Tomb.....	September 17, 1898..	250 00
Gorley, John, jr.....	Manitowaning.....	July 3, 1900.....	150 00
Haekett, Andrew.....	Bois Blanc.....	January 13, 1864.....	435 00
Hudgins, James M.....	False Ducks.....	April 28, 1894.....	350 00
Hamilton, John.....	Hamilton's Island.....	September 3, 1873..	130 00
Hill, Thomas H.....	Lancaster Pier.....	July 1, 1877.....	325 00
Haitez, Jean.....	Lonely Island.....	May 11, 1885.....	450 00
Hunter, David.....	Port Dalhousie.....	October 29, 1879.....	350 00
Hawkins, David B.....	Peninsula Harbour.....	August 31, 1891.....	400 00
Huff, Thomas W.....	Ferry Sound Range Lights.....	July 25, 1894.....	550 00
Harvey, James.....	Thessalon.....	November 22, 1897..	250 00
Hughes, Wm.....	Red River Range Lights.....	1885.....	250 00
Hughes, Amos.....	Point aux Pins.....	May 10, 1899.....	250 00
Hamilton, Thos.....	Pie Island, Port Arthur.....	April 15, 1899.....	75 00
Johnson, Isaac S.....	Cherry Island.....	November 5, 1883.....	300 00
Jackson, Wm.....	Spectacle Shoal and Red Horse Rock.....	August 1, 1880.....	400 00
Jeffrey, Carson.....	Nigger Island Shoal.....	April 28, 1894.....	200 00
Kinney, James.....	Gore Bay.....	July 27, 1895.....	350 00
Kennedy, James.....	Allumette Island.....	May 23, 1887.....	100 00
Lambert, Wm. McGregor.....	Chantry Island.....	October 1, 1880.....	500 00
Labelle, Louis.....	Deep River Island.....	May 5, 1897.....	100 00
Laberge, Alfred.....	Green Shoal.....	January 26, 1866.....	‡240 00
Lamorandière, Pierre Ré- gis de.....	Killarney.....	September 24, 1880..	400 00
Léger, Thomas.....	Lachine Pier.....	July 14, 1897.....	250 00
Lamondin, Joseph.....	Byng Inlet.....	April 19, 1884.....	375 00
Lee, John.....	Southampton.....	October 7, 1882.....	150 00
Lockerbie, Andrew.....	Collingwood Harbour.....	May 4, 1883.....	300 00
Low, Robert.....	Thornbury.....	April 12, 1887.....	80 00
Lowry, Robert M.....	Port Elgin.....	March 14, 1896.....	80 00
Lumsden, A.....	Lake Temisamingue Lights.....	October 6, 1890.....	200 00
Lidwill, John R.....	Pelee Island.....	July 10, 1899.....	300 00
Lawson, Colin P.....	Middle Island.....	October 17, 1898.....	240 00
Muller, Michael.....	South River Muskoka.....	May 8, 1900.....	80 00
Munroe, John Jacob.....	Lancaster Bar.....	June 8, 1892.....	280 00
Moreland, F.....	Nine Mile Point.....	April 1, 1895.....	200 00
Masson, Lucas H.....	Pointe aux Anglais.....	September 4, 1897..	200 00
Mongeon, Charles A.....	Way Shoal.....	May 23, 1887.....	100 00
Matheson, Norman.....	Cape Robert, Algoma.....	October 7, 1896.....	350 00
Millar, John.....	Port Credit.....	December 16, 1897..	150 00
Morrisseau, Jonathan.....	Hooper's Point.....	March 24, 1898.....	150 00
Manson, John.....	Colchester Reef.....	June 9, 1886.....	600 00

*Per month during season of navigation. †Allowance \$60. ‡Allowance \$10.

SESSIONAL PAPER No. 21

STATEMENT giving Names and Stations of Light-keepers, &c.—Continued.

ABOVE MONTREAL—Continued.

Name.	Station.	Appointed.	Salary.
			\$ cts.
Morriseau, Michael.....	Rainy River, Algoma.....	June 9, 1886.....	*250 00
Martin, Wm. J.....	Spanish River.....	July 5, 1890.....	250 00
Malott, Albert E.....	Kingsville Range Lights.....	April 12, 1890.....	150 00
Miron, Louis.....	Gargantua.....	October 26, 1889.....	450 00
Maguire, James W.....	Corunna Range Lights.....	April 12, 1890.....	120 00
Murray, Wm.....	Valleyfield Range Lights.....	May, 17, 1900.....	150 00
Montgomery, Wm.....	Toronto Harbour, Eastern Channel.....	October 16, 1895.....	300 00
Matheson, Daniel.....	Black Bear Island, Manitoba.....	June 22, 1889.....	150 00
Magnusson, August.....	Gull Harbour, Lake Winnipeg.....	September 19, 1898.....	150 00
McKenzie, Donald.....	Little Current.....	" 1, 1898.....	350 00
McKillop, John.....	Campbell's Island.....	April 2, 1892.....	150 00
McIntosh, John.....	Arnprior Island.....	" 2, 1892.....	150 00
McKenzie, John.....	Owen Sound.....	July 14, 1873.....	100 00
McDonald, Murdoch.....	Point Clark.....	January 8, 1897.....	375 00
McDonald, Amos.....	Salmon Point.....	July 12, 1897.....	300 00
McKillop, Donald.....	St. Anicet Shoal.....	June 8, 1892.....	230 00
McLaren, Allan J.....	Brown's or Knapp's Point.....	February 11, 1896.....	180 00
McKay, Chas. S.....	Battle Island.....	August 27, 1877.....	500 00
McIntosh, Daniel.....	South Bay Point.....	October 1, 1881.....	200 00
McKenzie, Wm.....	Strawberry Island.....	May 17, 1893.....	300 00
McQuestion, Mrs. Maria.....	McQuestion Point.....	June 9, 1886.....	100 00
McAulay, Donald.....	Saugen River.....	March 16, 1899.....	80 00
McDonald, Lauchlin D.....	Mississauga Island.....	May 16, 1896.....	450 00
McCool, James.....	Fort William Beacon Light, Ottawa River.....	" 23, 1887.....	90 00
McDevitt, Chas.....	Point au Baril.....	March 1, 1897.....	300 00
McKay, John.....	Lyal Island.....	October 27, 1884.....	450 00
McLean, Arch.....	Owen Sound.....	December 23, 1897.....	126 00
McGaw, Thos.....	Kincardine.....	June 13, 1899.....	350 00
Onillette, Godfrey.....	Buckan's Point.....	May 1, 1884.....	180 00
O'Rourke, Michael.....	Centre Brother Island.....	June 18, 1894.....	200 00
O'Brien, Matthew.....	Frenchman's Bay.....	October 13, 1898.....	125 00
O'Conner, P.....	Bishop's Bay, Algoma.....	April 13, 1899.....	150 00
Plumb, Ward S.....	Wind Mill Point.....	November 18, 1882.....	180 00
Purvis, John.....	Great/Duck Island Light and Fog Alarm.....	March 9, 1898.....	†500 00
Pettypiece, Stephen.....	Lime Kiln Crossing.....	May 11, 1888.....	350 00
Prosser, John.....	Muskoka or Fox Island.....	September 14, 1896.....	250 00
Plunkett, H. E.....	Swampy Island, Lake Winnipeg.....	October 12, 1884.....	350 00
Proudfoot, Thos.....	Neebish, St. Mary's River.....	November 4, 1898.....	100 00
Root, Albert.....	Grenadier Island.....	December 15, 1863.....	250 00
Roddick, Robert.....	Gull Island.....	March, 1872.....	500 00
Row, Geo. Albert.....	Telegraph Island.....	October 25, 1895.....	200 00
Repentigny, Toussaint de.....	Ste. Anne de Bellevue.....	February 28, 1881.....	†125 00
Robillard, Honoré.....	Isle Perrot.....	January 25, 1897.....	100 00
Redmond, William H.....	Gravenhurst Narrows.....	June 18, 1894.....	100 00
Rains, Evan.....	Shoal Point, Algoma.....	November 24, 1884.....	250 00
Rains, A. M.....	Sailor's Encampment.....	August, 1892.....	††17 00
Rains, W. W.....	Westfield Range Light.....	" 1892.....	†† 7 00
Ritchie, James.....	South Bay Range Lights.....	" 20, 1898.....	150 99
Rowan, James.....	Victoria Island, Galetta.....	December 3, 1898.....	100 00
Richardson, Wm.....	Michipicoten Hr. Algoma.....	September 28, 1900.....	200 00
Sommers, Napoleon.....	Midland Range Lights.....	June 19, 1900.....	150 00
Shannon, William.....	Gross Point.....	September 27, 1866.....	**425 00
Shannon, George.....	Assistant.....	" 27, 1866.....	175 00
Seguin, Grégoire.....	L'Orignal.....	May 8, 1894.....	100 00
Smithers, R. O.....	Mohawk Island.....	March 31, 1896.....	400 00
Sutherland, Jno.....	Port Burwell.....	June 18, 1894.....	225 00
Schofield, Fergus.....	Port Maitland.....	April 10, 1871.....	350 00
Simpson, Hedley V.....	Presqu'Isle.....	May 11, 1888.....	540 00
Smith, H. E.....	Presque Isle, Main Light.....	April 29, 1898.....	350 00

* Allowance \$30. † Allowance \$200 attending Fog alarm. ‡ Allowance \$25. †† Per month while light in operation. ** Allowance \$10.

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STATEMENT giving Names and Stations of Light-keepers, &c.—Continued.

ABOVE MONTREAL—Continued.

Name.	Station.	Appointed.	Salary.
			\$ cts.
Shepperd, Mrs. Wm., acting keeper	Sulphur Island, Range Light	August, 1890	300 00
Sullivan, Silas	Baskin's Wharf	December 22, 1896	130 00
Sauvé, Honoré	Caron's Point	February 16, 1889	60 00
Spence, Bernard	Paquet Rapids	April 2, 1892	100 00
Stoneburner, John A.	Cornwall Canal, upper entrance	" 12, 1890	100 00
Smith, Richard	Western Island	March 5, 1896	700 00
Smith, Donald	Flower Pot Island	November 8, 1897	300 00
Spencer, D. O.	Scotch Bonnet	August 8, 1898	350 00
Taylor, Ross	Stag Island, River St. Clair	July 12, 1900	150 00
Veech, Stannes	Nine Mile Point; light-keeper and engineer of fog alarm	March 7, 1894	450 00
Valee, Charles	Hope Island	April 20, 1899	450 00
Wallace, John	Lindoe Island	July 1, 1881	250 00
Winthrop, Robert W.	Head of Dechene Rapids	April 13, 1891	100 00
Weightman, Wm	North Sisters Rock, Algoma	November 6, 1885	350 00
Wootton, Edward	Niagara	July 11, 1887	50 00
White, Charles L.	Snug Harbour, Parry Sound	" 25, 1894	350 00
Webster, Chas	Cabot's Head Light and Fog Alarm	May 10, 1898	650 00
Whitmarsh, John	Snake Island	July 18, 1900	350 00

BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC.

Arcand, Elzéar	Cap de la Madeleine	May 17, 1892	80 00
Ayer, R.	Georgeville, Lake Memphremagog	From year to year	*1 50
Arcand, Alfred	Seven Islands	May 20, 1898	324 00
Ascah, James	Faine Point, Gaspé Co.	September 2, 1880	400 00
Beaudet, Fulgence	Lotbinière (1)	June 1, 1895	80 00
Beaudet, George	Lotbinière (2)	January 4, 1883	80 00
Beandet, Charles	Platon	August 24, 1894	†120 00
Bourque, Peter	Bird Rocks	November 27, 1896	1,300 00
Bouilliane, Pierre	Lark Islet	September 1, 1872	200 00
Bertrand, Auguste	Macquereau Point	December 21, 1877	300 00
Banville, Joseph	Matane	February 1, 1897	‡250 00
Bourget, F.	Percé Roadstead	March 18, 1893	200 00
Babin, Louis D.	Pillars	February 23, 1874	450 00
Babin, Louis D.	Algernon Rock	" 23, 1874	200 00
Breton, Narcisse	Point Rich	May 16, 1896	500 00
Bourget, Charles	Cape Despair	November 1, 1897	‡400 00
Bisson, Wm	Grand River	October 22, 1896	‡150 00
Bergeron, George	River Valee	June 16, 1885	70 00
Bouchard, Louis	Cap au Saumon Lighthouse and Fog Alarm	May 16, 1896	600 00
Beaulieu, Jos. Hudon dit.	Point aux Originaux	April 7, 1875	250 00
Boucher, Louis	Isle aux Raisins	" 13, 1898	240 00
Belanger, H.	St. Thomas Wharf	" 4, 1898	80 00
Bujold, Louis	Carleton Point	May 25, 1899	250 00
Carignan, L. P.	Champlain Main Light	October 1, 1892	80 00
Cornier, Wm	Amherst Island	April 26, 1871	**300 00
Coltin, Michael	Belleisle	" 1, 1882	††1,100 00
Côté, Louis T.	Cape Chatte	September 10, 1874	‡‡300 00
Campbell, John W.	Cape Norman Lighthouse and Fog Alarm	April 12, 1890	720 00
Costin, Eugène	Cape Rosier	November 4, 1890	800 00
Cassidy, James	Entry Island	September 22, 1873	***300 00
Côté, Paul	Egg Island	November 3, 1871	500 00
Chamberlain, H.	Oak Point, Range Lights	April 19, 1900	75 00

* Per week. † Has also charge of Back Range Light at \$5 per month. ‡ Allowance \$100.

§ Allowance \$30. ** Has allowance of \$50 for fuel, etc. †† Allowance \$100. ‡‡ Allowance \$200.

*** Allowance \$20. ††† A light-ship is maintained, under contract, at Peninsula Bank, Gaspé Basin.—The present contractor is Thomas Kennedy, sr., of Douglstown, Gaspé County.

SESSIONAL PAPER No. 21

Statement giving Names and Stations of Light-keepers, &c.—Continued.

BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC—Continued.

Name.	Station.	Appointed.	Salary.
			\$ cts.
Chabot, Edouard.....	Pointe St. Laurent.....	August 1, 1880	300 00
Chiasson, Edward.....	Etang du Nord.....	October 22, 1896.....	350 00
D ubreuil, Hector.....	Pointe aux Trembles	February 18, 1897.....	130 00
Desmarais, Phileas.....	River St. Francis.....	July 2, 1897.....	*20 00
Desjardins, Jean B.....	Kamouraska.....	August 23, 1887.....	400 00
Duperie, Alfred J.....	Pointe aux Jones.....	May, 1873.....	40 00
Dubois, Octave.....	Flower Island, Strait of Belle Isle.....	October 14, 1899.....	500 00
E lectric Light Company.....	Roberval Beacon Lights (2).....	June, 1898.....	60 00
F ournier, Alfred.....	Upper Traverse.....	April 14, 1900.....	600 00
Fugère, Léandre.....	Batiscan (1).....	" 19, 1868.....	80 00
Fugère, Napoléon.....	Batiscan (2).....	January 10, 1887.....	80 00
Fiset, Jean H.....	Lake St. Peter Light-ship No. 2.....	April 22, 1875.....	500 00
Francoeur, Siméon C.....	St. Pierre les Bequets.....	September 24, 1862.....	70 00
Fontaine, Edouard.....	Cape Bauld Lighthouse and Fog Alarm.....	November 1, 1892.....	800 00
Faffard, Victor.....	Pointe de Monts.....	August 1, 1889.....	†400 00
Fraser, Pierre T.....	Red Island.....	April 12, 1890.....	†450 00
Fagot, George.....	Greenly Island Lighthouse and Fog Alarm.....	June 30, 1890.....	800 00
Frenette, A.....	St. Croix Front Range Light.....	February 10, 1900.....	70 00
G ervais, Ovila.....	Contrecoeur (1).....	March 1, 1877.....	100 00
Giguère, Denis.....	Lavaltrie.....	April 24, 1870.....	300 00
Galibois, Jean B.....	Bellechasse.....	June 23, 1880.....	320 00
Gauthier, Jean.....	Martin River.....	February 21, 1876.....	\$300 00
Goudreault, Jos. M.....	River Caribou.....	—, 1874.....	40 00
Gauthier, Francis.....	Pointe aux Jones.....	April, 1872.....	40 00
Goudreault, Abraham.....	Eboulements Pole Light.....	May 10, 1882.....	40 00
Grenier, Solomon.....	Newport.....	June 3, 1897.....	120 00
Guyon, Philip.....	Isle aux Prunes.....	March 22, 1898.....	120 00
H oude, Athanase.....	Cape Charles.....	November 4, 1890.....	150 00
Hébert, Moïse M.....	Cap de la Madeleine.....	May 11, 1888.....	80 00
Harvey, André.....	Chicoutimi Wharf.....	" 30, 1889.....	40 00
Huot, Joseph.....	L'Ange Gardien.....	August 1, 1885.....	70 00
Heroux, Didié.....	Lake St. Peter Light-ship No. 3.....	April 13, 1898.....	400 00
I rvine, John.....	Red Island Light-ship.....	March 2, 1900.....	**500 00
L afèche, Désiré.....	Lake St. Peter Light-ship No. 1.....	April 12, 1887.....	400 00
Lachapelle, Jean B.....	Repentigny (2).....	February 1, 1861.....	75 00
Langlois, Antoine.....	River du Chêne.....	July 11, 1888.....	100 00
Laliberté, Arthur.....	Ste. Emelie, Front Range.....	September 24, 1880.....	70 00
Lebel, Esdras.....	Lower Traverse Light-ship.....	April 21, 1900.....	††2,300 00
Leclerc, P. M.....	Ste. Emelie, Back Range.....	April 8, 1899.....	80 00
Lavoie, M.....	St. Fulgence.....	— 1893.....	70 00
Le Hugnet, François.....	Gaspé Cape.....	October 22, 1896.....	650 00
Lindsay, Wm.....	Gaspé Wharf.....	June 14, 1900.....	42 00
Lindsay, Irénée.....	Green Island.....	September 25, 1888.....	600 00
Loisel, John.....	Point Paspebiac.....	August 27, 1894.....	150 00
Leclerc, A.....	St. Antoine.....	February 6, 1899.....	175 00
LeBlanc, Régis.....	White Island Light-ship.....	January 11, 1878.....	†500 00
Lemieux, Z.....	South-west Point, Anticosti.....	July 19, 1900.....	600 00
Lachance, Louis.....	Port of St. John.....	September 26, 1896.....	300 00
Lavoie, F.....	Anse St. Jean Wharf.....	— 1889.....	40 00
M oiseau, François.....	Port St. Francis.....	March 27, 1900.....	***30 00
Montplaisir, Antoine B.....	Cap de la Madeleine.....	August 6, 1877.....	175 00
Martineau, Valerie.....	Champlain Pole Light.....	" 2, 1889.....	60 00
Mercier, O.....	Isle à la Bague.....	" 31, 1883.....	150 00
Malo, Joseph.....	Isle Ste. Thérèse (1).....	February 1, 1897.....	130 00
Ménard, Denis.....	North of Halfway Point.....	September, 12, 1890.....	170 00
Marchand, Ferdinand.....	Pointe aux Citrouilles.....	April 27, 1896.....	200 00

* Per month. † \$200 for attending signal gun, &c. † Allowance, \$50 for fuel, etc.

‡ Allowance, \$25. †† Was in charge of Upper Traverse Light-ship from April 13, 1893.

*** Allowance, \$1,900. ††† Allowance, \$2,300. *** A month during season of navigation.

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STATEMENT giving Names and Stations of Light-keepers, &c.—Continued.

BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC—Continued.

Name.	Station.	Appointed.	Salary.	
			\$	cts.
Martin, Paul	St. Valentine	April 23, 1873	150	00
Molson, Mrs. Alexander	Molson's Island, Lake Memphremagog	From year to year	+2	50
Malouin, Alfred	Anticosti, West Point	July 1, 1877	+++150	00
Martin Jule G.	Little Metis	December 23, 1879	+++300	00
Marceau, Louis	St. Francis	April 1, 1884	75	00
Maltais, Eli	Murray Bay	May 10, 1882	50	00
Myrick, John	Cape Race, Newfoundland, Lighthouse and Fog Whistle	November 1, 1897	1,000	00
Morin, Hypolite	Pilgrims	April 29, 1898	340	00
Marcotte, P. L.	Point Bleue, Lake St. John	November 23, 1898	40	00
McWilliams, John J.	Father Point	June 1, 1876	200	00
McLaren, Donald	River du Moulin	September 19, 1889	35	00
Nadeau, Alphonse	Anticosti, South Point	June 18, 1894	800	00
Noel, Edouard	Richelieu Light, Lotbinière	April 10, 1899	150	00
Paquin, Sylva	Point du Lac	May 2, 1900	100	00
Paul, Edouard	Isle de Grace	September 7, 1871	+30	00
Pagé, Celestin	L'Islet Richelieu	January 9, 1895	150	00
Peters, D. E.	Witch Rock, Lake Memphremagog	From year to year	+2	50
Peters, J. H.	Green Point	"	+1	50
Patterson, J. C.	Wadleigh	"	+1	50
Painchaud, Joseph	Crane Island	October 1, 1864	320	00
Paquet, Pierre	St. Famille	" 19, 1885	70	00
Postras, Alexander	Bersimis Range Light	September 21, 1891	100	00
Pedneau, Pierre	Isle aux Coudres Pole Light	April 6, 1896	40	00
Poulin, Alfred	St. Famille	" 26, 1898	70	00
Pineault, Louis	Bicquet Lighthouse & Fog Alarm	October 6, 1900	700	00
Reeves, Samuel	Isle Ste. Thérèse (2)	" 12, 1870	270	00
Rivet, Léon L.	Repentigny (1)	April 28, 1894	75	00
Robinson, George L.	Ash and Bloody Islands	June 18, 1894	200	00
Richard, Alphonse	Brandy Pots	October 7, 1878	400	00
Rennie, E. H.	Cape Ray Lighthouse and Fog Whistle	" 19, 1884	800	00
Roberge, C. Honoré	St. Pierre Island	" 19, 1885	70	00
Rodrique, F. F.	Portneuf	January 22, 1858	250	00
Racette, D.	St. Croix back range lights	February 10, 1900	70	00
St. Onge, Thomas	Contrecoeur	June 14, 1886	75	00
Salvail, Omer	Isle à la Pierre	May 6, 1897	220	00
Simard, Edward	Montée du Lac, and Cape Rouge Beacons	October 28, 1870	400	00
Sasseville, F. J.	Cape Magdalen, Lighthouse and Fog Whistle	June 9, 1886	700	00
Simard, Arthur	River Caribou	" 9, 1870	40	00
Savard, Xavier	"	May 1, 1873	40	00
St. Croix, George	Plateau Rock	October 22, 1896	400	00
Trottier, Widow I.	Grondines (1)	August 1, 1872	100	00
Trottier, Ephrem	Grondines (2)	May 17, 1892	100	00
Thurber, Wm.	Ste. Croix	October 5, 1878	175	00
Tremblay, W. T.	Goose Cape	April 4, 1888	250	00
Tremblay, Dorilas	Portneuf (2)	February 13, 1875	350	00
Tremblay, George	River du Moulin	September 9, 1889	35	00
Trudelle, Ambroise	L'Ange Gardien	October 19, 1885	70	00
Tremblay, Pitre	St. Alphonse Wharf	June 19, 1895	40	00
Tremblay, Henry	Cape l'Aigle Pole Light	February 6, 1896	40	00
Tremblay, Thomas	Bay St. Paul	October 25, 1898	250	00
Tremblay, P. E.	Harbour Light Rivière du Loup	May 19, 1900	70	00
Tremblay, Alexis	Heath or East Point, Anticosti	July 25, 1900	600	00
Vigneau, Placide	Perroquet Island	September 19, 1892	600	00
Vézina, Oliver	St. Pierre	October 28, 1897	70	00
Whitman, Robert H.	Lacolle	May 14, 1883	150	00
Wheeler, W.	Lead Mines, Lake Memphremagog	From year to year	+1	50
Wyatt, Thomas	Forteau, Lighthouse and Fog Whistle	October 18, 1889	+++800	00

*Per month. †Per week. ‡Allowance \$75. ††Allowance \$20 for fuel and \$20 for horse.
 +++ Allowance, \$250.

SESSIONAL PAPER No. 21

STATEMENT giving Names and Stations of Light-keepers, &c.—Continued.

NEW BRUNSWICK.

Name.	Station.	Appointed.	Salary.	
			§	cts.
Arseneau, James.....	Dalhouse.....	June 18, 1894.....	100	00
Archer, Wm.....	North Tracadie.....	November 7, 1872.....	275	00
Allain, Joseph.....	Hay Island, Beacon Light.....	May 21, 1895.....	150	00
Balmer, Matthew.....	Oak Point.....	April 27, 1900.....	80	00
Barbour, Jas. G.....	Cape Enrage Lighthouse and Fog Signal..	May 11, 1888.....	800	00
Bent, A. W.....	Cape Jourmain or Cape Tormentine.....	September 15, 1875..	300	00
Blacklock, Fred G.....	Cape Spencer.....	March 5, 1888.....	400	00
Brown, Charles.....	Quaco.....	November 25, 1884..	400	00
Bradshaw, L. B.....	Quaco Fog Alarm.....	September 3, 1887..	400	00
Brune, John David.....	Goose Lake.....	May 11, 1888.....	250	00
Boyd, B. G.....	Spruce Point.....	September 1892.....	120	00
Boudreau, Jos. B.....	Petit Rocher.....	February 26, 1896..	150	00
Blakley, Lawrence.....	Harper's Point.....	September 9, 1887..	75	00
Bellmore, Fredk.....	Dipper Harbour.....	March 12, 1895.....	100	00
Belleveau, Philip T.....	Folly Point.....	November 29, 1897..	175	00
Cochran, Fredk. M.....	St. Martin's Wharf, Quaco.....	March 25, 1892.....	100	00
Clark, Geo. H.....	St. John Harbour.....	October 2, 1893.....	350	00
Conley, John C.....	Beaver Harbour.....	April 2, 1892.....	250	00
Cummings, Geo.....	Cainbellton Beacon Light.....	January 1, 1880.....	100	00
Chapman, James.....	Baie du Vin Island.....	July 24, 1882.....	200	00
Crandall, D. H.....	Grays Point, Pole Light.....	April 12, 1900.....	70	00
Carney, John.....	Perry Point.....	September 25, 1900..	80	00
Dixon, Elias C.....	Pea Point.....	November 16, 1898..	250	00
Delaney, John.....	Grant's Beach.....	October 7, 1880.....	125	00
Drake, Jeremiah.....	St. John Signal Station.....	March 24, 1881.....	650	00
Dumaresq, Francis X.....	Shippegan.....	November 7, 1872.....	280	00
Dalzell, Geo. Y.....	Swallow Tail.....	March 18, 1893.....	400	00
Dutch, John.....	Heron Island.....	" 7, 1875.....	200	00
Dinsmore, Samuel G.....	Big Duck Island Fog Alarm.....	July 5, 1886.....	550	00
DeGrace, John.....	Indian Point.....	June 4, 1889.....	150	00
Davidson, Warren P.....	Southern Wolves.....	January 14, 1897.....	500	00
Day, W. A.....	Belyea's Point.....	September 20, 1899..	90	00
Egan, Edward.....	Bellonie's Point.....	May 17, 1892.....	100	00
Frawley, Frank.....	Point Lepreau Fog Alarm.....	June 15, 1898.....	400	00
Flewelling, M.....	Flewelling's Wharf.....	April 12, 1890.....	80	00
Fanjoy, William.....	Fanjoy's Point.....	December 15, 1897..	80	00
Ferguson, W. G.....	South Tracadie Gully.....	March 23, 1898.....	150	00
Guptill, S. N.....	Grand Harbour.....	October 24, 1900.....	400	00
Gillard, John.....	Point DuChene Range Lights.....	June 13, 1888.....	90	00
Gillespie, David.....	Hillsborough Pier.....	December 31, 1892..	75	00
Gould, Francis T.....	Point Brule Range Lights, Shediac.....	January 13, 1889... } April 3, 1900..... }	40	00
Hendry, A. M.....	Hendry Farm.....	April 25, 1899.....	80	00
Hayden, Michael.....	Pokemouche.....	October, 17, 1888.....	200	00
Henderson, Arthur.....	Midjie Bluff.....	" 5, 1894.....	200	00
Hamm, Chas. P.....	Musquash.....	January 14, 1879.....	*300	00
Helms, Geo.....	Petit Passage Fog Whistle.....	May 5, 1882.....	†400	00
Hachey, Octave.....	Pokesudie Island.....	July 12, 1881.....	180	00
Hagan, E.....	Ward's Point.....	April 12, 1890.....	80	00
Harvey, W. L.....	Gannet Rock.....	May 20, 1898.....	700	00
Kilpatrick, Joseph.....	Passamaquoddy Bay.....	February 3, 1898.....	350	00
Lantaigue, Gervais.....	Caraquet Island.....	June 16, 1888.....	200	00
Leblanc, Charles P.....	Cassie's Point.....	May 4, 1872.....	250	00
Looney, Thos. E.....	Greenhead, St. John River.....	October 14, 1896.....	105	00
Mills, George.....	Lower Fox Island.....	June 23, 1897.....	200	00
Morrison, Peter.....	Oak Point.....	" 24, 1882.....	100	00

*Allowance \$45.

†Allowance \$180.

64 VICTORIA, A. 1901

STATEMENT giving Names and Stations of Light-keepers, &c.—Continued.

NEW BRUNSWICK—Concluded.

Name.	Station.	Appointed.	Salary.
			\$ cts.
Morrison, Peter, jr.	Portage Island.	July 1, 1892.	200 00
Morrison, Duncan.	Sheldrake Island.	February 25, 1880.	300 00
Maillet, D. O.	Indian Point, Buctouche.	July 7, 1883.	150 00
Moore, Rev. S. C.	Anderson's Hollow.	May 14, 1889.	100 00
Matheson, E. B.	Newcastle.	April 18, 1898.	109 00
McLeod, J. H.	Bliss Island.	October 17, 1900.	300 00
McLennan, Kenneth	Escuminac Lighthouse and Fog Whistle.	March 7, 1892.	750 00
McEwen, David	Middle Island.	July 22, 1875.	300 00
McIntosh, Chas.	Neguac Range Lights.	December 19, 1892.	100 00
McBaine, Alex.	Cox's Point.	May 6, 1898.	80 00
McMonagle, Miles	Oromocto Shoals.	" 26, 1891.	80 00
McDonald, Whitfield.	Musquash Island.	June 1, 1888.	80 00
McMann, Robert	McMann's Point.	September 7, 1876.	80 00
McLaughlin, Walter B.	South-west Head.	October 29, 1879.	500 00
McNeill, Henry H.	Dalhousie Beacon Lights and Douglas Island Light.	January 1, 1880.	150 00
McConnell, Robert.	Muscov Gully.	September 2, 1887.	100 00
Nevers, George.	Jemseg.	November 24, 1884.	80 00
Nobles, Israel.	Belleisle Point.	" 23, 1885.	80 00
Purvis, David	No Man's Friend.	June 2, 1897.	80 00
Preston, S.	Preston's Beach.	July 11, 1889.	125 00
Pendlebury, Wm. J.	St. Andrews.	April 10, 1889.	250 00
Pickett, Robert E.	Farmers' Point.	May 11, 1897.	80 00
Parker, Malachi	Mulholland's Point.	April 4, 1885.	200 00
Palmer, E. B.	Hampstead.	November 6, 1900.	80 00
Quinton, Wm. M.	Mark's Point.	April 12, 1890.	120 00
Russell, James R.	Grindstone Island.	January 13, 1899.	700 00
Ryan, William.	Miramichi Light-ship.	May 22, 1889.	*400 00
Rivers, Robert.	Miscou Lighthouse & Fog Whistle.	April 24, 1877.	800 00
Robinson, John	Neguac Beach.	June 30, 1896.	150 00
Richard, Peter F.	Richibucto.	May 30, 1895.	185 00
Robertson, Chas. M.	Robertson's Point.	June 30, 1897.	80 00
Robertson, Meier	Shediac Island Beacons.	December 29, 1873.	250 00
Ross, Elijah	Negro Point.	March 5, 1878.	400 00
Robichaud, Jude.	Richibucto Beacon.	December 5, 1891.	225 00
Robicheau, Henry B.	Dixon Point.	June 21, 1884.	150 00
Roberty, A.	Belledune.	February 5, 1895.	160 00
Richards, D. L.	Partridge Id. Lighthouse & Fog Whistle.	July 19, 1900.	800 00
Sutherland, George A.	Bathurst Harbour.	March 20, 1882.	†200 00
Seely, Chas. F.	Machias Seal Island Li'th'se & Fog Whistle.	June 14, 1883.	1,000 00
Seely, Neil	Head Harbour Lighthouse and Fog Whistle.	May 3, 1882.	800 00
Scott, Chas. F.	Stonehaven.	July 20, 1885.	100 00
Thomas George H.	Point Lepreau.	August 29, 1884.	400 00
Tatton, George T.	Grand Mann Fog Whistle.	October 16, 1886.	550 00
True, Geo. Howard.	Willmot's Bluff.	September 11, 1899.	80 00
Upton, Robert.	Bridge's Point.	" 11, 1899.	80 00
Williston, Wm. W.	Fox Island.	May 31, 1873.	300 00
Wagner, Richard	Sand Point.	June 7, 1883.	80 00
Williams, Forrest W.	William's Wharf.	May 11, 1897.	80 00

NOVA SCOTIA.

Amero, George D.	Pubnico.	February 6, 1893.	240 00
Amirault, James.	Sisiboo.	July 11, 1899.	200 00
Amero, Chas. A.	Whitehead Island.	November 3, 1897.	200 00

* Allowance \$300.

† Allowance \$10.

SESSIONAL PAPER No. 21

STATEMENT giving Names and Stations of Light keepers, &c.—Continued.

NOVA SCOTIA—Continued.

Name.	Station.	Appointed.	Salary.
			\$ cts.
Beaman, Edwin	Digby Pier	May 29, 1897	100 00
Bancroft, Joseph E.	Brier Island	April 19, 1884	400 00
Burke, James	Main-à-Dieu	May 2, 1871	300 00
Bonner, George	Point Aconi	April 18, 1874	200 00
Burgess, Watson	Port l'Hébert	July 26, 1892	150 00
Boutillier, R. J.	Superintendent of Sable Island	November 13, 1884	*600 00
Bollong, James	Pope's Harbour	August 6, 1877	300 00
Bourgeois, Philip	Cheticamp Range Lights	May 23, 1898	150 00
Baker, Thomas	Pease's Island	" 19, 1879	350 00
Burns, Wm. H.	Wedge Island	April 2, 1892	400 00
Brackett, Wm.	Herring Cove	August 28, 1897	100 00
Belleveau, John H.	Belleveau's Cove	February 16, 1889	80 00
Brownell, Alfred	Cold Spring Head	May 26, 1891	120 00
Brown, James	Cranberry Head Fog Alarm	June 22, 1898	500 00
Buchanan, Angus A.	Neil's Harbour	August 14, 1899	150 00
Beck, Henry	Terence Bay	" 20, 1900	100 00
Chiasson, German	Caveau Point Range Lights	" 20, 1897	120 00
Crichton, H. H.	Crichton's Head	May 6, 1874	200 00
Crooks, Demas	Liscomb	October 5, 1894	300 00
Connington, Thomas	Louisburg Range Lights	" 26, 1897	150 00
Crowell, John	Seal Island Lighthouse and Fog Whistle	" 14, 1899	800 00
Campbell, Samuel C.	St. Paul's Island, Superintendent	July 17, 1897	†700 00
Campbell, J. O.	Port Mouton	April 29, 1898	300 00
Comeau, Louis C.	Meteghan River Wharf	October 12, 1875	100 00
Campbell, R. J.	Red Islands	August 28, 1899	120 00
Croucher, George A.	Croucher's Island	January 31, 1883	300 00
Clough, Daniel	Grandique Pole Light	July 4, 1884	70 00
Clory, Abraham	Glasgies Point Pole Light	" 25, 1894	150 00
Coolin, Joseph	Westhaver's Point	August 5, 1885	250 00
Carey, James	Carey's Beach	" 18, 1886	60 00
Cameron, John	Beaver Point	September 29, 1896	150 00
Crowell, Benjamin S.	Pagis Island, Port LaTour	June 30, 1890	150 00
Campbell, John M.	Engineer Fog Alarm, St. Paul's Island	October 26, 1898	400 00
Christian, John	Betty's Island	December 12, 1899	500 00
Dunlap, Wm. H.	Bird Island	June 26, 1897	400 00
Doane, Isaac	Cape Sable	July 1, 1871	800 00
Duane, Wm.	Green Island	October 30, 1871	500 00
Doody, James	Meagher's Beach, Lighthouse & Fog Whistle	February 19, 1896	800 00
Dunn, James M.	Port Williams	October 26, 1859	260 00
Doane, John H.	Yarmouth Fourchu, Lighthouse & Fog W.	July 1, 1874	800 00
Doane, Joshua	Yarmouth Harbour	February 23, 1874	†356 00
Doyle, Edward	Mabou Range Lights	June 14, 1897	70 00
D'Entremont, W. H.	Abbott's Harbour	May 22, 1888	75 00
Dewis, F. H. P.	Cape d'Or	April 13, 1898	500 00
Ellis, Wm. E.	Annapolis, Pt. Prim or Digby L. H. & F. W	March 8, 1875	800 00
Early, John	Margaretville	February 19, 1887	230 00
Fowler, James E.	Apple River Lighthouse and Fog Whistle	July 25, 1894	700 00
Fisher, Joel W.	Baccaro or Barrington	August 8, 1893	400 00
Fulker, Wm. G.	Devil's Island	July 1, 1886	420 00
Firth, Charles M.	Coffin Island, Liverpool	June 30, 1880	400 00
Foster, Israel C.	Port Medway	October 13, 1892	260 00
Foster, Samuel T.	Port Medway Breakwater	February 17, 1899	100 00
Foster, Geo. M.	Port George	November 5, 1897	100 00
Fraser, John A.	Callaghan's Island	December 31, 1892	200 00
Faulker, W. Y.	Burnt Coat	June 22, 1898	250 00
Findlay, John H.	Bull Point	December 7, 1899	100 00
Giffin, Spencer H.	Country Harbour	September 18, 1883	400 00
Gilkie, Henry A.	Sambro	January 8, 1877	800 00
Giffin, Ira L.	Holly Point, Isaac's Harbour	April 28, 1894	200 00
Goudock, Edward	Shelburne Sand Point	December 3, 1880	280 00

*With board of self and family. †Allowance \$1,400. ‡Allowance \$30 per annum for fog bell.

64 VICTORIA, A. 1901

STATEMENT giving Names and Stations of Light-keepers, &c.—Continued.

NOVA SCOTIA—Continued.

Name.	Station.	Appointed.	Salary.
			\$ cts.
Gardner, Frederick T.	Brooklyn Pier	February 6, 1885	100 00
Gallant, Patrick	Little Loraine	January 19, 1900	50 00
Goodwin, Jas. E.	Wood's Harbour	August 27, 1900	200 00
Helm, William	Flint Island	July 31, 1883	450 00
Hopkins, Leslie	Bon Portage Island	October 20, 1897	350 00
Huntley, Charles	Kingsport Pier	June 30, 1890	100 00
Hensbee, David S.	Crowe Harbour	November 10, 1897	300 00
Hawley, Matthew	South Bay, Ingonish	May 13, 1897	140 00
Hardy, John	Gabarus	November 22, 1890	200 00
Hennesey, W. P.	Highland Village Pole Light	April 6, 1899	25 00
Jackson, David	Ingonish Island	April 13, 1898	300 00
Johnson, Edward	Chebucto Head Lighthouse & Fog Whistle	May 14, 1872	800 00
Joyce, Simon	Seal Island Pole Light	July 4, 1884	100 00
Jamieson, Chas.	Cape St. Lawrence	September 21, 1893	400 00
Jamieson, Geo. C.	Cole Harbour Range Lights	October 21, 1898	120 00
Long, Joseph	Canso Harbour	December 31, 1896	200 00
Leblanc, Severin	Fish Island	July 1, 1889	250 00
Lowden, David	Pietou Harbour Range Lights	" 12, 1897	150 00
LeVashe, Wm.	Arichat	October 17, 1898	250 00
Lyons, John W.	Barrington Light-ship	June 18, 1897	500 00
Landry, Edward	Big Arrow Island	February 23, 1897	200 00
Larkin, Ephraim	Shag Harbour, Stoddart's Island	March 18, 1896	200 00
Livingstone, George S.	Advocate Harbour	May 8, 1884	250 00
LeBlanc, Benjamin	Tusket, Wedge	November 1, 1892	300 00
Morrison, Charles	Amet Island	October, 5, 1894	320 00
Morrison, M. D.	Black Rock Point	June 8, 1892	250 00
Muise, Marcellin	Chetichamp	November 27, 1896	300 00
Misner, John E.	Fort Point	May 16, 1896	150 00
Moser, Samuel	Moser's Island	November 6, 1885	450 00
Mullins, James	Mullins Point	June 8, 1892	250 00
Munro, William	Pietou	November 22, 1890	460 00
Murphy, Michael	Pomket Island	December 18, 1890	350 00
Mundell, Joseph	Sand Point	October 18, 1869	400 00
Martlet, John T.	Scatterie Lighthouse and Fog Whistle	July 30, 1897	800 00
Murray, John	Cape George	November 3, 1882	200 00
Munroe, William L.	Three Top Island	October 28, 1879	300 00
Mitchell, John W.	Jeddore Rock	September 29, 1882	400 00
Mitchell, Wm. A.	Quaker Island	February 19, 1896	300 00
Matheson, Murdoch	Whycocomah Pole Light	September 11, 1884	60 00
Morrison, Widow	Freestone Pole Light	June 5, 1897	150 00
Mauger, John J.	Cape LaRonde	November, 16, 1898	300 00
McDonald, Robert	Carter's Island	January, 1885	275 00
McKenzie, R.	Gull Rock, Carribou Island	August 1, 1881	300 00
McDonald, Henry S.	Little Hope Island	April 3, 1897	500 00
McRae, Roderick	Margaree or Sea Wolf Island	February 3, 1898	400 00
McFarlane, Alex.	Margaree Harbour	August 18, 1886	60 00
McKay, R.	North Canso	February 4, 1882	350 00
McFarlane, Andrew	Pietou Island	June 8, 1892	400 00
McDonald, John A.	Port Hood	May 10, 1880	280 00
McDonald, James	Point Tupper	March 15, 1870	300 00
McAskell, Donald	St. Anne's Harbour	June 26, 1889	140 00
McLean, H.	Gillis Point	December 18, 1897	120 00
McRae, Hector	McKenzie Point, Plaster Harbour	August 20, 1890	160 00
McLeod, Norman	Cape North	October 14, 1899	400 00
McRae, Donald	Kidston's Island	May 17, 1892	200 00
McLeod, Angus	St. Esprit	October, 27, 1880	400 00
McDonald, Charles L.	Little Narrows	January 17, 1896	120 00
McDonald, Norman	Marjorie's Isle Pole Light	July 4, 1884	100 00
McAskill, James	Jerome Point	November 8, 1897	250 00
McNeil, John C.	Piper's Cove	December 18, 1897	120 00
McNeil, Laughlin	McNeil's Back Pole Light	August 6, 1884	60 00
McFadyen, M.	Mabou Range Light	April 17, 1891	50 00
McVickar, Archibald	Cow Bay Breakwater	July 3, 1896	70 00
McDonald, Donald	Clark's Harbour Pole Light	April 25, 1892	50 00

SESSIONAL PAPER No. 21

STATEMENT giving Names and Stations of Light-keepers, &c.—Continued.

NOVA SCOTIA—Concluded.

Name.	Station.	Appointed.	Salary.	
			\$	cts.
McNeil, John.....	Campbell's Island, Victoria Co.....	May 22, 1900.....	100	00
McEachern, A. L.....	Cape St. George.....	September 8, 1898.....	450	00
McLeod, Murdoch.....	Pugwash.....	December 10, 1897.....	250	00
McKenna, John L.....	McNutt's Island, Shelburne Harbour L. H. & F. W.....	March 31, 1899.....	800	00
MacIntosh, James.....	Egg Island.....	July 28, 1899.....	500	00
McLellan, Ingersoll L.....	Economy Pole Light.....	May, 16, 1899.....	*6	00
McAdam, Hugh R.....	Arisaig.....	November 14, 1898.....	60	00
Nass, Henry.....	Lunenburg.....	March 12, 1897.....	300	00
Nickerson, Byron.....	Negro Island.....	July 26, 1897.....	300	00
Nunn, George.....	Sydney South Bar.....	June 20, 1872.....	300	00
O'Leary, Wm.....	Beaver Island.....	February 22, 1900.....	350	00
Orchard, L. D.....	Gull Rock.....	January 1, 1877.....	400	00
Pearl, Albert.....	Green Island.....	December 29, 1873.....	500	00
Price, Philip.....	Louisburg.....	November 8, 1897.....	350	00
Peters, John G.....	Low Point.....	October 1, 1865.....	460	00
Pettis, William.....	Parrsboro'.....	December 6, 1888.....	340	00
Palmer, Howard.....	Wolfe Point.....	October 14, 1899.....	250	00
Palmer, H. W.....	Fort Point.....	May 22, 1878.....	200	00
Perry, John.....	Sheet Harbour.....	December 17, 1878.....	500	00
Phinney, Elisha.....	Cape Sharp, Diligent River.....	July 6, 1893.....	250	00
Perry, Levi.....	North East Harbour Range Lights.....	June 17, 1899.....	200	00
Quinn, James.....	Lingan.....	April 13, 1874.....	200	00
Robinson, Charles.....	Black Rock.....	March 16, 1885.....	330	00
Puggles, H. M.....	Boar's Head.....	December 1, 1864.....	425	00
Robicheau, B. H.....	Cape St. Mary's.....	July 5, 1886.....	350	00
Rathburn, S. M.....	Horton Bluff.....	1879.....	250	00
Reid, George J.....	Isle Haute.....	October 18, 1889.....	500	00
Ross, Robert.....	George's Island.....	January 18, 1876.....	250	00
Robblee, Jacob V.....	Shafner's Point.....	May 29, 1897.....	150	00
Riley, Simon W.....	Annapolis Royal.....	March 7, 1892.....	100	00
Smith, Eph.....	Inner Pole Light Sambro Island.....	January 3, 1900.....	20	00
Sullivan, James.....	Cape Canso, Cranberry Island, L.H.&F.W.....	May 23, 1887.....	800	00
Scott, M. C.....	Guysborough.....	April 19, 1884.....	220	00
Swinehammer, George.....	Peggy's Cove Point.....	January 4, 1883.....	350	00
Spencer, Robert A.....	Spencer's Point.....	April 1, 1870.....	125	00
Suthern, Edward W.....	Westport.....	" 12, 1890.....	300	00
Suthern, John F.....	Brier Island Fog Whistle.....	October 1, 1874.....	500	00
Saulnier, John H.....	Church Point.....	August 8, 1878.....	200	00
Sampson, C.....	Ouetique Island.....	December 1, 1874.....	350	00
Strum, James A.....	Westhaver Island.....	September 23, 1888.....	200	00
Sollows, Walter.....	Green Cove Pole Light.....	August 15, 1884.....	75	00
Sampson, Theodore.....	South Beaver Harbour Pole Light.....	October 15, 1892.....	80	00
Smith, Caleb.....	Salter's Head Beacon Light.....	June 21, 1888.....	60	00
Smith, William B.....	Westhead Barrington.....	April 12, 1890.....	200	00
Simpson, W. H.....	Pictou Custom House Light.....	December 21, 1897.....	100	00
Smeltzer, John D.....	Hobson Island.....	April 10, 1900.....	300	00
Vigneau, George.....	Jerseyman's Island.....	March 23, 1883.....	300	00
Vance, George.....	Masstown.....	June 29, 1898.....	25	00
Wolfe, Howard M.....	Ironbound.....	June 22, 1895.....	250	00
Weldon, Burton.....	Walton Harbour.....	May 26, 1891.....	125	00
Wells, James.....	Whitehead.....	October 20, 1897.....	510	00
Winton, Robert B.....	Guion Island.....	April 28, 1877.....	450	00
Wambold, James.....	Sheet Harbour Passage.....	May 11, 1887.....	50	00
Webb, Patrick.....	Harbour-au-Bouche.....	February 19, 1896.....	250	00
Webber, James M.....	Torbay.....	May 10, 1898.....	300	00
Wynacht, W. H.....	Cross Island Lighthouse and Fog Whistle.....	April 13, 1898.....	300	00
Young, Uriah.....	Chester, Quaker Island.....	February 15, 1884.....	400	00

* Per month during season of navigation.

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STATEMENT giving Names and Stations of Light-keepers, &c.—Continued.

PRINCE EDWARD ISLAND.

Name.	Station.	Appointed.	Salary.
			\$ cts.
Anderson, Albert.....	St. Peter's Harbour.....	July 25, 1900.....	130 00
Allen, Joel S.....	Indian Point Pier.....	May 18, 1898.....	350 00
Arseneault, F. C.....	Cape Egmont.....	April 20, 1900.....	200 00
Champion, Wm.....	Cascumpec Harbour.....	October 25, 1897.....	80 00
Costain, Frederick.....	Miminegash, Rix Point Range Light.....	May 19, 1897.....	40 00
Fraser, John.....	Summerside Wharf.....	April 12, 1897.....	100 00
Gaudet, Agape.....	Tignish.....	August 30, 1897.....	130 00
Gillis, Donald.....	Point Prim.....	December 10, 1897.....	300 00
Hardy, Wm.....	Little Channel.....	July 26, 1875.....	100 00
Howatt, Abner J.....	Crapaud Outer Range Light.....	" 22, 1893.....	100 00
Harris, Wm.....	Cape Bear.....	November 11, 1896.....	350 00
Kennedy, Alexander.....	Hazard's Inner Range Light.....	June 27, 1890.....	60 00
Leard, Solomon J.....	Crapaud Inner Range Light.....	May 14, 1889.....	100 00
Lewis, James.....	Brighton Beach Range Lights.....	March 1, 1899.....	100 00
Munn, Duncan.....	Little Sands.....	May 1, 1877.....	30 00
Morrison, Angus.....	Cardigan.....	September 21, 1883.....	100 00
McRae, Daniel.....	Hazard's Outer Range Light.....	April 6, 1900.....	70 00
McLaine, Archibald.....	Block House, Charlottetown.....	" 3, 1867.....	*340 00
McDonald, Lauchlin.....	East Point Lighthouse and Fog Whistle.....	February 23, 1897.....	500 00
McDonald, Wm.....	Pannure Island.....	November 20, 1853.....	300 00
McDonald, Chas. Æ.....	St. Andrew's Point Outer Range.....	July 18, 1887.....	125 00
McDonald, John.....	Orwell.....	June 25, 1879.....	80 00
McLeod, Jas. H.....	New London.....	January 29, 1896.....	100 00
McDonald, Wm.....	West Point.....	December 1, 1875.....	300 00
McKay, John.....	Wood Island.....	September 12, 1898.....	250 00
McMillan, Donald.....	Covehead Range Lights.....	October 21, 1893.....	90 00
McDonald, Angus.....	Souris.....	November 13, 1880.....	300 00
McDonald, Jas. A.....	Savage Harbour.....	July 11, 1889.....	100 00
McLeod, Lemuel.....	Murray Harbour Beach Light.....	December 21, 1897.....	50 00
McPherson, Daniel W.....	Brush Wharf, Orwell, Range Lights.....	January 13, 1899.....	60 00
Oulton, Robert T.....	Savage Island, Cascumpec.....	June 14, 1897.....	80 00
O'Brien, Patrick.....	Miminegash Range Light.....	May 14, 1897.....	60 00
Phee, James.....	North Cape.....	September 4, 1897.....	300 00
Penny, Robert.....	Murray Harbour, Penny's Light.....	November 11, 1897.....	50 00
Pino, Joseph N.....	North Rustico.....	February 6, 1897.....	125 00
Ranaghan, Peter.....	Sea Cow Head.....	April 21, 1873.....	250 00
Ready, Michael.....	Tracadie.....	August, 1867.....	100 00
Robertson, Alfred.....	Annandale Range Lights.....	October 5, 1898.....	100 00
Sinclair, Wm.....	Fish Island.....	March 8, 1897.....	250 00
Stevart, Geo.....	Summerside Harbour Back Range Light.....	September 5, 1895.....	80 00
Tuplin, Jas. C.....	Sandy Island, Cascumpec.....	May 5, 1897.....	250 00
Taylor, Chas.....	Darnley Basin Range Lights.....	June 14, 1897.....	60 00
Taylor, James W.....	St. Peter's Island.....	May 1, 1897.....	200 00
Westaway, Roger D.....	St. Andrew's Point Inner Range.....	May 19, 1883.....	125 00
Wiggins, G. W. J.....	Darnley Point Range Lights.....	October 16, 1896.....	100 00
Wright, Chas. L.....	Wright's Range Light, Crapaud.....	June 14, 1894.....	100 00

* Allowance \$40 for signalling vessels.

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STATEMENT giving Names and Stations of Light-keepers, &c.—*Concluded.*

BRITISH COLUMBIA.

Name.	Station.	Appointed.	Salary.
			\$ cts.
Brinn, Richard.....	Discovery Island Lighthouse & Fog Whistle	June 14, 1886.	900 00
Carpenter, C.....	Dryad Point Light.....	November 7, 1899....	180 00
Crozier, James.....	Bare Point, Chemainus.....	June 12, 1897.....	120 00
Clark, M. G.....	Entrance Island Lighthouse & Fog Whistle	November 26, 1897..	900 00
Codville, James.....	Pointer Island.....	July 11, 1900.....	360 00
Daykin, William P.....	Carmanah Point Lighthouse & Fog Whistle	November 4, 1890 ..	1,200 00
Davidson, John.....	Cape Mudge.....	June 27, 1898....	360 00
Davies, John.....	Fiddle Reef, Victoria.....	December 2, 1898....	*25 00
Deacon, Andrew.....	Fisgard.....	April 10, 1900.....	500 00
Eastwood, F. M.....	Race Rocks.....	January 31, 1891....	1,200 00
Erwin, Walter.....	Point Atkinson Lighthouse & Fog Whistle.	October 5, 1880.....	1,000 00
Forsythe, James.....	Ivory Island	September 5, 1900..	500 00
Georgeson, Henry.....	Plumber Pass Lighthouse & Fog Whistle..	July 21, 1884	900 00
Georgeson, James.....	Saturna Island, East Point	October 26, 1889....	500 00
Grove, John.....	Prospect Point.....	June 21, 1898.....	300 00
Gallup, J. W.....	Balfour.....	March 1900.....	*20 00
Harrison, S. G.....	Beren's Island.....	November 4, 1897....	300 00
Harvey, Thos. W.....	Sands Head	April 13, 1898.....	900 00
Higgins, Harry.....	Sister's Rock, Vancouver.....	October 1, 1899.....	500 00
Jones, William D.....	Brockton Point, Burrard Inlet.....	August 20, 1890....	300 00
McDonagh, William.....	Yellow Island.....	September 16, 1898..	500 00
McCull, Wm.....	Garry Point.....	August 4, 1898.....	*10 00
Patterson, Thomas.....	Cape Beale.....	March 2, 1895.....	†500 00
Richards n, John.....	Portlock Point Lighthouse & Fog Alarm..	December 2, 1895....	460 00
Scarlett, Robert.....	Egg Island.....	August 22, 1900....	500 00

* Per month. † Allowance, \$700.

DEPARTMENT OF MARINE AND FISHERIES,
OTTAWA, November 6, 1900.

APPENDIX No. 13.

BOARD OF EXAMINERS OF MASTERS AND MATES.

HALIFAX, N.S., November 30, 1900.

SIR,—I have the honour to submit, for the information of the Honourable the Minister of Marine and Fisheries, my annual report of the proceedings of the Board of Examiners of Masters and Mates, from June 30, 1899, to June 30, 1900, the end of the fiscal year.

The Board met for the purpose of examining candidates, who were applying for sea-going certificates of competency, at the following ports:—

At the port of Halifax	13 times.
“ “ St. John	6 “
“ “ Yarmouth	3 “
“ “ Quebec	0 “
Total	22 times.

Five examinations were also held before the local examiner at Victoria, B.C., the papers and nautical problems being supplied by me and returned to this office for inspection and approval.

Some officers, desirous of obtaining coasting and inland certificates, also presented themselves for examination at the above named ports of Halifax and St. John, and were duly examined at the monthly examinations.

At Halifax, 9 applications were made for sea-going certificates of competency as master, and 11 for master for coasting and inland waters; 8 sea-going masters and 8 masters for coasting and inland waters received certificates. 14 applications were made for sea-going certificates of competency as mate, and 3 for coasting; 11 sea-going, and 3 coasting mates received certificates.

At St. John 6 applications were made for sea-going certificates of competency as master, and 5 for master coasting; 4 sea-going and 3 coasting masters received certificates. 7 applications were made for sea-going certificates as mate and 3 for mates of coasting and inland waters; 7 sea-going and 1 coasting mate received certificates.

At Yarmouth 3 applications were made for sea-going certificates as mates and 1 for mate; 2 masters and 1 mate were granted certificates.

At Quebec no candidates applied for examination during the past year.

At Victoria, 1 application was made for a master's certificate sea-going, and 5 for mates' certificates, and all were successful.

It can therefore be seen that 19 applications were made for masters' certificates of competency sea-going, and 27 for mates' during the year; 15 masters and 24 mates received certificates; also 16 applications for certificates as master competency coasting and inland waters, were made to the Board of Examiners, and 6 for mates' certificates; 11 masters and 4 mates received certificates.

Three certificates of service were issued through the Halifax office for master coasting, and 1 renewal certificate.

The total number of certificates issued by the Department of Marine and Fisheries, during the past fiscal year, including competency, service and renewal, upon applications made to the Board of Examiners at Halifax, was 58, and fees to the amount of \$715.50 were collected and deposited to the credit of the Receiver General.

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Amongst the applicants enumerated above, some have presented themselves a second or third time for examination, having previously failed to pass. A second trial, however, is allowed any candidate without an extra fee being charged.

At St. John, the local member of the board formerly held examinations for certificates for coasting and inland waters, and this officer made his returns direct to the department up to the time of his death in October, 1899.

At Yarmouth, examinations for certificates for coasting and inland waters, are conducted by an examiner, who also instructs the candidates for these examinations as well as those who desire to present themselves before the board for sea-going certificates, and reports direct to the department, similar to the examiners of coasting officers at the other ports.

In my last annual report, I stated it was desirable that the standard of examination to test the qualifications of applicants for certificates of competency as masters or mates in the coasting trade, should be raised at as early a date as possible, and acting upon instructions from the department, I drafted a new set of rules and regulations for these examinations.

Having given serious consideration to the subject of officers holding coasting certificates under the very slight qualifications required by the present regulations, I desire most respectfully to bring the matter before the department again and at the same time strongly urge upon its notice that life and property may at any time be jeopardised if things continue in their present state.

I am of opinion, based upon a long career afloat, that masters and officers trading between ports in Canada and in the West India Islands and South America, should possess the same professional knowledge and qualifications as officers making voyages across the Atlantic Ocean.

Indeed the passage to and from the West Indies made partly out of sight of land, and often very near the shore, amongst shoals, reef, and irregular currents, the navigation being necessarily intricate and dangerous, demands even greater nautical skill than a voyage across the Atlantic. In the latter case an offing is gained in a few hours after leaving Nova Scotia or New Brunswick ports, and the open ocean is then only to be crossed until a landfall is made upon the other side.

By inspecting the rules and regulations for the examination of candidates for certificates of competency coasting, it may be seen that the qualifications are very low, and the note at the end states that 'as the examination of masters and mates is made compulsory, the qualifications have been kept as low as possible, but it is distinctly to be understood that the Minister of Marine and Fisheries may raise the standard from time to time if deemed advisable.'

I may, however say that within the time that I have been in office, the standard has actually been reduced for whereas in former years the master and mate had to work a day's work, find the latitude and longitude by inspection, find the latitude by a meridian altitude of the sun and work a case in parallel sailing, and find the course and distance from one position to another by Mercator sailing. The only problem now required is to find the latitude by a meridian altitude of the sun.

Regarding the examinations of sea-going officers, I have frequently found some of them deficient in their writing and spelling.

The new examination prescribed for a second mate of sea-going vessel, requires that his hand writing and spelling should be tested by a quarter of an hour's dictation; the spelling must be reasonably and fairly good, and the writing clear and legible.

In the Imperial rules, where there is any doubt about the ability of a candidate to spell correctly, he must be specially tested by dictation, and we are guided by those rules.

Some officers who have been examined for master's sea-going certificates, have not been well acquainted with the deviascope, and have had much difficulty in describing the meaning of the co-efficients, which represent the magnetic character of the ship.

Few appear to understand the necessity of making themselves familiar with the methods adopted for correcting the semi-circular deviation produced by the ship's polar magnetic force, by the use of permanent magnets.

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The increase of the number of ships being built of iron and steel, and the large amount of iron now used in the interior fittings of vessels, more especially in passenger steamers, renders it necessary that officers serving in those ships should have as fair a knowledge of the deviation of the compass as the officers who are examined in Great Britain.

Masters of large passenger steamers in our own coasting trade should likewise be required to pass an examination in compass deviation, but this is not embodied in the rules for the work they have to perform.

During the past year, I had to inform you of the death of the late Captain William Thomas, assistant examiner at St. John, and also that of Mr. B. A. Stammers, formerly instructor of navigation at that port.

The loss of Mr. Stammers was very serious, as he always took a deep interest in giving proper instructions to those candidates who were preparing for examination, and kept himself up to all the requirements,

For some time after the death of these gentlemen, we had no one to take their places, and the port of St. John was left without either an instructor or examiner.

Recently Captain Rufus C. Cole, a master mariner of experience, has taken over the duties of instructor, but no one has been appointed as an examiner.

Some months since an officer was sent to be examined before the board at Halifax, for that position, but he failed to pass the requisite examination.

I consider that it will be difficult for the department to obtain the services of a gentleman who is prepared to conduct these examinations, as many retired masters of ships, although being thoroughly capable men having had long experience, do not attempt to keep themselves up to the knowledge which it is necessary to have to examine candidates, nor do they generally acquaint themselves with the changes made in the problems and other nautical work introduced from time to time by the Imperial Board of Trade.

The new examination is entirely different and much more difficult than was required of them when they passed the board.

Our examinations being similar to those held in Great Britain, the problems are sent out to Canada by the British Government for that purpose and any new subject proposed for examination in England, has to be adopted by the board of examiners here.

This being the case (and it would not be fair otherwise), certificates issued by the Hon. Minister of Marine and Fisheries, after an examination before a board of examiners at any of our ports, have the same value as those which are obtained in Great Britain.

The certificates only require to be stamped with the seal of any mercantile marine office in any British or Irish port, and the officer then becomes eligible to serve on board any ship in the British or colonial marine.

I am firmly of opinion that the duties of an examiner and instructor should not be undertaken by the same individual.

In England great stress is laid upon the impropriety of an instructor even appearing upon the premises, for fear that he should by any means have intercourse with the candidates or obtain any information whatever in connection with the problems prepared for examination.

Our own regulations are similar, it being distinctly stated that no instructor shall be allowed upon the premises.

It is in fact contrary to our law and to that in existence in Great Britain, and therefore as our procedure is regulated by that in force under the Imperial Board of Trade, I submit that it is necessary for our rules to be wholly in accordance with those issued by that body.

Under these circumstances it would appear that the Department of Marine and Fisheries is debarred from allowing one man to hold the two offices of examiner and instructor, and this salutary principle is adopted in every other profession, either of the law, medical, etc., or in connection with the civil service examinations.

I beg respectfully to recommend that the department abolish the issue of service certificates.

If a man can show proof that he has been at sea prior to January, 1883, he is entitled to receive a certificate of service for either master or mate according to the position he has held.

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Some applicants for these certificates have not been to sea for years and when they take charge of a vessel as master, are compelled to employ a man to navigate her.

With regard to certificates for ferry boat officers, I desire respectfully to suggest that they should be limited to the waters on which the holders thereof intend to ply, and the examination should have special reference to the dangers to be met with in the locality, and if they are taken off the route for any purpose, the officer taking charge of such ferry boat, should be required to pass the requisite examination to qualify him for the particular route the ship is engaged on.

I understand that large excursion parties are carried on board of steamers which are taken off the ferry routes for that purpose, and some of them have only certificates for ferry boats.

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

W. H. SMITH,
Chairman.

The Deputy Minister of Marine and Fisheries,
Ottawa.

APPENDIX No. 14.

REWARDS FOR SAVING LIFE.

LIST of persons to whom rewards have been granted by the Government of Canada for the fiscal year ended June 30, 1900, for the gallant and humane services rendered in life-saving from shipwrecked vessels, or by British and Foreign Governments for similar services rendered by Canadian vessels in saving life from shipwrecked British and Foreign vessels for the same period.

Names and Designations of Persons.	Nature of Services rendered.	Date of Services rendered.	Description of Reward.
Capt. S. M. Marsters, master; George Murphy, mate; Karl Karlsen and Harry Blunt, seaman; of the Barque "Avola" of Windsor, N.S.	Services rendered to the shipwrecked crew of the "Hattie May," of Halifax, N.S.	Oct. 3, 1898..	A binocular glass to master, a silver watch to mate and \$10 to each of the seaman.
F. Jacobson, H. C. Brewsters, F. Stanley Spain, Nigel L. Campbell, Thomas Owen and S. Jorgeson, residents of Clayoquot, B.C.	Services in the rescue of five men of the crew of the American Schooner "Hera," which vessel had taken fire in a heavy north-east gale off Clayoquot, B.C., the captain having abandoned the vessel and taken four men and one woman on the only available boat and left the remainder to their fate.	Nov. 27, 1898..	A gold life saving medal to each of the men by the President of the United States.
Capt. Frank Carroll, master of the Schooner "Polar Wave," of Boston, Mass., U.S.	Humane and generous services to the shipwrecked crew of the Schooner "Jersey Lily," of Shelburne, N.S., abandoned at sea.	Jan. 30, 1899..	A gold watch.
Capt. J. J. Pereira, of the Portuguese Barque "Nepuno," of Lisbon, Portugal.	Humane services to the shipwrecked crew of the three-masted Schooner "Delight," of Charlottetown, P.E.I.	Feb. 11, 1899..	A gold watch.
Capt. J. Shekleton, master of the British SS. "Ceuto" of Liverpool, England.	Humane services in the rescue of the shipwrecked crew of the Barque "Madeleine," of Yarmouth, N.S.	Mar. 20, 1899.	A binocular glass.
Commodore John H. Hanan, of the Yacht "Sagamore," of New York, U.S.	Humane and generous services in the rescue of the shipwrecked crew of the Brigantine "Caspian," of Charlottetown, P. E. I., abandoned at sea.	April 14, 1899.	A silver cup.
Thomas Fitzpatrick, Frank Fitzpatrick, George Martin, William Dove and Daniel McLeod, fishermen of Bayfield, N.B.	Humane services rendered in the rescue of the shipwrecked crew of the Schooner "Lady Speedwell," of Halifax, N.S., at Jourimain Island, Cape Tormentine, N.B.	May 10, 1899..	\$10 to each of the fishermen.
Capt. John Gwinn, master of Schooner "Morell," of Charlottetown, P.E.I.	Humane and generous services in the rescue from drowning of a passenger of the "Morell."	June 20, 1900..	A binocular glass.

SESSIONAL PAPER No. 21

LIST of persons to whom rewards have been granted by the Govt. of Canada—*Continued.*

Names and Designation of Persons.	Nature of Services rendered.	Date of Services rendered.	Description of Reward.
Capt. D. Doxrud, master, John Daddow, chief officer; E. Petersen, boatswain; H. Lorensen, quartermaster; A. Anderson, J. Anderson, R. Kettlesen and M. O'Keefe, seamen; of the SS. "Rhynland," of Antwerp.	Humane and gallant exertions in the rescue of the shipwrecked crew of the "Ida Maud," of Liverpool, N.S.	Oct. 6, 1899...	A binocular glass to master, a gold watch to chief officer, a silver watch to boatswain, and a silver watch to quartermaster, \$10 to each of the four seamen, \$40 in all.
Joseph John Chiasson and his two sons, Joseph and Peter, fishermen, of Island River, Shippegan, N.B.	Bravery in the rescue of a fisherman from drowning off a wrecked boat.	Oct. 7, 1899...	A binocular glass to Mr. Chiasson and \$5 to each of his two sons.
Mr. Patterson, keeper of Cape Beale Light, B.C., and Capt. Walbran, of the Dominion Govt. steamer "Quadra."	Kindly services to the American Schooner "Winona" which was disabled, and bringing the vessel to a safe anchorage.	Nov. 20, 1899..	The thanks of the Department of Marine and Fisheries for the timely assistance rendered by its officers to a vessel under the United States flag.
R. Clark, coxswain; Joseph Crockett, Wm. Smith, James Smith, James Peach, John Peach, George Wisner and John Fritzley, crew of Life Boat at Port Rowan, Ont.	Services in rescue of two men in a fishing boat in the outer bay of Long Point, Ont.	Dec. 5, 1899...	\$1.50 to each man, \$12 in all.

Supplement to the Thirty-Third Annual Report of the Department of Marine and Fisheries
MARINE

ANNUAL REPORT

OF THE

GEOGRAPHIC BOARD OF CANADA

1900

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST
EXCELLENT MAJESTY

1901

Hon. SIR LOUIS HENRY DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit herewith the Second Annual Report of the Geographic Board of Canada, which forms a supplement to the Thirty-Third Annual Report of the Department of Marine and Fisheries, Marine Branch. The Report covers the work of the Board for six months of the present year in addition to the year 1899, and contains the Proclamation creating the Board, a list of the members of the Board, an account of the changes in the constitution of the Board, and its transactions since the date of the last Annual Report, the by-laws and rules, and a list of place-names approved by the Board.

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

F. GOURDEAU,
Deputy Minister of Marine and Fisheries,
Chairman of the Board.

2024-25 Budget Report

The 2024-25 budget report details the financial performance of the organization, including revenue, expenses, and net income. It provides a comprehensive overview of the budgetary process and the resulting financial outcomes for the fiscal year.

Financial Summary

The financial summary highlights the key components of the budget, including total revenue, total expenses, and the resulting net income. It also includes a breakdown of the budget by department and a comparison to the previous fiscal year.

ORDER IN COUNCIL.

THE CANADA GAZETTE.

OTTAWA, Saturday, June 25, 1898.

[3324]

AT THE GOVERNMENT HOUSE, AT OTTAWA.

Saturday, the 18th day of December, 1897.

PRESENT :

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, by and with the advice of the Queen's Privy Council for Canada, is pleased to create a 'Geographic Board' to consist of one member for each of the Departments of the Geological Survey, Railways and Canals, Post Office, and Marine and Fisheries, such member being appointed by the minister of the department ; of the Surveyor General of Dominion Lands, of such other members as may from time to time be appointed by Order in Council, and of an officer of the Department of the Interior, designated by the Minister of the Interior, who shall act as secretary of the Board ; and to authorize the Board to elect its chairman and to make such rules and regulations for the transaction of its business as may be requisite.

His Excellency is further pleased to order and direct that all questions concerning geographic names in the Dominion which arise in the departments of the public service shall be referred to the Board, and that all departments shall accept and use in their publications the names and orthography adopted by the Board.

JOHN J. MCGEE,
Clerk of the Privy Council.

MEMBERS OF THE GEOGRAPHIC BOARD OF CANADA

GOURDEAU, F.,	DEPUTY MINISTER OF MARINE AND FISHERIES, <i>Chairman</i>
ANDERSON, W. P.,	CHIEF ENGINEER, Department of Marine and Fisheries
BELL, DR. ROBERT,	ASSISTANT DIRECTOR AND GEOLOGIST, Geological Survey Department
DAWSON, DR. S. E.,	KING'S PRINTER AND CONTROLLER OF STATIONERY
DENNIS, J. S.,	DEPUTY COMMISSIONER OF PUBLIC WORKS, Regina, Assa, representing the Northwest Territories
DEVILLE, E.,	SURVEYOR-GENERAL OF DOMINION LANDS
DOWLING, D. B.,	ASSISTANT GEOLOGIST, Geological Survey Department
INCH, DR. J. R.,	CHIEF SUPERINTENDENT OF EDUCATION, Fredericton, N.B., representing the province of New Brunswick
JOHNSON, E. V.,	Department of Railways and Canals
MACKAY, DR. A. H.,	SUPERINTENDENT OF EDUCATION, Halifax, N.S., repre- senting the province of Nova Scotia
MACMILLAN, HON. A.,	PROVINCIAL SECRETARY, Charlottetown, P.E.I., representing (ex-officio) the province of Prince Edward Island
ROBERTSON, W. F.,	PROVINCIAL MINERALOGIST, Victoria, B.C., representing the province of British Columbia
SENÉCAL, C. O.,	GEOGRAPHER AND CHIEF DRAUGHTSMAN, Geological Survey Department
SMITH, W.,	Post Office Department
WHITE, JAMES,	GEOGRAPHER, Department of the Interior
WHITCHER, A. H.,	Department of the Interior, <i>Secretary</i>

EXECUTIVE COMMITTEE:

W. P. ANDERSON, J. WHITE, A. H. WHITCHER

SECOND ANNUAL REPORT

OF THE

GEOGRAPHIC BOARD OF CANADA

1900.

At the date of the last annual report, the Board consisted of eight members, two for the Department of Marine and Fisheries, two for the Department of the Interior, and one each for the Departments of the Geological Survey, Public Printing and Stationery, Post Office, and Railways and Canals. Mr. James White, who represented the Geological Survey Department, having been transferred to the Department of the Interior as Geographer, the former department was no longer represented on the Board. It was submitted by the Director of the Geological Survey that the nature of the questions coming up for decision by the Board, seemed to show that the representation of his department might with advantage be so increased as to include a wide range of experience and knowledge with regard to actual nomenclature and the derivation of names coming before the board for decision. It appeared, in fact that a considerable portion of the actual work might be delegated to small special committees conversant with certain lines of knowledge and that the decisions of such committees need only, in most cases, come before general meetings of the Board for final action. Probably no branch of the public service is more competent to afford expert advice and information with regard to nomenclature than the Geological Survey Department; it was therefore suggested that Dr. Robert Bell, Assistant Director, Mr. D. B. Dowling, Assistant Geologist, and Mr. C. O. Senécal, Geographer and Chief Draughtsman, should be members of the Geographic Board. The appointments were made by Order in Council of January 13, 1900.

It was felt that Mr. James White, who had ceased to be a member of the Board when he was transferred to the Department of the Interior, should be continued in office, the nature of his new duties as well as his long experience and intimate knowledge of many of the problems coming before the Board for decision fitting him in an exceptional degree for the position. He was reappointed by Order in Council of January 23, 1900.

Under the provisions of the Order in Council of December 18, 1897, creating the Board, its jurisdiction was limited to questions arising in the departments of the public service of the Dominion, and its decisions were binding only upon such departments. The publications of the provincial governments were not governed by the decisions of the Board so that there was still a lack of uniformity within the Dominion in the geographical nomenclature. It seemed that if the jurisdiction of the Board could be extended to include the departments of the public service of the various provinces and, at the same time, their co-operation in the work of the Board secured, not only would greater uniformity result, but the local knowledge of the provincial officers would be of considerable assistance in dealing with the questions arising. In order to obtain this co-operation, an Order in Council was passed on December 14, 1899, amending the constitution of the Board by giving to the governments of the Northwest Territories and of each province the right to nominate one of their officials as a member of the Board with reference to names in his province, provided that the several governments should undertake to be guided by the decisions of the Board. This order was communicated to the lieutenant-governors of the several provinces, and to the lieutenant-governor of the

Northwest Territories for the views of their respective governments in the matter. The invitation was accepted by the provinces of Nova Scotia, New Brunswick, Prince Edward Island and British Columbia, and by the Northwest Territories, each nominating one of its officers to act as a member of the Board. Following these nominations, a new rule was adopted by the Board, providing that before dealing with any geographical name within a province, the name is to be submitted to the member representing such province, for examination and report.

Only three provinces, namely: Ontario, Quebec and Manitoba, have thus far failed to respond to the invitation to appoint representatives on the Board.

During the period covered by this report, the Board has held 15 meetings, and has received references covering 2,066 names, submitted by the following departments:—

Geological Survey.....	1,455
Marine and Fisheries.....	458
Interior.....	153
Total.....	<hr/> 2,066

Many of these names were not confirmed, either because they were duplicated, inappropriate, or otherwise objectionable, or because they were applied to unimportant or uncertain features. In the latter cases, the Board, although not objecting to the names, declines to confirm them unless it is shown that they are important, as for instance, in connection with navigation or mining.

The 1,307 names which have been confirmed, together with those previously published, are contained in the list appended, the total number being 1,708.

In addition to the usual large distribution from the Printing Bureau, a great many copies of the Annual Report have been sent to geographical societies, to government officials, and to many persons known to be interested in geographical work, and a number in response to requests from map publishers, &c.

Appreciative notices regarding the creation and proposed work of the Board, have appeared in leading geographical and other publications. The result of the operations of the Board since its inception, affords ample evidence of the necessity which existed for such an organization.

F. GOURDEAU,

Deputy Minister of Marine and Fisheries,

Chairman of the Board.

GEOGRAPHIC BOARD, CANADA

BY-LAWS.

I—OFFICERS OF THE BOARD.

The officers shall consist of a chairman (who shall be elected by ballot), of an executive committee of three to be nominated by the chair and approved by the Board, all of whom shall serve for one year or until their successors shall be chosen, and of the secretary.

II—DUTIES OF OFFICERS.

(a.) The chairman shall preside at the meetings and shall certify to the decisions of the Board. He shall appoint all committees not specially named by the Board. In his absence the Board shall have power to elect a temporary chairman.

(b.) The secretary shall keep minutes of the proceedings of the Board and shall record the decisions rendered, or other action of the Board upon cases submitted to it, with reference to the papers filed in each case. He shall maintain files of the original papers, or copies of them, that may be presented in each case, conveniently arranged for reference. He shall, under the instructions of the Board, conduct the general correspondence and shall receive communications presented for the consideration of the Board, transmitting them to the executive committee as their character may require or as may be hereafter provided.

(c.) The executive committee shall receive through the secretary all communications requiring decision by the Board, shall investigate the questions presented and, after securing information from all available sources, shall report to the Board with recommendations regarding them.

(d.) Before dealing with any name within a province represented upon the Board, such name shall be submitted to the representative of said province for examination and report.

III—MEETINGS.

The Board shall hold regular meetings on the first Monday in each month. Special meetings may be called by the chairman or by the executive committee. A majority of the Board shall constitute a quorum. The affirmative vote of a majority of all the members of the Board shall be required for the final decision in any case. All motions presented for the consideration of the Board shall be submitted in writing.

IV—REPORTS.

The Board shall submit an annual report of its work and decisions which shall be printed and communicated to all persons or bodies interested.

V—AMENDMENTS.

These by-laws may be amended at any regular or special meeting, by a majority vote of all the members of the Board, provided that copies of the proposed amendment have been sent by the secretary to the members of the Board at least twenty days previous to the time the vote is taken.

RULES OF NOMENCLATURE.

1. When the priority of a name has been established by publication, particularly when such publication has occurred in any standard or authoritative work or works, that name should, if possible, be retained.

2. When names have been changed or corrupted, if not too firmly established by local usage or otherwise, the original forms should be restored.

3. In cases where what was evidently originally the same word appears with various spellings sanctioned by local usage or otherwise, these various spellings when applied to different features should be regarded as in effect different names, and as a rule it is inadvisable to attempt to produce uniformity.

4. As a rule the first published name should be retained, but where a choice is offered between two or more names for the same place or locality, all sanctioned by local usage, that which is most appropriate and euphonious should be adopted.

5. The possessive form should be avoided whenever it can be done without destroying the euphony of the name or changing its descriptive application. Where the possessive form is retained, the apostrophe should be dropped.

6. It is desirable to avoid the use of hyphens to connect parts of Indian names.

7. Names consisting of more than one word may be connected by hyphens or combined in one word as may be advisable.

8. It is desirable to avoid the use of the words city and town as parts of names.

9. The form 'canyon' shall be used instead of 'cañon.'

10. The term 'brook' is considered preferable to 'creek' for designating small streams, and will be adopted in cases where the latter has not become too firmly fixed.

11. The Board suggests that the initial letters of generic or descriptive parts of geographical names, when used in reports or other documents, should not be capitals.

12. The use of alternative names should be discontinued where possible or not inconvenient.

13. Geographical names in foreign countries should be rendered in the form adopted by that country, except where there are English equivalents already fixed by usage.

14. French names in Canada are to be spelt according to the rules of the French language.

15. The spelling of native geographical names should represent, approximately, the true sounds of the words as pronounced in the native tongue.

16. The Board adopts the rules of the Royal Geographical Society for the orthography of geographical names, of which the broad features are as follows:—

(a) The vowels are to be pronounced as in Italian and the consonants as in English.

(b) Every letter is pronounced, and no redundant letters are introduced. When two vowels come together each one is sounded, though the result, when spoken quickly, is sometimes scarcely to be distinguished from a single sound, as in *ai, au, ei*.

(c) One accent only is used, the acute, to denote the syllable on which stress is laid. This is very important, as the sounds of many names are entirely altered by the misplacement of this 'stress.'

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The following amplification of these rules explains their application :—

Letters.	Pronunciation and Remarks.	Examples.	
a	<i>ah</i> , <i>a</i> as in <i>father</i>	Java, Banána, Somáli, Bari.	
e	<i>eh</i> , <i>a</i> as in <i>fate</i>	Tel-el-Kebír, Oleleh, Yézo, Medina, Levúka, Peru.	
i	English <i>e</i> ; <i>i</i> as in <i>ravine</i> ; the sound of <i>ee</i> in <i>beet</i> . Thus, not <i>Feejee</i> but	Fiji, Hindi.	
o	<i>o</i> as in <i>mote</i>	Tokyo.	
u	long <i>u</i> as in <i>flute</i> ; the sound of <i>oo</i> in <i>boot</i> . <i>oo</i> or <i>ou</i> should never be employed for this sound..... Thus, not <i>Zooloo</i> , but <i>All vowels are shortened in sound by doubling the following consonant</i>	Zulu, Sumatra.	
	Doubling of a vowel is only necessary where there is a distinct repetition of the single sound.	Yarra, Tanna, Mecca, Jidda.	
ai	as in <i>aisle</i> , or English <i>i</i> as in <i>ice</i>	Nuulúta, Oosima.	
au	<i>ow</i> as in <i>how</i> Thus, not <i>Foochow</i> , but	Shanghai.	
ao	is slightly different from above.....	Fuchau.	
aw	when followed by a consonant or at the end of a word, as in <i>law</i>	Macao.	
ei	is the sound of the two Italian vowels, but is frequently slurred over, when it is scarcely to be distinguished from <i>ei</i> in the English <i>eight</i> or <i>ey</i> in the English <i>they</i> .	Cawnpore.	
b	English <i>b</i> .	Beirút, Beilál.	
c	is always soft, but is so nearly the sound of <i>s</i> that it should be seldom used.	Celébes.	
ch	If <i>Celébes</i> were not already recognized it would be written <i>Selébes</i> .	Chingchin.	
d	is always soft as in <i>church</i>		
f	English <i>d</i> .		
	English <i>f</i> . <i>ph</i> should not be used for the sound of <i>f</i> .		
g	is always hard. (Soft <i>g</i> is given by <i>j</i>).....	Thus, not <i>Haiphong</i> , but	
h	is always pronounced when inserted.	Haifong, Nafa.	
hw	as in <i>what</i> ; better rendered by <i>hw</i> than by <i>wh</i> , or <i>h</i> followed by a vowel, thus <i>Hwang ho</i> , not <i>Whang ho</i> , or <i>Hoang ho</i> .	Galápagos.	
j	English <i>j</i> . <i>Dj</i> should never be put for this sound.....	Hwang ho, Ngan hwi.	
k	English <i>k</i> . It should always be put for the hard <i>c</i> .	Japan, Jinchuen.	
kh	The Oriental guttural.....	Thus, not <i>Corea</i> , but	
gh	is another guttural, as in the Turkish.....	Korea.	
l	} As in English.	Khan.	
m			
n			
ng		has two separate sounds, the one hard as in the English word <i>finger</i> , the other as in <i>singer</i> . As these two sounds are rarely employed in the same locality, no attempt is made to distinguish between them.	Dagh, Ghazi.
p		As in English.	
ph	As in <i>loophole</i>	Chemulpho, Mokpho.	
th	stands both for its sound in <i>thing</i> , and as in <i>this</i> . The former is most common.	Bethlehem.	
q	should never be employed; <i>qu</i> (in <i>quiver</i>) is given as <i>kw</i>	Kwangtung.	
	When <i>qu</i> has the sound of <i>k</i> as in <i>quoit</i> , it should be given by <i>k</i> .		
r	} As in English.		
s			
sh			
t			
v			
w			
x			
y		is always a consonant, as in <i>yard</i> , and therefore should never be used as a terminal, <i>i</i> or <i>e</i> being substituted as the sound may require..... Thus, not <i>Mikindány, wady</i> , but not <i>Kwaly</i> , but	Sawákin.
z	English <i>z</i>	Kikúyu.	
zh	The French <i>j</i> , or as <i>s</i> in <i>treasure</i>	Mikindáni, wadi.	
	Accents should not generally be used, but where there is a very decided emphatic syllable or stress, which affects the sound of the word, it should be marked by an <i>acute</i> accent.	Kwale.	
		Zulu.	
		Muzhdaha.	
		Tongatábu, Galápagos, Pá-láwan, Saráwak.	

DECISIONS.

In the following list of names, those approved by the Board are printed in small capitals. Names and different forms of the same name, which have been discarded are also given. The former are printed in *italics* and alphabetically arranged with the adopted names, the latter being so nearly like the adopted forms, are not repeated.

- A**BATAGUSH bay ; at the south end of lake Mistassini, Q.
- ABBOT pass ; near Mt. Lefroy, Rocky mountains, B.C.
- ABITIBI lake and river ; south of James bay. The boundary line between Ontario and Quebec passes through the lake. (Not Abittibi nor Abittibbi.)
- ABLOVIK bay ; east shore Ungava bay, Ungava. (Not Ablorialik.)
- ACTIVE pass ; between Galiano and Mayne islands, in southern part of the strait of Georgia, B.C. (Not Plumper's pass.)
- ADAMS creek ; branch of Bonanza creek, Klondike river, Yukon.
- ADVANCE reef ; off Michael point, Manitoulin island, L. Huron, Ont.
- AGOTAWEKAMI lake ; southeast of Abitibi lake, northwestern Quebec.
- AIABEWATIK lake ; east of Anzhekunning lake, Rainy R. district, Ont.
- AINSLIE shoal ; Manitoulin island, south of Girouard point, L. Huron, Ont.
- AIRY mountain ; east of Mt. Stanley, W. Kootenay, B.C.
- AISHIHK lake and village ; in southwest part of Yukon.
- AKOLKOLEX river ; tributary to Columbia river between Revelstoke and Arrowhead, B.C. (Not Akotkolex.)
- AKOS lake ; at the head of Kamachigama river, Montcalm county, Q. (Not Akonse nor Akoney.)
- AKPATOK island ; Ungava bay, Ungava.
- AKULING inlet ; north shore of Hudson strait, Franklin. (Not A-ku-ling.)
- ALBURY ; P. O. in Ameliasburg township, Prince-Edward county, Ont.
- ALKI creek ; tributary to Klondike river, Yukon.
- ALLEN island ; east coast Baffin Land, Franklin.
- ALGOLD creek ; tributary to Klondike river, Yukon.
- ALMA creek ; tributary to Klondike river, Yukon.
- ALSEK river ; in northwest part of Cassiar district. B.C. (Not Alseck nor Altsek.)
- ALUKPALUK bay ; southeast shore, Ungava bay, Ungava.
- AMELIASBURG ; township in Prince Edward county, Ont.
- AMY point ; north end of Gribbell island, Pacific coast, B.C.
- ANDERSON channel ; on east coast of Baffin Land, Franklin.
- ANDERSONS wharf ; Ameliasburg township, Prince Edward county, Ont.
- ANN, Point ; east of Upper Arrow lake, W. Kootenay, B.C. (Not Lone Tree Point.)
- ANSTRUTHER lake ; Anstruther township, Peterborough county, Ont. (Not Eagle.)
- ANUK river ; tributary to Stikine river, Cassiar, B.C.
- ANVIL mountain ; near chain of lakes, Dease river, B.C.
- ANWATAN lake ; east of Grand Lake Victoria, Pontiac county, Q.
- ANZHEKUMMING lake ; northeast of Manitou lake, Rainy R. district, Ont. (Not Upper Manitou.)
- APIKA brook ; flows into the head of lake Temiscaming, northwestern Quebec. (Not Abbika.)
- ARCHIBALD bay ; north shore of Hudson strait, Franklin.
- ARGYLE creek ; tributary to St. Mary river, E. Kootenay, B.C.
- ARKANSAS creek ; tributary to Dominion creek, Indian river, Yukon.
- Arnell lake.* See Kusawa.
- ARTHUR SEAT ; mountain near Nahlin river, Cassiar, B.C. (Not Arthur's Seat.)
- ASH brook ; northeast of Nozheiatik lake, Rainy R. district, Ont.
- ASHBY lake ; Ashby township, Addington county, Ont. (Not Island lake.)
- ASHE inlet ; in south shore of a large island in Hudson strait, Franklin.
- ASHEIGAMO lake ; south of L. Hill, Rainy R. district, Ont. (Not Tasheigama nor Bass.)
- ASHTON point ; Douglas channel, opposite Maitland island, B.C.
- ASHWAPMUCHUAN lake and river ; tributary to L. St. John, Q.

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- ASINITCHIBASTAT lake; west of Chibougamau lake, northwestern Quebec. (Not Asinitebastat.)
- ASSIWANAN lake; at headwaters of St. Maurice river, Champlain county, Q. (Not Asiwananan.)
- ASKITICHI lake; headwaters of Ashwapmehuan river, Chicoutimi county, Q.
- ASSINKEPATAKISO lake; near Atikwa lake, Rainy R. district, Ont.
- ATIK river; tributary to Migiskan river, below Millie lake, northwestern Quebec. (Not Atikosi.)
- ATIKMAHIK lake; northeast of L. Temiscaming, Pontiac county, Q.
- ATIKWA lake; southeast of Dryberry lake, Rainy R. district, Ont. (Not Deer.)
- ATIM river; flows into Manuan lake, upper St. Maurice, Champlain county, Q. (Not Atem.)
- ATLIN lake; Cassiar, B.C., and Yukon.
- ATLIN mountain and river; Atlin lake, Cassiar, B.C.
- AUKPATUK; fishing station, west coast Ungava bay, Ungava. (Not Akpatok.)
- AUSTRALIA creek; tributary to Indian river, Yukon.
- AVA inlet; north shore of Hudson strait, Franklin.
- AYLEN lake; Dickens township, Nipissing district, Ont. (Not Little Opeongo)
- B**AACH, Mount; southwest part of Yukon, near Hutsh lakes.
- BADGLEYS wharf; on Big island, Bay of Quinte, L. Ontario.
- BAD NEIGHBOUR rock; in main channel between L. Huron and Georgian Bay, Ont.
- Bad Rice lake.* See Kaiashkemin.
- Bad river.* See Bull.
- BAFFIN LAND; eastern part of the provisional district of Franklin. (Not Hall peninsula.)
- BAIN rock; in middle of channel between Great and Outer Duck islands, Lake Huron, Ont.
- BAKER creek; tributary to Yukon river, south of Klondike river, Yukon.
- BAKER island; between Nigger island and Trenton, Bay of Quinte, L. Ontario.
- BAKER, Mount; south of Howse pass, Rocky mountains, B.C.
- BALD creek; headwaters of Klondike river, Yukon.
- BALD island; in Weller bay, Ameliasburg township, Prince Edward county, Ont.
- BALDUR, Mount; west of Upper Arrow lake, W. Kootenay, B.C.
- BALFOUR, Mount; northwest from Stephen station, C.P.R., B.C.
- BANNOCK burn; tributary to Little Slovan river, W. Kootenay, B.C. (Not Bannock creek.)
- BAPTISTE lake; Herschel township, Hastings county, Ont. (Not Kaijick Manitou.)
- BARCLAY, C.P.R. station, Rainy R. district, Ont.
- BARK lake; Jones township, Renfrew county, Ont.
- BARNES creek; tributary to Whatshan river, W. Kootenay, B.C.
- BARREN brook; south of Eagle lake, Rainy R. district, Ont.
- BARRETTE lake; Methuen township, Peterborough county, Ont.
- BARRIÈRE lake; an expansion of the Upper Ottawa, Pontiac county, Q.
- Bass lake.* See Asheigamo.
- BAXTER river; flows into Waswanipi lake, northwestern Quebec.
- BAY OF QUINTE; bay of Lake Ontario, almost separating Prince Edward county from the mainland of Ontario. (Not Quinté.)
- BAYSIDE; P. O. in Sidney township, Hastings county, Ont.
- Beacon point.* See Inukshuktuyuk.
- BEADY creek; near outlet of Dease lake, Cassiar, B.C.
- BEAR creek; tributary to Klondike river, B.C.
- BEARDWOOD, Lake; Brudenell township, Renfrew county, Ont.
- BEAR-GREASE river; upper Ottawa river, near O'Sullivan lake, Montcalm county, Q.
- BEATRICE, Cape; east side of Lower Arrow lake, W. Kootenay, B.C. (Not Cape Horn.)
- BEATRICE lake; west of Slovan lake, W. Kootenay, B.C.
- BEAUMONT harbour; north of Hudson strait, Franklin.
- BEAVER lake; south of Atlin lake, Cassiar, B.C.
- BEAVER portage; on Rupert river, below Nemiskau lake, northwestern Quebec.
- BEAVERHOUSE lake; southwest of Eagle lake, Rainy R. district, Ont.
- BEDFORD harbour; north shore of Hudson strait, Franklin.
- BEDLINGTON; custom house, Int. boundary, W. Kootenay, B.C. (Not Rykerts.)
- BEDROCK creek; tributary to Sixtymile river, Yukon.
- BEECH point; Fitzwilliam island, L. Huron, Ont.
- BEEKMAN peninsula; east coast Baffin Land, Franklin.
- BEBBIE, Mount; west of Columbia river, south of C.P.R., W. Kootenay, B.C.
- BELANGER bay and point; Manitoulin island near Gironard point, L. Huron, Ont. (Not West Belanger point.)
- Bell river.* See Migiskan.

- BELLEVILLE; city in Hastings county, Ont.
- BENDING lake; at head of Big Turtle river, Rainy R. district, Ont.
- BENNETT, Lake; B.C. and Yukon.
- BENNETT, Mount; northwest of Stupart bay, Hudson strait, Ungava.
- BENSON creek; tributary to the north fork of Klondike river, Yukon.
- BENSON point; South bay, Manitoulin island, L. Huron, Ont.
- BERNARD, Lake; south of Lake Bennett, Cassiar, B.C.
- BERRY lake; north of Lobstick bay, Rainy R. district, Ont.
- BIDDLE, Mount; south of Mt. Lefroy, Rocky mountains, Alberta.
- BIG bay; an expansion of the Bay of Quinte, L. Ontario.
- BIG island; in Bay of Quinte, Lake Ontario. P.O. of same name on north side of the island.
- Big rock.* See Inukshilgaluk.
- BIG SALMON river; tributary to Lewes river, Yukon.
- BIRCH point; east of Walker point, Manitoulin island, L. Huron, Ont.
- BIRD creek; branch of Ophir creek, Indian river, Yukon.
- BISEL, Mount; west of Nordenskiöld river, Yukon.
- BISHOP cove, Boxer reach, Pacific coast, B.C.
- BISHOP island; at head of Frobisher bay, Franklin.
- BLACK creek; tributary to Sloko river, Cassiar, B.C.
- BLACKFISH bay; Radcliffe township, Renfrew county, Ont.
- BLACKFOX bend; Pelly river near Ketzra river, Yukon.
- Black Swallow lake.* See Kinnickoneship.
- BLAEBERRY river; tributary to Columbia river, between Donald and Moberly stations C.P.R., B.C.
- BLAKE point; southeastern end of Western Duck island, L. Huron, Ont. (Not Stony point.)
- BLANCHE river; flowing into the head of lake Temiscaming, Nipissing district, Ont.
- BLANFORD bay; north shore of Hudson strait, Franklin.
- Blueberry lake.* See Mennin.
- BLUE GROUSE creek; tributary to Caribou creek, W. Kootenay, B.C.
- BLUE JAY creek; empties into Michael bay, Manitoulin island, L. Huron, Ont.
- BLUE river; tributary to Dease river, Cassiar, B.C.
- BLUNT peninsula; at entrance to Frobisher bay, Franklin. (Not Blunt's.)
- BOLGER lake; Burleigh township, Peterborough county, Ont. (Not Bolger's.)
- BONANZA creek; tributary to Klondike river, Yukon.
- BONNEY island; north shore of Hudson strait, Franklin.
- BOOM point; southern point of Cockburn island, L. Huron, Ont.
- BOOTH creek; tributary to St. Mary river, E. Kootenay, B.C.
- BOR, Mount; a peak in Valhalla mountains, W. Kootenay, B.C.
- BOSANQUET harbour; north shore of Hudson strait, Franklin.
- BOSHKUNG lake; Stanhope township, Haliburton county, Ont.
- BOSWELL river and mountain; Teslin river, Yukon.
- BOUCHETTE, Lake; an expansion of the upper Ottawa, Montcalm county, Q.
- BOULDER creek; branch of Bonanza creek, Klondike river, Yukon.
- Boulder lake.* See Osipasinni.
- BOULTER lake; McClure township, Hastings county, Ont.
- BOUNDARY creek; at crossing of Yukon river by the international boundary line.
- Bow lake.* See Lower Bow.
- BOWMAN creek; west of Lower Arrow lake, W. Kootenay, B.C.
- BOXER reach, east of Gribbell island, Pacific coast, B.C.
- BRATNOBER, Mount; southwest part of Yukon.
- BRÉBEUF island; in the southern part of Georgian bay, Ont. (Not Bréboenf.)
- BREVOORT island; east coast Baffin Land, Franklin.
- BREWER creek; tributary to Stewart river, above Scroggie creek, Yukon.
- BREWERY creek; tributary to Wild Horse river, E. Kootenay, B.C.
- BRIGHT lake; McClintock township, Haliburton county, Ont.
- BRIGHTON; township in Northumberland county, Ont.
- BROADBACK river; flows westward into Rupert bay, north of Nottaway river, northwestern Quebec. (Not Little Nottaway.)
- BROWNS creek; tributary to Fortymile river, near international boundary line, Yukon. (Not Brown, nor Brown's.)
- Brownwater river.* See Coffee.
- BRUCE harbour; north shore of Hudson strait, Franklin.
- BRUSHY creek; flows into Christopherson lake, northwestern Quebec.
- BRYANT creek; tributary to Yukon river, south of Klondike river.
- BUCKEYE shoal; south of Jenkins point, Manitoulin island, L. Huron, Ont.

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- BUCK-HILL river; tributary to Nipukatasi river, Northwestern Quebec.
- BULL rapid; in Nottaway river, below Soskumika lake, northwestern Quebec.
- BULL river; tributary to Kootenay river, north of Wardner, B.C. (Not Bad river.)
- BULLER reef; south shore Manitoulin island, L. Huron, Ont.
- BURGESS, Mount; Porcupine river, Yukon.
- BURGOYNE bay; south shore of Hudson strait, Ungava.
- BURNET lake; west of Kennabutch lake, Rainy R. district, Ont.
- BURNHAM creek; tributary to Dominion creek, Indian river, Yukon.
- BURNS creek; tributary to Indian river, Yukon.
- BURNT BAY lake; south of Grand L., Victoria, Pontiac county, Q.
- BURNT hill; near Nahlin river, Cassiar, B.C.
- BURNT island; northerly, from Inner Duck island, and separated from Manitoulin island by a very narrow channel, L. Huron, Ont. The south end of this island was called "Peninsular point" by Admiral Bayfield.
- BURNT-ISLAND harbour; Manitoulin island, north of Burnt island, L. Huron, Ont.
- BURNT river; Haliburton and Victoria counties, Ont.
- BURTON; creek tributary to Klondike river, Yukon.
- BURTON; town on Columbia river near north end of Lower Arrow lake, W. Kootenay, B.C. (Not Burton city.)
- BUTLER bay; east coast Baffin Land, Franklin.
- BUTLER lake; south of Wabigoon lake, Rainy R. district, Ont. (Not Kabitustigweiak.)
- BUTTON islands; north of Gray strait.
- BUZZARD lake; Burleigh township, Peterborough county, Ont.
- BYRNE gulch; on Campbell creek; a branch of Bonanza creek, Yukon.
- C**ACHE lake; in the Algonquin National Park, Ont.
- CAMILL lake; west of Slocan lake, W. Kootenay B. C.
- CALDER creek; branch of Quartz creek, Indian river, Yukon.
- CALDER lake; west of Manitou lake, Rainy R. district, Ont.
- CALF creek; headwaters of Klondike river, Yukon.
- CALF PASTURE point and shoal; Presquile peninsula, Brighton township, Northumberland county, Ont.
- CAMERON lake; northwest of Kakagi lake, Rainy R. district, Ont.
- CAMP lake; Finlayson township, Nipissing district, Ont.
- CAMPBELL creek; tributary to Pelly river, Yukon. At the mouth of this stream is the site of Pelly Banks Post, abandoned in 1850.
- CAMPBELL gulch; on Bouanza creek, Klondike river, Yukon.
- CAMPBELL, Mount; northwest of Dawson, Yukon.
- CAMPBELL mountains; at upper waters of Liard river, Yukon.
- CANNING lake; Minden township, Haliburton county, Ont. (Not Canning's lake.)
- Canoe lake.* See Kamongus.
- CANOE lake; in the Algonquin National Park, Ont.
- CANYON creek; Dease river, near Dease lake, Cassiar, B.C.
- CANYON creek; branch of Quartz creek, Indian river, Yukon.
- CANYON hill; Lewes river, between lakes Laberge and Marsh, Yukon.
- CANYON lake; south of Lake Lindeman, Cassiar, B.C. (Not Deep lake.)
- Captain John's island.* See Foresters.
- CARCAJOU river; tributary to Kinojevis river, Pontiac county, Q.
- CARIBOU creek; tributary to Indian river, Yukon.
- CARIBOU creek and point; east of Columbia river, between the Arrow lakes, B.C.
- CARIBOO; district, mining division, and lake, in central B.C. (Not Caribou.)
- CARLETON lake; west of Manitou lake, Rainy R. district, Ont.
- CARMACK fork; Bonanza creek, Yukon.
- CARMACK, Mount; south of Mount Cleveland, near Skagway river, B.C.
- CARROLL WOOD bay; south shore Manitoulin island, L. Huron, Ont. (Not Woods bay.)
- CARRYING PLACE; village on the road of that name, Murray and Ameliasburg townships, Ont.
- CARSON lake; Jones township, Renfrew county, Ont.
- CARTER bay; east of Jenkins point, Manitoulin island, L. Huron, Ont.
- CARTIER, Mount; east of Columbia river, south of C.P.R., W. Kootenay, B.C.
- CARTER rock; west of Greene island, and south of the west end of Manitoulin island, L. Huron, Ont.
- CASSIAR bar; Lewes river, south of Big Salmon river, Yukon.
- CASSIAR creek; tributary to Yukon river above Fortymile, Yukon.
- CASSIAR district; a subdivision of British Columbia.
- CASSIAR mountains; at the upper waters of Liard river, Yukon.

- CASTILIAN shoal; southeast of Magnetic island and southwesterly from Cinder point, L. Huron, Ont.
- CATCHACOMA lake; Cavendish township, Peterborough county, Ont. (Not Ketchacum.)
- CAT portage; on the lower part of Rupert river, northwestern Quebec.
- CATARACT brook; tributary to Kicking-horse river; near Hector station, C. P. Ry., B. C. (Not Wapta creek.)
- CAVE rock; in Yukon river, east of international boundary line, Yukon.
- CEDAR island; west of Massasauga point, Bay of Quinte, Ont.
- CHABATOK; Indian village on Kabistachuan bay, L. Mistassini, Q.
- CHAKWA lake; at headwaters of St. Maurice river, Champlain county, Q.
- CHAMBERLIN island; north shore of Hudson strait, Franklin. (Not Crete.)
- CHANDINDU river; tributary to Yukon river, between Dawson and Cudahy, Yukon.
- CHANNEL point; northeast side of Cockburn island, L. Huron, Ont.
- CHANNEL rock; off northwest side Fitzwilliam island, L. Huron, Ont.
- CHARLES island; in Hudson strait, Ungava. (Not Katutok.)
- CHARLOTTE, Lake; Brudenell township, Renfrew county, Ont.
- CHARLTON bay; northeast of Leask point, Manitoulin island, L. Huron, Ont.
- CHASE island; in Frobisher bay, Franklin.
- CHEBISTUANONEKAU river; upper waters of Waswanipi river, northwestern Quebec.
- CHEHALIS creek; flows into Gladys lake, Cassiar, B.C. (Not Che-halis.)
- CHENSAGI river; northeast of Mattagami lake, northwestern Quebec. (Not Tshensagi.)
- CHIBOGAMAU lake and river; south of lake Mistassini, northwestern Quebec. (Not Chibougamou nor Chibougamoo.)
- CHIEF gulch; on Eldorado creek, Yukon.
- CHIEF island; in upper part of lake Temiscaming, Q.
- CHILKAT inlet, lake and river; north of Lynn canal, Cassiar, B.C. (Not Chilcat.)
- CHILKOOT inlet, lake and pass; north of Lynn canal, Cassiar, B.C. (Not Chilcoot nor Chileut.)
- CHIKOIDA mountain and river; Nakina river, Cassiar, B.C.
- CHISHOLM shoal; in Michael bay, south shore of Manitoulin island, L. Huron, Ont.
- CHISMAINA lake; southeast of Teslin lake, Cassiar, B.C.
- CHOQUETTE bar; in Stikine river, north of Iskut river, Cassiar, B.C. (Not Choquette's.)
- CHORKBAK inlet; north shore of Hudson strait, Franklin. (Not Tchork-back.)
- CHRISTINA bay; Manitoulin island, east side of Burnt island, L. Huron, Ont.
- CHRISTOPHERSON, Lake; north of Grand L., Victoria, northwestern Quebec.
- CHRISTY creek; east of Whatshan lake, W. Kootenay, B.C.
- CHUDLIASI bay; north shore of Hudson strait, Franklin. (Not Chudli-a-si.)
- CHURCH point; north shore of Hudson strait, Franklin.
- CINDER point; eastern side of Cockburn island, L. Huron, Ont.
- CINNAMON creek; west of Lower Arrow lake, W. Kootenay, B.C.
- CLARK harbour; east coast Baffin Land, Franklin. (Not Frank Clark.)
- CLARK lake; Dungannon township, Hastings county, Ont. (Not Clark's.)
- CLAY river; a small tributary of the Migiskan, below Shabogama lake, northwestern Quebec.
- CLEAR creek; tributary to Stewart river, Yukon.
- Clear lake.* See Smooth Rock lake.
- CLEARWATER river; tributary to Stikine river, Cassiar, B.C.
- CLEFT ROCK lake; west of Manitou lake, Rainy R. district, Ont.
- CLEMENTS land; north of Cyrus Field bay, Franklin.
- CLEVELAND, Mount; at headwaters of Skagway river, B.C.
- CLINTON creek; near Cudahy, Yukon.
- CLIO bay and point; Kitimat arm, B.C.
- COAL creek; tributary to Yukon river, below Fortymile, Yukon.
- COBAN river; tributary to Waswanipi river, below Otchisk river, northwestern Quebec. (Not Cabane.)
- COCKBURN island; west of Manitoulin island, L. Huron, Ont.
- COFFEE river; tributary to Nottaway river, below Shabogama lake, northwestern Quebec. (Not Brown water.)
- COGLE pass; at head of St. Mary river, between E. and W. Kootenay, B.C.
- COLD brook; tributary to Gizzard river, Nottaway river, northwestern Quebec.
- Coldwater lake.* See Upper Bow.
- COLE point; northwest point of Big island, Bay of Quinte, L. Ontario. (Not Cole's.)
- COLES wharf; in Sophiasburg township, Prince Edward County, Ont.
- COLLIE, Mount; south of Mt. Baker, and northwest of Mt. Balfour, Rocky mountains, B.C.
- COLMER, Cape; north shore of Hudson strait, Franklin.

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- COLUMBIA river ; Kootenay district, B.C.
- COMPASS lake ; Burleigh township, Peterborough county, Ont.
- CONE hill ; near mouth of Clinton creek, Yukon.
- CONE mountain ; near Stikine river, north of Sead river, Cassiar, B.C.
- CONE point ; on the west side of lake Evans, northwestern Quebec.
- CONSOLATION creek ; empties into west end of Gladys lake, Cassiar, B.C.
- CONY creek ; near Mount Woden, W. Kootenay, B.C.
- COOPER lake ; an expansion of Marten river, Rupert river, northwestern Quebec.
- COOPER, Mount ; near Hutshi lakes, Yukon.
- COPEWAY lake ; Lake township, Hastings county, Ont.
- COPPER creek ; Hackett river, east of Egnell, Cassiar, B.C.
- CORNWALL park ; a summer resort on east extremity of Big island, Bay of Quinte, L. Ontario.
- COSTE island ; Kitimat Arm, B.C.
- COTTONWOOD river ; tributary to Dease river, Cassiar, B.C.
- COUGAR creek ; tributary to Little Slocan river, W. Kootenay, B.C.
- COUNTESS WARWICK sound ; north shore Frobisher bay, Franklin.
- COVE island ; in entrance to Georgian bay from L. Huron, Ont. (Not Isle of Coves.)
- COVE island ground ; off northwest side of Cove island, Georgian bay, Ont.
- COW island ; in Bay of Quinte, east of Belleville, Ont.
- COX lake ; Burleigh township, Peterborough county, Ont. (Not Cox's.)
- CRANBERRY creek ; near north end of Upper Arrow lake, W. Kootenay, B.C.
- CRANBROOK ; important town in E. Kootenay, B.C.
- CRATER creek ; a feeder of Quiet lake, Yukon.
- CRATER lake ; southwest of Lake Lindeman, Cassiar, B.C.
- CRESTON ; R.R. station, W. Kootenay, B.C.
- CROOKED creek ; tributary to Stewart river, Yukon.
- CROOKS inlet ; north shore of Hudson strait, Franklin. (Not Ka-lik-took-dnag.)
- Crow lake.* See Kakagi.
- CROW portage ; on Rapid river, east of lake Evans, northwestern Quebec.
- CROW river ; Hastings and Peterborough counties, Ont.
- CUDAHY ; post on Yukon river, northwest of Dawson.
- CUMBERLAND sound ; northeast of Baffin Land, Franklin. (Not Northumberland inlet, Hogarth sound, nor Penny gulf.)
- CUMMING, Point ; southwest point of Gribbell island, Pacific coast, B.C.
- CYRUS FIELD bay ; north of Loks Land, Franklin. (Not Cyrus W. Field.)
- D**AGO creek ; tributary to Little Slocan river, W. Kootenay, B.C.
- DALTON range mountains near Dezadeash lake, southwest Yukon.
- DALY, Mount ; southeast of Mt. Balfour in Rocky Mts. divide, B.C.
- DAVE bay ; south side of Great Duck island, L. Huron, Ont.
- DAVENPORT creek ; flows into west end of Gladys lake, Cassiar, B.C.
- DAVIS creek ; branch of Walker creek, at international boundary, west of Dawson, Yukon.
- DAVIS lake ; Lutterworth township, Haliburton county, Ont. (Not Davis'.)
- DAWSON peak ; near Teslin lake, Yukon.
- DAWSON point ; at the head of L. Temiscaming, Ont.
- DAWSON point ; at the northerly end of Promise island, Pacific coast, B.C.
- DAWSON range ; mountains at the confluence of Lewes, Pelly, and Yukon rivers, Yukon.
- DAWSON ; town and Govt. headquarters, on Yukon river, at mouth of Klondike river, Yukon. (Not Dawson City.)
- DEADWOOD creek ; tributary to Yukon river, below Dawson, Yukon.
- DEAN bay and spit ; east of Dominion point, Manitoulin island, L. Huron, Ont.
- DEASE lake and creek ; Cassiar, B.C.
- DECEPTION bay ; south shore of Hudson strait, Ungava. (Not Foster's Harbour nor Shedlin.)
- Deep lake.* See Canyon lake.
- DEEPWATER lake ; northeast of L. Temiscaming, Pontiac county, Q.
- Deer lake.* See Atikwa.
- DEER PARK ; mountain, P.O., and landing to important mining district, east of Lower Arrow lake, W. Kootenay, B.C. (Not Deer mountain.)
- DEFOT creek ; branch of Canyon creek, Dease river, Cassiar, B.C.
- DEMERS, Mount ; a peak in Valhallä mts., W. Kootenay, B.C. (Not DeMers.)
- DENMARK lake ; south of Atikwa lake, Rainy R. district, Ont.
- DENVER creek ; tributary to St. Mary river, E. Kootenay, B.C.
- DENVER, Mount ; west of Slocan lake, W. Kootenay, B.C.

- DESERONTO ; town in Tyendinaga township, Hastings county, Ont.
- DESERT point ; northeast end of Great Duck island, L. Huron, Ont. (Not Sand point.)
- DEVILLE, Mount ; Tatonduk river, Yukon.
- DEWDNEY, Mount ; Porcupine river, Yukon.
- DEZADEASH lake ; southwest Yukon, at head of Kaskawulsh river.
- Devil's Head lake.* See Minnewanka.
- DIAMOND island ; north shore of Hudson strait, Franklin.
- DIAMOND lake ; Herschel township, Hastings county, Ont.
- DIANA bay ; south shore of Hudson strait, Ungava.
- DIBBLE creek ; tributary to Bull river, E. Kootenay, B.C.
- DICKEY lake ; Lake township, Hastings county, Ont. (Not Dickey's.)
- DINORWIC lake and R.R. station ; Rainy R. district, Ont. (Not Little Wabigoon lake.)
- DION creek ; tributary to Yukon river, near Dawson.
- DISCOVERY creek ; tributary to Last-chance creek, a branch of Hunker creek, Klondike river Yukon.
- DISELLA lake ; south of Chismaina lake, Yukon.
- DISPATCH island ; in Columbia river near south end of Upper Arrow lake, W. Kootenay, B.C. (Not Despatch.)
- Dixie creek.* See O'Donnel.
- DIXON lake ; Limerick township, Hastings county, Ont. (Not Dixon's.)
- DOCTOR island ; south shore of Hudson strait, Ungava.
- DOGNOSE creek ; tributary to Klondike river, Yukon.
- DOKDAON creek ; tributary to Stikine river, near Clearwater river, Cassiar, B.C.
- DOME mountain ; west of Cudahy, near international boundary, Yukon.
- DOME mountain ; southwest of Mount Scott, near lake Evans, northwestern Quebec.
- DOMINION bay and point ; east of Melville point, Manitoulin island, L. Huron, Ont.
- DOMINION creek ; tributary to Indian river, Yukon.
- DONJEK river ; tributary to White river, Yukon.
- DOROTHY island and narrows ; Devastation channel, B.C.
- DOTTY, Lake ; Finlayson township, Nipissing district, Ont. (Not Dotty's lake.)
- DOUGLAS channel ; between Hawkesbury island and the mainland, Pacific coast, B.C.
- DOUGLAS harbour ; south shore of Hudson strait Ungava.
- DRAG lake ; Dudley township, Haliburton county, Ont.
- DRUMMOND island ; west of Cockburn island, L. Huron, Ont.
- DRYAD point ; northeast part of Campbell island, Seaforth channel, Pacific coast, B.C. (Not Turn point.)
- DRYBERRY lake ; northeast of Berry lake, Rainy R. district, Ont.
- DRYDEN ; C. P. R. station, Rainy R. district, Ont.
- DUCKIE lake ; northwest of Chismaina lake, Yukon.
- DUDIDONTU river ; near Sheslay river, Cassiar, B.C.
- DUNN island ; near Pearson island, L. Huron, Ont. (Not Grant island.)
- Dyer sound.* See Waddell.
- DYKE HEAD ; point on south shore of Hudson strait, Ungava.
- DYMENT ; C. P. R. station, Rainy R. district, Ont.
- E**EAGLE bay ; at the south end of Grand Lake Victoria, Pontiac county, Q.
- EAGLE crag ; mountain near Stikine river, north of Iskut river, Cassiar, B.C.
- Eagle lake.* See Anstruther.
- EAGLE lake and river ; Rainy R. district, Ont. C. P. R. station at crossing of river.
- EAGLE NEST ; mountain on lower part of Lewes river, below Little Salmon river, Yukon.
- EAGLE pass ; on C.P.R. west of Revelstoke, B.C.
- EAGLE river, tributary to Dease river, Cassiar, B.C.
- EAGLE ROCK lake ; northeast of Kaopskikamak lake, Rainy R. district, Ont.
- EARN river ; tributary to Pelly river, north of Glenlyon mountains, Yukon.
- East Belanger point ;* See Girouard.
- EAST BLUFF ; southeast end Baffin Land, Franklin. (Not Innarulligang.)
- EAST lake ; Harburn township, Haliburton county, Ont.
- EAST SISTER ; shoal south of Yeo island, entrance to Georgian bay, Ont.
- EDITH river ; north shore of Hudson strait, Franklin.
- EDGAR lake ; southeast of Taku arm, Cassiar, B.C.
- EDNA point ; east of Burnt island, forms the eastern boundary of Christina bay, L. Huron, Ont.
- EEL lake ; southwest of Opasatika lake, near the western boundary of Quebec.
- EELS, Lake ; Cardiff township, Haliburton county, Ont. (Not Eel lake.)

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- EFFINGHAM lake; Effingham township, Addington county, Ont. (Not Little Weslemcoon.)
- EGAN brook and lake; tributary to York river, Hastings county, Ont. (Not Jamieson's.)
- EGNELL creek, post, and hill; Sheslay river, Cassiar, B.C. (Not Egnelle nor Egnell's.)
- Egypt island.* See Macdonald.
- EIDER islands; west coast Ungava bay, Ungava.
- Eightmile creek.* See Tatsho.
- ELBOW mountain; at bend in lower part of Stikine river, Cassiar, B.C.
- ELDORADO creek; tributary to Bonanza creek, Yukon.
- ELIZABETH bay; south part of lake Olga, north-western Quebec.
- ELK river; tributary to Kootenay river, E. Kootenay, B.C.
- EMERALD lake; northwest of Field station, C.P. Ry, B.C.
- EMIL creek; tributary to Nello river, Klondike river, Yukon.
- EMILIA island; Douglas channel, west of Maitland island, B.C.
- EMILY MAXWELL reef; south of Fitzwilliam island, L. Huron, Ont.
- EMMA island; north shore Hudson strait, Franklin. (Not High island.)
- ENSLEY creek; tributary to Yukon river, north of Indian river, Yukon.
- ESKWAHANI lake; between the headwaters of Ottawa and Gatineau rivers, Berthier county, Q. (Not Askwahani.)
- ETCHIPOTCHI river; tributary to Waswanipi river, northwestern Quebec. (Not Eathepashi.)
- ETHEL lake; south of Mayo brook, Stewart river, Yukon.
- EUREKA creek; tributary to Indian river, Yukon.
- EVA point; Devastation channel, Pacific coast, B.C.
- EVANS creek; west of Slocan lake, W. Kootenay, B.C.
- EVANS, Lake; between Nottaway and Rupert rivers, northwestern Quebec.
- EVERETT reefs; at entrance to Timber bay, Manitoulin island, L. Huron, Ont.
- EXAMINER gulch; on Bonanza creek, Yukon.
- EXPANSE lake; an expansion of the upper Ottawa river, Pontiac county, Q.
- F**AGAN ground; southwest of Yeo island, at entrance to Georgian bay, Ont.
- FAIRFIELD bluff; on Yukon river below Cudahy, Yukon.
- FAIR NESS; headland on north shore of Hudson strait, Franklin.
- FALLS creek; west of Slocan lake, W. Kootenay, B.C.
- FALSE DETOUR channel; between Cockburn and Drummond islands, L. Huron, Ont. The international boundary passes through this channel.
- FANTAIL lake and river; west of Taku arm, Cassiar, B.C. (Not Otter.)
- FAREWELL, Cape; at the south end of Promise island, Pacific coast, B.C.
- FARQUART lake; Harcourt township, Haliburton county, Ont.
- FARR creek; flows into L. Temiscaming, Upper Ottawa, Ont.
- FAY river; tributary to Klondike river, Yukon.
- FIFE creek northwest of Whatshan lake, W. Kootenay, B.C.
- Fifteen-mile river.* See Jennings.
- FILE-AXE lake; on the height of land, southeast of lake Mistassini, Q.
- FINLAYSON lake and river; near the upper waters of Pelly river, Yukon. (Not Tle-tlan-a-tsoots.)
- FIRE valley; west of Lower Arrow lake, W. Kootenay, B.C.
- Fish lakes.* See Norbury.
- FISHER bay; south shore of Hudson strait, Ungava.
- FISHER bay; northeast of Inner Duck island and north of Queen point, Manitoulin island, L. Huron, Ont.
- FISHER creek; tributary to Wild Horse river, E. Kootenay, B.C.
- FISHER harbour; north shore of Hudson strait, Franklin.
- FISHER lake; east of Dryberry lake, Rainy R. district, Ont.
- FISHER lake; at the western boundary of Quebec between Temiscaming and Abitibi lakes.
- FISHER, Mount; east of Kootenay river, E. Kootenay, B.C.
- FISHERMAN cove; at the north end of Gil island, Pacific coast, B.C.
- FISHTAIL lake; Harcourt township, Haliburton county, Ont. (Not Fish Tail.)
- FITZWILLIAM channel and island; at the entrance to Georgian bay, Ont.
- FIVE-FINGER rapid; in Lewes river, below Nordenskiöld river, Yukon.
- FLAT creek; tributary to Klondike river, Yukon.
- FLETCHER island; in Frobisher bay, Franklin.
- FLETCHER lake; McClintock township, Haliburton county, Ont. (Not Fletcher's.)
- FLINT lake; north of Kakagi lake, Rainy R. district, Ont.
- FLORENCE river; tributary to Migtskan river, below Wedding river, northwestern Quebec.
- FLORENCE river; tributary to Klondike river, Yukon.

- FOAM-FALL river; tributary to Ashuapmuchuan river, Chicoutimi county, Q.
- FOG lake; west of Manitou lake, Rainy R. district, Ont.
- FORELEG bay; in Atikwa lake, Rainy R. district, Ont. (Not Little Jackfish.)
- FORESTERS island; Bay of Quinte, L. Ontario. (Not Captain John's island.)
- FORT CHIMO; H. B. Post on Koksoak river, Ungava.
- FORT NELSON river, tributary to Liard river, Cariboo, B.C. (Not Nelson.)
- FORT RELIANCE; post on Yukon river, north of Dawson.
- FORT SELKIRK; at the mouth of Lewes river, military headquarters. The site of the old fort of the H.B. Co. is on the opposite bank of the river.
- FORTY MILE river and town; near Cudahy, Yukon.
- FORTYNINE gulch; on Bonanza creek, Yukon. *Foster's Harbour.* See Deception.
- FOSTHALL creek; west side of Upper Arrow lake, W. Kootenay, B.C.
- Fox bay.* See Gordon.
- FOX island; in Weller bay, Ameliasburg township, Prince Edward county, Ont.
- FOX islands; Gordon bay, Franklin. (Not West Fox.)
- FRANCES lake and river; in southwest Yukon.
- FRASER lake; Carlton township, Hastings county, Ont. (Not Fraser's.)
- FRASER reach; northeast of Princess Royal island, Pacific coast, B.C.
- FRAZER falls; on Stewart river, Yukon.
- FRECHETTE bay, bank, and point; near Misery bay, Manitoulin island, L. Huron, Ont.
- FREDERICK lake; southwest Yukon, west of Kusawa lake.
- FRENCH gulch; on Eldorado creek, Yukon.
- FRESNO creek; tributary to Yukon river, below Dawson, Yukon.
- FREYA, Mount; a spur of Valhalla mts, W. Kootenay, B.C. (Not Freda.)
- FRIDAY creek; branch of Sulphur creek, Indian river, Yukon.
- FRIEZE landing; on east side of Lower Arrow lake, W. Kootenay, B.C.
- FROBISHER bay; in east part of Baffin Land, Franklin. (Not Lumley inlet &c.)
- FROUDE bay; northeast of McKim bay, Manitoulin island, L. Huron, Ont.
- G**ABRIEL island; in Frobisher bay, Franklin. (Not Gabriell.)
- GABRIEL strait; between Resolution island and the mainland, Franklin. (Not Tudjakdjudusirn.)
- GALENA bay; at north end of Upper Arrow lake, W. Kootenay, B.C. (Not Thumb bay.)
- GALENA creek; tributary to Yukon river, below Indian river, Yukon.
- GAMSKAGAMIK lake; south of L. Hill, Rainy R. district, Ont. (Not Painkiller.)
- GAOTANAGA lake; west of Grand L. Victoria, Pontiac county, Q.
- GARDEN-ISLAND lake; north of Matchi-Manitou lake, northwestern Quebec.
- GARNET creek; tributary to Dominion creek, Indian river, Yukon.
- GASPESIA shoal; southeast of Walkhouse point, Manitoulin island, L. Huron, Ont.
- GARDNER canal, Devastation channel, Pacific coast, B.C. (Not Gardiner.)
- GAT point; west part of Cove island, at entrance to Georgian bay, Ont.
- GATACRE point; south shore of Manitoulin island, L. Huron, Ont.
- GAUDIN point; Devastation channel, Pacific coast, B.C.
- GAUVIN gulch; on Bonanza creek, Yukon.
- GAWJEWIAGWA lake; east of Anghekumming lake, Rainy R. district, Ont.
- GAY gulch; on Eldorado creek, Yukon.
- GEIKIE, Lake; east of lake Evans and south of Marten river, northwestern Quebec.
- GENESTA reef; south of Maiden island, south shore Manitoulin island, L. Huron, Ont.
- GENS DE TERRE river; tributary to Gatineau river, Ottawa county, Ont. (Not Jean de Terre.)
- GEORGE river; flows into Ungava bay, Ungava. (Not Kangerthialuksoak.)
- GEORGIAN bay; the northeastern portion of L. Huron, Ont.
- GERTRUDE point; Douglas channel, near Kitkiata, Pacific coast, B.C.
- GHOST lake; north of Wabigoon lake, Rainy R. district, Ont.
- GIG point; north part of Cove island, at entrance to Georgian bay, Ont.
- GILBERT; C. P. R., station, Rainy R. district, Ont.
- GIL island; northwest of Princess Royal island, Pacific coast, B.C. (Not Gill.)
- GIMLI, Mount; a peak in Valhalla mountains; W. Kootenay, B.C.
- GIROUARD point; north of Western Duck island and west of Rickley harbour, L. Huron, Ont. (Not East Belanger point.)
- GIZZARD river; tributary to Nottaway river, above Mattagami lake, northwestern Quebec.
- GLACIER creek; a branch of Gold creek, Yukon.
- GLACIER lake; near Howse pass, Rocky mountains, Alberta.
- GLACIER mountain; near lower part of Stikine river, north of Elbow mountain.

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- GLADMAN, Mount ; on Yukon river near international boundary, Yukon.
- GLADSHHEIM, Mount ; a peak in Valhalla mountains, W. Kootenay, B.C.
- GLADSTONE creek ; east of Lower Arrow lake, W. Kootenay, B.C.
- GLADYS lake and river ; southwest of Teslin lake, Cassiar, B.C. (Not Sucker lake, nor North river.)
- GLASGOW island ; north shore of Hudson strait, Franklin.
- GLAVE, Mount ; near upper waters of Chilkat river, Cassiar, B.C.
- GLENCOE island ; north shore of Hudson strait, Franklin.
- GLENLYON mountains and river ; Pelly river, Yukon.
- GLENORA ; town on Stikine river below Telegraph creek, Cassiar, B.C.
- GLYCERINE rock ; South bay, Manitoulin island, L. Huron, Ont.
- GNAT creek ; tributary to Klondike river, Yukon.
- GOAT CANYON creek ; tributary to Caribou creek, W. Kootenay, B.C.
- Goat island.* See Teresa.
- GOAT river ; at south end of Kootenay lake, W. Kootenay, B.C.
- GOATFELL ; R. R. station, W. Kootenay, B.C.
- GOBEIL island ; north of Coste island, Kitimat arm, B.C.
- GOLD creek ; tributary to Sixtymile river, Yukon.
- GOLDBOTTOM creek ; branch of Hunker creek, a tributary to Klondike river, Yukon.
- GOLDEN creek ; branch of Henderson creek, north of Stewart river, Yukon.
- GOLDEN HORN ; mountain near Lewes river, west of L. Marsh, Yukon.
- GOLDFINCH lake ; upper waters of Lièvre river, St. Maurice county, Q.
- GOLD-RUN creek ; tributary to Dominion creek, Indian river, Yukon.
- GOOSE point ; south shore Manitoulin island, L. Huron, Ont.
- GORDON bay ; north shore of Hudson strait, Franklin.
- GORDON brook ; west of Lower Arrow lake, W. Kootenay, B.C.
- GORDON, Mount ; northwest of mount Balfour, Rocky Mts. divide.
- GORDON, Mount ; near Stikine river, south of Telegraph creek, Cassiar, B.C.
- GORMAN, Lake ; Brudenell township, Renfrew county, Ont.
- GOVAN brook ; north shore of Hudson strait, Franklin.
- GRACE lake ; Dudley township, H.iburton county, Ont.
- GRAND canyon ; on Tatonduk river, Yukon.
- GRAND LAKE VICTORIA ; upper waters of Ottawa river, Pontiac county, Q.
- GRANITE creek ; tributary to Caribou creek, W. Kootenay, B.C.
- GRANITE creek ; a feeder of Quiet lake, southeast Yukon.
- GRANTHAM shoals ; southeast of Todman reef, Manitoulin island, L. Huron, Ont.
- GRANT point ; southwest point of Maitland island, Pacific coast, B.C.
- GRAPE island ; in Muscote bay, northeast of Huff island, Bay of Quinte, L. Ontario.
- GRASSY point ; in northeast part Sophiasburg township, Prince Edward county, Ont.
- Grassy River lake.* See Stanawan.
- GRAVEL point ; at eastern side of Great Duck island, L. Huron, Ont.
- GRAY, Mount ; north of L. Bennett, Yukon.
- GRAY strait ; between Labrador peninsula and Button islands.
- GRAY WOLF mountain ; north of Valhalla mountains, W. Kootenay, B.C.
- GREAT BEAVER lake ; at headwaters of St. Maurice river, Champlain county, Q.
- GREAT DUCK island ; the largest of the Duck island group, south of Manitoulin island, L. Huron, Ont.
- GREEN creek ; branch of Sulphur creek, Indian river, Yukon.
- GREEN point ; northeast extremity of Sophiasburg township, Prince Edward county, Ont.
- GREEN point ; Manitoulin island, north of Inner Duck island, L. Huron, Ont.
- GREENAN lake ; Jones township, Renfrew county, Ont. (Not Greenan's.)
- GREENE island ; northwest of Western Duck island, L. Huron, Ont. (Not Green's.)
- GREENE-ISLAND harbour ; Manitoulin island, L. Huron, Ont.
- GREENWOOD Land ; at head of Frobisher bay, Franklin. (Not Greenwood's.)
- GRIBBELL island, between Ursula channel and Verney passage, Pacific coast, B.C.
- GRIFFIN bay ; southwest shore Frobisher bay, Franklin.
- GRIMSTHORPE lake ; Grimsthorpe township, Hastings county, Ont. (Not Wolf.)
- GRINNELL glacier ; southeast part of Baffin Land, Franklin.
- GRIZZLY bluff ; near the mouth of Teslin river Yukon. (Not Grizzly Bear Bluff.)
- GROVE island ; northeast of Huff island, Bay of Quinte, L. Ontario.
- GRUNDY creek ; east of Kootenay river, north of Steele, B.C.

- GRYPHON lake ; southwest of Wall-eye lake, Rainy R. district, Ont.
- GULL lake ; east of Pelly lakes, Yukon.
- GUN lake ; north of Nahlin river, Cassiar, B.C.
- GUNTER lake ; Cashel township, Hastings county, Ont. (Not Gunter's.)
- GYRFALCON islands ; south coast Ungava bay, Ungava.
- H**ABEL, Mount ; southwest of Mt. Collie, Rocky mountains, B.C.
- HACKETT river; tributary to Sheslay river, Cassiar, B.C.
- AECKEL hill ; near the confluence of Lewes and Takhini rivers, Yukon.
- HAGGART creek ; tributary to Johnston creek, McQuesten river, Yukon.
- HAIR-CUTTING lake and river ; at headwaters of St. Maurice river, Champlain county, Q.
- HALCYON ; health resort, P. O. and wharf, W. Kootenay, B.C. (Not Halcyon Hot Springs.)
- HALCYON, Mount ; east of Upper Arrow lake, W. Kootenay, B.C.
- HALDANE, Mount; near Mayo brook, Stewart river, Yukon.
- HALE creek ; near south end of Taku arm, Cassiar, B.C.
- HALIBURTON lake ; Harburn township, Haliburton county, Ont.
- HALL, Mount ; west of Upper Arrow lake, W. Kootenay, B.C.
- Hall peninsula.* See Baffin Land.
- HALL river ; Teslin lake, Cassiar, B.C.
- HALSEY point ; at the entrance to Douglas channel, Pacific coast, B.C.
- HAMMOND point ; east of Jenkins point, Manitoulin island, L. Huron, Ont.
- HANCOCK hills ; east of L. Laberge, Yukon.
- HANNAH bay ; south end of James bay, northwestern Quebec.
- HANNAH point ; South bay, Manitoulin island, L. Huron, Ont.
- HANSEN lake ; east of Kootenay river, north of Steele, B.C.
- Harbour island.* See Rawson.
- HAROLD, Mount ; on lower part of Stikine river, Cassiar, B.C.
- HARPER, Mount ; in Ogilvie range of mountains, north of Klondike river, Yukon.
- HARRICANAW river ; flows into Hannah bay (south end of James bay), northwestern Quebec. (Not Hannah Bay river.)
- HARRIS creek ; branch of Ophir creek, Indian river, Yukon.
- HARRIS, Lake ; southwest of Manitou lake, Rainy R. district, Ont.
- HARRY lake ; Lawrence township, Haliburton county, Ont. (Not Harry's.)
- HART, Mount; near Sixtymile river, southwesterly from Dawson, Yukon.
- HARTZ creek ; tributary to Tahltan river, Cassiar, B.C.
- HASTINGS county ; north of Bay of Quinte, Lake Ontario.
- HATCHAU lake ; Hackett river, Cassiar, B.C. (Not Maeha.)
- HATIN lake ; near upper part of Koshin river, Cassiar, B.C.
- HATTON headland ; south end Resolution island, Franklin. (Not Cape Best.)
- HAVEN, Cape ; Clements Land, Franklin. (Not Siggia.)
- HAWK lake ; and H. L. station C. P. R., Rainy R. district, Ont.
- HAWK CLIFF lake ; west of Eagle lake, Rainy R. district, Ont.
- HAWKESBURY island ; north of Princess Royal and Gribbell islands, Pacific coast, B.C.
- HAY lake ; Sabine township, Nipissing district, Ont.
- HAYES river and peak ; Teslin lake, Cassiar, B.C.
- HEALY lake ; south of Kusawa lake, Yukon.
- HEART creek ; east of Lower Arrow lake, W. Kootenay, B.C.
- HEART mountains ; east of Sheslay river, Cassiar, B.C.
- HEBDEN brook ; near C.P.R., Rainy R. district, Ont. (Not Hebden's creek.)
- HECATE strait ; Pacific coast, B.C.
- HECTOR island ; north shore of Hudson strait, Franklin. (Not Khartum.)
- HECTOR lake ; west of Manitou lake, Rainy R. district, Ont. (Not Large Trout.)
- HECTOR, Mount; between Bow river and Pipestone creek, Rocky mountains, B.C.
- HEIGHT-OF-LAND lake ; northeast of Mattagami lake, northwestern Quebec.
- HEIMDAL, Mount ; a spur of Valhalla mountains, W. Kootenay, B.C.
- HELA, Mount; a peak in Valhalla mountains, W. Kootenay, B.C.
- HELEN, Lake ; east of Upper Bow lake, Alberta.
- HELEN point ; Douglas channel, near Kitkiata, Pacific coast, B.C.
- HENDERSON creek ; tributary to Yukon river, below Stewart river, Yukon.
- HENDERSON harbour; north shore of Hudson strait, Franklin.
- HENRIETTA creek ; tributary to Last-chance creek, a branch of Hunker creek, Klondike river, Yukon.

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- HENSLEY bay; south shore Manitoulin island, L. Huron, Ont.
- HERSCHELL island; west of Cockburn island and northeast of Kitchener island, L. Huron, Ont.
- HESTER creek; branch of Hunker creek, Yukon.
- HIGH-FALL creek; tributary to Koksoak river, south of Fort Chimo, Ungava.
- High island.* See Einma.
- HIGHWOOD river; tributary to Bow river, Alberta. (Not High river.)
- HILDA, Mount; a peak in Valkyr mountains, W. Kootenay, B.C.
- HILL, Lake; east of Kakagi lake, Rainy R. district, Ont.
- HOBSON island, in Mahone bay, Lunenburg county, N.S. (Not Hobson's Nose.)
- HODER creek; tributary to Little Slocan river, W. Kootenay, B.C.
- HOGG creek; tributary to Moyie river, E. Kootenay, B.C.
- HOMAN river; at south end of L. Bennett, Cassiar, B.C.
- HOMESTAKE gulch; on Bonanza creek, Yukon.
- HOOKER pass; at head of St. Mary river, between E. and W. Kootenay, B.C.
- HOOLE river and canyon; upper part of Pelly river, Yukon.
- Hootalinqua river.* See Teslin.
- HOPES ADVANCE bay; west coast of Ungava bay, Ungava.
- HOPES ADVANCE, Cape; south shore of Hudson strait, Ungava. (Not Cape of Hopes Advance nor Prince Henry Foreland.)
- HOPKINS lake; southeast of Aishihik lake, Yukon.
- HOPKINS point; Devastation channel, Pacific coast, B.C.
- HORN, Cape; east side of Upper Arrow lake, W. Kootenay, B.C.
- HORSE point; in eastern part of Ameliasburgh township, Prince Edward county, Ont.
- HORSESHOE bay; west side of Great Duck island, L. Huron, Ont.
- HOTAILUH mountains; between Stikine and Tantzilla rivers, Cassiar, B.C.
- HOUSE pass; Rocky mountains, near northerly limit of Railway Belt, B.C. (Not House.)
- HUDSON bay and strait; inland sea and passage communicating with the Atlantic. (Not Hudson's.)
- HUDSON lake; Cardiff township, Haliburton county, Ont. (Not Hudson's.)
- HUFF island; in Muscote bay, Bay of Quinte, L. Ontario. (Not Huff's.)
- HUFFS wharf; Adolphustown township, Lennox county, Ont.
- HUGH, Mount; east of lake Evans, northwestern Quebec.
- HUGHES brook; flows into Barritt bay, Eagle lake, Rainy R. district, Ont. (Not Hughes creek.)
- HUGHES range; mountains east of Kootenay river, E. Kootenay, B.C.
- HUGHSON bay; east of Providence bay, Manitoulin island, L. Huron, Ont. (Not Husten, Housten nor Hewson.)
- HUNGERFORD point; south part of Manitoulin island, L. Huron, Ont.
- HUNGRY bay; a shallow bay in northeast part of Big bay, Bay of Quinte, L. Ontario.
- HUNGRY peak; at head of St. Mary river, between E. and W. Kootenay, B.C.
- HUNKER creek; tributary to Klondike river, Yukon.
- HURON, Lake; one of the five great lakes of Ontario.
- HURRICANE river; tributary to Nakina river, Cassiar, B.C.
- HUTCHISON creek; east of Lower Arrow lake, W. Kootenay, B.C.
- HUTSHI lakes; west of L. Laberge, Yukon.
- HUTSHIKU bluff; on Lewes river, below Rink rapid, Yukon.
- HUTSIGOLA lake; south of Teslin lake, Cassiar, B.C. (Not Hutsigula.)
- HYLAND hill; east of Hutsigola lake, Cassiar, B.C.
- HYNDMAN bay; at southwestern end of Cockburn island, L. Huron, Ont. (Not Sand bay.)
- I**CE-CAP mountain; on lower part of Stikine river, Cassiar, B.C. (Not Ice-Capped mountain.)
- ICE portage; on the lower part of Nottaway river, below Kitchigama river, northwestern Quebec.
- ICY cove; north shore Hudson strait, Franklin.
- ILLES brook, a feeder of Frances lake, Yukon. (Not Ii-es-too-a.)
- INDEPENDENCE creek; tributary to Stewart river, Yukon.
- Indian church.* See Mohawk.
- INDIAN island; Bay of Quinte, L. Ontario, northeast of Murray canal entrance.
- INDIAN harbour, point and reef; south of Fitzwilliam island, L. Huron, Ont.
- INDIAN river; tributary to Yukon river, south of Klondike river, Yukon.
- INGALL lake; southwest of Wabigoon lake, Rainy R. district, Ont.
- INGERSOLL, Mt.; west of Columbia river, W. Kootenay, B.C.
- INGRAM, Mount; north of Kusawa lake, Yukon.
- INKLIN river; tributary to Taku river, Cassiar, B.C.

- INKSTER rock ; at S. Baymouth, Manitoulin island, L. Huron, Ont.
- INLET rapid ; where Migiskan river flows into Mattagami lake, northwestern Quebec.
- Innarulligang.* See East Bluff.
- INNER DUCK island ; northeastern island of the Duck island group ; off the southern side, western end of Manitoulin island, L. Huron, Ont.
- INNOAKLIN creek ; west of Lower Arrow lake, W. Kootenay, B.C. (Not Sanderson.)
- INUKSHILIGALUK point ; south coast Ungava bay, Ungava. (Not Big-rock.)
- INUKSHUKTUYUK point ; south coast Ungava bay, Ungava. (Not Beacon.)
- IRISH gulch ; on Eldorado creek, Yukon.
- IRISHMAN creek ; tributary to Moyie river, E. Kootenay, B.C.
- IROQUOIS chute ; Nottaway river, south end of L. Kelvin, northwestern Quebec.
- IRVING bay ; north shore of Hudson strait, Franklin.
- ISABELLA, Lake ; north of Upper Bow lake, Alberta.
- ISERHOFF river ; flows into Waswanipi lake, northwestern Quebec.
- Island lake.* See Ashby.
- Isle of cores.* See Cove island.
- ISLANDS OF GOD'S MERCIE ; north shore of Hudson strait, Franklin. (Not Middle Savage islands.)
- ITTIMENOKTOK cape ; east shore Ungava bay, Ungava.
- IVAN point ; Manitoulin island, east of Burnt island, L. Huron, Ont.
- J**ACK lake ; Burleigh township, Peterborough county, Ont. (Not Jack's.)
- Jackman sound.* See Pritzler.
- JAMES, Cape ; north shore of Hudson strait, Franklin.
- JAMES island and reef ; between Fitzwilliam and Yeo islands, Georgian bay, Ont.
- JAMIESON lake ; Dnnannon township, Hastings county, Ont. (Not Jamieson's.)
- Jamieson's lake.* See Egan.
- JAMESONS wharf ; Sophiasburg township, Prince Edward county, Ont.
- JANET lake ; between Stewart river and Mayo brook, Yukon.
- JENKINS point ; east of Providence bay, Manitoulin island, L. Huron, Ont.
- JENNIE GRAHAM shoal ; the most southerly shoal off Great Duck island, L. Huron, Ont.
- JENNINGS river ; near south end of Teslin lake, Cassiar, B.C. (Not Fifteenmile.)
- JENSEN creek ; tributary to Dominion creek, Indian river, Yukon.
- JIM creek ; tributary to Yukon river, below Indian river, Yukon.
- JOEL river ; tributary to Klondike river, Yukon.
- JOHNSON lake ; Havelock township, Haliburton county, Ont. (Not Johnson's.)
- JOHNSTON creek ; tributary to McQuesten river, Yukon.
- JOHNSTON creek ; west of Lower Arrow lake, W. Kootenay, B.C.
- JONES shoal ; south of Labrador reef and southwesterly from Belanger point, L. Huron, Ont.
- JORDAN lake and river ; Hastings county, Ont.
- JORDAN river ; flows into Frobisher bay, Franklin.
- JORDAN river ; tributary to Columbia river near Revelstoke, W. Kootenay, B.C.
- JOSEPH creek ; tributary to St. Mary river, E. Kootenay, B.C.
- JOY bay ; south shore of Hudson strait, Ungava.
- JUBILEE island ; north shore of Hudson strait, Franklin.
- JUBILEE mountain ; near north end of Atlin lake, Yukon.
- JULIAN point ; north shore of Hudson strait, Franklin.
- JUNNUSUKSOAK inlet ; east shore Ungava bay, Ungava.
- K**ABAGUKSKI lake ; south of Sasakwei lake, Rainy R. district, Ont. (Not Mud L.)
- KABAKWA lake ; Stanhope township, Haliburton county, Ont. (Not Kah-bah-bah-quah.)
- KABISTACHUAN bay ; at the south end of L. Mistassini, Q. (Not Cabistachuan.)
- KABONA lake ; south of Matchi Manito lake, northwestern Quebec.
- KAGIWIOSA lake ; east of Dinorwie lake, Rainy R. district, Ont.
- KAHA creek ; tributary to Koshiin river, Cassiar, B.C. (Not Kahak.)
- KAHTATE river ; tributary to lower part of Stikine river, Cassiar, B.C.
- KALASHKOMIN lake ; north of Wabigoon lake, Rainy R. district, Ont. (Not Bad Rice L.)
- KAJAKANIKAMAK lake ; southeast of Abitibi lake, Pontiac county, Q.
- KAKABONGA river ; flows into Lac des Rapides, east of Grand L. Victoria, Pontiac county, Q. (Not Kakebonka.)
- KAKAGI lake ; east of Sabaskong bay, L. of the Woods, Ont. (Not Crow.)
- KAKASHE river ; tributary to Kapitachuan river, upper Ottawa, Montcalm county, Q.

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- KAKETSA, Mount ; south of Egnell, Cassiar, B.C. (Not Koketsa.)
- KAKINNOZHANS lake ; near Manitou lake, Rainy R. district, Ont.
- KAKUCHUYA river ; tributary to Dudidontu river, Cassiar, B.C.
- Ka-lik-took-duag.* See Crooks.
- KALZAS lake ; between Macmillan and Stewart rivers, Yukon.
- KAMACHIGAMA lake and river ; tributary to the upper Ottawa, Montcalm county, Q.
- KAMANATOGAMA lake ; southeast of Saganaga lake, Rainy R. district, Ont.
- KAMANISKEG, Lake ; Bangor township, Hastings county, Ont.
- KAMINNASSIN lake ; south of Dinorwic lake, Rainy R. district, Ont.
- KAMINNI lake ; northwest of Manitou lake, Rainy L. district, Ont. (Not Kaminneseipekok.)
- KAMITSGAMAK lake ; on Ribbon river, upper St. Maurice, Champlain county, Q.
- KAMONGUS lake ; near Manitou lake, Rainy R. district, Ont. (Not Canoe.)
- KAMPIGUKAKATOKA river ; tributary to Migiskan river, northwestern Quebec.
- KAMSHIGAMA lake and river ; tributary to Migiskan river, northwestern Quebec.
- Kangerflung.* See Newell.
- KANIAPISKAU river ; tributary to Koksoak river, Ungava. (Not Wanguash.)
- KANIKAWINIKA lake ; upper Ottawa river, east of Grand L. Victoria, Pontiac county, Q. (Not Kaniqonika nor Kanekequaneka.)
- KANIMITTI river ; flows into Shoshokwan river, a tributary of the upper Ottawa, Pontiac county, Q. (Not Kanimittikoshkwa.)
- KANOTAUKAU lake ; at headwaters of Rupert river, northwestern Quebec.
- KANUSIO lake and river ; tributary to Kekek river, Migiskan river, northwestern Quebec.
- KAOFSKIKAMAK lake and river ; southeast of Manitou lake, Rainy R. district, Ont.
- KAOSKAUTA lake ; northwest of Manitou lake, Rainy R. district, Ont. (Not Kaoskwtakok.)
- KAPEMITSHIGAMA lake ; at the sources of Ottawa river, Joliette county, Q. (Not Kapemehigama.)
- KAPESAKOSI lake ; west of Manitou lake, Rainy R. district, Ont. (Not Kapesakosikok.)
- KAPIKILEGOITCH lake ; headwaters of Ashuapmuchiuan river, Chicoutimi county, Q.
- KAPITACHUAN lake and river ; tributary to the upper Ottawa, northwestern Quebec. (Not Kapitashewinna nor Kapitajewin.)
- KAPITAGAMA lake ; southeast of Abitibi lake, Pontiac county, Q.
- KAPITSWE lake ; at headwaters of St. Maurice river, Champlain county, Q.
- KASHAGAWI lake ; Stanhope township, Haliburton county, Ont. (Not Kah-shah-gah-wig-e-mog.)
- KASHAGAWIGAMOG lake ; Dysart township, Haliburton county, Ont.
- KASKAWULSH river ; tributary to Alesk river, Yukon and B.C.
- KASSHABOG lake ; Methuen township, Peterborough county, Ont. (Not Kag-ish-a-bog-a-mog.)
- KATE point ; at upper end of lower Arrow lake, W. Kootenay, B.C.
- KATES NEEDLE ; mountain near Stikine river, opposite Porcupine creek, Cassiar, B.C.
- KATHERINE, Lake ; east of upper Bow lake, Rocky mts., Alberta.
- KATIN creek ; tributary to Nakina river, Cassiar, B.C.
- KATONCHE lake ; upper Ottawa river, east of Grand L. Victoria, Pontiac county, Q. (Not Kahuch.)
- KATRINA creek ; tributary to White river, Yukon.
- KATSEKAHIN river ; at the head of Chilkat inlet.
- KATTAKTOK, Cape ; east shore Ungava bay, Ungava.
- Katutok island.* See Charles.
- KAWAGAMA lake ; Sherborne township, Haliburton county, Ont. (Not Kahwcambejewagamog.)
- KAWASACHUAN lake and river ; near Grand L. Victoria, Pontiac county, Q. (Not Kawasajewan nor Kawasajewan.)
- KAWASHEGAMUK lake ; southeast of Dinorwic lake, Rainy R. district, Ont. (Not Long L.)
- KAWASKISIGAT lake ; headwaters of Lièvre river, St. Maurice county, Q. (Not Kawasgiguegat.)
- KAWASTAGUTA bay ; at the northerly end of Grand L. Victoria, Pontiac county, Q.
- KAWAWIA lake ; southeast of Manitou lake, Rainy R. district, Ont. (Not Oval L.)
- KEGLO bay ; east shore Ungava bay, Ungava.
- KEKEK river ; tributary to Migiskan river, northwestern Quebec.
- KEKEKO lake ; southeast of Abitibi lake, Pontiac county, Q.
- KEKEKWA lake ; near Eagle lake, Rainy R. district, Ont.
- KEKEO river ; tributary to Manuan river, upper St. Maurice, Champlain county, Q.
- KEKKEKWABI lake ; Stanhope township, Haliburton county, Ont. (Not Cay-ka-quah-be-kung.)
- KELVIN, Lake ; an expansion of Nottaway river, northwestern Quebec.
- KEMPT lake ; upper waters of Manuan river, St. Maurice county, Q.

- KENIAPISKAU lake; north of Opatawaga lake, northwestern Quebec. (Not Kaniapiskau.)
- KENNABUTCH lake; east of Dinorwic lake, Rainy R. district, Ont. (Not Kennabuch.)
- KENNEWATEKKO lake; south of Saganaga lake, Rainy R. district, Ont.
- KENNIBIK lake; Dudley township, Haliburton county, Ont. (Not Ken-ne-big.)
- KENNICOTT lake; at head of Hackett river, Cassiar, B.C.
- KENNISIS lake; Havelock township, Haliburton county, Ont. (Not Ke-ne-ses.)
- Kenogamissee river.* See Larch.
- KENOZHE lake; north of Dinorwic lake, Rainy R. district, Ont. (Not Kinoje.)
- KERNERTUT cape; southeast shore Ungava bay, Ungava.
- KERSY point; at northerly end of Maitland island, Douglas channel, Pacific coast, B.C.
- KETCHUM lake; northeast of Egnell, Cassiar, B.C.
- KETZA river; tributary to Pelly river, above Ross river, Yukon. (Not Kitza.)
- KEWAGAMA lake; southeast of Abitibi lake, Pontiac county, Q.
- Khartum island.* See Hector.
- KIASK river; a small tributary of Migiskan river, below Shabogama lake, northwestern Quebec.
- KICKING HORSE river; tributary to Columbia river, B.C. (Not Wapta).
- KID creek; tributary to Goat river, W. Kootenay, B.C.
- KIEMAWISK lake; northwest of Grand L. Victoria, northwestern Quebec.
- KIKENDATCH; Indian village, upper St. Maurice river, Champlain county, Q. (Not Kirkendatch nor Kickendatch.)
- KILDALA arm; near Kitimat arm, Pacific coast, B.C.
- KILLARNEY; village on west side of Lower Arrow lake, W. Kootenay, B.C.
- KILVERT lake; south of Hawk lake, Rainy R. district, Ont.
- KIMBALL lake; Livingstone township, Haliburton county, Ont. (Not Kimball's.)
- KINGCOME point; on the northeast part of Princess Royal island, Pacific coast, B.C.
- KING GEORGE sound; south shore of Hudson strait, Ungava.
- KING, Mount; on Tatonduk river, Yukon.
- KINGSCOTE, Lake; Bruton township, Haliburton county, Ont.
- KINNICKONESHIP lake; near Manitou lake, Rainy R. district, Ont. (Not Black Sawbill.)
- KINNYU lake; Rainy R. district, Ont.
- KINOJEVIS lake and river; tributary to the upper Ottawa, Pontiac county, Q. (Not Kinojeviskaskatik.)
- KIPLING reef; west of Middle Duck island, L. Huron, Ont.
- KIRK island; in the northerly part of lake Evans, northwestern Quebec.
- KITCHENER island; west of Cockburn island and southeast of Drummond island, L. Huron, Ont. (Not Little Cockburn island.)
- KITCHENER; R.R. station, W. Kootenay, B.C.
- KITCHIGAMA river; tributary to Nottaway river, northwestern Quebec. (Not Michagama.)
- KITMAT arm; north of Douglas channel, Pacific coast, B.C.
- KITKIATA; Indian village at Douglas channel, Pacific coast, B.C. (Not Kit-kia-tah.)
- KITTY shoal; south of Great Duck island, and southwesterly from Mary shoal, L. Huron, Ont.
- KLEHINI river; tributary to Chilkat river.
- KLEMTU passage and Indian village; Pacific coast, B.C. (Not Klemtoo nor China Hat.)
- KLOKHOK river; tributary to Takhini river, Yukon.
- KLONDIKE river; tributary to Yukon river, Yukon. (Not Klondyke, Clondyke, nor Thron-diuck.)
- KLONDIKE; village at mouth of Klondike river, opposite Dawson.
- KLOOTCHMAN canyon; on Stikine river, south of Clearwater river, Cassiar, B.C. (Not Kluchman.)
- KLOTASSIN river; tributary to White river, Yukon.
- KLOTZ, Mount; at headwaters of Tatonduk river, Yukon.
- KLUANE lake and river; in southwest Yukon. (Not Kluahne.)
- KLUHINI river; flowing out of L. Frederick into L. Dezadeash, Yukon.
- KLUKSHU lake; south of L. Dezadeash, Yukon.
- KLUKWAN; village at confluence of Chilkat and Klehini rivers.
- KNEELAND bay; southwest shore Frobisher bay, Franklin.
- KODERN river; tributary to White river, Yukon.
- KOKOMENIANI lake; at headwaters of Rupert river, northwestern Quebec. (Not Kokamenhani.)
- KOKOMIS lake; southwest of Grand L. Victoria, Pontiac county, Q.
- KOKSOAK river; flowing into Ungava bay, Ungava. (Not Big river nor South river.)
- KOOTENAY; district, lake and river, in southeastern B.C. (Not Kootenai, Kootanie, &c.)
- KORIKDUARDU inlet; north shore of Hudson strait, Franklin. (Not Ko-rick-du-ar-du.)
- KOSHIN river; tributary to Nahlin river, Cassiar, B.C.
- KUKUKAHU lake; west of Manitou lake, Rainy R. district, Ont.

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- KUSAWA lake ; southwest of L. Laberge, Yukon. (Not Arkell.)
- KUSHOG lake ; Stanhope township, Haliburton county, Ont. (Not Kah-wah-she-be-mah-gog.)
- Kusiwah lake.* See Surprise.
- KUSKANAX creek ; east side of Upper Arrow lake W. Kootenay, B.C. (Not Koos-ka-nax.)
- KUTHAI lake ; southeast of Atlin lake, Cassiar, B.C.
- KYAK bay ; west coast Ungava bay, Ungava.
- L**ABERGE Lake ; in southern part of Yukon. (Not Labarge nor Laberge.)
- LABRADOR reef ; south of Belanger point, Manitoulin island, L. Huron, Ont.
- LABRADOR reef ; north of cape Chidley, Labrador peninsula.
- LAC DU MALE ; lake at headwaters of St. Maurice river, Q.
- LAC DES QUINZE ; an expansion of the upper Ottawa river, Pontiac county, Q.
- LAC DES RAPIDES ; upper Ottawa river, southeast of Barrière lake, Pontiac county, Q.
- LAC DE TRAVERS ; at headwaters of St. Maurice river, Champlain county, Q.
- LADUE CREEK ; tributary to White river below Katrina creek, Yukon.
- LADY ALICE lake ; northeast of Upper Bow lake, Alberta.
- LADY BEATRIX lake ; northeast of Mattagami lake, northwestern Quebec.
- LADYBIRD mountain ; north of Columbia river, W. Kootenay, B.C. (Not Lady Bird.)
- LADY FRANKLIN island ; east of Clements Land, Franklin. (Not Kitigtung.)
- LAKE creek ; tributary to Stewart river, Yukon.
- LAKE OF BAYS ; Ridout township, Muskoka district, Ont.
- LAKE OF ISLANDS ; southeast of Abitibi lake, Pontiac county, Q.
- LAKE OF TWO RIVERS ; in the Algonquin National Park, Ont.
- LAKETON ; post on Dease lake, Cassiar, B.C.
- LAKIT creek ; east of Kootenay river, north of Steele, B.C. (Not Four-mile.)
- L'AMABLE brook and lake ; Dungannon and Faraday townships, Hastings county, Ont.
- LAMB creek ; tributary to Moyie river, E. Kootenay, B.C.
- LANSLOWNE, Mount ; west of L. Marsh, Yukon.
- LANSING river ; tributary to Stewart river, Yukon.
- LAPIE river ; tributary to Pelly river, below Ross river, Yukon.
- LARCH river ; tributary to Koksoak river, Ungava. (Not Kenogamissee.)
- Large Trout lake.* See Hector.
- LARRY rock ; south of Great Duck island, and west of Kitty shoal, L. Huron, Ont.
- LAST-CHANCE creek ; branch of Hunker creek, Klondike river, Yukon.
- LAURA creek ; tributary to Klondike river, Yukon.
- LAURA, Mount ; near lower Stikine river, north of Iskut river, Cassiar, B.C.
- LAURIER, Mount ; east of L. Laberge, Yukon.
- LAZY lake ; east of Kootenay river, north of Steele, B.C. (Not Rock.)
- LEAF bay, lake, and river ; south coast Ungava bay, Ungava. (Not Nepihjee river.)
- LEASK bay and point ; South bay, Manitoulin island, L. Huron, Ont.
- LEON ; settlement on east side of Upper Arrow lake, W. Kootenay, B.C. (Not Leon Hot Springs.)
- LEOPOLD point ; north shore of Hudson strait, Franklin.
- LEOTTA creek ; tributary to Klondike river, Yukon.
- LEFROY, Mount ; on summit line of the Rocky mts., southwest of Laggan stn., C.P.Ry.
- LÈVE lake ; Radcliffe township, Renfrew county, Ont.
- LEWES river ; tributary to Yukon river, Yukon. (Not Lewis.)
- LEWIS creek ; east of Kootenay river, north of Steele, B. C.
- LIARD river ; tributary to Mackenzie river, B.C., Mackenzie, and Yukon. (Not Mountain river.)
- LILY bay ; upper Ottawa river, northwest of Grand L. Victoria, Pontiac county, Q.
- LIMESTONE lake ; Mayo township, Hastings county, Ont.
- LINDEMAN, Lake ; south of L. Bennett, Cassiar, B.C. (Not Linderman nor Lyndeman.)
- LINE lake ; southwest of Eagle lake, Rainy R. district, Ont.
- LINKWATER creek ; tributary to Kootenay river, near Int. boundary, E. Kootenay, B.C. (Not Meadow.)
- LISCOMB harbour and P. O., Guysborough county, N.S. (Not Liscombe.)
- LITTLE ATLIN lake ; between Atlin lake and lake Marsh, Yukon.
- LITTLE BLANCHE creek ; branch of Quartz creek, Indian river, Yukon.
- LITTLE bluff ; northeast of Hungerford point, Manitoulin island, L. Huron, Ont.
- LITTLE BOSHUNG lake ; Minden township, Haliburton county, Ont.
- LITTLE-GEM creek ; branch of Hunker creek, Yukon.
- Little Grant islands.* See Dunn island and Pearson island.
- LITTLE MADAWASKA river ; east side of Algonquin National Park, Ont.

- Little Nottaway river.* See Broadback.
- Little Opeongo lake.* See Aylen.
- LITTLE rock; southwest of Phoebe point, Fitzwilliam island, L. Huron, Ont.
- LITTLE ROGERS lake; northeast of L. Temiscaming, Pontiac county, Q.
- LITTLE SALMON river; tributary to Lewes river, Yukon.
- LITTLE SKOOKUM gulch; on Bonanza creek, Yukon.
- LITTLE SLOCAN river; tributary to Slocan river, W. Kootenay, B.C.
- LITTLE TAHLTAN river; tributary to Tahltan river, Cassiar, B.C.
- Little Wabigoon lake.* See Dinorwic.
- Little Westemcoon.* See Effingham.
- LLEWELLYN glacier; south of Atlin lake, Cassiar, B.C.
- LOBSTER lake; Airy township, Nipissing district, Ont.
- LOBSTICK bay; east of the Lake of the Woods, Rainy R. district, Ont. (Not Lob-stick.)
- LOCKYER island; north shore of Hudson strait, Franklin.
- LOGAN, Mount; east of Frances lake, Yukon.
- LOKS LAND; at entrance to Frobisher bay, Franklin (Not Lok's.)
- LOMBARD creek; tributary to Indian river, Yukon.
- LONELY river; outlet of Obikoba lake, Pontiac county, Q.
- Lone Tree point.* See Ann.
- Long lake.* See Mountain lake.
- Long lake.* See Kawashegamuk.
- LONG point; extends into the central portion of lake Evans, northwestern Quebec.
- LONG point; in southerly part of Tyendinaga township, Hastings county, Ont.
- LORETTA island; north of Hawkesbury island, Pacific coast, B.C.
- LORNE, Mount; west of L. Marsh, Yukon.
- LOUCKS lake; Burleigh township, Peterborough county, Ont. (Not Loucks'.)
- LOUISA, Lake; Lawrence township, Haliburton county, Ont.
- LOUISE, Lake; west of Laggan station, C.P. Ry., Alberta.
- LOUIS point; south end of Coste island, Kitimat arm, B.C.
- LONELY bay; east of Dominion point, Manitoulin island, L. Huron, Ont.
- LOUGHED bay, point, and reef; east of Dominion point, Manitoulin island, L. Huron, Ont.
- LOVATTS bridge; western bridge of Murray canal, in Murray township, Northumberland county, Ont.
- LOWER ARROW lake; an expansion of Columbia river, W. Kootenay, B.C.
- LOWER BOW lake; between mounts Balfour and Hector, Alberta. (Not Bow.)
- LOWER JUMPING portage; below the outlet of L. Evans, northwestern Quebec
- LOWER SAVAGE islands; south of East Bluff, Baffin Land, Franklin.
- LUBBOCK bay; north shore of Hudson strait, Franklin.
- LUBBOCK river; empties into Atlin lake from Little Atlin lake, Yukon.
- LUCAS channel, island, and reef; entrance to Georgian bay, Ont.
- LUCKY creek; branch of Allgold creek, Klondike river, Yukon.
- LUKE creek; tributary to St. Mary river, E. Kootenay, B.C.
- LYNN point; Manitoulin island, northwest of Greene island, L. Huron, Ont. (Not Black point.)
- Lynx lake.* See Selby.
- M**CARTHUR, Mount; west of Columbia river south of C.P.R., W. Kootenay, B.C.
- MACAULAY lake; Airy township, Nipissing district, Ont. (Not McCauley's.)
- MACAULAY spit; off the southeastern end of Inner Duck island, L. Huron, Ont.
- MCCARTHY point; southeast side of Fitzwilliam island, L. Huron, Ont.
- Macha lake.* See Hatchau.
- M'CLINTOCK river and peak; between L. Marsh and Teslin river, Yukon. (Not McClintock.)
- MCCONNELL peak and river; Nisutlin river, Yukon.
- MCCORMICK creek and landing; near foot of Lower Arrow lake, W. Kootenay, B.C. (Not McCormack.)
- MCDAME creek; tributary to Dease river, Cassiar, B.C.
- MCDONALD creek; flows into southern part of Upper Arrow lake, W. Kootenay, B.C.
- MACDONALD island; north shore of Hudson strait, Franklin. (Not Egypt.)
- MACDONALD lake; Havelock township, Haliburton county, Ont. (Not Macdonald's.)
- MC EVOY lake; northeast of Finlayson lake, Yukon.
- McFADDEN lake; McClintock township, Haliburton county, Ont. (Not McFadden's.)
- McGAW point; at entrance to S. Baymouth, Manitoulin island, L. Huron, Ont.
- MCGRATH, Mount; near lower part of Stikine river, north of Iskut river, Cassiar, B.C.
- McHUGH brook; flows into Dinorwic lake, Rainy R. district, Ont. (Not McHugh's creek.)
- MACKAY gulch; on Bonanza creek, Yukon.

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- McKAY reach; between Princess Royal and Gribbell islands, Pacific coast, B.C.
- McKAY rock; southwesterly from Pulpwood point, Cockburn island, L. Huron, Ont.
- McKEE creek; north of O'Donnel river, Cassiar, B.C.
- McKENZIE lake; Nightingale township, Haliburton county, Ont. (Not McKenzie's.)
- McKENZIE, Mount; east of Columbia river south of C.P.R., W. Kootenay, B.C.
- McKIM bay; west shore of South bay, Manitoulin island, L. Huron, Ont. (Not McKimm.)
- McLELAN rock; in Fitzwilliam channel, L. Huron, Ont.
- McLELAN strait; northeast shore Ungava bay, Ungava. (Not McLEAN.)
- McLEOD, Mount; west of Dease lake, Cassiar, B.C.
- McMASTER lake; Jones township, Renfrew county, Ont. (Not McMaster's.)
- MACMILLAN; C.P.R. station, Rainy R. district, Ont.
- MACMILLAN mountains, and river tributary to the Yukon, Yukon.
- McMULLEN, Mount; east of Columbia river, south of C.P.R., W. Kootenay, B.C.
- McNEVIN lake; Murchison township, Nipissing district, Ont. (Not McNevin's.)
- McPHERSON lake; north of Frances lake, Yukon.
- McQUESTEN river; tributary to Stewart river, Yukon. (Not McQuestion.)
- MADAWASKA river; flows into Chats lake an expansion of Ottawa river, Ont.
- MAGGIE, Lake; Finlayson township, Nipissing district, Ont. (Not Maggie's lake.)
- MAGNET gulch; on Bonanza creek, Yukon.
- MAGNETIC island and reefs; southeastern side of Cockburn island, L. Huron, Ont.
- MAIDEN island; south shore Hudson strait, Ungava. (Not Maiden Paps.)
- MAIDEN island; east of Michael point, Manitoulin island, L. Huron, Ont.
- MAIKASKSAGI river; north of Waswanipi river, northwestern Quebec.
- MAIN channel; between Cove island and "Bad Neighbour" rock, L. Huron to Georgian bay, Ont.
- MAITLAND island; Douglas channel, north of Hawkesbury island, Pacific coast, B.C.
- MAKUSTIGAN lake; south of Wetetnagami lake, northwestern Quebec. (Not Macoostigan.)
- MALONEY, Mount; northwest of Aishihik lake, Yukon.
- MANG lake; west of Kawawia lake, Rainy R. district, Ont. (Not Loon.)
- MANITOBA ledge; off west side of Yeo island at entrance to Georgian bay, Ont.
- MANITOBA reef; north of Great Duck island, L. Huron, Ont.
- MANITOU creek; flows into Michael bay, Manitoulin island, L. Huron, Ont.
- Manitoulin gulf.* See South bay.
- MANITOULIN island, near north end of L. Huron, Ont. (Not Grand Manitoulin.)
- MANITUMEIG lake; west of Manitou lake, Rainy R. district, Ont.
- MANN island; in upper part of lake Temiscaming, Que.
- MANOMIN lake; west of Winnange lake, Rainy R. district, Ont. (Not Unaminnikan.)
- MANUAN lake and river; tributary to the upper St. Maurice, Champlain county, Q. (Not Manouan.)
- MAPLE point; at the northeast end of Gil island, Pacific coast, B.C.
- MARGARET, Lake; south of Lower Bow lake, Alberta.
- MARIA lake; northwest of Tuya lake, Cassiar, B.C.
- MARK creek; tributary to St. Mary river, E. Kootenay, B.C.
- MARKHAM bay; north shore of Hudson strait, Franklin.
- MARMOT mountain; east of Peyto lake and north of Observation peak. Rocky mts., Alta.
- MARSH, Lake; southern part of Yukon, near Bennett and Tagish lakes.
- MARSHALL, Lake; near Skagway river.
- MARTEN river; tributary to Rupert river, northwestern Quebec.
- MARY creek; tributary to Teslin river, near M'Clintock peak, Yukon.
- MARY point; Boxer reach, Pacific coast B.C.
- MARY shoal; south of Great Duck island, L. Huron, Ont.
- MASSAUGA point; west of Horse point, Ameliasburg township, Prince Edward county, Ont.
- MASSEY church; Sidney township, Hastings county, Ont.
- MATASHI river; headwaters of Gatineau river, Berthier County, Q.
- MATCHI MANITO lake; at the height of land south of the great bend of Migiskan river, northwestern Quebec.
- MATSATU river; tributary to Nahlin river, Cassiar, B.C.
- MATTABETCHUAN rapid; at the mouth of O'Sullivan river, Waswanipi lake, northwestern Quebec.
- MATTAGAMI lake and river; tributary to Nottaway river, northwestern Quebec.
- MATTAWA lake; at headwaters of St. Maurice river, Champlain county, Q.
- MATTAWAGOSIK lake; south of Abitibi lake, northwestern Quebec. (Not Mattawagosig.)

- MATTHEW creek; tributary to St. Mary river, E. Kootenay, B.C.
- MAUNOIR butte; near confluence of Lewes and Teslin rivers, Yukon.
- MAUS creek; east of Kootenay river, south of Steele, B.C. (Not Mouse.)
- MAYFLOWER island; at entrance to Thomas bay, Manitoulin island, L. Huron, Ont.
- MAYNE island, village, and P.O.; in southern part of the strait of Georgia, B.C.
- MAYO brook and lake; tributary to Stewart river, Yukon.
- MAX narrows; east of Mattagami lake, northwestern Quebec.
- MEACHAM creek; tributary to St. Mary river, E. Kootenay, B.C. (Not Caribou nor Whitefish.)
- Meadow creek.* See Ripple, and Linkwater.
- MEADOW creek; branch of Sulphur creek, Indian river, Yukon.
- MEANDER brook; south of Eagle lake, Rainy R. district, Ont.
- MELDRUM point; northwestern end of Manitoulin island, L. Huron, Ont. (Not Mildram nor Mildrum.)
- MELVILLE point; south of Srigley bay, Manitoulin island, L. Huron, Ont.
- MENDENHALL river; tributary to Takhini river, between Kusawa lake and L. Laberge, Yukon.
- MENIKWESI lake; west of Kawawia lake, Rainy R. district, Ont.
- MENNIN lake; southeast of Dinorwic lake, Rainy R. district, Ont. (Not Blueberry nor Shallow.)
- MERIGOMISH village and P.O.; Pietou county, Nova Scotia. (Not Merigomishe.)
- MESKWATESSI lake; east of Atikwa lake, Rainy R. district, Ont.
- METHUEN reef; south shore Manitoulin island, L. Huron, Ont.
- MICHAEL bay and point; south shore of Manitoulin island, L. Huron, Ont.
- MICHAUD creek; tributary to Klondike river, Yukon.
- MICHAUD creek; west of Lower Arrow lake, W. Kootenay, B.C.
- MICHIE, Mount; east of L. Marsh, Yukon.
- MIDDLE creek; tributary to Tahltan river, Cassiar, B.C.
- MIDDLE Duck island; south of Inner Duck island, L. Huron, Ont.
- MIDDLE mountain; near lower part of Stikine river, south of Porcupine creek, Cassiar, B.C.
- Middle Savage islands.* See Islands of God's Mercie.
- MIDDLETON island; at the mouth of Broadback river, Rupert bay, northwestern Quebec.
- MIDDLETON, Mount; southeast of lake Evans, northwestern Quebec.
- MIGISKAN river; flows westerly from the height of land near the sources of St. Maurice river and through Shabogama lake northerly into Mattagami lake, northwestern Quebec. (Not Metiscan, Metchiskan, Mekiscan, Megiskun, nor Bell.)
- MIKWASACH lake; upper waters of Waswanipi river, northwestern Quebec. (Not Wikwasash.)
- MILES canyon; on Lewes river, above Whitehorse rapid, Yukon.
- MILLARS wharf; North Fredericksburg township, Lennox county, Ont.
- MILLER creek; tributary to Sixtymile river, Yukon.
- MILLER point; western entrance point of Robinson cove, Big island, Bay of Quinte, Ont. (Not Miller's.)
- MILLIE lake; northeast of Matchi Manito lake, northwestern Quebec.
- MILTON point; between Lonely and Lougheed bays, Manitoulin island, L. Huron, Ont.
- MINDEMOYA river; empties into Providence bay, Manitoulin island, L. Huron, Ont.
- MINERAL creek and town; north of Caribou creek, W. Kootenay, B.C.
- MINERS range; mountains near L. Laberge, Yukon.
- MINETTE bay; Kitimat arm, Pacific coast, B.C.
- MINK reef; Manitoulin island, northwest of Steevens island, L. Huron, Ont.
- MINNAWEISKAG lake; south of Dinorwic lake, Rainy R. district, Ont. (Not Kaminnaweiskagwak.)
- MINNEHAHA lake; north of Peak lake, Rainy R. district, Ont. (Not Kiskopkechewans.)
- MINNEWANKA lake; in the Rocky Mountains Park of Canada, Alberta. (Not Devil's Head lake.)
- MINNIE BELL creek; tributary to Flat creek Klondike river, Yukon.
- MINT creek; branch of Hunker creek, Klondike river, Yukon.
- MINTO, Mount; west of Atlin lake, near north end, Cassiar, B.C.
- MISERY bay and point; south shore Manitoulin island, L. Huron, Ont.
- MISHOMIS lake; southwest of Grand L. Victoria, Pontiac county, Q.
- MISKATLA; Indian village on Douglas channel, opposite Maitland island, Pacific coast, B.C. (Not Mis-ka-tla.)
- MISKITENAU lake; at headwaters of Rupert river, northwestern Quebec.
- MISKWAH lake; Dudley township, Haliburton county, Ont. (Not Mis-quah-be-nish.)
- MISSISSAGI strait, river, bay, and island; at north end of L. Huron, Ont. (Not Mississauga.)
- MISSISSAGUA brook and lake; Peterboroug county, Ont. (Not Gull lake.)
- MISTA, Mount; a peak in Valkyr mountains, W. Kootenay, B.C.

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- MISTASSINI, Lake ; large lake of northwestern Quebec.
- MISTASSINIS, Lake ; east of L. Mistassini, Q. (Not Little L. Mistassini.)
- MITCHINAMEKUS lake and river ; headwaters of Lièvre river, tributary to the Ottawa, Q. (Not Mashamengoose, Mejomanguse, nor Menjobaguse.)
- MOBERLY creek ; west of Lower Arrow lake, W. Kootenay, B.C.
- MOHAWK church ; Tyendingaga township, Hastings county, Ont. (Not Indian church.)
- MOIRA river ; flows into Bay of Quinte, near Belleville, Ont.
- MOKWAWASTUK lake ; at headwaters of Marten river, northwestern Quebec. (Not Mokwah-wastuk.)
- MOLAR, Mount ; northeast of mount Hector, Rocky mountains. Alta.
- MONDONAK lake and river ; upper waters of Manuan river, Champlain county, Q.
- MONELL reef ; at entrance to Wood bay, Manitoulin island, L. Huron, Ont.
- MONEY point ; southerly part of Hawkesbury island, Pacific coast, B.C.
- MONGUS lake ; near Manitou lake, Rainy R. district, Ont.
- MONK lake ; Cardiff township, Haliburton county, Ont.
- MONMOUTH lake ; Monmouth township, Haliburton county, Ont.
- MONROE creek and lake ; near Moyie lake, E. Kootenay, B.C.
- MONTANA creek ; tributary to Yukon river, above Dawson, Yukon.
- MONTROSE, Cape ; north shore of Hudson strait, Franklin.
- MONUMENTAL island ; east of Clements Land, Franklin.
- MOODY point, Boxer reach, Pacific coast, B.C.
- Moonshine lake.* See Uphill.
- MOORE lake ; Lutterworth township, Haliburton county, Ont. (Not Moore's.)
- MOOSE creek ; tributary to Fortymile river, near international boundary, Yukon.
- MOOSE narrows ; near south end of Teslin lake, Cassiar, B.C.
- MOSEHORN lake ; west of Grand L. Victoria, Pontiac county, Q.
- MOSESKIN mountain and creek ; near mouth of Klondike river, Yukon.
- MORLEY river ; Teslin lake, Yukon.
- MORRISON, Mount ; Yukon river, near international boundary, Yukon.
- MOSES OATES, Cape ; Charles island, Hudson strait, Ungava.
- MOSQUITO creek ; tributary to Columbia river, W. Kootenay, B.C.
- MOSQUITO creek ; tributary to Bonanza creek, Yukon.
- MOUNTAIN lake ; southwest of L. Lindeman, Cassiar, B.C. (Not Long lake.)
- MOYELLE ; R. R. station, E. Kootenay, B.C. (Not Moyell.)
- MOYIE lakes, river, and town ; in southwestern part of E. Kootenay, B.C. (Not Mooyie.)
- MUCHUYA creek ; tributary to Kakuchuya river, Cassiar, B.C.
- Mud lake.* See Kabagukski.
- MULVEY creek ; tributary to Slocan river, W. Kootenay, B.C.
- MUMMERY, Mount ; west of Blaeberry river, Rocky mountains, B.C.
- MUNRO creek ; flows into Gladys lake, Cassiar, B.C.
- MURCHISON, Cape ; southeast end of Brevoort island, east coast Baffin Land, Franklin.
- MURPHY harbour and point ; south shore of Manitoulin island, L. Huron, Ont.
- MURRAY canal ; in Murray and Brighton townships, connects Bay of Quinte with Presquile bay, Ont.
- MURRAY hill ; in the town of Trenton, Ont.
- MURRAY point ; north shore of Hudson strait, Franklin.
- MURRAY ; township in Northumberland county, Ont.
- MUSCOTE bay ; off Big bay, southwest side Bay of Quinte, L. Ontario.
- MUSKOKA lake and river ; Muskoka district, Ont.
- MUTCHMORE point ; south shore Manitoulin island, L. Huron, Ont.
- MYERS point ; in Sidney township, Hastings county, Ont.
- N**AHLIN river ; tributary to Inklin river, Cassiar, B.C.
- NAHONI mountains, and lakes (upper, lower and middle) at headwaters of Porcupine river, Yukon. (Not Nahone.)
- NAJAN river ; tributary to St. Maurice river, above Manuan river, Champlain county, Q.
- NAKINA river ; tributary to Taku river, Cassiar, B.C.
- NAKONAKE river ; tributary to Sloko river, Cassiar, B.C.
- NAKUSP ; town, railway terminus, and creek, east side of Upper Arrow lake, W. Kootenay, B.C. (Not Na-Kusp.)
- NAMAWASH lake ; upper Ottawa river, northwest of Grand L. Victoria, Pontiac county Q.

- NAMEGOS lake ; south of Matchi Manitou lake, Montcalm county, Q. (Not Nemegos.)
- NAMEGOSIS lake ; south of Matchi Manito lake, Montcalm county, Q. (Not Nemegos.)
- NARES, Lake ; between Bennett and Tagish lakes, Yukon.
- NARCHILLA brook ; flows into McPherson lake, Yukon.
- NATCHIPOTCHI lake ; at the head of Etchipotchi river, Waswanipi river, northwestern Quebec. (Not Natchipoishi.)
- NAUMULTEN mountain ; east of head of Lower Arrow lake, W. Kootenay, B.C.
- NAUYATS island ; southeast shore Ungava bay, Ungava.
- NAWAPITECHIN river ; tributary to Kinojevis river, Pontiac county, Q. (Not Nawaspitshins.)
- NEDLUK lake ; empties into Koksoak river, Ungava.
- NELLO river ; headwaters Klondike river, Yukon.
- NELLY point ; on the northwest part of Princess Royal island, Pacific coast, B.C.
- NELSON lake ; west of Edgar lake, Cassiar, B.C.
Nelson river. See Fort Nelson river.
- NEMEIBENNUK lake ; west of Anzhekumming lake, Rainy R. district, Ont. (Not Sucker.)
- NEMIKACHI lake ; upper waters of Lièvre river, St. Maurice, Q. (Not Nemicachingue.)
- NEMISKAU lake ; in northwestern Quebec, north of lake Evans. Rupert river flows through this lake. (Not Namiska.)
- NEMO creek ; west of Slocan lake, W. Kootenay, B.C.
Nepihjee river. See Leaf.
- NEPTUNE HEAD point ; at entrance to Stupart bay, Hudson strait, Ungava.
- NEWAGAMA lake ; southeast of Abitibi lake, Pontiac county, Q.
- NEWELL sound ; southwest shore, Frobisher bay, Franklin. (Not Kangérflug.)
- NEWTON fiord ; Frobisher bay, Franklin. (Not Tornait.)
- NEW ZEALAND creek ; tributary to Indian river, Yukon.
- NIGGER island ; between Belleville and Trenton, Bay of Quinte, Ont.
- NIGGER narrows ; Bay of Quinte, Ont. (Not Nigger island narrows.)
- NIKABAU lake and river ; headwaters of Ashwamuchuan river, Chicoutimi county, Q.
- NILES, Mount ; Rocky Mountains divide, southeast of mount Balfour, B.C.
- NINATIGO lake ; Stanhope township, Haliburton county, Ont. (Not Ne-na-tik-go.)
- NIORD n untain ; west of Slocan lake, W. Kootenay, B.C.
- NIPMENANNI river ; a tributary of Shoshokwan river, upper Ottawa, Q. (Not Nipmenane.)
- NIPPLE mountain ; east of Frances lake, Yukon.
- NIPUKATASI river ; flows into a long lake southeast of lake Evans, northwestern Quebec. (Not Nipukatase.)
- NISLING river ; tributary to White river, east of Wellesley lake, Yukon.
- NISUTLIN river ; a large feeder of Teslin lake, Yukon.
- NOBLE island ; north shore of Hudson strait, Franklin.
- NOEL harbour ; north shore of Hudson strait, Franklin.
- NOGOLD creek ; tributary to Stewart river, Yukon.
- NORBURY lakes ; east of Kootenay river, south of Steele, B.C. (Not Fish.)
- NORDENSKIÖLD river ; tributary to Lewes river, Yukon.
- NORNS mountains ; southeast of Airy mountain, W. Kootenay, B.C.
- NORTH bay ; north shore of Hudson strait, Franklin.
- NORTH channel ; between Manitoulin island and the north shore of L. Huron, Ont.
- NORTHEAST bay ; Shabogama lake, northwestern Quebec.
North Foreland. See Queen Elizabeth.
- NORTH lake ; Harburn township, Haliburton county, Ont.
North river. See Gladys.
- NORTHPORT ; village, Sophiasburg township, Prince Edward county, Ont.
- NORTHPORT shoal ; middle ground northeast of Northport, Bay of Quinte, L. Ontario.
- NORTH STAR hill ; north of St. Mary river, E. Kootenay, B.C.
Northumberland inlet. See Cumberland sound.
- NOTTAWAY river ; flows from Mattagami lake into Rupert bay (pt. of James bay), northwestern Quebec. (Not Noddawai nor Nodway.)
- NOZHEIATIK lake ; east of Anzhekumming lake, Rainy R. district, Ont.
- NUGGET gulch ; on Eldorado creek, Klondike river, Yukon.
- NUNIKANI lake ; Sherborne township, Haliburton county, Ont. (Not Numnekaning.)
- O**AK lake ; Methuen township, Peterborough county, Ont.
- OATMEAL portage ; on Rupert river, below Nemiskau lake, northwestern Quebec.
- OBASKA lake ; north of Grand L. Victoria, Pontiac county, Q. (Not Obiska.)
- OBATOGAMAU lake ; at the height of land south of Chibougamau lake, northwestern Quebec.
- OBIDUAN lake ; at headwaters of St. Maurice river ; Champlain county, Q.

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- OBIKOBA lake ; northeast of L. Temiscaming, Pontiac county, Q.
- O'BRIEN creek ; at international boundary west of Cudahy, Yukon.
- OBSERVATION butte ; near Gun lake, north of Nahlin river, Cassiar, B.C.
- OBSERVATION peak ; east of Peyto lake, and north of Upper Bow lake, Alta. (Not Mount Observation.)
- OCTOPUS creek ; east of Lower Arrow lake, W. Kootenay, B.C.
- ODIN, MOUNT ; west of Upper Arrow lake, W. Kootenay, B.C.
- O'DONNELL river ; empties into east side of Atlin lake, Cassiar, B.C. (Not Dixie creek.)
- OGILVIE ; post on Yukon river, near mouth of Sixtymile river, Yukon.
- OGILVIE range of mountains, and river ; in northwest Yukon.
- OGILVIE valley ; north of L. Laberge, Yukon.
- O'HARA, Lake ; west of mount Lefroy, Rocky mountains, B.C. (Not Cascade lake.)
- OLDMAN rock ; Yukon river, between Cudahy and international boundary, Yukon.
- OLDWOMAN rock ; Yukon river, near Oldman rock, Yukon.
- OLGA lake ; southeast of Mattagami lake, northwestern Quebec.
- OLGA river ; north shore of Hudson strait, Franklin.
- OLIVE, Mount ; northeast of Mount Gordon, Rocky mountains, Alberta.
- OMANEK island ; east shore Ungava bay, Ungava.
- OMINECA ; mining district, mountains, and river, in eastern part of British Columbia. (Not Omenica, Ominica, nor Omeneca.)
- ONDERDONK point ; Ameliasburg township, Prince Edward county, Ont.
- O'NEIL gulch ; on Bonanza creek, Yukon.
- ONKAMMIS lake ; at headwaters of St. Maurice river, Champlain county, Q.
- OPASATIKA lake ; south of Abitibi lake, Pontiac county, Q.
- OPATAWAGA lake ; northeast of Mattagami lake, northwestern Quebec. (Not Opiwatakan.)
- OPAWIKA river ; tributary to Waswanipi river, northwestern Quebec.
- OPEMISKA lake ; west of Chibougamau lake, upper waters of Waswanipi river, northwestern Quebec. (Not Opamiska.)
- OPEONGO river ; in southeast part of Algonquin National Park, Ont.
- OPHIR creek ; tributary to Indian river, Yukon.
- OPIKWAN lake ; upper waters of Ottawa river, Pontiac county, Q. (Not Opequanne nor Opequon.)
- ORCHAY river ; tributary to Pelly river, west of Ross river, Yukon.
- OSBOURNE bay, Eagle lake, Rainy R. district, Ont. (Not Osbourne's.)
- OSIPASINNI lake ; east of Kakagi lake, Rainy R. district, Ont. (Not Boulder.)
- OSISKO lake ; southeast of Abitibi lake, Pontiac county, Q.
- OSKELANEO lake ; at headwaters of St. Maurice river, Champlain county, Q.
- O'SULLIVAN lake ; at headwaters of Ottawa river, Montcalm county, Q.
- O'SULLIVAN river ; flows through Puskitamika lake into Waswanipi lake, northwestern Quebec.
- OTAKUS lake ; north of Berry lake, Rainy R. district, Ont. (Not Otakoose.)
- OTANABI lake ; upper waters of Ottawa river, northwest of Grand L. Victoria, Pontiac county, Q.
- OTCHISK river ; tributary to Waswanipi river, northwestern Quebec.
- OTTAWA creek ; tributary to Dominion creek, Indian river, Yukon.
- OTTAWA lake ; at headwaters of Ottawa river, Joliette county, Q.
- Otter lake and river.* See Fantail.
- OUTER DUCK island ; east of Great Duck island ; the most southerly of the Duck islands, L. Huron, Ont.
- Oval lake.* See Kawawia.
- OVERFLOW lake ; north shore of Hudson strait, Franklin.
- OWEN channel and island ; between Manitoulin and Fitzwilliam islands, L. Huron, Ont.
- OXDRIFT ; C.P.R. station, Rainy R. district, Ont.
- Ox point ; the western extremity of Point Anne Thurlow township, Hastings county, Ont.
- OXTONGUE lake and river ; Haliburton county, Ont. (Not Ox Tongue.)
- P**AISLEY point ; Douglas channel, west of Maitland island, Pacific coast, B.C.
- PAKONSIGANE river ; upper waters of Manuan river, St. Maurice county, Que.
- PALMER BAR creek ; tributary to Moyie river, E. Kootenay, B.C.
- PAPINEAU brook and lake ; Wicklow township, Hastings county, Ont.
- PARKER bay ; north shore of Hudson strait, Franklin.
- PARKER creek ; tributary to Klondike river, Yukon.
- PARRYWOOD ; C.P.R. station, Rainy R. district, Ont.
- PARSONS peak ; west of Skagway.

- PASMINIKANA lake; at headwaters of St. Maurice river, Champlain county, Que.
- PASKAGAMA lake; upper waters of Migiskan river, northwestern Quebec.
- PAUDASH brook and lake; Cardiff township, Haliburton county, Ont.
- PAUGH lake; Sherwood township, Renfrew county, Ont.
- PAUKTORVIK island; southwest shore Ungava bay, Ungava.
- PAYNE lake and river; emptying into Ungava bay, Ungava. (Not Tasurak.)
- PEAK lake; southwest of Dinorwic lake, Rainy R. district, Ont.
- PEARSON island; west of Belanger point and east of Greene island, L. Huron, Ont. (Not Little Grant island.)
- PEAVINE creek; tributary to Moyie river, E. Kootenay, B.C.
- PELLY mountains, lake, and river; Yukon.
- PENASSI river; west of Manitou lake, Rainy R. district, Ont.
- PEN lake; Nightingale township, Haliburton county, Ont.
- PENCIL lake; Cavendish township, Peterborough county, Ont.
- PERCY lake; Harburn township, Haliburton county, Ont.
- PERELESHIN mountain; near Stikine river, between Anuk and Scud rivers, Cassiar, B.C.
- PERRY creek; tributary to St. Mary river, E. Kootenay, B.C.
- PERRY ridge; west of Slocan river, W. Kootenay, B.C. (Not Perry's.)
- PERSEVERANCE island; west of Fitzwilliam island, L. Huron, Ont.
- PERTHES point; in north part of Tagish lake, Yukon. (Not Perth's.)
- PETERSON range; mountains northwest of L. Laberge, Yukon.
- PETERSONS wharf; Sophiasburg township, Prince Edward county, Ont.
- PEYTO lake; northwest of Upper Bow lake, Alta. (Not Peyto's.)
- PHOEBE point; northwest pt. of Fitzwilliam island, L. Huron, Ont.
- PHOTOGRAPH mountain, Kitimat arm, Pacific coast, B.C.
- PICHENNINIS brook; south of Eagle lake, Rainy R. district, Ont.
- PICTURE NARROWS lake; west of Manitou lake, Rainy R. district, Ont.
- PIEROMONTA river; a feeder of Kempt lake, St. Maurice county, Que.
- PIJUWYAN lake and river; tributary to Waswanipi river above Opawika river, northwestern Quebec. (Not Pijou Wyan.)
- PIKE lake, mountain, and river; south of Atlin lake, Cassiar, B.C.
- PILOT lake; Burleigh township, Peterborough county, Ont.
- PILOT point, southeast corner of Gribbell island, Pacific coast, B.C.
- PINCHED-NECK lake; at headwaters of Rupert river, north of L. Mistassini, Que.
- Pine lake.* See Shingwak.
- PINE point; Weller bay, Ameliasburg township, Prince Edward county, Ont.
- PINGSTON creek; west of Upper Arrow lake, W. Kootenay, B.C.
- PIPIKWABI lake; Stanhope township, Haliburton county, Ont. (Not Pee-pee-ke-wah-be-kung.)
- PITOPIKO lake; an expansion of Mannan river, Upper St. Maurice, Champlain county, Que. (Not Pitopieco.)
- PITT creek; tributary to St. Mary river, E. Kootenay, B.C.
- PITTS, Mount; southwest of the junction of Yukon, Lewes and Pelly rivers, Yukon.
- PLOVER islands; west coast Ungava bay, Ungava.
- Plumper's pass.* See Active.
- POINT ANNE; opposite Massasauga point, Thurlow township, Hastings county, Ont.
- POKER creek; branch of Walker creek, near international boundary, Yukon.
- POPLAR point; near the mouth of Rupert river, northwestern Quebec.
- PORCUPINE creek; tributary to Stikine river, south of Anuk river, Cassiar, B.C.
- PORCUPINE creek; tributary to Skagway river.
- PORCUPINE river; northwestern Yukon, tributary to Yukon river.
- PORTAGE bay and point; east of Gatacre point, Manitoulin island, L. Huron, Ont.
- PORTAGE DANSEUR; on Abitibi river, southeast of Abitibi lake, northwestern Quebec.
- PORTAL peak; at west end of Upper Bow lake, Alta. (Not Mount Portal.)
- PORT BURWELL; east shore Ungava bay, Ungava.
- PORTER creek; tributary to Indian river, Yukon.
- PORTER landing; at north end of Dease lake, Cassiar, B.C. (Not Porter's Landing.)
- POTTER point; Ameliasburg township, Prince Edward county, Ont.
- POVERTY lake; Monmouth township, Haliburton county, Ont.
- POWER lake; east of Anghekumming lake, Rainy R. district, Ont.
- PRATT, Mount; northwest of the elbow of Stikine river.
- PREJEVALSKY point; Lake Bennett, Yukon. (Not Prejevalski.)

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- PRESQUITE bay, peninsula, and point; L. Ontario, near southeast corner of Northumberland county.
- PRIAM lake; west of Manitou lake, Rainy R. district, Ont.
- PRINCE EDWARD county; between L. Ontario and Bay of Quinte, Ont.
Prince of Wales cape, island, and sound. See Wales.
- PRITZLER harbour; north shore Hudson strait, Franklin. (Not Pritzler's nor Jackman sound.)
- PROCTORS wharf; Presquise bay, Brighton township, Northumberland county, Ont.
- PROMISE island; at the entrance to Douglas channel, Pacific coast, B.C.
- PROUD-SITTING lake; at headwaters of St. Maurice river, Champlain county, Que.
- PROVIDENCE bay and point; south shore Manitoulin island, L. Huron, Ont.
- PROVOKING lake; in the Algonquin National Park, Ont.
- PTARMIGAN creek; flows into large lake of Pelly group of lakes, Yukon.
- PUDDING burn; tributary to St. Mary river, E. Kootenay, B.C.
- PULPWOOD point; southwestern side of Cockburn island, western boundary of Hyndman bay, L. Huron, Ont.
- PUNICHUAN bay; in the southern end of lake Mistassini, Que.
- PURE-GOLD gulch; on Bonanza creek, Yukon.
- PURVIS bank; northwest of Greene island, L. Huron, Ont.
- PUSKITANIKA lake; south of Waswanipi lake, northwestern Quebec.
- PYRAMID creek; tributary to St. Mary river, E. Kootenay, B.C.
- Q**UARRY point; Manitoulin island, L. Huron, Ont.
- QUARTZ creek; branch of McDame creek, Dease river, Cassiar, B.C.
- QUARTZ creek, tributary to Indian river, Yukon.
- QUEBEC creek, tributary to Yukon river, below Dawson, Yukon.
- QUEEN ELIZABETH foreland; southeast end of Loks Land, Franklin. (Not North Foreland.)
- QUEEN gulch; on Bonanza creek, Yukon.
- QUEEN point; forms the western boundary of Walkhouse bay. Manitoulin island, L. Huron, Ont.
- QUESNEL; lake, river, mining division, village, and P.O., Cariboo, B.C. (Not Quesnelle.)
- QUICKS wharf; Presquise bay, Brighton township, Northumberland county, Ont.
- QUIET lake; northeast of Teslin lake, Yukon.
- QUIGLEY gulch; on Klondike river, Yukon.
- QUINN creek; branch of Sulphur creek, Indian river, Yukon. (Not Quin.)
- R**ABBIT mountain; south of Rapid river and east of L. Evans, northwestern Quebec.
- RAGGED lake; in the Algonquin National Park, Ont.
- RAINY creek; tributary to Moyie river, E. Kootenay, B.C.
- RALEY point, north of Clio bay, Kitimat arm, Pacific coast, B.C.
- RAMSAY river; north shore of Hudson strait, Franklin.
- RANKINE narrows; east of Mattagami lake, northwestern Quebec.
- RAPID canyon; Tatonduk river, near west boundary of Yukon.
- RATHBUN bay and point; east of Jenkins point, Manitoulin island, L. Huron, Ont.
- RAWSON island and harbour; north shore of Hudson strait, Franklin. (Not Harbour island.)
- READY-BULLION gulch; on Bonanza creek, Yukon.
- RED chute; between Mattagami and Olga lakes, northwestern Quebec.
- RED DEER lake and river; tributary to lake Winnipegosis, Saskatchewan district.
- RED DAN reef; southeast of Birch point, Manitoulin island, L. Huron, Ont.
- REDDING creek; tributary to St. Mary river, E. Kootenay, B.C.
- RED-FLOWER portage; on the Migiskan near Shabogama lake, northwestern Quebec.
- REDNERSVILLE; village and wharf, Ameliasburg township, Prince Edward county, Ont.
- REDSTONE brook and lake; Guilford township, Haliburton county, Ont.
- REEVES harbour; north shore of Hudson strait, Franklin.
- REID, Mount; southeast of lake Evans, northwestern Quebec.
- REINDEER creek; tributary to Yukon river, south of Indian river, Yukon.
- REMINGTON creek; tributary to Indian river, Yukon.
Resolution, Cape. See Warwick.
- RESOLUTION island; southeast of Frobisher bay, Franklin. (Not Tudjakdjuan.)
- REVELSTOKE; town on C.P.R. at crossing of Columbia river, B.C.
- RIBBON river; tributary to Mannan river, upper St. Maurice, Champlain county. (Not Rivière au Ruban.)
- RIGHTHOFEN valley and island; L. Laberge, Yukon. (Not Richtofen.)

- RICKETT harbour, eastern side of Cockburn island and southwesterly from Cinder point, L. Huron, Ont.
- RICKLEY harbour; Manitoulin island, west of Burnt I., and north of Western Duck I., L. Huron, Ont.
- RIDGEWAY creek; tributary to Moyie river, E. Kootenay, B.C.
- RINDA MOUNT; a spur of Valhalla mountains, W. Kootenay, B.C.
- RINK rapid; in Lewes river, below Tatchun river, Yukon.
- RIORDON point, Boxer reach, Pacific coast, B.C.
- RIPPLE creek; tributary to Moyie river, E. Kootenay, B.C. (Not Meadow.)
- RIVIÈRE DES QUINZE (Ottawa R.); river flowing into the head of L. Temiscaming, Q.
- ROBERT lake; Marten river above Tesekau lake, northwestern Quebec.
- ROBERT, Point; north shore of Hudson strait, Franklin.
- ROBERTS bay; in South bay, Manitoulin island, L. Huron, Ont.
- ROBERTSON creek; tributary to little Slocan river, W. Kootenay B.C.
- ROBERTSON, Mount; near Stikine river, north of Iskut river, Cassiar, B.C.
- ROBINSON cove; Big island, Bay of Quinte, Lake Ontario.
- ROBINSON sound; east coast Baffin Land, Franklin. (Not Robinson's.)
- ROB ROY creek; tributary to Dominion creek, Indian river, Yukon.
- ROBSON; town and R.R. station, on Columbia river, W. Kootenay, B.C.
- ROCK lake; Nightingale township, Haliburton county, Ont.
- ROGER bar; Yukon river, between Cudahy and west boundary of Yukon. (Not Roger's.)
- ROGERS lake; northeast of L. Temiscaming, Pontiac county, Q.
- ROSE lake and river; at headwaters of Nisutlin river, Yukon.
- ROSE pass; at head of St. Mary river between E. and W. Kootenay, B.C.
- ROSEBUD creek; tributary to Stewart river, Yukon.
- ROSS river; tributary to Pelly river, Yukon.
- ROSSMORE; village in Ameliasburgh township, Prince Edward county, Ont.
- ROUTE lake; west of Manitou lake, Rainy R. district, Ont.
- RUBY creek; tributary to Indian river, Yukon.
- RUBY creek and mountain; west of Surprise lake, Cassiar, B.C.
- RUBY mountains; east of Columbia river between the Arrow lakes, W. Kootenay, B.C.
- RUDYARD reef; west of Queen point, Manitoulin island, L. Huron, Ont.
- RUPERT bay and river; James bay, northwestern Quebec. Rupert House, a post of the H.B. Co., is at the mouth of the river.
- RUSSEL creek; tributary to Little Slocan river, W. Kootenay, B.C.
- RUSSEL wharf; Ameliasburg township, Prince Edward county, Ont. (Not Russell dock.)
- RUTH lake and river; west of Nakina river, and south of Chikoida mountain, Cassiar, B.C.
- Rykerts.* See Bedlington.
- S**SADDLE mountain; near confluence of Stikine and Anuk rivers, Cassiar, B.C.
- SADDLE mountain; west of Upper Arrow lake, W. Kootenay, B.C.
- SADDLEBACK island; north shore Hudson strait, Franklin.
- SAGANAGA lake; south of Dinorwic lake, Rainy R. district, Ont.
- SAINT-CYR, Mount; north of Quiet lake, Yukon.
- ST. EUGENE; mission on St. Mary river, E. Kootenay, B.C.
- ST. MARY lake; Ridout township, Muskoka district, Ont. (Not St. Mary's.)
- ST. MARY lake and river; tributary to Kootenay river, E. Kootenay, B.C. (Not Torrent.)
- ST. MAURICE river; a large tributary of the St. Lawrence, Q.
- ST. NORAS lake; Stanhope township, Haliburton county, Ont.
- SALMON island; in north side of Big bay, Bay of Quinte, L. Ontario.
- SALMON river; flows into Big bay, Bay of Quinte, L. Ontario.
- SALT point; Presquile peninsula, Brighton township, Northumberland county, Ont.
- SAND narrows; Lady Beatrix lake, northeast of Mattagami lake, northwestern Quebec.
- SAND point; on Soskumika lake, Nottaway river, northwestern Quebec.
- Sand point.* See Desert point.
- Sanderson creek.* See Ionoaklin.
- SANDERSON point; west side of Lower Arrow lake, W. Kootenay, B.C.
- SANDY-BEACH lake; at headwaters of St. Maurice river, Champlain county, Q.
- SANGRIDA Mount; a peak in Valkyr mountains, W. Kootenay, B.C.
- SARBACH, Mount; north of Howse pass, Rocky mountains, B.C.
- SASAKWEI lake; southwest of Peak lake, Rainy R. district, Ont. (Not Summit.)
- SASSAGANAGA; northeast of L. Temiscaming, Pontiac county, Q.

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- SASSAWATISI lake ; at headwaters of Manuan river, Champlain county, Q. (Not Sackawatesie nor Chisaouataisi.)
- SATASHIA lake ; west of Nordenskiöld river, Yukon.
- SAUGUM creek ; east of Kootenay river, north of Steele, B.C. (Not Six-mile.)
- SAUNDERS reef ; near Misery bay, Manitoulin island, L. Huron, Ont.
- SAWAMISSHI lake ; Stanhope township, Haliburton county, Ont. (Not Sah-wah-mish-she.)
- SAWBACK range ; mountains west of Stikine river, Cassiar, B.C.
- SAWYER pass ; at head of St. Mary river, between E. and W. Kootenay, B.C.
- SAYYEA creek ; tributary to upper Liard river, Yukon. (Not Sayia.)
- SCALPING KNIFE mountain ; east of Columbia river, W. Kootenay, B.C.
- SCOTCHIE reef ; at South Baymouth, Manitoulin island, L. Huron, Ont.
- SCOTT, Mount ; near Rapid river and east of Rabbit mountain, east of lake Evans, northwestern Quebec.
- SCROGGIE creek ; tributary to Stewart river, Yukon.
- SCUD river ; tributary to Stikine river, Cassiar, B.C.
- SEA lake ; Murchison township, Nipissing district, Ont.
- Seal lake.* See Tisiriuk.
- SEAMAN reef ; at entrance to Wood bay, south shore Manitoulin island, L. Huron, Ont.
- SEGEMAK lake ; southeast of Saganaga lake, Rainy R. district, Ont. (Not Black Bird Lake.)
- SEKULMUN lake ; west of Aishihik lake, Yukon.
- SELBY lake ; east of Anzhekumming lake, Rainy R. district, Ont. (Not Lynx.)
- SELWYN river ; tributary to Yukon river, west of Lewes river, Yukon.
- SEMENOF hills ; at confluence of Lewes and Big Salmon rivers, Yukon. (Not Semenow.)
- SERPENTINE lake ; Anstruther township, Peterborough county, Ont.
- SEYMOUR harbour ; north shore of Hudson strait, Franklin.
- SHABOGAMA lake and river ; at the great bend of Migiskan river, northwestern Quebec. (Not Shabokama.)
- SHAKES creek ; tributary to Stikine river, south of Glenora, Cassiar, B.C.
- SHAKWAK valley ; west of L. Dezadeash, Yukon.
- SHALLOW lake ; between Bernard and Tutshi lakes, Cassiar, B.C.
- Shallow lake.* See Mennin.
- SHAMROCK bank ; southeast of Gatacre point, Manitoulin island, L. Huron, Ont.
- SHAMUS river ; flows into Matchi Manito lake, northwestern Quebec.
- SHANNONVILLE ; village in Tyendinga township, Ont.
- SHECAKE island ; South bay, Manitoulin island, Lake Huron, Ont.
- Shedui.* See Deception.
- SHEEP mountain and lake ; east of Tatonduk river, Yukon.
- SHELDON lake ; Lutterworth township, Haliburton county, Ont. (Not Sheldon's.)
- SHERBROOKE lake ; northwest of Hector station C. P. R'y. B.C.
- SHERWOOD point ; Presquile bay, Brighton township, Northumberland county, Ont. (Not Sherwood's.)
- SHELAY river ; tributary to Inklin river, Cassiar, B.C.
- SHIELDS landing ; on west side of Lower Arrow lake, W. Kootenay, B.C.
- SHINGWAK lake ; north of Cameron lake, Rainy R. district, Ont. (Not Pine.)
- SHIP bank ; in Owen channel, L. Huron, Ont.
- SHIP island ; northeast from Horse point, Ameliasburg township, Prince Edward county, Ont.
- SHOAL point ; in Presquile bay, Brighton township, Northumberland county, Ont.
- SHONGWASHIU lake ; east of Saganaga lake, Rainy R. district, Ont. (Not Shongwashoucheneibewin.)
- SHOSHOKWAN lake and river ; tributary to upper Ottawa river, east of Grand Lake Victoria, Pontiac and Montcalm counties, Q. (Not Shoshoquon nor Shesheinquann.)
- SIDNEY township ; in Hastings county, Ont.
- SIFTON lake ; south of Shabogama lake, northwestern Quebec.
- SIFTON mountains ; west of L. Laberge, Yukon.
- SILVERHORN, Mount ; northeast of Peyto lake and south of lake Isabella, Rocky mountains, Alta.
- SIMCOE bank and point ; at entrance to Providence bay, Manitoulin island, L. Huron, Ont.
- SIMMONS creek ; tributary to Stewart river, below Scroggie creek, Yukon.
- SIMON, Lake ; south of Obaska lake, northwestern Quebec.
- SIMPSON mountains and lake ; between Liard and Frances rivers, Yukon.
- SIMPSON TOWER ; mountain west of Frances lake, Yukon. (Not Simpson's.)
- SIMS bay and island ; South bay, Manitoulin island, L. Huron, Ont. (Not Simms.)
- SIXTY creek ; branch of Henderson creek, Yukon.
- SIXTYMILE river ; tributary to Yukon river, Yukon.
- SKAGWAY river and town ; at head of Taiya inlet. (Not Skaguay nor Shkagway.)
- Skirmish river.* See Wild Horse.
- SKOOKUM gulch ; on Bonanza creek, Yukon.
- SLATE creek ; tributary to Klondike river, Yukon.

- SLATE pass ; between headwaters of Klondike and McQuesten rivers, Yukon.
- SLEEPY river ; flows into Obaska lake, northwestern Quebec.
- SLOCAN ; town and R.R. station, at south end of Slocan lake, W. Kootenay, B.C. (Not Slocan City.)
- SLOKO inlet, lake, mountain, and river ; Cassiar, B. C. (Not Slocoh.)
- SMALL DUCK creek ; tributary to Sock creek, Klondike river, Yukon.
- SMITHFIELD bridge ; middle bridge of Murray canal, in Murray township, Northumberland county, Ont.
- SMITH point ; southwestern point of Cockburn island, L. Huron, Ont.
- SMITH rock ; in Fitzwilliam channel, L. Huron, Ont.
- SMOKE-HILL portage ; on the lower part of Rupert river, northwestern Quebec.
- SMOKE lake ; in the Algonquin National Park, Ont.
- SMOKE point ; in Weller bay, Ameliasburg township, Prince Edward county, Ont.
- SMOOTH-ROCK lake ; south of Manitou lake, Rainy R. district, Ont. (Not Clear lake.)
- SNAKE island ; north of Cedar island, Bay of Quinte, L. Ontario.
- SNOW-CAP mountain ; west of lower part of Stikine river, Cassiar, B.C.
- SNOWSLIDE creek ; tributary to Caribou creek, W. Kootenay, B.C.
- SNOWY mountain ; east of Stikine river, near the elbow, Cassiar, B.C.
- SOCK creek ; tributary to Klondike river, Yukon.
- SODA creek ; flows into an upper branch of Hunker creek, Yukon.
- SOLMES island ; east of Telegraph island, Bay of Quinte, L. Ontario.
- SOLMESVILLE ; P. O. in Sophiasburg township, Prince Edward county, Ont.
- SOPHIASBURG ; township in Prince Edward county, Ont.
- SOSKUMIKA lake ; an expansion of Nottaway river, near Mattagami lake, northwestern Quebec.
- SOURCE lake ; in the Algonquin National Park, Ont.
- SOUTH bay ; near southeast end of Manitoulin island, L. Huron, Ont. (Not Manitoulin Gulf.)
- SOUTH BAYMOUTH ; town site, Manitoulin island, L. Huron, Ont.
- South river.* See Koksoak.
- SOUTHWEST bay ; in lake Evans, northwestern Quebec.
- SOYERS lake ; Minden township, Haliburton county, Ont.
- SPICKER harbour and island ; north shore of Hudson strait, Franklin.
- SPIRIT creek ; tributary to Wild Horse river, E. Kootenay, B.C.
- SPROAT, Mount ; north of Upper Arrow lake, W. Kootenay, B.C.
- SQUARE bay ; east of Dominion point, Manitoulin island, L. Huron, Ont.
- SRIGLEY bay ; south shore Manitoulin island, L. Huron, Ont.
- STAFFORD rock ; north of Western Duck island, L. Huron, Ont.
- STAKE creek ; flows into Quiet lake, Yukon.
- STANAWAY lake ; southwest of Dinorwic lake, Rainy R. district, Ont. (Not Grassy River Lake.)
- STANFORTH point ; at the entrance to Gardner canal, Pacific coast, B.C. (Not Stanforth.)
- STANLEY, Mount ; a spur of Valkyr mountains, W. Kootenay, B.C.
- STAR creek ; branch of Hunker creek, Yukon.
- STEELE ; chief town of E. Kootenay B.C. R. R. station of same name 7 miles south of town. (Not Fort Steele.)
- STEEVENS island ; north of Greene island and south of Manitoulin island, L. Huron, Ont. (Not Cariboo island nor Little Green island.)
- STEPHEN lake ; north of Kakagi lake, Rainy R. district, Ont.
- STEPHEN, Mount ; near Field station, C. P. Ry., B.C.
- STEVENS creek ; north of Whatshan lake, W. Kootenay, B.C.
- STEWART lake ; west of Parrywood station C.P.R., Rainy R. district, Ont.
- STEWART rock ; in Owen channel, L. Huron, Ont.
- STEWART river ; tributary to Yukon river, Yukon.
- STIKINE river ; Cassiar, B.C. (Not Stickeen nor Stikeen, &c.)
- STIMUKOKTOK cape ; east shore Ungava bay, Ungava.
- STONEBURGH cove ; in Weller bay, Ameliasburg township, Prince Edward county, Ont. (Not Stoneburgh's.)
- STONY creek ; tributary to M'Clintock river, Yukon.
- STONY lake ; Burleigh township, Peterborough county, Ont.
- STONY point ; in Presquile bay, Brighton township, Northumberland county, Ont.
- STOPLOG lake ; Burleigh township, Peterborough county, Ont. (Not Stop Log.)
- STORMY lake ; Glamorgan township, Haliburton county, Ont.
- STRAGGLE lake ; Harcourt township, Haliburton county, Ont.
- STRATHCONA island ; north shore of Hudson strait, Franklin.

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- STUPART bay ; south shore of Hudson strait, Ungava.
- Sucker lake.* See Gladys.
- Sucker lake.* See Nemeibennuk.
- SUGARLOAF mountain ; near Stikine river, north of Iskut river, Cassiar, B.C.
- SUGARLOAF portage ; at the outlet of Opatawaga lake, northeast of Mattagami lake, northwestern Quebec. (Not Sugar Loaf.)
- SULLIVAN hill ; north of St. Mary river, E. Kootenay, B.C.
- SULLIVAN, Mount ; west of Dease lake, Cassiar, B.C.
- SULPHUR creek ; tributary to Indian river, Yukon.
- SUMMIT ; C. P. R. station, Rainy R. district, Ont.
- SUMMIT lake ; south of L. Bernard, Cassiar, B.C.
- Summit lake.* See Sasakwei.
- SUNSHINE creek ; east of Lower Arrow lake, W. Kootenay, B.C.
- SUNSHINE lake ; northeast of Manitou lake, Rainy R. district, Ont.
- SURPRISE lake ; east of Atlin lake, Cassiar, B.C. (Not Kusiwah.)
- SWAN island ; in Columbia river between Upper and Lower Arrow lakes, W. Kootenay, B.C.
- SWEDE creek ; tributary to Yukon river above Dawson, Yukon.
- SYLVIA GRINNELL river ; flows into Frobisher bay, Franklin.
- SYNDICATE lake ; west of Manitou lake, Rainy R. district, Ont.
- SYRINGA creek ; tributary to Columbia river, south of Lower Arrow lake, W. Kootenay, B.C.
- T**ACHÉ ; C.P.R. station, Rainy R. district, Ont.
- TACKLE creek ; tributary to Wild Horse river, E. Kootenay, B.C.
- TAGISH lake and P.O. ; east of L. Bennett, Yukon.
- TAHLTAN lake and river ; tributary to Stikine river ; Cassiar, B.C.
- TAHTE river ; northwest of Aishihik lake, Yukon.
- TAIBI lake ; an expansion of Migiskan river, above Mattagami lake, northwestern Quebec.
- "T" point ; in Taibi lake, Migiskan river, above Mattagami lake, northwestern Quebec.
- TAKHIN river ; tributary to Chilkat river, near Chilkat inlet.
- TAKHINI river ; flows from Kusawa lake, tributary to Lewes river, Yukon.
- TAKU river ; northwest Cassiar, B.C.
- TAKU arm ; Tagish lake, Yukon, and Cassiar, B.C.
- TALAHA bay ; Tagish lake, Yukon.
- TALLAN lake ; Chandos township, Peterborough county, Ont. (Not Tallan's.)
- TALTMAN lake ; south of lower Pelly river, Yukon.
- TANGAMONG lake ; Lake township, Hastings county, Ont. (Not Tangamongue.)
- TANTALUS butte ; near confluence of Lewes and Nordenskiöld rivers, Yukon.
- TANZILLA river ; tributary to Stikine river, Cassiar, B.C.
- TARTE bay ; in Kitimat arm, Pacific coast, B.C.
- TASSO, Lake ; Finlayson township, Nipissing district, Ont.
- Tasurak lake.* See Payne.
- TATCHUN river ; tributary to Lewes river, between Rink and Five-finger rapids, Yukon. (Not Tatchum.)
- TATONDUK river ; tributary to Yukon river, Yukon. (Not Tatonduc.)
- TATSHENSHINI river ; tributary to Asek river, Cassiar B.C., and Yukon.
- TATSHO mountain, south of Dease lake, Cassiar, B.C. (Not Tacho.)
- TATSHO creek ; tributary to Tanzilla river, Cassiar, B.C. (Not Eightmile creek.)
- TATTIKI bay ; in Taku arm of Tagish lake, Cassiar, B.C. (Not Tatiki.)
- TAWINA river ; east of Kuthai lake, Cassiar, B.C.
- TAY river ; tributary to Pelly river, above "The Detour," Yukon.
- TAYE lake ; southeast of Hutshi lakes, Yukon.
- TAYLOR reef ; Misery bay, Manitoulin island, L. Huron, Ont.
- TEA lake ; in the Algonquin National Park, Ont.
- TELEGRAPH creek ; tributary to Stikine river, below Tahltan river, Cassiar, B.C.
- TELEGRAPH island ; in the Bay of Quinte, L. Ontario.
- TELEGRAPH narrows ; a contraction of the Bay of Quinte at Telegraph island, between Tyendinaga and Sophiasburg townships, Ont.
- TENAZIE creek ; south of Gladys lake, Cassiar, B.C.
- TERESA island ; great island in Atlin lake, Cassiar, B.C. (Not Goat.)
- TERRACE ridge ; on Porcupine river, northeast of Mount Dewdney, Yukon.
- TESEKAU lake ; an expansion of the lower part of Marten river, above Cooper lake, northwestern Quebec. (Not Tesaycau.)
- TESLIN lake and river ; in southern part of Yukon. (Not Hootalinqua nor Teslin-too.)
- THE DETOUR ; a bend of Pelly river, west of Glenlyon mountains, Yukon.
- THE FOURS ; portages on the lower part of Rupert river, northwestern Quebec.
- THE KNOB ; mountain near Stikine river, mouth of Iskut river, Cassiar, B.C. (Not "Knob.")

- THE NARROWS ; in South bay, Manitoulin island, L. Huron, Ont.
- THE NEEDLES ; narrows in Lower Arrow lake, W. Kootenay, B.C.
- THE RIDGE ; bar in Owen channel, L. Huron, Ont.
- THE STEEPLES ; mountains east of Kootenay river, B.C.
- THE THREE GUARDSMEN ; mountains south of Aishihik lake, Yukon.
- THE WART ; hill at mouth of Koksoak river, Ungava.
- THE WIGWAN ; a hill on Migiskan river, near Shabogama lake, northwestern Quebec.
- THIBAUT shoal ; runs south from Manitoulin island to Inner Duck island, L. Huron, Ont.
- THIBERT creek ; at north end of Dease lake, Cassiar, B.C.
- THISTLE creek ; tributary to Yukon river, above White river, Yukon.
- THISTLE reef ; in Portage bay, Manitoulin island, L. Huron, Ont.
- THOMAS bay and point ; near South Baymouth, Manitoulin island, L. Huron, Ont.
- THOMAS gulch ; on Klondike river, Yukon.
- THOMAS river ; flows into north end of Frances lake, Yukon. (Not Too-tlas.)
- THOMSON lake ; Lake township, Hastings county, Ont. (Not Thomson's.)
- THOR, Mount ; west of Upper Arrow lake, W. Kootenay, B.C.
- THREE FORK river ; flows into Wabigoon lake from the south, Rainy R. district, Ont.
- Thumb bay.* See Galena.
- THURLOW ; township in Hastings county, Ont.
- TIGER brook ; tributary to Rivière de Quinze, at the head of L. Temiscaming, Q.
- TILLEI lake ; north of Frances lake, Yukon. (Not Til-e-i-tsho.)
- TIMBER bay ; east of Providence bay, Manitoulin island, L. Huron, Ont.
- TIMBER Bay shoal ; Timber bay, Manitoulin island, L. Huron, Ont.
- TISIPIK lake ; empties into Leaf river, Ungava. (Not Seal lake.)
- TISKU river ; tributary to Chilkat river, near Chilkat inlet.
- TODMAN reef ; at mouth of Thomas bay, Manitoulin island, L. Huron, Ont.
- TOMKINSON point ; Ursula channel, Pacific coast, B.C. (Not Tomkinsin.)
- TOO-FLAT creek ; tributary to Klondike river, Yukon.
- TOO-MUCH-GOLD creek ; tributary to Klondike river, Yukon.
- Too-tlas river.* See Thomas.
- Torrent river.* See St. Mary.
- TOWER creek ; tributary to St. Mary river, E. Kootenay, B.C.
- TOWER peak ; north of Quiet lake, Yukon.
- TRACY creek and town ; east of Kootenay river, north of Steele, B.C.
- TRADING lake ; Ridout township, Muskoka district, Ont.
- TRENTON ; town at western end of Bay of Quinte, L. Ontario.
- TRENT river ; empties into Bay of Quinte at Trenton, Ont.
- TRIVET point ; on northerly part of Princess Royal island, Pacific coast, B.C.
- TROUT creek ; branch of McDame creek, Dease river, Cassiar, B.C.
- TSETELUI lake ; at headwaters of Kakuchuya river, Cassiar, B.C. (Not Tseteloui.)
- Tudjaktjuan island.* See Resolution.
- TUHULITAS inlet ; east coast Baffin Land, Franklin. (Not Toohoolitas.)
- TULIP creek ; east of Lower Arrow lake, W. Kootenay, B.C.
- TUMMEL river ; tributary to Pelly river, below "The Detour," Yukon.
- TUNAGAMIK lake ; at headwaters of Ottawa river, Joliette county, Q.
- TUNUSSAKSUK point ; south of Port Burwell, east shore of Ungava bay, Ungava.
- TURNER island ; north shore of Hudson strait, Franklin.
- TURNER, Mount ; east of Stikine river and north of Iskut river, Cassiar, B.C.
- TURQUOISE lake ; south of Lower Bow lake, Alta.
- TURTLE point ; northerly part of Gil island, Pacific coast, B.C.
- TUSTLES lake ; north of Frances lake, Yukon. (Not Tus-tles-tu.)
- TUTESHETA creek ; tributary to Tahltan river, Cassiar, B.C. (Not Tuteshita.)
- TUTSHI lake ; southeast of lake Bennett, Cassiar, B.C. (Not Toochi.)
- TUTTLE point ; at entrance to Stupart bay, Hudson strait, Ungava.
- TUVALIK ; Indian village, west coast of Ungava bay, Ungava.
- TWELVE O'CLOCK point ; at the eastern entrance to Murray canal, Murray township, Northumberland county, Ont.
- TWO-BIT creek ; east of Lower Arrow lake, W. Kootenay, B.C.
- TYENDINAGA ; township in Hastings county, Ont.
- TYERS river ; tributary to Frances river, near Frances lake, Yukon.
- U**IVAKSOAK cape ; east shore Ungava Bay, Ungava. (Not Uibvaksoak.)

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- UNAHINI river; tributary to Tatshenshini river, Yukon.
- UNGAVA; Provisional district and large bay, northeastern Canada.
- UNGER island; in Bay of Quinte, at mouth of Napanee river, Ont. (Not Unger's.)
- UPHILL lake; northeast of Manitou lake, Rainy R. district, Ont. (Not Sunshine nor Kasakacheweiwak.)
- UPPER ARROW lake; an expansion of Columbia river, W. Kootenay, B.C.
- UPPER BOW lake; source of Bow river, Alberta. (Not Coldwater lake.)
- UPPER JUMPING portage; below the outlet of L. Evans, northwestern Quebec.
- Upper Manitou lake.* See Anzhekumming.
- UPPER SAVAGE islands; north shore Hudson strait, Franklin. (Not Savage islands.)
- URD, Mount; peak in Valhalla mountains, W. Kootenay, B.C.
- URQUHART island; north shore of Hudson strait Franklin.
- URSULA channel; east of Gribbell island, Pacific coast, B.C.
- V**ALHALLA mountains; west of Slocan lake, W. Kootenay, B.C. (Not Val Halla.)
- VALKYR mountains; east of Lower Arrow lake, W. Kootenay, B.C. (Not Valkyriur.)
- VANCOUVER creek; tributary to McQuesten river, Yukon.
- VAN HOUTEN creek; east of Lower Arrow lake, W. Kootenay, B.C. (Not Van Hooven.)
- VERMILION bay; Eagle lake, Rainy R. district, Ont. (Not Vermillion.)
- VERNEY passage; between Hawkesbury and Gribbell islands, Pacific coast, B.C.
- VERTICAL, Mount; east of Kootenay river, E. Kootenay, B.C.
- VICTORIA creek; tributary to Wild Horse river, E. Kootenay, B.C.
- VICTORIA gulch; on Bonanza creek, Yukon.
- VIGILANT rock; east of Grantham shoals, Manitoulin island, L. Huron, Ont.
- VINGOLF mountain; west of Slocan a W Kootenay, B.C.
- VOLUNTEER spit; between Walker and Birch points, Manitoulin island, L. Huron, Ont.
- VON WILCZEK valley; on Lewes river, above Pelly river, Yukon. (Not Valley of Von Wilczek.)
- Vulture lake.* See Winnange.
- W**ABANONI river; flows into Obaska lake, northwestern Quebec. (Not Wabinoni.)
- WABASKU lake; southeast of Abitibi lake, Pontiac County, Q.
- WABI bay; at the head of L. Temiscaming, Ont.
- WABIGOON lake, river, and C.P.R. station; Rainy R. district, Ont. (Not Wabigwunn.)
- WADDELL bay; Frobisher bay, Franklin. (Not Dyer sound.)
- WADSWORTH lake; Tudor township, Hastings county, Ont.
- WAGOSH bay and reef; near Pulpwood point, Cockburn island, L. Huron, Ont. (Not Wahgoosh.)
- WAGWABIKA lake; headwaters of Lièvre river, St. Maurice county, Q. (Not Wagwabeya.)
- WAKHAM bay; south shore Hudson strait, Ungava.
- WAKONICHI lake; south of lake Mistassini, northwestern Quebec. (Not Wahwanichi nor Wakinichi.)
- WALBRAN point, north end of Loretta island Devastation channel, Pacific coast, B.C.
- WALES; cape, island, and sound, south shore of Hudson strait, Ungava. (Not Prince of Wales.)
- WALKER creek; north of Sixtynmile river, near international boundary, Yukon.
- WALKER point, south shore Manitoulin island, L. Huron, Ont.
- WALKHOUSE bay and point; Manitoulin island, northeast of Inner Duck island, L. Huron, Ont.
- WALLACE rock; near S. Baymouth, Manitoulin island, L. Huron, Ont.
- WALLBRIDGE point; Ameliasburgh township, Prince Edward county, Ont.
- WALLENGER creek; tributary to Wild Horse river, E. Kootenay, B.C.
- WALL-EYE lake; south of Eagle lake, Rainy R. district, Ont.
- WAPAGEISI lake; east of Anzhekumming lake, Rainy R. district, Ont.
- Wapta creek.* See Cataract brook.
- Wapta river.* See Kicking Horse.
- WAPUS lake and river, north of Kakagi lake, Rainy R. district, Ont. (Not Wapoose.)
- WAPUSANAN lake; upper waters of Ottawa river, north of Grand L., Victoria, Pontiac county, Q.
- WARD inlet; Frobisher bay, Franklin. (Not A. H. Ward.)
- WARDNER; town on Kootenay river, south of Bull river, E. Kootenay, B.C.
- WARWICK, Cape; east end of Resolution island, Franklin (Not Resolution.)
- WASHEBEMAGA lake; southeast of Saganaga lake, Rainy R. district, Ont. (Not Kawasheibemagagamak.)
- WASHEKA lake; upper Ottawa, Pontiac county, Q. (Not Waskega.)
- WASWANUPIE lake and river; tributary to Nottaway river, northwestern Quebec.

- WATSON valley ; north of L. Bennett, Yukon.
Wanguush river. See Kaniapiskau.
- WAY point ; southwest of Potter point, Ameliasburg township, Prince Edward county, Ont. (Not Salt point.)
- WEAVER creek ; tributary to Moyie river, E. Kootenay, B.C.
- WEDDING river ; tributary to Migiskan river, northwestern Quebec.
- WEESE creek ; Presquile bay, Brighton township, Northumberland county, Ont. (Not Weese's.)
- WEGGS, Cape ; and island of same name, on south shore of Hudson strait, Ungava.
- WEISEIENO lake ; near Manitou lake ; Rainy R. district, Ont.
- WELCOME lake ; Lawrence township, Haliburton county, Ont.
- WELLER bay ; Lake Ontario, near west end of Bay of Quinte. (Not Weller's.)
- WELLESLEY lake ; west of White river, Yukon.
- WEMISTAGOSEW river ; upper waters of Waswanipi river, northwestern Quebec.
- WESKETAHIN village ; near the mouth of Unahini river, Yukon.
- WESLEMKOON lake ; Ashby township, Addington county, Ont.
- WEST bay ; the western extremity of lake Evans, northwestern Quebec.
- WEST BELANGER point ; see Belanger point.
- WESTBOURNE bay ; north shore of Hudson strait, Franklin.
- WEST DUCK reef ; northwest of Western Duck island, L. Huron, Ont.
- WESTERN DUCK island ; west of Inner Duck island and northwesterly from Great Duck I. L. Huron, Ont.
- WEST SISTER shoal ; south of Yeo island, at entrance to Georgian bay, Ont.
- WETETNAGAMI lake and river ; tributary to Opawika river which flows into Waswanipi river, northwestern Quebec.
- WETTIGO lake ; south of Nemiskau lake, northwestern Quebec.
- WEYMONTACHI ; Indian village at the mouth of Manuan river, upper St. Maurice, Q. (Not Weymontachingue.)
- WHALE river ; flows into Ungava bay, Ungava.
- WHARTON harbour ; north shore of Hudson strait, Franklin.
- WHATSHAN lakes and river ; west of Lower Arrow lake, W. Kootenay, B.C.
- WHEATON river ; flows into west side of L. Bennett, Yukon.
- WHEELER reef ; southwest of Kitchener island, L. Huron, Ont.
- WHETSTONE lake ; Lake township, Hastings county, Ont.
- WHIPPLE, Mount ; east of the elbow of Stikine river, Cassiar, B.C.
- WHITE cliff ; northeast of Hungerford point, Manitoulin island, L. Huron, Ont.
- WHITE, Mount ; north of Atlin lake, Yukon.
- WHITE pass ; at head of Skagway river, Cassiar, B.C.
- WHITE river ; tributary to Yukon river, above Stewart river, Yukon.
- WHITE strait ; between north shore of Hudson strait and a large island, Franklin.
- WHITE BEAR bay ; north shore of Hudson strait, Franklin.
- WHITE BEAR lake and river ; at headwaters of Gatineau river, Champlain County, Q.
- WHITEGOOSE river ; tributary to Migiskan river below Paskagama lake, northwestern Quebec.
- WHITE GROUSE creek ; east of Whatshan lake, W. Kootenay, B.C.
- WHITEHORSE rapid ; Lewes river, below Miles canyon, Yukon.
- WHITESWAN river ; flows into south end of Teslin lake, Cassiar, B.C.
- WHITLEY bay ; south shore of Hudson strait, Ungava.
- WIKWASKAPAU lake ; northwest of Grand L. Victoria, northwestern Quebec.
- WILD bight ; in west side of Fitzwilliam island, L. Huron, Ont.
- WILD HORSE river ; tributary to Kootenay river near Steele, E. Kootenay, B.C. (Not Skirmish.)
- WILLIAM SMITH, Cape ; northeast shore Ungava bay, Ungava.
- WINAWIASH lake ; southwest of Grand L., Victoria, Pontiac county, Q.
- WINDY arm ; Tagish lake, Yukon.
- WINNAGE lake ; north of Dryberry lake, Rainy R. district, Ont. (Not Vulture.)
- WODEN, MOUNT ; a peak in Valhalla mountains, W. Kootenay, B.C.
- WOLF creek ; tributary to Klondike river, Yukon.
Wolf lake. See Grimsthorpe.
- WORTHINGTON creek ; west of Lower Arrow lake, W. Kootenay, B.C.
- WOTINIMATA lake ; northeast of Matchi Manito lake, northwestern Quebec.
- WRIGHT creek ; near west end of Surprise lake, Cassiar, B.C.
- WRIGHT creek ; tributary to Blanche river, L. Temiscaming, Ont.
- WRIGHT sound ; between Gribbell and Gil islands, Pacific coast, B.C.
- Y**AHK mountain, river, and R.R. station, in southwestern part of E. Kootenay, B.C.

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- YEO channel, island, and spit ; at entrance to Georgian bay, Ont.
- YETH creek : tributary to Inklin river, Cassiar, B.C.
- YORK river ; tributary to Madawaska river, Hastings and Renfrew counties, Ont. (Not York branch of Madawaska.)
- YORK sound ; southwest shore Frobisher bay, Franklin.
- YOUNGS point ; in Weller bay, Ameliasburg township, Prince Edward county, Ont.
- YUKON river ; northwest Canada, and Alaska. (Not Youcon, Youkon, Kwichpak, &c.)
- YUKON ; a territorial division of northwest Canada.
- Z**EMAWDZA. Indian village. Kitimat arm, Pacific coast, B.C. (Not Ze-mawd-za.)
- ZWICK island ; in the Bay of Quinte, Ontario.

THIRTY-THIRD ANNUAL REPORT

OF THE

DEPARTMENT OF MARINE AND FISHERIES

1900

FISHERIES

PRINTED BY ORDER OF PARLIAMENT



O T T A W A

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST
EXCELLENT MAJESTY

1901

*To His Excellency the Right Honourable SIR GILBERT JOHN ELLIOT, EARL OF MINTO,
Governor General of Canada, etc., etc.*

MAY IT PLEASE YOUR EXCELLENCY :

I have the honour to submit herewith, for the information of Your Excellency and the Legislature of Canada, the Thirty-Third Annual Report of the Department of Marine and Fisheries, Fisheries Branch.

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

LOUIS HENRY DAVIES,
Minister of Marine and Fisheries.

DEPARTMENT OF MARINE AND FISHERIES,
OTTAWA, December 31, 1900.

ALPHABETICAL INDEX

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FISHERIES REPORT

1900

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REPORT

OF THE

DEPUTY MINISTER.

To the Honourable

Sir LOUIS H. DAVIES, K.C.M.G., &c.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit the annual report upon the transactions of the Fisheries branch of the Department of Marine and Fisheries, embracing the fiscal year ending on June 30 last. The Fisheries Protection Service, Fisheries Intelligence, Behring Sea Question and Fish Culture reports comprise the whole calendar year 1900, and the statistics, as usual, are those covering the previous year.

A general review of the state of the fisheries during the year now ending is given in the preliminary reports of the fifteen Dominion Fishery Inspectors who have charge of the various fishery divisions in the several provinces. No changes have taken place in regard to the system of fishery protection by local officers under this department in the provinces of New Brunswick, Nova Scotia, Prince Edward Island, Manitoba, the North-west Territories, District of Yukon and British Columbia; but as pointed out in last year's report, the provinces of Quebec and Ontario took over fishery protection responsibilities so far as was defined in the judgment of the Lords of the Judicial Committee of the Privy Council in London, delivered on May 26, 1898.

Three special reports are appended by Professor Prince, Commissioner of Fisheries, treating of the following subjects:—

1. Planting of Young Fry: Its comparative advantages.
2. The Vernacular Names of Fishes.
3. Acclimatization of Fish, Fresh-water and Marine.

The Commissioner also adds, as an Appendix, his usual report on the Hatcheries, and Fish Culture operations, which are under his charge.

BAIT COLD STORAGE.

Reference was made in the report of last year to the inauguration of a system of bait cold storage, and the leading features of the system were indicated; these may be summarized as follows:—

1. Formation of 'Fishermen's Bait Associations' at the various fishing centres.
2. Incorporation of the associations formed under special acts passed by the local legislatures of the maritime provinces.
3. Erection of bait freezers under the superintendence of skilled foremen provided by the department.

4. Audit of the accounts by one of the officials, and the payment of fifty per cent of the cost by the Department.
5. Practical explanation of the method of freezing and storing fish frozen for bait.
6. Provision of suitable forms for returns to be made to the department showing daily the amount of fish received and issued and the temperatures maintained.
7. Payment of the bonus of \$5 per ton for bait frozen, up to 20 tons, on the certificate of an inspector.

Public meetings have been held at a large number of places in the provinces of Nova Scotia, Prince Edward Island, New Brunswick, and at the Magdalen Islands by officers of the department, and a number of fishermen's bait associations formed. During the past fishing season three freezers were in operation at Cape George, Antigonish Co., N.S., Frog Pond, Prince Co., P.E.I. and at Alberton in the same county

In addition to these, seven freezers have been erected at the following points:—Souris, King's Co., P.E.I., Gabarus, Cape Breton Co., C.B., Port Hood Island, Inverness Co., C.B., Whitehead and Port Beckerton, Guysborough Co., N.S., Bayfield, Antigonish Co., N.S. and Clarke's Harbour, Shelburne Co., N.S. Five freezers are under construction, viz. :—Sambro, Halifax Co., N.S., Port Maitland, Yarmouth Co., N.S., Lower East Pubnico, Yarmouth Co., N.S., Port la Tour, Shelburne Co., N.S. and Petit de Grat, Richmond, Co., C.B. Fifteen freezers are either built or building, and it is expected that five additional ones at least will be constructed. It is estimated that during the next fishing season, twenty bait freezers will be in operation around the shores of the maritime provinces, capable of storing 475 tons of frozen bait.

In addition to holding public meetings at various points a large amount of literature has been distributed, explaining the department's offer to the fishermen, and containing full instructions for the formation of fishermen's bait associations and information respecting the operation of the freezers.

The results obtained from the operations of the three bait freezers during the past fishing season were satisfactory. At Cape George the season was an exceptionally good one for fresh bait, and in consequence the fishermen did not require to use their supply of frozen herring, the presence of the freezer, however, was a guarantee that bait would be always obtainable. The past season has been a very favourable one for the fishermen of this locality. At Alberton no decisive results were obtained. The freezer was late in commencing operations, and a small charge only was frozen. At Frog Pond the results were very satisfactory and a large amount of fish valued at \$2,000 were caught which could not otherwise have been obtained. The President of this Association, Mr. A. F. Larkin, of Tignish, writes that he is 'certain that we are on the eve of a new era in the cod fishing business around our shores since the inauguration of the Fishermen's Bait Associations.'

The fishermen of the different localities visited have borne testimony to the value of the system of bait cold storage by the interest taken in the meetings and the efforts made by them to form associations. Financial considerations have prevented many localities from taking the offer up, that would otherwise have done so. Many prominent men engaged in the fishing industry have also written in support of the movement to establish a system of bait cold storage.

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The legislatures of Nova Scotia and Prince Edward Island at their last session passed special Acts for the free incorporation of Fishermen's Bait Associations, and it is anticipated that similar legislation will be enacted by the legislatures of the provinces of New Brunswick and Quebec.

The special committee appointed by the legislature of Nova Scotia to consider the state of the fisheries, among other resolutions reported as follows :—

'That your committee would also desire to impress upon the federal government their sense of the great importance of the enterprise (system of bait cold storage) conferring, as it will do, immense benefits on the fishermen by preserving fresh bait and encouraging the trade in fresh fish, which latter should attain to much greater proportions than it has hitherto done, and they would express the hope that government will continue to deal with it in the most liberal manner possible.'

Provision has been made for the erection of bait freezers varying in capacity from 10 to 50 tons and costing from \$500 to \$2,000. It has been found that the larger sized freezers are more in demand than the smaller ones ; of the fifteen freezers either built or building, only two have a smaller capacity than twenty tons.

As it is expected that Canadian vessels engaged in the deep sea fisheries will utilize to some extent the chain of freezers established around the coast, and as is it desirable to explain how frozen bait may be preserved after being taken from the freezers, it is proposed to issue during the winter, plans showing how small cold storage boxes can be built enabling frozen bait to be preserved on the fishing vessels.

It is proposed to continue the work along the same lines during the winter and spring, and it is expected that a great impetus will be given to the fishing industry, at those points where Fishermen's Bait Associations have been established.

MARINE BIOLOGICAL STATION.

The Marine Biological Station vigorously continued its work during the past season, a numerous staff of distinguished scientific workers and specialists occupying the laboratory tables, and conducting fishery and technical investigations, of practical value and importance. In order to allow of the completion of certain somewhat lengthened researches, the Marine Station was not moved from its location on Passamaquoddy Bay, near St. Andrews, N.B., though the proposal to tow the building round the coast, to the Nova Scotia shore, was fully discussed at the meeting of the Board of Management held in June. The great importance of the fisheries and of complex fishery problems along the eastern shores of Nova Scotia, around the Gut of Canso, and the coast of Cape Breton, weighed with the Board in considering the proposal to have this movable station conveyed to a new temporary site. A final decision will be arrived at, at the next meeting of the Board, early in the new year.

During the summer and fall, marine investigations were carried on by Professor Macallum, of the University of Toronto, Professor A. P. Knight, of Queen's University, Kingston; Dr. Joseph Stafford, Toronto University; Professor James Fowler, of Queen's University, Kingston; Dr. R. H. Scott, Toronto University; Professor E. W. MacBride, of McGill University, Montreal; Mr. Bower, of Kingston, Ont., Dr. F. S. Jackson, McGill University, and Dr. A. H. Mackay, Superintendent of Education for Nova Scotia, Halifax, N.S. The Commissioner of Fisheries (Professor Prince) carried on

some fishery studies in the fall, besides continuing to act as Director of the institution. Each of the ten scientific specialists above named took up several subjects; and much faunistic work was done by all, the fullest and most complete lists, however, being prepared by Dr. Stafford. It is not possible in this place to specify, with any attempt at detail, the various lines of investigation taken up by the staff; but the following special researches may be mentioned:—‘Effects of Polluted Waters on Fish life,’ by Professor Knight; ‘The Clam Fishery of Passamaquoddy Bay, including the Habits, Distribution and Breeding of the Clam,’ by Dr. Stafford; ‘The Food of Sea Urchins and other Echinoderms,’ by Dr. Scott; ‘The Flora and Marine Algæ of Passamaquoddy Bay,’ by Professor Fowler; ‘The Histology and Chemical Characteristics of Medusæ,’ by Professor Macallum; and ‘The Young Stages of the Salmon with special reference to Pacific Species,’ by Professor Prince. The MS. reports, with illustrative drawings, have for the most part been already placed in the director’s hands, including, in addition to most of the reports mentioned above, a paper on ‘The effect of the Sardine Fishery on the Herring Supply in New Brunswick,’ by Dr. B. Arthur Bensley, of Columbia University, New York, formerly of Toronto University, who spent the season of 1899 at the Biological Station.

The above scientific papers will be published as a supplement to this report.

The library of the Marine Station is as yet very inadequately equipped; but mention must be made of a munificent gift from the British government, through the kind offices of the Right Hon. Lord Strathcona, High Commissioner for Canada, by which the shelves of the laboratory have been enriched with a complete set of the magnificent reports of the ‘Challenger’ Expedition. The Right Hon. Joseph Chamberlain, Secretary of State for the Colonies, communicated to the High Commissioner on Sept. 11, 1899, the intimation that the Lords Commissioners of Her Majesty’s Treasury had given directions for the transmission of a complete set of the reports of the expedition of H.M.S. ‘Challenger,’ and the 50 large volumes, which are of very great value, were available for use this season. It is worthy of special mention that through the Secretary of the Station, Professor Penhallow, the board were informed early in the season of the completion of an arrangement with Dr. C. O. Whitman, Director of the Wood’s Holl Biological Station, U.S., whereby an investigator’s table in the Canadian Marine Station is placed at the service of a nominee from Wood’s Holl, on condition that a similar privilege is given to a nominee from the Canadian Biological Station. Dr. C. O. Whitman, the Board were informed, had reserved a table at Wood’s Holl in accordance with this proposition. Such mutual international courtesies are beneficial in many desirable ways, in addition to the benefit and advantage accruing scientifically. The first two seasons of the Biological Station’s work have been in every sense most successful, and the arduous and self-denying labours of eminent scientists who have resorted to it for purposes of research cannot fail to aid in a very practical way the fisheries of the Dominion.

GENERAL STATISTICS OF FISHERIES.

EXPENDITURE AND REVENUE.

The details of the total expenditure for the different fisheries services during the last fiscal year amounting to \$411,717, form the first appendix of this report. This amount comprises the fisheries proper \$85,151, fish-culture \$38,070, fisheries protection service \$97,370. Miscellaneous expenses \$31,125, besides the \$160,000 distributed as fishing bounties.

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The total amount received during the same period as revenue from fishery licenses, fines, &c., in the different provinces is given at \$88,406. This sum also includes the *modus vivendi* licenses granted to the United States fishing vessels (\$8,617).

A comparative statement of all fisheries expenditure and revenue for the last fourteen years concludes this appendix.

FISHING BOUNTIES.

During the year 1899, the deep-sea fishermen of the maritime provinces received the sum of \$160,000 as fishing bounties on the season's catch. Of this amount \$71,079 was divided amongst the owners of 789 vessels and their crews, and \$88,920 was distributed to 21,738 boat fishermen. These different amounts covered the payment of 13,628 claims. 131 claims were refused payment on account of illegalities.

For last year Nova Scotia received more than two-thirds of the bounty fund, amounting to \$106,598. The amount in Quebec was \$32,065, New Brunswick \$13,514, and Prince Edward Island \$7,822.

Since its inception (1882) the sum of \$2,841,369 has been distributed amongst the fishermen of the above mentioned provinces to substantially aid the development of their sea fisheries. See appendix No. 2, for further particulars.

EXTENT OF COAST.

The fisheries of Canada are the most extensive in the world, comprising an immense line, besides innumerable lakes and rivers. The eastern sea coast of the maritime provinces from the Bay of Fundy to the Straits of Belle Isle covers a distance of 5,600 miles, and that of British Columbia is given at 7,180 miles, or more than double that of Great Britain and Ireland.

While the salt water inshore area not including minor indentations covers more than 1,500 square miles, the fresh water area of that part of the great lakes belonging to Canada is computed at 72,700 square miles, not including the numerous lakes of Manitoba and the Territories all stocked with excellent species of food-fish.

CAPITAL INVESTED AND NUMBER OF PERSONS ENGAGED IN THE CANADIAN FISHERIES.

The following tables will show that no less than 79,863 men were last year earning their livelihood by exploiting our waters, using 5,506,760 fathoms of nets and other fishing gear representing a capital of \$10,000,000. Nearly twelve hundred schooners and tugs manned by 8,970 sailors, as well as 70,893 other fishermen, using over 38,000 boats, found occupation in this vast industry.

The lobster plant alone is estimated at \$1,334,180; comprising 858 canneries, dispersed on the sea board of the maritime provinces. No less than 18,708 persons found employment in this branch of the fishing industry, using over 1,360,000 traps.

The salmon preserving industry of British Columbia, comprising 69 canneries, and representing a capital of \$1,380,000, gives employment to 18,977 hands.

RECAPITULATION
 SHOWING THE VALUE OF VESSELS, BOATS, NETS, &c., AS WELL AS THE NUMBER OF FISHERMEN IN CANADA, 1899.

PROVINCE.	FISHERMEN IN		VESSELS.			BOATS.		GILL-NETS AND SEINES.		Value of pound and trap nets, trawls, etc.	Value of Lobster plant.	Approximate value of freezers, ice and smoke houses, and other fixtures, not itemized.	TOTAL VALUE.
	Vessels.	Boats.	Number.	Tonnage.	Value.	Number.	Value.	Fathoms.	Value.				
Nova Scotia.....	5,705	19,466	533	25,342	901,498	15,366	322,437	2,030,363	552,731	233,583	586,304	484,152	3,080,795
New Brunswick.....	1,131	11,843	276	3,640	118,450	6,743	265,992	974,241	640,811	297,198	367,047	492,390	2,181,888
Prince Edward Island.....	98	4,655	21	741	12,950	2,353	63,150	105,494	33,869	21,084	243,595	50,072	424,670
Quebec.....	154	13,096	29	986	18,100	7,328	189,170	383,030	193,962	104,492	137,143	196,540	839,407
Ontario.....	541	1,889	*109	1,886	238,925	1,033	70,505	1,192,271	198,604	135,266	.....	139,204	782,504
British Columbia.....	{ 4800 469 }	18,977	{ 426 153 }	{ 41,894 3,825 }	{ 484,500 313,550 }	{ 4353 4,829 }	{ 421,050 290,350 }	{ 682,734 }	518,823	27,050	.....	1,495,000	2,710,323
Manitoba and N.W. Territories.	72	967	*11	194	29,000	533	13,202	183,629	24,076	300	.....	63,675	130,253
Totals.....	8,970	70,893	.....	38,508	1,716,973	38,538	1,195,856	5,506,762	2,162,876	818,923	1,334,179	2,921,633	10,149,840

NOTE.—*Mostly tugs.
 †Sealing crews, whites and Indians.
 ‡Sealing vessels, boats and canoes.

SESSIONAL PAPER No. 22

STATEMENT of the Lobster industry in Canada, 1899.

PROVINCES.	Number of Persons Employed.	PLANT.				CATCH.					
		Number of Canneries.	Value.	Number of Traps.	Value.	Total Value of Plant.	Number of 1 lb. Cans.	Value.	Fresh or Alive.	Value.	Total Value of Catch.
Nova Scotia	7,570	247	217,491	681,173	368,903	586,394	4,837,402	967,480	134,462	672,310	1,639,790
New Brunswick	5,171	216	145,550	241,002	221,497	367,047	2,177,106	435,421	19,965	99,825	535,246
Prince Edward Island	3,176	240	95,230	283,114	148,365	243,595	2,421,144	484,229	46	230	484,459
Quebec	2,791	155	52,281	159,345	84,862	137,143	1,059,658	211,932	125	625	212,557
Totals	18,708	858	510,552	1,364,634	823,627	1,334,179	10,496,310	2,099,062	154,598	772,990	2,872,052

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COMPARATIVE TABLE showing Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries of Canada, together with the Value of Fishing Materials employed, from 1879 to 1899.

YEAR.	VESSELS.			BOATS.		Value of Nets and Seines.	Value of other Fishing Material.	Total of Capital Invested.
	No.	Tonnage.	Value.	No.	Value.			
			\$		\$	\$	\$	\$
1879	1,183	43,873	1,714,917	25,616	854,289	988,698	456,617	4,014,521
1880	1,181	45,323	1,814,688	25,266	716,352	985,978	419,564	3,936,582
1881	1,120	48,389	1,765,870	26,108	696,710	970,617	679,852	4,113,049
1882	1,140	42,845	1,749,717	26,747	833,137	1,351,193	823,938	4,757,985
1883	1,198	48,106	2,023,045	25,825	783,186	1,243,366	1,070,930	5,120,527
1884	1,182	42,747	1,866,711	24,287	741,727	1,191,579	1,224,646	5,014,663
1885	1,177	48,728	2,021,633	28,472	852,257	1,219,284	2,604,285	6,697,459
1886	1,133	44,605	1,890,411	28,187	850,545	1,263,152	2,720,187	6,814,295
1887	1,168	44,845	1,989,840	28,092	875,316	1,499,328	2,384,356	6,748,840
1888	1,137	33,247	2,017,558	27,384	859,953	1,594,992	2,390,502	6,863,005
1889	1,100	44,936	2,064,918	29,555	965,010	1,591,085	2,149,138	6,770,151
1890	1,069	43,084	2,152,790	29,803	924,346	1,695,358	2,600,147	7,372,641
1891	1,027	39,377	2,125,355	30,438	1,007,815	1,644,892	2,598,124	7,376,186
1892	988	37,205	2,112,875	30,513	1,041,972	1,475,043	3,017,945	7,647,835
1893	1,104	40,096	2,246,373	31,508	955,109	1,637,707	3,174,404	8,681,557
1894	1,178	41,768	2,409,029	34,102	1,009,189	1,921,352	4,099,546	9,439,116
1895	1,121	37,829	2,318,290	34,268	1,014,057	1,713,190	4,208,311	9,253,848
1896	1,217	42,447	2,041,130	35,398	1,110,920	2,146,934	4,527,267	9,826,251
1897	1,184	40,679	1,701,239	37,693	1,128,682	1,955,304	4,585,569	9,370,794
1898	1,154	38,011	1,707,180	38,675	1,136,943	2,075,928	4,940,046	9,860,097
1899	1,178	38,508	1,716,973	38,538	1,195,856	2,162,876	5,074,135	10,149,840

SESSIONAL PAPER No. 22

COMPARATIVE TABLE showing the number of men employed in the Fishing Industry since 1879.

Years.	Number of Persons in Lobster Canneries.	Number of Men in Vessels.	Number of Men in Boats.	Total Number of Fishermen.	Total Number of Persons in Fishing Industry.
1879.....		8,818	52,577	61,395	
1880.....		8,757	51,900	60,657	
1881.....		8,359	50,679	59,056	
1882.....		8,498	52,785	61,283	
1883.....		9,966	52,259	62,225	
1884.....		9,968	51,854	61,822	
1885.....		9,539	53,282	62,821	
1886.....		8,927	53,073	62,000	
1887.....		8,911	55,247	64,158	
1888.....		9,574	53,109	62,683	
1889.....		9,621	55,382	65,003	
1890.....		8,726	55,000	63,726	
1891.....		8,666	56,909	65,575	
1892.....		8,330	55,348	63,678	
1893.....		8,890	58,854	67,753	
1894.....		9,525	61,194	70,719	
1895.....	13,030	9,804	61,530	71,334	84,364
1896.....	14,175	9,735	65,502	75,237	89,412
1897.....	15,165	8,879	70,080	78,959	94,124
1898.....	16,548	8,657	72,877	81,534	98,082
1899.....	18,708	8,970	70,893	79,893	98,601

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VALUE OF THE FISHERIES.

The total value of the catch of fish in Canada for the year 1899 amounts to \$21,891,706, being an increase of about *two and a quarter million dollars* over the yield of the preceding year. This amount is subdivided by provinces as follows:—

Provinces.	Value.		Increase.	
	\$	cts.	\$	cts.
Nova Scotia.....	7,347,604	00	121,569	00
British Columbia.....	5,214,074	00	1,500,972	00
New Brunswick.....	4,119,891	00	270,533	00
Quebec.....	1,953,134	00	191,694	00
Ontario.....	1,590,447	00	156,815	00
Prince Edward Island.....	1,043,645	00		
Manitoba and North-west Territories.....	622,911	00	9,556	00

As will be noticed, there is an increase in almost every province, and British Columbia, which the previous year showed a decline of nearly two and a half million dollars, exhibits the highest surplus, amounting to over one and a half million dollars, due almost solely to the salmon industry in the province which fluctuates from year to year. New Brunswick, Quebec, Ontario and Nova Scotia also largely contributed to the above mentioned total increase.

The features of the various fisheries are fully explained by the different inspectors, in their respective reports, forming the appendices three to ten of this report.

The figures given above do not include the enormous quantity of fish consumed by the Indians of British Columbia, the Yukon district, and remoter parts of the North-west Territories, where fish form the staple food.

The following statement shows the relative values of the principal kinds of commercial fishes (above \$100,000) for the year 1899, as compared with those of the previous year:—

Kinds of Fish.	Value.		Increase.		Decrease.	
	\$	cts.	\$	cts.	\$	cts.
Salmon.....	4,534,020	00	1,374,714	00		
Cod.....	3,754,973	00	753,390	00		
Lobsters.....	2,872,052	00			1,015,887	00
Herring.....	2,164,050	00	176,596	00		
Trout.....	874,530	00	180,704	00		
Mackerel.....	801,694	00	107,103	00		
Haddock.....	686,611	00	5,054	00		
Whitefish.....	653,162	00	30,989	00		
Hake.....	595,806	00	204,256	00		
Sardines.....	509,270	00	80,248	00		
Smelts.....	441,063	00	21,521	00		
Halibut.....	275,210	00			16,066	00
Pickarel.....	274,694	00	38,699	00		
Pollock.....	243,086	00	98,378	00		
Oysters.....	162,052	00			54,972	00
Pike.....	160,314	00	64,800	00		
Sturgeon.....	137,690	00			61,470	00
Alewives.....	135,308	00			24,116	00
Tom cod.....	123,133	00	20,707	00		
Eels.....	109,580	00			9,040	00
Shad.....	107,752	00			261	00

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The quantity of fish used as bait is valued at \$401,809, that of fish oil at \$235,042, while the fur seal skins of British Columbia have realized \$441,825.

A glance at the above table will show that out of twenty one species valued at over \$100,000, fourteen have increased while seven have declined when compared with the previous yield. A most important fact to note is the \$1,374,714 reported in excess of the value of British Columbia *salmon pack*, of 1898, which was very much below that of the year before. Over thirty-six millions cans of salmon were preserved in that province in 1899 as against twenty-three millions in 1898.

Cod, which has advanced a step, now occupies second place on the honour roll of these returns. The improvement over the previous year's take valued at three-quarters of a million dollars, applies to every province, but Nova Scotia can boast of the largest share, with 186,000 cwt. surplus over the catch of 1898.

Other fluctuations worth mentioning are the increases to be noted in hake, trout, herring and mackerel.

While the sardine canning establishments of Charlotte County did not put up as large a pack as in the previous season, the quantity caught in the weirs and sold to the Maine canneries shows an increase of over forty-five thousand barrels.

From the year 1869 to 1899 inclusive, the five principal commercial fishes have yielded the following enormous total values :—

Cod.....	\$117,523,126
Herring.....	60,664,916
Lobsters	59,210,127
Salmon	59,103,171
Mackerel.....	39,683,427

EXPORT OF FISH.

During the last fiscal year the value of fish exported from Canada to foreign countries is given as follows :—

Nova Scotia	\$5,007,798
British Columbia	3,443,037
New Brunswick.....	731,392
Prince Edward Island.....	590,152
Ontario	548,823
Quebec	541,376
Manitoba and North-west Territories	306,505

\$11,169,083

Details of these exports will be found in the Customs Department's reports, 1900.

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STATEMENT of the production of each Branch of the Fisheries

No.	KINDS OF FISH.	NOVA SCOTIA.		NEW BRUNSWICK.		BRITISH
		Quantity.	Value.	Quantity.	Value.		Quantity.
			\$		\$	
1	Cod, dried Cwt.	629,810	2,519,240	87,230	348,920	5,375
	" tongues and sounds Brls.	1,136	11,360	140	1,400	
2	Haddock, dried Cwt.	126,355	379,065	6,975	20,925	
	" fresh Lbs.	3,582,102	107,463	781,000	23,430	
	" smoked (finnan haddies) Lbs.	1,353,966	81,238	1,080,050	65,763	
3	Hake, dried Cwt.	196,693	442,559	28,702	64,580	
	" sounds Lbs.	53,775	26,888	20,191	10,095	
4	Pollock Cwt.	98,503	197,006	23,040	46,080	
5	Tom cod or frost fish Lbs.	199,655	9,983	1,713,000	85,680	
6	Halibut Lbs.	1,473,162	147,316	72,400	7,240	2,075,000
7	Flounders Lbs.	593,890	29,695	125,400	6,270	
	Salmon, preserved in cans Lbs.	4,787	718	8,200	1,230	36,443,912
	" fresh Lbs.	387,087	77,417	1,246,510	249,302	1,873,550
8	" smoked Lbs.	6,252	1,250	400	80	211,500
	" pickled Brls.	1,015	15,225			3,450
	" dry salted Lbs.					3,000,000
9	Trout Lbs.	104,812	10,481	188,800	18,880	328,800
10	Ouananiche Lbs.					
11	Whitefish Lbs.					
12	Smelts Lbs.	376,060	18,803	7,033,800	351,690	74,000
13	Oulachans (in B.C.) Lbs.					1,077,000
	Herring, salted Brls.	80,632	322,528	194,546	778,184	
14	" fresh Lbs.	3,973,151	39,732	20,396,000	203,960	625,000
	" smoked Lbs.	557,050	11,141	8,885,775	177,716	187,600
	" kippered Lbs.				36,120	
15	Sardines, preserved Cans.			1,261,000	63,050	
	" Brls.			217,921	433,842	
16	Shad Brls.	3,647	36,470	6,598	65,985	22
17	Alewives Brls.	11,807	47,228	20,614	82,456	
18	Pike Lbs.					
19	Maskinongé Lbs.					
20	Eels, salted Brls.	2,237	22,370	2,288	22,880	
	" fresh Lbs.					
21	Perch Lbs.			25,000	1,250	
22	Pickarel Lbs.			158,000	7,900	
23	Bass Lbs.	11,960	1,191	337,400	33,740	
24	Mackerel, salted Brls.	13,454	201,810	40	600	
	" fresh Lbs.	3,692,117	443,054	325,450	39,054	
25	Sturgeon Lbs.			12,000	840	278,650
	" caviare Lbs.			490	245	4,000
26	Lobsters, canned Lbs.	4,837,402	967,480	2,177,106	435,421	
	" fresh or alive Cwt.	134,462	672,310	19,965	99,825	
27	Oysters Brls.	2,027	8,108	17,250	69,000	
28	Clams Brls.	2,454	8,180		45,631	
29	Squid Brls.	12,762	51,048	178	712	
30	Coarse and mixed fish Brls.	64,009	128,018	4,750	9,500	110
	" Lbs.			102,450	8,373	
31	Home consumption (not included above)					
32	Fur seal skins (in B.C.) No.					35,346
33	Hair " No.	8	10	65	106	7,600
34	Belugas (white whales) No.					
35	Fish oil Galls.	401,828	120,549	55,730	16,719	145,200
36	Fish as bait Brls.	99,058	148,587	86,195	137,692	
37	Fish as manure and guano Brls.	84,166	42,083	95,050	47,525	55,000
	Totals		7,347,604		4,119,891	

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in the different Provinces of Canada for the Year 1899.

COLUMBIA.		QUEBEC.		ONTARIO.		P. E. ISLAND.		MANITOBA AND N.-W. TERRITORIES.		No.
Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.		
\$		\$		\$		\$		\$		
26,875	183,720	737,500				26,422	105,688		1	
	238	2,380				161	1,610			
	1,360	4,080				980	2,940		2	
	53,510	1,605				3,000	90			
	180	405				200	12		3	
						14,687	33,046			
						36,466	18,233		4	
	1,216,700	25,735				34,700	1,735		5	
103,750	165,343	16,534				3,700	370		6	
									7	
3,644,391									8	
187,355	885,810	177,162								
21,150						8,000	1,600		9	
34,500	176	2,640								
120,000									10	
32,880	550,724	55,072	7,578,120	747,832	51,350	5,135	85,000	4,250		
	98,000	5,800							11	
	87,668	7,013	3,313,990	264,663			7,622,520	381,486		
3,700	406,700	20,335				942,700	47,135		12	
53,200									13	
	39,837	159,348	647	2,590	34,797	139,188				
18,750	8,944,450	89,445	8,155,910	163,118	134,800	1,348			14	
18,700	108,500	2,170			600	12				
									15	
	4,126	12,378								
225	440	5,072							16	
					1,406	5,624			17	
	327,405	13,098	1,849,774	73,991			3,661,258	73,225	18	
	90,420	5,425	304,599	18,276					19	
	301	3,010			794	7,940			20	
	848,920	50,935	40,745	2,445						
	255,430	7,663	681,165	20,435			72,513	1,435	21	
	371,110	18,555	3,580,126	179,006			2,307,758	69,233	22	
	143,545	11,884	300,579	24,046					23	
	5,391	80,865			100	10				
					2,260	33,900			24	
					20,092	2,411				
13,933	483,057	28,983	755,932	45,356			559,787	32,437	25	
1,600			21,414	6,424			15,745	7,872		
	1,059,658	211,932			2,421,144	484,229			26	
	125	625			46	230				
12,000					18,236	72,944			27	
9,080					335	1,340			28	
	5.032	20,128			686	2,744				
1,100	160	320			1,400	3,625			29	
51,300	3,322,275	36,290	2,043,867	42,265			4,102,582	47,248		
350,000							572,500	5,725	30	
441,825									31	
5,700	4,180	5,225			10	20				
	227	908							32	
43,560	161,782	48,535			18,932	5,679			33	
	39,042	58,563			37,978	56,967				
16,500	50,871	25,436			7,840	7,840			34	
									35	
									36	
									37	
5,214,074		1,953,134		1,590,447		1,043,645		622,911		

RECAPITULATION

OF the Yield and Value of the Fisheries in the Dominion of Canada for the Year, 1899.

No.	Kinds of Fish.	Quantity.	Value.	Total Value.
			\$	\$
1	Cod, dried.....	Cwt. 932,557	3,738,223	
	" tongues and sounds.....	Brls. 1,675	16,750	3,754,973
2	Haddock, dried.....	Cwt. 135,670	407,010	
	" fresh.....	Lbs. 4,419,612	132,588	
	" smoked finnan haddies.....	" 2,434,216	147,013	686,611
3	Hake, dried.....	Cwt. 240,262	540,590	
	" sounds.....	Lbs. 110,432	55,216	595,806
4	Pollock.....	Cwt. 121,543		243,086
5	Tom cod or frost fish.....	Lbs. 3,164,655		123,133
6	Halibut.....	" 3,789,605		275,210
7	Flounders.....	" 719,290		35,965
	Salmon, preserved in cans.....	" 36,456,899	3,646,339	
	" fresh.....	" 4,391,957	691,236	
8	" smoked.....	" 226,152	24,080	
	" pickled.....	Brls. 4,641	52,365	
	" dry salted.....	Lbs. 3,000,000	120,000	4,534,020
9	Trout.....	Lbs. 8,887,606		874,530
10	Ouananiche.....	" 98,000		5,880
11	Whitefish.....	" 11,024,178		653,162
12	Smelts.....	" 8,833,260		441,663
13	Oulachans (in B.C.).....	" 1,077,000		55,200
	Herring, salted.....	Brls. 350,459	1,401,838	
	" fresh.....	Lbs. 42,229,311	516,353	
14	" smoked.....	" 9,738,925	209,739	
	" kippered.....	"	36,120	2,164,050
15	Sardine, preserved.....	Cans. 1,261,000	63,050	
	".....	Brls. 222,047	446,220	509,270
16	Shad.....	Brls. 10,707		107,752
17	Alewives.....	" 33,827		135,308
18	Pike.....	Lbs. 5,838,437		160,314
19	Maskinonge.....	" 395,019		23,701
20	Eels, salted.....	Brls. 5,620	56,200	
	" fresh.....	Lbs. 889,665	53,380	109,580
21	Perch.....	" 1,034,108		30,783
22	Pickarel.....	" 6,416,994		274,694
23	Bass, sea (striped).....	" 349,460	34,941	
	" black, (achigan).....	" 449,124	35,930	70,871
24	Mackerel, salted.....	Brls. 21,145	317,175	
	" fresh.....	Lbs. 4,037,659	484,519	801,694
25	Sturgeon.....	" 2,089,426	121,549	
	" caviare.....	" 41,649	16,141	137,690
26	Lobsters, preserved in Cans.....	" 10,495,310	2,099,062	
	" fresh or alive.....	Cwt. 154,598	772,990	2,872,052
27	Oysters.....	Brls. 40,513		162,052
28	Clams.....	"		64,231
29	Squid.....	" 18,658		74,632
30	Coarse and mixed fish.....	" 70,429	142,563	
	".....	Lbs. 10,597,174	185,476	328,039
31	Home consumption.....	"		355,725
32	Fur seal skins (in B.C.).....	No. 35,346		441,825
33	Hair.....	" 11,863		11,061
34	Beluga or (white whale).....	" 227		908
35	Fish-oil.....	Galls. 783,472		235,042
36	Fish as bait.....	Brls. 262,273		401,809
37	Fish as manure and guano.....	" 292,927		139,384
	Total for 1899.....			21,891,706
	" 1898.....			19,667,121
	Increase.....			2,224,585

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RECAPITULATION.

SHOWING the Total Value of the Fisheries in the respective Provinces of Canada, from 1870 to 1899, inclusive, as compiled from the Annual Reports of the Department of Fisheries.

Year.	Nova Scotia.	New Brunswick.	Prince Edward Island.	Quebec.	Ontario.	British Columbia.	Manitoba and North-west Territories.	Total for Canada.
1870.....	\$ 4,019,425	\$ 1,131,433	No data.	\$ 1,161,551	\$ 264,982	No data.	No data.	\$ 6,577,391
1871.....	5,101,030	1,185,033	"	1,093,612	193,524	"	"	7,573,190
1872.....	6,016,835	1,905,459	"	1,320,189	267,633	"	"	9,570,116
1873.....	6,577,085	2,285,662	207,595	1,391,564	293,091	"	"	10,754,997
1874.....	6,652,302	2,685,794	288,863	1,603,660	446,267	"	"	11,681,886
1875.....	5,573,851	2,427,654	298,927	1,596,759	453,194	"	"	10,350,385
1876.....	6,029,050	1,953,389	494,967	2,097,668	437,229	104,697	"	11,117,000
1877.....	5,527,858	2,133,237	763,036	2,560,147	438,223	583,433	"	12,065,384
1878.....	6,131,600	2,305,790	840,344	2,664,055	348,122	925,767	"	13,293,678
1879.....	5,752,937	2,554,722	1,402,301	2,820,395	397,133	631,766	"	13,529,254
1880.....	6,201,061	2,744,477	1,675,089	2,631,566	444,491	713,335	"	14,499,979
1881.....	6,214,782	2,936,904	1,955,290	2,751,962	509,903	1,454,321	"	15,817,162
1882.....	7,131,418	3,192,339	1,855,087	1,976,516	825,457	1,842,675	"	16,821,092
1883.....	7,689,374	3,185,674	1,272,468	2,138,997	1,027,033	1,644,646	"	16,938,132
1884.....	8,763,779	3,730,454	1,085,619	1,694,591	1,133,724	1,358,267	"	17,766,404
1885.....	8,283,922	4,005,431	1,293,430	1,719,460	1,342,692	1,342,692	"	17,222,973
1886.....	8,413,362	4,180,227	1,141,991	1,741,382	1,435,998	1,577,348	186,980	18,679,288
1887.....	8,379,782	3,539,597	1,037,426	1,773,567	1,531,850	1,974,887	129,084	18,386,103
1888.....	7,817,030	2,941,863	876,862	1,860,012	1,839,869	1,902,193	17,418,510	17,418,510
1889.....	6,346,722	3,067,039	886,430	1,876,194	1,963,123	3,348,067	167,679	17,653,256
1890.....	6,636,444	2,699,055	1,041,109	1,615,119	2,004,637	3,481,432	232,104	17,714,902
1891.....	7,011,300	3,571,050	1,238,733	2,008,678	1,896,389	3,008,755	332,969	18,977,878
1892.....	6,340,724	3,203,922	1,173,836	2,236,732	2,042,198	2,819,433	1,088,254	18,941,171
1893.....	6,407,379	3,746,121	1,133,368	2,218,905	1,634,430	4,443,963	1,042,093	20,686,661
1894.....	6,547,387	4,351,526	1,119,738	2,303,386	1,659,968	3,950,478	1,942,093	20,719,573
1895.....	6,213,131	4,403,158	976,836	1,867,920	1,584,473	4,401,354	752,466	20,199,338
1896.....	6,070,895	4,799,433	976,136	2,025,754	1,605,674	4,078,999	638,416	22,788,546
1897.....	8,090,346	3,394,135	954,949	1,737,011	1,289,922	6,138,865	613,355	19,667,121
1898.....	7,226,034	3,849,357	1,076,202	1,761,440	1,433,632	3,713,101	622,911	21,891,706
1899.....	7,347,604	4,119,891	1,043,645	1,953,134	1,590,447	5,214,074		
Totals.....	200,606,351	92,843,706	28,110,887	58,306,886	32,280,708	60,524,946	7,519,528	480,089,028

FISH CULTURE.

The Fish Culture report for the year 1900, by Professor E. E. Prince, Commissioner of Fisheries, will be found in Appendix 11 of this publication. It includes a complete description of the various fish breeding operations, such as the capture of parent fish, collection of eggs, &c., at the different hatcheries by their respective officers in charge.

During the year no less than 265,996,000 fry were hatched and distributed in Canadian waters, nearly half of which were lobsters, the balance consisting of salmon, great lake trout and whitefish.

For the second time a quantity of rainbow trout have been procured and hatched in a Dominion establishment, viz., Bedford Hatchery, N.S. This Pacific species is reported to reach a large size, to be of superior edible qualities, and is a fine game fish, so that its introduction into Nova Scotia waters, with the co-operation of the Nova Scotia Game and Fish Society is a matter of unusual interest.

Reference is made in the Commissioner's report (Appendix 11) to the erection of new hatcheries in Inverness County, Cape Breton; Gaspé, P.Q., and Shuswap Lake, near famous spawning grounds of the Fraser River salmon, commonly called Sockeye or Blue-back salmon. A quantity of eggs of Rainbow trout were procured as in the previous season, and part of them were shipped, with 10,000 land-locked salmon eggs to Glencoe, in Scotland, at the request of the Right Hon. Lord Strathcona. They arrived safely and were planted in the Glencoe waters. A reserve or inclosed sheet of water has been secured by the department as a black bass breeding ground near Belleville, the parent fish being from the Bay of Quinte, long famous as a black bass resort, but during recent years considerably deteriorated. It is anticipated that the department will have a supply of young black bass from this breeding reserve.

Unfortunately the request of the New Zealand government this year for a shipment of B.C. salmon eggs, same as sent before, could not be acceded to. All the arrangements were made, but the supply of ova this fall (1900) was seriously short.

Most of the hatcheries had a successful season of work, indeed much above the average, as Professor Prince points out in his report. Thus the work of fish culture has not only been carried on during the year with undiminished activity and success, but steps have been taken to extend the operations and to vastly increase the benefits which it is admitted accrues from the government fish-breeding operations.

OYSTER CULTURE.

A full report of last season's work on the culture of oysters by the department's expert, Mr. Ernest Kemp, follows the fish culture report of which it forms an annex.

FISHERIES PROTECTION SERVICE.

The report of the operations of the Fisheries Protection Service during the season of 1900, by Commander O. G. V. Spain, forms Appendix 12 of this publication. It is pleasing to note that this service has again been carried on without accidents and in a very satisfactory manner.

The fleet of cruisers consisted of the same ships as last year, with the addition of the steamer *Brant*, viz., the *Acadia*, *La Canadienne*, *Curllew*, *Osprey*, *Kingfisher*, *Constance*,

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Aberdeen and *Petrel*. The latter cruising in the Ontario Great Lakes, and the others in the Gulf of St. Lawrence and off the Atlantic coast. The *Quadra* is also partly employed for the protection of our fisheries on the British Columbia coast.

The number of United States fishing vessels taking advantage of the *modus vivendi* licenses was 78.

A glance at the long list of foreign fishing schooners calling on our ports shows of what importance these harbours are to their fishing fleet.

The officers of the cruisers devoted a good deal of time to the protection of the lobster industry, and many thousand traps found fishing during the close time were seized and destroyed.

FISHERIES INTELLIGENCE BUREAU.

A full report of this branch of the service, which also comes under the charge of the Commander of the Protection Service, by Mr. A. D. McKarrow, clerk in charge, forms an annex to Appendix 12.

Daily compilations of the reports of 55 stations now dispersed on our Atlantic coast, are sent to Halifax and then telegraphed to the principal fishing localities of the province.

THE BEHRING SEA QUESTION AND PELAGIC SEALING.

The diplomatic or international status of this question remains unchanged, it being, as explained in the Report for 1899, page XXXI : one of those included in the scope of the Joint High Commission for the consideration of the differences between Canada and the United States.

The prosecution of the pelagic sealing industry by Canadians therefore still continues under the provisions of the Paris Award Regulations, applied to British sealers by Imperial legislation,—the 'Behring Sea Award Act, 1894,' 57 Victoria, Chapter 2.

Intimation was given in March that the United States government had detailed the revenue steamers *Bear*, *McCulloch*, *Manning* and *Perry* to cruise in the waters of the North Pacific Ocean and Behring Sea, during the season of 1900, with a view to the proper enforcement of the regulations of the Paris Tribunal of Arbitration for the protection and preservation of fur seals.

The vessels employed for similar patrol service by the British government were the same as the previous year, viz.: H.M. ships *Icarus* and *Pheasant*.

The sealing fleet this year numbered thirty-seven vessels, being an increase of eleven over last year—and representing an aggregate of 2,641 tons register.

Of these thirty-seven vessels, thirty-three were engaged in what is known as the coast fishery, i. e., the coast of the Pacific from the southern sealing limit to Alaska, and these thirty-three and three others, in all thirty-six, operated in Behring Sea, after the expiration of the close season, which covers May, June and July.

One schooner, the *Minnie*, although employed in the coast fishery, did not participate in the Behring Sea fishery, and two others appear to have worked in Asiatic waters, as well as in the coast and Behring Sea ventures.

The crews of these vessels comprised 386 white men and 646 Indian hunters, employing 114 boats and 316 canoes.

The total number of fur-seal skins taken by Canadian sealers during 1900 was 35,523. Of these the vessels took 34,159, and the coast Indian canoe catch was 1,364 skins. This result is larger by 177 skins than that of the previous year, which in its turn largely exceeded the catches of 1898 and 1897.

The coast catch was 16,438 against 10,471 skins last year; the Behring Sea catch 17,513, against 23,284; the Asiatic catch 208, against 699; and the Indian catch 1,364, against 892.

Although the total catch of 1900 is slightly in excess of that of 1899, the average catch per vessel shows a falling off, if the comparison were confined to these two specific years. For the purpose of convenience and reference, it might be well to here reproduce a short table of averages for eleven years, published in the last departmental report adding to it the figures for the season just closed:—

Year.	Vessels.	Catch.	Averages per vessel.
1889	23	29,570	1,285
1890	29	39,351	1,357
1891	51	50,437	989
1892	65	46,362	713
1893	55	67,797	1,233
1894	59	90,485	1,533
1895	61	66,962	1,097
1896	64	53,324	833
1897	41	29,392	717
1898	35	27,452	784
1899	26	34,454	1,325
1900	37	34,159	924

The decrease in the average catch per vessel is more apparent than real. If the figures for the past seven years are examined, it will be observed that the average catch for 1899 (1,325 skins), was abnormal, while that for 1894 (1,533 skins), largely exceeded any catch in the history of the industry; yet the average per vessel for this year is 924, against an average of 902 for the seven years—1894 to 1900.

These years are particularly apposite, because they represent the full term of the application of the Paris Award regulations; they comprise the seven last consecutive years of the industry; and also include these two abnormal averages. When it is further considered that more than half the extraordinary catch of 1894 was secured off the coast of Japan, there are reasonable indications of a not unhealthy condition of the pelagic sealing business in the North American waters of the Pacific.

The quality of the seal skins obtained this year is reported to be very good, and the prices favourable, although the competition for Indian hunters was keen, and the pay or remuneration consequently high.

The vessels cleared from Victoria in January and February, proceeding along the Oregon and California coasts to about seventy-five miles south of San Francisco. Returning, they follow the seals northward, and the majority arrive at Victoria about the

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end of May, or the first week in June, thus ending the spring, or coast fishery. Those having Indian hunters went to the west coast of Vancouver Island to the native villages.

For the Behring Sea branch of the business, all the vessels had sailed before the first of July.

There is a slight increase in the number of branded seals captured, and the operation of branding appears to be continued on the islands by the United States authorities, although the department has no definite information on this point for the past season. So far as the sealing statistics show, it appears that branded seals were observed in the pelagic catch for the first time in 1898, when six skins so treated were taken, out of a total catch of 28,000 seals. During the following year, 1899, the returns revealed that the number of seals taken showing evidence of branding, had increased to sixteen, which number had been found among an aggregate catch of over 35,000 seals, only eleven vessels out of twenty-six securing a branded seal.

During the season of 1900, forty-five branded skins are among the catch, having been taken by twenty-one vessels, out of thirty-seven engaged in sealing. One vessel took six out of 1,362 skins, one took five out of 1,081, one took four out of 1,416, the others ranging from three to one each.

So far as can be learned, there have been no complaints of transgressions of the law or regulations by the sealers this year; nor have any complications arisen by the application of the law affecting the business.

The only disaster reported, is the wreck of the schooner *Minnie* of Victoria which vessel struck on the rocks of Ugamok Island, on the evening of July 26, and became a total loss. She had a crew of seven white men and thirteen Indians, all of whom were taken on the schooner *Walter L. Rich*, which vessel proceeded on the sealing voyage into Behring sea.

It is said that several Japanese schooners, managed and sailed by sealers formerly in the business on the British Columbia coast, had been very successful this year on the Japan coast, and it is expected that this will act as an incentive to the Canadian sealers to resume to some extent their operations off that coast.

From 1892 to 1896 inclusive, the business was pursued by Canadians with much success off the Japanese coast; but in 1897 the number of vessels visiting that locality fell to eleven, and the following year, 1898, only one vessel crossed the ocean to that coast, while for the past two years, no Canadian vessels have exploited those waters.

The vessels crossing to the Japan side cannot of course participate in the North American coast fisheries, and any increase in the number visiting the waters in the vicinity of Japan, means a corresponding withdrawal from, or decrease in the fleet operating on our coasts. This natural condition should afford an automatic protection of these two branches of pelagic sealing from undue prosecution, should they both prove remunerative.

In past years the sealers have attempted to form some kind of association, by which means the competition for skilled hunters would be lessened, and the industry pursued under better management, and on a more economical basis.

Up to the present season they met with but indifferent success in this direction; but they recently formed themselves into a joint stock company, under the name of 'The Victoria Sealing Company, Limited.'

This company is said to have acquired the whole of the British Columbia fleet at present participating in the pelagic sealing industry, with the exception of two or three schooners, which it is expected will join the company before the approaching sealing season begins.

ARBITRATION OF SEIZURES OF SEALING VESSELS BY RUSSIA IN 1892.

Although considerable diplomatic correspondence has passed between Her Majesty's government, the Russian government and that of Canada, in connection with the negotiation of the terms of reference of the claims to the arbitrator, the text of the note to be exchanged between Great Britain and Russia, has not yet been agreed to.

It has been announced in the press of St. Petersburg, that the contract with the Russian Company, who for the past ten years has had the lease of the hunting rights on the Russian seal islands, expires in February next, and that a new contract for a period of ten years would shortly be considered; all tenderers, however, must be Russian subjects, or members of Russian firms.

THE STAFF.

The outside staff of fishing officers connected with this department during the year ending 31st December, 1900, aggregate, 836 men, including the crews of the fisheries protection fleet.

These officers were dispersed by provinces as follows:

Ontario	3
Quebec	11
Nova Scotia.....	59
New Brunswick.....	29
Prince Edward Island.....	5
Manitoba	5
North-west Territories.....	7
British Columbia.....	9
Fishery guardiams employed in 1900.....	290
Officers and crews of the Fisheries Protection Vessels.....	418
	<hr/>
Total	836

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The following are inspectors of fisheries in the different provinces of the Dominion :

Name.	P. O. Address.	Extent of Jurisdiction.
Bertram, A. C	North Sydney, N.S.	District No. 1.—Cape Breton Island.
Hockin, Robt.	Pictou, N.S.	District No. 2.—Cumberland, Colchester, Pictou, Antigonish, Guysboro, Halifax and Hants counties.
Ford, L. S.	Milton, N.S.	District No. 3.—Lunenburg, Queen's, Shelburne, Yarmouth, Digby, Annapolis and King's counties.
Pratt, J. H., Capt.	St. Andrews, N.B.	District No. 1.—The county of Charlotte.
Chapman, Robt. A.	Moncton, N.B.	District No. 2.—Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert counties.
Miles, H. S.	Oromocto, N.B.	District No. 3.—St. John, King's, Queen's, Sunbury, York, Carleton and Victoria counties.
Matheson, J. A.	Campbellton, P.E.I.	Prince Edward Island.
Wakeham, Wm., M.D.	Gaspé Basin, Que. ...	Lower St. Lawrence River and Gulf.
Lavoie, N., M.D.	L'Islet, Q.	That portion of Quebec, south of River St. Lawrence and north and east of and including county of Bellechasse.
Belliveau, A. H.	Ottawa.	Province of Quebec, north of River St. Lawrence and west from and including River Saguenay, and the portion south of River St. Lawrence which lies west and south of the county of Bellechasse.
Cunningham, F. H.	Ottawa.	That portion of Ontario east of the western boundary line of the counties of Durham, Victoria and Haliburton including Lake Scugog and the eastern boundary of Muskoka and Parry Sound districts.
Sheppard, O. B.	Toronto, Ont.	That part of the province of Ontario, west of the eastern boundaries of the county of Ontario, and the districts of Muskoka and Parry Sound along the Mattawa and Ottawa Rivers and northward along the north eastern boundary line of said province to James Bay.
Duncan, A. G.	Marksville, Ont.	That portion of Ontario lying west and north of Lake Nipissing, the Rivers Mattawa and Ottawa and the north-east boundary line of the province to James Bay, embracing Nipissing, Algoma, Thunder Bay and Rainy River districts, Lake Superior and such portions of Lake Huron and Georgian Bay as lie adjacent or opposite to the part of Ontario above described.
Colcleugh, F. W.	Selkirk, Man.	Province of Manitoba.
Miller, E. W.	Qu'Appelle, N.W.T.	All the North-west Territories.
Stewart, Theophilus.	Dawson City.	Yukon District, N. W. Territories.
Sword, C. B.	N. Westminister, B. C.	Province of British Columbia.

The following are the officers in charge of the Government Fish Hatcheries :

Name.	Rank.	P. O. Address.
Armstrong, Wm.	Officer in charge of Government Fish Hatchery.	Newcastle, Ont.
Parker, Wm.	"	Sandwich, Ont.
Walker, John.	"	Ottawa, Ont.
Finlayson, Alex.	Asst. officer in charge of Government Fish Hatchery.	Magog, Que.
Catellier, L. N.	Officer in charge of Government Fish Hatchery.	Tadoussac, Que.
Mowat, Alex.	"	Campbellton, N.B.
McCluskey, Chas.	"	Grand Falls, N.B.
Sheasgreen, Isaac.	"	South Esk, Miramichi, N.B.
Ogden, A.	"	Bedford Basin, N.S.
"	Government Lobster Hatchery.	Pictou, N.S.
Sword, C. B.	Officer in charge of Government Fish Hatchery.	New Westminister, B. C.
Colcleugh, F. W.	"	Selkirk, Man.
Kemp, Ernest	"	Oyster culture. Ottawa, Ont.

PRELIMINARY REPORTS ON THE FISHING SEASON OF 1900.

A glance at the preliminary reports (herewith appended) received from our different inspectors in their respective provinces or districts, on the general aspects of the fishing operations for the season of 1900, now closing, indicates a falling off in the aggregate value of the fish catch as compared with that of 1899, as detailed in this report.

The salmon canning industry of British Columbia alone will be responsible for a million dollars decrease. Considerable diminutions are also expected from the Cape Breton and Bay of Fundy districts, where the herring and sardine fishermen have fared badly. Another disadvantage was the extraordinary storms prevailing during the autumn, which not only destroyed numerous fishing vessels and much gear, but brought bereavement to many humble homes. The drowning, off the coast of Prince Edward Island, of forty-seven fishermen all from Gloucester County, N.B., on September 13, was certainly one of the worst catastrophes recorded in our fishery reports in one year.

Notwithstanding these circumstances, it is safe to estimate the value of the present year's fisheries yield at over twenty million dollars.

NOVA SCOTIA.

Inspector A. C. Bertram, of North Sydney, sends the following preliminary report on the fisheries of Cape Breton. The fishing season not being ended yet, the statistics for 1900 have not all been gathered; however, they will exhibit a decrease in the catch of fish as compared to those of 1899. This is to be accounted for by the fact that the great development in mining, in railroad construction, and also in the building of the mammoth iron and steel plant now under way on Sydney Harbour, have taken from the fishing districts hundreds of men who would have otherwise been engaged in fishing. Not only have our own fishermen been able to secure employment at good wages at the works referred to, but more than three thousand fishermen from the Colony of Newfoundland have come across into Canada and have been given employment. While all branches of the fishing industry have suffered as a result of the drain on the fishing districts in consequence of the works referred to, there was no scarcity of fish in the coastal waters excepting in the case of mackerel, which branch has been almost a failure this year. In their journey to and from the northern waters these fish evidently kept out in deep water instead of, as has been their habit, keeping close inshore and entering bays and harbours. The result has been a decreased catch of mackerel of about 55 per cent under an average year.

Lobsters were fairly plentiful throughout the season, and as boys and girls are largely employed in this industry, outside employment did not draw from this fishery as has been the case in other branches. There has been a considerable increase in the export of live lobsters this year to the American markets.

Another feature of the fisheries this year is the preserving of haddock. An extensive industry in this branch was operated in Isle Madame, the best haddock grounds in Cape Breton. The canned article takes well in the foreign markets and the industry promises great development.

Dogfish, which have harassed all kinds of fish in our coastal waters during the past eight years, and were so destructive to fishermen's gear, are disappearing. Only in one or two districts were they seen this year.

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Inspector L. S. Ford, of Milton, says :—From what has come under my notice I am of the opinion that full returns will justify me in calling the year 1900 a good season generally for the fisherman.

Cod may show a falling off in the number secured, but the ready sale and good prices will fairly meet the deficiency. Scarcity of bait and the fact of the increased number of men engaged in the lobster business, are factors to be encountered in these statistics.

Lobsters will probably show an increased catch in numbers and value. This most valuable fishery has been successfully prosecuted, and extensive preparations are being made for the coming season. No one need to be deceived; the increased yield does not mean that the fish are increasing by any means, but that more efforts are made to keep up the business. The close observance of stringent measures are necessary to protect this fishery, if it is to be permanent, and nothing to take its place is in sight at present.

Mackerel, in some places, show a large increased catch. Lunenburg phenomenally so—15,000 barrels against 3,000 the previous year. Digby fair, while in Queen's and Shelburne they were a total failure. The Yarmouth traps did not pay expenses.

Herring will be only fair with good prices. This fish, like the mackerel, makes seemingly erratic visits to our coast. Places where once plentiful are now deserted by them. There must be some cause for their frequent absence, possibly remediable by intelligent inquiry. Herring is a useful bait fish, and in that particular its scarcity determines the catch of the more valuable fish.

Salmon yielded an average catch, the river fisheries being generally fairly remunerative. Our regulations, as regards the rivers are not now satisfactory and need amending in many instances. The conflict between the river fisherman and the mill owners has taken on chronic indications in some places, but as a whole the situation has improved. All other kinds of fish not named would seem to be about an average catch.

Inspector Robert Hockin, of Pictou, reports that an increased catch of lobsters, which is the principal fishery of the district, a good cod, haddock, and lake season, abundance of herring, and a phenomenally large catch of mackerel have combined to make this season the best for years. Not only have fish been abundant, but prices obtained for them have been satisfactory. The salmon fishery returns show a slight increase on the Bay of Fundy, Atlantic Coast and Straits of Northumberland. The shad fishery, which last year gave excellent results, will show a decrease of about 75 per cent.

Owing to the mildness of the winter months the smelt fishery was not successful. The ice was not strong enough to allow bag-nets to be operated, and the fish that were caught were not marketed in the best condition, and hence the prices obtained were small. The shad and smelt fisheries are, however, not of sufficient importance to affect the results of the season's operations to any great degree. Other fisheries will show results about an average catch.

NEW BRUNSWICK.

Inspector J. H. Pratt, of St. Andrews, N.B., states that the catch of nearly all kinds of fish for 1900 will be found below that of last year, and some kinds will show fully 25 per cent of a decrease. The value of the catch will also be found much below that of any season during the past ten years. This falling off will be most apparent in the

herring fishery of the district, more especially in the waters of Grand Manan, whose fishermen claim that the herring catch has been the poorest they have experienced for at least twenty years. Various reasons are advanced to account for this decrease, some of them quite plausible, but, as yet the matter is enveloped in doubt. The pack of sardine herring at the numerous sardine factories, will return about a 30 per cent deficit from that of last year, showing how this decreased herring catch will very seriously effect even the skilled labour market in the state of Maine.

Lobsters will yield about the same as heretofore, with a probable increase in value of catch, although, more traps, men, and labour were required to capture them. When the statistics are all in, line fish of all kinds will show a decrease, which can be attributed not to any scarcity of fish, but to the great want of herring for bait at the time line fish were plentiful, and, also, to the fact that many of the former handliners, and trawlers engaged in weir fishing, which yielded them much poorer returns than if they had remained at their old calling. Large herring, suitable for smoking purposes, will also show a decrease this season. The much desired mackerel schools, I regret to say, did not put in their appearance in the Bay of Fundy this season, although many good hauls were made by United States seiners off the entrance to the bay. The very nefarious method of killing pollock by exploding dynamite among the numerous schools of this fish in the waters off Grand Manan, introduced to the fishermen's attention for the first time this year, is claimed by the majority of the Bay of Fundy fishermen, to be the principle cause of the unusual scarcity of fish in these waters, and must to a certain extent, injuriously effect the other fisheries of the Bay of Fundy.

Inspector R. A. Chapman, of Moncton, says that the aggregate of fish caught in 1900 will be somewhat larger than in 1899, while the number of *salmon* netted was about the same as in previous year, fly fishing was better than for several seasons, and the streams seemed well stocked with parent fish last fall. Spring *herring* were very plentiful and immense quantities taken for food, bait, etc. Fall fishing on the banks between Caraquet and Miscou was also unusually good and a larger catch of fine fish secured and sold at good prices. The catch of *codfish* up to September 13, was the largest for many years but the gale on that date, when thirteen fishing schooners belonging to Gloucester County, were wrecked and forty seven lives lost (the most fatal ever known) made the fishing thereafter very irregular, but the quantity taken during the whole season was above the average and prices ruled high.

The take of oysters has been hardly up to the average especially at Baie du Vin where the quality is inferior, but the reserve in Shediac harbour, which was opened on October 20 for three weeks fishing, produced about eleven hundred barrels of fine large oysters, all the small ones having been returned to the water. Of hard shell clams (quahogs) about ten thousand (10,000) barrels were raked in Buctouche and Cocagne which were shipped to the United States. This is a comparatively new fishery and is progressing. Between three and four thousand barrels of the ordinary clams were canned at Inkerman by Messrs A. & R. Loggie. The take of *smelts* will even be above the large one of the year before, which exceeded three thousand five hundred tons, yet these fish are not decreasing, but on the contrary they appear to be more abundant than ever.

The catch of lobsters, notwithstanding increase of factories and gear, is scarcely up to that of 1899, except in the narrow part of the straits of Northumberland, where probably owing to change of the fishing, it might be fully as large. Mackerel were

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unusually abundant early in the season, and large catches were made, but they were of inferior quality; later on as the quality improved the quantity diminished. The catch of other kinds of fish was about an average one. Taking the quantity and prices into consideration the past year has been a good one for the fishermen and dealers.

Inspector H. S. Miles, of Oromocto reports that the fishing operations there have been of a most satisfactory character. Although there has been a slight falling off in a few lines, yet the increase in others and better general prices more than compensated for the deficiency, particularly so in regard to lobsters. Owing to a change in the regulation regarding size, none under $10\frac{1}{2}$ inches were allowed to be taken from the traps; this reduced the catch but so enhanced the price that in the end the fishermen received more than for a larger catch last year. Among the other fish in which there was a decrease may be mentioned salmon and herring. Those showing an improvement were cod, hake, haddock, pollock, eels and sardines.

PRINCE EDWARD ISLAND.

Inspector J. A. Matheson, of Charlottetown, reports that the value of the fisheries of this province for the season of 1900 will be about an average one. The lobster fishing, to the surprise of many, has held out well, and it now appears as if the present catch may be maintained if the regulations can be enforced. Cod and hake were plentiful during the first part of the season, and large quantities were taken, but owing to the rough weather very little fishing was done during the fall. The oyster fishing in Richmond Bay has been a fair season, but in East and West Rivers the catch was much below that of last season. Good prices were obtained and the fishermen made fair wages, and shippers were well satisfied with the season's business. The mackerel fishing was a great improvement on the last few years' catch. All other fishing gave about an average yield.

PROVINCE OF QUEBEC.

Commander Wakeham, Officer in charge of the Gulf of St. Lawrence Division, reports that in spite of an unusually rough season the returns for 1900 will show an increase in the total yield from the fisheries, over each of the three preceding years. This will be due to an increase in the cod, salmon, and herring fisheries. The season was unusual in that, on the lower north shore between Cape Whittle and the Strait of Belle-Isle, during the summer time cod fishery, June and July, the coast was blocked with heavy Arctic ice, which coming down from Davis Strait along the outer Labrador was, about the 20th of June, by constant east wind, driven in through the Strait of Belle-Isle, and up along the north shore coast, entirely putting a stop to the usual summer inshore fishery made with seines and trap-nets. A large fleet of vessels from Nova Scotia and Newfoundland were on the coast as usual, for the fishery. Most of these vessels did nothing whatever. About the 25th of July, it looked as though we were in, for the fourth consecutive season, for a complete failure in the Labrador cod-fishery; fortunately however, for the resident population, after the vessels, with one exception, had all left the coast, fish struck in abundantly and good catches were made with hook and line. Nothing was done anywhere in the Gulf division during the fall cod-fishery, as after the 13th of September we had a succession of heavy gales, which brought wreck and disaster all round the coast. Fish were abundant on

calm days and bait plentiful, but after the unfortunate loss of life at Percé and Caraquet, and the general wrecking of boats, fishermen were disheartened and nervous about going any distance off shore. In spite however of the failure on Labrador in summer, and the almost total absence of a fall fishery, at the leading stations, the cod-fishery for 1900 was a good one.

Salmon were below an average in Bonaventure and Gaspé, but very abundant on the north shore and Labrador. *Herring* were also plentiful and remained late on the coast, at this date (4th of December) they are still abundant in Gaspé Bay. *Mackerel* and *Lobsters* will both show a decrease, though in the case of the latter, the fishing season at the Magdalen Islands, Anticosti, and the north shore was, under the new regulations, extended by two weeks. The fall *Smelt* fishery in Gaspé Bay was good, and had the steamer *Admiral* been continued on the route to Dalhousie later in the season, as she should have been, the catch could easily have been doubled.

The decision in the Fox Bay case was, as was expected, in favour of Mr. Menier and against the settlers, who were early in the season removed to Manitoba. Arrangements have been made by Mr. Menier with a gentleman from Nova Scotia, who has had an extended experience in the fisheries, to take charge of, operate, and develop the fishing possibilities of the island. Already extensive buildings are being put up at Fox Bay, a tank steamer is ordered to be built to carry the fish alive from the fishing grounds to the packing houses, or to the nearest port where connection can be made by rail for export, fresh to market, in refrigerator cars. A large number of fishermen will be wanted in the coming spring to prosecute the various fisheries of the island. These men will have to be shipped during the winter, and will most likely be secured among the fishing populations of Gaspé and Nova Scotia.

Inspector N. Lavoie, of L'Islet, submits the following report on the result of fishing operations in his division during the season of 1900:—On that part of the coast of the counties of Bonaventure and Gaspé, summer and fall codfishing was good, but would have been better had it not been for the frequent and severe storms which were experienced when fishing was at its height. West of Port Daniel, fishing is not so much carried on as elsewhere, most of the people being engaged in agriculture. Herring fishing was excellent and the trade seems to revive. Two firms alone shipped 1,500 barrels out of Grand River division, and other merchants have also done as well. Lobster fishing will have a falling off. In 1880 the lobster catch for Gaspé and Bonaventure was 9,345 cases, while it only yielded 3,285 in 1900. Heavy storms and the general destruction of fishing gears largely contribute to this decline. The size of lobsters was generally larger than usual, most of them measuring from nine to sixteen inches.—Prices ruled from \$9 to \$12 a case on the spot. Salmon fishing was somewhat better than last year, although the rivers kept very high in spring and summer. Prices ruled very high, 12, 15 and 20 cents a pound being paid.

From Gaspé to Métis codfishing is not so eagerly pursued as in former years. People now give part of their time to agricultural operations, to their great advantage. During the last 20 years five new parishes have been established on this part of the coast, and there are everywhere evidences of progress and comfort. Herring and squid were abundant as well as cod. Very few white whales were seen, to the great delight of cod fishermen, because these mammals chase the cod out of their fishing grounds. Salmon fishing was about the same as in 1899. Lobster fishing was a failure. Trout fishing

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was a trifle less remunerative than last year. From Métis to Lévis the result of this year's fishing operation will be about the same as last year.

Inspector A. H. Belliveau, who has charge of the western division of the province of Quebec, report as follows:—From the meagre information derived at my hurried visits to the principal fishing centres under my charge, I am under the impression that the yield of fisheries for 1900 will far exceed that of the season just published. Almost everywhere along the St. Lawrence, particularly on the Richelieu River, Chateauguay, Verchères, Lake St. Pierre, and even below Quebec the spring fishing was better than for years past. On a certain Thursday in the beginning of June last, Overseer Riendeau and I estimated that between fifteen and twenty tons of fish had been brought that morning to the markets of the great Canadian metropolis from the neighbouring districts extending from Sorel to Beauharnois. It is true that most of these were coarse fish, but the weather being still cool, good prices were readily obtained, and before eleven o'clock all had been disposed of. I regret to say that some were so small as to render them almost unfit for food. The small meshed verveux of Richelieu and Yamaska districts were blamed for the capture of these immature fish.

I am pleased to note that the provincial authorities seem disposed to exercise a more efficient protection. In future all their game-keepers and even forest and fire rangers will be clothed with the powers of fishery officers. These, with the assistance of the different clubs dispersed over the extensive inland areas, will no doubt achieve better results.

Many of the remarks in my report, page 190, apply to this year as well as last.

ONTARIO.

Inspector F. H. Cunningham, of Ottawa, submits the following report on the fisheries of the eastern division of the Province of Ontario, for the year ended December 31.

The waters of this division are frequented by nearly all the varieties of sporting fish of the finest kind, and it is of the utmost importance that the regulations should be strictly enforced. I am glad to be able to state that there has been a decided improvement in this respect during the past year. Of course it cannot be expected that all poaching can be prevented; but I firmly believe that the officers of the Ontario Government are doing their best to enforce the law.

The past year has been an average one, from the angler's standpoint. Charleston Lake, Rice Lake and the Bay of Quinté afforded excellent fishing. No place in Canada furnishes better proof of the success of artificial fish breeding than Charleston Lake, where, notwithstanding the increased amount of fishing, the fish (salmon trout) are steadily on the increase, consequent upon the supply of young fish that are deposited in these waters each year from the hatchery located in Ottawa.

During the year just closed, a pond for the propagation of black bass has been constructed in the Bay of Quinte district, and as applications are being received from all parts of the Dominion for young bass, it is expected that this pond will fill a long-felt want.

In the spring of last year I superintended the distribution of a considerable quantity of fry from the Ottawa hatchery, and while these little fish were planted in

fine condition, it appeared to me that some of the lakes did not afford all the natural conditions requisite for salmon-trout to reach maturity. In this connection, applicants for fry should be requested to make their application to the department early in the summer, and thus enable the inspector to examine and report on the suitability of the waters in which the fry are to be placed.

Owing to other outside work, I have not been able to give as much attention to my district as I would have wished, but next year I hope to be able to devote considerable time to inspectorship duties.

Inspector O. B. Sheppard, of Toronto, reports as follows :—In the Lake Huron and Georgian Bay districts the catch of trout and pickerel has been equal to or slightly above last season's, while whitefish, herring and sturgeon show a falling off.

In Lake Erie the catch of pickerel has been an exceptionally good one, with herring fully up to or above the average. The catch of sturgeon has decreased very materially, and the catch of other fish has been about an average one.

In that portion of Lake Ontario, in my division, this year's catch shows a decided decrease all round, with the single exception of herring, which has held up exceptionally well.

In the inland waters, which, with the exception of Lake Nipissing and the waters running out of it, are chiefly given over to local and sporting fishermen, the catch has been about the same as last season (a poor one), not having recovered from the depletion that occurred last season by reason of the non-appointment of overseers when the protection branch of the fisheries was taken over by the Provincial Government until too late to have the regulations enforced. I am, however, pleased to state that a great deal more attention has been given this branch of our fisheries this year by the provincial authorities, with whom I have had many interviews on the matter, and I confidently look forward to a decided improvement in the near future.

I am strongly of the opinion that a great and lasting improvement, especially in the bass fishing, might be made by restocking the waters in the more settled districts, which have been practically fished out, with fish (either fry or parent fish) taken from the waters of the more northern lakes and rivers, where they are very plentiful and the country very sparsely settled, and where tourists seldom visit. This, in my opinion, could be done at a nominal cost, and would have a very beneficial and lasting effect. I am sorry to report that the carp are increasing rapidly in many of the waters of my division, and are a great menace to the fishery interest, and would suggest that, if possible, some means be devised to lessen their numbers and prevent their increase. The sturgeon have been gradually decreasing in my division, except in the more northerly part, and during the present season, especially in the southern part, the catch has been very small indeed, and I am convinced that unless something is done to prevent it, this fish will soon be practically extinct. In the northern part of my district, especially in Lake Nipissing and the rivers leading therefrom, they are still plentiful, but they are being slaughtered at a fearful rate, one firm having shipped this season 70,000 lbs. of caviare. As the roe is the part of the fish that is of the most value, and it is taken just before spawning, the sturgeon has no chance to reproduce itself, and the end must shortly come. I would strongly advise a drastic measure of protection for this fish for a few years, and would also suggest a transplanting of a number of them from the northern waters, when they can be taken to some of the more southern waters where

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they are almost extinct. These fish being very tenacious of life, this could easily be accomplished, and at a very small cost, as the transportation would be entirely by water.

Inspector A. G. Duncan, of Marksville, makes the following preliminary report on this season's operations of the fisheries for the Western Division of Ontario:—I have visited during the summer the most important fishing points of this district, and I find the catch of whitefish, trout and pickerel aggregate about the same as last year. The number of men employed and number of gill-nets are in excess of last year. I also visited the Nepigon River this spring, which is the finest trout stream known in America, and every season is visited by sportsmen, not only from all over this continent, but even from Europe. This sport furnishes employment for some two hundred guides during the summer, at an average wage of two dollars per day and board, each year finding an increased number of visitors. The Nepigon is still holding its own as a producer of the finest speckled trout. There are nine portages on the river, and I found that all the camping grounds were well kept and clean. This stream is protected by an officer of the Provincial Government, and I also found that the guides take great interest in the protection of this stream. The weight of the trout caught runs from two to seven pounds. I saw an American lady with one seven pounds weight. Specimens of these trout are taken and mounted on birch bark for ornamental purposes. There has not been as much illegal fishing done this season as last. The fishery overseers of the Ontario Government have acted in a more vigorous way in detecting and confiscating illegal nets. They have seized and confiscated a number of trap-nets on the Georgian Bay, near Bustard Island, Bad River and Badgely Island.

BRITISH COLUMBIA.

Inspector C. B. Sword, of New Westminster, reports as follows:—In the Fraser River district this year sockeye (*O. Nerka*) and cohoes (*O. Kisutch*) have been very scarce. The northern canneries, however, made good packs.

The deficiency occasioned by the failure of the sockeye and coho runs has, however, been partly made up by the canners having this year put up between 90,000 and 100,000 cases of qualo or dog salmon (*O. Keta*.) A market is found for these in South America. Some 7,000 cases of humpbacks (*O. Gorbuscha*) were put up last year, otherwise the packing of the dog salmon and humpbacks is a new industry here. The removal of the close season between the sockeye and coho runs has greatly facilitated the utilization of these varieties. The returns are not yet all in, but the gross pack for the province will amount to nearly 550,000 cases as against 765,519 cases in 1899, 492,550 cases in 1878 and 1,027,180 cases in 1897. In addition to the salmon put up in cans there will be an increase as compared with last year of the quantities exported, dry, salted and frozen. While the catch of sturgeon has been very small, there is an increase in the yield of halibut.

A larger number of commercial salmon licenses were issued than heretofore from this office (4,892).

PARIS EXHIBITION, 1900.

In my report last year I made reference to the fact that this Department had undertaken to make an adequate display of Canada's vast fisheries wealth at the great exhibition in Paris. A large number of showcases containing specimens of

fish, aquatic birds, fishery products in great variety, a unique collection of furs and examples of heads of big game were sent to Paris, and these exhibits, illustrative of the marine, fishery and the sporting resources of the Dominion of Canada, attracted wide attention and formed a notable feature even amongst the representative displays of all nations.

It is gratifying to find that not only did the exhibit call forth admiration and praise from the public, but official experts and exhibition authorities deemed the Canadian fisheries collection worthy of the highest awards. A Grand Prize was awarded for the high character of the fishery products displayed, and the gear and instruments of fishing. A Grand Prize was also awarded in class 52 for the splendid fur exhibit. In class 53 (fishery products and fishing gear) I was the recipient of a gold medal, and a silver medal was awarded to Mr. Andrew Halkett, as collaborateur. In class 52 (game and fur exhibits) a gold medal was awarded to the Honourable the Minister of Marine and Fisheries for the Department's exhibit; while four further gold medals and five silver medals were awarded, two of these being granted to Dr. Wakeham for collection of deep sea shells, and Mr. A. Halkett, of this Department, for his work as a naturalist in connection with the exhibit. Two bronze medals in this same class were gained by Mr. Franklin Brownell for the pictorial decorations in the Canadian Court, and a gold medal was awarded for the Prince Edward Island oysters. The general character and splendid quality of these oysters excited unusual admiration, and generally I think that Canada has every reason to feel proud of the position gained by her exhibition amongst the fishery and game exhibits of all countries.

In accordance with the decision to take part in the Glasgow exhibition in May next, the cases of exhibits have been transported from Paris to Scotland, and the question is now being considered whether, on the close of the Glasgow exhibition next fall, they might not well find a permanent home in the Imperial Institute, London, England.

In the Fisheries Museum at Ottawa, which has been practically depleted by the removal of fish and fishery products to complete the collection sent to Paris, it will be necessary to form an entirely new collection. The economic and scientific aspects of the fisheries will be given more adequate representation under the skilled superintendence of Professor Prince, the Commissioner of Fisheries, who will organize the new collection. In view of the vastly increased interest in Canadian fisheries, this step is of great public importance, and whereas the former exhibit, although interesting and valuable was admittedly incomplete, a more worthy display of our fishery wealth will ere long be made in the museum building on O'Connor street.

It is a matter of satisfaction that a general survey of the fisheries of the Dominion shows continued prosperity on the whole, and the exhibits in 1900 in Paris and in 1901 in Glasgow, will, there is every reason to anticipate, open up new and lucrative avenues of trade, of which full advantage has not yet been taken.

I have the honour to be, sir,

Your obedient servant,

F. GOURDEAU,
Deputy Minister of Marine and Fisheries.

SPECIAL
APPENDED REPORTS

BY

PROFESSOR E. E. PRINCE

Dominion Commissioner of Fisheries

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1. PLANTING YOUNG FRY: ITS COMPARATIVE ADVANTAGES.
 2. THE VERNACULAR NAMES OF FISHES.
 3. ACCLIMATIZATION OF FISH, FRESH-WATER AND MARINE.

1900

I.

PLANTING YOUNG FRY: ITS COMPARATIVE ADVANTAGES.

BY PROFESSOR EDWARD E. PRINCE, DOMINION COMMISSIONER OF FISHERIES, OTTAWA.

It was my intention, in the present report, to treat exhaustively the much discussed question of the planting of yearling or 'fingerling' fish, as compared with the planting of newly-hatched fry. The latter method of stocking waters is that mainly carried out in the system of artificial fish-culture conducted by the Department of Marine and Fisheries. The controversy, respecting the merits of the two systems, has been actively carried on for more than a quarter of a century, and fish-culturists are still divided into two schools, the partisans of one school being as emphatic and zealous in their own special advocacy, as the partisans of the other. The adoption of one system does not imply the total disparagement of the other, and there is certainly much to be said for the rearing of the fry of fishes, in our hatcheries, until they are robust and independent; until, in other words, they are able to look after themselves. In order to do justice to the two methods: the 'young fry' method, and the 'fingerling' or 'yearling' method, the various points raised require to be dealt with exhaustively and I therefore propose to treat in a future report the whole subject with some thoroughness, in order that the practical aspects of the matter may be fully set forth, as theoretical considerations, have, it must be confessed, hitherto figured very largely in this important discussion. My present purpose is simply to state, in the meantime, the principal points which may be urged in favour of the system carried out in Canada. I shall do so as concisely and as clearly as I can, reserving for the present those more technical and complex features which can be understood by the embryologist, but are of less moment to the practical man, to whom the more salient points appear, of course, to have the greatest weight. It is necessary to point out that by the terms fry, young fry, or newly-hatched fry, is meant the true larval condition, before the features of the embryonic stages are lost. When a young fish emerges from the egg, at the close of the incubation process, it bears no resemblance in most cases, to the parent fish. It is, as a rule, not at all like a fish: but resembles a small worm with a protruding bag of yolk attached to the under side. I have often heard people declare, on seeing newly-hatched fish in a jar or tank, that they looked like wriggling insects. A minute scientific examination shows that the young fish larva is not only in external form and features, but also in internal structure and anatomical arrangement quite different from a fish, indeed is almost as unlike as the caterpillar is unlike the butterfly. At first the newly-hatched larval fish feeds only on its store of yolk, but as soon as this is exhausted, it begins to change its shape, the mouth, which at first is not used at all, becomes actively movable and numerous minute teeth protrude from the surface of the jaws. Indeed, in the young shad, for instance, teeth develop long before the food-yolk is used up. The late Professor Ryder called attention to this precocious appearance of teeth in the infant shad. Of his previously published statement 'that the yolk sack disappeared on the fourth to the fifth day after the young fish had left the egg,' he said (Bullet. U.S. Fish. Commis., 1881, p. 241): 'Although this statement is in a broad sense true, I find upon more accurate investigation that there is a small amount of yolk retained in the yolk-sack for a much longer time. It appears in fact that there are really two periods of absorption of the yolk which may be very sharply distinguished from each other. The first extends from the time of hatching to the end of the fourth or fifth day, according to temperature,

during which most of the yolk is absorbed. . . . The second period of the absorption of the yolk extends in the shad over about twice that of the first, or about ten days. . . . The function of the yolk-sack, during the first period, appears to be to build up the structure of the growing embryo; during the second, not so much to build it up as to sustain it in vigorous health until it can capture food to swallow and digest, so that it may no longer be dependent upon the store of food inherited from its parent. Minute conical teeth appear on the lower jaws and in the pharynx of the young shad, about the second or third day after hatching. . . I have never observed food in the alimentary canal until ten or twelve days after the young fish had left the egg. At about the beginning of the second week considerable may be seen in the living specimens. But the intestine is often not yet very densely packed with food even at this period. At the age of three weeks an abundance of food is found in the intestine.' A young fish a month old, or even three weeks old in some species, begins to assume the fish-like form, the fins losing their embryonic or larval form, and the external and internal structure of the growing creature changes to a more mature condition. Between the earliest or immature larval stage and the more mature stage, when the form of the adult begins to be recognizable, there is often a peculiar post-larval stage, characterized in some marine species by the most extraordinary transient developments, which often give the young fish a most grotesque appearance.

Broadly speaking, then, there is a larval and a post-larval condition, the latter insensibly passing into the still small, but externally mature condition called by fish-culturists the fingerling stage. The latter is often called the yearling stage, although the fish may not be a year old. Indeed the rate of growth in any particular batch of fishes varies very much. Frank Buckland drew attention to this in his little work entitled 'Fish Hatching' (London, 1863), and quotes an authority as saying that of three specimens of young salmon taken from the Stormontfield ponds in Scotland, on April 1, 1863, all of the same age, one was $6\frac{1}{2}$ inches long and weighed 646 grains; another was $3\frac{5}{8}$ inches long and weighed 135 grains; and the third was $2\frac{1}{8}$ inches long, and weighed 23 grains. The last had the dark parr-bands along the sides, the second had indications of small scales, and in the largest the scales were large, silvery and in an advanced stage of growth. As Buckland remarked, young fish whether kept in hatchery tanks, reared in large ponds or turned into streams, vary very much in growth; some individuals growing more rapidly and attaining a greater size than others. In a study which I made at the Marine Biological Station of Canada of three batches of Pacific salmon fry this year, I found a similar though not quite so marked a difference in growth. The specimens in each series (five or six dozen fish in each series) were presumably about the same age, and in one series they varied from 42 millimeters ($1\frac{1}{10}$ in.) to 31 millimetres ($1\frac{1}{4}$ in.) in length. In another batch (belonging to the brood of another year) they varied from 65 millimetres ($2\frac{5}{8}$ in.) to 38 millimetres ($1\frac{6}{16}$ in.) and in another year's series they varied from 47 millimetres ($1\frac{1}{2}$ in.) to 34 millimetres ($1\frac{3}{8}$ in.) The well-known authority on angling, Mr. Stoddard states, that the nature of the food greatly influences growth: 'Trout were placed in three separate tanks, one of which was supplied daily with worms, another with live minnows, and the third with those small dark coloured water-flies which are to be found moving about on the surface under banks and sheltered places. The trout fed with worms grew slowly, and had a lean appearance; those nourished on minnows, which, it was observed, they darted at with great voracity, became much larger; while such as were fattened upon flies only, attained in a short time prodigious dimensions, weighing twice as much as both the others together, although the quantity of food swallowed was in nowise so great.' Under natural conditions, however, where the food available for all the individuals in a brood of young is practically the same, the difference in size must be mainly due to inherent variability, dependent upon very obscure causes. Such variation in growth, which is so noticeable within the limits of one species considered separately, is no less marked when we compare several different species together. One kind or species attains a known average size at a certain stage in the growth of the young. Thus a newly hatched salmon measures a little more than half an inch in length; at the fourth week the larva has doubled its length, and in the third month it attains two inches, while in the fourth month it is no less than two and a half to nearly four inches long,

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and a month later as much as five inches in length. Brook trout in the fourth month are usually two inches from tip to tip, three inches when nine or ten months old, and five inches when a year old. Lake trout (*Salvelinus namaycush*) are six inches long at the end of twelve months, and black bass are four to six inches. The growth of very few marine larval fishes has been observed, but it is interesting to note that in a batch of young wolf-fish (*Anarrhichas lupus*), a fish reaching a length of five or six feet, the larval forms were a fraction over a quarter of an inch long on hatching out, in the fourteenth week (3½ months) they were not more than half an inch in length, this slow growth being probably due to confinement in tanks.

Marine fish being as a rule of very minute size and delicate in organization when hatched probably reach the same length as fresh water species in a much more extended period of time. The observed variation, which is frequently so very great in young fishes of precisely the same age, is of moment in connection with this question of young fry *versus* fingerlings. Certain fishes moreover exhibit a cannibalistic habit at a very early stage. Black bass when very young, devour each other, even when little over an inch in length, so that it is necessary to take special steps to prevent this. I have on a previous occasion (Rep. Canadian Lobster Commission, 1898) pointed out, in the case of the lobster, that amongst young lobster fry 'cannibalism is frequent, and the method adopted of attacking each other is very striking, as the young lobster barely a few weeks old invariably selects the most vulnerable point, viz., the opening behind the head-shield. The stronger larva springs upon the back of the weaker and savagely bites him at the point named.' Frank Buckland describes the voracity of fingerling salmon and trout and said 'they will certainly eat the young grayling when they can catch them, for they are very active: they also eat young perch. I have placed perch spawn in their tanks, and as the perch, which are exceedingly minute, hatch out, they are caught up and devoured in an instant.'

Whatever arguments may be urged for or against the prevailing system of planting newly hatched fry, it can hardly be doubted by any fair-minded critic that the attempt to stock depleted waters with countless millions of young fish, as is done in Canada, must have some beneficial results. There is certainly much evidence in favour of the view that benefit has resulted. Would better results follow the adoption of the system of planting advanced fry or fingerlings? There are certain points urged against planting very young fry which merit some attention. Nothing, it is said, can be more helpless and defenceless than young fish immediately on hatching out. They must be at the mercy of numberless enemies. This objection has this defect that as a matter of fact most of the fry are some days, or at any rate some hours old when deposited in the open waters. The planting is postponed until a large quantity have liberated themselves from the egg, some time is occupied in removing them from the tanks, carting them to the railway or conveying them by wagon to the more or less distant localities to be stocked. In other words the youngest fry are always 12 to 48 or 72 hours old and are not 'newly born' young fish when placed in lakes or rivers. Two or three weeks elapse before all are planted, and the fry are thus getting older as each batch is sent off day after day during the distribution. Hence the majority of artificially hatched fry are really much older, and must be more sturdy and robust, than the delicate young fish exposed on the natural spawning beds. The further objection that artificially hatched fry are suddenly transferred from warmer water in the hatchery tanks to the colder water of the lake or stream outside is also baseless. The ample supply of water pouring through the hatchery troughs has been found to be, as a rule, many degrees colder than the water to be stocked. Ice is always used in keeping the water cold when transporting the young fish in large tanks. Records have been kept showing that the water in the hatcheries is more equable and cool at the distributing time than in the waters outside. The helpless fry, it has also been urged, being hatched under unnatural conditions are untaught to seek shelter, and must be devoured by watchful enemies. It should be remembered that the eggs are taken from wild parent fish. The fry hatched from these cannot fail to inherit, by the inflexible law of heredity, the instincts of their parents. They act, as indeed they cannot avoid acting, precisely as the young of wild fish do. Hence, when the fry have been carefully watched at the time of planting, they

have been noticed to act with great alertness and intelligence, and at once dart off to the nearest available shelter.

The objections usually urged, apply indeed with greater force to young fish kept for a long period under artificial conditions, and reared to the fingerling or yearling stage. Such young fish must become accustomed to the safe and protected conditions provided for them in the tanks or rearing ponds. In such ponds the usual enemies are absent, the water as a rule is warmer, and food is supplied to them, of kinds and at times wholly unlike those which obtain in the case of naturally hatched fish. 'If the fry are kept until they are of fair size,' wrote the late Francis Francis, one of the best authorities on fish-culture, 'fed regularly every day, never seeing an enemy of any kind, what will become of them when they are turned into deep water amongst foes, without the preliminary and probationary life on the comparatively safe shallows, being all unaccustomed to seek their own food, or see enemies? They are far more likely to fall victims then, and less likely to thrive on their own exertions, unless it is proposed to keep them until they are beyond the size taken by pike and large trout.' I cannot do better than quote the opinion of Mr. Francis on a further point, as it fully coincides with the view which I have already published, and to which I still adhere. 'I have heard people urge, that if the young fish are turned at an early age into the river, they will fall a prey to predaceous fish. It is possible that a small percentage of them may, but the remainder will easily learn to know their enemies and avoid them; besides, in putting them into the river, the most shallow places at the sides, and the most sheltered spots should be selected, and the fish should be distributed in small numbers in such places as predaceous fish are the least likely to come and look for them. Added to this, the remainder will thrive so much better in the wider area of the river, and will grow so much faster that this will counterbalance any slight loss.' Experiments have been tried with a view of comparing the rate of growth of fry in confined waters, and those liberated in a stream or creek and it has been shown that the fry which were planted soon after hatching and which subsisted on natural food under natural conditions grew much more rapidly than those under artificial conditions.

I am aware that some experiments in the Detroit river, carried on in 1895, under the Michigan Fish Commission, point to the opposite conclusion, for of a quantity of white-fish (*Coregonus*) fry confined in boxes in the river able to subsist on natural food, only three survived from April 20 to July 23, by which time they were nearly two inches in length, but the boxes were twice tampered with, and the results were thus deprived of their chief value, though it was noticed that a batch of several hundred kept in the hatchery, fared much better. 'These had grown rapidly, much faster in fact than those in the river,' the report states, 'and they were in fine condition... when moved (at about the age of ten months) they were three or four inches in length, in good condition, but small for their age.' No reliable conclusion can be drawn from this experiment, which is precisely the reverse of that communicated to Frank Buckland. (See *Fish Hatching*. 1863, p. 160.) 'Amongst the advantages of early turning into the river must be reckoned that of rapid growth. Some of those (wrote a correspondent to Mr. Buckland) which you and I turned in were, after only nine days, found to be three or four times larger than those of the same age left behind in the troughs.' An assistant in this experiment observed some of the young fish on the shallows, and stated that one of these liberated fish would weigh down four of the fish confined in the hatchery tanks. This is indeed what might be anticipated. Most animals are more vigorous, healthy and of more rapid natural growth than when confined under artificial conditions. 'The old idea (wrote the late Sir J. G. Maitland) was to turn out fish big enough... to take care of themselves.' But it is not a question of size, but of food, habit and training. Yearlings will live, it is claimed, where young fry would perish; but planting of fish should always be in favourable localities only.

The main considerations, which weigh in favour of the planting of newly hatched fry may be summarized as follows:

1.—The fry being placed in their natural surroundings, food, temperature, and other conditions must be more favorable than in the cramped conditions of a hatchery or a rearing pond.

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2.—The fry endowed with their natural instincts inherited from the parent fish, exercise these instincts at the earliest moment, and do not become accustomed to an artificial environment.

3.—It enables a vast quantity of young fish to be handled, whereas, an infinitely smaller quantity alone can be dealt with if the labour, expense and difficulty of feeding, rearing and caring for are to be faced.

4.—Fry are most vigorous and alert soon after hatching, but when kept confined and their stock of food yolk becomes exhausted, they are less vigorous, swim less freely, and require great care in management.

5.—When fish are planted at the young fry age, the public receive the greatest return and most widespread benefit. This would not be possible were a restricted quantity of young fish merely available for planting. It allows of the maximum of output at the minimum of cost.

6.—Lastly the planting of young fry has been successful, in spite of losses when planting, and undoubted losses (from predaceous enemies) after planting. It is incredible that 50 or 80 or 200 millions of fry of various fishes can be planted in Canadian waters, as they have been planted for over a quarter of a century, and have no effect whatever. The popular opinion, the opinion of practical men, the strong conviction of fishermen especially is that the beneficial results are patent and undeniable.

It has been shown that most of the stock objections urged are not merely based on gross misconceptions, they are the reverse of the facts. The eggs in our hatcheries are, at any rate, safely shielded from numberless enemies and hurtful influences. When the fry hatch as Mr. Seymour Bower pertinently asked (in a paper in the Mich., Fish Commiss. Rep., 1896,) 'the question of how much longer they should be held, without any attempt at feeding, becomes an important one. Whitefish fry, as such, are never more vigorous than at the time of hatching: they are free swimmers, and begin to take food within a very few days. It would seem, therefore, that the sooner they are set free in their native habitat, to mingle with nature's fry the better. There is nothing to be gained by holding them and there is great risk in carrying them beyond the time when nourishment other than that supplied by the food sack is essential to normal development.' It is indeed impossible to supply food, at all corresponding to the natural food in quantity, or in its nature, to fry retained until the post-larval condition; and the resulting fish may be stunted, or at any rate will bear evidence in the adult stage of the unnatural conditions under which they were reared. They will reveal what Frank Buckland called the 'semi-tame' condition all through life.

II.

THE VERNACULAR NAMES OF FISHES.

BY PROFESSOR E. E. PRINCE, DOMINION COMMISSIONER OF FISHERIES, OTTAWA.

The editor of a well-known organ of the angling fraternity was compelled, a few years ago, to admit, 'the utter impossibility of ever clarifying the muddle caused by anglers clinging so persistently to local nomenclature in the identification and classification of fishes.' Anglers are not, however, by any means the worst offenders, and one of the main sources of confusion and uncertainty in this matter is the inveterate habit, prevalent amongst fishermen and those who handle fish commercially, of giving special names, often without rhyme or reason, to the kinds of fish which they send into the market. With regard to kinds which are uncommon, or of no value for commercial purposes, no name is too absurd to select, and the fishery expert and naturalist while frequently experiencing difficulty in determining precisely what fish may be meant, when a fisherman or dealer uses a special name for a common commercial species, finds the difficulty infinitely increased when some rare or uncommon fish is referred to. It is, as a rule, impossible to know what is meant when a fisherman speaks of a 'Sunfish,' or a 'Dog-fish,' or a 'Minnow,' for each of these terms is habitually used for half a dozen creatures wholly different and unlike. To add to the bewilderment, scientific experts have in recent years decided to throw aside generic and specific names, which from long use and familiarity have become universally accepted and recognized, and have substituted for them, in a great many cases, obscure and even uncouth and forbidding names, which, unlike the names so long adopted, are neither descriptive nor euphonious. This exchange of well known scientific names, on which even amateur naturalists were wont with some certainty to rely, has been adopted in obedience to a principle of priority, consistent and defensible no doubt from an antiquarian point of view, but wholly confusing and misleading from the standpoint of utility and convenience. The once uniform and reliable scientific names, which were a safe refuge under the bewildering variations of local nomenclature, have been thrown into hopeless and inextricable confusion. Thus the familiar *Gadus aeglefinus*, the common haddock, has become *Melanogrammus aeglefinus*; the large tunny is *Albacora thynnus* instead of *Thynnus vulgaris*: and its close relative the bonito is *Gymnosurda pelamis*, instead of *Pelamys sarla*.

It is no matter of surprise that the early settlers in this western continent, anxious for old association's sake to keep in use names familiar to them in the old land, should have applied such names, borne by very different creatures, to fishes, birds and animals new to them in this country and bearing some more or less distant resemblance to the originals. Thus it is easy to understand that the name 'robin' was applied to a bird which resembles in hardly a single feature the original *Erithacus rubecula*, or robin redbreast of England. The large aggressive loudvoiced nervous thrush 'every motion decided and alert,' the American robin (*Merula migratoria*,) is the reverse of the small delicately-formed, retiring bird with throat and breast of a deep orange red colour, whose song is of a sweet, low, plaintive character, and whose habit is to haunt the dwellings of men only in the winter time, for the English robin, unlike ours, is non-migratory. Our robin is a typical, somewhat noisy, thrush—the original robin a retiring, tender-voiced warbler, indeed the *Sylviinae* as a whole differ in every feature from the thrush family the *Turdinae* to which our North American robin belongs. It was no doubt for precisely similar reasons, largely old association, that the name speckled-trout or brook-trout, was applied to that most widely distributed and highly esteemed fish

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Salvelinus fontinalis. In the report of the Pennsylvania State Commissioners of Fisheries (1895, p. 221,) reference is made to this instance of mis-naming, and the following remarks put the matter so appropriately that I quote the paragraph verbatim :— As recently determined the beautiful brook-trout of our waters is not a true salmon but a charr, a circumstance which need not cause the angler or the lover of this attractive fish any sorrow, since all the members of this group of salmonoids are noted not only for their beauty and grace but their game qualities. No truer words were ever spoken than those uttered by an eminent ichthyologist when he declared that 'no higher praise can be given to a salmonoid than to call it a charr.' It came by the name of trout through the Pilgrim fathers who, when they first saw it in New England, mistook it for the same fish they knew in their own Devonshire streams. Had they come from the north of England or from Scotland and been more observing, the error in all likelihood would have never been made. But brook trout or speckled trout or charr, or whatever name may be applied to the fish, it needs no description. There are few anglers who are not well acquainted with this most beautiful and graceful of fishes. It is more eagerly sought for and by the majority of fresh water sportsmen in the east prized more than any other member of the finny tribe, while epicures regard its flesh as unsurpassed for delicacy and richness of flavour. Unquestionably, the pure cold water and the usually picturesque character of the streams in which the brook trout live has something to do with making this fish a general favourite among sportsmen.

Amongst many evils, which result from a lack of uniformity in the use of popular names, are the errors which inevitably appear in statistical records and comparative tables. Unless the precise application of any particular name frequently used indifferently for several fishes, be first ascertained, the information afforded by official reports may be most misleading. Familiar names like trout, salmon, smelt, herring, and pike, are used with utter carelessness, and so grossly misapplied that it is difficult to understand how any intelligent community can continue, year after year, to keep in circulation names so utterly inappropriate to many of the fishes upon which they have been imposed.

As an example of the erratic use of popular names even in official publications, I may instance the case of a very valuable, and sumptuously illustrated report of a Game and Fish Association on this continent, in which I find that the pike-perch, doré, or wall-eyed pike, is repeatedly called 'Susquehanna Salmon.' It is so called in the table of spawning seasons given in the book; but in the text, only a few lines lower down on the same page, the fish is referred to as the wall-eyed pike, whereas in the body of the report the same fish is several times mentioned as the pike-perch. This last named term is the most appropriate and most descriptive, and has been in common use for a century or two at least in European countries. This instance will illustrate the confused state of mind—not to say of nomenclature, which leads to the use of three almost contradictory terms for one fish in the pages of the same report.

Similarly the weakfish or squeteague (*Cynoscion regalis*) in the southern states is called 'trout'. Indeed all the various species are thus erroneously named, as Professor Jordan says :—'All . . . are absurdly called "trout" in the southern States—a name also applied in the same regions to the black bass.'

The misnomers, innocently applied for old association's sake, are responsible for much confusion; but this has been enormously increased by the less defensible and erratic method, adopted by men who have applied names which, through ignorance, they imagine to be rightly applied. Numerous examples of this occur amongst fishes, but perhaps the most glaring instance is the case familiar to the hunter of the magnificent stag of the western hills and plains—the *Cervus canadensis* which was called elk by men who no doubt imagined, in pure ignorance, that it bore some resemblance by reason of its size, and other features, to the elk of Europe. The European elk is really almost identical with the moose of North America. The late Professor Spencer Baird once wrote : 'It is somewhat unfortunate that the European name of this animal, the elk, should be applied here in America to an entirely different animal or deer. Much confusion has been produced in this way, and it becomes necessary to ascertain the nationality of an author before it is possible to know exactly what the word elk is intended to convey.' Nor is the name wapiti, generally supposed to be the Indian name for the great Canada stag, more accurate, for Mr. J. B. Tyrrell has recorded that the Indian

name for this fine mammal is 'waskasew.' Errors in nomenclature hardly less glaring are not uncommon in the naming of fishes, indeed they are far too frequent.

There are indeed, speaking in general terms, at least seven ways in which the names of fishes, as of birds and other animals, have been chosen and applied on this continent. First, we may note the adoption of Indian or Indo-French names—names which the early settlers continued to apply to animals because they were already in use. As a rule, these early names always more or less accurately describe features in the forms on which they were bestowed. Thus the name maskinongé, commonly, but very erroneously spelt muskellunge or mascalonge in the United States, is really an Indian name, the Chippewa name for pike being 'Kenosha' and the prefix *Mis* or *Mas* means large or great, so that Maskenosha or Maskinoge (corrupted into Maskinonge) is really a large deformed pike. So also the word ouananiche, sometimes spelt wananishe, or winninish, is really the old Montagnais Indian name, the Montagnais Indians being the Algonkin tribes who dwelt in the wild mountainous Saguenay country, as did also the Naskapis or Labrador Indians. In some learned and exhaustive articles upon the original name for the 'land-locked salmon' of Quebec Mr. E. T. D. Chambers has pointed out that the usual signification 'little salmon' (*iche* or *ishe* being a Montagnais diminutive termination) is not correct, *ouen-a*, pronounced 'when-na' is an interrogative, while *ounans* or *unans* is an eddying pool below a fall or rapid; and from either terms may have originated the word 'ouananiche,' which may thus mean 'the little what-is-it fish' or the 'little below-the-rapids pool fish,' both of which names may be paralleled by many examples in Indian nomenclature. Thus the large Mackenzie river food-fish, combining features of the pike family and the whitefish, so puzzled the early French explorers that they called it the 'dont-know-what-fish,' or the 'undetermined fish' the *inconnu*—a name which the fish permanently bears. The word *Touladi*—a variety of the great lake trout is practically the old Indian name, whereas "lunge" the name in some parts of eastern Canada for the same fish, is no doubt a French term having reference to the length of the body in this species as compared with the brook trout or the whitefish. The name for the small but valuable salmonoid, the blue-back salmon of the Fraser and other British Columbia rivers, viz., the Sockeye, is really that of the Indians inhabiting the lower part of the Fraser River—the word being *Saw-quai* or *Suck-kia*, a name which is replaced by the term *Ta-lo* higher up the course of the river.

It may be pointed out that in the United States the fish is usually known as the red-fish, more perhaps on account of the brilliant red colour assumed by the male when on the spawning grounds, than the deep red flesh, which is very characteristic of this species and gives it its special value on the markets.

On the other hand such names as *gaspereau* for the migratory alewife, called 'kiak' in Nova Scotia, is clearly a French-Canadian name, and it may be that *togue*, as certainly *longe* or *lunge* applied as already stated to varieties of the great lake trout in New Brunswick and the province of Quebec, are French, unless the word *togue* be Indian. Dr. Perley says, however, that the word *togue* is used by the lumbermen, while "the Indians designate it by a name equivalent to fresh-water cod."

Second, we may note that of the names applied on grounds of old association, perhaps the most patent is that of the adoption of the name brook-trout, or speckled trout, for a fish which is not in a strict scientific sense a true trout at all; but, as already pointed out, is really a charr, and closely allied to species of charr found somewhat locally in lakes in Great Britain and certain European countries. The fish which occurs in certain Scottish, Welsh and Cumberland lakes in the British Isles, and is most closely related to our brook trout, is not called a trout at all, but is known as a charr. The genuine brook trout, the *Salmo fario* is a true *Salmo*, and not to be confused with any member of the genus *Salvelinus*, or charrs. In size and in many features our *Salvelinus fontinalis* or brook trout, recalls the trout of the old world, and the earliest English, Scottish and Irish settlers liked to think that the streams in the new land, like those in the old, were trout streams. 'When the New England States were first peopled from Britain,' said the late Dr. Francis Day, "this fish was called a "trout" for but few of the early emigrants could have had an opportunity of observing a "charr," and they gave it the name that most

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nearly reminded them of a form which existed in the mother country.' Thus they habitually spoke of the Canadian charr as the brook trout or speckled trout. This was done deliberately and with the knowledge that this trout, like fish in the lakes and streams of North America, was not the same as the trout of English rivers and Scottish burns. Dr. Jordan has on many occasions pointed out with singular clearness the main points in which the American brook trout or charr differs from the original brook trout of Europe. Referring to the almost unavoidable blunder of the white settlers on this continent, he says:—'Finding no real trout with black spots and large scales in the rivers, and having forgotten the name of "charr," they gave to this fish the name of trout, or speckled trout, or brook trout, and in spite of the fact that in reality it is not a trout but a charr, the name of brook trout is likely to adhere for ever to the *Salvelinus fontinalis*. Real trout there are none on our Atlantic Coast, and salmon trout is likewise wanting, but the name salmon trout is often given to brook trout, or charr, which has run out into the sea; and it is also often given to another charr, a very large, coarse species, in which the red spots have faded out to a cream colour, which is found in all the lakes from Alaska to Maine, across the northern half of our continent. This is the great lake trout (*Salvelinus namaycush*), and except for its large size and comparative coarseness, it would never be mistaken either for trout or salmon. The name salmon trout is wholly inapplicable to it.'

In a very clear and luminous way this eminent authority thus compares the species to which the names 'trout,' 'salmon,' and 'charr,' were originally applied. He further says:—'In order to get a better idea of the proper application of the various vernacular names that are used in America, it is necessary to go back to Europe, the source from which these names have been drawn. First, we have a large fish, common in the salt waters of northern Europe, spending most of its life near the shores in regions where the water is cold and clear, and ascending the rivers in the spring when the high water comes down from the mountains, going through the rapids with great force, leaping cataracts, and finally casting its spawn on the gravelly bed of a small stream. This was known to the Latin writers as *Salmo*, the word coming from *salio*, which means "to leap," and in the different languages which are derived from the Latin having as its names some form of the word "salmon." The scientific name of this fish is *Salmo salar*. Very similar to the salmon in all technical respects, like it having black spots over the surface of the body and rather large silvery scales, is a smaller fish which rarely descends to the sea, and makes its home in the rivers and lakes throughout northern and central Europe. This fish was known by the name of *Fario* to the old Latin writers, the most important of whom, in this regard, was Ausonius, who wrote feelingly and poetically of the fishes of the River Moselle. From the Latin word "fario" comes the German name "forelle." This fish is the trout of all English writers, the trout of Izaak Walton, and the scientific name is *Salmo fario*.' Professor Jordan also very lucidly refers to the species on this continent, which received the European names, saying:—'In the lakes of Greenland and the eastern part of British America, the European charr (*Salvelinus alpinus*) is as abundant as it is in Europe—a fact which has been only lately made manifest, and even yet there is some question whether some of these which are found in the lakes in New Hampshire have not some time or other been brought over and planted there from Europe.'

In the lakes of Maine, and on the north, there is still another charr, smaller and finer than the European one, the Blue-back trout of the Ranglely Lakes, known as *Salvelinus oquassa*.

Thus, instead of one of the salmon, salmon trout, trout, and charr, of Europe, we have in the Eastern States the same salmon, the same charr, and three other charrs, but neither the trout nor the salmon trout.

In coming to the Pacific coast, the settlers of California brought the names with them from the East, but found none of the fishes to which they had been accustomed. Salmon they found, similar in habits and in value as food, but many of them larger, finer, and vastly more abundant than any of the salmon of Europe. California salmon differ from all the rest of the salmon family, in the fact that the number of rays in the anal fin is from fourteen to twenty, while in all the salmon and trout on the other side of the Atlantic this fin contains no more than nine or ten rays. The Pacific coast

salmon have also an increased number of branchiostegals, an increased number of gill-rakers, and a much larger number of pyloric cœca, or glands, about the stomach. They are, therefore, in strictness, not salmon at all, but something more intensely salmon than the salmon of Europe itself really is. They have therefore been placed in another genus known as *Oncorhynchus*. For the lack of any other common name they are always spoken of and will always be canned, as long as the canning industry lasts, under the name of Salmon. The Chinook name, *Quinnat*, was early applied to them, and if we feel the need of some other name to distinguish them from real salmon we may call the Pacific coast salmon *Quinnat*, or *Quinnat* salmon. These species all live in the ocean, ascend the rivers in the spring and summer, spawn in fresh water in the fall, the young, as soon as they are able to swim, floating tail foremost down the river and growing rapidly as soon as they reach the ocean and the peculiar ocean food. There are five species of these *Quinnats*, varying in size, colour, &c., and differing especially in the quality of the flesh: but all of the same genus.

Besides the salmon, the settlers of California found in the brooks an abundance of what they called trout. These are *black-spotted*, silverscaled, and in every way *closely resemble* the trout of Europe, and are wholly unlike the charr, or so-called trout of the Eastern States. The name trout by rights belongs to these fishes, and they are placed in the genus *Salmo*. A *charr* is also found in Pacific waters, but as the name 'charr' had been wholly forgotten by our ancestors, they could only call this, like the others, a trout.

A third mode of naming and one which has led to some confusion is that of the innocent application of names, which appear to the ordinary mind appropriate, but are in reality not suitable and not correct. Thus the term lake-herring is usually given by fishermen and dealers to fishes (of several species) which are really whitefishes, and not herring at all. The so-called herring of the great lakes—as also the 'long-jaw' (*Coregonus hoyi*) and the 'blue fin' (*C. nigripinnis*), all belong to the same group as the true whitefish, indeed the term lesser whitefishes should be applied to these species, which have all the characters of true salmonoids, and not one feature, except size and silvery brightness, to entitle them to be called clupeoids or herrings. In other words the term herring is in the highest degree erroneous and misleading. A similar case is that of the so-called shad in many inland waters of Canada. The process is, however, the reverse of that just referred to. The shad is a true clupeoid—a typical member of the herring family, though larger than the familiar *Clupea harengus* and reaching a weight of no less than four to six pounds—the average being one or two pounds. The name has long been applied or mis-applied to certain varieties of true whitefish in some localities. Thus in Lake Champlain and Memphremagog the fishermen for years have made catches of what they called shad, but which proved to be true whitefish, of the smaller elongated species known as *Coregonus quadrilateralis*. Official statistics have long recorded catches of shad in these inland lakes of Eastern Canada; but they have been demonstrated to be really catches of whitefish.* These catches, it may be added, were made in November, the close season for whitefish; but being regarded as shad, the law was never applied, and the fish were thus destroyed in the November spawning season. The term shad is misapplied in Lake Ontario—being there used to signify a small and worthless clupeoid, which dies mysteriously in vast schools every summer. Mr. A. Nelson Cheney, State Fish Culturist for the state of New York, writes of this fish 'It is abundant along the Atlantic coast, entering streams to spawn, and also found in the interior lakes of this state, where it is scientifically known as variety *lacustris*. The name saw-belly is given to it in Lake Ontario and the St. Lawrence, and, I think, in Lake Cayuga, where it swarms and where great multitudes die every year in early summer. From the best information obtainable the fish die from a change in the temperature of the water. Coming from the deep cold water of the bottom into the warm surface water, heated by the summer sun, they make a spasmodic movement, turn over and die in such quantities that the surface of the water is covered with them, and it is sometimes a problem to get rid of their decayed and decaying bodies.' They are very generally called shad along the Canadian shores of Lake Ontario, and the name is of course wholly inappropriate, as is also a name frequently

*Dr. Hart Merriam pointed out in 1883 that the shad in Lake Champlain were really whitefish. Bull. U. S. F. Comm., Vol. IV., p. 287.

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applied to these small landlocked gaspereau, viz., menhaden, which name belongs to a very different member of the herring family and should be confined to *Brevoortia tyrannus*. The term shad is also wrongly applied to another clupeoid *Dorosoma cepedianum* indeed, excepting the somewhat absurd name 'Hairy-back,' the four or five popular names which are given to that species all imply that it is a shad—the terms in common use being : gizzard shad, hickory shad, mud shad, and white-eyed shad, whereas it is not a shad at all ; but a large-sized member of the herring group, having a hard muscular stomach, deep body, small head, and a long hair-like projection from the hind border of the dorsal fin, really the last bony ray of that fin. In certain rivers in Louisiana, in which Dr. Evermann stated that there was no evidence of the existence of any species of true shad (*Alosa*), a herring-like species *Signalosa atchafalayæ* is called shad by all the fishermen. The term 'whiting' which is really the popular name of a European fish closely related to the haddock and cod, and named *Gadus merlangus*, is applied along the Canadian shore to a widely different fish, viz., the silver hake (*Merluccius bilinearis*) which resembles the true whiting in scarcely a single prominent feature. On the Pacific coast the name whiting is similarly applied to *Merluccius productus*, while in New York State the whitefish (*Coregonus*) is known as the whiting in many localities. A similar error was made in the case of *Menticirrhus Americanus* and *Menticirrhus littoralis* neither of which fishes are in any way allied to the Gadidæ, to one of which the name whiting has been for centuries applied.

The term shad-waiter, though an erroneous name, is not seriously confusing. It has been adopted in many lakes in Eastern Canada for the small whitefish *Coregonus quadrilateralis*, for which the name shad has been erroneously chosen in other places as mentioned above. Along the Atlantic coast the terms horse mackerel and mackerel shark are applied to the tunny (*Thynnus thynnus*) both names, having this element of justification that the tunny is a gigantic and voracious member of the family *Scombridæ*, or the mackerels, but the horse mackerel is in reality *Caranx trachurus* the scad or horse-mackerel, represented on our shores by *Caranx hippos* or *Caranx crysos*, and the mackerel shark is *Lamna cornubica*—known also as the porbeagle shark.

There is less objection to the use of the word loach or loche for the burbot, or fresh-water ling, also called the cusk, and the name is confined mainly to the province of Quebec,* no doubt brought by the early French immigrants, who were familiar with a small eel-like fish, the groundling or stone-loach (*Nemacheilus barbatula*) which Dr. Day states is known as *la loche franche* in France. It is a peculiar specialised little fish, lurking at the bottom of stony brooks and rivers, and rarely exceeding five inches in length. The burbot, at a cursory glance, recalls the brown, slimy, eel-like European loach, and *la loche* was a name instinctively chosen, though, as stated on a later page, the Canadian fish rejoices in no less than fifteen or sixteen more or less inappropriate names ; perhaps the most absurd and unsuitable for this ugly, slimy, dull-coloured, and inactive fish, is the term trout, which in some localities in the United States has been applied to it. Dr. Jordan gives the name of Alekey trout, as one of the popular names of this voracious fresh-water cod, or rather ling, (*Lota maculosa*) which some old authority, it is recorded, pronounced to be a hybrid between an eel and a trout.

A fourth mode of false nomenclature is that of the adoption of names already appropriated and universally accepted for certain fish and their application to other wholly different fish ; some fancied justification being found in the habits, the form or the teeth of the fish. Thus the word 'pike' has become venerable as the distinguishing name for the Esocidæ, yet the term pike, usually qualified by the word 'yellow,' or 'blue,' is very generally applied to fishes more closely related to the perch family, indeed the long-used scientific name *Lucio-perca*, or pike-perch, was an appropriate and descriptive one. In Canada these fish, of which there are at least three species in the Dominion, are called pickerel, and the yellow species, or American Sandre, (*Stizostedion vitreum*), is called doré in Quebec, and indeed amongst French-Canadians generally. The sauger, or Canadian sandre, also called blue pickerel (*Stizostedion canadense*) is often called blue pike by United States fishermen and sportsmen, who also distinguish both species as wall-eyed pike. Similar confusion has arisen in relation to the word 'pickerel,'

*The name losh or loche, is in use in Alaska.

which in Canada always signifies the doré, sauger, sandre, or pikeperch; but in the United States means a small species (or small specimens in some cases) of the long-nosed pike (*Lucius*) i.e. members of the *Esox* family. Mr. A. N. Cheney, whom I have already had reason to quote, has written very aptly upon this question of the confusion of the names 'pike,' 'pickerel,' &c., and I venture to give his words at length:— 'In New York State the pike, *Lucius lucius*, is almost universally called pickerel, although some concede so much as to call it great northern pike. If the word pike alone is used, it generally means the pike-perch or wall-eyed pike. I have tried over and over to separate the pike, the pickerel and the pike-perch by describing them, and the reason why I refer again to the "pickerel" is that I recently looked over a lot of fish applications made to the Forest, Fish and Game Commission in which "pickerel" were asked for, and with one exception I concluded that the applicant really wished the pike. The State does not propagate any of the pike family, but the maskinonge; but it does propagate the pike-perch, and it has distributed the pike and the pickerel on occasions, but always adult fish. Great care is exercised when pike or pickerel are distributed in State waters to place them only where they will do no harm to other fish, and that means that unless the pike or pickerel are already in the water the State will not furnish them for planting. Pike and pickerel for distribution are procured only when netting inland lakes for other fish, and this year none of the pike tribe were taken. They can be hatched artificially, and have been in Germany, but it is not necessary, for they are perhaps the most prolific of the fresh-water fishes, and being spring spawners they require but a few days for their eggs to hatch, and if they have half a chance during the breeding season fair angling will never materially reduce their numbers in a pond or lake, but they have always been the mark for the man with spear and gun when they run into the shallows to spawn. The late Count von dem Borne told me of propagating the pike and the black bass in his fishery in Germany, and how the pike fry worked through into the black bass pond and lived on the bass fry before he knew of the mingling of the fishes. I have already given the details in 'Forest and Stream,' but from memory I will say that at five months from hatching the pike that had been living on black bass fry weighed something over two pounds, and were seventeen inches long.'

A fifth and most unjustifiable mode of affixing names to North American fish is that which can only be described as the thoughtless and wilful misapplication of names either already appropriated for wholly different fish, or newly devised names without appropriateness or utility. It is surprising how many cases may be found of this erratic and harmful, and even culpable, mode of choosing names for fishes. Thus the term 'salmon,' or usually 'jack-salmon,' is used on the Mississippi River for the Canadian pickerel or the wall-eyed pike. The editor of the *American Angler* (June, 1896) stated that great attention has been paid 'by the State Fish Commissioner of that section (the county adjacent to St. Louis) to the propagation of the pike-perch locally called the jack-salmon,' while in Pennsylvania it is called the 'Susquehanna salmon.' Similarly the word 'trout' is applied to the large-mouthed black-bass, often called Oswego bass in Florida and most of the southern states. It is there also applied to the sea bass, probably the striped bass. Frequently the name 'green trout' is given to the black bass as though to reconcile the sportsmen to the misuse of the term, for a green trout could hardly be mistaken by the least observant for the silvery, richly-tinted speckled beauty of northern waters. The black bass, however, endures much maltreatment in the way of inappropriate naming, for the *American Angler* (June, 1892) p. 419, tells us that 'there is no fish, not excepting the chameleon brook trout, that shows greater variation than the black bass of both species known as green bass, yellow bass, moss bass, black perch, yellow perch, black trout, green trout, &c. This much maltreated fish bears in the Neuse River, North Carolina, the meaningless and foolish name 'Welshman,' when for the use of intelligent people the name black bass is available, and in most civilized regions it is the name generally adopted. Similarly the name 'Dutchman' is applied to the English trout or brown trout in the Beaver-kill waters. Again it is difficult to see what rational ground there can be for applying the name trout to a member of the carp family, really a chub, as is the case with (*Mylocheilus caurinus*) the Columbia River chub. Great numbers of these small inferior fish are

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caught and called trout almost universally by the local people. It is said that they 'bite very quickly and when they take them off the hook they find their stomachs full of salmon eggs.' Equally unjustifiable is the custom of calling another cyprinoid, the small mud-minnow, *Umbra lima*, by the name dog-fish—a term applied most commonly to certain small members of the shark tribe, but also given to the Bow-fin or Mudfish, *Amia calva*. The bow-fin also bears the name 'lawyer,' a distinction which had already been bestowed on Lake Ontario and Lake Michigan waters to the burbot or fresh-water ling.

A sixth mode of naming fish to which there is every reason to object is that of putting in circulation a new name in place of an old and universally known name for some comparatively trivial and unscientific reason. The most flagrant case of this evil course is found in the name very often given to the original brook trout or spotted trout of European streams and rivers (*Salmo fario*). It is by many United States authorities called Von Behr trout, a name wholly unknown in any other country, and wholly inappropriate. Even so eminent an authority as Dr. Jordan speaks of *Salmo fario* as the Von Behr or brown trout, neither of which names are commonly applied to it in any country in which the fish is indigenous. Mr. Livingston Stone, in a paper on American Fish Culture, two or three years ago, thus spoke of the reason for calling the common brook trout of Europe by the name of a German fish-culturist, and urges some considerations in order to justify the policy. He says:—

'It was the writer's privilege to carry on a delightful correspondence with Herr von Behr for several years. Dropping all official forms and, indeed, all formality whatever, his letters were earnest, confidential, and full of enthusiasm. They expressed the same love and admiration for Professor Baird that Americans felt for him at home, and never lacked in expressions of his great admiration of American fish-culture. They also record his sad domestic bereavements, and told how, after the loss of his three sons, he had resolved to devote the remainder of his life to the cause of fish-culture in Germany. I am aware that much criticism has been expressed because Von Behr's name has been given by Americans to a European trout since its introduction into this country; but whatever may be said of the judiciousness of the act, no one can deny that it was a fitting compliment to a man who richly deserved the honour, nor can any one deny that it reflects credit on the kindly feeling which sought in this way to recognize America's indebtedness to Von Behr, and to perpetuate in America the name of the distinguished German fish-culturist.'

A parallel case occurred in Canada, some years ago, when an effort was made to perpetuate the name of a pioneer fish-culturist of the Dominion viz.:—the late Mr. S. Wilmot. The name Wilmot's salmon was applied to the salmon which formerly occurred in some abundance in Lake Ontario; but is now practically extinct. The fish, it has been agreed, differed in no structural respect from the sea salmon (*Salmo salar*) and the name Wilmot's salmon never attained any currency and rightly so. As a matter of fact records show that these Lake Ontario salmon were prior to the middle of the present century extremely abundant in the lake. So late as 1856, large schools still occurred, but about 1865 it is reported that only a scanty remnant existed, destructive poaching, especially merciless slaughter on the spawning grounds, chiefly small shallow creeks and streams, had decimated them. In 1865, says an official report, the scanty remnant referred to were snatched from extinction through the efforts of the Fishery Department. This remnant was afterwards utilized by Mr. Wilmot, who conceived the idea of restocking the stream by artificial reproduction. His initial experiments, purely of an individual character, were prosecuted during two years under much outside difficulty and at very considerable personal labour and expense. They were, however, successful, establishing the important fact that salmon eggs could be hatched out there and the young fish reared through proper means and intelligent care. Aided to a very limited extent in the following years by the government, Mr. Wilmot persevered, and he was able to exhibit upwards of 140,000 well shapen, healthy and active salmon fry from three-fourths of an inch to one and a half inches long, and fully capable of being fed and reared to that stage of vigour and growth when naturally they would emigrate from their native stream and return as adolescent salmon. It was officially stated that these fry were no hybrids—no doubtful or inferior members of the salmon family—but the

thorough progeny of the true salmon (*Salmo salar*) which form so valuable a product of the sea-coast and tidal river fishings in other parts of the Dominion. 'Their identity is an ascertained certainty,' says the official report, 'in spite of a doubt which is known to exist in the minds of many persons, and demonstrating that the commercial value of fish so bred renders the subject of its increased production worthy of greater attention. Grilse, or in other words, two-year-old salmon, of the experimental hatching of 1866, having revisited the creek in the fall of 1868, are actual progenitors of part of the present large hatch of salmon fry. The female grilse is not known to propagate on her first migration from sea, but the male does. The few full grown stock fish, male and female, which were last autumn accompanied by the large number of grilse returning to the stream, were rendered available towards supplying the fecundated ova laid in the hatching troughs.'

The hatching troughs referred to were those in the private establishment inaugurated by the late Mr. Wilmot, in which he carried on for some years fish culture before the Dominion government took up the work, when the buildings were transferred to the Department of Marine and Fisheries, and fish-breeding has been carried on there until the present time. No doubt this special effort on the part of a private individual, gave that individual, in the eyes of some people, the right to confer his own name upon them; but the principle is one which has no claim to approval on general grounds, and there is on scientific grounds every reason for strongly condemning it. The name *Salmo Wilmoti* is one, therefore, which could not by any means be justified or gain currency. That vigorous and enthusiastic fish authority, the late Fred Mather, expressed himself thus clearly on this application of personal names to fish. 'I find frequent reference,' he wrote, 'to German trout, and I wish to protest against the use of that name for the brown trout. . . . the United States Fish Commissioner has seen fit to ignore the name brown trout, which, as the original importer, I have the right to give, and has called it "Von Behr trout," a name that will never stick.' The right claimed by the importer of a foreign fish, here urged, may be questioned; but it is certain that so long as the name Von Behr trout is used by fishery authorities on this western continent, their brethren in other lands will not know to what fish they refer. Certainly the name will never be recognized or adopted in any other country on the face of the earth. Quite a number of fishery experts have felt the inappropriateness which the selection of an unknown name for a well-known fish possesses, and the hindrance it is to clearness and intelligibility, and Mr. A. N. Cheney thus strongly places himself on record in a recent issue of *Forest and Stream*:

'For years I have inveighed against the use of the term German brown trout, because it was absolutely improper. As well call our native brook trout New York brook trout or Connecticut brook trout, because they happened to come from either of the states named. Over and over I have written that the brown trout is the common brook trout of Europe. In Germany it is called brook trout and in Great Britain it is called brown trout. We cannot adopt the translation of the German common name, as we have a brook trout of our own, but we can call it by its English common name, brown trout, the trout of Izaak Walton, and the first brown trout eggs that ever came to this country came from England, though the first eggs that came here to a State or national hatchery came from Germany, and the name German brown trout has stuck to the fish in one of the State hatcheries ever since. The State of New York made a fish exhibit at the State Fair in Syracuse, and when I reached the building where the fish were and read over one of the tanks, "German Brown Trout," I felt I was wounded in the house of my friends, as well as stabbed in my vitals. It required but two seconds to pull down the cards bearing this misinformation, and it required at least five minutes talk to the man who prepared the cards and put them over the tanks, and the tail end of the talk was that such an offence should be deemed just cause for the dismissal of the offender from the service of the State.'

The same authority just quoted added great force to his argument, if any additional force were needed, in the considerations which he urged in a communication to the *New York Sun* when he pointed out that the fish in question is the common brook trout of Europe—Izaak Walton's trout, native to the waters of Great Britain and the Continent, introduced into the United States, New Zealand, South Africa, India, &c. In Ger-

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many the fish is called *Bachforelle* (brook trout). Dr. Day, in 'British and Irish Salmonidæ,' persistently writes it down brook trout; but as we have a brook trout of our own we cannot adopt the translation of the German name which Day seems to prefer. In England the fish is generally called the common trout, although it is sometimes called by other names. This is particularly true in Scotland. The name German trout became attached to the European trout from the fact that the first eggs of this species sent to the country for a public hatching station were presented to the United States Fish Commission by Dr. von Behr, President of the German Fisheries Association, and were taken from German waters, although a private fish breeder in Massachusetts had previously imported brown trout eggs from England. The United States Fish Commission, out of courtesy to Dr. von Behr, named the fish von Behr trout, but in New York State the Fisheries, Game and Forest Commission adhere to the English name brown trout, and under this name it is hatched and distributed in some of the public waters of the state.'

Lastly, there is the method, too commonly adopted, of conferring a great variety of names upon one fish, instead of adhering to a single, generally accepted name. There may be an element of appropriateness in each of the names as in the term 'smelt' which is applied on many lakes in New York State to a lesser whitefish, whose specific distinctiveness was first noticed by that able and gifted fishery expert, Dr. H. M. Smith. Dr. Smith called it *Coregonus osmeriformis*, (now called *Argyrosomus osmeriformis*) the specific name having reference to the smelt-like character of its external appearance. Both the smelt and this lesser whitefish belong to the same family (*Salmonide*), and the misnaming is certainly not so outrageous as calling the whitefish a bass, a practice on some waters in New York State: the term 'Otsego Bass' being most unjustifiably applied to the lake whitefish. The name smelt is also given to *Notropis hudsonius*, a widely distributed minnow, ranging from Lake Superior to South Carolina. So also the name 'Mullet,' which really belongs to a family having most of the characters of the perch, viz., the *Mugilidæ* (applied likewise to the Surmulletts or *Mullidæ*) has been conferred in many localities to members of the carp family, from which they wholly differ. The mulletts are marine fishes, though some of them come into brackish water. The chub-sucker (*Erimyzon sucetta*) is called mullet in North Carolina, while in Ontario the *Moxostomæ*, or large scaled suckers, are called mulletts, e.g. white mullet, *M. papillosum*; blue mullet, *M. coregonus*; jumping mullet, *M. cervinum*, carp mullet, *M. carpio*, or simply mullet, *M. aureolum*. There is probably no case, however, which for variety of popular names can excel that fresh-water Gadoid, *Lota maculosa*, which rejoices in at least fifteen distinct names. It is called the burbot, the fresh-water ling, (to distinguish it from the sea-ling), the losh or loche in Quebec and Alaska, the eel-pout in Eastern Canada and some Eastern States, the dog-fish in Lake Erie, the 'chub eel' in Mohawk River, New York State; the 'fresh-water cusk' in St. John River, N.B.; 'the ling and lawyer' in Lakes Ontario and Michigan; the 'lake cusk,' and 'fresh-water cod,' of Lake Winnipogee; the 'maria' in Lake Winnipeg; the 'methy,' by the Cree Indians, and 'eel-pout' in many districts, and the 'mathemeg' in some western areas. It is also called 'spotted burbot,' but, as Professor Ramsay Wright some years ago suggested, the name American burbot is at once most distinctive and appropriate and should supplant all other names. Only one species is recognized by experts, though a small species was at one time named and distinguished as *Lota compressa*, the lesser eel-pout. Amongst the French Canadians the same lack of uniformity exists for *M. Montpetit* points out that 'Les Canadiens Français de Montreal appellent improprement ce poisson la loche; à Québec on lui donne tantôt le nom de queue d'anguille, tantôt celui de bar-bue.'

If great variations obtain regarding the naming or misnaming of this fish, a corresponding diversity of opinion exists regarding its edible qualities. At a remote Hudson Bay post, in the Canadian North-west, I found that the flesh was regarded as poisonous, indeed, cases of poisoning after Indians and employees of the post had eaten the fish were mentioned, and it was pointed out that even the dogs would not eat it. The dogs are usually fed on the excellent whitefish and decline being put off with inferior fare, and it is a fact pointed out by various explorers that the dogs of the North-west, used in the dog-trains, refuse to eat the burbot. I found, however, at another Hudson

Bay post, that the fish was often eaten and was regarded as most excellent, no ill effects having been noticed. Belonging as it does to the cod family, it should be an excellent fish for the table, like its near relatives the cod, haddock and hake. In one of the lakes in New York State, (Lake Winnipiseogee) it is pronounced equal to the whitefish for table use, and the liver is generally considered a rare delicacy.

Dr. Richardson (*Fauna Boreali Americana*) is recorded to have said that 'the flesh of the fresh-water cusk is firm, white, and of good flavour; the liver and roe are considered delicacies, when well-bruised and mixed with a little flour, the roe can be baked into very good biscuits, used in the fur countries as tea-bread.' Professor Brown Goode spoke of it as a very excellent fish, especially for boiling, though Dr. T. H. Bean pointed out that apart from the liver, the fish is not esteemed in the Great Lake region and northward, but in the rivers of Montana the burbot is in great favour.

Perhaps the name 'minnow' is more generally applied, or misapplied than any other common popular term in use. When it is remembered that the term 'minnow,' may on scientific and popular grounds be justifiably applied to small species of Pimphales, of which there are at least four kinds, of *Leuciscus*, twenty-two species; of *Notropis*, one hundred and three species; of *Fundulus*, forty-one species; of *Cyprinodon*, eleven species; of *Gambusia*, nine species, and of *Gastrosteidae* at least fourteen species or varieties, or a total of just over two hundred distinct varieties of small fishes, it can be imagined how much uncertainty and confusion is bound to arise when the name minnow instead of being confined to this somewhat numerous group of seven genera, is indiscriminately applied to any small fish if of a minnow-like appearance, whether the young of a well-known large species, or the adult of some small species. Indeed in my own experience I have heard characterized as minnows the young of salmon (that is the parr stage) of black bass, of pike, pike-perch or pickerel, of whitefish and of many other familiar kinds in immature and young stages.

More than one word is scarcely called for on the matter of traders' names or commercial names for fish. Such names are not, strictly speaking, popular names at all, and as a rule are confined to the circle of traders which have adopted them. They do not mislead the public to any great extent, though they often vitiate official statistical records, except in such cases as that of the small immature herrings caught in the Bay of Fundy and along the Atlantic coast, and used chiefly for canning purposes. These small fish, put up in oil and other liquids, are sent into the markets as sardines. They are not true sardines, but fishermen, dealers and local inhabitants never refer to them as herring. The traps or weirs are called sardine weirs; the nets, sardine nets; the fishermen, sardine fishermen; and it would be difficult to get into common use any other name than that universally adopted along the shores, viz., sardine. As already pointed out, the danger of such misnomers is that in official reports and statistical returns the information collected may often be misleading unless special care be taken to discriminate between an erroneous local or trade name, and the correct and distinctive name which is in general use. It is plain that if it were open to any one at will to use, say, the term 'dog' when referring to the horse, and when speaking of cats use the term 'bears,' no one would know what was meant, for not only would confusion result, but far worse, viz.: the spreading of misleading and erroneous statements. Yet, this is precisely what has taken place all over North America in regard to fish. Well-known names have been misapplied and misused, the same name has been given to fishes placed by naturalists wide apart, and on the other hand a variety of names, really belonging to diverse fishes have been applied to one fish.

As Dr. W. C. Kendall has pointed out in a paper on the fresh water fishes of Washington County, Maine, published in the Bulletin of the U.S. Fish Commission, 1894, vol. XIV., p. 44, that local names are as a rule far from clear, and he gives such apt illustrations from the part of Maine referred to that I venture to quote the examples which he gives: 'Local names,' he says, 'are always more or less confusing, and they are especially so in many instances in Maine, where distinct species in neighboring localities are often known by the same name. The name "chub" is applied indiscriminately to the larger fishes of the family *Cyprinidae*; "young chubs" or "shiners" to the intermediate sizes, and "minnies" to the young *Cyprinidae* and to the *Cyprinodontidae*. The catfish *Ameiurus nebulosus*, is known generally as "hornpout," as also in some places in stickle-

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backs *Pygosteus*, *Gastrosteus*, and *Apeltes*. *Catostomus teres* is commonly designated as "sucker." *Semotilus bullaris* is widely known as "chub;" but the adult *Fundulus heteroclitis*, in places along the coast, are likewise called "chub," and the young of the same species "minny." *Salvelinus fontinalis* is everywhere recognized by the names "trout," "brook trout," and "speckled trout," *Salvelinus namaycush* is known as "togue," "lake trout," or "salmon trout;" *Salmo salar sebago* as landlocked salmon and "salmon trout." The brook-trout when large, also has sometimes been misnamed salmon-trout. *Salmo salar* is commonly known as "salmon" or "sea salmon."

If the use of popular names is to be anything else than a hindrance and a false guide, some uniform method of popular nomenclature will require to be adopted. The adoption of a cast-iron rule of priority might, as in the case of scientific nomenclature in ichthyology, result in the suppression of generally accepted and well-known descriptive names and the unearthing of questionable treasures in the shape of uncouth and unknown names from the lumber pile of musty antiquarian ichthyological records. Nomenclature should be a help, not a hindrance, and its terms as far as possible should be descriptive and convey information instead, as is too often the case, of mystifying and beclouding the intelligent student and inquirer.

III.

ACCLIMATIZATION OF FISH, FRESHWATER AND MARINE.

BY PROFESSOR EDWARD E. PRINCE, DOMINION COMMISSIONER OF FISHERIES, OTTAWA.

Fishes are frequently divided into freshwater and salt-water species, though there are some kinds, like the salmon, shad and eel, which occupy a kind of neutral position ; and have the habit of spending part of their time in fresh water and part in the sea. Those which ascend rivers for spawning purposes, their young brood descending at a sufficiently advanced age to the ocean, are distinguished as "anadromous" or "ascending" species, while those which have their habitat in fresh water lakes and rivers, and migrate to the sea for spawning purposes, are known as "catadromous." But while these distinguishing names apply accurately enough on the whole, there is abundant evidence that numerous species, which are essentially marine species and neither anadromous nor catadromous, are able to live in fresh water and *vice versa*.

The power of endurance which enables a marine fish to live and grow, and even reproduce in fresh water, or in brackish water, is in some species so remarkable as to open up to the fish-culturist possibilities which hitherto have received little or no attention. If waters remote from the sea can be stocked with fine species of fish, normally inhabiting salt-water, the possibility of conferring immense benefits upon the public becomes apparent. The introduction of new species of fish into various countries, as for example the brook trout of this country into England has been a great success. Plants and trees in the same way have been distributed. I had for many years been impressed with the remarkable adaptability to new and unaccustomed conditions of certain Canadian fishes and it had occurred to me that some of the so-called alkaline or saline lakes—many of considerable extent—in the North-west Territories, might be stocked with fish capable of enduring profound changes of environment. I had a long conversation in 1893 with Sir John Schultz upon the subject, and as a result, Sir John, at that time Lieutenant-Governor of Manitoba, arranged for a discussion of the matter with the Rev. Father Lacombe. I therefore arranged a scheme for introducing certain species of fishes, new to western waters, into the barren and unpromising lakes in the west. Various circumstances interfered with the realization of the plan which I devised in detail ; but in 1896 an attempt was made, to which I referred in my report upon fish-culture in that year (29th An. Rep. Dep. Mar. and Fisheries, 1896, pp. 290 and 291). The frost-fish or tom-cod on account of its hardy nature, habits of spawning and excellence as a table fish, appeared specially suited for transference to the barren western lakes, where the conditions are somewhat unfavourable to most kinds of edible fish.

Few people have any idea of the number of species, which can be safely transferred from their usual habitat to conditions wholly different in many respects. To the fish-culturist, whose work includes the introduction of valuable species, in adult or immature stages, into new waters, as much as the hatching and rearing of the usual kinds, the fact is of profound importance.

That certain marine shell-fish are able to survive removal from their usual surroundings has long been known. In a paper read Nov. 19, 1825, to the Wernerian Society of Edinburgh, Mr. Henry Witham described a bed of sea-cockles (*Cardium edule*) as existing in a peat moss in Yorkshire at a distance of no less than 40 miles from the sea. The peat-moss was about two miles from Greta bridge, and not many miles from the river Tees. The bed of cockles, which were living on the sandy bottom of a channel or drain passing through the peat-moss, had existed for a long period, indeed the adjacent

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farm was called Cocklesbury in allusion to the occurrence of the shell-fish. Specimens of the cockles were exhibited at the meeting of the Wernerian Society, and they differed in no respect from those occurring on the vast beds of the estuary of the Tees, excepting that on tasting them they were less distinctly salt in flavour. Over a hundred years earlier Mr. John Brand, in his book entitled 'A Brief Description of Orkney, Zetland, Caithness, &c.' (Edinburgh, 1701,) referred to the occurrence of living cockles in the fields more than a mile from the sea. When ploughing the fields, cockles were turned up in numbers and were eaten. Of this remarkable occurrence Mr. Brand wrote:— 'How these shell-fishes came there, and should be fed at such a distance from their ordinary element, I cannot know, if they have not been cast upon land by a violent storm, much of the ground of this parish, especially what they labour, lying very low, and the sea hath been observed in such storms both to cast out stones and fishes; or if these cockles have been found in some deep furrow, from which to the sea there hath been a conveyance by some small stream, upon which the sea hath flowed in stream tides, especially when there is also some storm blowing. If only shells were found such as oysters and the like, the marvel would not be great, seeing such are found upon the tops of high mountains, at a greater distance from the sea, which, in all probability, have been there since the universal deluge; but that any shell-fish should be found at some distance from the sea, and fit for use, is somewhat wonderful and astonishing.' Specimens of the sea-whelk, *Buccinum undatum*, have been found in Shetland, living on the margin of a freshwater lake (on the island of Yell) about a mile and a half from the sea. The shells were somewhat thinner in texture than those found on the adjacent rocky coast, and their coloration differs markedly, being very distinctly banded. Many showed the tip fractured, lending support to the theory that crows or water fowl had carried them to the locality, but that they were found living in fresh water, and according to competent observers differed from the marine forms in certain features seemed to show that they had long lived in their new surroundings. The lake had an extremely small outlet emptying by a minute rivulet into the sea, and it was practically unaffected by the tides. The well known Scottish geologist, the late Dr. John MacCulloch, suggests to a resident on the Isle of Guernsey, viz., Mr. Arnold, that experiments, in the acclimatization of many species of marine animals, might be tried in a closed pond about four acres in extent, and separated from the sea only by an embankment. The inflow of fresh water (non-saline that is to say) was very deficient in summer, but abundant in winter, hence it was nearly fresh in winter, very salt in summer and brackish in varying degrees at intermediate periods. The experiment which was tried, was not therefore conclusive in establishing the permanence of the adaptability of the creatures tested, to fresh-water conditions, yet a variety of sea fishes as well as crabs, shrimps, oysters, and mussels, survived in health and vitality. The test was, however, not decisive as to the possibility of keeping these creatures alive at a distance from the sea and in water which was invariably fresh. That oysters can endure transference to water, not merely brackish but almost destitute of salinity, has been demonstrated. They do not breed under such conditions, nor do they maintain a fully healthy state, though they may fatten and increase in size.

From an economic standpoint the acclimatization in fresh water of fishes wholly or partially marine is, however, of prime importance. That a fish, like the salmon, which habitually spends much of its life distant from the sea, should either naturally or under circumstances artificially devised, take to a purely fresh water existence is not surprising. The ouananiche or land-locked-salmon of eastern Canadian waters is a familiar example. No doubt the land-locked species of salmon found in certain lakes in Maine, U. S. A., and in Chamcook and other lakes in New Brunswick, has acquired the habit of remaining permanently in fresh water, owing, as in the case also of Lake St. John in Quebec, to certain physical difficulties which may have at one time existed in the way of admitting free migration to and from the sea. The experiment has been tried of retaining the fry of sea-salmon in fresh water ponds and lakes with a view of originating a non-seagoing variety, but with no satisfactory success, so far as has been demonstrated. Perhaps the earliest attempt, at any rate, one of the earliest attempts artificially to raise a land-locked variety of the sea-salmon was that made in Lier, in the south of Norway. A quantity of salmon fry were in the year 1857 put in a small fresh

water pond. Their growth was found to be slow, for after a period of five years, they had only attained a weight of $1\frac{3}{4}$ lbs: less than one tenth the weight normally reached by the migratory salmon. In the same year 2,000 salmon and sea-trout fry were placed in two lakes in Luardal, Lower Thelemarken, and the experiment proved somewhat more satisfactory than the initial attempt at Lier. In 1862 some of the salmon were found to weigh $3\frac{1}{2}$ to 5 lbs. each, while the sea-trout averaged half that weight. At a later date an experiment near Throndhjem, and another near Christiania resulted in salmon weighing from $2\frac{1}{2}$ to 8 and 9 lbs. While the experimenters found that growth is more tardy than is the case with those having access to the salt water, yet the maximum growth seems to be largely influenced by the size of the waters. The larger the lake the speedier their growth. In small ponds the experiment proved no very marked success. Even in large inland seas, like Lake Huron, the late Mr. S. Wilmot stated that he found them somewhat stunted. 'I took the eggs of *Salmo salar*, impregnated them, hatched them and took them up into the rivers running into Lake Huron,' said Mr. Wilmot in 1883, and to day some of the true *Salmo salar* are found in Lake Huron, though smaller than those found along the coast.' The Lake Wernern salmon in Norway are said in size and every other feature to equal if not rival the sea-salmon (see Day, *British Salmonidae*, p. 104.) Sir James Maitland in Mar., 1881, hatched fry from the eggs of sea-salmon, and kept some of the brood until 1884 when he took eggs and milt from them and in Mar., 1885, produced young salmon from small parent fish (smolts) which had never been to the sea. In 1886 some of these young fish were $5\frac{1}{2}$ in. long as Dr. Day has recorded.

Apart from the influence of the water, its salinity and chemical character, there are other conditions which must also be taken into account. The area, depth and geological character, and above all the fauna have a potent influence. The last is but another name for the food-supply, and of the influence of that, Mr. J. Harvie-Brown of Dunipace (Scotland), has given to the scientific world a remarkable instance. Mr. Brown says:—

"I put a $\frac{1}{4}$ lb trout, along with others, into a previously barren loch, in two years some of these trout attained to $4\frac{1}{4}$ lb. weight, developed huge fins and square or rounded tails, lost all spots, took on a coat of dark slime, grew huge teeth, and became *feroces* in that short time. The common burn trout, taken from a very high rocky burn up in the hills, in two years became indistinguishable from *Salmo ferocax*. The first year they grew to about 1 lb. or $1\frac{1}{4}$ lb., took on a bright silvery sheen of scales, were deep and high shouldered, lusty and powerful, more resembling Lochleven trout than any others. This was when their feeding and condition were at their best; but as food decreased, and they rapidly increased in number, spawning in innumerable quantities, and with no enemies, the larger fish began to prey on the smaller, grew big teeth, swam deep and lost colour, grew large fins and a big head, and became *Salmo ferocax* so-called. In two years more the food supply became exhausted, and now the chain of lochs holds nothing but huge, lanky, kelt-looking fish and swarms of diminutive 'black nebs,' neither of the sorts de-erving of the angler's notice. The first year they were splendid fish—rich and fat. Now they are dry and tasteless."

Dr. Barfurth ascertained that when migratory fish ascend into fresh water and find no suitable spawning ground they refuse to shed their ova, and an anatomical examination showed that ovarian disease had resulted, and the eggs had degenerated. Certain marine fish, for example, flounders, have been noticed in an egg-bound condition, due to some physiological cause, and the specimens were found to grow sick and ultimately they died. Dr. Barfurth reported that in the case of trout, which were prevented from spawning, the ovaries not only became diseased, but the eggs and brood of the same fish in the following season were very inferior, and had been affected detrimentally. It was this consideration which compelled me to withhold approval of the plan, inaugurated in Canada by the late Mr. S. Wilmot, of retaining parent salmon in sea-water ponds long after they should naturally have reached the upper waters, where the spawning beds are located. In most cases the land-locked salmon, those that is to say which became land-locked naturally, can descend to the sea. There is no insuperable obstacle in the way of their descent to the ocean. The ouananiche of Lake St. John, in the province of Quebec, are occasionally found in the Saguenay river, far below the Grande Décharge,

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and the variety of salmon, evidently a land-locked variety, similar to the ouananiche, and found in Grand Lake, Lake Onawa, and the head waters generally of the St. Croix river, on the borderland of New Brunswick and the state of Maine, can also readily descend to the sea, if they desire to do so. The famous fish-culturist, Mr. Charles G. Atkins, once said of the land-locked salmon in Maine, U.S.A., 'it is likely that it has sometimes occurred to stray individuals to descend the St. Croix river, or the Presumpscot to the sea.' The catadromous habit, however, seems to have been lost, largely, no doubt, owing to the abundance of food, especially the dainty land-locked smelt, which is plentiful in most lakes inhabited by non-migratory salmon. Specimens which do descend such a river as the Saguenay cannot readily return, but this difficulty of return does not apply to land-locked salmon waters generally. It is possible, as already indicated, that the non-seagoing habit was assumed when the physiographic conditions were different. A slight geological elevation or subsidence in the St. Croix river basin would very much alter the means of access to the sea from inland lakes, and some such changes may have been effected, while we know that the basin of the Saguenay is geologically a most remarkable one. The late Mr. Wilmot spoke on this matter in London, in 1883, and remarked:—It might be said, how could the salmon in Lake Ontario be said to be land-locked when the St. Lawrence emptied that lake into the sea? Salmon were feeders in the sea and breeders in fresh-water; they migrated annually to the rivers to reproduce. When they were abundant in the waters of the gulf, they passed up the St. Lawrence, entering every stream on either side up into Lake Ontario; and were it not for the great barrier of Niagara Falls the salmon would be found in the upper springs of Lake Superior. It was their instinct to go onward and onward until they found a suitable spot for spawning, and they would have passed into Lake Erie and Lake Superior, the same as Lake Ontario, were it not for the falls; the consequence was they entered into the smaller streams which fed the lake and went back into Lake Ontario instead of into the sea, where they had remained up to the present time, as the true sea-salmon only acclimatized to fresh-water.

It appears to be wholly different with the large Pacific salmon, known as the spring salmon or quinnat (*Oncorhynchus quinnat*). The California State Fisheries Commissioners, in their report 1876-77, quoted in the report of the U.S. Commissioner of Fisheries, 1878 (Washington, 1880), state of this fish that it readily adapts itself to a life in fresh water, and reproduces its kind where it has no opportunity to go to the ocean. When the dams were constructed on the small streams that go to make the reservoirs of San Andreas and Pillarcitos—which supply the city of San Francisco with water—as also when the dam was constructed on the San Leandro, to supply the city of Oakland, the young of the salmon that had spawned the year previous to the erection of these dams remained in the reservoirs and grew to weigh, frequently, as much as ten pounds; these reproduced until the reservoirs have been stocked. As the supply of fish increased the quantities of food lessened, so that the salmon have gradually decreased in weight until now, after nine years, they do not average more than two pounds. From the fact that, when food was in abundance, they grew to weigh from eight to twelve pounds, and that, as they increased in numbers, they averaged less in size, but still continued to spawn and produce young fish, it would seem that the Sacramento salmon may be successfully introduced into large lakes in the interior of the continent, where, in consequence of dams or other obstructions, they would be prevented from reaching the ocean. The history of this fish in these small reservoirs shows that all that is requisite for their successful increase is the abundant supply of food, to be found in large bodies of fresh water. Salmon, fully mature, weighing two pounds, and filled with ripe eggs, were taken, in September, 1877, in the waters of San Leandro reservoir. These fish were hatched in the stream which supplies the reservoir, and by no possibility have ever been to the ocean. The San Leandro is a coast stream, not exceeding fifteen miles in length, and empties into the Bay of San Francisco. It contains water in the winter and spring, at which time, before the reservoir was constructed, the salmon sought its sources for the purpose of spawning. There was never sufficient water in the months of August or September to permit the fish to reach their spawning grounds. After the construction of the reservoir, large numbers of the salmon that came in from the ocean in January and February were caught at the foot of the dam and transported

alive and placed in the reservoir above. The descendents of these fish thus detained in fresh water and not permitted to go to the ocean, have so far modified the habits of their ancestors that they now spawn in September, instead of in January and February. Inasmuch as these fish spawn in the McCloud, in the headwaters of the Sacramento, and at the sources of the San Joaquin, in the Sierra Nevada, in September, and in short coast range rivers in January and February, and as, when changed to other waters, their eggs ripen at a time when the conditions of their new homes are most favourable for reproduction, they show a plastic adaptability, looking to their future distribution, of much practical, as well as scientific, importance.

This large Pacific salmon, unlike the true or Atlantic salmon, can endure a very high temperature—indeed it is stated to ascend rivers in California, the water in which is no less than 70° F. The colder waters of the eastern sea-board would indeed appear to be less favourable, as there is no clear evidence that any adequate results, indeed any results at all have followed the planting of quinnat salmon in the waters of Ontario and the maritime provinces. The retention of young salmon in restricted waters such as Parker's Lake near Campbellton, N.B., in the Restigouche basin, and at the pond close by the salmon hatchery at Tadoussac, P.Q., has not had satisfactory results. The fish seem dwarfed and never reach more than a third of their usual growth, while there is no evidence that they breed at all. The species of Clupeoid found in Lake Ontario and erroneously called shad, though it is really not distinguishable except in size from the Gaspereau or Alewife, which migrates up rivers from the sea in the maritime provinces, is supposed not to be native to the interior waters. If artificially introduced it is now thoroughly established and has become extremely abundant. It is said to spawn in spring in inshore shallows, and vast schools of them die and are stranded on the lake shore, causing great annoyance to the residents. They accumulate in some seasons in decaying masses, fouling the water and polluting the air. It has been argued that this extraordinary mortality is due to the difficulty of readily descending to the sea, which the Gaspereau along the sea-coasts can easily accomplish. Probably that is not the explanation of the fatal epidemic which occurs every summer. Of a great variety of fishes it cannot be said that change of habitat from salt to fresh water, or vice-versa, has had any such serious effects as that just detailed. Many species voluntarily appear to make the change and suffer no apparent inconvenience, others have found themselves involuntarily in their new environment, and become thoroughly acclimatised, while others have been transferred artificially by man, and have flourished under the change.

There is no well established case of a marine species of shark or dogfish taking permanently to fresh-water, except one instance recorded in the *American Angler*, March, 1897, (Vol. xxvii, p. 87.) Among the strange things told us (says the narrator) was his (Mr. Broder's) chance meeting with a live salt-water dogfish, about fifteen hundred miles from its natural habitat—the ocean and its estuaries—and the writer quotes Mr. Broder as saying: I saw and handled this dogfish in 1881, near the headwaters of the Bruno river, in Elko county, Nevada, about twelve miles from Mountain City, a mining camp. I was accompanied at the time by ten vaqueros (cowboys) and a Mexican named Via. These men were working for Mr. Dan Murphy, who at that time was rated as the largest land owner in the world, as he owned about two million acres in Mexico and a like amount west of the Rocky Mountains. One of the vaqueros brought the dogfish to me, it having been nearly killed by one of the train wagons when crossing a small stream. I think the fish was following the salmon from the Pacific Ocean up the Bruno river, a distance of at least 1,500 miles.

Sharks are known to ascend the Amazon and other great rivers to considerable distances, but not beyond the influence of salt water, while there is a saw-fish (*Pristis perottettii*) in the Senegal river, and some South American and Indian species of Electric Rays (*Torpedo*, *Narcine*, &c.), which are purely fresh water in habitat. A shark (*Carcharias gangeticus*) frequents the Ganges and is found nearly 200 miles from the ocean. In this connection it may be mentioned that of the order of whales also three are residents in fresh water, viz.: the small *Platanista gangetica*, which lives in the Ganges, and *Inia* and *Pontoporia*, found in the Amazon and South American rivers, and belonging to the Grampus and Porpoise family. The Beluga, or large white whale,

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ascends the St. Lawrence river in considerable schools for nearly a hundred and fifty miles from the open sea, passing, indeed, up the Saguenay river for some distance.

The small gadoid, *Microgadus tom-cod*, Walbaum, the tom-cod or frost-fish, a valuable little food-fish, which varies from 4 to 12 inches in length, is capable of enduring great changes in regard to the salinity of the water in which it lives. It ranges on the Atlantic coast of this continent from Labrador to Virginia, and is in great request for the table wherever it is found. Though so dwarfed it is a true cod in all the usual external characteristics, and in its excellence for table use. Occurring as it does to so large an extent in brackish water, especially in harbours and about piers and wharfs, it is found to make its way up rivers as far as the limits where the water is essentially fresh. Its artificial retention in fresh water does not appear to have been attempted, nor are there records of such being accomplished, as there are in the case of the smelt, the sea-herring, striped bass, &c. The field open to the fish culturist in regard to the acclimatization of species of fishes, usually regarded as marine, is a wide and promising one. But much information will be necessary before any successful attempts in this direction can be carried on upon an extensive scale. We know how species vary in their powers of endurance, so that it is impossible except by experiment to presage the tenacity of life which a particular species may possess. Thoreau has said of the catfish or common bullhead, *Ameiurus nebulosus*, that specimens are only killed with extreme difficulty, for they have been observed opening and shutting their mouths for half an hour after their heads have been cut off.

Professor Jordan's studies of the fishes in the waters of Yellowstone Park, state of Wyoming, have yielded some quite unexpected results. The alkaline character of the waters, the calcareous and siliceous matters which so strongly impregnate the ponds, geyser basins and outlets, and the streams and lakes in that remarkable region of hot springs does not seem to be fatal to fish life, nor is the high temperature seriously detrimental in a great many cases. In Yellowstone Lake, trout are especially abundant. Dr. Jordan reports about the hot overflow from Lake Geyser Basin. The hot water flows for a time on the surface, and trout may be taken immediately under these currents. Trout have been known to rise through a scalding hot surface current. They also linger in the neighbourhood of hot springs in the bottom of the lake, and the fact is evident that geyser water does not kill trout. In Heart Lake, trout are most plentiful about the mouth of the Warm Witch Creek. Suckers and chubs (*Leuciscus atrarius*) ascend this creek for some distance, although half its water comes from geysers and hot springs. The chubs are found in water in which the temperature is about 85° F. Dr. Jordan has published many interesting details, and I quote the following:—The Hot River, which drains the Mammoth Hot Springs, flows into Gardiner River. Trout abound about the mouth of this stream, and here, as in numerous other places in the Park, the conventional trick of catching a trout in cold, and scalding it in hot water, is possible. Below the mouth of this Hot River young suckers (*Catostomus griseus*) were found in a temperature of about 88°, and young trout in a temperature of about 75°. The small Miller's Thumbs abound in the Gibbon River about the hot springs. Three were found boiled in the edge of the river below Elk Park, at the mouth of a hot tributary. The volume of hot water poured into any river is greatest in the Firehole, below the upper Geyser Basin. The stream, however, is hardly warm, and the water has little mineral taste, though the abundant vegetation gives it something of the flavour of stewed plants. Even this stream, it would seem, is probably not so hot nor so heavily charged with mineral substance as to be unfit for trout. Its waters constitute a very dilute alkaline siliceous solution. * * * * There are, however, numerous springs in the Park which discharge sulphurous liquids (some of them the black ammoniac sulphide, being very offensive in odour and doubtless fatal to fishes.) Most of these springs have but a very slight discharge, and so exert no appreciable influence on the streams. The upper part of Obsidian Creek between Twin Lakes and Beaver Lake is the only running stream noticed as likely to prove uninhabitable by fishes.

Professor Jordan found the red horse sucker (*Catostomus ardens*) abundant in the warm waters of Witch Creek, while the diminutive *Agosia nubila* was found in the same heated location. The Utah chub (*Leuciscus atrarius*) ascends the same creek in great numbers, going up further than any other fishes and being found in water no

less than 88° F. Thus cyprinoids and trout (the red-throat or Rocky Mountain trout) endure conditions of temperature and chemical impurity of water under which it would at first sight be regarded as improbable not to say impossible, for them to survive. We know that the fresh water species of trout can all at will take to a seawater habitat and, as in New Zealand, become so vastly changed that a specialist would hardly recognize the transformed fish as belonging to familiar species, yet the young salmon and the young trout cannot for more than a few seconds endure salt water. Indeed in the young larval stages they die very soon after transference to salt water—the physical nature of the yolk sack becomes so seriously altered. The whole subject is not only one of great biological and physiological interest, it is also of immense practical importance. If the cyprinoids, the salmonoids, and the gadoids, can furnish examples of this transformation of habitat—the exchange of a fresh water life for life in salt water, there is every reason to think that a much larger range of genera will be found to possess powers of endurance no less remarkable.

The Bras d'Or Lakes in Cape Breton as is well known are peculiar inclosed lakes of sea water, or rather of water whose salinity is markedly less than that of the sea outside. Lobsters, cod, and other valuable marine creatures, are found in these waters, but not in any great abundance. The lobsters are said to be of large dimensions, but by no means so numerous as along the shores washed by the ocean. Cod of very large size too are captured, some 56 and 58 lbs. weight having been taken in Little Bras d'Or Lake; but it has been remarked that the head in these specimens is disproportionately large, as though they were not so well fed as their congeners in the open sea. Cod indeed occur in all parts of the extensive Bras d'Or waters, numbers being taken with hook and line through the ice at Whycomagh which is at least 50 miles from the sea coast (to the north-east), and 25 miles from the coast (on the south-east) of Cape Breton Island, and the water in some places is almost fresh.

Only one or two members of the cod family (Gadidæ) are, however, known to be truly fresh water species. All the rest are marine. The fresh water codfish known as the cusk, burbot, ling and eel-pout, and by many other names, is a typical Gadoid somewhat resembling the sea-ling *Molva molva*, and ranges from 2½ lbs. to 10 lbs. or 12 lbs. though in extreme north western lakes it is recorded at 50 lbs. or 60 lbs. weight. An allied form belonging to the hake family (*Merlucciidæ*) has been found to forsake the salt water, and in winter at any rate resort in considerable numbers to freshwater. An instance of this is afforded by Darling's Lake, near Rothesay, New Brunswick. In this lake, which communicates with the Kennebecasis River, a considerable branch of the River St. John, large numbers of silver hake (*Merluccius bilinearis*, *Mitchill*) are caught on hook and line through the ice. This being a salt water fish, its presence in the waters of Darling's Lake is explained by its habit of following the shoals of gaspereaux or alewives when they ascend in spring from the sea. The true cod (*Gadus morhua*) is found in moderate abundance in the Baltic Sea, the waters of which are of low salinity especially in the bays and inlets along the shores. Other members of the family *Gadidæ* occur there such as the haddock, the ling, the whiting, the pollock and the green cod; but none are so numerous as the true cod. As might be surmised, the cod does not reach the size which it attains in the open sea, rarely exceeding 12 or 15 pounds, whereas in the salt water outside it reaches a weight of 50 or 60 lbs. * The specimens indeed become more stunted the further one goes up the Baltic, in the Sound and southern part of the Baltic, off Copenhagen, the size ranges from 3 to 6 lbs., whereas 300 miles further up, off Gothland Island, they run from 2 to 3 lbs.: at 150 miles further up near Stockholm, nearly 500 miles from the Sound, the weight is barely 1 or 2 pounds. They differ in colour, being darker, and showing few spots, in contrast to the rich brownish red mottled markings and spots of the cod nearer the sea or out in the open ocean. The Baltic cod spawn in comparatively shallow water somewhat late in the season off Gothland and Stockholm. A similar instance of the sea-cod's change of habit is recorded in Iceland. In Olufs Fjord lake, a sheet of fresh water near the mouth of the romantic Olufs Fjord, and separated by a neck of land from the sea out-

* The well known Scottish authority, Dr Parnell, was certainly wrong when he said 'Cod are never found but in salt water, and remain habitually in the depth of the sea (Fishes of the Firth of Forth, p. 334).

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side, there are found cod, not distinguishable from the marine cod except by their smaller dimensions. This freshwater species, locally called 'Mauronger' is not found elsewhere in Iceland. In a Norse journal it is stated that M. Elisée Réclus specially mentions this fish as a kind of cod acclimatized to fresh water; but an opinion exists that a subterranean passage did or does allow of communication with the sea, and the cod may have found entrance in that way. Herring, it is stated, have found their way into this freshwater lake, and having passed the winter months there have died. In England, small cod 5 to 8 inches long are found considerable distances up rivers. Thus they are common at Goole, a town on the River Ouse, which empties into the estuary of the Humber, in Yorkshire. In Canada at least five species of Clupeoids very closely allied to the true herring migrate up rivers to spawn in fresh water (viz., the gaspereaux or alewives, *Pomolobi*) two species of shad (*Alosa*) have the same habit, one species of *Dorosoma*, the Gizzard shad, which ascends the St. John River in New Brunswick, and one species of *Brevoortia*, viz., the Menhaden or Pogy. Four other species of clupeoids, at least, have become completely acclimatized to a non-marine environment, viz., the goldeye (*Hiodon alosoides*), found in the Red River, Lake Winnipeg, and western waters, the mooneye (*Hiodon tergisus*) of more eastern lakes and rivers, the blue herring (*Pomolobus chrysochloris*) and the alewife (*P. pseudoharengus*) in Lake Ontario and eastern waters. The last-named occur in Lakes Cayuga and Seneca and in western New York State; but as they annually die in enormous numbers, especially in June and July, some unfavourable circumstance exists, and experts are generally agreed that they are not indigenous. They certainly reach barely half the length of the marine forms (i.e. 6 or 7 inches instead of 12 or 13 inches). There are few records of the acclimatization of the true herring but it is interesting to note that a special race of herrings is native to the Baltic Sea called 'strömming.' They are smaller than the herrings found in perfectly salt water, and paler in coloration; but, contrary to the opinion of experienced herring fishermen, who claim that herring-spawn cannot survive the influence of fresh water, the Baltic herring spawn in suitable grounds irrespective of their salinity—indeed authorities have declared that in brackish water, where rivers debouch into the sea, there is more abundance of minute food for the young herring fry to live upon, and such localities are especially favourable for breeding herring. In the Baltic there are local races of herring and, like their congeners in the sea, they spawn at two periods, viz., spring and late summer, indeed in the Southern Baltic the spawning takes place as late as October. Nowhere indeed has such conclusive evidence been furnished of the very limited and local range of the schools of herring as in the Baltic Sea. Overfishing and unfavourable circumstances have resulted even in that comparatively limited area, (not much more than five times the area of Lake Superior) in the entire destruction of certain local herring fisheries, the schools frequenting other bays and coastal areas not moving in to fill the vacant places of the exterminated fish. Loffoden herring are caught in Borgefjord and in Lake Pollen, the latter almost fresh water but both connected with the Polar Sea by a narrow sound and the catch per annum amounts from 30 to 50 tons. They live and propagate away from pure sea water. Sea herring, and a smaller species closely allied, the sprat, are mentioned as successfully confined in fresh water or rather brackish water by Mr. Arnold, of Guernsey, in his experiments already mentioned, but they did not breed or become transformed into a fresh water form, as is certainly the case with the Baltic herring, specimens of which, some years ago, were kept for a long period in a freshwater tank at the St. Andrew's Laboratory, Scotland, under the superintendence of the eminent zoologist, Professor McIntosh.

Many instances are known of the smelt (*Osmerus mordax*) taking to a life in freshwater, though really a marine species, frequenting brackish water and migrating into freshwater mainly in the fall and in spring. It spawns in brackish water in spring. Colonel Meynell, of Yarm, in north Yorkshire, England, nearly seventy years ago, acclimatized smelts and successfully bred them. It is recorded that they lived 'for four years in a fresh-water pond, having no communication with the sea, and continued to thrive, and propagate abundantly. They were not affected by freezing, as the whole pond, which covered about three acres, was so frozen over as to admit of skating. When the pond was drawn, the fishermen of the Tees considered that they had never seen a

finer set of smelts. There was no loss of flavour nor of quality'. The late Sir James Gibson Maitland successfully tried the same experiment and said 'either the fresh water smelt of America or our own *Osmerus eperlanus*, which I have successfully hatched, and am now rearing in fresh water, if introduced into a Highland loch, for instance, Loch Tay, would enable it to carry a very heavy crop of some of the inland species, for instance land-locked salmon, &c.' (Culture of Salmonidæ, Lond. Int. Fish Exhibit. 1883.)

In New Brunswick, Dr. Philip Cox has described a land-locked smelt—indeed they abound in Loch Lomond, near St. John, N.B., and in the Chamcook waters in the same province. These land locked varieties, Dr. Jordan, the eminent ichthyologist, regards as forming at least two species, or rather subspecies, distinguishable from the sea-running smelt. One form, the Wilton smelt (*Osmerus mordax spectrum*) is land locked in Wilton Pond in Maine, and the other form, the Cobessicentic smelt (*Osmerus mordax abbotti*) is found in the neighbouring waters of Cobessicentic Lake, in Maine. In some instances there are narrow outlets to the sea. But the smelt having acquired the habit of remaining permanently in fresh water, shows no tendency to migrate to salt water. The land locked smelt in Lake Onawa, Maine, cannot descend to the sea and they abound in the lake.* The true smelt belongs to the family salmonidæ and is therefore allied to the trout, salmon and whitefish: but the so-called sand smelt, often termed the Atherine (*Atherina*), of which six species occur in more southerly waters on the Atlantic shores of this continent, is more nearly related to the mullets (*Mugilidæ*) and the sand-rollers (*Percopsidæ*). The atherine to the untrained eye might be readily regarded as a smelt, and like the smelt it has been acclimatized to fresh water, indeed the Guernsey experiment demonstrated this, as the atherine in Mr. Arnold's pond were amongst the most successful species. The mullets are essentially sea fish, yet instances are numerous of the retention of these fish in fresh water inclosures. In the Guernsey pond the mullet survived, but did not breed or become properly acclimatized, but in a fresh water pond in Tampa Bay, Florida, mullet are found in great numbers along with sheepshead (*Sparus* or *Archosargus*), red fish (*Pagrus*), &c. A correspondent in the *American Angler*, April, 1898, describes this lake, which is named 'Salt Lake,' as $1\frac{1}{4}$ miles long by $1\frac{1}{2}$ miles broad, having two small fresh water streams pouring into it, and one small outlet through low marshy woodland, connecting it with Tampa Bay at high water. Twenty five years ago this arm of the bay was salt, and peopled by salt water fish, but during a violent storm a bank was heaped up cutting off the lake, and inclosing some schools of marine fish. Some sharks and sting rays were imprisoned, but seemed unable to survive the winter (1885). The water became a little brackish: but, says the writer referred to, 'it is now perfectly sweet and fresh, and has a slight current towards the small outlet where the water drains off'. Red fish are caught in the lake weighing 38 lbs. and of much richer red colour, and of finer and more delicate flavour than those taken in the sea outside. This last remark applies to mullets and many sea fish when acclimatized in fresh water. Thus Dr. J. C. Mitchell, an authority on the fishes of Egypt, tells us that three species of mullet frequent brackish water there, and when retained in fresh water ponds attain a greater size and a more excellent flavour. He describes Lake Menzaleh, which communicates with the sea by an ancient mouth of the Nile. It is brackish, but varies in salinity at different seasons. Near the fresh water inlets it is comparatively fresh, but near the sea entrance it is more salt, and while there is a preponderance of marine species in the salter portions, the influx of flood water from the Nile affects the salinity of the whole lake, and many species, wanderers from the sea, succumb to the changed conditions. Dr. Mitchell states that all the mullets spawn in the sea and they as a family are essentially shore fishes; but they have a preference for the mouths of rivers, and cut-off lakes where the water is brackish, while not unfrequently they are found to enter rivers, indeed *Mugil cephalus* and *Mugil capito* have been caught more than 600 miles up the Nile, as far south that is to say as Assouan. 'When kept in fresh water

*Land locked salmon frequently occur in lakes inhabited by land locked smelt, and the latter may account for the loss of the migratory instinct in the former as the salmon are found to mainly feed upon the smelt.

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ponds' adds Dr. Mitchell, 'mullet are found to improve rapidly in weight and condition,' and he suggested to the Egyptian government the experiment of stocking fresh water ponds with mullet fry, which in midsummer abound in the inshore shallows of Lake Menzaleh.

The flat-fishes are without exception marine, yet certain species of flounder are found to wander up rivers long distances from salt water. The common flounder *Pleuronectes flesus* as Frank Buckland stated 'inhabits every part of the British coast, and often ascend to rivers beyond the reach of the tide, thriving alike in salt, brackish or in fresh water. Now that the Thames is getting purer, the flounders are returning to the river above London Bridge.' Many years ago I caught specimens of the flounder at Riccal, near York, on the Ouse, in the north of England, fully fifty-five miles from the sea, and they are recorded on tributaries of the Ouse (viz., the Nidd and Ribble), over eighty miles from the mouth of the Humber. As the species of flounder mentioned and most of the flat-fish, indeed, possess floating eggs not at all favourable for deposition in rivers and running water, it is probable that they do not successfully breed away from the sea, as their eggs would appear to have little chance of survival. Dr. Parnell makes the claim, which has already been mentioned in connection with other species of fish, that flounders found in fresh water are more highly esteemed for the table than those taken in salt water. He also makes the questionable assertion that they spawn in brackish water in March and April, but they certainly make their way into fresh water in many cases at a very early stage. Thus, Professor McIntosh describes them as occurring numerously in May at the outlet of a mill stream, which pours fresh water into St. Andrew's Harbour, Scotland, and their length at that time was barely half an inch. Young flounders very little older, Dr. McIntosh adds, can be captured considerable distances up the fresh water stream. Other species of flat-fishes appear less hardy and venturesome. The plaice (*Pleuronectes platessa*) has, however, been successfully retained and fattened in fresh-water ponds, as Dr. Parnell states, and the highly esteemed sole (*Solea vulgaris*) and the turbot (*Rhombus maximus*) were thoroughly acclimatized by Mr. Arnold, in Guernsey. There is only one record of the occurrence of the sole under natural conditions in practically fresh water limits, viz., near the mouth of the Yorkshire Ouse, in the estuary of the Humber. Such fishes as the striped bass, which, like the smelt, regularly ascends for some distance fresh-water streams, might be expected to survive retention, and this has been proved to be the case. In some of the larger Canadian rivers, the St. John River and the Miramichi River for example, striped bass (*Roccus lineatus*) migrate for distances of from thirty to forty miles above the limits of sea water, and congregate in large schools in deep holes in the bed of the river. There they remain in a dormant condition, resting on the muddy bottom, and are captured in great numbers by a kind of scoop net. Dr. Perley in his 'Sea and River Fisheries of New Brunswick' (1852) says 'the places which they frequent are easily discovered, the fish being seen through the clear ice when it first makes; large holes are cut in the ice, and the fish are lifted out with a circular net on a strong wooden bow, called a dip-net. All the fish in each locality, of whatever size are thus taken; and in many of the northern rivers, especially the Richibucto, and North-west Miramichi, where they were formerly very abundant, they are now quite scarce and only found of small size.' There is record of a striped bass confined in a fresh water pond which grew to a weight of 20 pounds—a considerable weight for a fish retained for some years in abnormal surroundings. The flavour too of the impounded striped bass is stated to improve, for Dr. MacCulloch personally vouched for the superiority of the flavour of the specimens confined in Mr. Arnold's fresh-water lake in Guernsey.

Fish vary so greatly in their tenacity of life, that until experiments have shown what any particular species can endure without permanent injury, it is not possible to foretell its capabilities. The German carp, for example has peculiar tenacity and endurance. A member of Parliament informed me, a year or two ago, of a fine specimen of carp that was found several miles from Lake Erie where they were planted and now abound. This carp was a very large specimen and was wriggling along a plough-furrow in which there was little or no water, evidently kept moist and alive by the thick damp herbage, just as they may be kept alive in damp moss. The accomplished angling authority of New York, Mr. Wm. C. Harris, records a hardly less extraordinary

case of the tenacity of the German carp: 'Many clubs are draining their ponds in the hope to eradicate this fish; but it will be well to do the work thoroughly, for Mr. Louis Papineau, of Montebello, Canada, tells us of a carp pond being drained, cleaned and exposed for some days until it was thoroughly dry. On the sixth day water was introduced, and some hours after several large carp were seen swimming near the surface. This is another striking instance of the vitality of this fish, which evidently burrowed into the mud as the pond was drained.* Many fishes are able to survive dry seasons by immersing themselves in mud; but they are specially organized for that peculiar habit. The bull-head tribe, (*Siluridae*), are hardy and tenacious and being exceptionally good table fish afford a fine field for experiment in acclimatization.

The Catfish family, including so many forms notoriously hardy and tenacious of life might be supposed to present numerous examples of acclimatization by transference from fresh water to salt water. Yet the records of successful transplanting are few. There are thirty or forty species which are strictly marine; but certain of the fresh water species have been found to be capable of enduring life in salt water. Thus the *Fishing Gazette* (of New York) announced in April, 1896, the capture of a freshwater catfish in the sea at Gravesend Bay, Long Island. A few days later, six 'squaretailed bullheads', of the same kind as the foregoing, were taken in a hoop- or fyke-net, and they were kept alive for some days by alternately supplying fresh and salt water in imitation of the tidal inflow and outflow, but the fish could not be kept in captivity very long. No doubt by a gradual process of change the common catfishes of our lakes and rivers could be acclimatized, and their increasing market importance would give great value to the experiment. If the fresh water species could be so acclimatized as to endure or rather live in health in water strongly impregnated with saline and alkaline matters, their suitability for introduction into certain barren waters in the north-west of the Dominion would be demonstrated. But while numerous instances are to hand of salt water fishes becoming completely reconciled to a fresh water environment, the cases seem to be far rarer of fishes, native to fresh water, assuming a salt water existence. Yet Bloch somewhere states that the grayling, one of the most delicate and fastidious of the salmonoids, frequents the Baltic and the Caspian Sea. Sir Humphrey Davy, curiously enough, laid special stress upon this very point, that while salmon and trout readily endure such changes of conditions, the grayling (*Thymallus*) will not bear even brackish water without dying. Grayling and perch undoubtedly live in certain parts of the Baltic which Linnaeus stated, after drinking some of the water, is very slightly brackish, even a mile from the shore in the upper portion. The perch (*Perca flavescens*) is found very abundantly at the mouth of the Miramichi and other Canadian rivers, where the water is quite saline, indeed where the estuary is practically part of the sea.

There are numerous species of very small fish, of no importance from an economic point of view, which frequent indifferently sea water and fresh-water. Thus the *Gastrosteidae* or stickle-backs are found in astonishing abundance in shallow estuaries, and the three spined species nests, breeds and passes its whole life frequently in small pools just above high-water mark, where high tides thoroughly impregnate the water with saline matters; but which during most of the year are kept slightly brackish by trickling streams of fresh water from the adjacent land. There are of course genuine marine species in the family, one (*Gastrosteus spinachia*), the fifteen spined species, builds a large nest of *Fucus* or other marine plants attached to rocks between tide-marks, another *G. gladiunculus* is found in the east Atlantic coast amid floating sea weeds. *Gastrosteus pungitius*, the ten spined species, is recorded from brackish and salt water, but its relatives, especially *Gastrosteus aculeatus*, are found distributed, from lakes and streams far inland and up the highest mountains to low lying marine swamps and estuaries. Indeed the species named often abounds in pools just about high-water mark making its small mound-like nest and rearing its numerous families regardless of the variety of conditions obtaining in these various situations. There is no more remarkable feature presented by fishes than this incapability, on the one hand, in some species, of enduring salt water or even brackish water; and on the other hand in other species, the capability

* Recorded instances of carp flourishing in hot and in alkaline waters are questionable (See Bulletin U.S. Fish Commis. Vol. IV., p. 426 and Vol. V., p. 427.

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of living and flourishing in the midst of a fresh water, brackish or even extreme salt-water environment.

The plasticity of various species in this respect is a matter upon which experiments would be of great value. Changed conditions certainly work the most marvellous results. Probably no more curious example could be instanced than that of a small fish* found in Ceylon and in the Celebes, which has so accustomed itself to living on damp rocks out of water that the late Professor Balfour once declared that from what he saw of its habits he expected that the fish would be inevitably drowned by long immersion in water. 'These fishes,' says Dr. Günther, 'are able to progress out of water, on humid places, and to hunt after their prey, which consists of terrestrial insects, using their muscular fins to spring with, they jump along by a series of leaps, over rocks, seaweed and the surface of the water, and prefer escaping in that way to swimming beneath the surface.' The accomplished Dr. John Davy, brother of Sir Humphrey Davy, carried on some experiments, forty years ago, on the vitality of fishes, and his conclusion may be stated as follows,—that the enduring power of each fish in relation to variation of temperature, &c., differs in degree, the *Salvelini*, to which our native brook trout belongs, being most intolerant, the *Cyprinidæ* least so, though of course there are limits to the endurance and accommodative power of every fish, even the most plastic and hardy.

**Periophthalmus*.

APPENDIX No. 1.

EXPENDITURE AND REVENUE.

The total expenditure for all Fisheries services, except Civil Government, for the fiscal year ending June 30, 1900, including Fishing Bounty, amounted to \$411,717.35, being within the appropriation by \$31,110.45.

The total net fisheries revenue, during the same period, from rents, license fees, fines and sales, including the *modus vivendi* licenses to United States vessels, amounted to \$88,406.59.

Service.	Expenditure		Vote.	
	\$	cts.	\$	cts.
Fisheries.....	85,151	45	85,600	00
Fish-breeding.....	38,070	12	48,450	00
Fisheries protection service.....	97,370	11	100,000	00
Fishing bounty.....	160,000	00	160,000	00
Miscellaneous expenditure.....	31,125	67	48,777	80
Total.....	411,717	35	442,827	80

The details of the above will be found in the Auditor General's report under the proper headings.

In addition to the above, the following summary shows the salaries and disbursements of fishery officers in the several provinces, together with the expenses for maintenance of the different fish-breeding establishments throughout the Dominion.

Service.	Expenditure		Vote.	
	\$	cts.	\$	cts.
Fisheries, Ontario.....	3,604	94		
“ Quebec.....	5,452	41		
“ New Brunswick.....	21,459	94		
“ Nova Scotia.....	27,461	91		
“ Prince Edward Island.....	7,364	20		
“ Manitoba.....	1,723	59		
“ North-west Territories.....	3,763	23		
“ British Columbia.....	13,662	17		
General account.....		652		41
Total.....	85,151	45	85,600	00

SALARIES and Disbursements of Fishery Officers.

Service.	Expenditure		Amount.
	\$	cts.	\$ cts.
Fish-breeding, Ottawa hatchery	1,717	11	
" Newcastle "	3,646	32	
" Sandwich "	5,217	79	
" Tadoussac "	3,872	52	
" Gaspé "		1 76	
" Magog "	400	00	
" Restigouche "	8,426	76	
" Bedford "	1,474	13	
" Bay View "	1,936	71	
" Quinté Bass Pond hatchery		94 50	
" Miramichi hatchery	1,795	94	
" St. John Riv. "	2,155	64	
" Fraser Riv. "	2,741	88	
" Selkirk "	2,791	71	
General account	1,797	35	
Total			38,070 12

This expenditure by provinces is subdivided as follows :--

EXPENDITURE.

	\$	cts.	
<i>Ontario.</i>			
Salaries of officers	2,600	00	
Disbursements of officers	778	02	
Miscellaneous	226	92	
Total			3,604 94
<i>Quebec.</i>			
Salaries of officers	2,155	78	
Disbursements of officers	3,325	01	
Miscellaneous	68	25	
Total			5,548 94
<i>New Brunswick.</i>			
Salaries of officers	14,331	83	
Disbursements of officers	6,388	80	
Miscellaneous	739	31	
Total			21,459 94
<i>Nova Scotia.</i>			
Salaries of officers	15,225	38	
Disbursements of officers	12,154	52	
Miscellaneous	82	01	
Total			27,461 91
<i>Prince Edward Island.</i>			
Salaries of officers	4,958	02	
Disbursements of officers	1,732	21	
Miscellaneous	673	97	
Total			7,364 20

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EXPENDITURE—Concluded.

		\$	cts.	\$	cts.
<i>Manitoba.</i>					
Salaries of officers.....		1,716	16		
Miscellaneous.....			7 43		
Total				1,723	59
<i>North-west Territories.</i>					
Salaries of officers.....		2,731	13		
Disbursements of officers.....		1,016	18		
Miscellaneous.....			15 92		
Total.....				3,763	23
<i>British Columbia.</i>					
Salaries of officers.....		7,296	41		
Disbursements of officers			386 40		
Miscellaneous.....		5,979	36		
Total				13,662	17
General account					652 41
Grand total				85,151	45

FISH-BREEDING.

<i>Newcastle Hatchery.</i>					
Salaries		634	68		
Miscellaneous expenditure.....		3,011	64		
Total.....				3,646	32
<i>Sandwich Hatchery.</i>					
Salaries		900	00		
Miscellaneous expenditure.....		4,317	79		
Total				5,217	79
<i>Ottawa Hatchery.</i>					
Salaries.....		800	00		
Miscellaneous expenditure.....			917 11		
Total				1,717	11
<i>Tadoussac Hatchery.</i>					
Salaries.....		650	00		
Miscellaneous expenditure.....		3,222	52		
Total.....				3,872	52
<i>Gaspé Hatchery.</i>					
Miscellaneous expenditure.....					1 76

FISH-BREEDING—Continued

	\$ cts.	\$ cts.
<i>Magog Hatchery.</i>		
Salaries	180 00	
Miscellaneous expenditure.....	220 00	
Total		400 00
<i>Restigouche Hatchery.</i>		
Salaries.....	800 00	
Miscellaneous expenditure	7,626 76	
Total		8,426 76
<i>Bedford Hatchery.</i>		
Salaries.....	450 00	
Miscellaneous expenditure.....	1,024 13	
Total.....		1,474 13
<i>Bay View Hatchery.</i>		
Salaries.....	450 00	
Miscellaneous expenditure.....	1,486 71	
Total.....		1,936 71
<i>Miramichi Hatchery.</i>		
Salaries.....	1,000 00	
Miscellaneous expenditure.....	795 94	
Total.....		1,795 94
<i>St. John River Hatchery.</i>		
Salaries.....	600 00	
Miscellaneous expenditure.....	1,555 64	
Total.....		2,155 64
<i>Selkirk Hatchery.</i>		
Miscellaneous expenditure.....	2,791 71	
Total.....		2,791 71
<i>Fraser River Hatchery.</i>		
Salaries... ..	458 34	
Miscellaneous expenditure.....	2,283 54	
Total.....		2,741 88
<i>Quinte Bass Pond.</i>		
Miscellaneous expenditure.....	94 50	
Total.....		94 50
<i>General Account.</i>		
Miscellaneous expenditure.....	1,797 35	
Total.....		1,797 35
Total, Fish-breeding.....		38,070 12

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MISCELLANEOUS.

MISCELLANEOUS.		\$	cts.
Building fishways.....		911	06
Legal and incidental expenses.....		747	24
Canadian fisheries exhibit.....		1,046	17
Expenditure in connection with the distribution of fishing bounties.....		4,831	20
Surveys of oyster beds.....		4,105	08
Issuing licenses to United States fishing vessels.....		413	31
Fisheries revenue (refunds.).....		10	90
Cold storage.....		10,977	30
Biological Station.....		736	61
A. H. N. Bruce, compensation for loss.....		3,594	00
C. W. Gauthier, for supplying ova several years.....		1,300	00
Russian seizures.....		2,452	80
Total.....		31,125	67

FISHERIES PROTECTION SERVICE—1899-1900.

<i>Steamer 'Acadia.'</i>		\$	cts.	\$	cts.
Wages of officers and men.....		8,423	31		
Provisions.....		3,246	00		
Fuel.....		1,052	45		
Repairs.....		11,245	72		
Miscellaneous.....		5,590	43		
Total.....				29,557	91
<i>Steamer 'La Canadienne.'</i>		\$	cts.	\$	cts.
Wages of officers and men.....		7,865	93		
Provisions.....		2,543	39		
Fuel.....		2,646	10		
Repairs.....		2,477	74		
Miscellaneous expenditure.....		3,437	26		
Total.....				18,970	42
<i>Steamer 'Curlew.'</i>		\$	cts.	\$	cts.
Wages of officers and men.....		5,263	51		
Provisions.....		1,457	84		
Fuel.....		1,160	33		
Repairs.....		4	40		
Miscellaneous expenditure.....		2,077	22		
Total.....				9,963	30

FISHERIES PROTECTION SERVICE—*Continued.*

<i>Steamer 'Petrel.'</i>		
Wages of officers and men.....	6,552 11	
Provisions.....	2,071 05	
Fuel.....	1,580 84	
Repairs.....	1,863 74	
Miscellaneous expenditure.....	182 98	
Total.....		12,250 72
<i>Steamer 'Constance.'</i>		
Wages of officers and men.....	6,287 02	
Provisions.....	2,313 44	
Fuel.....	4,225 01	
Repairs.....	2,115 29	
Miscellaneous expenditure.....	1,925 94	
Total.....		16,866 70
<i>Schooner 'Osprey.'</i>		
Wages of officers and men.....	3,918 03	
Provisions.....	1,360 23	
Fuel.....	32 40	
Repairs.....	64 30	
Miscellaneous expenditure.....	2,472 62	
Total.....		7,847 58
<i>Schooner 'Kingfisher.'</i>		
Wages of officers and men.....	3,253 82	
Provisions.....	2,480 30	
Fuel.....	61 41	
Repairs.....	380 00	
Miscellaneous expenditure.....	2,705 78	
Total.....		8,881 31
Fisheries Intelligence Bureau.....		2,286 69
General account.....		7,612 18
Total.....		114,236 81
LESS—Amount paid by Customs Dept. for Str. 'Constance'.....		16,866 70
Net total.....		97,370 11

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STATEMENT of Fisheries Revenue paid to the credit of the Receiver General of Canada,
for the Fiscal Year ended June 30, 1900.

	\$	cts.
Ontario, rents, license fees, fines, &c.....	794	12
Quebec ".....	2,543	04
Nova Scotia ".....	5,494	49
New Brunswick ".....	12,015	27
P. E. Island ".....	2,207	12
Manitoba ".....	2,028	00
N. W. Territories ".....	1,522	50
British Columbia ".....	53,195	35
	79,799	89
LESS—Refunds.....		10 90
	79,788	99
Licenses to U.S. fishing vessels.....		8,617 60
Net Total.....	88,406	59

COMPARATIVE STATEMENT of Expenditure and Revenue of the

Number.	1886-87.		1887-88.		1888-89.	
	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1 Ontario	19,534 01	15,063 57	19,860 52	18,251 25	19,264 98	24,266 06
2 Quebec.....	14,966 55	3,804 66	13,463 37	5,394 99	12,991 63	3,380 79
3 New Bruswick.....	16,944 87	4,417 52	20,533 20	7,625 64	20,298 00	8,282 88
4 Nova Scotia.....	18,092 21	1,585 28	18,308 02	3,905 44	20,201 09	2,744 23
5 Prince Edward Island.....	4,044 49	128 00	3,402 51	.....	3,746 69	140 00
6 Manitoba & N. W. Territories.	2,468 25	5 00	2,816 64	819 25	2,848 16	848 00
7 British Columbia	5,860 72	943 50	3,661 83	6,934 55	4,333 63	6,416 00
8 Fish-breeding and fishways...	37,864 22	.....	41,082 04	.....	41,315 12	352 50
9 Fisheries Protection Service..	134,340 12	.....	77,102 98	.....	69,693 82	.....
10 Miscellaneous	11,327 77	.....	13,498 56	.....	10,912 18	.....
Totals	265,443 21	25,947 53	213,729 67	42,931 12	205,605 30	46,440 46
Fishing bounties	160,903 59	.....	163,757 92	.....	149,990 63	.....
	1893-94.		1894-95.		1895-96.	
11 General Account Fisheries ..						
12 Ontario.....	22,634 37	28,632 82	21,938 56	33,211 60	24,917 48	35,681 68
13 Quebec.....	11,692 82	7,211 82	12,459 34	8,836 18	11,870 43	8,160 98
14 New Brunswick	18,522 94	8,333 24	21,370 94	11,170 36	20,526 56	10,696 88
15 Nova Scotia	20,420 81	5,296 27	23,555 38	7,075 07	23,049 41	6,180 93
16 Prince Edward Island	3,078 55	980 15	3,796 58	3,312 30	3,555 87	2,161 85
17 Manitoba	5,331 29	926 99	6,178 71	2,458 80	6,915 20	2,256 69
18 North-west Territories						
19 British Columbia.....	5,283 21	25,337 90	6,218 74	23,517 25	6,226 77	26,410 75
20 Fish-breeding	45,024 67	.....	39,730 93	.....	38,050 41	.....
21 Fisheries Protection Service..	115,147 59	.....	100,207 29	.....	102,021 72	.....
22 Miscellaneous	34,892 19	.....	24,619 86	.....	20,203 25	.....
Totals.....	282,028 44	76,719 19	260,976 33	89,581 56	257,237 10	91,549 76
Fishing bounties	158,794 54	160,089 42	163,567 99

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Fisheries Department, from July 1, 1886, to June 30, 1900.

1889-90.		1890-91.		1891-92.		1892-93.		
Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
14,539 87	23,666 96	15,540 30	26,517 70	15,155 83	25,368 90	20,116 91	30,623 09	1
9,670 94	5,409 81	10,666 98	3,642 14	10,917 36	4,742 76	11,761 34	7,471 70	2
14,914 95	8,834 35	16,082 77	7,193 69	15,707 98	6,334 83	15,721 05	7,831 53	3
17,395 24	5,424 95	17,844 19	5,582 65	18,755 86	3,357 42	19,444 22	6,782 02	4
3,113 21	302 88	3,242 25	667 00	1,835 65	166 00	2,847 60	304 10	5
3,604 70	794 00	3,609 03	1,234 00	3,593 43	1,079 00	3,932 96	1,661 68	6
3,634 41	11,367 50	4,220 53	12,859 02	6,158 17	8,192 48	5,490 60	40,264 00	7
39,126 91	.....	39,496 45	1,286 50	43,957 74	178 00	47,322 49	.....	8
64,434 66	1,176 38	83,050 16	1,934 49	93,397 40	.....	106,805 39	.....	9
9,313 92	.....	13,382 28	.....	17,449 06	.....	100,602 14	.....	10
178,748 81	56,976 83	207,234 94	60,917 19	226,928 48	49,719 39	334,044 70	94,938 12	
149,999 85	.....	165,967 22	.....	156,892 25	.....	159,752 15	.....
1896-97.		1897-98.		1888-89.		1899-00.		
2,198 47	.....	2,389 66	.....	2,632 12	.....	652 41	.....	11
21,592 40	32,814 66	19,239 34	30,574 57	11,784 22	5,830 85	3,804 94	794 12	12
12,910 80	7,876 12	11,140 16	7,571 15	11,350 27	6,287 71	5,452 41	2,543 04	13
21,671 92	10,110 77	17,063 58	5,317 08	22,922 50	10,430 08	21,659 94	12,015 27	14
23,682 33	5,239 55	21,683 91	11,511 85	25,348 11	6,668 22	27,461 91	5,494 49	15
3,744 36	2,032 25	6,775 78	2,707 57	6,832 35	2,242 24	7,364 30	2,207 12	16
1,908 14	1,719 00	1,206 26	1,515 00	1,833 37	1,537 85	1,723 59	2,028 00	17
2,181 58	344 13	2,324 66	393 87	4,065 68	150 50	3,848 25	1,522 50	18
8,841 64	39,888 82	8,503 79	47,864 75	8,459 47	45,801 75	13,662 17	53,195 35	19
27,330 73	.....	28,002 32	.....	34,522 57	.....	38,070 12	.....	20
99,357 01	.....	101,807 96	.....	105,133 27	.....	97,370 11	.....	21
62,777 30	.....	59,919 56	.....	23,207 73	.....	31,125 67	.....	22
289,197 01	100,025 30	280,061 98	107,455 84	427,599 16	76,949 20	411,717 35	79,799 89	
154,389 77	.....	157,504 00	.....	159,459 00	.....	160,000 00	.....

APPENDIX No. 2.

FISHING BOUNTIES.

The payments made for this service are under the authority of Act 54-55 Vic., cap. 42, intituled: 'An Act to encourage the development of the sea fisheries and the building of fishing vessels,' which provides for the payment of the sum of \$160,000 annually, under regulations to be made from time to time by the Governor General in Council.

REGULATIONS.

The regulations governing the payment of fishing bounties are as established by the following Order in Council dated the 10th December, 1897.

Order in Council.

AT THE GOVERNMENT HOUSE AT OTTAWA,
FRIDAY, the 10th day of December, 1897,

Present :

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL,

His Excellency, in virtue of the provisions of 'The Bounty Act, 1891,' 54-55 Victoria, chapter 42, and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the regulations governing the payment of fishing bounties established by order of the Governor in Council dated the 24th August, 1894, shall be and the same are hereby rescinded, and the following regulations substituted therefor:—

1. Resident Canadian fishermen who have been engaged in deep-sea fishing for fish other than shell-fish, salmon and shad, or fish taken in rivers, or mouths of rivers, for at least three months, and have caught not less than 2,500 pounds of sea-fish, shall be entitled to a bounty; provided always, that no bounty shall be paid to men fishing in boats measuring less than 13 feet keel, and not more than 3 men (the owner included) will be allowed as claimants in boats under 20 feet.

2. No bounty shall be paid upon fish caught in trap-nets, pound-nets and weirs, nor upon the fish caught in gill-nets fished by persons who are pursuing other occupations than fishing, and who devote merely an hour or two daily to fishing these nets but are not, as fishermen, steadily engaged in fishing.

3. Only one claim will be allowed in each season, even though the claimant may have fished in two vessels, or in a vessel and a boat, or in two boats.

4. The owners of boats measuring not less than 13 feet keel which have been engaged during a period of not less than three months in deep-sea fishing for fish other than shell-fish, salmon or shad, or fish taken in rivers, or mouths of rivers, shall be entitled to a bounty on each such boat.

5. Canadian registered vessels, owned and fitted out in Canada, of 10 tons and upwards (up to 80 tons) which have been exclusively engaged during a period of not less than three months in the catch of sea-fish other than shell-fish, salmon or shad, or fish taken in rivers, or mouths of rivers, shall be entitled to a bounty to be calculated on the registered tonnage which shall be paid to the owner or owners.

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6. The three months during which a vessel must have been engaged in fishing, to be entitled to bounty, shall commence on the day the vessel sails from port on her fishing voyage and end the day she returns to port from said voyage.

7. Owners or masters of vessels intending to fish and claim bounty on their vessels must, before proceeding on a fishing voyage, procure a license from the nearest Collector of Customs or Fishery Overseer, said license to be attached to the claim when sent in for payment.

8. Dates and localities of fishing must be stated in the claim, as well as the quantity and kinds of sea-fish caught.

9. Ages of men must be given. Boys under 14 years of age are not eligible as claimants.

10. Claims must be sworn to as true and correct in all their particulars.

11. Claims must be filed on or before the 30th November in each year.

12. Officers authorized to receive claims will supply the requisite blanks free of charge, and after certifying the same will transmit them to the Department of Marine and Fisheries.

13. No claim in which an error has been made by the claimant or claimants shall be amended after it has been signed and sworn to as correct.

14. Any person or persons detected making returns that are false or fraudulent in any particular will be debarred from any further participation in the bounty, and be prosecuted according to the utmost rigour of the law.

15. The amount of the bounty to be paid to fishermen and owners of boats and vessels will be fixed from time to time by the Governor in Council.

16. All vessels fishing under bounty license are required to carry a distinguishing flag, which must be shown at all times during the fishing voyage at the main-topmast head. The flag must be four feet square in equal parts of red and white, joined diagonally from corner to corner. Any case of neglect to carry out this regulation reported to the Department of Marine and Fisheries will entail the loss of the bounty, unless satisfactory reasons are given for its non-compliance.

JOHN J. McGEE,
Clerk of the Privy Council,

There were received for the year 1899, 13,893 claims, a decrease of 786 compared with the year 1898.

The number of claims paid during the year was 13,628, being a decrease of 873 as compared with the previous year.

There were \$71,079.50 in bounties paid to vessels and their crews, and \$89,920.50 to boats and boat fishermen, making the total bounty paid during the year 1899-1900, \$160,000.

The number of vessels which received bounty during the year was 789, the total tonnage being 26,539 tons, showing an increase of 5 vessels and 1,431 tons, as compared with the previous year.

Bounty was paid on 12,839 boats, and to 21,738 boat fishermen during the year, being a decrease of 908 boats and 1,763 fishermen, as compared with 1898.

GENERAL STATEMENT of Fishing Bounty Claims received and paid for the Year 1899.

Province.	County.	Number of Claims received.	Number of Claims rejected.	Number of Claims held in abeyance.	Number of Claims paid.
Nova Scotia.....	Annapolis.....	135	2		133
	Antigonish.....	128		11	117
	Cape Breton.....	489	6	10	473
	Colchester.....				
	Cumberland.....	7			7
	Digby.....	495	5		490
	Guysborough.....	1,028	7	7	1,014
	Halifax.....	1,467	66		1,401
	Hants.....	1			1
	Inverness.....	546	2	2	542
	King's.....	49	2		47
	Lunenburg.....	965	1		964
	Pictou.....	17		8	9
	Queen's.....	213			213
	Richmond.....	943	4	2	937
Shelburne.....	729	1	3	725	
Victoria.....	474			474	
Yarmouth.....	208	1		207	
	Totals.....	7,894	97	43	7,754
New Brunswick.....	Charlotte.....	384	7	2	375
	Gloucester.....	363	15		348
	Kent.....	50			50
	Northumberland.....	6			6
	Restigouche.....				
	St. John.....	46			46
	Westmorland.....				
	Totals.....	849	22	2	825
Prince Edward Island.....	King's.....	546	1	26	519
	Prince.....	364		42	322
	Queen's.....	106			106
	Totals.....	1,016	1	68	947
Quebec.....	Bonaventure.....	841		12	829
	Gaspé.....	2,458	7	8	2,443
	Rimouski.....	49	1		* 52
	Saguenay.....	786	3	6	* 778
	Totals.....	4,134	11	26	4,102
	Grand totals.....	13,893	131	139	13,628

*NOTE.—The number of claims paid includes several applications for previous years, which explains the difference between claims paid and claims received, after deducting those rejected.

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DETAILED STATEMENT of Fishing Bounties paid to Vessels in each County for the Year 1899.

Province.	County.	Number of Vessels.	Tonnage.	Average Tonnage.	Number of Men.	Amount paid.	
						\$ cts.	
Nova Scotia.....	Annapolis	13	309	23·77	77	848 00	
	Antigonish	1	10	10	2	24 00	
	Cape Breton.....	15	304	20·26	78	850 00	
	Cumberland	1	15	15	3	36 00	
	Digby.....	54	1,664	30·81	487	5,072 50	
	Guysborough.....	26	629	24·19	149	1,672 00	
	Halifax.....	61	1,435	23·52	368	4,011 00	
	Hants.....	1	17	17	2	31 00	
	Inverness.....	25	367	14·68	126	1,249 00	
	King's.....	1	14	14	3	35 00	
	Lunenburg.....	166	12,193	73·45	2,598	30,379 00	
	Pictou.....						
	Queen's.....	9	257	28·55	63	698 00	
	Richmond.....	50	1,530	30·6	357	4,029 00	
	Shelburne.....	49	1,849	37·53	488	5,265 00	
	Victoria.....	3	55	18·33	15	160 00	
	Yarmouth.....	44	1,890	42·95	507	5,439 00	
		Totals.....	519	22,538	43·43	5,323	59,798 50
	New Brunswick.....	Charlotte.....	43	773	17·97	166	1,935 00
		Gloucester.....	185	2,210	11·94	683	6,991 00
Kent.....							
Northumberland ..		3	39	13	11	123 00	
Restigouche.....							
St. John.....		7	109	15·57	25	284 00	
	Totals	238	3,131	13·15	885	9,333 00	
Prince Edward Island....	King's.....	8	213	26·62	39	486 00	
	Prince.....	6	143	23·83	30	353 00	
	Queen's.....	1	17	17	7	66 00	
	Totals.....	15	373	24·86	76	905 00	
Quebec	Bonaventure	1	21	21	3	42 00	
	Gaspé.....	3	83	27·66	16	195 00	
	Rimouski.....						
	Saguenay	13	393	30·23	59	806 00	
	Totals.. ..	17	497	29·23	78	1,043 00	
	Grand totals....	789	26,539	33·63	6,362	71,079 50	

DETAILED STATEMENT of Fishing Bounties paid to **Boats** in each County for the Year 1899.

Province.	County.	Number of Boats.	Number of Men.	Amount paid.	Total Bounty paid to Vessels and Boats in 1899.
				\$ cts.	\$ cts.
Nova Scotia.....	Annapolis	120	178	743 00	1,591 00
	Antigonish	116	170	711 00	735 00
	Cape Breton	458	837	3,387 50	4,237 50
	Cumberland	6	8	34 00	70 00
	Digby	436	782	3,173 00	8,245 50
	Guysborough.....	988	1,534	6,357 00	8,029 00
	Halifax	1,340	1,799	7,634 50	11,645 50
	Hants				31 00
	Inverness	517	1,154	4,555 50	5,804 50
	King's	46	73	301 50	336 50
	Lunenburg	798	947	4,112 50	34,491 50
	Pictou	9	16	65 00	65 00
	Queen's	204	362	1,471 00	2,169 00
	Richmond	887	1,340	5,577 00	9,606 00
	Shelburne	676	1,108	4,554 00	9,819 00
Victoria	471	750	3,096 00	3,256 00	
Yarmouth	163	247	1,027 50	6,466 50	
	Totals.....	7,235	11,305	46,800 00	106,598 50
New Brunswick.....	Charlotte.....	332	501	2,085 50	4,020 50
	Gloucester.....	163	380	1,493 00	8,484 00
	Kent.....	50	73	305 50	305 50
	Northumberland.....	3	8	31 00	154 00
	Restigouche.....				
	St. John.....	39	65	266 50	550 50
	Westmorland				
	Totals.....	587	1,027	4,181 50	13,514 50
Prince Edward Island...	King's.....	511	755	3,153 50	3,639 50
	Prince.....	316	715	2,818 50	3,171 50
	Queen's.....	105	240	945 00	1,011 00
	Totals.....	932	1,710	6,917 00	7,822 00
Quebec.....	Bonaventure.....	828	1,437	5,857 50	5,899 50
	Gaspé.....	2,440	4,873	19,496 50	19,691 50
	Rimouski.....	52	79	328 50	328 50
	Saguenay.....	765	1,307	5,339 50	6,145 50
		Totals.....	4,085	7,696	31,022 00	32,065 00
	Grand totals.....	12,839	21,738	88,920 50	160,000 00

GENERAL STATISTICS.

The fishing bounty was first paid in 1882.

The payments were made each year on the following basis :—

- 1882, vessels \$2 per ton, one half to the owner and the other half to the crew.
Boats at the rate of \$5 per man, one-fifth to the owner and four-fifths to the men.
1883, vessels \$2 per ton, and boats \$2.50 per man, distributed as in 1882.
1884, vessels \$2 per ton, as in 1882 and 1883.

Boats from 14 to 18 feet keel	\$1 00
do 18 to 25 do	1 50
do 25 feet keel upwards	2 00
And boat fishermen \$3 each.	

1885, 1886 and 1887, vessels \$2 per ton as in previous years. Boats measuring 13 feet keel having been admitted in 1885, the rates were :—Boats from 13 to 18 feet keel, \$1 ; from 18 to 25 feet keel, \$1.50 ; from 25 feet keel upwards, \$2, and fishermen \$3 each.

1888, vessels \$1.50 per ton, one half each to owner and crew. Boats, the same as in 1885, 1886 and 1887.

1889, 1890 and 1891, vessels \$1.50 per ton as in 1888. Boats \$1 each. Boat fishermen \$3.

1892, vessels \$3 per ton, one half each to owner and crew. Boats \$1 each. Boat fishermen \$3.

1893, vessels \$2.90 per ton, paid as formerly. Boats \$1 each. Boat fishermen \$3.

1894, vessels \$2.70 per ton, distributed as in previous years. Boats \$1 each. Boat fishermen \$3.

1895, vessels \$2.60 per ton, half each to owner and crew. Boats \$1 each. Boat fishermen \$3.

1896, vessels \$1 per ton, which was paid to the owners, and vessel fishermen \$5 each, clause 5 of the regulations having been amended accordingly. Boats \$1 each, and boat fishermen \$3.50 per man.

1897, vessels \$1 per ton, and vessel fishermen \$6 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1898, vessels \$1 per ton, and vessel fishermen \$6.50 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1899, vessels \$1 per ton and vessel fishermen \$7 each. Boats \$1 each, and boat fishermen \$3.50 per man.

Since 1882, 14,643 vessels, totalling a tonnage of 529,388 tons, have received the bounty. The total number of vessel fishermen which received bounty is 111,865, being an average of 7 men per vessel.

The total number of boats to which bounty was paid since 1882 is 251,403, and the number of fishermen 468,953. Average number of men per boat, 2.

The highest bounty paid per head to vessel fishermen was \$21.75 in 1893 ; the lowest 83 cents, while the highest to boat fishermen was \$4, the lowest \$2.

The general average paid per head is \$4.89.

COMPARATIVE STATEMENT by Provinces for the Years 1882 to 1899, inclusive, showing :—
 (1) Total number of Fishing Bounty Claims received and paid by the Department of Marine and Fisheries.

YEAR.	NOVA SCOTIA.		NEW BRUNSWICK.		P. E. ISLAND.		QUEBEC.		TOTAL.	
	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.
1882.....	6,730	6,613	1,257	1,142	1,169	1,100	3,162	3,117	12,318	11,972
1883.....	7,171	7,076	1,693	1,579	1,138	1,106	3,602	3,325	13,604	13,086
1884.....	7,007	6,930	1,252	1,224	923	885	3,470	3,429	12,652	12,468
1885.....	7,646	7,599	1,609	1,588	1,117	1,025	3,943	3,912	14,315	14,124
1886.....	7,639	7,702	1,767	1,763	1,131	1,080	4,275	4,355	14,812	14,900
1887.....	8,262	8,227	1,975	1,958	1,201	1,126	4,138	4,105	15,576	15,416
1888.....	8,481	8,429	2,065	2,026	1,153	884	4,328	4,310	16,027	15,599
1889.....	8,816	8,523	2,428	2,392	1,211	1,511	4,664	4,652	17,119	17,078
1890.....	9,337	9,429	2,522	2,469	1,352	1,257	4,860	4,804	18,071	17,959
1891.....	10,242	10,063	2,831	2,084	1,482	1,446	5,108	4,913	19,663	18,506
1892.....	8,272	8,186	1,067	1,001	1,065	1,051	4,425	4,204	14,829	14,442
1893.....	7,926	7,844	967	881	1,027	1,012	4,059	3,898	13,979	13,635
1894.....	8,640	8,600	925	911	983	963	3,948	3,876	14,496	14,350
1895.....	8,835	8,825	979	975	1,009	1,025	3,904	3,955	14,727	14,780
1896.....	8,597	8,562	1,137	1,064	1,111	1,120	4,366	4,229	15,211	14,975
1897.....	8,450	8,418	1,042	991	1,175	1,171	4,180	4,149	14,847	14,729
1898.....	8,446	8,347	934	917	1,143	1,145	4,171	4,092	14,679	14,501
1899.....	7,894	7,754	849	825	1,016	947	4,134	4,102	13,893	13,623
Totals.....	148,391	147,127	27,299	25,790	20,406	19,804	74,722	73,427	270,818	266,148

(2) NUMBER of vessels, tonnage and number of men which received Bounty in each year.

YEAR.	NOVA SCOTIA.			NEW BRUNSWICK.			PRINCE EDWARD ISLAND.			QUEBEC.			TOTAL.		
	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.
1882....	588	22,841	5,343	120	2,171	531	15	389	74	63	2,210	538	786	27,611	6,486
1883....	700	29,788	6,238	126	2,102	496	16	450	66	62	2,236	443	904	34,576	7,243
1884....	700	29,823	6,327	139	2,289	560	16	582	92	56	1,965	382	911	34,664	7,361
1885....	629	27,709	5,897	128	2,120	496	19	597	113	55	1,791	317	831	32,217	6,823
1886....	562	25,375	5,022	145	2,628	520	32	1,071	215	52	1,730	320	791	30,804	6,077
1887....	556	24,520	4,900	154	2,889	563	38	1,677	338	54	1,883	334	812	30,969	6,135
1888....	539	26,003	5,450	150	2,545	544	37	1,245	246	51	1,842	388	827	31,640	6,631
1889....	597	27,123	5,684	153	2,590	565	35	1,274	239	48	1,729	330	833	32,716	6,818
1890....	540	23,955	4,935	133	2,129	447	32	1,002	203	34	1,182	220	739	28,268	5,805
1891....	527	22,780	4,618	124	2,051	411	27	778	155	27	924	168	705	26,533	5,352
1892....	507	22,279	4,611	108	1,683	343	30	983	139	23	803	159	668	25,748	5,252
1893....	536	23,195	4,780	210	2,922	634	27	910	151	32	952	179	805	27,979	5,744
1894....	602	24,735	5,077	233	3,189	721	21	594	114	38	1,066	178	899	29,584	6,090
1895....	603	25,018	5,184	238	3,107	764	27	769	129	39	1,262	173	907	30,156	6,250
1896....	553	23,415	4,607	250	3,351	800	23	656	114	36	1,143	144	862	28,551	5,665
1897....	507	21,323	4,829	239	3,079	816	20	490	109	24	833	116	790	25,725	5,870
1898....	508	20,868	4,840	239	3,155	859	24	561	125	16	524	77	784	25,108	5,901
1899....	519	22,538	5,323	238	3,131	885	15	373	76	17	497	78	789	26,539	6,362
Totals.	10,333	443,298	93,605	3,132	47,117	10,955	454	14,401	2,701	727	24,572	4,544	14,643	529,388	111,865

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(3) NUMBER of Boats and boat fishermen which received Bounty in each year.

Year.	NOVA SCOTIA.		NEW BRUNSWICK.		P. E. ISLAND.		QUEBEC.		TOTAL.	
	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.
1882.....	6,043	12,130	1,024	2,530	1,087	3,070	3,071	5,716	11,225	23,446
1883.....	6,458	13,553	1,453	3,309	1,098	3,106	3,226	6,188	12,275	26,156
1884.....	6,257	12,669	1,086	2,505	869	2,346	3,344	6,416	11,556	23,936
1885.....	6,970	13,396	1,460	3,254	1,006	2,606	3,857	7,485	13,293	26,741
1886.....	7,140	13,351	1,618	3,567	1,048	2,547	4,303	7,981	14,109	27,446
1887.....	7,662	13,997	1,804	3,994	1,088	2,711	4,051	7,550	14,605	28,252
1888.....	7,840	14,115	1,876	4,148	797	2,141	4,259	7,852	14,772	28,256
1889.....	7,926	14,118	2,237	5,032	1,475	3,563	4,602	8,807	16,240	31,525
1890.....	8,886	15,738	2,324	5,242	1,192	3,024	4,766	9,241	17,168	33,245
1891.....	9,525	16,552	1,928	4,126	1,383	3,427	4,865	9,402	17,701	33,507
1892.....	7,679	12,307	893	1,765	1,021	2,047	4,181	7,693	13,774	23,812
1893.....	7,308	11,748	671	1,314	985	1,962	3,866	7,245	12,830	22,269
1894.....	7,956	12,899	661	1,281	913	1,813	3,821	7,139	13,351	23,132
1895.....	8,222	13,106	737	1,434	998	2,141	3,916	7,877	13,873	24,558
1896.....	8,008	12,454	814	1,553	1,095	2,126	4,189	7,688	14,106	23,821
1897.....	7,911	12,542	752	1,351	1,151	2,147	4,125	7,572	13,939	23,612
1898.....	7,872	12,438	678	1,237	1,121	2,199	4,076	7,627	13,747	23,501
1899.....	7,235	11,305	587	1,027	932	1,710	4,085	7,696	12,839	21,738
Totals.....	136,898	238,418	22,603	48,669	19,259	44,691	72,643	137,175	251,403	468,953

(4) TOTAL Number of men receiving Bounty in each year.

Year.	NOVA SCOTIA.	NEW BRUNSWICK.	P. E. ISLAND.	QUEBEC.	Total.
	No. of Men.	No. of Men.	No. of Men.	No. of Men.	
1882.....	17,473	3,061	3,144	6,254	29,932
1883.....	19,791	3,805	3,172	6,631	33,399
1884.....	18,996	3,065	2,438	6,798	31,297
1885.....	19,293	3,750	2,719	7,802	33,564
1886.....	18,373	4,087	2,762	8,301	33,523
1887.....	18,897	4,557	3,049	7,884	34,387
1888.....	19,565	4,692	2,390	8,240	34,887
1889.....	19,802	5,597	3,807	9,137	38,343
1890.....	20,673	5,689	3,227	9,461	39,050
1891.....	21,170	4,537	3,582	9,570	38,859
1892.....	16,918	2,108	2,186	7,852	29,064
1893.....	16,528	1,948	2,113	7,424	28,013
1894.....	17,976	2,002	1,927	7,317	29,222
1895.....	18,290	2,198	2,270	8,050	30,808
1896.....	17,061	2,353	2,240	7,832	29,486
1897.....	17,371	2,167	2,256	7,688	29,482
1898.....	17,278	2,096	2,324	7,704	29,402
1899.....	16,628	1,912	1,786	7,774	28,100
Totals.....	332,083	59,624	47,392	141,719	580,818

(5) TOTAL annual payments of Fishing Bounty.

Year.	Nova Scotia.	New Brunswick	P. E. Island.	Quebec.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1882.....	106,098 72	16,997 00	16,137 00	33,052 75	172,285 47
1883.....	89,432 50	12,395 20	8,577 14	19,940 01	130,344 85
1884.....	104,934 09	13,576 00	9,203 96	28,004 93	155,718 98
1885.....	103,999 73	15,908 25	10,166 65	31,464 76	161,539 39
1886.....	98,789 54	17,894 57	10,935 87	33,283 61	160,903 59
1887.....	99,622 03	19,699 65	12,528 51	31,907 73	163,757 92
1888.....	89,778 90	18,454 92	9,092 96	32,858 75	150,185 53
1889.....	90,142 51	21,026 79	13,994 53	33,362 71	158,526 54
1890.....	91,235 64	21,108 33	11,686 32	34,210 72	158,241 01
1891.....	92,377 42	17,235 96	12,771 30	34,507 17	156,891 85
1892.....	109,410 39	10,864 61	9,782 79	29,694 35	159,752 14
1893.....	108,060 67	12,524 09	9,328 62	28,320 72	158,234 10
1894.....	111,460 03	12,690 80	7,875 79	28,040 18	160,066 80
1895.....	110,765 27	12,919 32	9,285 13	30,598 27	163,567 99
1896.....	98,048 95	13,602 88	9,745 50	32,992 44	154,339 77
1897.....	102,083 50	13,454 50	9,809 00	32,157 00	157,504 00
1898.....	103,730 00	13,746 00	10,188 00	31,795 00	159,459 00
1899.....	106,598 50	13,514 50	7,822 00	32,065 00	160,000 00
Totals.....	1,816,568 39	277,613 37	188,931 07	558,256 10	2,841,368 93

List of Vessels which received Fishing Bounty for the Year 1899.

PROVINCE OF NOVA SCOTIA.

ANNAPOLIS COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
88270	Alice May	St. John	10	Ambrose Sabeau	Port Lorne,	3	31 00
88396	Brant	Windsor	12	Handley Lewis	"	3	33 00
107291	Elva J. Hayden	Annapolis	65	David Hayden	Thorne's Cove	11	142 00
100315	Freddie A.	Yarmouth	10	Norman Gregory	Parker's Cove	4	38 00
36569	Hope	Halifax	34	Elias Hudson	"	7	83 00
83461	Josie L. Day	Digby	16	Albert Coates	Hillsburn	9	79 00
42089	Lily	St. Andrews	10	James D. Aldred	Margaretsville	3	31 00
100550	Martha D. McLean	Digby	49	John S. Hayden	Victoria Beach	13	140 00
100020	Mayflower	Annapolis	12	George D. Corbett	Port Lorne	2	26 00
83253	Rescue	"	17	Josiah Burrell	Clementsport	7	66 00
37172	Richard Simmonds	St. John	45	Norman Ray	Margaretsville	5	80 00
100314	Sea Fox	Yarmouth	19	Israel W. Banks	Port Lorne	4	47 00
100548	Violetta	Digby	10	Bernard Longmire	Hillsburn	5	45 00

ANTIGONISH COUNTY.

90642	Komaroff	Yarmouth	10	John Brow	Harb'rauBouche	2	24 00
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CAPE BRETON COUNTY.

100389	Annie F.	Sydney	13	John Farrell	Main-à-Dieu	4	41 00
100221	Baleka	Halifax	31	George Burge	North Sydney	8	87 00
100372	Betsy Jane	Sydney	11	Samuel Moore	Little Bras d'Or	4	39 00
85381	Champion	"	19	John Williams	Louisburg	4	47 00
75571	Fanny	Liverpool	16	Aron Anesty	North Sydney	5	51 00
100383	Florence L.	Sydney	10	Vital Arsenaault	Little Bras d'Or	4	38 00
107371	Highland Lass.	"	19	Roderick Beaton	Point Aconi	6	61 00
88513	Ida	"	11	Elias Leblanc	Little Bras d'Or	3	32 00
100381	Katie R.	"	24	John H. Burke	Little Loraine	7	73 00
100840	Maritime	Lunenburg	59	R. E. Burke	Ingonish	10	129 00
92600	Merit	Sydney	13	Alex. Leblanc	Little Bras d'Or	6	55 00
107360	Ovando	"	11	Patrick Campbell	Main-à-Dieu	3	32 00
107358	Olive A.	"	19	R. B. Spencer	Port Morien	5	54 00
100566	Rob S.	Halifax	21	Ambrose Forward	Lingan	6	63 00
103609	Verbena.	Sydney	27	Abram Grant	Gabarus	3	48 00

CUMBERLAND COUNTY.

80001	Florence	St. John	15	Lewis R. Morris	Parrsboro'	3	36 00
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DIGBY COUNTY.

83431	Acadian	Weymouth	32	George H. Stevens	Freeport	11	109 00
75888	Annie	Yarmouth	22	W. H. Anderson	Digby	9	85 00
72978	Annie Coggins	Digby	22	Thomas Milner	"	6	64 00
94696	Annie M. Sproul	"	70	Orbin Sproule	"	14	168 00
90660	Alice May	Yarmouth	18	Edward Haines	Freeport	9	81 00

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*DIGBY COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid	Amount of Bounty paid.
							\$ cts.
88598	Alph B. Parker	St. John	39	Holland Outhouse	Tiverton	12	123 00
100547	B. & C.	Digby	14	Loren Perry	Freeport	5	49 00
94698	Carrie H.	"	20	James Gower	Westport	8	76 00
94704	Charles Haskell	"	67	Howard Anderson	Digby	14	165 00
74331	Condor	"	11	Howard Titus	Westport	6	53 00
103181	Curlew	Shelburne	63	Joseph F. Miluerry	Digby	17	182 00
107474	Dorothy	Digby	59	M. G. Crocker	Freeport	13	150 00
80790	Electric Light	"	34	Lawson Keans	Digby	4	62 00
77740	Elmer	"	15	James Ellis, jr.	"	7	64 00
103749	Emerald	"	29	John H. Syda	"	8	85 00
94707	Ernest F. Norwood	"	79	Joseph E. Snow	"	16	191 00
75757	Etta	Yarmouth	17	Clarence Webber	Westport	3	33 00
83550	Fair Play	"	11	John A. Powell	"	2	25 00
74329	Fairy Queen	"	13	Wallace Coggins	"	6	55 00
75601	Flash	Digby	10	James A. Peters	"	5	45 00
100891	Fleur de Lis.	Weymouth	17	George E. Mallett	Plympton	4	45 00
80798	Freddie G.	Digby	18	George Gower	Westport	8	74 00
77963	Fr. eman Colgate	St. Andrews	26	Thomas Hicks	"	10	96 00
83260	Gazelle	Digby	20	Orbin Sproule	Digby	9	83 00
90436	Genesta	Barrington	32	George Denton	Westport	12	116 00
94835	Georgie Linwood	Digby	25	Herbert Johnson	Digby	9	88 00
107472	Goldie G.	"	15	Watson Guest	"	8	71 00
100544	Helen Mand.	"	26	Chas. McDormand	Westport	8	82 00
107471	Ina Brooks	"	22	William H. Brooks	Freeport	9	85 00
109064	Isma	St. John	31	Thomas Hicks	Westport	10	101 00
94693	John H. Kennedy	Digby	54	John W. Snow	Digby	7	103 00
80881	Kedron	Annapolis	22	Ansel Snow	"	7	71 00
59388	Lena May	St. Andrews	18	Orbin Sproule	"	8	74 00
85384	Letitia	"	10	Peter H. Belliveau	Belliveau's Cove	5	45 00
85534	Lloyd	Yarmouth	23	W. H. Anderson	Digby	9	86 00
85690	Lora T.	Digby	15	Judson Thurber	Freeport	6	57 00
100487	Mabel B.	"	57	M. G. Crocker	"	12	141 00
85682	Malapert	"	23	John Ring	Digby	9	86 00
88583	Mary Odell	Yarmouth	14	John T. Therrio	Meteghan	7	63 00
100574	Melrose	Lunenburg	71	Augustus Haycock	Westport	16	183 00
92640	Minerva	"	80	E. C. Bowers	"	13	171 00
85533	Minnie C.	Yarmouth	12	Milton Haines	Freeport	7	61 00
80794	Minnie C.	Digby	18	Charles Bailey	Westport	8	74 00
100895	New Home	Weymouth	31	Moise Thibaudeau	Church Point	8	87 00
94825	On Time	"	19	Henry Glaven	Westport	9	82 00
100515	Packet	Parrsboro	49	Norman Robbins	Tiverton	13	140 00
100319	Rob Roy	Yarmouth	12	Moses Therrio	Meteghan	6	54 00
100539	Rowena	Digby	10	Warren Snow	Digby	4	38 00
100609	Swan	Shelburne	56	Edward Haines	Freeport	13	147 00
85558	S. A. Crowell	Yarmouth	23	Wallace Gower	Westport	8	79 00
94694	Utah & Eunice	Digby	33	Milton Haines	Freeport	9	96 00
103711	Yenite	Yarmouth	16	Stephen Doucett	Cape Cove	6	58 00
94832	Venus	St. Andrews	42	Milton Haines	Freeport	13	133 00
100543	W. Parnell O'Hara	Digby	79	William Snow	Digby	20	219 00

GUYSBORO COUNTY.

103322	Bonnie Brier Bush	Pt. Hawkesbury	38	Henry O'Neill	Auld's Cove	6	80 00
103321	Christie Campbell	"	55	Thomas H. Peeples	Mulgrave	8	111 00
38418	Dolphin	Arichat	36	William S. Peart	Guy'sboro	2	50 00
80994	Esperance	Guysboro	10	Charles S. Horton	Half Island Cove	5	45 00
83180	Friend	Lunenburg	17	Luke Mannotte, sr.	Larry's River	7	66 00
94963	Golden Seal	Halifax	32	Edward B. Pelrine	"	5	67 00
100815	Happy Home	Barrington	10	James W. Feltnate	White Head	6	52 00
100161	Hilda Maude	Pt. Hawkesbury	46	John G. Murray	Port Richmond	10	116 00

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List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

GUYSBORO COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.	
							\$	cts.
57715	John Lawrence.....	Halifax.....	23	Henry A. Richard.....	Charlo's Cove...	7	72	00
100835	Lottie B.....	Lunenburg.....	12	R. T. Mathews.....	Canso.....	6	54	00
100449	Lucy J. Warren.....	Canso.....	58	William Dicks.....	White Head.....	8	114	00
103173	Mabel.....	Shelburne.....	21	Joseph Fougère.....	Larry's River.....	7	70	00
75577	Mary Ann Bell.....	Lunenburg.....	33	Joseph O'Neill.....	Auld's Cove.....	5	68	00
103532	Maria A.....	Halifax.....	22	has. A. Crittenden.....	Mulgrave.....	2	36	00
103859	Mary May.....	".....	23	Benjamin David.....	Port Felix.....	11	100	00
100446	Minnie May.....	Canso.....	12	William L. Dort.....	Sandy Cove.....	5	47	00
100450	Minto.....	".....	18	William E. O'Hara.....	Canso.....	6	60	00
103323	Nita.....	Pt. Hawkesbury.....	22	Louis Maguire.....	Mulgrave.....	2	36	00
80970	Orion.....	Halifax.....	24	Hubert Richard.....	Charlo's Cove...	6	66	00
100231	Pearl.....	".....	17	Martin Meagher.....	Canso.....	3	38	00
75892	Peter Mitchell.....	Pt. Hawkesbury.....	26	Michael Power.....	Mulgrave.....	5	61	00
92575	Robinnetta.....	Halifax.....	14	John Leary.....	Queensport.....	5	49	00
100444	Stella May.....	Canso.....	12	James Meagher.....	Canso.....	5	47	00
107318	St. Stephen.....	Halifax.....	19	Vincent Pelrine.....	Port Felix.....	8	75	00
100448	Surprise.....	Canso.....	15	John J. Meagher.....	Canso.....	4	43	00
197991	Two Brothers.....	".....	14	Frederick Gello.....	Port Felix.....	5	49	00

HALIFAX COUNTY.

107313	Alice A.....	Halifax.....	16	Alexander Fillis.....	W. Chezzetcook...	3	37	00
103507	Annie.....	".....	16	Charles Covey.....	Indian Harbour...	4	44	00
90495	Annie S.....	".....	34	J. J. Scott.....	East Dover.....	7	83	00
100604	Bella H. McKinnon.....	Shelburne.....	35	Win. H. Henneberry.....	Halifax.....	8	91	06
103858	B. & B. Holland.....	Halifax.....	26	Richard Holland.....	Duncan's Cove...	8	82	00
94662	Bessie Florence.....	".....	12	Charles Twohig.....	Pennant.....	4	40	00
03537	Bonacord.....	".....	12	James W. Smith.....	Sambro.....	3	33	00
90721	Brilliant Star.....	".....	36	Peter & John Hartlin.....	East Jeddore.....	8	92	00
96799	Catherine A. C.....	".....	17	Hezekiah Cleveland.....	West Dover.....	5	52	00
103852	Dawn.....	".....	13	Jas. & Thos. Parker.....	Owl's Head.....	3	34	00
59484	Day Spring.....	".....	36	George L. Baker.....	West Jeddore.....	9	99	00
90481	Ella D.....	".....	32	Archibald Darrach, sr.....	Herring Cove...	11	109	00
90726	Ellen Maud.....	".....	16	A. Wilson & Son.....	Halifax.....	5	51	00
85738	Emma F.....	".....	13	Eliza Cook.....	".....	4	41	00
96785	Eva M. B.....	".....	45	Daniel Bonang.....	W. Chezzetcook...	8	101	00
100247	Fairy Queen.....	".....	11	Geo. H. Nickerson.....	Pennant.....	4	39	00
85644	Flora.....	".....	42	Patrick Scallion.....	Herring Cove...	10	112	00
100481	Florence.....	Lunenburg.....	29	Simeon Boutillier.....	French Village..	5	64	00
100259	Florence G.....	Halifax.....	15	Caleb Gray.....	Sambro.....	3	36	00
80996	Gertie Belle.....	Guysboro.....	15	James Yorke.....	Eastern Passage...	3	36	00
97088	Glendale.....	Lunenburg.....	38	Charles Neiforth.....	Seaforth.....	14	136	00
100228	Golden Dawn.....	Halifax.....	46	George A. Conrod.....	E. Chezzetcook..	12	130	00
103544	Grace D.....	".....	10	James Marrayatt.....	Pennant.....	3	31	00
88220	Grandeec.....	".....	14	John P. Slauwhite.....	Terence Bay.....	4	42	00
90489	Green Leaf.....	".....	44	Isaac Lapierre, s. Pros.....	W. Chezzetcook...	8	100	00
83306	I. O. N. A.....	".....	26	Andrew Sullivan.....	Herring Cove...	8	82	00
100216	Katie M.....	".....	11	Charles Nelson.....	Halifax.....	3	32	00
83402	Louisa Maud.....	".....	21	Albert Manuel.....	Peggy's Cove.....	6	63	00
94665	Louis Luby.....	".....	41	James Lapierre.....	W. Chezzetcook...	7	90	00
100580	Maggie E. C.....	Lunenburg.....	20	David Covey.....	Hackett's Cove...	7	69	00
96805	Maggie May.....	Halifax.....	62	Jeremiah Fillis.....	W. Chezzetcook...	10	132	00
85664	Mary E.....	".....	14	Andrew Twohig.....	Pennant.....	4	42	00
100227	May.....	".....	10	Thomas E. Little.....	Terence Bay.....	4	38	00
69213	May Fly.....	".....	12	John Neville.....	Halifax.....	5	47	00
103132	Meta.....	Shelburne.....	18	James Reyno.....	Herring Cove...	7	67	00
100254	Myrtle M. Gray.....	Halifax.....	19	James Gray.....	Pennant.....	5	54	00
85665	Nellie D.....	".....	12	James Crooks.....	Halifax.....	4	40	00
94667	Nettie M. G.....	".....	32	Matthew Lynch, sr.....	Ferguson's Cove..	8	88	00
103539	Neva.....	".....	11	Ephraim Marrayatt.....	Pennant.....	4	39	00

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*HALIFAX COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	N ^o . of Crew Paid.	Amount of Bounty Paid.
							\$ cts.
80841	Nina	Halifax	13	Joseph Parker	Owl's Head	2	27 00
100245	Oracle	"	18	W. McC. Boak	Halifax	3	39 00
85562	Oresa	"	14	Lawson B. Corkum	East Jeddore	4	42 00
100241	Pansy	"	32	George Schnair	Pennant	7	81 00
92571	Primrose	"	14	Angus Gray	"	5	49 00
100474	R. Beatrice	"	19	J. Morash, sr.	West Dover	7	68 00
75575	Rising Dawn	Lunenburg	18	Frederick Boutilier	Indian Harbour	4	46 00
96806	Rising Sun	Halifax	28	Richard Christian	Prospect	5	63 00
69082	Saint Agnes	"	38	Ebenezer Homans	Clam Harbour	4	66 00
100255	Seaflee	"	12	James Stevens	Owl's Head	4	40 00
64869	Sarah L. Oxner	"	34	Edward Hayes	Herring Cove	15	139 00
100218	Sarah M. W.	"	14	Z. Wambolt	Indian Harbour	5	49 00
103538	Staletta	"	25	W. Charles Henley	Spry Bay	2	39 00
103193	Startle	Liverpool	11	Chas. F. Martin	Halifax	5	46 00
77836	T. W. Smith	Halifax	35	Charles Beaver	Spry Bay	3	56 00
75833	Twilight	"	14	Leander Hubly	Indian Harbour	5	49 00
103869	Uganda	"	14	James B. Stoddard	Ship Harbour	4	42 00
96781	Venture	"	43	Edward Dempsey	Herring Cove	13	134 00
61904	Water Lily	"	14	Isaac Morash	West Dover	4	42 00
92578	Willetta	"	12	Joseph Gray	Sambro	5	47 00
100226	Willie H. Crosby	"	65	James Julien	W. Chezzetcook	17	184 00
85378	Zephyr	"	16	Robert Slau n white (John P.)	Terence Bay	5	51 00

HANTS COUNTY.

75614	Fawn	Digby	17	Henry E. Ogilvie	Summerville	2	31 00
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INVERNESS COUNTY.

71302	Alice	Charlottetown	10	Pepin Chaiasson	Belle Côte	7	59 00
96778	Campania	Pt. Hawkesbury	11	Robin, Collas & Co., Ltd	Eastern Harbour	5	46 00
103313	Catherine	"	10	Séverin Chiasson	"	4	38 00
103452	Charlotte	"	73	David Walker	Pt. Hawkesbury	13	164 00
83244	Claribel	Charlottetown	19	Charles Doucet	Eastern Harbour	7	68 00
103325	Elizabeth Ann	Pt. Hawkesbury	11	David Bourgeois	"	4	39 00
96768	Elizabeth Ann	"	11	Robin, Collas & Co., Ltd	"	4	39 00
96774	Florence	"	11	Sinéon Bellefontaine	"	5	46 00
103317	Flying Star	"	11	"	"	4	39 00
103316	Laura	"	10	Ubald Bourgeois	"	4	38 00
103312	Laura	"	13	Amédée Aucoin	Belle Côte	7	62 00
103315	Lillie	"	12	Peter Fiset	Point Cross	4	40 00
103318	Little Heir	"	19	Michel Maillet	Eastern Harbour	6	61 00
96775	Louise	"	11	Sinéon Bellefontaine	"	4	39 00
96779	Majestic	"	12	Robin, Collas & Co., Ltd	"	5	47 00
96771	Marie	"	10	John Roach	"	4	38 00
96777	Marie Joseph	"	11	Victor Roach	"	4	39 00
103314	Mary	"	10	Paul J. Aucoin	"	4	38 00
96769	Mary Lambert	Port Hawkesb'ry	11	Luc Chiasson	Eastern Harbour	5	46 00
69125	May Flower	Halifax	20	Hyacinthe Chiasson	"	6	62 00
103326	Mizpah	Port Hawkesb'ry	10	George Le Brun	"	5	45 00
96370	O. L. B.	"	12	David Chiasson	Grand Étaug	4	40 00
96962	Sunrise	Yarmouth	18	Duncan J. Gillis	Seaside	2	32 00
96773	Virgin	Port Hawkesb'ry	10	Michael Ramard	Eastern Harbour	5	45 00
96776	Willie B.	"	11	Emilien Roach	Point Cross	4	39 00

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LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

KING'S COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew Paid.	Amount of Bounty Paid.
83261	Economist	Digby	14	Jesse Parker.....	Hall's Harbour .	3	\$ cts. 35 00

LUNENBURG COUNTY.

94790	Abana	Lunenburg	80	James Romkey.....	Ritcey's Cove...	16	192 00
100839	Acalia	"	34	Nathan Silver.....	Lunenburg	6	76 00
94783	Alaska	"	80	J. F. Risser.....	Ritcey's Cove...	17	199 00
107644	Albertha	"	80	Amiel Corkum.....	La Have.....	17	199 00
100489	Algoma	"	56	Jeffrey Publicover	Getson's Cove...	15	161 00
107124	Alma Nelson	"	80	J. William Young	Lunenburg	20	220 00
94778	Argosa	"	80	Charles Smith	"	17	199 00
100472	Arcana	"	80	Alexander Knickle.....	"	17	199 00
103205	Aroostook	Liverpool	67	John Geldert.....	"	13	158 00
103495	Athlon	Lunenburg	80	J. N. Rafuse.....	Conquerall Bank	17	199 00
100170	Atlanta	"	80	Freeman Anderson.....	Lunenburg	17	199 00
103745	Avis	"	80	A. V. Conrad.....	Parks Creek.....	17	199 00
103501	Barcelona	"	80	John M. Ritcey.....	Ritcey's Cove...	17	199 00
103755	Basil M. Geldert	"	80	John B. Young.....	Lunenburg	17	199 00
107130	Beatrice L. Corkum	"	80	Wm. C. Smith.....	"	17	199 00
103430	Beluga	"	80	A. V. Conrad.....	Park's Creek	15	185 00
94651	Bessie A.	"	80	W. N. Reinhardt.....	La Have.....	17	199 00
103503	B. G. Anderson.....	"	80	Thomas Hamm.....	Lunenburg	17	199 00
100838	Blanche A. Colp.....	"	80	C. U. Mader.....	Mahone Bay.....	17	199 00
103421	Blenheim	"	80	Charles Smith	Lunenburg	17	199 00
94782	Bona Fides.....	"	80	J. Joseph Rudolf	"	17	199 00
96828	Bonanza	"	80	Charles L. Silver	"	17	199 00
100848	Britannia	"	59	Lambert Lohnes	Middle La Have	14	157 00
100571	Britannia	"	80	Charles Smith	Lunenburg	17	199 00
94645	C. A. Chisholm.....	"	80	Abraham Ernst.....	Mahone Bay.....	13	171 00
97084	Calla Lily	"	62	Simon Hirtle	Middle La Have	13	153 00
103427	Cambrion	"	60	Dean Fralick	Pleasantville.....	15	165 00
103502	Carlraine.....	"	80	Alvin Himmelman.....	Rose Bay.....	18	206 00
100823	Carrie.....	"	60	Adnah Burns.....	Dayspring.....	13	151 00
97081	Carrie.....	"	80	Artemas Zink.....	Ritcey's Cove...	18	206 00
107115	Cayuga	"	80	Simon Hirtle	Middle La Have	18	206 00
100579	Citizen	"	80	Murdock McGregor.....	Ritcey's Cove...	17	199 00
90869	Clara E. Mason.....	"	80	Richard Smith.....	Lunenburg	15	185 00
103415	Clarence Smith.....	"	80	G. A. Smith.....	"	17	199 00
107122	Collector	"	89	W. N. Reinhardt.....	La Have.....	17	199 00
103759	Columbia	"	80	J. Alexander Silver.....	Lunenburg	18	206 00
100834	Comrade	"	80	W. N. Reinhardt.....	La Have.....	17	199 00
103419	Cordova	"	80	Charles Smith	Lunenburg	14	178 00
100159	C. U. Mader.....	"	80	C. U. Mader.....	Mahone Bay.....	17	199 00
100483	Curfew	"	49	J. D. Sperry.....	Petite Riviere.....	12	133 00
107112	Daisy Linden	"	80	Abraham Ernst.....	Mahone Bay.....	17	199 00
88355	D. A. Mader	"	80	C. U. Mader.....	"	13	171 00
90834	Diego.....	Port Medway	27	Harris Conrad.....	Vogler's Cove... ..	10	97 00
97089	Dictator	Lunenburg	80	S. Watson Oxner.....	Lunenburg	17	199 00
107649	D. M. Owen.....	"	72	J. N. Rafuse.....	Conquerall Bank	17	191 00
100841	Dora.....	"	80	Lewis Hirtle.....	Lunenburg	17	199 00
103506	Ebro.....	"	75	J. William Young.....	"	15	180 00
107127	Ellen L. Maxnor.....	"	80	H. W. Adams.....	"	19	213 00
83308	Ella.....	Liverpool	10	J. C. Hanson.....	Mahone Bay.....	1	17 00
103424	Elva M.....	Lunenburg	80	C. U. Mader.....	"	17	199 00
103492	Emily L.....	"	10	Wesley Stevens.....	West Shore.....	3	31 00
107123	Emulator	"	80	John M. Ritcey.....	Ritcey's Cove...	17	199 00
88356	Energy.....	"	80	C. U. Mader.....	Mahone Bay.....	17	199 00
94659	Enterprise.....	"	80	William Cleversy	Pleasantville.....	18	206 00
100151	Erminie	"	80	Thomas Hamm.....	Lunenburg	17	199 00
103429	Fern.....	"	70	Cyrus Walters.....	Middle LaHave... ..	16	182 00

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*LUNENBURG COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.]	No. of Crew paid.	Amount of Bounty paid.
							\$
103743	Flo. F. Mader.....	Lunenburg.....	80	C. U. Mader.....	Mahone Bay....	18	206 00
100480	Gallant.....	"	57	Elias Richard, sr.....	Getson's Cove... 13	148 00	
97083	Garland.....	"	51	J. D. Sperry.....	Petite Riviere... 9	114 00	
90582	G. A. Smith.....	"	80	Eli Ritcey.....	Ritcey's Cove... *	80 00	
103411	Genevieve.....	"	80	Abraham Ernst.....	Mahone Bay....	17	199 00
100825	Georgina.....	"	34	James Bell.....	Dublin Shore... 8	90 00	
103505	Gladys May.....	"	80	Adam Selig.....	Vogler's Cove... 21	227 00	
103753	Gladys B. Smith...	"	80	Benjamin C. Smith...	Lunenburg.....	19	213 00
103752	Glyndon.....	"	80	Elisha Wentzel.....	Ritcey's Cove... 19	213 00	
100850	Grace.....	"	80	Daniel Getson.....	Getson's Cove... 17	199 00	
90862	Grenada.....	"	80	S. Watson Oxner.....	Lunenburg.....	16	192 00
100488	Gurnet.....	"	56	Alvin Creaser.....	Ritcey's Cove... 11	133 00	
96836	Gleaner.....	"	80	William C. Acker.....	Lunenburg.....	17	199 00
107119	Harold J. Parks.....	"	80	L. B. Currie.....	West Dublin... 17	199 00	
103744	Harry Smith.....	"	80	J. H. Wilson.....	Lunenburg.....	17	199 00
107641	Hattie L. M.....	"	80	P. B. Zwicker.....	Mahone Bay.... 17	199 00	
100659	Howard Young.....	"	80	James Young.....	Lunenburg.....	18	206 00
107128	Huron.....	"	80	Henry Wilson.....	"	17	199 00
100490	Irene M. B.....	"	66	Eli Ernest.....	Mahone Bay.... 14	164 00	
107116	Ivy.....	"	12	Joshua Ernst.....	Conquerall Bank 1	19 00	
96830	J. A. Silver.....	"	80	Charles L. Silver.....	Lunenburg.....	17	199 00
103414	Jeanie Myrtle.....	"	80	John M. Ritcey.....	"	17	199 00
94785	J. C. Schwartz.....	"	80	David Heisler.....	"	21	277 00
103491	Jennie May.....	"	80	Martin Westhaver.....	"	15	185 00
107646	Jessie L. Smith.....	"	80	Lemuel Smith.....	Lower LaHave. 20	220 00	
100164	J. H. Ernst.....	"	80	S. Watson Oxner.....	Lunenburg.....	18	206 00
100837	J. M. Young.....	"	80	J. William Young.....	"	17	199 00
94789	Joseph McGill.....	"	80	David Ritcey.....	Ritcey's Cove... 18	206 00	
107144	Klondyke.....	"	80	James Richard.....	Getson's Cove... 19	213 00	
96838	La France.....	"	80	S. Watson Oxner.....	Lunenburg.....	16	192 00
96832	Laura M. Knock.....	"	80	Allan R. Morash.....	"	17	199 00
103202	L. B. Currie.....	"	80	L. B. Currie.....	West Dublin... 17	199 00	
94780	Lawrence.....	"	80	Abraham Ernst.....	Mahone Bay.... 20	220 00	
94788	Lawrence C. Zwicker	"	80	"	"	15	185 00
96833	L. E. Young.....	"	80	Benjamin Anderson.....	Lunenburg.....	17	199 00
107126	Lena F. Oxner.....	"	80	James Gelbert.....	"	18	206 00
96827	Leopold.....	"	80	Ammon Ritcey.....	Ritcey's Cove... 18	206 00	
107129	Lilla B. Hirtle.....	"	80	Benjamin Anderson.....	Lunenburg.....	19	213 00
103760	Lillian.....	"	80	Elias Richard.....	Getson's Cove... 19	213 00	
107113	L. Morton.....	"	60	Adam Selig.....	Vogler's Cove... 13	151 00	
103496	Lorcana Maud.....	"	80	David Risser.....	Lunenburg.....	17	199 00
100830	Lorraine C.....	"	64	Steadman Corkum.....	Middle LaHave. 10	134 00	
83316	Lottie.....	Port Medway.....	80	Samuel E. Teel.....	Vogler's Cove... 11	157 00	
103420	Luetta.....	Lunenburg.....	80	Isaac Mason.....	Lunenburg.....	18	206 00
107120	Madeira.....	"	80	Theophilus Creaser.....	Ritcey's Cove... 20	220 00	
103509	Maggie E. Z.....	"	70	Emmanuel Zellars.....	Lunenburg.....	17	189 00
97100	Maggie M. W.....	"	80	Howard Wynthacht.....	"	17	199 00
100162	Magic.....	"	45	J. D. Sperry.....	Petite Riviere... 10	115 00	
103425	Majestic.....	"	80	Ruben Ritcey.....	Ritcey's Cove... 17	199 00	
94775	Malabar.....	"	80	R. H. Griffiths.....	Lunenburg.....	16	192 00
103413	Martello.....	"	65	Abraham Ernst.....	Mahone Bay.... 10	135 00	
107652	Mascot.....	"	80	Charles Hewett.....	Lunenburg.....	19	213 00
100849	Merl M. Parks.....	"	80	A. V. Conrad.....	Park's Creek... 17	199 00	
96840	Mayflower.....	"	60	Robert Dawson.....	Bridgewater... 11	137 00	
103426	Melbourne.....	"	61	Eber Gerhardt.....	Middle La Have. 15	166 00	
107650	Mildred.....	"	80	Abraham Ernst.....	Mahone Bay.... 19	213 00	
90823	Miletus.....	"	80	John Shankle.....	Middle La Have. 14	178 00	
107111	Millie Mace.....	"	80	William C. Smith.....	Lunenburg.....	19	213 00
100153	Milo.....	"	80	J. William Young.....	"	17	199 00
103416	Minnie J. Smith.....	"	80	William C. Smith.....	"	18	206 00
103757	Minnie J. Heckman	"	80	Murdock McGregor.....	Ritcey's Cove... 21	227 00	

* No crew entitled.

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LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

LUNENBURG COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew Paid.	Amount of Bounty Paid.
103412	Minnie B.	Lunenburg.	25	Phineas Richard.	Pentz Settlem't	9	88 00
107121	Minto.	"	80	Daniel Zinck.	Lunenburg.	20	220 00
103422	Mischief.	"	80	Thomas A. Wilson.	Bridgewater.	17	199 00
92632	Monarch.	"	80	Allan R. Morash.	Lunenburg.	15	185 00
103758	Muriel.	"	80	G. N. C. Hawkins.	"	19	213 00
94966	Nicanor.	"	79	Davis Westhaver.	"	15	184 00
100485	Nightingale.	"	52	John Haughn.	Pentz Settlem't	13	143 00
92636	Nonpareil.	"	80	John Zinck.	Lunenburg.	17	199 00
88242	Nova Zembla.	"	79	C. U. Mader.	Mahone Bay.	15	184 00
94786	Ontario.	"	80	Thomas Hamm.	Lunenburg.	15	185 00
107643	Olive Louise.	"	80	Alexander Knickle.	"	17	199 00
94779	O. P. Silver.	"	80	Charles L. Silver.	"	17	199 00
94641	Ovando.	"	80	Jeffrey Publicover.	Getson's Cove.	15	185 00
100836	Panama.	"	80	Henry Adams.	Lunenburg.	17	199 00
107642	Pavia.	"	80	A. V. Conrad.	Park's Creek.	17	199 00
103747	Perfect.	"	54	John Schmeisser.	Middle La Have.	13	145 00
100483	Puma.	"	58	Simon Pentz.	"	16	170 00
94774	Puritan.	"	80	Theophilus Creaser.	Ritcey's Cove.	17	199 00
100473	Rapture.	"	57	Alvin Moser.	Middle South.	16	169 00
107633	Renown.	"	80	William C. Smith.	Lunenburg.	17	199 00
107647	Roc.	"	80	C. U. Mader.	Mahone Bay.	15	185 00
96834	Robert F. Mason.	"	80	Martin Mason.	Lunenburg.	18	206 00
107125	Roma.	"	80	Isaac Zink.	Ritcey's Cove.	19	213 00
100572	Rowena.	"	51	William Schmeisser.	Middle La Have.	14	149 00
90868	Sadie.	"	79	G. N. C. Hawkins.	Lunenburg.	16	191 00
100471	Secret.	"	80	John B. Young.	"	17	199 00
88349	Senovar.	"	80	Nathan Hiltz.	Martin's River.	15	185 00
100165	Snow Queen.	"	67	Leander Misener.	Martin's Point.	15	172 00
94962	Stella E.	"	80	Norman Rafuse.	Conquerall Bank.	*	80 00
107117	St. Clair.	"	80	Charles Smith.	Lunenburg.	18	206 00
103500	St. Helena.	"	80	Howard Wynthacht.	"	17	199 00
107648	St. Vincent.	"	78	Cyrus Walters.	Middle La Have.	19	211 00
100029	Stranger.	"	11	Garrett Richard.	Pleasantville.	1	18 00
103754	Talmouth.	"	80	F. S. Messenger.	Petite Riviere.	19	213 00
107651	Torata.	"	80	J. William Young.	Lunenburg.	19	213 00
92623	Torridon.	"	80	Isaac Heckman.	"	18	206 00
100575	Tyler.	"	54	W. A. Zwicker.	"	13	145 00
103742	Unique.	"	80	Abraham Ernst.	Mahone Bay.	17	199 00
97098	Urania.	"	80	David Heisler.	Lunenburg.	18	206 00
103417	Uruguay.	"	80	Elijah Ritcey.	Ritcey's Cove.	17	199 00
83164	Valiant.	"	80	Thomas A. Cook.	Lunenburg.	16	192 00
100821	Venus.	"	76	J. W. Mills.	Mahone Bay.	14	174 00
103504	Viking.	"	80	Amiel Corkum.	La Have.	16	192 00
94776	Volunteer.	"	80	Murdoek McGregor.	Ritcey's Cove.	17	199 00
61921	W. C. Wier.	Halifax.	41	Freeman Young.	Tancook.	5	76 00
100152	Werra.	Lunenburg.	80	E. Fenwick Zwicker.	Lunenburg.	17	199 00
96829	Wisteria.	"	80	Freeman Anderson.	"	17	199 00
107645	Yosemite.	"	80	Kenneth Silver.	Dayspring.	16	192 00
100833	Yucatan.	"	80	J. Joseph Rudolf.	Lunenburg.	17	199 00

QUEEN'S COUNTY.

83134	Infant.	Lunenburg.	15	James H. Rhynard.	Brooklyn.	5	50 00
103174	Iona.	Liverpool.	15	Robert Smith.	Hunt's Point.	5	50 00
103191	Jennie B.	"	13	William Vogler.	Port Joli.	4	41 00
83310	Myosotis.	Port Medway.	80	Edwin Morine.	Port Medway.	19	213 00
94833	News Boy.	Liverpool.	16	Alexander Shankle.	Port Mouton.	4	44 00
61916	Only Son.	"	16	William A. Conrad.	Liverpool.	4	44 00
103191	Oressa.	"	10	Joseph Hagan.	Hunt's Point.	4	38 00
107274	Priscilla.	"	80	Abram W. Hendry.	Liverpool.	15	185 00
103199	Trilby.	"	12	William Wigglesworth.	"	3	33 00

*No Crew Entitled.

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

RICHMOND COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
36474	Alexander Fraser..	Lunenburg	32	Anselm Sampson.....	River Bourgeois.	10	102 00
88456	Alice May.....	Arichat.....	39	Wm. J. Le Vesconte..	"	10	109 00
77544	Alpha.....	"	42	Wm. J. Le Vesconte..	"	12	126 00
103463	Annie May.....	"	11	Placide Dugas.....	"	6	53 00
41771	Atalia.....	Guysboro.....	34	Jesse Hunson.....	St. Peters.....	4	62 00
94680	Bonnie Glen.....	Halifax.....	17	Xavier Marchand.....	Petit de Grat.....	6	59 00
75561	Boreas.....	Lunenburg.....	41	John Colford.....	Port Richmond..	8	97 00
54156	British Lady.....	Halifax.....	19	Albert Joyce.....	River Inhabitants	5	54 00
38501	B. Wier & Co.....	Arichat.....	25	John Shannon.....	E. B. Riv. Inhab.	2	39 00
74100	Candid.....	"	23	Desiré Burke.....	River Bourgeois.	7	72 00
72061	C. P. M.....	"	22	Alexander Burke.....	"	6	64 00
72058	Daisy.....	"	34	Patrick Richard.....	Arichat.....	4	62 00
88462	Fanny S.....	"	28	Docité Fougere.....	River Bourgeois.	9	91 00
38481	G. H. B.....	"	36	Jeffrey Forgeron.....	West Arichat...	4	64 00
85382	G. H. Marryatt.....	Halifax.....	23	Isaac Dugas.....	"	3	44 00
88599	Guide.....	"	38	Edward Poirier.....	Goulet.....	12	122 00
38468	Hector.....	Arichat.....	35	Edw. J. Walker.....	Basin.....	4	63 00
46294	Janett.....	Halifax.....	32	J. B. Girroir.....	West Arichat...	5	67 00
96764	Ida C. Spoffard...	Port Hawkesby	54	Robert Murray.....	Port Richmond..	6	96 00
85560	Jacques.....	Yarmouth.....	58	Frederick Poirier.....	D'Escousse.....	16	170 00
83135	J. B. M.....	Halifax.....	20	John Landry.....	Petit de Grat...	5	55 00
88454	Jubilee.....	Arichat.....	34	Arthur Poirier.....	Lowr D'Escousse	9	97 00
103458	K. McKenzie.....	"	17	James Barron.....	L'Ardoise.....	6	59 00
38516	Lady of the Lake..	"	26	Peter Landry.....	St. Peter's Inlet.	8	82 00
88455	Laura Victoria...	"	39	Henry McDonald.....	D'Escousse.....	12	123 00
61615	Laura Cox.....	Guysboro.....	49	Alex'dr E. Morrison	"	15	154 00
96763	Lelia Linwood...	Arichat.....	67	Wm. J. Le Vesconte..	River Bourgeois.	15	172 00
72071	Lumen Diei.....	"	20	Urbain Sampson.....	"	7	69 00
88463	Maria.....	"	14	Andrew Boudrot.....	Petit de Grat...	3	35 00
38522	Mary.....	"	23	Isaiah Boudrot.....	River Bourgeois.	7	72 00
85388	Mary Alice.....	Halifax.....	21	Edward Malcom.....	Port Malcom.....	5	56 00
100380	Mary D.....	Sydney.....	27	Simon Deveaux.....	Little Bras d'Or	8	83 00
103462	Maud.....	Arichat.....	16	Henry Duyon.....	Arichat.....	3	37 00
38417	Messenger.....	"	30	Cyprian Burke.....	River Bourgeois.	9	93 00
72048	Neptune.....	"	26	Henry Sampson.....	"	7	75 00
74365	Nova Stella.....	"	53	Leon N. Poirier.....	D'Escousse.....	15	158 00
54139	Ocean Belle.....	Halifax.....	20	Isidore Fougere.....	Poulamond.....	8	76 00
61630	Olive J.....	"	57	John J. Malcom.....	Port Malcom.....	10	127 00
72067	Philomene D.....	Arichat.....	22	John Pelham.....	Janvrin Island..	4	50 00
100477	Pilot.....	Lunenburg.....	42	William Proctor.....	R'vr Inhabitants	9	105 00
46485	Quickstep.....	Port Hawksb'ry.	52	John Murray.....	Port Richmond..	6	94 00
64033	Ripple.....	"	34	G. A. Cruickshank..	"	3	55 00
73119	Royal.....	Halifax.....	12	Nicholas McDonald..	Basin R. I.....	1	19 00
103461	St. Lidwina.....	Arichat.....	11	Alexander Peters.....	L'Ardoise.....	4	39 00
103464	St. Patrick.....	"	27	Thomas Clannon.....	"	7	76 00
92599	Thistle.....	Sydney.....	11	R. Monbourquette..	" west.....	4	39 00
103460	Two Brothers.....	Arichat.....	18	Maurice Peters.....	"	6	60 00
71034	Vanguard.....	"	51	Dominick Boudrot...	Petit de Grat...	7	100 00
38523	Victoria.....	"	24	Henry Burke.....	St. Peters.....	7	73 00
57662	Village Bride.....	Halifax.....	24	Peter Malcolim.....	Port Malcom...	6	66 00

SHELburnE COUNTY.

94632	A. C. Greenwood..	Shelburne.....	15	Howard Chetwynd...	Port Saxon.....	6	57 00
97034	A. D'E.....	Yarmouth.....	15	David H. Blades.....	UpperW. Harb'r	3	36 00
103793	Agatha.....	Shelburne.....	80	John H. Thorbourne..	Jordan Bay.....	22	234 00
103792	Alice M. Gordon...	"	80	Enos Churchhill...	Lockeport.....	23	241 00
100620	Alina.....	"	80	Churchill Locke.....	"	20	220 00
100617	Altona.....	"	28	Austin Swanburg...	Little Harbour..	8	84 00
80627	Annie D.....	Yarmouth.....	70	John M. Harding.....	Osborne.....	8	126 00

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LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*SHELBURNE COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty Paid.
90655	Annina.....	Yarmouth.....	12	George Pike.....	Coffin's Croft...	4	40 00
107053	Bonnie Lin.....	Barrington.....	10	Norman Madden.....	Baccaro.....	6	52 00
103186	Brittania.....	Shelburne.....	11	Ross Enslow.....	Green Harbour..	5	46 00
96970	Charlie Richardson.	".....	26	John B. Harding.....	Rockland.....	8	82 00
100605	Dawn.....	Barrington.....	49	A. N. Smith.....	Barrington.....	14	147 00
103118	Della F. Tarr.....	St. Andrews.....	34	Samuel Greenwood.	Port Saxon.....	9	97 00
96976	Edith.....	Shelburne.....	40	Enos Churchill.....	Lockeport.....	9	103 00
103789	Effie B. Nickerson.	".....	22	Anasa Nickerson..	Woods Harbour..	5	57 00
77603	Eldon C.....	Barrington.....	27	Josiah Thomas.....	Cape Negro.....	9	90 00
103795	Etta Vaughn.....	Shelburne.....	80	B. P. Thorbourn.....	Sandy Point.....	21	227 00
85731	Eva L. H.....	".....	62	B. P. Thorbourn.....	".....	12	146 00
103319	Flora Temple.....	Port Hawksb'ry.	55	Joseph W. Nickerson.	Port La Tour...	9	118 00
90645	Fly.....	Yarmouth.....	16	William Wickens..	Shag Harbour..	3	37 00
103818	Geneva Ethel.....	Barrington.....	29	Charles E. Kenney..	Clark's Harbour	9	92 00
90647	Hattie Emeline.....	Yarmouth.....	11	Charles A. Reynolds	UpperPt LaTou	4	39 00
103790	Helene.....	Shelburne.....	80	Churchill Locke.....	Lockeport.....	20	220 00
94941	John Purney.....	".....	80	George H. King.....	Sandy Point...	21	227 00
85566	J. Lyons.....	Barrington.....	17	Joseph M. Thomas	Cape Negro.....	7	66 00
73967	Katie.....	Liverpool.....	14	Churchill Locke.....	Lockeport.....	4	42 00
90438	Lark.....	Barrington.....	13	James Ross.....	UpperPt LaTour	5	48 00
94661	L. C. Tough.....	Shelburne.....	12	Thomas Swain.....	Black Point.....	5	47 00
80624	Lima.....	Yarmouth.....	12	William Halliday..	Bear Point.....	3	33 00
51972	Lydia Rider.....	Shelburne.....	57	E. P. Greenwood..	North East Ha'br	14	155 00
103796	Mabel Denvers..	".....	14	Alexander Smith..	Cape Negro.....	5	49 00
103712	Marguerite.....	Yarmouth.....	10	Jared Brannen.....	L'wr Woods H'br	4	38 00
83493	Mary C.....	Liverpool.....	80	William McMillan..	Lockeport.....	20	220 00
92568	Mary Kate.....	Shelburne.....	13	Charles G. Acker..	Churchover.....	3	34 00
103177	Mayflower.....	".....	12	Adam Hamilton.....	Carleton Village.	4	40 00
83434	Mary May.....	".....	20	Adam J. Firth.....	Shelburne.....	8	76 00
103782	Oasis.....	".....	80	John A. McGowan..	".....	20	220 00
103788	Plover.....	".....	80	George A. Cox.....	".....	21	227 00
100820	Ranger.....	Barrington.....	10	Robert Atkinson..	North East Point	3	31 00
53551	Roving Bird.....	Halifax.....	24	King Perry.....	" Ha'br.....	9	87 00
103783	Springwood.....	Shelburne.....	80	William McMillan..	Lockeport.....	22	234 00
88542	Three Bells.....	".....	80	Enos Churchill.....	".....	21	227 00
96961	Tivoi.....	".....	24	W. J. Doane.....	Read Head.....	6	66 00
103179	Trilby.....	".....	31	William McMillan..	Lockeport.....	9	94 00
100608	Vesper.....	Shelburne.....	14	Churchill Locke.....	Lockeport.....	4	42 00
77744	Whip-poor-Will..	".....	17	J. P. Littlewood..	Ingomar.....	5	52 00
90430	Will Carleton.....	Barrington.....	80	James Snow.....	U. Port LaTour.	18	206 00
103183	Wren.....	Shelburne.....	18	William McCarthy..	Shelburne.....	3	39 00
100812	Wyvern.....	Barrington.....	25	Levi J. Nickerson..	Clark's Harbour.	7	74 00

VICTORIA COUNTY.

100388	Hattie.....	Sydney.....	27	John Fitzgerald.....	Dingwall.....	4	55 00
74039	James Henry.....	".....	18	John Dumphy.....	South Ingonish.	6	60 00
107351	Wilfrid Laurier...	".....	10	Daniel McLeod.....	".....	5	45 00

YARMOUTH COUNTY.

80647	Annie M. Bell.....	Yarmouth.....	64	Leandre Amiro.....	East Pubnico...	16	176 00
94980	Aurore.....	".....	80	Leon D'Eon.....	West Pubnico...	19	213 00
88267	Bessie May.....	St. John.....	23	Nathaniel Pierce..	Charlesville.....	6	65 00
103051	Carrie May.....	Yarmouth.....	25	Ferdinand Murphy..	Pubnico Harb'r.	9	88 00
85536	Circassian.....	".....	80	A. F. Stoneman.....	Yarmouth.....	20	220 00
94977	Civilian.....	".....	80	Henry S. LeBlanc..	West Pubnico...	21	227 00

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*YARMOUTH COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew Paid.	Amount of Bounty Paid.
							\$ cts.
103063	Defender.....	Yarmouth.....	20	A. F. D'Entremont...	West Pubnico...	8	76 00
103066	Eddie J.....	".....	23	C. L. D'Entremont....	".....	9	86 00
85683	Edith L.....	".....	16	W. A. Killam.....	Yarmouth.....	5	51 00
107332	Estelle.....	".....	15	Stillman Smith.....	Lower Argyle...	6	57 00
85551	Ethel.....	".....	80	J. H. Porter & Co.....	Tusket Wedge...	18	206 00
97036	Eva.....	".....	10	Abijah Rankin.....	Lower Argyle...	3	31 00
100535	Fair Play.....	".....	11	J. B. Lewis.....	Yarmouth.....	3	32 00
90654	Flora.....	".....	64	Arthur D'Entremont..	West Pubnico...	20	204 00
94972	Florence.....	".....	11	Marc Boudreau.....	Tusket Wedge...	5	46 00
103719	Freddie M.....	".....	10	Dominique Muise.....	Comeau's Hill..	5	45 00
90885	Georgiana.....	".....	80	Henry Lewis.....	Yarmouth.....	22	234 00
100327	Hattie.....	".....	10	Robert Ellenwood....	".....	2	24 00
80643	Hazel Dell.....	".....	80	James Amiro.....	West Pubnico...	20	220 00
85554	Hazel Glen.....	".....	80	H. T. D'Entremont...	Lower E. ".....	19	213 00
103717	Henry L.....	".....	10	A. C. D'Entremont...	West ".....	2	24 00
88587	Jessie May.....	".....	14	Alexander Hemlow...	Yarmouth.....	3	35 00
103709	Lizzie E.....	".....	14	E. Juston Ellis.....	Port Maitland..	5	49 00
80614	Louise.....	".....	80	J. H. Porter & Co.....	Tusket Wedge...	18	206 00
103718	Lucy.....	".....	10	A. F. D'Entremont...	West Pubnico...	2	24 00
88596	M. A. Louis.....	".....	64	A. F. Stoneman.....	Yarmouth.....	18	190 00
103705	Nebula.....	".....	24	Ferdinand Amiro.....	West Pubnico...	10	94 00
90659	N. A. Laura.....	".....	59	Julien D'Entremont...	".....	18	185 00
90892	Nellie.....	".....	59	J. H. Porter & Co.....	Tusket Wedge...	15	164 00
96777	Orjole.....	".....	43	J. L. Morton.....	Lower Argyle...	9	106 00
90873	Primrose.....	".....	34	H. T. D'Entremont...	Lower E. Pubnico	8	90 00
103706	Régine.....	".....	16	Wm. D'Entremont...	West ".....	1	17 00
83254	Sea Foam.....	Annapolis.....	28	Joseph L. Amiro.....	Lower E. ".....	7	77 00
75724	Sea Foam.....	Yarmouth.....	75	J. H. Porter & Co.....	Tusket Wedge...	20	215 00
100323	Senora.....	".....	80	Marc A. Surette.....	West Pubnico...	22	234 00
88589	Sanford.....	".....	20	W. A. Killam.....	Yarmouth.....	*	20 00
100313	Souvenir.....	".....	71	Sylvain D'Entremont..	West Pubnico...	18	197 00
88597	Uncle Sam.....	".....	80	G. D. D'Entremont...	East ".....	20	220 00
10 330	Viola Pearl.....	".....	23	Harvey Goodwin.....	Pubnico Harbo'r	8	79 00
90896	Wapite.....	".....	80	A. F. Stoneman.....	Yarmouth.....	18	206 00
103704	Whisper.....	".....	31	Henry A. Amiro.....	West Pubnico...	9	94 00
85559	Willie F.....	".....	12	Riley Haskell.....	Port Maitland..	5	47 00
90882	Will O' the Wisp..	".....	51	A. F. Stoneman.....	Yarmouth.....	17	170 00
90897	Wrasse.....	".....	56	".....	".....	18	182 00

* No crew entitled.

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LIST of Vessels which received Fishing Bounty for the year 1899.

PROVINCE OF NEW BRUNSWICK.

CHARLOTTE COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew Paid.	Amount of Bounty Paid.
103124	Addié B.	St. Andrews.	13	Arthur Ramsdell.	White Head Isl.	1	20 00
83478	Argyle.	"	10	Joseph McGee.	Back Bay.	3	31 00
107439	Arminia.	"	15	J. L. Guptill.	Grand Harbour.	3	36 00
94727	Aurelia.	St. John.	22	James Scovill.	Flagg's Cove	5	57 00
64011	Bee.	St. Andrews.	18	Sherman Lawson.	"	4	46 00
88409	Carrie.	Digby.	12	Thomas A. Cook.	Le Tete.	3	33 00
92515	Dispute.	St. Andrews.	13	Byron Wilcox.	Outer Wood Isld	2	27 00
92505	Edith R.	"	47	Winslow Richardson.	Leonardsville.	4	75 00
103114	Edward Morse.	"	32	Alexander Calder, jr..	Wilson's Beach.	7	81 00
59391	Eliza Ann.	"	12	John Wills.	Whitehead.	4	40 00
92516	Emma.	"	22	Walter Galder, jr..	Campo Bello.	4	50 00
59382	Emma T. Story.	"	40	Henry E. Fraser.	Grand Manan.	5	75 00
83202	Enchantress.	"	10	Peter Dixon.	Flagg's Cove.	3	31 00
80803	Exenia.	Windsor.	18	William F. Parker.	Beaver Harbour.	5	53 00
88276	Falcon.	St. Andrews.	12	John F. Cronk.	Flagg's Cove.	5	47 00
92511	Fleet Wing.	"	11	Aldm McFarland.	"	3	32 00
97150	Gleaner.	"	13	Frank Newman.	Campo Bello.	2	27 00
107433	Golden Rule.	"	49	Mariner Calder.	Wilson's Beach.	14	147 00
107432	Greenback.	"	22	Irvine Ingalls.	Grand Harbour.	4	50 00
59396	Gurtie Westbrook.	"	16	James Cline.	Lord's Cove.	*	16 00
94839	Harrie.	"	14	William J. Tucker.	Le Tete.	2	28 00
107437	Hattie L.	"	12	Albert Cheney.	Grand Harbour.	3	33 00
83463	Havelock.	"	33	William James.	Campo Bello.	6	75 09
103119	Hortense.	"	15	William J. Morse.	White Head Isl.	4	43 00
103121	Island Girl.	"	17	Frank Ingersoll.	Flagg's Cove.	2	31 00
103997	Jesse James.	"	11	Lewis Franklyn.	White Head Isl.	3	32 00
51965	John E. Dennis.	"	18	Alfred Stanley.	Flagg's Cove.	3	39 00
77766	Laconic.	"	15	John Dixon.	"	3	36 00
88273	Lillian E.	"	13	Sanford Dakin.	Beaver Harbour.	1	20 00
59342	Lizzie S. McGee.	"	14	Andrew McGee.	Back Bay.	5	49 00
92514	Maggie Jane.	"	10	John Thomas.	Flagg's Cove.	3	31 00
83471	May Queen.	"	31	Thomas Redmond.	"	6	73 00
107434	Minnie G.	"	13	Owen Green.	Grand Harbour.	3	34 00
92518	Peril.	"	18	Martin Eldridge.	Beaver Harbour.	4	46 00
83132	Restless.	Digby.	25	Robert Graham.	Sandy Cove, N.S	5	60 00
75591	Rise and Go.	St. Andrews.	16	William Sirls.	Wilson's Beach.	7	65 00
75864	Roving Lizzie.	Weymouth.	11	John Carter.	Seeley's Cove.	3	32 00
107433	Sir John.	St. Andrews.	11	Hiram Morse.	White Head Isl.	3	32 00
107440	Three Links.	"	12	R. A. Main.	Woodw'rd's Cove	5	47 00
88414	Trumpet.	St. John.	20	Newton Wright.	Beaver Harbour.	5	55 00
88282	Veritas.	St. Andrews.	10	Simon Leonard.	Leonardsville.	1	17 00
103125	Virgin Queen.	"	16	Nelson Morse.	White Head Isl.	4	44 00
77969	Wave Queen.	"	11	Hiram W. Foster.	Grand Harbour.	4	39 00

GLOUCESTER COUNTY.

72099	Adelina.	Chatham.	12	Clement Lanteigne.	Lameque.	4	40 00
103' 09	Adeline Gladys.	"	12	Richard Young.	Shippegan.	3	33 00
103081	Albatross.	"	13	Thomas Ahier.	"	3	34 00
100984	Alice.	"	11	Joseph J. Doiron.	Caraquet.	4	39 00
103279	Alice Maud.	"	10	C. Robin, Collas & Co.	"	3	31 00
97194	Alika.	"	12	Lange Paulin.	Lameque.	4	40 00
103763	Alouette.	"	10	Thomas Ahier.	Shippegan.	3	31 00
92419	Anna.	"	12	Dosithé Chiasson.	Lameque.	4	40 00

* No crew entitled.

LIST of Vessels which have received Fishing Bounty, &c.—New Brunswick—*Con.*GLOUCESTER COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew Paid.	Amount of Bounty Paid.
103073	Anna	Chatham	11	The W. S. Loggie Co.	Chatham	2	25 00
100960	Annie M.	"	11	"	"	4	39 00
103071	Anglesea	"	12	Hy. LeBouthillier.	Caraquet	4	40 00
100987	Arabi	"	12	Philip Rive.	"	3	33 00
96739	Argeline	"	14	Joseph C. Doiron.	"	5	49 00
103085	Argentina	"	12	C. Robin, Collas & Co.	"	4	40 00
100983	Bee	"	11	"	"	4	39 00
61431	Bee	"	11	Paul Noel	Lameque	4	39 00
72079	Betsy.	"	13	Wm. Fruing & Co.	Shippegan	4	41 00
103072	Ben Hur	"	11	Richard Young	"	4	39 00
100975	Big Bear	"	10	Robt. Young	Caraquet	3	31 00
100299	Blanchard	"	12	C. Robin, Collas & Co.	"	3	33 00
103589	Blenheim	"	13	"	"	4	41 00
103780	Britannia	"	13	Wm. Fruing & Co.	"	3	34 00
100780	Britannic	"	12	C. Hubbard	"	4	40 00
100909	Bluenose	"	11	Joseph Sewell	"	2	25 00
100988	Cesar	"	10	Philip Rive	"	3	31 00
100774	Calliope	"	12	"	"	3	33 00
103271	Celia	"	11	Dominique Gallien	"	4	39 00
103585	Cerdrie	"	14	Philip Rive	"	4	42 00
100789	Chazalie	"	11	Robt. Young	"	3	32 00
100784	Charlotte	"	13	"	"	3	34 00
96730	Christina	"	11	C. Robin, Collas & Co.	"	3	32 00
101000	Condor	"	10	Thomas Ahier	Shippegan	4	38 00
103083	Corsair	"	10	"	"	4	38 00
100916	Cygnat	"	12	C. Robin, Collas & Co.	Caraquet	3	33 00
100971	Cyprian	"	10	Elie Sivret	"	4	38 00
100913	Daffodil	"	10	Thomas Ahier	Shippegan	4	38 00
100915	Dawn	"	12	C. Robin, Collas & Co.	Caraquet	4	40 00
103934	Diamond Jubilee	New Carlisle	31	Daniel Hatton	Montreal	4	59 00
103070	Dipper	Chatham	12	The W. S. Loggie Co.	Chatham	4	40 00
92412	Dollie Dutton	"	13	Richard Young	Shippegan	4	41 00
103949	Dora	"	12	Peter Fiott	Caraquet	3	33 00
100999	Dove	"	11	Thomas Ahier	Shippegan	4	39 00
100998	Eagle	"	10	"	"	4	38 00
100293	Eliza	"	15	Robt. Young	Caraquet	4	43 00
103590	Eliza	"	13	C. Robin, Collas & Co.	"	4	41 00
96737	Elmina	"	11	Jacques Noël	Lameque	4	39 00
96723	Emma	"	15	Sebastien Noël	Little Lameque	4	43 00
100911	Emperor	"	10	Thomas Ahier	Shippegan	3	31 00
100786	Empress	"	12	Robt. Young	Caraquet	4	40 00
100772	Estelle	"	13	Philip Rive	"	3	34 00
103776	Esk	"	14	Robt. Young	"	4	42 00
100787	Ethel	"	11	"	"	3	32 00
100905	Evangeline	"	10	Philip Rive	"	4	38 00
103001	Falcon	"	10	Thomas Ahier	Shippegan	3	31 00
103077	Fame	"	10	The W. S. Loggie Co.	Chatham	4	38 00
100298	Fisher	"	12	Joseph J. Chiasson	Little Lameque	4	40 00
61445	Flavie	"	13	Théophile Duguay	Lameque	4	41 00
96736	Fly	"	14	Richard Young	Shippegan	3	35 00
61405	Fly	"	11	Alex. McLaughlin	Tracadie	4	39 00
100782	Flying Foam	"	12	Robt. Young	Caraquet	4	40 00
100912	Foam	"	10	Thomas Ahier	Shippegan	3	31 00
85699	Four Sisters	"	10	Marcel Caron	Caraquet	4	38 00
100778	Gambetta	"	13	C. Hubbard	"	3	34 00
100954	Gazelle	"	10	"	"	3	31 00
100919	Gazelle	"	12	C. Robin Collas & Co.	Caraquet	4	40 00
100993	Garfield	"	10	Philip Rive	"	3	31 00
100968	Gem	"	11	C. Robin Collas & Co.	"	3	32 00
96733	Gem	"	12	Richard Young	Shippegan	3	33 00
103282	Gilknockie	"	11	Robert Young	Caraquet	3	32 00
103086	Gipsy	"	20	The W. S. Loggie Co.	Chatham	5	55 00
100964	Gladstone	"	10	Philip Rive	Caraquet	3	31 00

SESSIONAL PAPER No. 22

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*GLOUCESTER COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner. or Managing Owner.	Residence.	No. of Crew Paid.	Amount of Bounty Paid. \$
100910	Gleaner	Chatham	13	Luke Lanteigne	Caraquet	3	34 00
103766	Gluesta	"	12	Thomas Ahier	Shippegan	3	33 00
100992	Great Mogul	"	11	Philip Rive	Caraquet	3	32 00
92418	Grip	"	12	James Davidson	Tracadie	3	33 00
100790	Guiding Star	"	11	Robert Young	Caraquet	3	32 00
100956	Harold N	"	12	The W. S. Loggie Co.	Chatham	3	33 00
107771	Heron	"	13	Wm. Fruing & Co	Shippegan	4	41 00
100994	Hercules	"	10	Philip Rive	Caraquet	4	38 00
103950	Hibernia	"	13	Wm. Fruing & Co	Shippegan	4	41 00
103765	Hironnelle	"	11	Thomas Ahier	Shippegan	3	32 00
100903	Hope	"	12	Robert Young	Caraquet	3	33 00
61425	Hope	New Carlisle	13	C. Robin Collas & Co.	"	4	41 00
103939	Hope	Chatham	11	Michael Bisho	Inkerman	3	32 00
100906	Hotspur	"	10	Philip Rive	Caraquet	3	31 00
103931	Irene	"	12	Wm. Fruing & Co	Shippegan	3	33 00
103779	Ibis	"	11	"	"	4	39 00
96724	Isabel	"	11	"	"	4	39 00
100997	Ivanhoe	"	10	Thomas Ahier	"	3	31 00
103281	Japan	"	11	Robert Young	Caraquet	3	32 00
103289	Jersey Lily	"	12	Thomas Ahier	Shippegan	4	40 00
100958	John B.	"	11	The W. S. Loggie Co.	Chatham	3	32 00
100965	Josephine	"	11	Philip Rive	Caraquet	4	39 00
103949	King Fisher	"	13	"	"	4	41 00
100981	Kite	"	11	C. Robin Collas & Co.	Caraquet	4	39 00
103288	Kite	"	10	Thomas Ahier	Shippegan	4	38 00
103293	Koh-i-noor	"	13	Philip Rive	Caraquet	5	48 00
103003	Lark	"	10	Thomas Ahier	Shippegan	3	31 00
103089	Lady Maud	"	11	Philip Rive	Caraquet	3	32 00
100951	Leo	"	13	Hyacinthe Lanteigne	"	4	41 00
103280	Lily	"	11	C. Robin Collas & Co.	"	3	32 00
100972	Lizzie D	"	11	Robert Young	"	3	32 00
88664	Lizzie D	"	17	James Davidson	Tracadie	2	31 00
100980	Lynx	"	11	C. Robin Collas & Co.	Caraquet	3	32 00
100955	Majestic	"	10	C. Hubbard	"	4	38 00
92403	Marie	"	25	Ubalde Landry	Grand Anse	4	53 00
72100	Marie	"	11	Onesime Chiasson	Lameque	4	39 00
103278	Marie Celia	"	13	Wm. Fruing & Co	Shippegan	4	41 00
100292	Marie Joseph	"	12	Lazare Gauvin	Little Lameque	4	40 00
100295	Marie Louise	"	18	Joseph A. Paulin	Caraquet	4	46 00
100781	Mary Louise	"	11	C. Hubbard	"	2	25 00
103084	Mary Emma	"	11	Onesime Paulin	"	4	39 00
100957	Mary R.	"	12	The W. S. Loggie Co.	Chatham	3	33 00
103088	Max	"	10	Maxime Cormier	Caraquet	5	45 00
103768	Mayflower	"	13	C. Robin Collas & Co.	"	3	34 00
61447	Merida	"	13	Andre D. Aché	Lameque	4	41 00
100779	Mermaid	"	11	C. Hubbard	Caraquet	3	32 00
100785	Midnight	"	12	Robert Young	"	3	33 00
100300	Mikado	"	13	C. Robin Collas & Co.	"	3	34 00
88669	Morning Star	"	12	Gustave Gionet	Pokerouche	3	33 00
100970	Nellie	"	11	Dominique Gallien	Caraquet	4	39 00
103284	Nornandy	"	11	Philip Rive	"	2	25 00
103004	Oriole	"	11	Thomas Ahier	Shippegan	4	39 00
103005	Osprey	"	10	"	"	4	38 00
100297	Palma	"	14	Oliver Duguay	Lameque	5	49 00
100776	Patrick	"	11	Philip Rive	Caraquet	4	39 00
103778	Pelican	"	13	Wm. Fruing & Co.	Shippegan	4	41 00
103777	Penquin	"	13	"	"	4	41 00
103674	Petrel	"	12	Thomas Ahier	"	4	40 00
96732	Providence	"	11	Jos. L. Robichaud	"	4	39 00
72076	Providence	"	12	Thomas Ahier	"	4	40 00
96740	Providence	"	13	Prosper Albert	Caraquet	3	34 00
103080	Ptarmigan	"	11	Thomas Ahier	Shippegan	4	39 00
100904	P. T. S.	"	11	J. N. LeBouthillier	Caraquet	5	46 00

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*GLOUCESTER COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.	
							\$	cts.
103287	Raven	Chatham	11	Thomas Ahier	Shippegan	3	32	00
100775	Red Gauntlet	"	11	Philip Rive	Caraquet	3	32	00
103272	Red Weasel	"	11	Richard Young	Shippegan	4	39	00
100952	Replevin	"	10	Robin, Collas & Co.	Caraquet	4	38	00
103586	Remus	"	17	The W. S. Loggie Co.	Chatham	4	45	00
103078	Reward	"	13	James De Grace	Shippegan	4	41	00
97191	Rita	"	12	Robin, Collas & Co.	Caraquet	4	40	00
103946	Robin	"	12	Peter Fiott	"	3	33	00
103587	Romulus	"	19	The W. S. Loggie Co.	Chatham	4	47	00
100908	Rosalie	"	10	E. LeBouthillier	Caraquet	3	31	00
100773	Rupert	"	12	Philip Rive	"	4	40	00
103273	Russell	"	10	John M. Ward	Miscon	4	38	00
96727	Ryse	"	11	Luc Aché	Lameque	3	32	00
100907	Sarah	"	10	Robt. Young	Caraquet	3	31	00
74401	Sara	"	11	Nazaire Noel	Lameque	4	39	00
92408	Sarah A. W.	"	15	Robt. J. Wilson	Wilson Point	4	43	00
103010	Sarah B.	"	10	Joseph N. Lanteigne	Caraquet	3	31	00
103584	Saxon	"	13	Philip Rive	"	4	41	00
100959	Sea Bird	"	10	The W. S. Loggie Co.	Chatham	3	31	00
100901	Sea Flower	"	12	Robt. Young	Caraquet	4	40	00
100914	Sea Flower	"	11	Robin, Collas & Co.	"	4	39	00
96731	Sea Star	"	13	Joseph M. Savoy	Shippegan	4	41	00
100961	Silver Moon	"	14	The W. S. Loggie Co.	Chatham	5	49	00
100788	Sir Charles	"	11	Robt. Young	Caraquet	4	39	00
100974	Sivret	"	10	"	"	4	38	00
100982	Snowdrop	"	11	Robin, Collas & Co.	"	4	39	00
103008	St. Joseph	"	12	Adolphe Aché	Lameque	4	40	00
100963	Stanley	"	10	Philip Rive	Caraquet	3	31	00
103087	Stanley	"	10	Joseph A. Baudin	Miscon	4	38	00
103767	Stella Maris	"	19	Luc Friolet	Caraquet	4	47	00
103947	Swallow	"	13	Peter Fiott	"	3	34	00
103761	Swing	"	11	Agapit A. Albert	"	3	32	00
103712	Surprise	"	10	Thomas Blanchard	Mizzonette	3	31	00
103762	Swan	"	14	Thomas Ahier	Shippegan	4	42	00
100986	Swift	"	11	F. G. Chiasson	Little Shippegan	3	32	00
100777	Teutonic	"	11	C. Hubbard	Caraquet	3	32	00
100918	Tickler	"	12	Robin, Collas & Co.	"	3	33	00
96738	Three Brothers	"	12	Richard Young	Shippegan	4	40	00
103082	Thrush	"	10	Thomas Ahier	"	3	31	00
103583	Two Brothers	"	11	The W. S. Loggie Co.	Chatham	4	39	00
103285	Valkyrie	"	12	Philip Rive	Caraquet	3	33	00
103274	Vesuvius	"	10	George Mallet	Shippegan	4	38	00
103775	Victoria	"	16	The W. S. Loggie Co.	Chatham	4	44	00
100995	Voltaire	"	10	Philip Rive	Caraquet	3	31	00
100966	Von Moltke	"	11	"	"	3	32	00
103588	Vulture	"	13	The W. S. Loggie Co.	Chatham	5	48	00
96735	White Fish	"	12	Joseph L. Savoy	Lameque	4	40	00
100953	White Wings	"	10	Robt. Young	Caraquet	4	38	00
100973	World's Fair	"	11	"	"	4	39	00
103079	Wren	"	11	Thomas Ahier	Shippegan	3	32	00
100920	Zephyr	"	12	Robin, Collas & Co.	Caraquet	3	33	00

NORTHUMBERLAND COUNTY.

100969	John Bull	Chatham	10	James Anderson	Church Point	4	38	00
92420	Mary Louise	"	13	Donald Loggie	"	4	41	00
83096	St. Patrick	"	16	John White	Upper Neguac	3	37	00

SESSIONAL PAPER No. 22

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*

ST. JOHN COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew Paid.	Amount of Bounty Paid.
88253	E. B. Colwell.....	St. John.....	19	Addison Thompson..	Dipper Harbour.	4	47 00
59373	E. M. Oliver.....	St. Andrews....	14	Charles Harkins.....	"	3	35 00
77783	Lost Heir.....	St. John.....	15	Henry Alston.....	Pisarincó.....	5	50 00
83426	Louisa.....	"	16	Bristall Hargrove....	Dipper Harbour.	4	44 00
92509	Mary Jane.....	St. Andrews....	13	M. Shannon.....	Musquash.....	2	27 00
52159	Mary E.....	St. John.....	21	Fred'k Buchanan.....	St. John.....	3	42 00
80630	Vanity.....	Yarmouth.....	11	Patrick Murray.....	Dipper Harbour.	4	39 00

PROVINCE OF PRINCE EDWARD ISLAND.

KING COUNTY.

38335	Elizabeth.....	Arichat.....	17	James Gerrior.....	Georgetown.....	5	52 00
75552	Hannah Eldridge..	Charlottetown..	57	Henry Dicks.....	"	5	92 00
75566	Julia A.....	"	15	Reuben Penny.....	Murray Harbour South.....	4	43 00
94670	Kate A. Burns.....	Halifax.....	36	Joseph White.....	Beach Point.....	9	99 00
69105	Lady of the Lake..	"	20	Sampson Bowdridge..	"	4	48 00
69109	Marcella Butler....	"	38	John Hemphill.....	Georgetown.....	5	73 00
107189	Sea Pearl.....	Charlottetown..	11	Augustin Boudreau..	Lower Montague	4	39 00
90488	Wave.....	"	19	James Delory.....	Georgetown.....	3	40 00

PRINCE COUNTY.

71310	Black Watch.....	Charlottetown..	23	Benjamin Perry.....	Alberton.....	3	44 00
103771	J. Anny.....	Chatham.....	12	John Poirier.....	Tignish.....	5	47 00
92473	Lucy Louise.....	Charlottetown..	19	James Roach.....	Malpeque.....	6	61 00
94992	Sarah P. Ayer.....	"	64	John Champion.....	Alberton.....	8	120 00
96926	Sea Foam.....	"	15	John Kinch.....	"	4	43 00
88518	W. F. Elizabeth....	Sydney.....	10	Roderick McDougald.	Port Hill.....	4	38 00

QUEEN COUNTY.

92466	G. H. Gardner....	Charlottetown..	17	E. Marshall, jr.....	North Rustico..	7	66 00
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PROVINCE OF QUEBEC.

BONAVENTURE COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew Paid.	Amount of Bounty Paid.
83399	Finnie, R. C	Halifax.	21	William Joseph.	Paspebiac.	3	42 00

GASPÉ COUNTY.

103148	River Pride.	Gaspé	52	Alexander & LeMarquand.	Point St. Peter..	8	108 00
107188	Stella.	Charlottetown . .	15	Adonias Bourque	Etang du Nord..	4	43 00
94675	Success.	Halifax.	16	R. J. Leslie	Amherst, M. I . .	4	44 00

SAGUENAY COUNTY.

74270	Amarilda	Quebec	24	Cléophas Vézina	St. Michel.	2	38 00
85756	Aristile	"	19	Philius Vezina	"	2	33 00
100463	B. C.	"	15	François Metivier.	St. Thomas.	2	29 00
61966	D. Cronan.	Halifax.	40	Peter LeMarquand.	EsquimauxPoint	6	82 00
107239	Marie Anne.	Quebec.	12	Isaïe T. Comeau.	Caribou Islands.	2	26 00
69382	Marie d'Sacre Cœur	Gaspé	46	Alexander Turbis	EsquimauxPoint	8	102 00
75445	Phoenix.	"	28	Napoleon Scherrer.	"	5	63 00
103358	Romeo.	Quebec.	22	Louis Pineau	Bic	2	36 00
75680	Sea Star.	"	52	Simon Cormier.	PointEsquimaux	7	101 00
80753	Stella Maris.	"	51	Louis Cummings	"	10	121 00
107231	St. Anne.	"	13	Magloire Chouinard.	Manicouagan. . . .	4	41 00
92334	Ste. Marie	"	53	Pierre Onelette	Quebec	6	95 00
66727	Willow.	"	18	Auguste Boulet	St. Thomas	3	39 00

APPENDIX No. 3.

NOVA SCOTIA.

District No. 1.—Comprising the four counties of the Island of Cape Breton.

Inspector A. C. Bertram, North Sydney, C. B.

District No. 2.—Comprising the counties of Cumberland, Colchester, Pictou, Antigonish, Guysborough, Halifax and Hants.

Inspector Robert Hockin, Pictou.

District No. 3.—Comprising the counties of King's, Annapolis, Digby, Yarmouth, Shelburne, Queen's and Lunenburg.

Inspector L. S. Ford, Milton.

DISTRICT No. 1.

ANNUAL REPORT ON THE FISHERIES OF CAPE BRETON ISLAND, 1899.

NORTH SYDNEY, C.B., January 2, 1900.

Hon. Sir LOUIS H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit herewith my sixteenth annual report on the fisheries of District No. 1, comprising the four counties of the Island of Cape Breton, together with statistical tables showing in detail the catch in each section and locality, with synopsis of reports of overseers for the past year.

The principal feature of last season's fishery operations, I am pleased to say, is an increase in the total yield amounting to \$239,191. This increase is made up by the returns from counties, viz :—Inverness, Cape Breton and Victoria ; Richmond County giving a decrease. The kinds of fish which go to make up the increase in Cape Breton County are pickled salmon, herring, lobsters, cod, haddock, hake, pollock and halibut. In Inverness there is an increase in the catch of cod, haddock, hake, halibut and squid, and in Victoria County there is an increased catch of salmon, herring, cod, haddock, hake, pollock and halibut ; while in Richmond County there is a marked decrease in salmon, herring and lobsters as compared with the previous year.

Taking the statistics for the whole island it will be observed that the principal decreases are to be found in the salmon and mackerel fishery while all other branches show a considerable increase over the season of 1898.

LOBSTERS.

There were seventy-four lobster canneries in operation during the past season against seventy-one in the previous year. The increase in the canned article amounted to 28,276 cans of one pound each. The counties of Cape Breton and Richmond have

entered vigorously into the export of live lobsters this year to the American market, with the result that during the past season there has been an increase of 22,306 cwt. This branch of the industry has brought to those engaged in it such remunerative returns that it is likely to be entered into more vigorously next season. The Bras d'Or lakes were the principal contributors to this export of live lobsters. In this inland sea lobsters are unusually large and almost each one taken exceeds in length the United States prescribed limit of ten and a half inches. In the Bras d'Or waters, lobsters are not found as plentiful as on the sea coast, but as already stated the percentage of size is much greater. Why the difference in this inland sea over the coastal waters can only be explained by the fact that the feeding ground is so much better in the lakes than outside. It is contended by some fishermen that there are abundance of lobsters in these extensive Bras d'Or lakes, but they are so large and so well fed that they will not trap as readily as lobsters in the sea shore waters which are all the time on the move in search of food. It is my opinion that with the increased export of live lobsters there will be a proportionate decrease in canning, as the high price realized for live lobsters will be found more remunerative than canning. Besides there is much less labour required in the export than in canning. Then again, in consequence of the growing demand for labour in our extensive mines and iron works, the price of labour has so advanced of late that unless the canned article also advances in price the labour problem will enter into the canning industry to such an extent that there will be a great decrease in the number of canneries now in operation. I do not think this will be regrettable, as it will help to preserve to future generations a branch of the fishery which has been threatened in recent years owing to a more vigorous prosecution.

COD.

There is an increased catch in this important branch of the fishery of 27,149 cwt. over the previous one, notwithstanding the fact that 1898 showed a marked increase over 1897. This increase is in the dried article, which excepting what is used for local consumption, is exported to foreign countries. Local dealers ship by coastal vessels to Halifax and Newfoundland, from which places, the product is exported to foreign markets. There are several large firms known as the Jersey firms, which carry on an extensive fishery business at Arichat, in Richmond County, and Cheticamp in Inverness. These firms export direct from Cape Breton to foreign countries, bringing back fall and spring salt and general goods, such as are required by those engaged in the fishing industry. There has been an advance in the price of dried cod this year, which accounts for the increased catch. In some localities these fish were found very scarce all the season, whereas in other districts they were more abundant, particularly in the autumn season. Fishermen attribute the scarcity of cod to the pollution of the inshore waters by bait used in lobster traps and the throwing of fish offal overboard by fishing vessels. Possibly the water is affected by decayed matter and the fish in consequence leave for other parts, but I am of the opinion that scarcity of cod and haddock in certain seasons is owing to the lack of food. Cod largely feed on caplin, squid and other small fish. It is noticed that when these small fish strike inshore they are invariably followed by cod and haddock. Therefore, this is the best proof that the cod family are continually on the move in search of food. If the inshore banks do not supply this food these fish are to be found elsewhere. Invariably when cod and haddock are scarce in Cape Breton waters they are reported plentiful on the Newfoundland coast and on the great banks in the Atlantic. They are a migratory fish and so prolific that the supply will always be kept up. Man is not as great an enemy to the cod family as the hair seal, which mainly exists on cod. It is no unusual occurrence to find in a seal as many as five or six cod, and as many as fourteen have been found in the stomach of one large seal. These hair seals can be seen the year around in our waters. Considering the quantity of human food fish they devour, the killing of hundreds of thousands of seals every year on our coast and on the coast of Newfoundland helps more than anything else to preserve the cod family. If those of our local fishermen who complain of scarcity of fish in our inshore waters would follow the example of the fisher-

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men of Lunenburg and other western counties of Nova Scotia and build schooners so that they could reach the great cod banks in the ocean, there would be less cause for grumbling and complaint of hard times such as is frequently heard from those who engage in the fishing industry.

MACKEREL.

This branch of the fishery shows a decrease amounting to 3,073 barrels of pickled fish. There has been an increase, however, of 109,286 pounds of fresh mackerel, which has been purchased from fishermen by owners of freezers as well as those who canned mackerel. The frozen fish were exported to the United States during winter, and the canned article sold among local merchants as well as marketed in Halifax. The catch of mackerel depends a great deal upon the condition of the water. On their journey to southern waters from the North Bay and Magdalen Islands, if the autumn is fine these fish keep well inshore, where they can be reached by local fishermen's gill-nets, but if the weather is stormy, mackerel invariably keep out in deep water during their journey south, and are thus lost to the shore fishermen. The fall mackerel fishery is the most profitable of this branch to our local fishermen. I have in former reports pointed out the injury to this fishery by American seining vessels, which pursue the mackerel on their way to the spawning grounds and capture tens of thousands of barrels of parent fish just before spawning. As the American seiners are on the increase, the destruction will become greater. If the Honourable the Minister could bring about an agreement with the American authorities by which these purse-seining vessels would be refused clearance from their customs houses until after the 15th June in each year, he would be adding to the many benefits he has conferred on his country in connection with the great fishery industry. Unless something is done I fear that the mackerel branch of our fisheries will become a thing of the past.

SALMON.

There is a very marked decrease in the catch of salmon. In fresh salmon the statistics show a falling off of no less than 51,968 pounds, and in preserved of 10,261 pounds. Pickled salmon shows an increase of 685 barrels. Last year there was an increased catch of salmon over the previous year, but why there should be such a marked decrease this year is unexplainable, as even a greater number of gill-nets were employed in this fishery. There are two freezers which take salmon from the fishermen and freeze them for the Canadian and United States markets. There was a scarcity of salmon throughout the fishing season. The season for this fishery ends on the 15th August, but beginning with the middle of September and continuing until the middle of October salmon enter our coastal waters in immense numbers, and when the autumn rains begin they ascend the streams and run to the spawning grounds. There is hardly a stream, large or small, that these fish do not ascend, yet they make their appearance too late for commercial purposes. There is no doubt there are two runs of salmon. In the month of June, salmon make their first appearance on our coast. This is the commercial run. They enter only a few of our large rivers, and those which can escape the gill-net set in the sea coast and inside tidal waters, as well as the angler's fly, reach the upper waters. These fish spawn last of August and early in September, and return to the sea, but the autumn run referred to above remain in the deep pools and lakes all winter, and return to the sea as soon as the ice leaves the streams and lakes. Hence when a hatchery is necessary to keep up the supply the spawn should only be taken from the mid-summer run and in no case from the fall run. This has been done in years past with the result that the Cape Breton rivers in autumn are alive with salmon, which under our regulations, are of no commercial value, while in midsummer the drain on the fishery is greater than the supply. A hatchery is needed at Margaree, where the drain is great in the coastal waters. The Honourable the Minister has instructed me to cut down falls in the Little River, Cheticamp, at a cost of some \$350. A fall of one fourteen feet has been reduced to six feet, with the result that salmon in this

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important river can reach nine miles of spawning grounds which they were prevented from reaching previously. I look for great results to the fishery on account of this wise expenditure, as I know from observation that tens of thousands of these commercial fish were prevented from reaching the upper waters before, while there were hardly any grounds on the reefs between this fall and the tidal waters for salmon to spawn. The blasting of this fall at such a trifling cost, in my opinion, will be of greater benefit to the salmon fishery of Cheticamp and Pleasant Bay than a hatchery.

HERRING.

There has been a decrease in pickled herring of 1,744 brls., and an increase of 300,250 lbs. of herring fresh. The former has reference to our large midsummer herring and the latter to the spring run, which is largely used for bait. Year by year our midsummer run of herring is declining much to the loss of our fishermen and farmers who live on the sea-coast. The large midsummer herring commanded a high price in the provincial markets and are extensively used for home consumption. The cause of the decrease is unexplainable.

OYSTERS.

The statistics show an increase in oysters of 38 brls. Our oyster grounds sadly need cleaning, as in the Malagawatch district the oyster beds are dying. I attribute this to the fact that eel grass is smothering the oysters. The grounds here need cleaning and restocking. The waters are well adapted in many parts of Cape Breton for the propagation of the oysters.

OTHER BRANCHES.

Smelts, also a commercial fish, show an increased catch of 37,037 lbs. Licenses are granted to fishermen who catch these fish in winter in the various bays in bag-nets and ship them frozen in boxes to New York and Boston markets. If the season is cold so that these fish can be frozen, the fishermen are well remunerated, but our seasons are invariably too mild for the successful prosecution of this fishery.

There is an increase in the catch of trout, but as these fish are caught by anglers and enter only into home consumption, it is impossible to obtain accurate statistics. The supply is well kept up.

There is a notable improvement in recent years in the observance of the various regulations. So many persons appearing before my fishery courts who were made examples of when convicted, that it has had a wholesome effect all round.

Appended hereto will be found a synopsis of the reports of fishery overseers in this district, all of which is respectfully submitted.

SYNOPSIS OF FISHERY OVERSEERS REPORTS FOR THE ISLAND OF CAPE BRETON.

Overseer A. R. Forbes, of North Sydney, reports a marked increase in all branches of the fishery in his district, with the exception of herring, the scarcity, of which he attributes to the presence of drift ice on the coast in the early part of the season. About 25 per cent of the total catch in his district is used for home consumption. The close seasons were well observed.

Overseer M. R. McInnis, of Amaguades Pond, reports an increase in the catch of cod. This increase he attributes to a more vigorous prosecution of the industry than formerly and to the abundance of these fish. Herring were scarce. The live lobster industry was also vigorously prosecuted in his district during the season. About fifty

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per cent of the total catch was sold in Canadian markets and the remainder used for home consumption. No abuses exist in his district and the close seasons were well observed.

Overseer Murdo McLean, of Jacksonville, reports an increased catch of herring, which he attributes to the increased demand for these fish by the fishermen who use them for bait. He reports a decrease in all other branches of the fisheries in his district owing to a less vigorous prosecution than formerly, many of the young men having abandoned the fishing industry, preferring to work in the mining sections of the country. No illegal fishing has come under his notice. There are no mills in his district.

Overseer John McLean, of Gabarous Lake, in his report states that there is an increase in cod, herring, and lobsters. The live lobster industry was carried on on a much larger scale than previously. The increase in herring and cod he attributes to fine weather during the fishing season and bait being more abundant than last year. The several close seasons were well observed.

Overseer Henry La Valte, of Louisbourg, reports that the fisheries in his district have been more remunerative during the season just closed than for some years past. The herring catch was small, but prices ranged higher than in 1898. Cod were plentiful, but bait was scarce and the presence of dogfish also interfered with this fishery. Lobsters and haddock were plentiful. The close seasons were well observed.

Overseer C. L. Reeves, of Port Morien, reports an increased catch of salmon, cod, pollock and halibut, and a decrease in herring and mackerel. The decreases were doubtless owing to scarcity of these fish.

INVERNESS COUNTY.

Overseer D. F. McLean, of Port Hood, reports a decrease in all branches of the fisheries in his district compared with the season of 1898, with the exception of haddock and smelts. This decrease is attributable largely to a less vigorous prosecution of the industry than during the preceding years. Many who had heretofore engaged in the fishery are now devoting their time to other work. A large percentage of the fish taken was sold fresh, which accounts for the increase in value as shown by the returns. About 75 per cent. of the total catch is exported to different countries and the remainder is used for home consumption. The close seasons have been well observed, the guardians employed having been most vigilant in protecting the fisheries of the districts assigned them. One trap-net under license from the Department of Fisheries was operated in his district.

Overseer Lewis McKean, of Mabou, reports a decrease in the catch of cod, haddock and hake. This decrease he attributes partly to scarcity of these fish. Bait was also scarce, and the majority of the fishermen in his district being engaged up to the middle of July in the lobster fishery, very little attention was paid to line fishing. Dogfish were also very troublesome. The spring herring catch was fair, but the July catch was a total failure. The small quantity taken were used for home consumption. He attributes the scarcity of herring to the presence of so many lobster traps on the fishing grounds. Mackerel and salmon were also scarce, while there was an increase in lobsters. No abuses exist in his district, and the regulations were fairly well observed, only one violation having come under his notice during the season. There are no fishways and in his opinion none are required.

Overseer A. A. Chisholm, of Margaree Forks, reports an average catch of salmon, an increase in herring and cod, and a decrease in mackerel. The prices realized for fish during the past season were good and the fishermen were satisfied with the result of their labours.

Overseer Wm. Aucoin, of Cheticamp, reports an increased catch of cod, hake and haddock, an average catch of herring and lobsters and a decrease in salmon, halibut and mackerel. The increase in cod, haddock and hake he attributes to the fact that bait was plentiful and the industry was more vigorously prosecuted than in the

preceding year. About 60 per cent, of the fish taken in his district is sold in Canadian markets and the remainder used for home consumption. No abuses of any kind exist in his district.

Overseer Angus McIntosh, of Pleasant Bay, reports that the mackerel fishery, which is the leading branch of the industry in his district was a total failure. This failure he attributes to the abuse of the purse-seine. The salmon fishery was also a failure and he is unable to assign any cause for the same. The lobster and cod fisheries were good. Almost the total catch were exported, a very small percentage being used for home consumption. No violations of the regulations came to his notice.

RICHMOND COUNTY.

Overseer D. R. Boyle, of West Arichat, in his report states that the fisheries in his district on the whole have not been as successful as in the previous year. The total catch, with the exception of cod, pollock and smelts shows a decrease, and there was also a falling off in the number of men engaged in the industry. The increase in cod he attributes to the successful prosecution of this branch of the fishery in the North Bay by the Goulet and Descousse fleet of fishing vessels. He is of the opinion that this fishery would have shown a still greater increase were it not for the presence of dog fish on the coast. The prices for all kinds of fish ruled higher than in the preceding years, and this made up in a great measure for the loss to the fishermen on account of a decreased catch, &c. No abuses exist in his district, and the several close seasons were well observed. About 75 per cent of the total catch was exported and the remainder was used for home consumption.

Overseer Archd. Morrison, of Cannes, is pleased to report an increase in the several branches of the industry in his division; the only decrease being in the lobster fishery. This decrease is attributable, he thinks, to the fact that this particular branch of the fisheries is being overdone. Almost all the fish taken in his district was exported to Canadian markets; only a very small percentage being used for home consumption. The close seasons were well observed.

Overseer Arthur Brymer, of Lower L'Ardoise, also reports a satisfactory increase in all branches of the fisheries during the past season over that of 1898. The increase in the catch of the mackerel he attributes to the absence of purse-seines from the coast during the mackerel season. Herring and cod were found in abundance and bait was also plentiful. No abuses exist in his district, and the close seasons were strictly observed.

VICTORIA COUNTY.

Overseer Duncan Gillis, of Baddeck, reports a slight decrease in the fisheries of his district owing, with the exception of the salmon fishery, to a less vigorous prosecution of the industry than formerly. The decrease in salmon he attributes to the scarcity of these fish on the lake shore. The prices paid for fish in his district have been very fair. Only a small percentage of the total catch is exported, the most of it being used for home consumption. There are no fish-ways in his district and only one mill is operated, whose owner complies with the regulations. The close seasons were well observed.

Overseer Chas. McRae, of Middle River, reports an increase in salmon and cod, while all other branches are about the same as the preceding year. He claims that the industry has been more vigorously prosecuted than formerly. The several close seasons were observed, as were also the saw-dust regulations. There are no fish-ways. About 65 per cent of the total catch was sold in Canadian markets, the balance being used for home consumption.

Overseer Alex. Morrison, of Wreck Cove, reports an increased catch in the several branches of the industry in his district, with the exception of mackerel and herring. The several close seasons were well observed.

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Overseer D. P. Montgomery, of Neil's Harbour, reports a slight increase in the catch of cod, while all other branches are about the same as in the previous year. The regulations governing close seasons, &c., have been strictly observed.

Overseer W. R. Moffatt, of Cape North, in his report states that while there is an increased catch of cod, herring and haddock the returns will show a marked decrease in the mackerel fishery. This decrease is claimed by the fishermen in his district to be caused by the presence of dogfish on the coast. These fish were very plentiful and did much damage to fishing gear besides frightening mackerel away. Almost the total catch of fish in his district is exported, only a small amount being used for home consumption. No violations of the regulations have come under his notice.

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

A. C. BERTRAM,
Inspector of Fisheries.

DISTRICT No. 2.

ANNUAL REPORT ON THE FISHERIES OF DISTRICT No. 2, NOVA SCOTIA,
COMPRISING THE COUNTIES OF ANTIGONISH, COLCHESTER, CUMBERLAND, GUYSBOROUGH, HALIFAX, HANTS AND PICTOU.

PICTOU, January 2, 1900.

Hon. Sir LOUIS H. DAVIES, K. C. M. G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit my annual report on the fisheries of District No. 2, Nova Scotia, together with tabulated returns showing the increase or decrease of each kind of fish.

The estimated value of the total catch for the past season is \$1,721,734, as compared with the estimated value of the catch for the year 1898, \$1,456,271, showing an increase in value of \$245,461, or nearly 17 per cent over the value of that year. This increase has been chiefly in the value of the catch of deep-sea fish, viz., cod, mackerel, and halibut.

Since the year 1890, when this district was set off, the value of the several year catch has been as follows :—

1890.....	\$1,453,015	1895.....	\$1,429,782
1891.....	1,640,912	1896.....	1,245,463
1892.....	1,357,208	1897.....	1,461,327
1893.....	1,427,605	1898.....	1,456,271
1894.....	1,510,900	1899.....	1,721,735

The results of last year's fishing being more favourable than any for the last ten years.

Of the anadromous fishes, the reports show that of—

Salmon there is an increase of.....	6 per cent.
Shad there is an increase of.....	13 “
Smelts there is an increase of.....	16 “
Alewives there is a decrease of.....	25 “

Of the deep-sea fish the catch of—

Halibut shows an increase of about.....	28	per cent.
Cod shows an increase of about.....	38	“
Haddock shows an increase of about	4	“
Pollock shows an increase of about	68	“

Comparing the aggregate catch of the whole cod family with that of last season there is an increase of about 50 per cent.

SALMON.

The returns for the district show an increase of nearly 30 per cent in the value of the catch of those fish, and this notwithstanding that on the Atlantic coast the catch was about 50 per cent less than last year, while on the coast fisheries of the Straits of Northumberland the decrease was about 20 per cent; the increase in the catch was entirely in the Bay of Fundy parts of the district, showing an increase of about 100 per cent. The results of this fishery are probably affected by the favourable or unfavourable condition of the rivers at spawning season, (Oct. and Nov.). In years that the streams are low, fish, if they do ascend the river, are easily observed, and the poacher does his deadly work. If these conditions obtain for a number of seasons in succession the results must be disastrous. Other years when the rivers are full, fish ascend readily and are not so easily detected, and under such conditions the spawn can be deposited in favourable locations and probably a larger number reach the fry stage.

Just why there should be such excellent returns from the Bay of Fundy and so great a falling-off in the Atlantic and Northumberland Straits fisheries is a question the writer cannot answer any more than an equally difficult one concerning the

SHAD FISHERY

which is almost entirely confined to the Bay of Fundy part of the district, and the returns show an increase of about 13 per cent over last year, while the catch of 1898 was 100 per cent over that of the previous year, the results of the several years since 1889 being as follows:—

	Barrels.
1889	535
1890	750
1891	1,178
1892	1,811
1893	746
1894	981
1895	1,185
1896	1,079
1897	1,382
1898	2,777
1899	3,208

So far as is known the same conditions obtain now as did ten years ago. It is, however, claimed by the fishery officers that the fish are afforded more protection while in the rivers at spawning time than formerly.

The *Alewijc* fishery shows a further decrease of 25 per cent. This is chiefly in the Straits of Northumberland fisheries. During the past three years the catch of these fish has not exceeded forty per cent of the average catch of the previous ten years. The favourable or unfavourable condition of the rivers at the spawning time is the most probable cause of the fluctuations in this fishery—on the Bay of Fundy rivers they ascend in the latter part of April, on the Atlantic Coast in the early weeks of the

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month of May they are to be found, but in the straits they do not go up until June, a month that the conditions necessary for successful propagation of the fish, viz., plenty of water in the streams, is by no means a certainty.

SMELT.

The returns show that in the smelt fishery the results are about fifteen per cent better than last season.

HERRING.

This catch is slightly under that of last season, which was the smallest reported for the last ten years, as the following statement will prove. I have assumed 200 lbs. of fish reported as fresh, as equal to one barrel:—

	Barrels.
1889	38,019
1890	40,424
1891	30,952
1892	43,435
1893	39,981
1894	41,607
1895	70,370
1896	28,018
1897	38,671
1898	25,570
1899	25,255

MACKEREL.

The result of this fishery is a surprise. There were taken in

	Barrels salted.	Lbs. fresh or preserved.
1889	19,751	38,538
1890	23,139	32,928
1891	27,124	6,000
1892	14,322	2,000
1893	10,851	751,850
1894	10,175	669,300
1895	5,907	575,350
1896	8,594	1,318,917
1897	3,558	1,606,091
1898	2,092	1,547,178
1899	2,310	2,774,759

or, assuming that 200 lbs. of the fresh fish equal to a barrel, the result in barrels would be

	Barrels.
1889	19,964
1890	23,304
1891	27,514
1892	18,332
1893	14,610
1894	13,522
1895	8,344
1896	15,189
1897	11,591
1898	9,828
1899	15,684

or about 66 $\frac{2}{3}$ per cent increase over the previous catch, and an average catch of the past eleven years. The fish were found plentiful in Margaret's Bay, Halifax County, for the first time in seven years.

LOBSTERS.

In the lobster fishery there is a decrease of about ten per cent chiefly upon the Atlantic Coast of the district. The close season was well maintained; it, however, required the constant efforts of the patrol boat on the coast to prevent illegal fishing. In a fishing community there are nearly always some fishermen who will not obey the law unless they are forced to do so. The work is not now done in an open manner, but trawls having traps attached to them are sunk and marks used to locate them, and without some pointers as to where these are set, there is much time occupied in searching grounds with a grapnel. This, however, is successfully done, and if traps are illegally set, they are found and destroyed. Fourteen persons were prosecuted for violation of the lobster season regulations, and convictions obtained in eleven cases.

An instance of the tenacity of life of the lobster under unfavourable conditions came to my notice during the past season. A considerable trade is done in exporting live lobsters to the United States. Several packers employ steamers in connection with their canneries. These gather lobsters over an extensive area of coast from the fishermen and those over 10 $\frac{1}{2}$ inches are placed alive in crates, and taken to Halifax for shipment. They are kept in cars in the water until the day previous to the sailing of the steamer for Boston when they are taken on board the steam tug and carried to Halifax. They are then kept in the water until an hour or so before the steamer sails, when they are iced (if the weather be warm) that is, broken ice is laid upon the top layer of lobsters. In this way they are carried to Boston and are probably 36 hours on the passage, there they are again immersed and are sold to dealers, the empty crates being returned to the packers. Upon the return of one of these empty crates to the lobster factory at Sober Island, a live lobster was found in one, which, no doubt, had survived the passage to Boston and back under the conditions mentioned above, and probably after being several days without being immersed in salt water.

In addition to the persons prosecuted for violation of the lobster fishery regulations, there have been a number of fines inflicted by the local overseers on view and processes were issued in seven other cases, in most of which there were convictions. Ten nets were confiscated, being found set in violation of the law.

SYNOPSIS OF OVERSEERS' REPORTS.

Overseer A. R. McAdam, of Antigonish County, speaking of the increase in the cod, hake and haddock fisheries caused by a more vigorous prosecution of the fishery, says it would have been 50 per cent more if bait had been available, particularly along the north shore between Cape George and Ponds, Merigomish. There was some net fishing for salmon in the West River, but the nets were found and confiscated. There are a number of fish-ways required in several mill dams in his division. Salmon were seen ascending the South and West Rivers in numbers during the spawning season. The guardians are faithful and attend to their work.

Overseer J. W. Davidson, speaking of the increased quantity of shad in his division, says that they were taken at the eastern end of the division, that is, nearer the head of the bay. At the lower part fewer fish were taken than last year. Quite a large increase was noticed in the salmon fishery, notwithstanding the fact that the nets used are those adapted only to the capture of shad. He thinks if suitable nets were used that a large number of these fish in the bay would be captured. Quite a large number of herring come in the bay but little or no effort is made to secure them in the first run. The fish are large and poor, while those that come in the latter part of June are fat but small. He urges a close season for shad all the time they go into the rivers for spawning purposes.

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Overseer Joseph Davis, of Guysborough, reports a shortage in the catch of lobsters in his division, which is attributed to the heavy storm about May 21st, which destroyed about half of the traps set, and the fishermen were unable to replace them.

Overseer A. W. Reid, of Guysborough, says of the decrease of herring that dogfish were so plentiful that fishermen could not keep their nets set for herring. Good prices were paid for lobsters which made up the difference in the quantity. Quite a number of fish-ways are wanted in his division.

Overseer Gaston, East Halifax, says of the four fish-ways in his division, those in the dams at Moser River and Tangier are defective and new ones are required.

Overseer Rowlings, Halifax, says that the vessels owned in his division caught about the same quantity of fish as last year, but the boats fishing in the coast waters have done much better. Alewives have been scarce for the last two years, even in places like Lake Porter and Pelpeswick River, where there are no dams or obstructions, no mill refuse or pollution, yet the fish appear only in small quantities as compared with former years. The lobster regulations have been much better observed than they were formerly. There should be fish-ways in the dam at Tangier and also at Laurencetown.

Overseer Kennedy, West Halifax, says that salmon get past Boutelier dam on Nine Mile River under favourable conditions, but gaspereaux cannot. A good fish-way is being built in the dam at Snake Lake, Ingram River. From Halifax West the fishermen have had better success than they have had for many years.

Overseer J. R. Mosher, Hants Co., says the catch of shad was the best for twenty years. Salmon were plentiful but soon went to head waters and were out of reach of nets. He recommends that spawning shad, particularly in the Shubenacadie River be protected by a close season in May and June.

Overseer A. J. McDonald, Pictou Co., says spring herring were plentiful. Owing to the dry season, salmon could not ascend the rivers until the middle of October. Poachers appeared on Barneys River in disguise at night, but escaped arrest and identification.

Overseer James Kitchin, Pictou, reports two dams obstructing the River John in which fish-ways should exist. Four persons were reported by the guardian, Wm. Gammon for violation of the salmon regulations and proceedings commenced which will lead to conviction.

Overseer Nathaniel Forbes reports the only fish-way in his division on east branch St. Mary's River fulfilling its purposes.

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

ROBERT HOCKIN,
Inspector of Fisheries.

DISTRICT No. 3.

ANNUAL REPORT ON THE FISHERIES OF DISTRICT No. 3, NOVA SCOTIA, BY INSPECTOR L. S. FORD.

MILTON, QUEEN'S Co., N.S., January 2, 1900.

The Hon. Sir L. H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit my annual report of Fisheries for District No. 3, Province of Nova Scotia, comprising the counties of Lunenburg, Queen's, Shelburne, Yarmouth, Digby, Annapolis and King's. The requisite statements showing the yield and values by sub-districts, and the amount of capital invested in such fisheries, are also included.

I have to report an increased catch in almost every branch of the fisheries in this district, excepting the lobster industry, and the decrease in that business much more than accounts for the decrease of \$383,071 in the aggregate amount, as shown by the following figures:—

Fishery, District No. 3, 1898	\$1,708,524
“ “ 1899	4,325,453
Decrease.....	\$ 383,091

I am inclined to believe that this result is exaggerated, as the difficulty in procuring accurate statistics last year accounts for the decrease this year. Special pains will be taken the coming season in this direction to discover any error that may have existed, as there does not seem as yet to be any marked falling off in the catch of lobsters in any district to warrant a decrease of over one million dollars in the shipments of live lobsters to foreign markets, especially in the county of Digby.

COD FISH.

The codfishery has been well and successfully prosecuted, both on the banks and shores, showing an increased value of \$400,000 over that of last year's.

MACKEREL.

The mackerel fishery shows a slight improvement over last year, both in salt and fresh fish. One feature of this business causing much speculation is that much of the catch for some years was limited to a few districts, notably, Yarmouth and Lunenburg. In Shelburne and Queen's, particularly where they were once plentiful, they seem now to have disappeared. We are watching with interest whether the law compelling the raising of lobster traps at an earlier date will not allow the mackerel to visit again those harbours which they of recent years so carefully shun.

HADDOCK.

Haddock show an increased catch, which is no doubt owing to the successful production of finnan haddies. Fish food of this kind amounting to \$72,103.20,

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was put up this year, finding a ready market, largely in the upper provinces, insuring a permanent business for this class of fish in the future.

POLLOCK.

Pollock shows a marked increase of more than \$46,000 over the previous year. Hake and sounds also show more than \$183,000 over 1898, while halibut show a decrease of over \$6,000.

As a whole the season of 1899 has been a profitable year for the fishermen of all classes. Prices have ruled high, and the demand for properly cured fish still obtains.

The proposed system of cold storage being inaugurated bids fair to meet the long-felt want of the bait question. It only remains to devise some means to scatter the cordon of voracious dogfish which now infests our coasts, when the fishermen of Nova Scotia will have their business placed on as good a footing as any industry in Canada.

RIVER FISHERIES.

The salmon fishery has nearly doubled its previous catch. For many seasons the salmon fishery is one of the most important in our district, and at the same time one of the most difficult to secure accurate returns for. Caught in large numbers by sportsmen and tourists, salmon enter so largely into home consumption that the officers are unable to arrive at the actual catch. The figures given are largely of fish exported, fresh and smoked.

Trout also are largely in excess of last year. They are caught in large numbers by sportsmen who give no account of their catch. The exportation of trout is seriously affecting rivers that once were full of them, and numbers of people are asking for some regulations to check it.

Shad, for some unexplained reason, show a large decline in the catch, but alewives an increase. The increase of those fish that annually ascend our rivers, I can safely attribute to the increased care taken by the several officers of your department of the rivers in their charge. Although much has been done, much remains. Mill owners have so long dammed the rivers, that they seem impressed with an idea of full ownership, and unless they are carefully watched all the water is retained for the mill, and the fish are left stranded. I have endeavoured to impress upon those people in my district the fact that if any stream has not sufficient water to pass the fish and run the mill, it is a poor mill site, as the fish have the first right on the premises.

All of which is respectfully submitted.

Your obedient servant,

L. S. FORD,
Inspector District No. 3.

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RETURN showing the Quantity and Value of Fish, &c.—Nova Scotia—Continued.

DISTRICTS.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod tongues and sounds, lbs.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereau, lbs.	Fels, lbs.	Flounders, lbs.	Squid, lbs.	Coarse and mixed fish, lbs.	FISH PRODUCTS.		TOTAL VALUE OF ALL FISH.	Number.
																	Fish oil, galls.	Fish as bait, lbs.		
<i>Cape Breton County.</i>																				
1 Sydney to Glace Bay.....	33024	6050	10	941	55	18	13900	1000	5500	40	2	55	5150	410	42,218 55	1				
2 North Sydney to Ball's Creek.....	1270	523	25	400	10	22	3600	9000	9000	10	10	380	350	5	8,535 00	2				
3 George's River to Beavers Cove.....	523	285	63	600	150	40	9000	1000	500	30	15	42	350	20	2,543 10	3				
4 Grand Narrows to Christmas.....	144	63	9	600	10	10	1400	3010	500	30	22	35	1400	20	2,431 00	4				
5 North Side East Bay.....														4	487 00	5				
6 South Side East Bay.....														1	101 50	6				
7 Little Bras d'Or.....	89568	1000	18	600	150	40	9000	9000	9000	22	22	2900	350	1	30,068 10	7				
8 Little and Big Pond and Sydney Mines.....	44880	50	50	10	10	10	1400	1400	15	15	500	42	350	50	1,148 00	9				
9 Gabarus, Grand Mira and Big Lake.....	127152	2800	1000	150	10	10	30	3010	3010	30	30	20	1400	21	108,104 90	8				
10 Louisburg.....	20160	4000	1000	400	600	600							1000	110	31,547 00	10				
11 Big Lorraine.....	29472	1950	1950	425	5	18	355	3	3	3	3	3	1200	25	5,894 40	12				
12 Kennington Cove.....	44880	715	715	85	2	12	260	14	14	14	14	14	630	14	22,884 25	13				
13 Main-a-Dieu and Little Lorraine.....	22224	300	300	50	4	4	80	80	80	80	80	80	180	4	10,092 50	14				
14 Baulieu to Mira River.....	106356	346	4000	120	10	1000	20000	2000	2000	2000	2000	2000	1000	500	1,567 00	15				
15 Catalone.....	57264	950	10	20	20	3000	24100	6	6	6	6	6	675	37	32,123 70	16				
16 Seatarie Island.....	42672	580	13	141	1300	1300	15000	16	16	16	16	16	457	19	18,149 80	17				
17 Port Morion and South Head.....	42672	166	435	400	200	1300	200	200	200	200	200	200	29	26	3,367 70	19				
18 Maaden's Cove and Black Brook.....	15	15	15	15	15	15	15	15	15	15	15	15	15	16	1,852 70	20				
19 Amaguadres Pond to Piper's Cove.....	25	25	25	25	25	25	25	25	25	25	25	25	25	24	1,531 00	21				
20 Big Beach to Shunacadie.....																				
21 Big Pond to Irish Cove.....																				
Totals.....	477072	23066	23827	51	1300	3567	232	5392	87635	1300	21410	103	113	4700	213	84	13722	1986	387,250 00	
Values.....	95414	115330	95308	510	39	10701	522	10784	8769	130	1071	412	1130	235	852	168	4116	2979		

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials, &c.—
Nova Scotia—Continued.

Number.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.								
	Vessels.			Boats.			Gill Nets.			Trawls.			Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Number.	
	Number.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.										
<i>Inverness County.</i>																					
1	18	500	5	65	1500	120	300	9000	3000	290	1400	400	10000	800	60	46752	1				
2			18	200	30	40	1200	300	300	25	100	80	3000	100	5	19200	2				
3			10	150	25	70	2000	700	700	30	150	75	6000	100	4	18000	3				
4			25	300	50	80	2500	800	800	40	200	250	60000	180	4	18000	4				
5			15	150	20	30	1200	300	300	20	70	50	8000	100	6	20000	5				
6			20	300	20	80	2400	600	600	30	120	100	4000	200	4	20040	6				
7			20	240	20	50	1500	400	400	20	100	200	2000	120	8	20000	7				
8			25	250	25	80	2500	800	800	60	300	150	2000	100	6	20000	8				
9	64	2500	20	300	25	60	1800	500	500	30	150	125	3000	300	5	30000	9				
10	141	3500	12	10	200	15	4500	1500	20	80	1000	185	750000	70000	10	20000	10				
11			69	803	85	280	5620	1066	20	49	40	62	205000	1200	11	20000	11				
12			47	556	63	186	3750	733	16	40	36	50	300	200	10	20000	12				
13			23	425	46	25	750	300	3	36	250	5	200	100	10	20000	13				
14			13	225	26	15	450	180	15	100	100	5	200	100	10	20000	14				
15			9	125	18	20	300	150	8	100	100	12	200	100	10	20000	15				
16			6	72	15	6	180	50	17	50	7004	192	48792	17	10	20000	16				
17			56	788	154	10	1200	850	17	282	4500	2520	415	49008	18	10	20000	17			
18	260	3400	100	133	8690	451	105	3188	690	17	282	4500	2520	415	49008	18					
19			31	1240	109	47	2365	564	10	55	1500	300	300	18	19008	19					
20			23	690	72	59	3450	1770	5	27	2550	150	150	11	3216	20					
21	23	800	16	109	2680	224	126	5605	5620	41	218	7600	801	260	85	13172	21				
22			21	528	80	11	800	600	8	45	5000	107	8880	292	49	5016	22				
23			25	235	58	23	600	290	8	45	5000	30	30	2073	257756	23					
Totals	506	10700	153	793	20644	1751	1853	56918	21763	603	3472	5687	1056000	72760	2073	257756	30				
Values											638	7	10560	8731	31095	51551					

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RETURN showing the Kinds and Quantities of Fish and Fish Products in the Province of Nova Scotia, &c.—Continued.

Number.	DISTRICTS.	KINDS OF FISH.												FISH PRODUCTS.			TOTAL VALUE OF ALL FISH.	Number.		
		Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake sounds, lbs.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alwives or gasperaux, brls.	Bass, lbs.	Hels, brls.	Oysters, brls.	Tom cod or frost fish, lbs.	Squid, brls.			Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.
<i>Inverness County.</i>																				
1	Port Hood	1700	6000	800	2300	600	100	500	30	80	800	200	40	27,936	40	1				
2	Little Mabou	200	400	30	60	20	40	100	4	5	20	20	10	1,570	00	2				
3	Seaside	100	500	40	100	50	50	200	12	15	30	40	20	5,249	00	3				
4	Little Judique	25	400	10	20	50	50	200	10	10	10	50	10	2,116	00	4				
5	Judique	20	200	1000	800	1000	1000	800	8	5	8	20	10	750	40	5				
6	Long Point	50	500	10	1000	1000	1000	800	1000	5	5	30	30	5,265	00	6				
7	Creignish	50	400	20	20	100	100	100	100	5	10	20	20	1,481	30	7				
8	Low Point	30	300	15	15	150	200	200	20	4	20	20	20	1,974	00	8				
9	Port Hastings	20	400	10	10	300	5000	5000	20	10	20	20	20	1,275	00	9				
10	Port Hawkesbury	150	500	1000	1500	1000	1500	1500	24	30	300	35	35	28,073	30	10				
11	West Bay to Matagawatch	130	500	1000	1500	1000	1500	1500	24	30	300	35	35	9,029	00	11				
12	North and South side River Dennis	48	250	36	30	150	400	3500	15	20	440	15	15	3,590	50	12				
13	Mabou Harbour and Coal Mines	135	250	36	30	20	200	5000	5	100	10	10	10	5,597	30	13				
14	Port Bain and Broad Cove	100	1000	25	5	20	200	2000	5	100	10	10	10	1,573	85	14				
15	Whycocomagh	110	1000	1000	1000	1000	1000	2000	90	65	50	15	15	725	50	15				
16	Loke Ainslie	405	10	10	10	400	400	4000	90	65	50	15	15	1,400	00	16				
17	Pleasant Bay to Pollett's Cove	13700	43	985	527	372	4080	1500	1225	165	3410	3710	2845	16,549	20	17				
18	Cheticamp Point to Cape Rouge	1250	80	100	100	600	600	2000	80	5	300	50	500	5850	3250	18				
19	Grand Etang	950	50	65	500	500	500	500	15	5	180	35	400	18,145	60	19				
20	Friar's Head	7400	570	258	258	1360	300	500	15	665	2388	2020	450	7,174	45	20				
21	Delaney's Cove to B. Cove Chapel	800	32	23	100	500	500	1000	125	30	51	110	42	43,737	19	21				
22	Margaree Island	27433	43	9850	2717	3494	1370	7610	350	100	315	180	440	6,718	25	22				
23	Margaree River and Harbour	109732	430	296	8151	7861	685	761	1400	-5	3150	720	22	2,723	20	23				
Totals		27433	43	9850	2717	3494	1370	7610	350	100	315	180	440	4725	4094	14606	7840	3820	311,898	75
Values		109732	430	296	8151	7861	685	761	1400	-5	3150	720	22	18912	8188	4382	11760	1910	311,898	75

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RETURN showing the Quantity and Value of Fish, &c.—Nova Scotia—Continued.

Number.	DISTRICTS	KINDS OF FISH.														TOTAL VALUE OF ALL FISH.	Number.							
		Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked man haddies, lbs.	Hake, dried, cwt.	Hake sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alwives or gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.			Squid, brls.	Coarse and mixed fish, brls.	Fish oil, gallons.	Fish as bait, brls.	Seal skins, number.		
<i>Richmond County.</i>																								
1	Arichat and Petit de Grat	7400	1433	1746	212	340	1149	1020	50	25	7000	33	75	3100	.....	40	160	1850	370	5	46,404	87	1
2	Cape Auguel, Janvier's Island, Port Royal and West Arichat	8600	1305	.....	30	150	752	3375	25	.....	4000	111	54	30530	.....	14	117	1200	264	3	50,253	05	2
3	Rocky Bay and Cape Le Ronde	7460	267	.....	2	180	2285	.....	.....	.....	3000	22	45	52475	.....	19	110	1750	245	.....	19,741	45	3
4	Descousse, Poulamond and Martinique	654	174	.....	1	43	5600	.....	.....	.....	9400	30	54	5500	.....	16	108	1945	434	.....	18,288	07	4
5	St. Peter's	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	280	30	.....	3,694	00	5
6	River Bourgeois	.....	200	.....	.....	.....	.....	.....	.....	.....	4000	50	20	.....	.....	.....	.....	1820	100	.....	28,085	40	6
7	Barachois St. Louis	.....	250	.....	.....	.....	.....	.....	.....	.....	5000	300	25	.....	.....	.....	.....	220	20	.....	4,846	00	7
8	River Inhabitants and Basin	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	700	.....	.....	.....	.....	.....	.....	80	20	17,854	00	8
9	Port Malcolin and Gut of Canso	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	.....	.....	.....	.....	160	10	.....	15,163	00	9
10	West Bay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	1,357	50	10
11	Fourchu to St. Esprit	.....	410	.....	120	52	270	8000	600	.....	100	43	16000	7800	271	4800	1280	210	.....	.....	54,238	60	11
12	L'Archeveque to Point Michaud	1090	600	.....	107	30	245	3400	1200	.....	78	22	8800	13300	80	1050	403	152	.....	.....	39,413	45	12
13	L'Ardoise to L. L'Ardoise and Rockdale	5870	4300	.....	78	50	1530	12000	900	.....	705	24	18000	55000	225	300	4800	2800	.....	.....	149,996	55	13
14	Grand Grève, Indian Reserve and St. Peter's East	5300	590	.....	56	11	273	7000	1600	.....	.....	46	32	7000	5000	60	52	1190	600	.....	23,164	10	14
Totals		36284	9829	1746	606	633	4442	43280	4375	25	32400	2175	419	141405	31600	725	6637	16978	3260	8
Values		1088	29487	105	1363	316	8884	4328	438	250	1620	8700	4190	7070	1580	2900	13274	5093	7890	10	473,880	04

RECAPITULATION

Of the Yield and Value of the Fisheries of the Island of Cape Breton, for the Year 1899.

Kinds of Fish.	Quantity.	Rate.		Value.	
		\$	cts.	\$	cts.
Salmon, fresh	Lbs. 64,304	0	20	12,860	80
" preserved	Cans. 787	0	15	118	05
" pickled	Brls. 1,015	15	00	15,225	00
Herring, pickled	" 29,655	4	00	118,620	00
" fresh or frozen	Lbs. 1,326,200	0	01	13,262	00
" smoked	" 1,500	0	02	30	00
Mackerel, fresh	" 140,588	0	12	16,870	56
" pickled	Brls. 10,226	15	00	153,390	00
Lobsters, preserved in cans.	Lbs. 1,203,886	0	20	240,777	20
" fresh in shell	Cwt. 26,858	5	00	134,290	00
Cod, dried	" 89,765	4	00	359,060	00
" tongues and sounds	Brls. 174	10	00	1,740	00
Haddock, fresh	Lbs. 47,434	0	03	1,423	02
" dried	Cwt. 18,170	3	00	54,510	00
" smoked finnan haddies	Lbs. 1,746	0	06	104	76
Hake, dried	Cwt. 4,805	2	25	10,811	25
" sounds	Lbs. 2,003	0	50	1,001	50
Pollock	Cwt. 10,057	2	00	20,114	00
Halibut	Lbs. 153,185	0	10	15,318	50
Trout	" 18,065	0	10	1,806	50
Shad	Brls. 25	10	00	250	00
Smelts	Lbs. 89,335	0	05	4,466	75
Alewives	Brls. 2,680	4	00	10,720	00
Bass	Lbs. 100	0	05	5	00
Eels	Brls. 938	10	00	9,380	00
Oysters	" 350	4	00	1,400	00
Flounders	Lbs. 146,105	0	05	7,305	25
Tom cods	" 36,340	0	05	1,817	00
Squid	Brls. 7,343	4	00	29,372	00
Coarse and mixed fish	" 10,968	2	00	21,936	00
fish oil	Galls. 54,605	0	30	16,381	50
fish used as bait	Brls. 16,082	1	50	24,123	00
" manure	" 3,820	0	50	1,910	00
veal skins	No. 8	1	25	10	00
Total for 1899				1,300,409	64
" 1898				1,061,235	45
Increase				239,174	19

STATEMENT

SHOWING the Number and Value of Fishing Vessels, Boats, Nets, &c., in the District No. 1 of Nova Scotia, for the Year 1899.

	Value.	Total.		Value.	Total.
	\$	\$			
102 vessels, 2,377 tons	38,500		74 lobster canneries	49,166	
3,252 boats	64,278		208,948 lobster traps	93,101	
13,527 gill-nets, 345,135 fathoms	133,275				142,267
5 seines, 830 fathoms	1,500		52 freezers and icehouses	3,530	
3 trap-nets	1,300		907 smoke and fish houses	30,123	
1,886 trawls	10,854		259 piers and wharfs	69,756	
25 weirs	500		68 tugs, steamers and smacks	9,663	
195 smelt nets	10,015				113,072
15,865 hand lines	9,194				
		269,416	Total value		524,755

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NOVA SCOTIA—District No. 2.
 RETURNS showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and the Quantity of Fish caught in the District
 No. 2, Province of Nova Scotia, for the Year 1899.

Number.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.					
	Vessels.			Boats.			Gill Nets.		Trawls.		Salmon, fresh, lbs.	Herring, salted, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, lbs.	Lobsters preserved in cans, lbs.	Number.		
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.							Number.	Value.
<i>Antigonish County.</i>																		
1	10	200	3	75	721	110	302	7170	1325	45	133	760	900	1800	100	35472	1	
2				60	700	72	130	5700	3570	16	65	12000	400	137500	50	11328	2	
3				49	802	68	131	3531	957	46	225	9800	385	16000	32	42432	3	
4				25	378	34	65	1418	356	28	149			300	25	12768	4	
5				34	543	49	104	3204	1654	24	129	5100	233	1900	93	28848	5	
	1	10	200	3	243	333	732	21023	7862	159	701	27660	2064	143700	300	130848		
												5532	8256	17172	4500	26169		
Totals.																		
Values.....																		

Number.	KINDS OF FISH.													TOTAL VALUE OF ALL FISH.	Number.				
	Cod, dried, cwt.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake sounds, lbs.	TROUT, lbs.	Smelts, lbs.	Alewives or gaspr, lbs.	Bass, lbs.	Beals, lbs.	Clams, lbs.	Oysters, lbs.	Flounders, lbs.	Squid, lbs.			Coarse-kitty-ed hsh, lbs.	Fish oil, lbs.	Fish as bait, lbs.	Fish as manure, lbs.
<i>Antigonish County.</i>																			
1	135	10	155	200	300	400	200	10	3	17050	5	19	60	850	180	16,050	1		
2	35	45			300	10000	20	3000	45	10	69	3300		5	10	350	53	26,179	
3						1500	54	12				21700	15	44	425	371	210	18,223	
4	472	27	322	640	1200		950					4260	17	2	174	43	64	5,080	
5	149	14	428				300					2200			902	100	144	17,029	
	891	290	2575	5463	1800	11900	74	4450	67	13	69	48510	37	70	1571	1714	656		
						595	296	445	670	26	276	2425	148	140	471	2572	328	83161	
Totals.																			
Values..... \$ 85564																			

RETURNS showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and Quantities of Fish—Nova Scotia—Con.

Number.	FISHING VESSELS AND BOATS.		FISHING GEAR OR MATERIALS.				KINDS OF FISH.								
	Boats.		Gill Nets.		Weirs.		Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Haddock, fresh, lbs.	Haddock, dried, cwt.	
	Number.	Value.	Number.	Value.	Number.	Value.									Number.	Value.
<i>Districts.</i>															
<i>Colchester County.</i>															
1	Sterling,	14	210	18	20	600	150	.....	21000	.....	20208	.....	.....	.....	1
2	Stewiacke,	111	1110	222	240	6000	2260	.....	2860	.....	.....	.....	130	1600	25
3	Five Islands,	7	219	20	.....	.....	.....	6	800	.....	.....	.....	.....	.....	3
4	Economy,	8	275	32	8	3200	480	.....	163200	.....	.....	.....	12	300	6
5	Little Bass River to Highland Village,	18	540	41	18	6300	1260	.....	9850	.....	.....	.....	.....	.....	4
6	Great Village to Queen's Village,	21	700	42	21	7560	1470	.....	32533	.....	.....	.....	.....	.....	5
	Totals,	179	3045	375	307	23660	5620	101828	20208	142	1900	31
	Values,	203645	80	30	57
		568	93

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RETURN showing the Quantity and Value of Fish, &c.—Nova Scotia—*Con.*

Number.	DISTRICTS.	KINDS OF FISH.											TOTAL VALUE OF ALL FISH.	Number.					
		Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or Gaspereau, brls.	Bass, lbs.	Clams, in shell, brls.	Oysters, brls.	Fish oil, galls.			Fish as bait, brls.	Fish as manure, brls.			
<i>Colchester County.</i>																			
1	Sterling				300												100	6,197 00	1
2	Stewiacke				4700		700											13,580 00	2
3	Five Islands						11											1,680 00	3
4	Economy		7	1200	1400													5,825 00	4
5	Little Bass River to Highland Village	10			400		355											13,076 00	5
6	Great Village to Queen's Village				500		590											10,607 00	6
	Totals	10	7	1200	7500	2008	22000	450	1400	2	300	239	130	13	100			50,975 00	
	Values	22	14	120	750	20030	11000	1800	140	20	600	956	39	20	50				

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and Quantities of Fish—Nova Scotia—Con.

Number.	DISTRICTS.				FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.						
	Vessels.		Boats.		Number.	Value.	Men.	Number.	Value.	Men.	Gill Nets.			Weirs.			Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Lobsters, preserved in cans, lbs.	Number.
	Number.	Tonnage.	Value.	Men.							Number.	Value.	Fathoms.	Number.	Value.	Number.								Value.	Number.	Value.
<i>Cumberland County.</i>																							
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
Totals																							
Values \$																							

SESSIONAL PAPER No. 22

RETURN showing the Quantity and Value of Fish, &c.—Nova Scotia—Continued.

DISTRICTS.	KINDS OF FISH.														TOTAL VALUE OF ALL FISH.	Number.				
	Cod, dried, cwt.	Cod tongues and sounds, brs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake sounds, lbs.	Pollock, cwt.	Halibut, lbs.	TROUT, lbs.	SHAD, brs.	SMELTS, lbs.	ALWIVES OR GASPAREAN, brs.	BASS, lbs.	RELS, brs.	CLAMS (in shell).			OYSTERS, brs.	FISH OIL, galls.	FISH AS BAIT, brs.	FISH AS MANURE, brs.
<i>Cumberland County.</i>																				
1 Pugwash, Port Philip and Gulf Shore.....								300		59650		500	5	44	523		2420	2400	108,121 00	1
2 Wallace.....								200		10000	337		10		756		112		5,311 00	2
3 River Philip.....									4		150	500	25						1,740 00	3
4 Maccan and Nappan.....									20	1000	15								420 00	4
5 Minudie to Apple River.....	60		25	45	200	50	500	200	394	400	20								5,584 00	5
6 Advocate.....	90		30	20	100	30	525	50		300									944 00	6
7 Spencer's Island.....	200		100				300												1,460 00	7
8 Port (Greville).....	225		125				550	60											1,754 00	8
9 Parrsboro'.....	50	2	50	5		25	800	150	5										919 00	9
10 Two Islands.....	275		45			15	800	100	10										1,896 00	10
Totals.....	900	2	375	70	300	120	3475	1160	433	71050	542	1000	40	44	1279	75	2581	2400	.....
Values.....\$	3600	20	1125	158	150	240	347	116	4330	3552	2168	100	400	88	5116	22	3871	1200	128,149 00	

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c.,

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING MATERIALS.					
		Vessels.			Boats.			Gill Nets.		Weirs.			
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.
	<i>Hants County.</i>			£		£				£		£	
1	Maitland to Shubenacadie					12	90	12	12	240	96	.....
2	Shubenacadie to Grand Lake					13	65	13	13	250	75	.....
3	Walton to Maitland					8	265	8	8	2450	310	3	425
4	West Hants	1	18	300	2	24	690	30	32	4845	750	7	620
	Totals	1	18	300	2	57	1110	63	65	7785	1231	10	1045
	Values	£											

Number.	DISTRICTS.	VESSELS.				BOATS.			GILL NETS.			Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.					
																£
	<i>Pictou County.</i>			£		£				£						
1	West Pictou					155	3875	157	120	3600	840	2700	.....	5000	2000	.....
2	Pictou Island					60	1360	120	38	780	200	.....	2000	.....	.....	.....
3	Central Division	1	30	400	3	10	250	12	20	400	100	.....	76000	1600	.....	.....
4	Southern Division					34	437	43	68	2270	947	3750	11	38000	550	.....
5	Merigomish Island					13	240	12	23	1082	560	2900	.....	.....	.....	.....
6	North Beach					6	100	6	15	1028	806	5400	.....	1000	.....	.....
7	Ponds					16	385	19	34	2274	1719	9100	.....	17000	300	.....
8	Lismore					12	166	14	25	784	456	1450	.....	.....	.....	.....
	Totals	1	30	400	3	306	6813	383	343	12218	5628	25300	11	139000	4450	.....
	Values	£										5060	44	1390	534	.....

SESSIONAL PAPER No. 22

and the Quantity and Value of all Kinds of Fish, &c.—Nova Scotia—Continued.

KINDS OF FISH.															TOTAL VALUE OF ALL FISH.	Number.	
Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Cod, dried, cwt.	Haddock, dried, cwt.	Pollock, cwt.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alwives or gaspereau, brls.	Eels, brls.	Clams, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.			Fish as bait.
2500	200						500			20						\$	
5240	75	4500	2500	14	26	24	400	95	1500	141	4	100	2000	1000	4	630	1
7940	75	4500	2500	119	26	24	4000	670	1500	3	75	175	2000	1000	4	734	2
1588	300	45	50	476	78	48	5700	770	1500	360	4	175	2000	1000	4	1,208	3
																10,344	4
																
																12,916	

KINDS OF FISH.															TOTAL VALUE OF ALL FISH.	Number.		
Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake sounds, lbs.	Trout, lbs.	Smelts, lbs.	Alwives or gaspereau, brls.	Eels, brls.	Clams, brls.	Oysters, brls.	Tom cod or frost fish, lbs.	Fish oil, galls.	Fish as bait, brls.			Fish as manure, brls.	
227328		45				400	10000	15	8	20	10	600	10	1100	750	\$	49,294	1
129840				450										300	450		27,676	2
		360	50	200		6000	6000	60	45		80						4,002	3
15984		85				300	4200	3	4	8				130	50		5,305	4
12000							4000		50					110	40		3,865	5
				4		400	11600							60			1,809	6
23952	165	15		76	35	400	8000						32	60	80		8,469	7
10272	245	7		17		100								86	35		3,792	8
419376	410	502	50	747	35	7600	43800	78	107	28	90	600	42	1846	1405		
83875	2050	2048	150	1681	18	760	2190	312	1070	56	360	30	12	2769	703	105,112		

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Boats, Nets, &c., and Quantities of Fish—Nova Scotia—Continued.

OR MATERIALS.					KINDS OF FISH.									
Seines.			Trap Nets.		Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Number.
Number.	Fathoms.	Value.	Number.	Value.										
4	250	260			750			30			37	11904		1
					150			25			4	29000	134	2
1	60	25			820			45			5	47616	140	3
					6800	100	1000	75	2000			32160		4
1	60	25			620			100			1			5
					375			150	1000		2			6
					400			110			2			7
								600	5000		5	53088	258	8
								200	1500		5	21888		9
1	50	40			1500	200		90	2000		13			10
3	290	375	3	1750	1800	1000		3450	26000	6000	560	220272	422	11
19	1369	1950	14	5600	2300	2400	1000	520	25400	30954	125	311472	1128	12
9	1125	1700	33	6900	6000	300		502	29000	71850	120	73392	200	13
8	890	1000	1	150	1200			3548	1000000	300000	50	30144		14
46	4085	5375	51	14400	22715	4000	2000	9445	1091900	408804	929	825936	2282	
					4543	600	400	37780	10919	49056	13935	165187	11410	

RETURN showing the Quantity and Value

Number.	DISTRICTS.	KINDS								
		Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Smoked finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.
<i>Guysborough County.</i>										
1	Ecum Secum.....	425			40				10	500
2	Marie Joseph.....	540			60				8	2000
3	Liscomb, Spanish Ship Bay and Gegogin.....	600			82				35	5200
4	St. Mary's Bay and River.....	110			19				5	500
5	Wine Harbour.....	30			3				1	300
6	Indian Harbour and Lake.....	80			8				1	700
7	Holland Harbour and Indian River.....	50			6				3	500
8	Port Beckerton.....	410			50		175	200	5	1500
9	Fisherman's Harbour.....	275			30				4	400
10	Country Harbour and Isaac's Harbour.....	175			15				15	1000
11	Isaac's Harbour to Whitehead.....	7650			2260		350	400	890	29500
12	Whitehead to Canso.....	13474	9	1498000	700	150000	1200	190	2400	306400
13	Canso to Salmon River.....	1280	4	108000	1166		331	130	1100	200
14	Salmon River to Antigonish County line including Guysborough, Cook's Cove, North Shore and Strait of Canso.....	880	4	115400	330		30	20	815	300
Totals.....		25979	17	1721400	4760	150000	2086	940	5292	34900
Values.....		103916	170	51642	14280	9000	4693	470	10584	349000

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of Fish &c.—Nova Scotia—Continued.

OF FISH.													TOTAL VALUE OF ALL FISH.	Number.		
Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or Gaspareau, brls.	Bass, lbs.	Eel, brls	Clams, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.			Fish as manure, brls.	\$
1000	600	10	.....	20	30	.....	2000	20	50	310	450	40	6,594	00	1
150	300	12	.....	10	50	.....	2800	30	60	400	410	80	9,649	00	2
1000	1500	30	.....	15	42	.....	3000	30	75	450	750	160	16,167	00	3
3000	2	950	75	.....	12	30	.....	2500	10	35	80	375	110	10,571	00	4
280	350	4	.....	3	20	.....	1800	2	10	20	195	.....	1,248	00	5
450	3000	12	.....	6	.....	.....	1200	4	18	60	370	.....	2,119	00	6
2000	5	.....	3	50	.....	1500	5	25	30	200	.....	1,616	00	7
.....	12	.....	6	10	.....	3100	25	45	300	380	180	18,072	00	8
.....	3	.....	5	20	.....	2000	20	20	210	200	78	7,229	00	9
1000	800	8	.....	10	15	.....	4000	8	25	125	300	.....	2,851	00	10
1800	1200	204	.....	145	270	.....	18000	470	250	5000	3000	720	126,177	00	11
950	50	4000	80	6	1000	.....	1650	300	22000	9000	1600	255,245	00	12
1300	5	.....	20	4	400	.....	1200	5000	1500	3260	360	65,269	00	13
1700	18000	468	.....	70	12	.....	.....	300	1000	1800	1000	150	85,942	00	14
14630	2	37300	888	4000	405	559	10400	41900	3774	6913	32285	19890	3478	.....	.....	.....
1463	20	1865	3552	400	4050	1118	520	2095	15096	13826	9685	29835	1739	608,749	00	.....

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and Quantities of Fish—Nova Scotia—Con.

Number.	DISTRICTS.				FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.									
	Halifax County.				Vessels.		Boats.		Gill Nets.		Seines.		Trap Nets.		Salmon, fresh, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Number.			
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.			
1	North Shore.....	1	20	350	7	130	210	1000	365	600	12000	1800	62	6200	1200	1000	50	3000	3500	600000	100	1	2880			
2	East St. Margaret's.....	4	62	1400	18	490	4500	300	4000	80000	1650	22	2200	1900	16	950	2000	150	4000	1000	500000	20	3	400000		
3	Indian Harbour.....	1	22	350	6	80	750	75	325	65000	1500	8	800	1200	1000	200	325	1000	330000	50	4	500000	50	4	500000	
4	Peggy's Cove.....	5	98	1750	26	230	2500	250	700	68500	6600	38	3800	9300	1200	500	2000	500	1500	1000	500000	200	5	200000		
5	Dover.....	1	21	500	6	150	2000	200	300	16000	4000	80	8000	10900	1200	500	400	4000	20000	8000	50000	100	6	15936		
6	Prospect.....	4	57	900	16	180	2000	275	300	9000	2200	22	2500	4000	300	500	400	4000	2000	8000	20000	100	7	50000		
7	Terrence Bay.....	1	21	500	6	150	2000	200	300	16000	4000	80	8000	10900	1200	500	400	4000	20000	8000	50000	100	8	15936		
8	Pennant.....	7	108	2000	32	45	800	90	350	9000	2500	10	1200	2000	300	500	75	1000	4500	1000	2000	90	9	50112		
9	Sambro.....	8	140	3500	40	45	800	90	350	9000	2500	10	1200	2000	300	500	75	1000	4500	1000	2000	90	9	50112		
10	Ketch Harbour.....	1	40	900	10	60	900	90	300	8000	2000	12	1200	1500	400	400	65	1500	120000	20	10	2880	10	10	2880	
11	Portuguese Cove.....	1	26	700	5	40	600	75	350	9000	2500	18	1800	2000	700	300	3000	25000	4000	10	11	2880	11	11	2880	
12	Herring Cove.....	5	135	3500	40	60	800	75	100	3000	800	25	2500	2750	400	400	25	1000	4000	12	12	2880	12	12	2880	
13	Ferguson's Cove.....	1	31	400	10	30	500	50	60	1500	500	40	3000	3000	200	200	75	2000	2000	15	13	2880	13	13	2880	
14	Halifax.....	5	170	8000	50	25	500	40	4	80	28	10	1000	2000	400	400	25	2500	1000	1200	21	14	2880	14	14	2880
15	Eastern Passage and Devil's Islands.....	1	15	500	3	78	1222	61	231	13300	924	..	..	..	..	280	90	2400	1070	25	15	2880	15	15	2880
16	Cow Bay and Lawrencetown.....	1	15	500	3	78	1222	61	231	13300	924	..	..	..	..	280	90	2400	1070	25	15	2880	15	15	2880
17	Seaforth and Three Fathom Harbour.....	1	15	500	3	78	1222	61	231	13300	924	..	..	..	..	280	90	2400	1070	25	15	2880	15	15	2880
18	West Chezetcook.....	6	275	6250	80	132	1250	75	388	7800	400	400	400	400	215	215	58	58	2	17	2880	17	17	2880
19	East Chezetcook.....	2	84	2200	27	57	620	38	113	6775	452	620	38	113	6775	452	461	461	23	18	2880	18	18	2880
20	Petpeswick Harbour.....	1	51	891	43	90	5400	345	90	5400	345	90	5400	345	90	5400	345	500	500	20	19	2880	19	19	2880	
21	Musquodoboit Harbour.....	4	98	1100	28	98	1635	75	200	12000	750	1	175	40	40	900	66	400	2000	3	21	2880	21	21	2880	
22	Jeddore.....	4	98	1100	28	98	1635	75	200	12000	750	1	175	40	40	900	66	400	2000	3	21	2880	21	21	2880	
23	Clam Harbour and Owl's Head.....	5	88	1600	21	82	1439	65	316	18960	1200	2	265	400	1	135	265	626	47	23	2880	23	23	2880
24	Ship Harbour, Pleasant Harbour and Tangier.....	1	13	400	4	64	1180	64	108	6480	250	280	370	12	24	2880	24	24	2880

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25	Pope's Harbour and Gerrard's Island.....	28	600	42	129	2580	387	1	80	60	1	500														3	32976	25	
26	Spry Bay, Taylor's Head and Mushaboon.....	63	1411	79	394	7880	1182																			186	61920	26	
27	Sheet Harbour and Sober Island.....	43	878	58	173	3460	519																			17	34232	27	
28	Beaver Harbour and Port Dufferin.....	7	130	10	18	340	54																			5	56448	28	
29	Quoddy and Harrigan Cove.....	5	70	11	7	140	21																						
30	Moser River and Smith's Cove.....	5	83	6	7	140	21																						
31	Mitchell's Bay and Ecum Secum.....	27	347	37	35	700	105	6	490	420															36	61776	31		
	Totals.....	66	1678	38300	450	2489	31672	2862	10688	399243	37763	384	38010	46520	31	3820	14950	3050	6912	35800	7500	2217025	1081	473384					
	Values.....\$																										16215	94076	

RETURN Showing the Quantity and Value of Fish, &c.—Nova Scotia.—Continued.

Number.	DISTRICTS.	KINDS OF FISH.															TOTAL VALUE OF ALL FISH.	Number.										
		LOBSTERS, FRESH IN SHELL, CWT.	COD, DRIED, CWT.	COD, TONGUES AND SOUNDS, DLS.	HADDOCK, FRESH, LBS.	HADDOCK, DRIED, CWT.	HADDOCK, SMOKED, FINNAN HADDIES, LBS.	HAKE, DRIED, CWT.	HAKE, SOUNDS, LBS.	POLLOCK, CWT.	HALLBUT, LBS.	TROUT, LBS.	SMELTS, LBS.	ALWIVES OR GASPERAN, DLS.	BELS, DLS.	CLAMS, DLS.			FLOUNDERS, LBS.	TOM COD OR FROST FISH, LBS.	SQUID, DLS.	COARSE AND MIXED FISH, DLS.	FISH OIL, GALS.	FISH AS BAIT, DLS.	FISH AS MANURE, DLS.			
1	North Shore.....	1000	200	3	400	100	20	150	.....	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82,518	1
2	East St. Margarets.....	1000	500	4	500	50	1200	200	1000	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73,671	2
3	Indian Harbour.....	2000	1000	5	1000	400	400	300	4000	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71,300	3
4	Peggy's Cove.....	5000	800	6	500	80	300	50	1000	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,680	4
5	Dover.....	2000	1300	12	500	750	1000	1500	300	3000	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90,255	5
6	Prospect.....	500	1000	15	1000	100	50	40	1000	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,438	6
7	Terence Bay.....	400	1000	7	1000	80	100	80	250	1000	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,892	7
8	Pennant.....	50	1300	5	1000	30	200	160	500	1000	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,479	8
9	Sambro.....	60	4000	10	1000	40	1000	40	7500	10000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45,211	9
10	Ketch Harbour.....	30	2500	3	1500	5	.....	.....	1500	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28,909	10
11	Portuguese Cove.....	15	75	1	5000	.....	.....	.....	30	400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,621	11
12	Herring Cove.....	10	10000	6	10000	.....	.....	.....	200	10000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55,696	12
13	Ferguson's Cove.....	10	600	3	20000	.....	.....	.....	20	6000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,758	13
14	Halifax.....	150	1200	.....	.....	.....	.....	.....	100	50000	1000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12,654	14
15	Eastern Passage and Devil's Island.....	.....	550	1	20000	150	.....	.....	180	7770	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,858	15
16	Cow Bay and Lawrencetown.....	.....	95	.....	1500	.....	.....	.....	65	500	400	4000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,894	16
17	Seaforth and Three Fathom Harbour.....	110	88	.....	1000	21	.....	.....	28	450	150	7500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,235	17
18	West Chezetcook.....	140	4198	2	420	.....	.....	.....	115	4000	60	4000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23,678	18
19	East Chezetcook.....	150	438	.....	170	.....	.....	.....	107	1900	525	1750	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,683	19
20	Petpeswich Harbour.....	225	700	.....	3600	57	.....	.....	233	1400	750	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,845	20
21	Musquedoboit Harbour.....	275	700	.....	8750	80	.....	.....	148	5000	1800	6500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20,258	21
22	Jeddore.....	300	2360	1	23000	147	.....	.....	362	4400	180	1500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20,258	22
23	Clam Harbour and Owl's Head.....	270	815	.....	23500	57	.....	.....	47	2670	750	1500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,395	23
24	Ship Harbour, Pleasant Harbour and Tangier.....	60	650	55	40	120	600	750	10,196	24

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25	Pope's Harbour and Ger-rard's Island.....	537	9	700	27	5	455	12	100	11,080	25							
26	Spiny Bay, Taylor's Head and Mushaboon.....	995	231	30	108	100	200	39	14	703	14	200	24,036	26							
27	Sheet Harbour & Sober Island.....	620	2444	26	.....	.....	5	500	.....	30	.....	4	.....	500	15	110	23,448	27		
28	Beaver Harbour, Port Dufferin.....	126	335	3	.....	.....	.....	.....	.....	5	.....	1	.....	100	2	190	13,799	28
29	Quoddy and Harrigan Cove.....	733	119	.....	.....	.....	.....	300	.....	2	.....	.....	.....	100	5	220	17,663	29
30	Moser River and Smith's Cove.....	80	.....	.....	.....	.....	.....	200	.....	2	.....	.....	.....	50	2	.....	442	30
31	Mitchell's Bay and Ecum Secum.....	75	.....	17	.....	.....	.....	100	.....	6	.....	2	.....	286	8	300	15,218	31
	Totals.....	13073	39746	67	258850	3165	500	3798	2519	12612	215795	9215	29700	290	102	926	79300	35900	516	420	20508	1991	1650
	Values.....	65365	158984	670	7765	9495	30	8545	1260	25224	21579	921	1485	1160	1020	1852	3965	1795	2064	840	6152	2986	825	732	672

RECAPITULATION

Of the Yield and Value of the Fisheries in District No 2, Nova Scotia with Comparative Statements of the Increase or Decrease for the Years 1898 and 1899.

Kinds.	Quantity in 1899.	Rate.	Totals.	QUANTITIES.	
				Increase.	Decrease.
		\$ cts.	\$		
Salmon, fresh.....	Lbs. 210,938	0 20	42,187	9,839	
" preserved in cans.....	" 4,000	0 15	600	1,380	
" smoked.....	" 5,050	0 20	1,010	925	
Herring, salted.....	Brls. 18,872	4 00	75,488		1,830
" fresh.....	Lbs. 1,276,600	0 01	12,766	302,997	
" smoked.....	" 15,700	0 02	314	7,400	
Mackerel, fresh.....	" 2,774,759	0 12	332,971	1,227,581	
" salted.....	Brls. 2,310	15 00	34,650	218	
Lobsters, preserved in cans.....	Lbs. 2,358,920	0 20	471,784		243,804
" fresh, in shell.....	Cwt. 15,765	5 00	78,825		3,133
Cod, dried.....	" 68,289	4 00	273,156	25,713	
" tongues and sounds.....	Brls. 86	10 00	860	56	
Haddock, fresh.....	Lbs. 1,982,150	0 03	59,464	142,318	
" dried.....	Cwt. 8,697	3 00	26,091		107
" smoked finnan haddies.....	Lbs. 150,500	0 06	9,030		9,780
Hake, dried.....	Cwt. 9,286	2 25	20,893	1,353	
" sounds.....	Lbs. 9,257	0 50	4,630	23	
Pollock.....	Cwt. 18,055	2 00	36,110	12,518	
Halibut.....	Lbs. 569,470	0 10	56,947	158,341	
Trout.....	" 47,605	0 10	4,760	8,120	
Shad.....	Brls. 3,208	10 00	32,080	431	
Smelts.....	Lbs. 217,250	0 05	10,862	33,890	
Alewives or gaspereaux.....	Brls. 2,682	4 00	10,728		533
Bass.....	Lbs. 10,850	0 10	1,085		3,910
Eels.....	Brls. 727	19 00	7,270		112
Clams, in shell.....	" 2,045	2 00	4,090	404	
Oysters.....	" 1,677	4 00	6,708		108
Tom cod or frost fish.....	Lbs. 79,400	0 05	3,970	20,660	
Flounders.....	" 140,210	0 05	7,010		
Squid.....	Brls. 4,327	4 00	17,308	1,014	
Coarse and mixed fish.....	" 7,403	2 00	14,806	6,466	
Fish oil.....	Galls. 54,611	0 30	16,383	8,755	
Fish used as bait.....	Brls. 28,039	1 50	42,059	508	
" manure.....	" 9,689	0 50	4,845		4,084
Totals.....			1,721,740		

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RECAPITULATION

SHOWING the Number and Value of Fishing Vessels, Boats, etc., in the District No. 2, Province of Nova Scotia for the year 1899.

Material.	Value.	Total.
	\$	\$
100 ves-els (2,462 tons).....	57,873	
5,784 boats.....	99,814	
23,784 gill-nets (796,527 fathoms).....	137,365	
430 seines (42,095 fathoms).....	51,895	
82 trap-nets.....	18,220	
2,772 trawls.....	12,744	
49 weirs.....	6,880	
150 smelt nets.....	2,303	
9,662 hand lines.....	4,760	
120 lobster canneries (1,730 hands).....	117,075	391,854
290,630 lobster traps.....	153,450	
58 freezers and ice houses.....	21,192	270,525
1,790 smoke and fish houses.....	54,179	
848 wharfs and piers.....	42,924	
39 tugs, steamers, snacks.....	30,685	
		148,980
Total value.....		811,359

COMPARATIVE STATEMENT of the Value of the Fisheries in each County of District No. 2, Nova Scotia, for the years 1898 and 1899.

County.	Value in 1898.	Value in 1899.	Increase.	Decrease.
	\$	\$	\$	\$
Antigonish.....	66,412	83,161	16,749	
Colchester.....	33,145	50,975	17,830	
Cumberland.....	137,413	128,149		9,264
Guysborough.....	594,887	608,749	13,862	
Halifax.....	504,893	732,678	227,779	
Hants.....	13,602	12,916		686
Pictou.....	105,919	105,112		807
Totals.....	1,456,271	1,721,740	276,220	10,757
Net increase.....			265,463	

NOVA SCOTIA,

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets,
Nova Scotia

Number.	Name.	FISHING VESSELS AND BOATS.						FISHING MATERIALS.						Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.		
		Vessels.			Boats.			Gill Nets.		Trawls.		Weirs.								
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.						Number.	Value.
	<i>Annapolis County.</i>			\$		\$					\$	\$								
1	Margaretville	2	54	500	8	6	100	12	15	800	300	.....	.....	2	400	3000	300	.....	.....
2	Port George.....	.....	.....	.....	.....	15	275	17	20	1000	400	16	75	2	400	2000	400	.....	5000
3	Port Lorne.....	4	52	800	16	10	200	20	25	2000	800	15	70	.....	.....	.....	600	.....	.....
4	Hampton.....	.....	.....	.....	.....	16	300	22	24	1800	750	16	75	.....	.....	.....	400	.....	.....
5	Phinny & Young's Cove.....	.....	.....	.....	.....	20	400	20	25	1800	790	18	100	.....	.....	.....	300	.....	.....
6	Parker's Cove.....	2	44	700	12	25	500	40	30	2000	850	30	150	.....	.....	.....	250	.....	.....
7	Hilsburn's & Delap's Cove.....	2	26	500	10	18	400	25	40	2500	875	40	200	.....	.....	.....	150	.....	.....
8	Victoria Beach.....	1	48	1000	14	30	600	50	50	3000	1200	75	400	.....	.....	.....	60	.....	.....
9	Thorne Cove.....	1	65	1000	13	10	200	10	12	480	200	50	250	2	400	.....	.....	.....	.....
10	Annapolis to county line.....	.....	.....	.....	.....	.....	.....	.....	10	400	150	.....	.....	3	200	200	.....	.....	.....
11	Clementsport	1	17	300	5	8	200	10	12	600	250	30	175	5	800	80	2500	2000
12	Lequille River.....	1	50	350
13	Round Hill River.....	200
14	Inland Lakes.....
	Totals.....	13	306	4800	78	158	3175	226	263	16380	6565	290	1495	15	2250	5750	2540	2500	2000	5000
	Values.....	1150	10160	25	40	600

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District No. 3.

&c., and the Quantity and Value of Fish caught in District No. 3, Province of for the Year, 1899.

KINDS OF FISH.														FISH PRODUCTS.			TOTAL VALUE.	Number.			
Mackerel, salted, brls.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues & sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Smoked Finnan Haddies, lbs.	Hake, dried, cwt.	Hake sounds, lbs.	Pollock, cwt.	Trout, lbs.	Alewives or gasp'x, brls.	Bass, lbs.	Eels, brls.	Flounders, lbs.	Tom cod (frost fish) lbs.	Coarse and mixed fish, brls.			Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.
40	90	400	2	2000	150	...	100	100	150	...	...	...	...	...	...	...	150	25	100	5,237 50	1
...	150	300	1	1500	175	...	500	250	100	...	...	...	...	...	...	...	300	50	100	6,495 00	2
...	150	550	3	3000	200	...	300	175	90	...	...	...	...	...	...	...	175	60	80	7,195 00	3
...	200	400	3	2500	400	...	425	200	150	...	...	...	...	...	...	...	200	60	30	7,026 25	4
...	225	300	2	1000	700	...	800	400	200	...	...	...	...	...	...	...	275	75	25	8,282 50	5
...	300	375	3	1500	1300	...	1500	700	300	...	...	...	...	...	...	...	450	60	30	12,540 00	6
...	250	200	2	1000	700	...	1000	400	350	...	...	...	...	...	...	...	300	50	...	8,115 00	7
...	200	300	7	4000	3500	...	6000	3000	2800	...	...	...	...	...	...	...	900	125	60	45,017 50	8
...	100	100	1	3000	3000	...	3500	1500	2000	...	...	...	...	...	...	...	500	30	25	22,832 50	9
...	...	...	...	...	...	...	...	...	...	...	600	100	500	...	500	800	2000	...	...	4,615 00	10
...	...	300	1	800	500	...	400	200	100	...	...	...	...	...	...	...	150	100	60	4,544 00	11
...	...	...	...	...	...	...	...	...	...	...	200	100	2	...	...	...	...	...	...	120 00	12
...	...	...	...	...	...	...	...	...	...	...	300	100	2	...	...	...	...	...	...	100 00	13
...	...	...	...	...	...	...	...	...	...	...	8000	...	...	...	...	...	...	...	...	800 00	14
40	1515	5925	25	20300	10625	9600	14525	6925	6240	9100	100	700	4	500	800	2000	3400	635	510	.....	.....
600	7575	23700	250	609	31875	576	32681	3462	12480	910	400	70	40	25	40	4000	1020	952	255	133,496 25	.....

RETURN showing the Kinds, Quantities and Value of Fish, &c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.													TOTAL VALUE OF ALL FISH.	Number.								
		Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked in nam haddies, lbs.	Hake, dried, cwt.	Hake sounds, lbs.	Pollock, cwt.	Habitut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alwevers or garsperuan, brls.	Bass, lbs.	Hels, brls.			Clams, brls.	Flounders, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	
<i>Digby County.</i>																								
1	Digby.....	32268	12000	895370	12500	13000	1825	299225	1500	7	3000	600	300	5	.....	5000	80	10000	8400	2250	4500	242,125	1	
2	Bay View.....	5400	8200	265	340	600	55	1050	.....	.....	.....	.....	.....	.....	.....	400	.....	250	356	440	300	30,068	80	2
3	Culloden.....	3500	265	.....	425	800	90	1000	.....	.....	.....	.....	.....	.....	.....	75	.....	550	500	120	250	5,245	00	3
4	Roseway.....	350	200	.....	340	600	60	250	.....	.....	.....	.....	.....	.....	.....	.....	.....	100	150	300	350	4,728	50	4
5	Galliver's Cove.....	10000	4992	4000	4335	2000	457	5110	50	8	.....	10	.....	10	35	.....	.....	500	650	250	1000	64,609	75	5
6	Centreville.....	350000	650	20000	2000	2000	140	1500	.....	.....	.....	.....	.....	.....	.....	450	.....	700	7500	300	4000	52,188	50	6
7	Sandy Cove.....	1000	40	3500	200	150	30	500	.....	.....	500	.....	.....	.....	.....	20	.....	1000	500	200	1000	11,684	40	8
8	Mink Cove.....	50000	200	4000	600	500	100	1000	8	.....	.....	.....	.....	.....	.....	4	.....	1000	500	200	1000	36,390	00	9
9	Little River.....	160000	2000	20000	2200	3200	400	1000	50	.....	.....	.....	.....	.....	.....	1500	.....	2000	3500	1000	5000	2,328	50	10
10	White Cove.....	20000	130	.....	250	200	40	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	400	50	60	27,001	00	11
11	Whale Cove.....	70000	1000	.....	1000	2000	6000	1000	10	.....	.....	.....	.....	.....	.....	600	.....	500	2000	200	4000	.....	.....	.....
12	Long Beach.....	9000	400	.....	400	400	200	500	25	.....	.....	.....	.....	.....	.....	800	.....	40	350	40	70	5,792	50	12
13	East Ferry.....	35000	650	.....	1000	450	100	1000	.....	.....	.....	.....	.....	.....	.....	500	.....	200	1500	200	300	9,970	00	13
14	Tiverton.....	200000	4400	.....	9000	3200	450	35000	20	.....	.....	.....	.....	.....	.....	1000	.....	12000	5000	3000	5000	95,632	80	14
15	Central Grove.....	800	600	.....	550	600	200	400	4	.....	.....	.....	.....	.....	.....	100	.....	200	800	150	350	7,262	90	15
16	Free Port.....	140000	12000	.....	30000	2500	800	50000	.....	.....	.....	.....	.....	.....	.....	50	.....	3000	11000	3000	3500	172,415	00	16
17	Westport.....	120000	7500	.....	100000	2500	4000	80000	.....	.....	.....	.....	.....	.....	.....	5500	.....	3400	15000	4000	5000	331,595	00	17
18	Smith's Cove.....	10000	90	.....	70	200	112	550	.....	.....	.....	.....	.....	.....	.....	25	.....	2000	200	5000	3000	32,556	50	18
19	Brighton.....	3000	10	.....	.....	.....	20	.....	80	.....	.....	.....	.....	.....	.....	30	.....	150	200	4000	5000	7,164	00	19
20	Plympton.....	8000	20	.....	.....	.....	5	.....	50	.....	.....	.....	.....	.....	.....	10	.....	15	100	100	200	3,944	00	20
21	Doty's Landing.....	10000	10	.....	.....	.....	15	.....	.....	.....	.....	.....	.....	.....	.....	200	.....	20	120	200	350	1,586	00	21
22	Weymouth.....	2000	10	.....	.....	.....	.....	.....	600	.....	.....	.....	.....	.....	.....	.....	.....	10	100	60	100	2,542	00	22
23	New Edinburgh.....	50000	4000	.....	.....	.....	20000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56,780	00	23
24	Waterford.....	1000	200	280	200	35	8,170	00	24
25	New Edinburgh.....	119	8	57	3,928	00	25
26	Belliveau Cove.....	139	13	83	2,150	25	26

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etc., and the Quantity and Value of all Fish, &c.—Nova Scotia—Continued.

KINDS OF FISH.													FISH PRODUCTS.			TOTAL VALUE.	Number.	
Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, salted, brls.	Cod, dried, cwt.	Haddock, dried, cwt.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Alewives or gasperreaux, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.			\$	cts.
50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	500	.....	.....	.....	2,010	00	1
500	.....	.....	.....	.....	.....	.....	.....	.....	.....	500	.....	300	.....	.....	.....	1,350	00	2
400	.....	.....	.....	.....	.....	.....	.....	.....	.....	300	.....	60	.....	.....	.....	350	00	3
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75	.....	.....	.....	30	765	00	4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80	.....	.....	.....	40	820	00	5
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
20000	100	3000	9000	.....	150	180	75	225	400	.....	.....	.....	.....	.....	.....	.....	275	00
10000	150	.....	6000	4	75	80	.....	20	500	.....	.....	.....	.....	75	100	60	6,483	75
5000	75	.....	10000	.....	40	30	.....	35	.....	.....	.....	.....	.....	20	30	1,865	00	10
6000	60	.....	.....	.....	50	40	20	30	.....	.....	.....	.....	.....	50	45	1,962	50	11
7500	175	.....	75000	.....	80	24	35	56	.....	.....	.....	.....	.....	80	90	4,447	75	12
4500	190	.....	210000	.....	50	32	15	40	.....	.....	.....	.....	.....	40	75	6,367	25	13
8000	200	.....	.....	.....	36	9	.....	30	.....	.....	.....	.....	.....	30	45	2,698	50	14
.....	190	.....	160000	.....	60	20	.....	25	.....	.....	100	.....	.....	50	75	5,422	50	15
61950	1140	3000	470000	4	541	415	145	461	900	800	255	860	75	520	640	.....	.....	.....
12390	4560	30	9400	60	2164	1245	326	922	90	80	2550	3440	22	780	320	38,379	75	.....

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c—Nova Scotia—Continued.

Number.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.				KINDS OF FISH.													
	VESSELS.			BOATS.			Gill Nets.		Seines.		Trap Nets.		Salmon, fresh, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Number.			
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Value.	Number.	Value.	Number.										Value.		
<i>Lunenburg County.</i>																								
1	Lunenburg, Upper and Lower South Rose Bay, Kingsburg, Black and Blue Rocks, Back Harbour to Cross Island.....	72	6436	289630	1225	564	11250	110	2025	40500	20250	15	1500	3250	30	2100	.....	262	2600	1200	37	35424	124	1
2	LaHave, Eastside, Ritcey's Cove, Ironbound Island, LaHave, Middle, West to New Dublin.....	59	4652	209340	919	528	12000	130	2400	48000	24000	5	500	1000	20	4500	3000	252	9000	300	18	9024	200	2
3	Petite Rivière, Broad and Vogler's Cove to county line.....	11	816	36720	163	176	6350	70	1000	20000	10000	4	400	900	10	1750	720	.....	4800	100	2	.....	250	3
4	Chester.....	.....	.....	.....	143	3203	150	900	18000	4500	20	1600	25 0	25	6500	6000	500	.....	600	4000	35	50000	12	4
5	Malbone Bay and Martin's River.....	24	1841	60000	325	212	4000	125	800	16000	4400	12	1000	1200	4	1200	3200	.....	75	2000	7	.....	13	5
6	Fox Point.....	.....	.....	.....	108	2600	80	320	6403	1300	27	2700	10300	10	2000	150	.....	.....	50	2800	200	.....	10	6
7	Mill Cove.....	.....	.....	.....	105	1600	130	550	11060	2100	23	2500	2300	10	2000	160	.....	.....	20	3000	100	.....	.....	7
8	The Lodge.....	.....	.....	.....	32	460	33	105	2100	200	9	950	925	4	250	110	.....	.....	50	300	25	.....	.....	8
9	North-west Cove.....	.....	.....	.....	40	425	46	75	1500	150	9	900	900	2	150	100	.....	.....	10	2000	60	.....	.....	9
10	Aspotogan.....	.....	.....	.....	36	260	32	150	3000	430	9	1000	1100	2	200	120	.....	.....	.....	8000	10	35000	12	10
11	Bayswater.....	.....	.....	.....	43	420	400	800	8	800	1200	1	100	200	.....	.....	.....	.....	.....	1200	15	.....	.....	11
12	Islandford.....	.....	.....	.....	125	3200	175	2500	50000	10000	35	2820	4350	7	500	60	.....	.....	80	200	60	.....	.....	12
13	Little-Tancook.....	.....	.....	.....	3	100	1000	18	300	18000	320	5000	100000	36	4100	5950	300	.....	300	.....	100	.....	.....	1013
14	Big Tancook.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	400	.....	2000	200000	.....	.....	.....	1214
15	Deep Cove.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80	.....	10	.....	.....	.....	.....	815
Totals.....		169	13845	596680	2650	2434	64965	1494	16125	322500	98360	218	21530	36825	132	22680	14600	752	4807	218700	701	129448	704	704
Values.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2920	150	19228	2187	2822	10315	25889	3520

RETURN showing the Kinds, Quantities and Value of Fish, &c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.															TOTAL VALUE.	Number.					
		Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollack, cwt.	Habbutt, lbs.	Trout, lbs.	Smelts, lbs.	Alwives or gasperreaux, brls.	Clams, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.			Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.
<i>Lunenburg County.</i>																							
1	Lunenburg, Upper and Lower South Rose Bay, Kingsburg, Black and Blue Rocks, Back Harbour to Cross Island....	117295	45	.....	6285	170	.....	140	48100	.....	500	.....	20	200	300	.....	100	87972	15	.....	530,299 40	1
2	LaHave, Eastside, Ritcey's Cove, Ironbound Island, LaHave, Middle, West to New Dublin.....	100507	40	.....	257	.....	52	15090	.....	7500	.....	20	300	700	.....	400	75380	18	.....	436,729 20	2	
3	Petite Riviere, Broad and Volger's Coves to County line.....	13800	5	.....	8	.....	3	300	.....	100	10	15	150	400	.....	10350	10	.....	62,536 50	3		
4	Chester.....	1500	10	3200	50	70	25	1000	1800	.....	7000	125	15	30	50000	1400	60	360	400	60	23,922 50	4
5	Mahone Bay and Martin's River.....	60000	90	30000	17	360	90	36000	200	2600	20	8	18	8000	700	50	100	15200	1000	.....	235,273 00	5
6	Fox Point.....	500	50	.....	100	200	60	300	.....	.....	.....	12	70000	200	1600	350	1600	350	500	60	15,582 50	6
7	Mill Cove.....	2000	500	.....	160	400	70	100	.....	.....	.....	10	70000	.....	110	1500	200	200	400	160	24,307 00	7
8	The Lodge.....	200	40	300	30	40	15	.....	.....	.....	10	.....	.....	2000	200	10	60	40	60	12	2,105 00	8
9	North-west Cove.....	40	.....	.....	20	60	40	.....	.....	.....	10	.....	.....	2600	.....	10	60	30	60	.....	1,874 00	9
10	Aspotogan.....	20	.....	.....	6	15	45	.....	.....	.....	.....	6	5	1200	.....	10	70	15	70	.....	8,825 25	10
11	Bayswater.....	16	.....	.....	5	.....	.....	.....	.....	.....	.....	5	10	1600	.....	.....	60	12	50	.....	936 60	11
12	Blandford.....	300	.....	.....	200	.....	.....	.....	.....	.....	.....	10	4	40000	200	20	300	400	300	60	6,766 00	12
13	Little Tancook.....	600	.....	.....	300	100	40	400	.....	.....	.....	5	10	4000	.....	60	250	60	60	.....	7,000 00	13
14	Big Tancook.....	1500	6	60000	400	100	200	70	1000	.....	.....	12	.....	30000	.....	80	800	600	600	300	24,671 00	14
15	Deep Cove.....	12	2	.....	8	10	6	.....	.....	.....	.....	6	17	2500	.....	12	25	12	20	.....	903 50	15
Totals		298290	698	93550	7846	1525	490	856	102190	15000	17700	175	68	166	282550	4100	562	5395	191171	3563	652
Values		1193160	6980	2806	23538	3431	245	1712	10219	150	885	700	680	1060	14128	205	2248	10790	57351	5355	826	1,403,791 45

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and Quantities of Fish—Nova Scotia—Con.

Number.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.			
	Vessels.			Boats.			Gill Nets.			Seines.			Salmon, fresh, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.				Value.
<i>DISTRICTS.</i>																
<i>Queens County.</i>																
1	4	173 ^{1/2}	7900	32	74	1538	57	293	5274	2344	9	500	1000	1850	180	1
2	25	16 ^{7/8}	1000	9	45	1283	55	300	5400	2400	2	250	500	.....	79	2
3	1	16 ^{3/8}	600	4	69	1573	71	196	3528	1968	.....	.....	.....	.....	285	3
4	1	13 ^{1/8}	400	4	85	1920	93	268	4824	2144	.....	.....	.....	.....	710	4
5	1	.....	.....	.....	35	882	42	80	1440	640	.....	.....	.....	.....	218	5
6	1	.....	.....	.....	25	575	30	67	1200	536	.....	.....	.....	.....	52	6
7	1	.....	.....	.....	22	506	27	70	1360	560	.....	.....	.....	.....	46	7
8	1	92 ^{1/2}	4000	19	60	1272	48	150	2700	1200	.....	.....	.....	4000	250	8
9	.....	.....	.....	.....	8	96	.....	.....	.....	.....	.....	.....	.....	4580	.....	9
10	.....	.....	.....	.....	20	240	.....	.....	.....	.....	.....	.....	.....	5000	100	10
11	.....	.....	.....	.....	7	84	.....	.....	.....	.....	.....	.....	.....	960	100	11
Totals.	9	320	13900	68	450	9969	423	1506	26186	11634	7	750	1500	16580	450	1586
Values.	3316	90	6144

* Dip nets.

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RETURN showing the Quantity and Value of Fish, &c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.											TOTAL VALUE OF ALL FISH.	Number.			
		Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, dried, cwt.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereau, brls.			Reis, brls.	Fish oil, galls.	Fish as bait, brls.
<i>Queens County.</i>																	
1	Liverpool, Brooklyn and Gull Island	10			3075	38	10	116							80	14,431 50	1
2	Western Head, Moose Harbour and Black Point	38			714	53		40	1000						360	4,195 00	2
3	White Point, Hunt's Point and Summerville	23	21888		1300	103	12	30	2890						310	11,631 60	3
4	Port Monton	16	61056	2700	1400	43	10	13	3000						370	34,979 70	4
5	Port Joli and Port L'Herbert		6240		593	46		8	400	600	15	25			60	5,062 00	5
6	Eagle Head and Beach Meadows		57696	557	197	9		5							70	15,375 20	6
7	West and East Berlin	2			198	9	16								70	1,094 00	7
8	Port Medway				2063	60	10	29	1500						1025	10,354 00	8
9	Milton and Kempt								5000							1,516 00	9
10	Mill Village								500							2,070 00	10
11	Greenfield and Brookfield								1600							1,592 00	11
	Totals	89	146880	3257	9540	363	42	257	8700	7100	600	680	27	3525	160		
	Values	1335	29376	16285	38160	1089	94	514	870	710	30	2720	270	1058	240	102,301 00	

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c.—Nova Scotia—Continued.

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.							
		Vessels.			Boats.			Gill Nets.			Trap Nets.			Salmon, fresh, lbs.	Herring, salted, brls.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Number.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.								
	<i>Shelburne County.</i>																				
1	North-east Harbour, North-west Harbour and Port Saxon.	4	82	2875	37	20	1200	35	200	6000	1000	200	400	100	200	800	1	800			
2	Black Point, Red Head and Round Bay.	3	65	2000	18	55	3175	125	100	2000	3200	400	.....	400	.....	725	2	725			
3	Roseway and McNutt's Island.	.....	.....	.....	.....	55	3500	120	800	10000	2600	.....	.....	380	.....	525	3	525			
4	Gunning Cove, Churechover and Brehtown.	2	25	500	10	50	1800	100	415	8300	1385	150	.....	685	200	425	4	425			
5	Shelburne and Sandy Point.	7	494	19200	105	55	1450	110	970	19500	3300	460	.....	485	825	250	5	250			
6	Jordan.	1	100	5000	21	48	1480	70	625	12500	2100	700	.....	685	475	200	6	200			
7	Lockeport.	15	776	3100	160	160	2500	325	1275	25500	4500	300	.....	1200	1200	1004	7	1004			
8	Barrington.	2	60	3000	18	60	1800	66	700	14000	1300	200	.....	150	150	1500	8	1500			
9	Wood's Harbour.	5	120	4000	45	160	5000	175	1000	20000	1900	1	2000	1000	16000	74208	9	74208			
10	Shag Harbour.	3	52	1350	26	85	3000	85	900	18000	1400	.....	.....	600	1100	1600	10	1600			
11	Bear Point.	1	20	500	6	25	700	300	55	1100	1000	.....	.....	100	.....	650	11	650			
12	Cape Island.	6	180	5000	60	600	1500	800	4000	80000	9000	6	11000	4000	6000	103508	12	103508			
13	Port La Tour and Baccaro.	2	120	4000	20	300	5600	175	2750	35000	8000	.....	.....	3000	.....	3000	13	3000			
14	Upper Port La Tour.	3	50	1500	40	40	600	50	775	15500	700	.....	.....	500	.....	1200	14	1200			
15	Capes Negro and Blanche.	3	50	1000	20	85	1200	90	700	14000	1100	.....	.....	200	600	26832	15	26832			
16	Cape Negro Island.	.....	.....	.....	.....	65	1500	65	830	16500	1250	1	1500	150	600	4000	16	4000			
17	Port Clyde.	.....	.....	.....	.....	6	600	6	30	600	30	2000	.....	50	.....	36288	17	36288			
	Totals.	57	2194	80425	586	1869	36005	2427	16125	324600	43765	8	14500	13685	27200	74	294860	48879			
	Values.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54740	3264	1110	58972	244395			

SESSIONAL PAPER No. 22

RETURN showing the Kinds, Quantities and Value of Fish, &c.—Nova Scotia.—Continued.

DISTRICTS.	KINDS OF FISH.													TOTAL VALUE OF ALL FISH.	Number.				
	Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Smoked hnan haddies, lbs.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereaux, brls.	Relis, brls.	Tom cod or frost fish, lbs.			Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	
<i>Shelburne County.</i>																			
1 North-east Harbour, North-west Harbour and Port Saxon.....	1225	2	1000	110	.....	10	55	300	.....	.....	20	2	250	.....	180	37	10168 50	1
2 Black Point, Red Head and Round Bay.....	1400	2	1200	250	.....	.....	49	1000	400	500	450	10	500	.....	850	200	14899 00	2
3 Roseway and McNutt's Island.....	525	4	800	430	.....	.....	200	300	150	.....	35	10	700	.....	225	75	8839 00	3
4 Gunning Cove, Churchover and Birchtown.....	850	1	1200	340	.....	.....	225	450	225	75	30	6	550	.....	275	75	10388 75	4
5 Shelburne and Sandy Point.....	12625	7	2500	245	.....	.....	125	870	6500	500	75	8	600	.....	5075	675	58974 20	5
6 Jordan.....	2975	3	800	240	250	.....	30	.....	1200	2000	7	10	400	.....	1400	145	17756 50	6
7 Lockeport.....	25200	14	3000	1000	15000	7	360	3000	600	.....	400	20	400	23	10060	1972	130165 15	7
8 Barrington.....	4000	.....	.....	400	.....	.....	100	300	.....	.....	3	10	400	.....	300	2500	33030 00	8
9 Wood's Harbour.....	1600	.....	.....	500	.....	.....	400	700	.....	.....	.....	.....	.....	.....	200	6000	97691 60	9
10 Shag Harbour.....	1200	.....	.....	100	.....	.....	75	500	.....	.....	30	.....	.....	.....	350	650	23059 20	10
11 Bear Point.....	300	.....	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75	550	6137 50	11
12 Cape Island.....	12000	.....	.....	6000	.....	.....	1500	120000	.....	.....	.....	.....	.....	.....	3000	3000	207821 60	12
13 Port La Tour and Baecaro.....	6000	.....	.....	1000	.....	.....	3000	2000	.....	.....	140	30	.....	.....	2500	1400	63910 00	13
14 Upper Port La Tour.....	1500	.....	.....	400	.....	.....	900	1200	.....	.....	.....	.....	.....	.....	150	500	17915 00	14
15 Capes Negro and Blanche.....	800	.....	.....	600	.....	.....	250	800	.....	.....	.....	.....	.....	.....	125	400	42455 90	15
16 Cape Negro Island.....	700	.....	.....	400	.....	.....	300	2000	.....	.....	.....	.....	.....	.....	800	900	27062 00	16
17 Port Clyde.....	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	200	.....	.....	.....	.....	500	8407 60	17
Totals.....	72950	29½	10500	13015	15250	17	7669	134220	9375	3075	1390	104	4900	23	26165	25579
Values.....	\$ 291800	295	315	39045	915	38	15338	13422	937	154	5560	1040	245	46	7849	38369	778691	50

SESSIONAL PAPER No. 22

RETURN showing the Kinds, Quantities and Value of Fish, &c.—Nova Scotia—Continued.

DISTRICTS.	KINDS OF FISH.														TOTAL VALUE OF ALL FISH.	Number.						
	Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.			Squid, lbs.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	
<i>Yarmouth County.</i>																						
1 Yarmouth.....	19000	..	55000	4000	35000	600	15500	10000	3000	2000	..	..	2000	..	..	85	100	4000	270	300	201,307 00	1
2 Port Maitland.....	9682	4	72550	..	15000	55	1710	3500	..	..	..	..	..	..	..	15	1250	1630	100	550	74,718 25	2
3 Sandford.....	1422	..	2100	..	..	..	170	2200	..	2500	..	..	..	..	..	..	..	100	275	..	56,052 25	3
4 Arcadia.....	850	..	..	150	..	..	10	200	..	2100	..	65	..	..	..	..	..	..	..	..	12,592 00	4
5 Pubnico.....	12309	4	..	1468	..	..	1175	4500	..	6000	..	..	..	..	..	..	..	..	..	..	132,507 25	5
6 Tusket Wedge.....	7300	..	..	600	..	120	475	..	6000	..	..	..	..	..	..	100	75	650	350	..	32,039 00	6
7 Tusket.....	..	..	..	..	..	..	..	..	..	1250	..	40	..	65000	..	..	..	..	..	..	11,307 00	7
8 Eel Brook.....	..	..	..	..	..	..	..	..	..	800	..	30	..	..	..	..	..	..	..	..	3,650 00	8
9 Salmon River.....	..	..	..	..	..	..	..	..	..	..	..	25	..	..	..	..	..	..	..	..	2,335 00	9
10 Argyle.....	250	..	..	75	..	..	..	..	..	..	..	15	..	1500	..	..	..	..	..	..	36,067 00	10
Totals.....	50813	8	129650	6243	50000	800	19052	20400	9000	12600	2550	175	2000	74115	290	2850	9100	2080	1125	..	622,574 75	..
Values.....\$	203252	80	3889	18879	3000	1800	38104	2040	900	630	10200	1750	100	3705	1160	5700	2730	3120	562	..	..	..

SESSIONAL PAPER No. 22

RECAPITULATION.

Of the Value of Fishing Vessels, Nets, &c., in District No. 3, Nova Scotia, for the Year 1899.

Material.	Value.	Total.
	\$	\$
351 fishing vessels (20,503 tons).....	805,125	
6,330 " boats.....	158,345	
819,401 fathoms of gill nets.....	183,886	
265 seines (27,075) fathoms.....	44,810	
188 trap-nets.....	65,770	
82 weirs.....	14,115	
23 smelt-nets.....	912	
2,898 trawls.....	60,738	
11,150 hand lines.....	15,278	
		1,348,979
53 lobster canneries.....	51,250	
181,605 " traps.....	122,352	
		173,602
122 freezers and ice houses.....	12,995	
1,349 smoke and fish houses.....	75,355	
463 piers and fishing wharfs.....	98,075	
55 tugs or smacks (fishing).....	34,175	
2 fish canneries.....	1,500	
		222,100
Total.....		1,744,681

Number of fishermen employed in the same district.

Men in fishing vessels.....	4,449
" " boats.....	6,561
Persons in lobster canneries.....	2,259
Total.....	13,269

RECAPITULATION

Showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials, &c., used in the whole Province of Nova Scotia for the Year 1899.

Number.	FISHING VESSELS AND BOATS.											FISHING GEAR OR MATERIALS.												
	Vessels.						Boats.					Gill Nets.					Seines.			Trap Nets.		Trawls.		
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		
			£			£				£			£			£		£		£		£		
1	22	375	7850	124	578	12761	1145	3297	75245	28258	1	80	750	1	80	28258	1	80	2984	1	2984	1	2984	
2	30	506	10700	153	793	20644	1751	1853	56918	21763	3	600	600	1	600	21763	3	600	3472	2	3472	2	3472	
3	46	1430	18800	331	1240	20829	2315	11963	184760	71655	...	...	...	...	...	...	...	...	3200	3	3200	3	3200
4	4	66	1150	15	641	10044	1033	1414	28212	11599	1	150	150	2	150	11599	1	150	1198	4	1198	4	1198	
5	1	10	200	3	243	3144	333	732	21023	7862	...	...	...	...	...	...	...	...	701	5	701	5	701
6
7	3	65	800	11	179	3045	375	307	23660	5620	...	...	...	...	...	...	...	...	210	6	210	6	210
8	28	661	17873	164	2165	47460	2400	16289	324780	76716	46	4085	5375	51	14400	324780	46	4085	7377	8	7377	8	7377	
9	66	1678	38800	450	2489	31672	2802	10688	399243	37763	384	38010	46520	31	3820	399243	384	38010	4288	9	4288	9	4288	
10	1	18	300	2	57	1110	63	65	7785	1231
11	1	30	400	3	306	6813	383	343	12218	5628	...	...	...	...	...	...	...	...	168	11	168	11	168
12	13	306	4800	78	158	3175	226	203	16380	6565	...	...	...	...	...	...	...	...	1495	12	1495	12	1495
13	57	1819	43650	532	467	20095	880	634	17465	3089	39	3195	5985	3	1800	17465	39	3195	9350	13	9350	13	9350	
14	2	32	900	8	65	1090	119	117	4820	2220	...	...	...	...	...	...	...	...	190	14	190	14	190
15	169	13845	596880	2650	2434	64965	1494	16125	322500	98360	218	21530	36825	132	22680	322500	218	21530	45600	15	45600	15	45600	
16	9	320	13900	68	450	9969	423	1506	26186	11634	7	750	1500	...	...	...	...	...	188	16	188	16	188
17	57	2194	80425	586	1869	50005	2427	16125	324600	43765	1	1600	500	8	14500	324600	1	1600	2255	17	2255	17	2255	
18	44	1987	64770	527	887	9046	992	3235	107450	18253	...	...	...	...	...	...	...	...	265	18	265	18	265
	553	25342	901498	5705	15369	322437	19466	75316	1961063	454526	700	69300	98205	273	85290	1961063	700	69300	84386	553	84386	553	84386	

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RECAPITULATION—Continued.
 Showing the Number, the Quantity and Value of Fishing Materials, &c.—Continued.

Number.	COUNTIES.																				
	FISHING GEAR OR MATERIALS.					LOBSTER PLANT.					OTHER FIXTURES USED IN FISHERIES.										
	Wears.		Smelt Nets		Hand Lines.		Canneries.		Traps.		No. of hands employed		Freezers and Ice Houses		Smoke and Fish Houses		Piers and Wharfs.		Tugs, Steamers and Smacks.		
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
1		121	9525	3869	1958	15	16156	61199	26170	508	26	700	304	7648	137	4330	19	5950	1		
2		52	50	5187	3860	27	15400	55000	30905	533	24	2080	216	8020	80	58363	16	928	2		
3		21	320	4426	1950	15	11550	79050	30035	2303	2	750	297	8070	19	25500	29	2635	3		
4		1	5	2383	1431	17	6060	13699	5931	237			90	5790	23	4563	4	150	4		
5				408	165	6	6500	26160	11720	153	1	300	197	1799							
6		27	5500	12	120	12	1	730	1500	1200	11	9	700	43	1305						
7		12	385	103	1463	91	23805	45265	25961	335	23	678	23	678							
8		22	400	4075	2101	34	38675	111850	60620	523	24	19575	634	26493	278	28410	23	22575	8		
9		1	25	4681	2171	20	165000	62680	28094	327	13	500	887	23504	570	14514	16	8110	9		
10		10	1045	48	6	28	30895	43175	25855	381	11	117	6	100							
11		12	295	347	236	28	30895	43175	25855	381	11	117	133	4505							
12		15	2250	383	383	3550	3475	47	525	11	525	138	4505								
13		26	2775	15	505	1668	4442	11	15150	28885	20190	58	4120	140	7225	57	42800	15	5550	13	
14		36	8100	1	191	191	191	6	2000	12000	9050	26	1300	79	4030						
15		1	12	2200	3300	6	2000	12000	9050	352	3	650	350	24000	195	21010	13	1250	15		
16				964	1084	13	2550	12700	5080	88			190	3825	28	583	5	2850	16		
17		4	300	3129	4066	12	16300	101320	61407	227	16	2800	393	24070	166	23732	3	7600	17		
18		5	990	3	95	2615	1322	11	13250	23150	631	8	3600	64	7700	17	9950	19	16925	18	
		156	21495	368	13230	36677	29232	247	217491	681173	363903	232	37717	4046	159057	1570	210755	162	74523		

* Two canneries = \$1500.

RECAPITULATION—Continued.
 RETURN showing the Kinds and Quantities of Fish and Fish Products in the whole Province of Nova Scotia, &c.—Continued.

Number.	COUNTIES.												Totals.				
	Salmon.		Herring.		Mackerel.		Lobsters.		Cod.		Haddock.		Hake.				
	Fresh.	Preserved in Cans.	Smoked.	Salted.	Fresh.	Smoked.	Fresh.	Salted.	Preserved in Cans.	Fresh in shell.	Dried.	Tongues and Sounds.	Fresh.	Dried.	Smoked flman haddies.	Dried.	Sounds.
	Lbs.	Lbs.	Lbs.	Brls.	Lbs.	Lbs.	Lbs.	Brls.	Lbs.	Cwt.	Cwt.	Brls.	Lbs.	Cwt.	Lbs.	Cwt.	Lbs.
1	22500	..	*292	5160	46100	1500	16400	454	477072	23006	23827	51	1300	3567	..	232	..
2	31934	50	..	5087	1056000	..	72760	2073	257756	..	27433	43	9850	2717	..	3494	1370
3	1635	17	..	17051	53150	..	43418	7152	348622	3641	26287	66	36284	9329	1746	606	633
4	8285	720	*723	1757	170950	..	8010	547	120436	151	12218	14	2057	..	..	473	..
5	27600	..	..	2064	..	..	143100	300	130648	..	891	..	290	..	..	2575	5463
6	101828	..	..	20	3600	4000	..	..	20208	..	142	..	1900	31	..	10	..
7	10345	..	..	345	2400	1700	1380	..	489188	..	900	2	..	375	..	70	300
8	22715	4000	2000	9445	1091900	..	408504	929	825936	2282	25979	17	1721400	4760	150000	2086	940
9	14950	..	3050	6912	35800	7500	2217025	1081	473384	13073	39746	67	258850	3165	500	3798	2519
10	7940	..	..	75	4500	2500	..	..	119	..	119	..	..	26	..	..	..
11	25300	..	..	11	139000	..	4450	..	419376	410	512	..	..	50	..	747	3511
12	5750	..	..	2540	2500	2000	5000	40	..	1515	5925	25	20300	10625	9600	14325	..
13	1470	..	..	3047	1087151	66100	65300	..	27408	20734	36697	115½	1298518	69381	1126870	165848	35100
14	61950	..	..	1140	3000	470000	..	..	4	704	298290	698	93550	415	..	145	..
15	14600	..	752	4807	218700	..	23520	701	129448	3257	9540	..	..	7846	..	1525	490
16	16580	..	450	1536	..	..	27200	89	146880	48879	72050	291	10500	363	..	42	..
17	4210	..	..	13685	..	..	655750	74	294860	16390	50813	8	129050	6293	50000	17	..
18	7285	..	..	5350	59000	1750	..	10	676000	16390	50813	8	129050	6293	50000	800	..
	387087	4787	*6252	80632	3973151	557050	3692117	13454	4837402	134462	629810	1136	3582102	1246355	1353066	196693	53775

* Barrels, salted, total 1,015.

SESSIONAL PAPER No. 22

RECAPITULATION—Concluded.
 RETURN showing the Kinds and Quantities of Fish and Fish Products in the whole Province of Nova Scotia, &c.—Concluded.

COUNTIES.	KINDS OF FISH—Con.																TOTAL VALUE.	Number.			
	Pollock.	Halibut.	Trout.	Shad.	Smelts.	Alewives or gaspereaux.	Bass.	Hels.	Clams.	Oysters.	Flounders.	Tom cod or frost fish.	Squid.	Coarse and mixed fish.	Fish oil.	Fish as bait.			Fish as manure.		
	Cwt.	Lbs.	Lbs.	Brls.	Lbs.	Brls.	Lbs.	Brls.	Brls.	Brls.	Lbs.	Lbs.	Brls.	Brls.	Galls.	Brls.	Brls.	Brls.	\$	cts.	Number.
1 Cape Breton..	5392	87695	1300	.....	21410	103	.....	113	.....	.....	4700	.....	213	84	13722	1986	.....	.....	387,260	00	1
2 Inverness.....	.....	7610	11690	.....	23825	350	.....	315	.....	180	.....	440	4728	4094	14606	7840	.....	.....	311,898	75	2
3 Richmond.....	4442	43280	4375	23	32400	2175	.....	419	.....	141405	.....	31600	725	6637	16978	5200	.....	.....	473,880	04	3
4 Victoria.....	223	14600	700	.....	9700	52	.....	91	.....	170	.....	43900	1677	153	9299	996	.....	.....	127,370	85	4
5 Antigonish.....	.....	.....	1800	.....	11900	74	.....	67	13	69	48510	.....	37	70	1571	1714	.....	656	83,161	00	5
6 Colchester.....	7	1200	7500	2003	22000	450	1400	2	300	239	.....	.....	.....	.....	130	13	100	.....	59,375	00	6
7 Cumberland.....	120	3475	1160	433	71050	542	1000	40	44	1279	.....	41900	3774	6913	32285	75	2581	2400	128,149	00	7
8 Guysborough.....	5292	349000	14630	2	37300	888	4000	405	559	.....	10400	35900	516	420	20508	1931	1650	.....	608,749	00	8
9 Halifax.....	12612	215795	9215	.....	29700	230	.....	102	926	.....	79300	.....	.....	.....	.....	.....	.....	.....	732,678	00	9
10 Hants.....	24	.....	5700	770	1500	360	.....	4	175	.....	2000	1000	.....	.....	.....	4	.....	.....	12,916	00	10
11 Pictou.....	.....	.....	7600	.....	43800	78	.....	107	28	90	.....	690	.....	.....	42	1846	.....	.....	163,112	28	11
12 Annapolis.....	6240	.....	9100	.....	.....	100	700	4	.....	.....	500	800	.....	2000	3400	635	510	.....	133,496	25	12
13 Digby.....	35856	484097	2267	159	35500	690	310	96	341	.....	22525	.....	240	35370	59176	22400	67730	.....	1,246,218	30	13
14 King's.....	461	900	800	255	.....	860	.....	.....	.....	.....	.....	.....	.....	.....	75	520	640	.....	38,379	75	14
15 Lunenburg.....	856	102190	1510	.....	17700	175	.....	166	68	282550	4100	.....	562	5395	191171	3563	652	.....	1,403,791	45	15
16 Queen's.....	257	8700	7100	.....	600	680	.....	27	.....	.....	.....	4900	.....	.....	3525	190	.....	.....	102,301	00	16
17 Shelburne.....	7669	134220	9875	.....	3075	1390	.....	104	.....	.....	2000	.....	.....	.....	23	26165	25579	.....	778,691	50	17
18 Yarmouth.....	13052	20400	9000	.....	12600	2350	.....	175	.....	.....	.....	74115	200	2850	9100	2080	1125	.....	622,574	75	18
Totals.....	98503	1473162	104812	3647	370060	11807	11960	2237	2454	2027	593890	199655	12762	64009	401828	99058	84166	.....	7,347,603	92	.....

RECAPITULATION

OF the Yield and Value of the Fisheries of the **whole** Province of **Nova Scotia** for the Year 1899.

Kinds of Fish.	Quantity.	Rate.	Value.	Total Value.
		\$ cts.	\$ cts.	\$ cts.
Salmon, fresh	Lbs. 387,087	20	77,417 40	
" preserved in cans.....	" 4,787	15	718 05	
" smoked	" 6,252	20	1,250 40	
" pickled.....	Brls. 1,015	15 00	15,225 00	94,610 85
Herring, pickled.....	" 80,632	4 00	322,528 00	
" fresh.....	Lbs. 3,973,151	01	39,731 51	
" smoked	" 557,050	02	11,141 00	373,400 51
Mackerel, fresh.....	" 3,692,117	12	443,054 04	
" salted.....	Brls. 13,454	15 00	201,810 00	644,864 04
Lobsters, preserved in cans.	Lbs. 4,837,402	20	967,480 40	
" fresh in shell.....	Cwt. 134,462	5 00	672,310 00	1,639,790 40
Cod, dried.....	" 629,810	4 00	2,519,240 00	
" tongues and sounds	Brls. 1,136	10 00	11,360 00	2,530,600 00
Haddock, fresh	Lbs. 3,582,102	03	107,463 06	
" dried.....	Cwt. 126,355	3 00	379,065 00	
" smoked finnan haddies.....	Lbs. 1,353,966	06	81,237 96	567,766 02
Hake, dried	Cwt. 196,693	2 25	442,559 25	
" sounds	Lbs. 53,775	50	26,887 50	469,446 75
Pollock.....	Cwt. 98,503	2 00	197,006 00	197,006 00
Halibut.....	Lbs. 1,473,162	10	147,316 20	147,316 20
Trout.....	" 104,812	10	10,481 20	10,481 20
Shad.....	Brls. 3,647	10 00	36,470 00	36,470 00
Smelts.....	Lbs. 376,060	05	18,803 30	18,803 30
Alewives.....	Brls. 11,807	4 00	47,228 00	47,228 00
Bass.....	Lbs. 11,960		1,191 00	1,191 00
Eels.....	Brls. 2,237	10 00	22,370 00	22,370 00
Clams	" 2,454		8,180 00	8,180 00
Oysters.....	" 2,027	4 00	8,108 00	8,108 00
Flounders.....	Lbs. 593,890	05	29,694 50	29,694 50
Tom Cod or frost fish	" 199,655	05	9,982 75	9,982 75
Squid.....	Brls. 12,762	4 00	51,048 00	51,048 00
Coarse and mixed fish.....	" 64,009	2 00	128,018 00	128,018 00
Fish oil.....	Galls. 401,828	30	120,548 40	120,548 40
" as bait.....	Brls. 99,058	1 50	148,587 00	148,587 00
" as manure.....	" 84,166	50	42,083 00	42,083 00
Seal skins.....	No 8	1 25	10 00	10 00
Total for 1899.....				7,347,603 92
" 1898.....				7,226,034 40
Increase.....				121,569 52

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RECAPITULATION

Of the Values of all Fishing Materials in the **whole** Province of **Nova Scotia** for the Year 1899.

Articles.	Value.	Total.
	\$	\$
553 fishing vessels (25,342 tons).....	901,498	
15,366 fishing boats.....	322,437	
75,316 gill-nets (1,961,063 fathoms).....	454,526	
700 seines (69,300 fathoms).....	98,205	
273 trap-nets.....	85,290	
156 weirs.....	21,495	
7,556 trawls.....	84,336	
36,677 hand lines.....	29,232	
368 smelt nets.....	13,230	
247 lobster canneries.....	217,491	2,010,249
681,173 " traps.....	368,903	
232 freezers and ice houses.....	37,717	586,394
4,046 smoke and fish houses.....	159,657	
1,570 piers and wharfs (fishing).....	210,755	
162 tugs or smacks.....	74,523	
2 fish canneries.....	1,500	
		484,152
Total value of fishing capital invested.....		3,080,795

Number of persons employed in the fisheries of **Nova Scotia**, 1899.

Men in fishing vessels.....	5,705
" boats.....	19,466
Persons employed in canneries (lobster).....	7,570
Total.....	32,741

APPENDIX No. 4.

NEW BRUNSWICK.

District No. 1, comprising the county of Charlotte.—*Inspector J. H. Pratt, St. Andrews.*

District No. 2, comprising the counties of Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert.—*Inspector R. A. Chapman, Moncton.*

District No. 3, comprising the counties of St. John, King's, Queen's, Sunbury, York, Carleton and Victoria.—*Inspector H. S. Miles, Oromocto.*

DISTRICT No. 1.

REPORT ON THE FISHERIES OF DISTRICT No. 1, NEW BRUNSWICK,
COMPRISING THE COUNTY OF CHARLOTTE, FOR THE YEAR
1899, BY INSPECTOR JOHN H. PRATT.

ST. ANDREWS, N.B., January 2, 1900.

The Hon. Sir L. H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit herewith my eleventh annual report on the fisheries of District No. 1, New Brunswick, comprising the county of Charlotte, and the lakes forming a portion of the international boundary line separating New Brunswick from the adjoining State of Maine. I also include the several tabulated statements showing the yield and value of the sub-districts, together with a synopsis of the reports of the numerous fisheries officers, which I trust will fully explain to your department the many fishing industries busily occupying the time of the hardy toilers of the sea in this district.

It gives me considerable pleasure to be in a position to report that the last season's catch and value show an increase over 1898 amounting to over \$71,000. This surplus is mostly due to the greatly increased catch of sardine herring by the weirs, which exceeds that of the previous year by 44,021 barrels, aggregating for this class of fish alone 213,921 barrels. Other favouring influences contributed to the above pleasing results, and glancing backward from the threshold of the new year on the results of the past twelve months' operations, it is quite apparent that the fishermen of this district have many causes for thankfulness for the abundant harvest they have reaped from the sea.

I trust I may be pardoned for reiterating the statement made in my last annual report, that in no part of the maritime provinces does the sea yield such a valuable and continuous contribution to the fisherman's wealth as it does here in the swift rushing and treacherous tides of the much dreaded Bay of Fundy.

During the past season I made, as in past years, numerous cruises to the coasts of Nova Scotia, Cape Breton, and Prince Edward Island, and, therefore, was enabled to observe the fisheries of those provinces, and the methods employed in conducting them and it was quite evident to the most ordinary observer that the Bay of Fundy fisher-

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men's proximity to the United States markets, the greater competition among the buyers, the more sheltered fisheries, and the almost continuous fishing of various kinds throughout the whole year, places the fishermen of the bay in a position for the attainment of gain unequalled by those of any other district on the Atlantic Coast of the maritime provinces. Their comfortable and well-furnished homes bear testimony to the foregoing, and very agreeably surprises any stranger who may have the good fortune to visit any of the prosperous fishing villages located on the shores of the Bay of Fundy.

An increased number of sardine herring weirs will also be noticed in the returns for materials. This increase was entirely owing to the strong competition for small herring created by the two wealthy syndicates manufacturing sardines in the adjoining State of Maine, thus ensuring to the weir owners a certain price for their catch, and, as these syndicates employed a number of steamers for boating the catch to Eastport instead of sailing boats as formerly, the sale of all the fish caught was assured. The fishermen owning weirs located at the greatest distance from Eastport, that in years past yielded poor returns on account of the difficulty experienced by the sailing vessels that should purchase their catch landing the same at Eastport in good condition, were agreeably surprised at the financial results from many of those out-of-the-way weirs. Many of those weir men who did not possess sufficient courage to brave the hardships of the Klondyke felt that instead the Klondyke had come to them. It is to be sincerely hoped that the coming season of 1900 will yield those deserving fishermen equally gratifying returns on their ventures.

In order that you may better notice the fluctuations in the values of the annual catch in this district, in may be well to give here the annual value of the same for the past ten years. They are interesting, and to very many persons somewhat surprising:—

Total for	Total for
1890.....\$1,062,756	1895.....\$ 968,203
1891..... 1,279,977	1896..... 1,108,701
1892..... 863,465	1897..... 870,287
1893..... 771,182	1898..... 1,145,361
1894..... 1,118,477	1899..... 1,216,394

An increase of over \$51,000 will be observed in the returns, showing the value of fishing materials used this season over that of 1898, which consisted of a general addition of nearly all kinds to the already large stock of material now used. A couple of schooners and a large number of very fine boats were amongst those additions.

Numerous sloop boats for the carrying of fish and general purposes are being acquired by the fishermen each season, principally by those residing at West Isles and Grand Manan, and really the term yacht would be the most appropriate word to apply to those beautiful sloop boats, they being built with a view to speed and a desire to please the nautical eye, without surrendering too much of their carrying capacity.

One of the sad phases of the life of a fisherman can be noticed in the many homes made sorrowful by frequent visitations of the hand of death. This grim visitor has invaded many former happy homes in this district during the past twelve months, and even since the reciving of the bounty claims at the beginning of November, I find that through death a number of bounty cheques will require to be transferred to the names of the widow or the orphan.

The fishermen now seem to be directing more attention towards preserving fish, and an increased number of kippered herring and finnan haddies are being canned; an increased number of canned scallops and clams are also being put on the market. At a factory erected at Welchpool, Campobello, marine products such as sardines, lobsters and scallops are being hermetically sealed in transparent glass jars, and since being placed on the market have met with well merited encouragement. Our fishermen are awakening to the fact that there is a big market for fish properly cured by canning or otherwise, and their catch will thus yield them better financial returns. This is quite evident to the residents of the island of Grand Manan where several new kippered herring factories have been erected at a cost aggregating about \$7,000, and which packed about 5,000 cases during the past season.

HERRING.

I beg to call your attention to the increased catch during the year just closed of this, the all important fishery of this district. Not only has the catch of small herring for sardine purposes shown an increase, but the larger kind, which were pickled, smoked and kippered, will show an increase in the catch also. Quite a number of new herring weirs were added to the large number already erected, and as a result a successful season has rewarded the fishermen's efforts, and an increased price was received from the United States canning factories. The herring are still plentiful, although year after year the wise prophets that are to be found in each fishing district of this county have been prophesying the total disappearance from those waters of the herring, both large and small, but still the annual catches show that those 'wisemen' are fortunately disappointed in their gloomy predictions. Certainly the schools of herring do not act the same each season, but we are all aware that herring are somewhat irregular in their habits. The catch of the smaller kind alone, which were used for sardines, aggregated 213,921 barrels this season, and their value was \$427,842.

Many people advocate removal of all weirs, and thus prohibit the taking of all small herring for manufacturing into sardines or any other purpose. The value given above for this catch alone will serve to show what a terrible blow this proposition would be to Charlotte County, and how cautiously such a matter should be approached, more especially when it is known that those advocating the prohibiting of the catching of small herring have only unconfirmed theories to warrant them in their assertions.

It might be of interest to state here that the pack of the sardine factories in the adjoining State of Maine during the past year was 1,172,000 cases, being 5,000 cases less than that of last season. It must be borne in mind that in the state of Maine there are about seventy-six sardine factories, a number having been built during the past year, and fifty-six of these factories are located at Eastport, Lubec and vicinity. I may also state that these factories employ nearly nine thousand hands, disperse about \$700,000, and the value of this past season's pack was \$3,516,000.

Although the market for sardine herring does not require more than 1,000,000 cases, the two syndicates controlling these United States factories, glutted the market in their eager competition for business, and accordingly the price per case was not as satisfactory as it might otherwise have been. At present there is good reason to believe that one syndicate will absorb the other and the surviving one will be known as the Sea Coast Packing Company. They will be better able to control the markets, and when I state that these two syndicates have about \$1,500,000 invested in those sardine enterprises, a better idea can be formed of the magnitude of the work being carried on in these waters.

Although the returns for herring show only 7,931 barrels pickled in the whole district, I find that in Eastport and Lubec alone the dealers there put up about 20,000 barrels of pickled herring, which nearly all came from the weirs in this district, especially those located at Grand Manan.

Sardines were first canned at Eastport in 1875, by Julius Wolff, Esq., who erected a small factory. This attempt was a failure, the fish being dried only by the sun. The experiment of frying them in oil was found more satisfactory, several more factories were erected in the following years and their number has gradually increased until there are seventy-six in the state of Maine.

SALMON.

The catch of salmon will show a slight decrease from the previous season's catch, but not sufficient to indicate anything of an alarming nature. The St. Croix is the river where nearly all the salmon are taken in this district and the fisheries officer in charge of that river, Frank Todd, Esq., reports these fish as steadily increasing in numbers, and believes that they will continue to do so while they are so well protected as they are now, and also assisted by the annual planting of fry. The Marine and Fisheries Department appropriated some 400,000 fry this year, but it is a question whether that amount was really placed in the river.

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Salmon have been seen more frequently this season than ever before in the Magaguadavic and Pocologan rivers and there is hardly a doubt that as a result of more vigilant protection by the several officers they are beginning to increase in numbers in the rivers above named. A number of salmon were seen above the fishways at St. George, and there is every indication that salmon are now ascending this river annually in increasing numbers.

LOBSTERS.

I regret to have to report a decrease in the catch of lobsters. There is no doubt whatever that they are becoming scarcer, the number of traps being used is increasing and so is the number of fishermen handling them. Under these conditions no other results can be expected than the gradual disappearance of this valuable shell fish, and eventually a serious and irreparable injury to this fishery will be the result. Of course, there are difficulties in the matter of proper legislation for their efficient protection, opinions are divided on this matter, but it is pleasant to note that now, when it is plain that lobsters are decreasing in numbers while increasing in value, public opinion is in favour of strong protective measures. However, the importance of this matter is now being strongly recognized by your department, and there is no doubt that benefits will be derived from the measures adopted.

COD.

The statistics will show a slight increase over that of last season in the catch of cod. Good prices prevailed during the season, and a ready market was found for the entire yield. This catch would have been greater but for the fact of so many line fishermen having deserted their calling and ventured into weir fishing. Many poor men were sorely disappointed in their experiment, as they did not sufficiently realize the heavy costs and uncertainties of herring weir fishing. The immense schools of dogfish also interfered very much with the cod fishermen and were quite a factor in keeping down the catch.

HAKE.

A decrease will be noticed in the catch of hake of about 2,000 quintals, which was mainly due to the large schools of that scourge to the fishermen, the dogfish. These sea vultures struck into the Bay of Fundy earlier than ever before, they were in greater numbers, and prolonged their stay to an unusual length. The destruction wrought by them on the poor fishermen was great, but there was nothing he could do but gaze on their ravages with the calm air of a philosopher. However, it is pleasant to report that high prices were paid for hake during the year, which made the season's hake fishing a very satisfactory one.

HADDOCK.

About the same catch as last season will be noticed in the returns, and a greatly increased portion were used for finnan haddies. About 316,000 pounds were smoked into haddies, and 24,000 pounds of these haddies were afterwards canned. The manufacture of finnan haddies is becoming quite an industry in this district, which is not very surprising when the quality of these goods is taken into consideration. The increase in the quantity canned this season was double that of 1898. This canning industry affords the fishermen a steady and certain sale for their catch, whilst selling fresh to buyers is always attendant with various uncertainties.

HALIBUT.

A considerable decrease will be noticed in the catch of halibut, but it must not be supposed that this falling off is any evidence that halibut are scarcer, but it is because several fishermen who formerly engaged in this kind of fishing are now embarked in other branches of the fishing industry. On the several grounds, the halibut can be found as plentiful as ever, and no doubt that next season halibut fishing will be resumed with the same energy as in past years.

FISH-WAYS.

The numerous fish-ways in the district are all in an effective condition. The ones located at the mouth of the Magaguadavic River are still in good order, which is mainly located to the good care exercised by the fishery officer there, George Hall, Esq. Should salmon ascend the Magaguadavic River in any numbers it will be found necessary to put a fish-way at the upper falls, but instead of erecting a wooden fish-way as before, one could be blasted out of the rocks at the falls with little expense, thus forming an easy natural pass. This, however, will be a matter for the future consideration of your department, and on which I shall report more fully at a later date. Those on the St. Croix River are well looked after by Officer Todd, and are all in thoroughly good condition, all fish passing through them without experiencing any difficulty.

CAMPOBELLO FISHERY ASSOCIATION'S EXHIBITION.

The annual exhibition and yacht races of the above association were held on Thursday, October 19, at Welshpool, and were very largely attended. Beautiful weather prevailed during the day allowing the land sports to be carried out successfully, and a splendid breeze favoured those who took a pleasure in the sailing races. As directed by your department, I gave what assistance possible to make the exhibition a success, and the president very courteously appointed me on the racing committee as one of the judges, the races being started by the gun of the *Curllew* from a position near the stern. The exhibits of the several kinds of fish were superior to that of previous years and connoisseurs declared they could not be excelled. A large amount of money was awarded in prizes to successful exhibitors, which assists, no doubt, in materially encouraging the exhibitors to take unusual care in the preparation of their fish.

A better class of boats than heretofore competed in the various races and it is quite evident that this annual regatta is educating the fishermen to the fact that good sailing boats are essential for successfully conducting all fishing operations. If all fishing communities were aware of the benefits to be gained by annual fishery exhibition of this nature, they would have but little hesitation in the organising of one of those societies.

A dinner and ball in the Owen Hotel concluded the day's festivities, where over two hundred couples merrily amused themselves, bringing to a close one of those holidays long to be remembered by those who were so fortunate as to be present at this exhibition of the Campobello Fisheries Society.

THE MARINE BIOLOGICAL STATION.

The above named institution temporarily located at St. Andrews, was opened at the beginning of August, and a number of scientific gentlemen, mostly professors from prominent universities began their work there and energetically pursued their researches during the season. They accomplished a considerable amount of valuable work in the study of fish life, and were quite unanimous in the opinion that the waters of this vicinity can furnish the scientist with the greatest variety of specimens of marine life with which to carry on their investigations. This station is constructed with a view of being

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placed on a scow when a new location is desirable, and in this manner to be towed wherever required. A naphtha launch forms part of the station's equipment, and this was kept busy during the season in the gathering of specimens for the scientists' examination. A station of this nature seems to be an absolute necessity in a country possessing the valuable fisheries that Canada has, and is only what other countries, with less valuable fisheries have always possessed.

SYNOPSIS OF FISHERY OFFICERS' REPORTS.

Overseer Fraser, of Grand Manan, reports that the past year has been very satisfactory considering the many complaints of the weir fishermen against the net fishermen for setting their nets too close to the weirs, also, for throwing gurry on the fishing grounds. There were not so very many herring smoked as in 1898, but, many more herring have been packed in barrels, and by comparing the total results, the past year has been very profitable to the large majority of the fishermen. He believes the same quantity of fish, both fresh and manufactured, were exported foreign as last year, say ninety per cent, leaving ten per cent for home consumption. The present year also finds us with four new kippered herring canneries, costing in the aggregate about \$7,000 and manufacturing about 5,000 cases. On account of the small demand for them, the greater part of this output has been stored for future sales. There were some attempts at illegal fishing, although he succeeded eventually in compelling respect for the law. Some stringent measures should be taken to protect the spawning herring, also the throwing of gurry on the fishing grounds. He was estimating the amount of gurry disposed of in the entrance of Grand Harbour and Long Pond last season, as follows, sixty sail of vessels averaging two months time, ten buckets to a barrel, and one barrel each day to a vessel. This makes sixty barrels a day and 3,600 barrels in that vicinity during the two months' fishing. He might possibly overestimate but does not think he is far from being correct, showing the great injury it must be to the fisheries. The catch of cod and pollock was not as big as last year. The statistics of the lobster catch will show a decrease. The catch of herring was up to the average of previous years, and although the fishermen did not smoke as big a quantity as in 1898, they salted more in barrels for purposes of export.

Overseer Campbell, of St. Andrews, reports that line fishing has not been followed as usual, not from any scarcity of fish, but because more attention has been given to weir fishing. There were eleven new weirs erected for the catching of sardine herring, and with very few exceptions all the weirs in the district had a very profitable season. The average value of the catch of each weir was much larger than ever before. The herring schools lay in the St. Croix River this season longer than for some years, and, therefore, the weirs at Mascarene, Latete and Back Bay, did not do as well as in 1898, but the price was much better, averaging \$4.25 per hogshead, while in 1898 the value was less than three dollars. Lobster fishing in Passamaquoddy Bay was the poorest he ever saw, and fewer traps were set and the catch was smaller than ever before. Sometimes fifty traps would be pulled, and not more than five lobsters would reward the fishermen for his labours. This fishery has been getting poorer each year and now bids fair to become almost extinct. He is unaware as to the cause for this unless it is over fishing, and the returns for the men in the district do not represent the catch by any means, as large numbers of traps are set all over the bay by men from Deer Island and the returns for their catch is collected, no doubt, by Officer Lord. There is no regulation for setting the traps, and as these inner waters are not so rough as outside and more easily fished, the traps are put down inside Hardwood Island and along the shore very close together, and it is not very surprising that the catch of lobsters is decreasing. There have been seven schooners taking clams in this vicinity during the past season. They hail mostly from Lockeport, N. S., and require the clams for bait purposes, taking away in all 877 barrels of shelled clams. There was, besides, shipped to Boston in the shell, 1,700 barrels of clams during the past season. The line fishing has not been as good as in 1898, due mainly, on account of more attention being given

to weir fishing. This season's body of herring seems to be as large as ever and there were fewer britt, or young herring, than usual. During the latter part of the season the run of fish was mostly too large for canning purposes, and some old fishermen assert that this is owing to the small ones having a chance to grow by reason of the fish becoming scarcer owing to weir fishing. The trout fishing has been as good as usual and less violations of the law, prohibiting their being taken through the ice. Guardian Hall reports salmon having been seen in the St. George River but none taken by fishermen. He does not think that any of the salmon are able to get over the falls at the village, since the wing dam was carried away. In Pocologan River where salmon fry were placed some twelve years since, those fish having become quite plentiful, and, no doubt, many have been taken by illegal means during the season. This poaching is carried on in the pools located in the part of the country not much settled and can only be stopped by having the river patrolled by a guardian during the season.

The closed seasons have been fairly well observed, and few violations occurred until the last of October. At that time a large number of fishermen who had been 'torching' and seining on the American side of the St. Croix River, followed the fish into our waters, and for a short time were very bold about St. Andrews and Chamcook, and, in fact, over most of my district. The names and numbers of the vessels were painted out, and in the inky darkness it was hard to get the names of the parties or to make seizures without help. Warden French, of the United States staff of officers connected with their Fishery Bureau, with the assistance of a steam boat, made it very warm for those poachers whilst operating on the American side, and eventually succeeded in driving them over to the Canadian side. It is pretty difficult for two or three men, without arms or help, to prevent illegal work over bays, rivers and inlets, representing a shore line of more than one hundred miles. However, we will endeavour to procure the names of those parties who were fishing illegally and have examples made of them.

Guardian MacLean, of Latete, reports fishing for all kinds of line fish was good during the season, but the catch in this district will be found to be small, as quite a number of our line fishermen have deserted it for the weir fishing, which pays much better. The prices paid for line fish this season have been the best for the last ten years or more. The catch of lobsters will be found the same as last year, and the prices paid were very good. The catch of sardine herring was not as large as in 1898, but a good average price was received for all kinds of herring.

Guardian Cross, of Beaver Harbour, states that the fishing industry as a whole has not been as good as last season. More of the fishermen are engaged at weir fishing this year than ever before. The herring have run quite large during the season, and there might have been a great many taken if they had been fished for. The catch of small herring for sardines will show an increase, and more of them were canned here than during previous years. The American Syndicate, running steamers buying sardines here, gave the fishermen better opportunities for selling, and the whole catch was disposed of satisfactorily. The catch of line fish was not so good as the previous year. Not that there was any scarcity of fish, but many of the former line fishermen had embarked in weir fishing. The fishing for scallops and canning them is giving employment to quite a number of men this season, in fact, the demand for canned scallops is increasing each year. The catch of lobsters will show a decrease this year, and they are, no doubt, becoming scarcer, which is entirely due to over fishing. The close seasons have been strictly observed and the saw-dust regulations have been obeyed.

Guardian Hall, the officer in charge of the fisheries at the Lower Falls, on the *Magaguadavic River*, reports as follows:—The middle and upper fish-ways are in as good condition as when first put up, the lower one, however, is somewhat out of repair. Now that the cross dam is gone, I do not see any necessity for it, the salmon being able to ascend quite as readily without its assistance. Quite a number of salmon have been seen in the river above the falls as far up as Bonny River, which is six miles above the fish-ways. They have also been seen in Lake Utopia, but none have as yet been taken with a fly. There is not the slightest doubt, that with proper protection, this river and tributaries can be made as good as any in the province.

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Guardian Patrick McLaughlin, the officer in charge of the lakes in the vicinity of St. George, states, he has frequently visited Utopia, Mill and Trout Lakes, and prevented, to a large extent, illegal fishing. He also visited Pocologan River twice during the season, and found that there had been considerable illegal fishing. The river was full of salmon in the early part of the season and it is pretty hard to prevent poaching unless an officer would patrol the river about three times a week, during the season. He believes that if the salmon were well protected in the Pocologan River it would soon become one of the best salmon rivers in the province of New Brunswick. He would estimate that the catch of trout in his district would be about 6,000 pounds.

Guardian Conrad, who has control of the fisheries on the *Chiputneticook Lakes*, reports that fishing has been very quiet during the past season, there not being more than a half a car load shipped, to the United States. There has been very little poaching carried on. On April 4 he found a net set under the ice which he destroyed, not being able to get it up. On October 10 he seized and destroyed two other nets for which he could find no owners. White perch are becoming very numerous in the lake, and pickerel, landlock salmon and trout, are increasing in numbers. An increased number of sportsmen visited this district during the fishing season, and seemed to be quite well pleased with the sport obtained.

Overseer Todd, the officer in charge of the important salmon fisheries of the *S. Croix River* says, the catch of salmon in my district will be about the same as last year, they are steadily increasing, and will continue to do so under the present efficient protection, and if also assisted by the planting of young fish in the river. The department allowed this river during the season some 400,000 fry, and if this number was really planted each year wonderful results would surely follow. Salmon were taken with the fly during the season about four miles below Vansboro, which is good evidence that these fish are increasing in a satisfactory manner. All the fish-ways on the river are in thoroughly good repair with the exception of the one at Broad's dam, on the Dennis stream. This fish-way should be put in good order before the alewives ascend at the beginning of May, and I do not think you will have any trouble when you notify the owners. Numerous complaints have been made with reference to the deleterious matter flowing into the river from the cotton mills dye house, which, however, I will leave in your hands for what ever action is necessary. I regret to say that poachers still exist along the river, and at every opportunity that offers, endeavour to net salmon or dip them at the fish-ways. However, through the unceasing vigilance of my two officers, Messrs. Glass and Berry, we were able to frustrate every attempt made at illegal fishing. Some attempts were made by poachers on the American side of the river also, but the United States officer on duty there, Albert French, Esq., of Calais, promptly suppressed the poaching at its commencement.

Overseer Lord, of West Isles, in a very full and comprehensive report states:—The season as a whole was a little more prosperous than last year, although, it was not what might be termed an average year. The herring struck in early in the spring, but they did not remain very long. There were no fish at all during the summer, and they were quite scarce in the fall, but the school that came in then was not nearly so large as in former years, in fact, our fall school has been missing for the last few years. The catch of sardine herring exceeded that of last year, but herring suitable for smoking were quite scarce, the few that were taken being sold fresh to Eastport buyers. Very few herring were taken in the nets, and a greater part of the pickled herring shown in my report came from Letang and Grand Manan. The prices paid for sardine herring were considerably lower than last year, averaging \$1 per barrel, against \$1.50 received last year. However, on account of a larger catch this season, very little difference appears in the fishermen's receipts. Hake show a small increase both in the catch and price, but they are not fished for to any extent, some few being taken with the haddock. Quite a decrease will be noticed in the haddock catch, not more than one-half of what was taken last year, with the prices considerably higher. The catch of lobsters are up to the average, with the prices about the same as previous season. A large increase will be noticed in the catch of cod, about four times as large as last year, and a fair average price being paid throughout. Pollock were very plenti-

ful during the season, and my returns will show almost double the catch of last year. There was a good sale for them fresh, and they now command a high price. Owing to the bright prospects showing at present for the future of the sardine industry, a large number of applications for the building of new weirs next season are constantly arriving at this office. Hand-line fishing has been very good this year.

Overseer Charles Savage, of Campobello, states that herring generally were scarcer than in any previous year. Very small quantities were smoked and large herring have almost wholly disappeared from these waters, and this he attributes to the wholesale destruction of small fish for sardine purposes. The sardine herring were scarcer than in any previous year, prices ruled high though, and weir fishing generally, in this district, had a very unprofitable year. A decrease will be noticed in the returns for the catch of cod. Pollock were plentiful, but did not bite well, consequently the catch was below the average. There was a fair catch of hake and haddock, and for some unknown reason, those nuisances to fishermen the dogfish, struck in earlier, stayed longer, and were more numerous than in any previous year. High prices were paid for all kinds of fish, and it can be safely said that line fishing was fairly profitable. More lobsters were caught than last season, which is attributed to unusually good spring weather and the fishermen using more traps. Good prices were paid, especially by the canneries. The different close seasons were well observed.

Chief Boatman, Silas Mitchell, patrolling Coffills Ledge, in Quoddy River, opposite Eastport, states that he carefully patrolled the river with an assistant, and thoroughly prevented any Maine boats from crossing the boundary line and fishing in Canadian waters. There was a large fleet of boats fishing during the summer season on the United States side of the line, that could be seen daily hovering near the better fishing grounds in our waters. The catch of pollock on the river was not as good as in 1898, owing to their schooling in large bodies in shallow waters they would not take the hook. Large hauls were made in some of the weirs. There is no doubt that pollock in Quoddy River is on the increase. The catch of haddock was small when compared with that of the last two years, not more than half a catch was made on the trawl. There have been larger catches of codfish during 1899 than for the last three years, more especially large sized cod. The catch of sardine herring in Lubec Narrows, Herring Cove, Friars Bay, and Harbour DeLute, was small when compared with that of 1898. Large net herring, known as the Quoddy River herring, were scarcer than they have been for many years. The lobster catch was quite small in that part of the river that I patrolled, the close seasons were fairly well observed, and very little illegal fishing was attempted. Very few United States fishing schooners came to Eastport during the past year seeking bait, although, as a rule, a large number come every year when bait is scarce to the westward. Although admirably located to observe those vessels coming to Eastport, for bait, he only noticed two fishing schooners coming for this purpose during the year, the 'Eddie Davidson' and the 'Orpheus,' both of Gloucester, Mass. They took about 50 barrels of herring each.

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

JOHN H. PRATT,
Inspector of Fisheries.

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DISTRICT No. 2.

REPORT ON THE FISHERIES OF DISTRICT No. 2, COMPRISING THE EASTERN COUNTIES OF NEW BRUNSWICK FOR THE YEAR 1899, BY INSPECTOR R. A. CHAPMAN.

MONCTON, N.B., January 2, 1900.

Hon. SIR LOUIS H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries,

SIR,—I have the honour to submit my report of the fisheries in District No. 2, New Brunswick, comprising Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert counties, for the year 1899, with tabulated statements giving the products and values by districts and counties, together with an estimate of the capital employed in the prosecution of these fisheries.

Returns referred to show an increase in the aggregate value of fish taken over last year of \$167,609, the gross values for the two years being—

For 1898.....	\$ 2,427,415
“ 1899	2,595,024

which fully confirms my preliminary report, as do also the details of each kind of fish caught to which I would beg now briefly to refer.

SALMON.

While the total catch is somewhat under that of last year, caused by the small number taken on the Restigouche River, and waters leading thereto, the fishing was much better on the Miramichi than in 1898, the fly-fishing was also reported good on the streams leading into this river, and all the streams large and small were well stocked during the spawning time last fall. Many of the fishermen urge that the Miramichi hatchery should be supplied with eggs from fish caught in the summer, and pooled, as they contend that those taken from fish caught in the fall, being from a different run, do no good whatever towards increasing summer fishing. This matter is certainly well worth carefully looking into.

SHAD.

I have so often referred to the necessity of a close term for those fish during the spawning season, that I feel it is little use to repeat the reasons therefor, so often stated and discussed.

SMELTS.

At the opening of the season for bag-netting these fish, for past two years, the weather has been very unfavourable and considerable quantities have consequently been lost, or shipped and put on the market in bad condition, therefore many maintain that it would be better to have no fixed date for beginning, but leave the matter with the inspector to allow fishing to commence, whenever the weather permits, be it before or after the 1st of December. Notwithstanding these unfavourable circumstances, large quantities were taken last year, and they are increasing rather than diminishing in our rivers and bays, and proving a great boon to the working people of our country. Instead of extend-

ing the season each year it would be much better to have the time fixed at say February 20 to 25, and then fishermen and dealers would both know just what to depend upon.

BASS.

The catch of this valuable fish is smaller than last year, and I am afraid will continue to be less from year to year, unless hook and line fishing is prohibited at least in the spring while spawning. They grow slow, it consequently takes them a good many years to attain a large size.

HERRING.

While immense quantities of spring herring were taken for food, bait, &c., the fishing on the banks between Caraquet and Miscou in August and September, was not quite as good as usual.

COD.

The catch of cod was large last year, and prices very high, which will stimulate this fishery and largely increase the number of vessels and boats engaged in it, the low prices prevailing in 1896 and 1897 made the business unprofitable, but confidence is now fully restored, and it certainly appears as if the production might be increased manifold.

MACKEREL.

Owing to the large preparations in Kent County with boats, nets, tugs, &c., there is a slight increase in the catch of this fine fish over that of the previous year, but everywhere else on our coasts very few have been taken.

OYSTERS.

While the quantity of really good oysters raked in Buctouche, Cocagne, &c., has been quite up to the average, the take in Miramichi River, Bay du Vin, &c., where most of them are of inferior quality, has been much smaller, more, I believe, owing to want of active demand than from real scarcity.

CLAMS.

A market having been opened in the United States for hard shell clams (cohogs), large quantities of them have been raked at Buctouche and Cocagne, carried by boats to Pointe du Chêne, where they are shipped by the carload. This gives the local officers considerable trouble to prevent oysters being taken by those engaged in the clam fishing.

LOBSTERS.

With the number of traps largely increased the pack is a trifle larger than last year, but less almost everywhere except in the narrow part of the Straits of Northumberland between Chockpish, in Kent County, and the Nova Scotia boundary, and especially from Cape Bald to Cape Tormentine inclusive, where it has very largely increased, the output on some thirty miles of coast amounting to about \$150,000, but whether this is not at the expense of future fish remains to be seen, though certainly the season that suits some other parts of the coast does not appear to answer for this. I would like much to have seen fall fishing tried everywhere, which would have given the female fish a chance to spawn unmolested, and I believe to preserve this valuable fishery it may yet have to be tried. In this connection it is believed by some that the large

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increase of catch in eastern parts of the straits is caused by the fry set afloat from the Pictou lobster hatchery during recent years, and urge that one be established at Shemogue in the county of Westmorland, where on the New Brunswick side alone there are upwards of sixty factories within twenty miles.

I have reports from very few of the local officers, and no facts contained in those received not fully covered by my own report.

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

R. A. CHAPMAN,
Inspector.

DISTRICT No. 3.

REPORT OF THE FISHERIES OF DISTRICT No. 3, OF NEW BRUNSWICK, COMPRISING THE COUNTIES OF ST. JOHN, KINGS QUEENS SUNBURY. YORK, CARLETON AND VICTORIA, FOR THE YEAR 1899, BY INSPECTOR H. S. MILES.

OROMCTO, January 3 1900.

The Honourable Sir L. H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries,

SIR,—I am pleased in submitting my report on the catch of fish in this district to be able to state that there is an improvement in the yield from year to year with encouraging and abundant evidence of future increase, resulting largely from the successful work of your department in maintaining an efficient and well equipped hatchery in this district, the benefits of which to the general fishing industry are incalculable, and far reaching, affecting as they do not only the catch in the streams but also that of the harbour and bay.

The estimated value of the catch for the season just closed is \$308,607., which when compared with the value of the catch for 1898, \$276,580., shows an increase of \$32,027.

SALMON.

In the bay the fishing, owing to unusually bad weather, was more difficult and less remunerative than on the clear white bosom of the inner calm of the harbour. The late June freshet was most favourable to the weir owners, and a very marked increase resulted. No less than 700 salmon were placed in the fish pond in Carleton, St. John. In the months of October and November they were stripped and returned to the sea, and were not counted in the statistical returns.

SHAD.

An improvement is shown in this fishery as compared with other years, still there is no doubt that the supply from over fishing has been depleted. The scarcity enhances the value with the result that more men and more boats are engaged, and had we not something to hope for from the artificial hatching and protection of shad by the United States Commissions of Fisheries we might fear an extermination of this delicious fish.

ALEWIVES.

The St. John River counties show in the returns a marked increase in the catch of this fish, with about the usual quantity taken in the harbour.

LOBSTERS

Are overfished all along the coast from Lepreaux to St. Martins, consequently the result is that it takes more traps, more men and more area each year to keep up the general average yield, for while the supply is annually diminishing the demand is steadily on the increase, and this year an exceptionally large catch was taken.

SARDINES.

The demand for this fish has been very good this year and larger catches than usual have been taken. They are excellent lobster bait and a great many were used for that purpose. The surplus supply was disposed of at the L'Etang Packing Factory.

TROUT.

Owing to the fact that very few trout are caught for market, it is quite impossible to get even a fair estimate of the actual catch, still it is by no means correct to suppose that this fish is of the least important of any in the list. All our lakes, rivers and streams abound in trout, which are only caught by hook and line, and very largely by wealthy sportsmen, and the money spent by them in various ways while in pursuit of this sport is considerable.

HAKE AND HADDOCK.

These fish frequent the harbour at St. John where they are in great demand for home consumption, so good prices were readily obtained. They are caught by trawling, &c.

HERRING.

Packers admit that it has been an extraordinary season for obtaining high prices for herring and the supply was far below the demand. Less than usual were used as bait and more as food.

STURGEON

Were so overfished before good protection was afforded them that they are still a minus quantity and few are taken. The high price (\$15) of license is quite a protection still and may be attended by most beneficial results.

BASS.

These fish are wholly confined to the waters of Bellisle Bay in King's County, and like the sturgeon, have been overfished. However, some thirty licenses have been issued this season, and the fishermen have had fair luck.

Synopsis of Overseers' reports.

Overseer Robert Orr of York Co., reports an entire devotion of all his time to the careful watching of all rivers and lakes in his district with a view to strictly enforcing the fishery laws and regulations. One case of an attempt to drift in non tidal waters

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was stopped. He spent the greater part of his time in the south west branch of the Miramichi River, it being the most important fishing grounds in his district. He was assisted by his guardians, otherwise much illegal fishing would have been done. The inspector spent nearly two weeks on the river last summer and went up on the south-west branch as far as he could in a canoe and on the north branch as far as 'Flannagan's Boggan.' The grilse ascended the river all through the summer in large quantities, and after August 15, more salmon were seen than there had been for the last five years. Shad have not been so plentiful for ten years as they have been this season. While on duty he saw several sturgeon in the St. John River.

Overseer O'Brien, St. John Co., reports a very successful catch of all kinds of fish with a marked increase in live fish, sardines, lobsters, and salmon. He had the usual difficulty in enforcing the law and several prosecutions resulted, particularly from the non observance of the Sunday close time.

Overseer Leonard Wilson, of Victoria and Madawaska Counties, reports a successful fishing season in his district. Guardians were on duty to enforce the law, and poachers did not have a chance to do any effective work. In both counties trout and whitefish abound in all the lakes, rivers and streams. Salmon also are plentiful. The fish-way which was put in the dam at Plaster Rock on the Tobique River is not satisfactory. Some changes will be made, so that the trip can be made comparatively easy. No angling should be allowed in the Tobique River for a distance of one half mile below dam and fish-way.

Overseer Isaac J. Hetherington, of Queen's County, reports an average catch in alewives, shad and pickerel, an increase in trout and a decrease in salmon. He found the fishermen most unwilling to give statistics of their catch. The law and regulations were well observed.

King's County (note by Inspector). I have given this county what supervision I could, as I have no overseer in the district. According to instructions received from you last September, I appointed some sixteen special guardians in the several parishes in the county. I may say that Miles G. Jenkins, a special guardian on Bellisle has already rendered good service, aiding me very much in the bass fishing. I might also name Guardian Rickenson, same district.

Carleton County (Inspector). I have no overseer in this county, but the usual number of guardians were employed, viz., one on Maduxnakeag River, two on the St. John River, and one on S. W. Miramichi River, and north branch of the same river. That last named guardian comes under the supervision of Robt. Orr, overseer for York County. Regulations were well observed, and no complaints were made. The dam in Maduxnakeag River has been greatly damaged and there is now a free pass for fish. The fish ladder which was built a few years ago on the stream, is in good order, but has been dry since the damage to the dam. The fish ascend the river instead.

Cecil F. McLean, of Sunbury County, reports a marked increase in the run of alewives, but did not last as long. Eighty per cent of the catch was sold in St. John, the balance used for home consumption. Shad, salmon and pickerel, all up to the average. Pickerel fishermen are now using a larger mesh and are now taking a larger fish, which are bringing a better price in the United States market. I cannot too strongly recommend a fish ladder in the Smith dam, on the Oromocto River. The old fish-way in that dam was never any good. No fish ever went through it.

Respectfully submitted.

Your obedient servant,

H. S. MILES,
Inspector.

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RETURN showing the Kinds and Quantities of Fish, &c.—New Brunswick—Continued.

Number.	DISTRICTS.	KINDS OF FISH.														Number.					
		Salmon, fresh, lbs.	Squid, brls.	Herring, salted, brls.	Herring, fresh and frozen, lbs.	Herring, kippered in cans, lbs.	Herring, kippered (chickens), lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, frozen, lbs.	Clams, preserved, cans.	Clams, shelled, brls.		Clams, in shell, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked, Finnan haddies, lbs.	Haddock, preserved, cans.
<i>Charlotte County.</i>																					
1	* Lepreaux to L'Etang.	2000	.....	550	.....	103200	15000	2500	.....	32304	5575	240	.....	396000	890	.....	2000	500	.....	24000	.....
2	L'Etang to St. George.	.....	.....	8	.....	.....	.....	.....	.....	636	602	.....	.....	.....	.....	.....	25100	.....	.....	.....	.....
3	St. George to St. Stephen.	150	.....	1020	.....	.....	.....	36500	1050	.....	203	350	.....	.....	952	1737	180000	325	300000	.....	.....
4	St. George and vicinity.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	St. Stephen and vicinity.	750	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	Grand Manan.	.....	.....	5038	20130000	246000	.....	8587000	.....	43968	4070	1035	100000	.....	.....	.....	.....	450	14000	.....	.....
7	Campobello.	.....	.....	160	1054	.....	.....	28775	.....	29424	441	509	.....	.....	.....	.....	373900	.....	1850	.....	.....
8	West Isles.	.....	.....	261	.....	.....	.....	15000	.....	.....	200	274	.....	.....	.....	.....	200000	.....	200	.....	.....
Totals.		2900	160	7931	20130000	349200	15000	8669775	1050	105696	11125	5010	100000	39600	1842	1737	781000	1255	316050	24000

* In No. 1 include 25,000 cans scallop and 24,000 lbs. fresh scallop.

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RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 1, New Brunswick, for the Year 1899.

	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, fresh, in ice.	Lbs. 2,900	0	20	580	00
Scallops, preserved	Cans. 25,000	0	15	3,750	00
" fresh	Lbs. 2,400	0	05	120	00
Herring, pickled	Brls. 7,931	4	00	31,724	00
" fresh or frozen.	Lbs. 20,130,000	0	01	201,300	00
" smoked	" 8,669,775	0	02	173,395	50
" kippered	Cans. 349,200	0	10	34,920	00
" (chickens).	Lbs. 15,000	0	08	1,200	00
Mackerel, fresh	" 1,050	0	12	126	00
Lobsters, canned	" 105,696	0	20	21,139	20
" fresh	Cwt. 11,125	5	00	55,625	00
Cod, dried.	" 5,010	4	00	20,040	00
" fresh or frozen.	Lbs. 100,000	0	04	4,000	00
Clams, in shell.	Brls. 1,737	1	00	1,737	00
" shelled.	" 1,842	7	00	12,894	00
" preserved.	Cans. 39,600	0	10	3,960	00
Haddock, fresh	Lbs. 781,000	0	03	23,430	00
" dried	Cwt. 1,255	3	00	3,765	00
Finnan haddies, smoked.	Lbs. 316,050	0	06	18,963	00
" " canned.	Cans. 24,000	0	10	2,400	00
Hake, dried.	Cwt. 14,397	2	25	32,393	25
" sounds	Lbs. 10,551	0	50	5,275	50
Pollock, dried.	Cwt. 22,980	2	00	45,960	00
Halibut, fresh.	Lbs. 20,000	0	10	2,000	00
Trout "	" 10,500	0	10	1,050	00
Smelts "	" 11,190	0	05	555	00
Alewives, pickled	Brls. 262	4	00	1,048	00
Pickarel, fresh	Lbs. 3,000	0	05	150	00
Sardines "	Brls. 213,921	2	00	427,842	00
" preserved.	Cans. 1,005,000	0	05	50,250	00
Flounders, fresh	Lbs. 7,900	0	05	395	00
Tom cod or frost fish	" 1,100	0	05	55	00
Squid.	Brls. 160	4	00	640	00
Coarse and mixed fish	" 125	2	00	250	00
Fish oil.	Galls. 27,770	0	30	8,331	00
Dulse	Lbs. 75,650	0	06	4,503	00
Fish used as bait.	Brls. 11,295	1	50	16,942	00
" manure.	" 7,030	0	50	3,515	00
Seal skins.	No. 9	4	00	36	00
Total value of catch for 1899.				1,216,259	95
" " 1898.				1,145,361	77
Increase during 1899.				71,898	18

NUMBER and Value of Vessels, Boats, Nets, Weirs, etc., engaged in the Fisheries of District No. 1, New Brunswick, for the Year 1899.

Material.	Value.	Material.	Value.
	\$ cts.		
50 vessels (tonnage 936).	18,950 00	239 piers and wharfs.	40,625 00
1,075 boats.	90,442 00	11 tugs and smacks.	9,700 00
668 gill-nets (17,962 fathoms).. . . .	5,970 00	5 sardine factories.	41,000 00
322 seines (9,379 fathoms).	21,636 00	4 fish curing factories.	7,000 00
611 trawls	5,545 00	80 weir scows	4,000 00
344 weirs.	142,850 00	55 pile drivers	4,500 00
5 smelt nets	32 00	25 fish freezers.	2,800 00
1,290 hand lines	786 00	2 clam canneries.	600 00
7 lobster canneries	16,400 00	1 fish guano factory	5,000 00
17,702 " traps	16,097 00	Total value of material.	583,788 00
7 freezers and ice-houses.	15,800 00		
749 smoke and fish-houses	134,055 00		

NEW BRUNSWICK—District No. 2.
 RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., in the District No. 2, Province of New Brunswick, for the Year 1899.

Number.	FISHING VESSELS AND BOATS.										FISHING GEAR OR MATERIALS.							
	Vessels.				Boats.			Gill Nets.			Trawls.		Smelt Nets.		Hand Lines.			
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		
DISTRICTS.																		
<i>Restigouche County.</i>																		
1	Above Dalhousie	28	500	5	36	700	50	35	7500	7000	200	10000	200	10000	1	200		
2	Below Dalhousie	1	500	5	190	4000	350	86	18200	20000	24	1200	24	1200	2	1200		
	Totals	1	500	5	226	4700	400	121	25700	27000	224	11200	224	11200				
<i>Gloucester County.</i>																		
1	Beresford and part of Bathurst	1412	51000	500	415	9000	800	650	60000	40000	20	100	20	100	1	200		
2	Carsquet, New Bandon and part of Bathurst	220	8500	80	330	16500	1150	1800	66000	37500	126	500	77	3200	2	1000		
3	Saumarez, Inkerman and Shippegan mainland	61	710	32000	230	440	18500	550	25000	7800	40	200	35	1300	3	500		
4	Shippegan and Miscou Islands	208	2342	91500	810	1745	50200	3290	235000	117300	200	900	297	10000	4	500		
	Totals																	
<i>Northumberland County.</i>																		
1	Negusc, etc.	39	1500	11	200	7000	250	800	50000	45000	10	150	230	14500	1	200		
2	Bay du Vin, &c.	1	400	3	220	4200	550	800	65000	60000	200	9000	200	9000	2	150		
3	Chatham, &c.				160	4500	160	220	40000	35000	370	22600	370	22600	3	25		
4	South-west and North-west Miramichi Rivers.				110	1500	110	300	13000	7000					4			
	Totals	4	54	1900	14	690	22200	1070	168000	147000	10	150	800	45500		375		

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	1	2	3		1	2	3	4		1	2	3	4		1	2	3	4	
<i>Kent County.</i>																			
1 Richibucto, St. Louis, Carleton, &c.	1	20	500	3	315	11500	550	2700	110000	23500	10	400	355	14200	450	200			
2 Buctouche, &c.					500	15000	800	500	44000	16000			258	12000					
3 Cocagne, &c.					300	9500	500	300	24000	8000			65	3000					
Totals	1	20	500	3	1115	36000	1850	3500	178000	47500	10	400	678	29200	450	200			
<i>Westmorland County.</i>																			
1 Shediac, Moncton and Salisbury					360	12000	720	680	30000	13000	5	100	125	6000	100	40			
2 Botsford					355	9500	750	400	10500	4700			55	2000	40	20			
3 Sackville and Westmorland					45	1200	70	230	8500	3000			45	1800					
4 Dorchester					33	2100	66	210	8600	3500									
Totals					793	24800	1606	1520	63600	24200	5	100	225	9800	140	60			
<i>Albert County in all</i>																			
1					4	200	8	10	1800	1000									
Totals District No. 2.	213	2444	94400	832	4573	138100	8174	11171	672100	364000	225	1550	2224	105700	4455	2635			

RETURN showing the Quantity and Value of Fish, &c.—New Brunswick—Continued.

DISTRICTS.	KINDS OF FISH.													Number.							
	Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, dried, cwt.	Hake, dried, cwt.		Hake sounds, lbs.	Pollock, cwt.	Hallbut, lbs.	Trout, lbs.	Shad, brls.		
<i>Restigouche County.</i>																					
1 Above Dalhousie.....	25000	.....	1400	3000	.....	.....	.....	26000	90	140	.....	.....	.....	.....	.....	.....	7500	.....	1
2 Below Dalhousie.....	115000	.....	.....	.....	.....	.....	.....	.....	130	.....	.....	.....	.....	.....	.....	.....	3000	.....	2
Totals.....	140000	.....	1400	3000	.....	.....	26000	220	140	.....	.....	.....	.....	.....	.....	10500	.....	.....	.....
<i>Gloucester County.</i>																					
1 Beresford and part of Bathurst.....	65000	200	24500	50000	4000	1000	24000	130	1750	.....	.....	200	.....	.....	.....	.....	6000	.....	1
2 Caraquet, New Brandon and part of Bathurst.....	261000	.....	40000	40000	6000	12000	200500	200	46000	50	500	500	1000	.....	.....	25000	12000	.....	2
3 Saumarez, Inkerman and Shippegan mainland.....	32000	.....	8500	50000	10000	10000	106200	180	8150	30	.....	2000	4000	.....	.....	10000	6000	30	3
4 Shippegan and Miscou Islands.....	.....	8000	10000	10000	10000	6000	356000	140	20500	50	.....	1600	3000	.....	.....	12000	1000	.....	4
Totals.....	358000	8200	83000	150000	30000	29000	686700	650	70400	130	500	4300	7000	.....	.....	47000	25000	30	.....	
<i>Northumberland County.</i>																					
1 Neguac, &c.....	90000	.....	5000	10000	10000	5000	50000	120	1500	.....	.....	100	100	.....	.....	2000	6000	.....	1
2 Bay du Vin, &c.....	95000	.....	3000	.....	.....	40000	57200	80	900	.....	.....	200	.....	.....	1000	1000	100	.....	2
3 Chatham, &c.....	100000	20	1000	150	5000	500	3	
4 South-west and North-west Miramichi Rivers.....	85000	17000	1000	4
Totals.....	370000	8020	11000	10000	45000	107200	200	1850	100	300	3000	29000	1600		

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	1	2	3		1	2	3	4	1							
<i>Kent County.</i>																
1 Richibucto, St. Louis, Carleton, &c.....	19800	15400	30000	2400000	40	2201000	250	1810	6	200	1480	2140	2400	12500	130	
2 Buctouche, &c.....	.....	11800	10000	2000	.....	144510	150	100	.....	.....	240	500	.....	2500	.....
3 Cocagne, &c.....	.....	4000	10000	1000	.....	78500	100	100	.....	.....	60	.....	.....	1500	.....
Totals	19800	31200	50000	243000	40	443110	500	2010	6	200	1780	2640	2400	16500	130	
<i>Westmorland County.</i>																
1 Shediac, Moncton and Salisbury.....	2800	38000	.....	5000	.....	278400	250	60	.....	.....	.....	20	.....	5700	.....
2 Botsford . . . . .	.....	20000	10000	2000	.....	530000	1000	50	.....	.....	.....	.....	.....	2000	150
3 Sackville and Westmorland.....	3200	2000	40000	5000	400	.....	40	50	.....	.....	.....	20	.....	2000	550
4 Dorchester.....	3500	100	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	1000	1650
Totals	9500	60100	50000	7400	.....	808400	1290	170	.....	.....	.....	40	.....	10700	2850
<i>Albert County in all.</i>																
1	3500	300	2000	.....	.....	.....	.....	100	.....	.....	40	.....	.....	8500	300
Totals	900800	184020	266000	90000	324400	2071410	2860	80670	186	800	6420	9640	40	52400	100300	4410

RETURN showing the Quantity and Value of Fish, &c.—New Brunswick—Continued.

DISTRICTS.	KINDS OF FISH.												TOTAL VALUE OF ALL FISH.	Number.			
	Smelts, lbs.	Alwives or Caspereau, lbs.	Bass, lbs.	Clams, lbs.	Eels, lbs.	Sardines, cans.	Oysters, brls.	Flounders, lbs.	Tom Cod or Frost fish, lbs.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.			Fish as manure, brls.	Seal skins, No.	
<i>Restigouche County.</i>																	
1 Above Dalhousie.....	477200				35			30000	20000	80						33,070 00	1
2 Below Dalhousie.....	120000				45			3000	2500			600	120			43,025 00	2
Totals.....	597200				80			33000	22500	80		600	120			76,095 00	
<i>Gloucester County.</i>																	
1 Beresford and part of Bathurst.....	2000		500	10	30			10000	5000		350	1800	10000			134,255 00	1
2 Caraquet, New Bandon and part of Bathurst.....	530000		20000	1000	350			10000	150000		16000	10000	18000	8		522,635 00	2
3 Saumarez, Inkerman and Shippegan mainland.....	385000	1300	8000	200	200		70	4000	10000	500	2000	1000	20			139,435 00	3
4 Shippegan and Miscou Islands.....	225000		6500	90	100			4000	5000	300	6000	6000	12			234,215 00	4
Totals.....	1142000	1300	35000	1300	650		1070	28000	170000	800	24350	22300	35000	40		1,030,660 00	
<i>Northumberland County.</i>																	
1 N'eguac, &c.....	600000	150	30000	300	20			4000	20000		400	2000	4000			107,545 00	1
2 Bay du Vin, &c.....	650000	100	18000	50	20			3000	30000			3000	5000			109,740 00	2
3 Chatham, &c.....	1500000	1350	50000	50	30	256000	4000	20000	1100000				3000			198,290 00	3
4 South-west and North-west Miramichi Rivers.....		500	165000		300											50,200 00	4
Totals.....	2750000	2100	263000	400	370	256000	10500	27000	1150000		400	5000	12000			465,775 00	

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		Kent County.																				
		1	2	3																		
1	Richibucto, St. Louis, Carleton, &c.	960000	1885	18600	200	480	720	29500	140000	380	1560	3000	2800	12	286,930 00							
2	Buctouche, &c.	520000	600	800	8200	150	3200	.....	120000	1090	180	2800	6000	4	153,071 00						
3	Cocagne, &c.	160000	400	600	3000	100	1500	.....	50000	200	.....	1600	2000	.....	62,005 00				
	Totals	1640000	2885	20000	11400	730	5420	29500	310000	1580	1740	7400	10900	16	452,006 00							
<i>Westmorland County.</i>																						
1	Shediac, Moncton and Salisbury	600000	1000	4000	300	80	150	.....	12000	1500	.....	20000	15000	.....	288,660 00				
2	Botsford	140000	200	1000	100	40	100	.....	10000	.....	.....	12000	10000	.....	226,040 00			
3	Sackville and Westmorland	150000	200	4000	20	30	10	.....	4000	.....	100	2000	5000	.....	29,818 00				
4	Dorchester	.....	.....	.....	.....	20	.....	.....	2000	.....	100	.....	.....	.....	17,720 00
	Totals	890000	1400	9000	420	170	260	.....	29000	1500	200	34000	30000	.....	562,238 00					
<i>Albert County in all</i>																						
1	Albert County in all	3500	.....	400	.....	35	.....	.....	32000	50	50	.....	.....	.....	8,190 00
	Totals	7022700	7685	327400	13520	2065	17250	117500	1712500	4010	26740	69800	88020	56	2,565,024 00							

RECAPITULATION

OF the Yield and Value of the Fisheries in District No. 2, New Brunswick, for the year 1899.

Kinds of Fish.	Quantity.	Price,		Value.
		\$	cts.	\$
Salmon, fresh.....	Lbs. 900,800	0	20	180,160
" preserved in cans.	" 8,200	0	15	1,230
" smoked.....	" 400	0	20	80
Herring, salted.....	Brls. 184,020	4	00	736,080
" fresh.....	Lbs. 266,000	0	01	2,660
" smoked.....	" 90,000	0	02	1,800
Mackerel.....	Brls. 40	15	00	600
" fresh.....	Lbs. 324,400	0	12	38,928
Lobsters, preserved.....	Cans. 2,071,410	0	20	414,282
" in shell.....	Cwt. 2,860	5	00	14,300
Cod.....	" 80,670	4	00	322,680
" tongues and sounds.....	Brls. 136	10	00	1,360
Haddock.....	Cwt. 800	3	00	2,400
Hake.....	" 6,420	2	25	14,445
" sounds.....	Lbs. 9,640	0	50	4,820
Pollock.....	Cwt. 40	2	00	80
Halibut.....	Lbs. 52,400	0	10	5,240
Trout.....	" 100,300	0	10	10,030
Shad.....	Brls. 4,410	10	00	44,100
Smelts.....	Lbs. 7,022,700	0	05	351,035
Alewives.....	Brls. 7,685	4	00	30,740
Bass.....	Lbs. 327,400	0	10	32,740
Clams.....	Brls. 13,520	2	00	27,040
Eels.....	" 2,065	10	00	20,650
Sardines, preserved.....	Cans. 256,000	0	05	12,800
Oysters.....	Brls. 17,250	4	00	69,000
Flounders.....	Lbs. 117,500	0	05	5,875
Frost fish or Tom cod.....	" 1,712,500	0	05	85,625
Squid.....	Brls. 18	4	00	72
Coarse fish.....	" 4,010	2	00	8,020
Fish oil.....	Galls 26,740	0	30	8,022
Fish as bait.....	Brls. 69,300	1	50	103,950
Fish as manure.....	" 88,020	0	50	44,010
Seal skins.....	Pieces. 56	1	25	70
Totals, 1899.....				2,595,024
" 1898.....				2,427,415
Increase.....				167,609

SESSIONAL PAPER No. 22

RECAPITULATION

Of the Number and Value of Vessels, Boats, Nets, Traps, &c., engaged in the Fisheries in District No. 2, **New Brunswick**, in the year 1899.

Material.	Value.	Total.
	\$	\$
214 fishing vessels (2,444 tons).....	94,400	
4,573 fishing boats.....	138,100	
672 100-fathom gill nets.....	364,000	
2 mackerel trap nets.....	3,000	
225 trawls.....	1,550	
350 bass nets.....	1,500	
2,224 smelt nets.....	165,700	
4,455 hand lines.....	2,635	
		710,885
209 canneries.....	129,150	
210,100 lobster traps.....	192,200	
		321,350
138 freezers and ice houses.....	56,100	
385 fish and smoke houses.....	36,330	
35 piers and wharfs.....	7,380	
47 tugs and smacks.....	20,000	
730 smelt shanties.....	10,950	
		130,760
		1,162,995

NEW BRUNSWICK—District No. 3.

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and the Quantity and Value of Fish caught in District No. 3, Province of New Brunswick, for the Year 1899.

Number.	FISHING VESSELS AND BOATS.										FISHING GEAR OR MATERIALS.						KINDS OF FISH.								
	Vessels.					Boats.					Gill Nets.			Seines.			Weirs.			Salmon, fresh, lbs.	Herring, salted, brls.	Herring, smoked, lbs.	Lobsters, cwt.	Cod, dried, cwt.	Number.
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.							
			\$			\$				%			%		%		%		\$						
DISTRICTS.																									
<i>St. John County.</i>																									
1	2	40	800	15	220	8400	440	2270	68900	8	400	640	27	10800	157700	1000	126000	420	125	1					
2	5	100	2000	25	75	4500	150	820	24500	..	..	..	..	..	12300	175	2400	420	145	2
3	2	40	800	10	65	6500	130	2010	60500	6	270	400	..	..	75790	260	1580	140	140	3			
4	1	20	400	4	50	3000	100	1300	40000	12	600	960	8	3200	18720	150	580	50	150	4					
5	1	20	400	4	40	2400	80	550	14600	1	50	80	1	400	2600	340	1000	90	90	5					
Totals		10	200	4000	54	450	24800	900	6950	208500	26	1300	2080	36	14400	267110	1925	126000	5980	550					
<i>Other Counties.</i>																									
6	1	20	300	2	150	6000	300	650	20000	..	..	..	..	..	25000	650	..	..	..	6
7	1	40	800	4	60	1200	130	400	12000	6000	..	..	..	..	4000	..	..	..	..	8
8	1	40	800	4	110	2200	220	200	6000	4000	..	..	..	..	3700	..	..	..	..	9
9	..	..	..	..	385	350	70	20	500	375	..	..	..	..	8000	..	..	..	..	10
10	..	..	..	..	90	500	180	71	1500	750	..	..	..	..	5000	20	..	..	..	11
11	..	..	..	..	6	100	6	645	12650	38625	..	..	..	..	75700	670	..	..	..	..	
Totals		12	260	5100	60	1065	37450	2190	9121	273500	247125	26	1300	2080	36	14400	342810	25965	126000	5880	550				

SESSIONAL PAPER No. 22

RETURN showing the Quantity and Value of Fish, &c.—New Brunswick—Continued.

Number.	DISTRICTS.	KINDS OF FISH.													TOTAL VALUE OF ALL FISH.	Number.				
		God tongues and sounds, brls.	Hadcock, dried, cwt.	Hadcock, smoked fan nan haddies, lbs.	Hake, dried, cwt.	Pollock, cwt.	Trout, lbs.	Shad, brls.	Fresh shad, lbs.	Alwives or gaspereau, brls.	Smoked alwives, lbs.	Bass, lbs.	Pickarel, lbs.	Eels, brls.			Sardines, brls.	Bait (alwives), brls.	Coarse and mixed fish, brls.	Fish oil, galls.
<i>St. John County.</i>																				
1	St. John Harbour	600	740000	580		480	20000	410	500	375	1800	10000	27000	30			200	220	138,115 00	1
2	Dipper Harbour	43920	5180			20	7500	650	200	1350			60000	50			50		37,295 00	2
3	Pisarinco	400	600			25	1500	70	350	900	1800		27000	18			45		28,938 00	3
4	Musquash	300	325			50	20000	330	1000	450	1900		25000	10			120		21,975 25	4
5	St. Martin's	400	450	20		20	12000	35	800	100	1500		10000	20			40		12,292 50	5
	Totals.	44920	740000	7135	20	595	78000	1565	2850	3195	9400	10000	155000	138			615	220	238,635 75	
<i>Other Counties.</i>																				
6	King's			750			20000	410	500								200	220	*21,174 50	6
7	Queen's						7500	650	200	1350			60000	50			50		17,102 00	7
8	Sunbury						1500	70	350	900	1800		27000	18			45		6,871 00	8
9	York						20000	330	1000	450	1900		25000	10			120		+16,278 00	9
10	Carleton						12000	35	800	100	1500		10000	20			40		4,440 00	10
11	Victoria						17000	50		20	1300		6000	10			160		4,106 00	11
	Totals.			750			78000	1565	2850	3195	9400	10000	155000	138			615	220	60,971 50	
	Grand totals.	44920	740000	7885	20	78000	2160	2850		11795	174400	10000	155000	223	4000	5600	615	1220	308,607 25	

* In No. 6 include 12,000 lbs. sturgeon and 7 kegs caviare.
 + In No. 9 include 25,000 lbs. perch.

RECAPITULATION

OF the Yield and Value of the Fisheries in District No. 3, New Brunswick, for the Year 1899.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Fresh salmon.....	Lbs. 342,810	0	20	68,562	00
Herring, salted.....	Brls. 2,595	4	00	10,380	00
" smoked.....	Lbs. 126,000	0	02	2,520	00
White perch.....	" 25,000	0	05	1,250	00
Lobsters, alive or in shell.....	Cwt. 5,980	5	00	29,900	00
Cod.....	" 550	4	00	2,200	00
Tongues and sounds.....	Brls. 4	10	00	40	00
Haddock.....	Cwt. 4,920	3	00	14,760	00
Smoked finnan haddies.....	Lbs. 740,000	0	06	44,400	00
Hake.....	Cwt. 7,885	2	25	17,741	35
Pollock.....	" 20	2	00	40	00
Trout.....	Lbs. 78,000	0	10	7,800	00
Shad.....	Brls. 2,160	10	00	21,600	00
" fresh.....	No. 2,850	0	10	285	00
Alewives.....	Brls. 11,795	4	00	47,180	00
Bass.....	Lbs. 10,000	0	10	1,000	00
Pickarel.....	" 155,000	0	05	7,750	00
Eels.....	Brls. 223	10	00	2,230	00
Sardines.....	" 4,000	1	50	6,000	00
Sturgeon.....	Lbs. 12,000	0	07	840	00
Caviare.....	Kegs 7	35	00	245	00
Smoked alewives.....	Lbs. 174,400	0	02	3,488	00
Bait " ".....	Brls. 5,600	3	00	16,800	00
Coarse and mixed fish.....	" 615	2	00	1,230	00
Fish oil.....	Galls. 1,220	0	30	366	00
Total for 1899.....				308,607	25
" 1898.....				276,580	65
Increase in 1899.....				32,026	60

RECAPITULATION

OF Number and Value of Vessels, Boats, Nets, Traps, &c., engaged in the Fisheries in District No. 3, New Brunswick, in the Year 1899.

Materials.	Value.		Total.
	\$	cts.	
12 fishing vessels (260 tons).....	5,100		325,355
1,095 fishing boats.....	37,450		
273,500 fathoms of gill-nets.....	247,125		
26 seines (1,300 fathoms).....	2,080		
384 trawls.....	19,200		
36 weirs.....	14,400		
13,200 Lobster traps.....	13,200		
105 canoes.....	1,050		
59 ice-houses.....	8,700		
112 smoke and fish houses.....	43,700		
73 piers and wharfs.....	39,100		96,550
8 steamers and snacks.....	4,000		
Total.....			435,105

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RECAPITULATION showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials, &c., used in the Fishing Industry in the whole Province of New Brunswick, for the Year 1899.

Number.	FISHING VESSELS AND BOATS.				FISHING GEAR OR MATERIALS.																			
	Vessels.				Boats.				Gill Nets.		Seines.		Trawls.		Weirs.		Smelt Nets.		Hand Lines.					
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.				
	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§				
1	28	500	5	226	4700	400	121	25700	27000	...	...	...	...	...	...	...	...	...	...	...	...
2	208	2342	91500	810	1745	50200	3900	235000	117300	...	...	...	...	...	...	...	...	...	...	...	...
3	54	1900	14	690	22200	1070	2120	168000	147000	...	...	...	...	...	...	...	...	...	...	...	...
4	20	500	3	1115	36000	1850	3500	178000	47500	...	...	...	...	...	...	...	...	...	...	...	...
5	Westmorland	...	...	793	24800	1606	1520	63600	24200	...	...	...	...	...	...	...	...	...	...	...	...
6	Albert	...	...	4	200	8	10	1800	1000	...	...	...	...	...	...	...	...	...	...	...	...
7	St. John	...	...	54	450	24800	6950	208500	208500	26	1300	2080	384	19200	36	14400	...	...	...	...	...
8	King's	...	...	150	6000	300	650	20000	15000	...	...	...	...	...	...	...	...	...	...	...	...
9	Queen's	...	...	2	200	2400	830	25000	12500	...	...	...	...	...	...	...	...	...	...	...	...
10	Sanbury	...	...	4	800	1200	400	12000	6000	...	...	...	...	...	...	...	...	...	...	...	...
11	York	...	...	110	2200	220	200	6000	4000	...	...	...	...	...	...	...	...	...	...	...	...
12	Carleton	...	...	35	350	70	20	500	375	...	...	...	...	...	...	...	...	...	...	...	...
13	Victoria	...	...	90	500	180	71	1500	750	...	...	...	...	...	...	...	...	...	...	...	...
14	Charlotte	...	...	239	1075	90442	668	17962	5970	322	9879	21636	611	5545	344	142850	5	32	1290	786	14	
Totals				276	3640	118450	1131	6743	265992	11843	20960	963502	617095	348	10079	23716	1220	26295	380	157250	2229	105732	3745	9421

NOTE.—In No. 2 add 2 trap-nets, \$3,000.

RECAPITULATION showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of Fish, &c.—
New Brunswick—Continued.

Number.	LOBSTER PLANT.				OTHER FIXTURES USED IN FISHERIES.				KINDS OF FISH.										
	Canneries.		Traps.		Freezers and Ice Houses.	Smoke and Fish Houses.		Piers and Wharfs.	Tugs, Steamers and Smacks.		Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.			
	Number.	Value.	Number.	Value.		Number.	Value.		Number.	Value.							Number.	Value.	
1	Restigouche	2	1300	3500	3100	77	3	500	1	200	4	3500	140000	14000	1400	3000			1
2	Gloucester	64	50500	82300	78000	1710	56	15900	115	17400	22	3500	358000	83000	83000	150000	30000	29000	2
3	Northumberland	13	14000	14000	12000	340	51	22500	130	12500	18	5000	370000	8020	8020	110000	10000	45000	3
4	Kent	58	21500	48500	43000	925	15	7200	27	3300	22	880	19800	31200	31200	50000	50000	4243000	4
5	Westmorland	72	41850	61800	56100	1742	3	1500	109	2600	3	300	9500	69100	69100	50000	50000	7400	5
6	Albert						1	30					3500	300	300	2000			6
7	St. John			13200	13200		30	6000	66	40000	73	3910	267110	1925	1925				7
8	King's						9	1200	15	750			25000	650	650				8
9	Queen's						10	500	20	1000			4000						9
10	Sanbury						5	250	6	300			3700						10
11	York						5	750	5	750			30000						11
12	Carleton												8000						12
13	Victoria						7	15800	749	134055	239	40625	5000	20	20				13
14	Charlotte	7	16400	17702	16997	383							2900	7931	20130000	8668775	103014		14
	Totals	216	145550	241002	221497	5177	204	80600	1246	214085	347	87105	33700	1246510	194546	20396000	8885775	325450	

NOTE.—§ Lbs. smoked. + In No. 4 add 40 brls. of mackerel.

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RECAPITULATION showing the Quantity and Value of Fish, &c.—New Brunswick—Continued.

Number.	COUNTIES.	KINDS OF FISH.														Number.
		Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock-smoked, fman haddies, lbs.	Hake, dried, cwt.	Hake sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.		Alwives or gaspéan, brls.
1	Restigouche	26000	220	140					4300	7000			10500	30	597200	1
2	Gloucester	686700	650	76400	130	500			300				47000	36	1142000	2
3	Northumberland	107200	200	1850		100			300				3000	1600	2750000	3
4	Kent	443110	500	2010	6	200			1780	2640			2400	130	1640000	4
5	Westmorland	808400	1290	170					40				10700	2350	8900000	5
6	Albert		100	100					40				8500	300	3500	6
7	St. John		5880	550	4	4920			7135				595		8600	7
8	King's								750				20400	110		8
9	Queen's												7500	650	1350	9
10	Sunbury												1500	70	900	10
11	York												20000	350	450	11
12	Carleton												12000	35	100	12
13	Victoria												17000	450	420	13
14	Charlotte	105696	11125	5010		781000	1255		14347	10551	22980	20000	10500		11100	262
	Totals	2177106	19965	87230	140	781000	6975	1080050	28702	20191	25040	72400	188800	6370	7033800	19742

NOTE.—* Canned. † See page 130.

RECAPITULATION showing the Quantity and Value of Fish, &c.—New Brunswick—Concluded.

Number.	COUNTRIES.	KINDS OF FISH.												TOTAL VALUE OF ALL FISH.	Number.					
		Bass, lbs.	Clams, brs.	Mels, brs.	Sardines, cans.	Oysters, brs.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brs.	Coarse and mixed fish, brs.	Fish oil, galls.	Fish as bats, brs.	Fish as manure, brs.			Seal skins, No.				
1	Restigouché.			80			22500				80								76,095 00	1
2	Gloucester.	35000	1300	680			28000	1070		33000	170000			800	24350	600	120		1,030,660 00	2
3	Northumberland.	23300	400	370	250000		1150000	10500		28000					400	5000	12000		465,775 00	3
4	Kent.	20000	11400	730			310000	5420		25000	18	1580			1740	7400	10900	16	482,065 00	4
5	Westmoreland.	9000	420	170			28000	260		1500		1500			200	34000	30000		562,238 00	5
6	Albert.	400		35			32000								50				8,190 00	6
7	St. John.			85	4000											1000	5600		238,635 75	7
8	King's.	10000		30															21,174 50	8
9	Queen's.			50															17,102 00	9
10	Sunbury.			18															+ 6,871 00	10
11	York.			10															16,278 00	11
12	Carleton.			20															4,440 00	12
13	Victoria.			10															4,106 00	13
14	Charlotte.									7900	1100	160	125	2770	11295	7030	9	1,216,259 95	14	
Totals.		337400	{ 17039 } { *39600 }	2288	{ + 217921 } { * 1261000 }	17250	125400	1713600	1784750	55730	86195	95050	65	4,119,891 20						

NOTE.—† From No. 8 to 13 include 2,850 fresh shad and 155,000 lbs. of pickered, 1,200 lbs. of sturgeon and 9,400 lbs. smoked alewives. * Canned. † Brls.

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RECAPITULATION

OF the Yield and Value of the Fisheries of the whole Province of New Brunswick,
for the Year 1899.

Kinds of Fish.	Quantity.	Price.		Value.		Total Value.	
		\$	cts.	\$	cts.	\$	cts.
Cod, dried..... Cwt.	87,230	4	00	348,920	00		
Cod tongues and sounds.. Brls.	140	10	00	1,400	00		
Haddock, dried..... Cwt.	6,975	3	00	20,925	00		
" fresh..... Lbs.	781,000	0	03	23,430	00		
" smoked (finnan haddies)..... "	1,080,050	0	06	63,763	00		
Hake, dried..... Cwt.	28,702	2	25	64,579	50		
" sounds..... Lbs.	20,191	0	50	10,095	50		
Pollock..... Cwt.	23,040	2	00				74,675 00
Tom cod or frost fish... Lbs.	1,713,600	0	05				46,080 00
Halibut..... "	72,400	0	10				85,670 00
Flounders..... "	125,400	0	05				7,240 00
Salmon, fresh..... "	1,246,510	0	20	249,302	00		6,270 00
" preserved in cans..... "	8,200	0	15	1,230	00		
" smoked..... "	400	0	20	80	00		
Trout..... "	188,800	0	10				250,612 00
Smelts..... "	7,033,800	0	05				18,880 00
Herring, salted..... Brls.	194,546	4	00	778,184	00		351,690 00
" fresh..... Lbs.	20,396,000	0	01	203,960	00		
" smoked..... "	8,885,775	0	02	177,715	50		
" kippered..... "				36,120	06		
Sardines..... Brls.	217,921			433,842	00		1,195,979 50
" preserved..... Cans.	1,261,000	0	05	63,050	00		
Shad..... Brls.	6,598	10	00				496,892 00
Alewives..... "	20,614	4	00				65,985 00
Eels..... "	2,288	10	00				82,456 00
Perch..... Lbs.	25,000	0	05				22,880 00
Pickarel..... "	158,000	0	05				1,250 00
Sea-Bass..... "	337,400	0	10				7,900 00
Mackerel..... Brls.	40	15	00	600	00		33,740 00
" fresh..... Lbs.	325,450	0	12	39,054	00		
Sturgeon..... "	12,000	0	07	840	00		39,654 00
" caviare..... "	490			245	00		
Oysters..... Brls.	17,250	4	00				1,085 00
Clams..... "	17,099			41,671	00		69,000 00
" preserved..... Cans.	39,600	0	16	3,960	00		
Squid..... Brls.	178	4	00				45,631 00
Lobsters preserved in cans Lbs.	2,177,106	0	20	435,421	20		712 00
" fresh or alive..... Cwt.	19,965	5	00	99,825	00		
Scollops..... Lbs.	27,400						535,246 20
Coarse and mixed fish... Brls.	4,750						3,870 00
Seal skins..... No.	65						9,500 00
Dulse..... Lbs.	75,051						106 00
Fish oil..... Galls.	55,730	0	30				4,503 00
Fish as bait..... Brls.	86,195	1	50				16,719 00
Fish as manure..... "	95,050	0	50				137,692 50
							47,525 00
Total for the year 1899.....							4,119,891 20
" " 1898.....							3,840,357 40
Increase.....							270,533 80

RECAPITULATION

Of the Vessels, Boats, Nets, and all Fishing Material used in the whole Province of
New Brunswick, for the Year 1899.

Articles.	Value.		Total.	
	\$	cts.	\$	cts.
276 fishing vessels (3,640 tons).....	118,450	00		
6,743 fishing boats.....	265,992	00		
20,960 gill-nets (963,562 fathoms).....	617,095	00		
348 seines (10,679 fathoms).....	23,716	00		
2 trap-nets.....	3,000	00		
380 weirs.....	157,250	00		
2,229 smelt nets.....	105,732	00		
350 bass nets.....	1,500	00		
1,220 trawls.....	26,295	00		
5,745 hand lines.....	3,421	00		
216 lobster canneries.....	145,530	00	1,322,451	00
241,002 " traps.....	221,497	00		
204 freezers and ice-houses.....	80,600	00		
1,246 smoke and fish-houses.....	214,085	00		
5 sardine canneries.....	41,000	00		
2 clam canneries.....	600	00		
4 fish curing factories.....	7,000	00		
1 fish guano do.....	5,000	00		
66 tugs or smacks.....	33,700	00		
347 fishing piers and wharfs.....	87,105	00		
730 smelt fishing shanties.....	10,950	00		
25 fish presses.....	2,800	00		
80 weir scows.....	4,000	00		
55 pile drivers.....	4,500	00		
105 fishing canoes.....	1,050	00		
			492,390	00
Total.....			2,181,888	00

Number of Persons Employed in the New Brunswick Fisheries :—

Men in fishing vessels.....	1,131
" boats.....	11,843
Persons in lobster canneries.....	5,171
Total.....	<u>18,145</u>

APPENDIX No. 5.

PRINCE EDWARD ISLAND.

REPORT ON THE FISHERIES OF PRINCE EDWARD ISLAND FOR 1899,
BY INSPECTOR OF FISHERIES J. A. MATHESON.

CHARLOTTETOWN, P.E.I., January 2, 1900.

HON. SIR LOUIS H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit my annual report on the fisheries of the Province of Prince Edward Island for the year 1899, together with tabulated returns, showing the respective quantities and values of each kind of fish caught, and the amount of capital employed in the different fisheries.

The figures for the last two years are as follows :—

Total value of fisheries of 1898.....	\$1,070,206
“ “ 1899.....	1,043,645
Decrease..	<u>\$26,561</u>

LOBSTERS.

This fishing commenced later than in the past few years, owing to the fact that the ice remained on the coast longer than usual.

Very little was done before the 10th day of May.

The fishing was very good up to the 15th, when a heavy storm destroyed a large number of traps and rope, with the result that very few fish were taken for the following five days, and, as a consequence, the total catch was materially lessened.

In Prince County between Cape Traverse and West Point, an extension was given as recommended by the Fishery Commission, but at the close of the season the average quantity had not been taken.

In Queen County the catch was about an average one, while that in King County was in excess of last year.

HERRING.

Herring struck in about the first week of May, in some parts of the province quite plentifully, while in others scarcely enough were procured for local consumption, and for lobster bait, these being their principal uses.

COD.

This branch of the industry is principally prosecuted in small boats, and when bait can be procured, fishermen generally make good wages, the prices being fair and fish plentiful. This season may be called a good one. The assistance given by the department in establishing cold storage for bait is looked upon by the fishermen and others,

engaged in the cod and hake fishery, as commencing a new era in this staple industry. In no way could the fishermen receive a greater benefit than by being able to easily procure supplies of bait, when needed; and more especially while the present scarcity of mackerel continues, as, on this latter fishing, they formerly relied chiefly for their bait.

Hake fishing was good and the yield increased especially in King County.

MACKEREL.

Mackerel still continue to be scarce in this province. In Queen County, very few were taken, except with nets. In King County, especially at Morell, St. Peters and North Lake, the catch was fair. Schools of small mackerel have been noticed this season, and our fishermen are hoping that these fish may soon return to our waters.

OYSTERS.

The catch in this year's oyster fishing was smaller than that of last season's, the greatest shortage being in Queen County. Last year more than an average catch was taken, partially owing to the fact that North River had been closed for the two years previous. No doubt, the extra catch in 1898 accounts, in a measure, for the shortage of the present year.

The greatest difficulty was encountered in former years in preventing the taking and shipping of undersized fish. This year, special guardians were appointed and stationed at the different landings with beneficial results. The shippers appreciate the move very much, and say it will do more to protect the industry and will benefit the fishermen and shippers to a greater extent than any other means previously adopted.

A boat cruised continuously on Richmond Bay during the season, so as to allow no opportunity for the use of drags. The results have been satisfactory and few, if any, fish have been taken in this way.

SMELTS.

The catch was not so large as in former years, but prices remained good throughout the season, and fishermen were enabled to obtain a livelihood during the winter by this industry.

TROUT.

In most of our streams and brooks this fish can be caught quite plentifully and there is no danger of exhausting this fishing, while it is confined to angling.

Respectfully submitted,

J. A. MATHESON,
Inspector of Fisheries.

RETURN showing the Kinds and Quantities of Fish and Fish Products, &c.—Prince Edward Island—Continued.

DISTRICTS.	KINDS OF FISH.											TOTAL VALUE OF ALL FISH.	Number.					
	Haddock, dried, cwt.	Hake, dried, cwt.	Hake sounds, lbs.	Habit, lbs.	Trout, lbs.	Smelts, lbs.	Alewyes or gaspereau, lbs.	Clams, bbls.	Bels, bbls.	Caplin, bbls.	Tom cod or frost fish, lbs.			Squid, bbls.	Coarse and mixed fish, bbls.	Fish oil, galls.	Fish as bait, bbls.	Fish as manure, tons.
<i>King County.</i>																		
1 Souris and Red Point	100	3000	6000	1000	1500	1000		30	8	500	3000	60	50	3200	2000	900	54,355 20	1
2 Bay Fortune	40	1200	3000	200	4000	5000		15	8	50	2500	75	20	1000	400	90	25,379 60	2
3 Annandale	20	800	1500		4000	3000		10	6		3500	150	35	700	1800	900	49,104 00	3
4 Georgetown		500	1200		1500	1500						40		600	850	480	84,750 40	4
5 Murray Harbour, north		1000	2000		1000	1000		10	10		8000	40		900	1800	720	43,211 40	5
6 " " south		6000	12000		3000	3000		15	15		3000	100	100	5000	2000	600	78,229 60	6
7 Morell and St. Peter's	150	200	500		15000	20000		15	20		4000	50		900	2200	750	62,909 00	7
8 Naufrage	200	200	400		5000	5000		5	5		5000	30	10	500	1200	450	29,702 80	8
9 North Lake	150	300	600	1000	6000	2000			15		4000	30	10	750	600	350	37,807 20	9
10 East Lake	150				3000	1500		30	10		1200	15	10	350	550	250	18,811 80	10
Totals	810	13200	27200	2200	41000	38000	280	110	97	550	34200	590	235	13000	13400	5490		
Values	2430	29700	13600	220	4100	1900	1120	440	1925	1710	2360	470	4170	20100	5490		434,267 00	

RETURN showing the Kinds and Quantities of Fish and Fish Products, &c.—Prince Edward Island—Continued.

Number.	DISTRICTS.	KINDS OF FISH.														TOTAL VALUE OF ALL FISH.	Number.								
		Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked fish haddies, lbs.	Hake, dried, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereau, brls.	Clams, brls.	Relts, brls.	Oysters, brls.	Tom cod or frost fish, lbs.			Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, tons.	Seal skins, number.		
<i>Queen County.</i>																									
1	Tracadie	1100	20	1000	50																			39,857 60	1
2	New London	330	10		20	1000	500	10	50	100	2400													20,370 00	2
3	Point Prim	100	10	500	50	200	200	1000	200000															36,657 00	3
4	Rustico and Cove Head	2500	30					1000	15000	50	50	50	50	50	40	1000	800	165						54,964 80	4
5	Wheatley River	1200						300	6000		25	30	100											5,457 00	5
6	Povnal							2000	20000															1,200 00	6
7	Charlotte-town								60000															8,020 00	7
8	Crapaud								30000															500 00	8
9	Lot 65							5000	30000	500	150	100	1000											31,522 80	9
10	Bays and Rivers																							25,200 00	10
	Totals	5250	70	1500	120	200	220	1000	9800	645500	1080	225	495	6000	500	60	10	1590	3350	1200	10			230,127 60	
	Values	21000	700	45	560	12	495	100	980	32275	4320	900	4950	24000	25	240	20	477	5025	1200	20			230,127 60	

RETURN showing the Kinds and Quantities of Fish and Fish Products, &c.—Prince Edward Island—Continued.

DISTRICTS.	KINDS OF FISH.													TOTAL VALUE OF ALL FISH.	Number.					
	Cod, dried, cwt.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake sounds, lbs.	Hallibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewyes or gaspereau, lbs.	Bass, lbs.	Bees, lbs.	Oysters, brls.	Squid, brls.			Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, tons.	
<i>Prince County.</i>																				
1 Tignish.....	1600			500	8000			5000							1000	3000		46,105 20'	1	
2 Alberton.....	80						113000									1900		22,266 40	2	
3 Lot 11.....							153000									784		9,857 00	3	
4 Narrows.....	100	1500		50	500		14000			50	1000				500	1000	17,917 50	4		
5 Grand River.....	20						4000			100	1440				10	510	13,845 60	5		
6 Richmond Bay.....	100					100	600			1	4000				10	600	18,269 00	6		
7 Summerside.....							20000				80						1,420 00	7		
8 Travellers' Rest.....							10000			10	3750					1000	16,050 00	8		
9 Carleton.....							22500				90					1500	18,757 80	9		
10 Tyron.....	400			40			4900			2	1500				200	200	27,799 60	10		
11 Malpeque.....							20000										15,070 00	11		
12 Egmont Bay.....																	78,059 40	12		
13 Brae and West Point.....	1630			487	1191	450	1800			6					280	2060	14,923 40	13		
14 Miminigash.....	733			50	160						16	100			30	1870	22,414 35	14		
15 Nail Pond.....	719			30	75										6	575	30,432 54	15		
16 Skinner's Pond.....	215						12000				30				175	624	13,212 10	16		
17 Brae to Higgins' Wharf.....							16100				30					1280	11,550 00	17		
18 Rivers of lots 5 and 6.....	105						16100				30				41		2,301 30	18		
Totals.....	5672	1500	50	1267	9266	500	259290	46	100	202	12236	36	605	3442	21228	1150				
Values.....	\$ 22688	45	150	2850	4033	50	12060	184	10	2020	48944	144	1210	1032	31842	1150				\$ 379,250 59

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RECAPITULATION by Counties showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of Fishing Materials and other Fixtures used in the Fishing Industry in the Province of Prince Edward Island for the Year 1899.

Number.		FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.												
		Vessels.			Boats.			Gill Nets.		Seines.		Trap Nets for Perch.		Travels.		Dip Nets.				
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		
1	King.....	615	9400	68	84	17700	1670	2955	58000	19500	.....	.....	.....	120	240	675	7590	155	300
2	Queen.....	17	400	7	595	13200	1154	497	10865	2891	.....	.....	.....	35	1200	61	430	.....	.....
3	Prince.....	5	109	3150	23	918	32250	1831	1350	32984	7478	2	2000	44	721
Totals.....		21	741	12950	98	2353	63150	4655	4802	101854	29839	.....	.....	157	3440	780	8741	155	300

Number.		FISHING GEAR OR MATERIAL.						LOBSTER PLANT.						OTHER FIXTURES USED IN FISHERIES.						
		Smelt Nets.		Hand Lines.		Cammeries.		Traps.		Number of hands employed.		Freezers and Ice Houses.		Smoke and Fish Houses.		Piers and Wharfs.		Tugs Steamers and Smacks.		
		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	King.....	55	275	2440	2440	55	35085	90680	55381	775	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	Queen.....	101	2585	600	350	67	29750	67000	32500	955	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	Prince.....	106	2520	1508	383	118	29795	125434	60484	1446	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....		262	5380	4548	3173	240	95230	283114	148365	3176	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

101 2585 600 350 67 29750 67000 32500 955

RECAPITULATION by Counties showing the Kinds and Quantities of Fish and Fish Products, in the Province of Prince Edward Island, for the Year 1899.

COUNTY.		KINDS OF FISH.														Number.					
1	King.....	8000	25000	90000	Herring, fresh, lbs.	600	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked, human haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Habit, lbs.	Trout, lbs.	Number.
2	Queen.....	4300	2400	20800		600		6200	370	778260	12	15200	91	1500	810	13200	27200	2200	2200	41000	1
3	Prince	5497	5497	20800		600		13892	390	109,636	34	5972	70	1500	120	220	9265	1000	500	9800	2
	Totals.....	8000	34797	134800		600		20092	2260	2421144	46	26422	161	3000	980	290	36466	3700	51350		3

COUNTY.		KINDS OF FISH.														Number.					
1	King.....	38000	280	110	Clams, lbs.	100	Bas, lbs.	Pels, brls.	Capin, brls.	Oyster, brls.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, tons.	Seal skins, No.	TOTAL VALUE OF ALL FISH.			Number.
2	Queen.....	645500	1080	225		100		495	550	6000	34200	590	235	13900	13400	5490	.....	\$	434,267	1
3	Prince	239200	46	225		100		202	.....	12286	500	60	605	3442	21228	1150	.....	cts.	236,127	2
	Totals.....	942700	1406	335		100		794	550	18236	34700	686	850	17932	37978	7840	10	1,043,645	19		

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RECAPITULATION.

SHOWING Yield and Value of the different Fisheries in the Province of Prince Edward Island, during the Year 1899.

Kinds of Fish.	Quantity.	Price.		Value.
		\$	cts.	\$ cts.
Salmon, smoked.....	Lbs. 8,000	0	20	1,600 00
Herring, salted.....	Brls. 34,797	4	00	139,188 00
" fresh.....	Lbs. 134,800	0	01	1,348 00
" smoked.....	" 600	0	02	12 00
Mackerel, fresh.....	" 20,092	0	12	2,411 04
" salted.....	Brls. 2,260	15	00	33,900 00
Lobsters, preserved in cans.....	Lbs. 2,421,144	0	20	484,228 80
" fresh.....	Cwt. 46	5	00	230 00
Dried cod.....	" 26,422	4	00	105,688 00
Tongues and sounds.....	Brls. 161	10	00	1,610 00
Fresh haddock.....	Lbs. 3,000	0	03	90 00
Dried ".....	Cwt. 980	3	00	2,940 00
Smoked finnan haddies.....	Lbs. 200	0	06	12 00
Hake, dried.....	Cwt. 14,687	2	25	33,045 75
" sounds.....	Lbs. 36,466	0	50	18,233 00
Halibut.....	" 3,700	0	10	370 00
Trout.....	" 51,350	0	10	5,135 00
Smelts.....	" 942,700	0	05	47,135 00
Gaspereau.....	Brls. 1,406	4	00	5,624 00
Clams.....	" 335	4	00	1,340 00
Bass.....	Lbs. 100	0	10	10 00
Eels.....	Brls. 794	10	00	7,940 00
Caplin.....	" 550	3	50	1,925 00
Oysters.....	" 18,236	4	00	72,944 00
Tom cod.....	" 34,700	0	05	1,735 00
Squid.....	Brls. 686	4	00	2,744 00
Coarse and mixed fish.....	" 850	2	00	1,700 00
Fish oil.....	Galls. 18,932	0	30	5,679 60
Fish for bait.....	Brls. 37,978	1	50	56,967 00
" as manure.....	Tons. 7,840	1	00	7,840 00
Seal skins.....	No. 10	2	00	20 00
Total for 1899.....				1,043,645 19
Total for 1898.....				1,070,206 70
Decrease.....				26,561 51

RECAPITULATION.

SHOWING the Number and Value of Vessels, Boats, Nets, Lobster Canneries, Traps, &c., used in the Fisheries of the Province of Prince Edward Island, Season, 1899.

Articles.	Value.	Total Value.	Articles.	Value.	Total Value.
	\$	\$		\$	\$
21 vessels, 741 tons.....	12,950		240 lobster canneries.....	95,230	
2,353 boats.....	63,150		283,114 lobster traps.....	148,365	243,595
4,802 gill-nets, 101,854 fathoms	29,869		2 freezers and ice-houses..	200	
18 seines 3,640 fathoms.....	4,000		49 smoke and fish-houses..	1,702	
157 trap-nets for perch.....	3,440		33 piers and wharfs.....	47,670	
780 rawls.....	8,741		1 steamer.....	500	50,072
155 dip-nets.....	300				
262 smelt-nets.....	5,380				
4,548 hand lines.....	3,173				
		131,003	Total value.....		424,670

Number of persons employed in the fisheries of P.E.I.—

Men in fishing vessels.....	98
" " boats.....	4,655
Persons in lobster canneries.....	3,176
Total.....	<u>7,929</u>

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APPENDIX No. 6.

MANITOBA.

REPORT ON THE FISHERIES OF MANITOBA FOR 1899, BY INSPECTOR
F. W. COLCLEUGH.

SELKIRK, January 15, 1900.

Hon. Sir LOUIS H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to report as follows on the fisheries of Manitoba for the year 1899, and to inclose herewith statistical returns for the same period.

This season, in the matter of catch and all other respects, may be said to have been an average one, some lakes showing an increase in output, and others a proportionate decrease.

In *Lake Winnipegosis* and Dauphin District the catch was more than double what it was the preceeding year. This is accounted for to some extent by the large influx of population to this particular part of the province, following the construction of the Manitoba Northern into the Swan River country. The extension of this road to the north last season so increased the transport facilities, that quite an impetus was given to the fishing industry in the northern part of Lake Winnipegosis, which had never been fished before to any extent, and in which fish were abundant.

Many of the new comers found profitable employment during the winter, assisting in fishing, freighting fish to the railway track, and otherwise. And all fishermen did well, as competition among the several buyers was keen, and prices consequently high.

It was in this locality (Whisky Jack Harbour) where I secured the supply of ova for the hatchery here last year, and I found whitefish more abundant than I had ever seen in any other waters. I am therefore of opinion, that there is no danger from over-fishing in the northern parts of this lake for at least two years, and would recommend vigorous fishing for a year or two, with a view to testing the grounds, and improving the condition of the fish.

All fishing operations on Lake Winnipegosis this year have been successful and everybody made money. Fishing was most satisfactory, and as high as two and one-half cents per pound has been paid to the fishermen for whitefish by the rival buyers at this point.

The returns from this lake this year show a yield of over one and a quarter million pounds of whitefish alone and a total yield of nearly five and a quarter million lbs. of all kinds, valued at \$127,880. This is an increase on last year's business of \$74,680.

When one considers the figures in the preceding paragraph, it will be recognized that the fish of our lakes is one of the most valuable resources the country possesses, and will, if properly protected, prove an important factor in feeding the vast population, which will, in the near future, people this country.

One new tug has been built and placed for service on this lake this year, to be used in the transportation of fish and fishermen, and the season so far as weather is concerned, has been an average one, free from any disastrous storms, and no lives have been lost, excepting one poor fellow a half breed who fell off Capt. Coffey's tug the *Mocking Bird* and was drowned.

Late overseer Adam, of *Water-Hen River*, reports that fish are so plentiful in the north end of Lake Winnipegosis that 'nets left out only one night are found next morning so full of fish that they float on the top of the water.' He also reports that

during the summer $2\frac{1}{2}$ cents per pound was paid to the fishermen for whitefish, and as high as 5 cents per pound was being paid in the latter part of December for winter caught whites. He also states that the regulations have been fairly well observed during the year in his district, and he closes his report by recommending, as a most valuable aid to fishermen and boatmen, that a small lighthouse be erected at the mouth of Mossoy River. Fishermen being out all day, and coming home at night often have difficulty in finding the mouth of the river, and sometimes are compelled to remain all night outside the mouth in a rolling sea, thus causing considerable discomfort, delay and sometimes serious loss of fish, should they be short of ice. I have experienced some of these inconveniences myself, and would add, that owing to the shallowness of the water, and tortuousness of the course, that some sort of a beacon is absolutely necessary, and should receive attention from the Department of Marine this coming season.

The supply of ova for the hatchery at Selkirk has been taken from Lake Winnipegosis for the past two years, and the fishermen as well as many of the settlers are of opinion that some portion of the fry should be taken back to that lake. I agree with the idea and some think that some whitefish fry could be planted in the southern portion of the lake to advantage.

Lake Manitoba.—The catch in these waters this season has been an average one, and operations have not increased from what they were the preceding year. Owing to the removal of Officer Martineau in October, and his successor not being appointed until the following February, I am without any report from the western portion of the lake, and have had to approximate the catch as accurately as possible.

This lake, while being large in area is shallow, and is not as good a home for whitefish as either Winnipegosis or Winnipeg, but abounds in fish of a predatory character, and many of the whitefish taken from these waters have a hump on their back, or an abscess on their side, or other evidence of a serious conflict with an enemy, from which they have escaped by flight.

Officer *H. Chartrand*, of St. Laurent, and *James Matheson*, of The Narrows of Lake Manitoba, both report close seasons and regulation generally well observed in their respective districts. They also report that the catch of this year would have been in excess of last, but for the mild and open winter militating against all fishing operations.

Lake Winnipeg.—Operations on the lake began about the usual time, there being no increase in any class of licenses excepting sturgeon, and no accidents during the season excepting two, one resulting in the loss of one man's life, and the other, in the loss of large quantities of supplies which were being taken out in the fall for winter fishing, and which were replaced in time to prevent any interruption of operations.

The number of tugs, amount of twine, and men engaged on this lake, were all less than last year, and the catch was proportionately less, there being a decrease of about one and one-half million pounds. The season was not favourable and considerable loss was sustained by the fish becoming unmarketable in the nets, on account of wind being too high to lift them at the proper time. This, of course, was unavoidable.

Sturgeon was very much sought after, and although there was considerable increase in the number of licenses to fish for them, there was a slight falling off in the catch. During the last half of the season the sturgeon fishing was very unprofitable, many of the fishermen not making more than half wages.

There was much dissatisfaction amongst the fishermen on this lake regarding prices paid by the only two buyers there, and quite a number forsook the lake and went elsewhere, most of them to Winnipegosis, where prices were much higher. Those remaining have, I understand, formed themselves into an association, and presented their grievances in the form of a very largely signed petition to your department, and are expecting redress this coming season.

In the vicinity of Big Island no whitefish had been caught for several years, but this summer quite a few had been taken, and the settlers on the island who caught them are of the opinion from the general smallness of the fish, that they have come from the hatchery, and for this reason I have since declined to recommend any pickerel or 4-inch mesh licenses in that locality.

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The fish companies continue to move their plants northward, and this year their operations were carried on within a short distance of the northern shores of the lake, and I understand they contemplate another move to Norway House and Play Green Point on the northern coast. To my mind this is *prima-facie* evidence of the depletion of these waters. Fully ninety per cent of the catch of all our lakes goes to the United States, and finds a market there at good prices. Last spring I had a wholesale price list from the Detroit Fish Association, which, I am told, is one of the tentacles of the great American octopus, the fish combine, and this list quoted our whitefish at 8 cents per pound wholesale, and our sturgeon at from 9 to 14 cents, while fine dressed trout taken from eastern waters was only quoted at $5\frac{1}{4}$ cents.

The close seasons have been very well observed throughout the province, and those engaged in fishing seem to fully understand and appreciate that the regulations in this respect, have been framed entirely in their interests.

Officer Magnusson, of Arnes, on the western shore of *Lake Winnipeg*, reports a decrease in the catch of fish in his district, as compared with last season, and says that winter fishing was a failure. He reports close seasons and other regulations well observed in his district and closes his report as follows: 'In my opinion the lake will surely be depleted of fish in a few years if the companies are allowed to fish as at present.'

Officer Hughes, of Selkirk, reports having made a tour of his own district and a portion of that formerly under the custody and care of Mr. Leo Shannus, of Fort Alexander, but in which there is no officer at present, and finds the fishery laws and regulations well observed. The number of licenses in his district has increased from last year, but the yield of fish is less. He is also of opinion that the lake is being depleted.

Angus McKay, Esq., of Berens River, late Indian agent at that point, has resided there for over twenty years, and always taken a lively interest in all matters pertaining to the welfare of the community, and now writes stating that the lake is being rapidly depleted of both whitefish and sturgeon, and urges the government to pay heed to it before it is too late. I may add that this opinion is shared by all disinterested parties who have given this matter any consideration.

All of which is respectfully submitted.

I have the honour to remain, sir,
Your obedient servant,

F. W. COLCLEUGH,
Inspector of Fisheries.

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TOBA.

and Value of Fish caught in the Province of Manitoba, for the year 1899.

KINDS OF FISH.													VALUE.	Number.	
Salted white fish, bbls.	Whitefish, lbs.	Trout, lbs.	Pickereel, lbs.	Pike, lbs.	Sturgeon, lbs.	Caviare, lbs.	Perch, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Gold eyes, lbs.	Home consumption, lbs.			\$	cts.
120	1253000	10000	401000	1612000	.....	.....	10000	15000	.....	1600000	.....	300000	127,880	00	1
.....	250000	.....	151000	140000	.....	.....	.....	80000	.....	110000	.....	152000	24,050	00	2
..	22500	.....	305900	151350	.....	.....	43900	141700	72600	174100	.....	120500	22,165	00	3
.....	171749	.....	298582	117908	265072	9857	17113	3248	52053	.....	25881	.....	43,222	32	4
.....	632355	.....	15076	.....	.....	.....	.....	.....	.....	.....	.....	.....	32,070	03	5
.....	444525	.....	8342	.....	.....	.....	.....	.....	.....	.....	.....	.....	22,476	51	6
.....	725391	.....	15858	.....	.....	.....	.....	.....	.....	.....	.....	.....	36,745	29	7
.....	.....	.....	.....	.....	179715	5888	.....	.....	.....	.....	.....	.....	13,726	90	8
120	3499520	10000	1195758	2021258	444787	15745	71013	239948	124653	1884100	25881	572500			
960	174976	500	35872	40425	26687	7872	1420	4798	3739	18841	517	5725	322,336	05	

APPENDIX No. 7.

NORTH-WEST TERRITORIES

REPORT ON THE FISHERIES OF THE NORTH-WEST TERRITORIES, FOR
THE YEAR 1899, BY INSPECTOR E. W. MILLER.

QU'APPELLE, N.W.T. January 2, 1900.

The Hon. Sir LOUIS H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit the following report on the fisheries of the North-west Territories for the year 1899, together with statistics of the catch of fish, value of gear, etc.

The winter fisheries in most districts were more than usually successful and in those of the larger whitefish lakes, where the fishing is both heavy and persistent, the enforcement of the close season has proved efficacious in preserving a full supply of fish.

South of the Saskatchewan River the number of those actually dependent on the fisheries for their livelihood, is steadily diminishing, and the most serious danger of the exhaustion of the fish supply is therefore passing. In the more settled districts the amount of fishing done depends largely on the call for labour in other occupations, and the general activity prevailing throughout the Territories in 1899 caused fewer people than usual to resort to fishing.

At many of the smaller lakes a substantial gain in depth of water was registered, caused by the heavy rainfall of the year. For the same reason, the rivers continued in high water for a much longer period than usual and the fish thus obtained much freer passage and access to waters from which they have been in some cases isolated for several years.

It was intended to restock some of the Assiniboian lakes with whitefish fry from the Selkirk hatchery, but unfortunately the fry fell into poor condition just prior to the time for shipment, and the superintendent of the hatchery considered it useless to attempt to send them so long a journey. No fry have therefore been planted in the Territories in 1899, but it is hoped that greater success will attend a trial next season.

Steps have been taken by the appointment of an overseer and two guardians, to bring the important fisheries of the lower Saskatchewan valley under control. The high price offered for sturgeon had led to a small export trade being opened up even with the disadvantage of the very long haul to a market: the extension of the Canada Northern Railway has now much reduced this, and with proper safeguards, a certain amount of fishing for the market can probably be done with benefit to the resident Half-breeds and Indians. The maintenance of an ample fish supply for food requirements is however, of paramount importance in this district under present conditions, and it is not desirable that any influx of outside fishermen intending to fish for commercial purposes should be encouraged.

I regret to report that no satisfactory solution has been arrived at in the matter of the protection of the western trout from the ravages of the irrigation ditches. Fortunately in the past year the rainfall has been so ample that many of the ditches have been disused and others run only a short time, so that the injury done has been slight in comparison to that to be expected in a dry season. The screens called for by the Regulations are only used in a few isolated instances.

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Some trouble has been experienced with new settlers coming from foreign countries, who have taken fish out of season and by illegal methods. These offences however sprang more from ignorance of the regulations than from intentional wrong doing, and an explanation of the law has generally sufficed to prevent their repetition.

Satisfactory results have been obtained by the appointment of resident guardians at the more important of the detached Assiniboian lakes. Care has been taken to appoint men interested in the protection of the fish, and thus at a very small expense, the netting done in the spawning season by raiders from a distance, often to the indignation of the nearer settlers, has been practically ended.

SYNOPSIS OF THE REPORTS OF THE OVERSEERS AND GUARDIANS
IN THE DISTRICTS SPECIFIED.

PRINCE ALBERT.

Overseer Robertson reports a very much diminished catch in this district owing mainly to the entire abandonment of the fish export business. The lakes where this winter fishery was formerly carried on are situated from 70 to 80 miles from Prince Albert, in which immediate vicinity the fishermen live, and the latter claim that the fifteenth of December, when the season now opens, is too late for them to start, as export buying ceases about February 15, and so short a season does not enable them to make a fair winter's wage. Transportation charges are heavy and prices paid on the ice are two cents per pound for whitefish, $1\frac{1}{2}$ cents for trout, 1 cent for doré and pike.

Very little fishing was done in the Saskatchewan River, as both the North and South Branches continued very high throughout the summer and the current was too strong to permit of nets being set.

The overseer reports the fishery regulations to be now well understood and observed by both settlers and Indians, but the persistent fishing carried on at some of the smaller lakes in close proximity to Indian Reserves, has caused the supply of whitefish in particular to be much decreased. This is specially noticeable at Assiniboine and Sandy Lakes, both of which would be much benefited by a supply of fry.

No fishing is now being done at Candle, Big Trout, Little Trout and Dog Lakes, in which fishing for the export trade was formerly done. The whitefish here are specially good, and were found by the exporters to be the most marketable fish sent from the western lakes. Lake trout and pike are also very plentiful. The overseer is of opinion that as far as the supply of fish is concerned, a big catch could be made yearly without detriment to the fishery. The outlet from Candle Lake is a fine stream, about ninety feet wide, with scarcely any perceptible current except at a point about fifty miles from where it enters the Saskatchewan River. Here it breaks over a ledge of limestone rock in a fall of ten feet. The Indians have been in the habit of taking large numbers of sturgeon at this point in a rather novel method. Two nets are secured side to side, with poles fastened to the ends to be held on either side of the stream by three or four men. A platform as it were is thus formed for the fish to leap into as they come over the fall. When some have been taken the nets are shifted down the stream a little and the fish removed by canoe.

Montreal and Bittern Lakes were visited by *Guardian Anderson* in November. Fish had been found scarce in the former and the Indians had made their fall fishing at the latter lake before the beginning of the close season. Subsequent warm weather spoiled the fish and it was found necessary to permit them to fish for daily food in the close season.

Considerable work was done by *Guardian Cromartie* in removing obstructions from the connecting creeks of the crooked lake chain, which with the high stage of water prevailing has placed the lakes in good shape.

The overseer attributes the falling off in the number of licenses and permits issued in the district to the general prosperity prevailing, which enabled all able-bodied men to find more lucrative employment.

Five cents per pound was being paid for whitefish and trout in the local market, but very few were being brought in.

The steam tug and fishing plant formerly operated by the Killarney Fish Company has been removed from the district.

EDMONTON DISTRICT.

Overseer Young reports the whitefish lake fisheries in his district to be in capital condition. Lac la Biche is now again well stocked with fish, while the population steadily dependent on fish for food has decreased. Lac St. Anne has also picked up wonderfully from its former condition. In four nights 41 persons fishing with 67 nets, about 30 fathoms each, took 24,300 fish, the fish, too, being finer and larger than of late years. At Pigeon Lake not so much fishing as usual was done during the summer, the roads to it being in dreadful state. Owing to the bad weather, the Indians lost a great part of the hay they put up there, consequently fewer will winter at the lake and a smaller number of licenses be applied for.

The overseer reports that with the great influx of new settlers, a great deal more fish are being taken in the numerous creeks of his district. Fish traps and baskets are put in during the time of the spring run of the coarse fish, and large quantities are taken, from which, in many cases, a few of the best are taken for food and the rest left to rot or fed to pigs. The appointment of a special guardian or two to visit some of the worst points is recommended, in order that this evil may be checked.

LONG LAKE DISTRICT.

Overseer Foster reports a most satisfactory season at this lake. The water rose higher than it had been for seven years, there was an abundance of fish food and the fish taken were in prime condition. Spawning whitefish were observed in the shallows during the close season in much greater numbers than of late years and the spring run of coarse fish was also very good. With the close season as now enforced the stock of fish appears to be fully sustained. There were no infractions of the regulations. The bulk of the fish caught are taken in the winter but there was an increased amount of summer fishing in the past year. Most of the fish are marketed in the Regina and Moose-Jaw districts, but about 8,000 lbs. of whitefish were exported to British-Columbia.

QU'APPELLE LAKES.

Guardian Leader states that the heavy spring floods had a very beneficial effect on the waters of these lakes, the high water having afforded a long period of free passage from lake to lake and river. While there was a small increase in the catch of whitefish over last year, the quantity taken is still very small compared with that which these lakes once supplied, and it is noted that the fish are almost all of large size, reaching in some case to over ten pounds. It is evident that this valuable species is slow in recovering from the exhaustion it suffered in the very dry seasons of some years since and a supply of whitefish fry could be planted with much advantage. The catch of tullibee has been good: these weigh from $1\frac{1}{2}$ lbs. to 3 lbs. and sell very readily at 5 and 6 cents per lb. Pike, pickerel and suckers continue very plentiful, though vast numbers are destroyed every spring in the small creeks where they are left stranded. All fish taken are disposed of locally.

The dam at Katepewa successfully withstood the heavy strain of the long continued and exceptionally high waters, and its fish way works very satisfactorily.

Fines were imposed in three cases for illegal fishing during close season, but no infraction of the regulations by licensed fishermen is reported.

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BATTLEFORD DISTRICT.

Guardian Gagné reports having visited the various lakes in his charge, and that the close seasons were observed. A better catch of whitefish is reported at Jackfish Lake, it not having been fished during the past two years as much as formerly. At Turtle Lake, the catch was disappointing, and it is apparent that the lake will require some time to recover from the effects of former fishing in the spawning season. The whitefish of this lake have long been noted for their size and quality, the average weight being about 6 lbs.

There is still reason to complain of the destruction of fish in the Battle River by means of barriers and traps, but detection of the offender is difficult.

LOWER SASKATCHEWAN DISTRICT.

The fishery in this district was formerly confined to the food requirements of the resident Half-breeds and Indians, but in 1898 an export trade in sturgeon was started, the fish being caught in Cedar Lake and sent out in summer by way of Lake Winnipeg, and last winter by Winnipegosis. The high price prevailing for sturgeon and caviare led to an attempt to further develop this trade during the past summer, but it was not considered advisable to permit this in view of the dependence of the inhabitants of the district on the fish supply for their living during a great part of the year. The fishermen themselves petitioned for the closing of the fishery for the summer fearing the intrusion of outside men: this latter feeling leading to somewhat exaggerated statements being made as to the rapid depletion of the lake. Licenses were subsequently issued to permanent residents, only permitting them to take sturgeon during the winter season, when no fish are wasted and a far better price can be obtained by the fishermen. Overseer McKay of Grand Rapids has been placed in charge of the district and the present arrangement has given satisfaction. At Cumberland and Cheemawawin Guardians Jones and Hooker have been appointed: the gradual deterioration of the fisheries and the great dependence of the people upon them, making it necessary to prepare the way for the enforcement of a close season. The floods in the Saskatchewan River in the fall caused great hardship among the people, the fishing grounds were much disturbed, and the catch was much smaller than usual. Fish have become scarce in those lakes near the little centres of population, where the fishing has been very persistent both in and out of season. A close season will now be enforced at these points and its effects will doubtless be as beneficial as already proved elsewhere.

The extension of the Dauphin Railway will bring within reach of a winter market, the northern waters of Lake Winnipegosis, which are situated within the Territories. These are well stocked with whitefish and will no doubt receive the immediate attention of the commercial fishermen. It will therefore be necessary to at once arrange for the due regulation of this fishery.

I am, sir,
Your obedient servant,

E. W. MILLER,
Inspector of Fisheries N.W.T.

NORTH-WEST TERRITORIES.

RETURN of the Number of Fishermen, Boats, Nets, &c., and the Quantity and Value of Fish caught in the North-west Territories for the Year 1899.

DISTRICTS.	FISHING MATERIAL.				KINDS OF FISH.							TOTAL VALUE.		
	Boats.		Gill Nets.		Whitefish, lbs.	Trout, lbs.	Pickarel, lbs.	Pike, lbs.	Sturgeon, lbs.	Perch, lbs.	Tullibee.	Mixed and coarse fish, lbs.	Number.	Number.
	Number.	Value.	Men.	Number.											Fathoms.	Value.
1 Qu'Appelle.....	40	920	80	180	4370	1005	47000	78000	56000	500	26000	102000	1	7,135 00
2 Macleod.....	10	200	15	15	500	125	5000	8000	.....	.....	.....	4000	2	2,250 00
3 Edmonton.....	108	1300	200	620	18800	2500	307000	9000	4000	1000	18000	25000	3	16,270 00
4 Battleford.....	20	250	40	100	3500	500	50000	18000	10000	.....	3000	40000	4	3,670 00
5 Prince Albert.....	109	1090	140	270	7500	1600	202000	27000	42000	.....	.....	50000	5	13,800 00
6 Northern districts.....	.....	.....	100	.....	.....	.....	3500000	1500000	1000000	.....	60000	1500000	6	257,450 00
Totals.....	287	3760	575	1185	34670	5750	4111000	1640000	1112000	1500	167000	1721000
Values.....	2055550	32800	5750	15	2140	17210	300,575 00

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RECAPITULATION

OF the Yield and Value of the Fisheries of **Manitoba** and the **North-west Territories**, for the Year 1899.

Kinds of Fish.		Rate.	Quantity.	Value.
		\$	cts.	\$
Whitefish, salted	Brls.	8	120	960
" fresh	Lbs.	0	7,610,520	380,526
Trout	"	0	85,000	4,250
Pickarel	"	0	2,307,758	69,233
Pike	"	0	3,661,258	73,225
Sturgeon	"	0	559,787	32,437
" caviare	"	0	15,745	7,872
Perch	"	0	72,513	1,435
Tullibee	"	0	346,948	6,939
Catfish	"	0	124,653	3,740
Coarse fish	"	0	3,630,981	36,569
Home consumption	"	0	572,500	5,725
Total for 1899				622,911
" 1898				613,355
Increase				9,556

RECAPITULATION

OF the Number of Tugs, Boats, Nets, &c., used in **Manitoba** and the **North-west Territories**, for the Year 1899.

Articles.	Value.
	\$
11 fishing tugs, 194 tons (72 men)	29,000
533 fishing boats (967 men)	13,202
188,470 fathoms gill-nets	23,726
159 fathoms seines	350
2 pound-nets	300
63 freezers and ice houses	57,225
27 piers and wharfs	6,450
Total	130,253

APPENDIX No. 8.

BRITISH COLUMBIA.

ANNUAL REPORT ON THE FISHERIES OF BRITISH COLUMBIA FOR
THE YEAR 1899, BY C. B. SWORD, INSPECTOR.

NEW WESTMINSTER, B.C., January 2, 1900.

HON. SIR LOUIS H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to inclose statistical report of the fisheries of British Columbia for the year 1899, also returns of the pack of the various canneries and Collector Milne's report of the fur-sealing industry.

SALMON.

The pack of salmon was 765,519 cases, 36,744,912 lbs., showing a satisfactory increase over that of the previous year (23,642,452 lbs.) though fully twelve and a half million lbs. below the amount put up in 1897.

Of the total quantity of salmon packed, 664,332 cases were sockeye, 50,000 spring (mainly from the Skeena River) 43,337 cases cohoes, and the balance, 7,850 cases humpback and dog salmon. The humpback and dog salmon have only recently come into use as a commercial product, this being the first season in which they have been canned in the province, though both, but more especially the dog salmon have always been a favourite and important article of diet among the Indians.

The pack of these would have been very much larger this season had it not been for the intervention of the annual close time, from August 26 to September 25; the run of humpbacks being practically over before the fishing season reopened. This close time also interfered very much with the pack of cohoes, a considerable number of which had passed up the river before the opening of the season, and some of the canners who would otherwise have put up this variety did not think it would be profitable to them to start up their works again after a month of enforced idleness.

In the pack of the northern canneries no cohoes are included. The seasons of the runs of the different species there seem to be more sharply defined than in the Fraser River district, the sockeye run being over before the coho run begins and there being very few sockeyes seen except as part of the main run.

Guardians Roxburgh and Williams, the one on the Skeena River and the other at Rivers' Inlet, who have each had some years experience in their respective districts agree in their views on this point, and do not consider the regulations of the Fraser River suitable to these districts. They consider the close season between the sockeye and coho runs unnecessary and of very little use there, as there are so few straggling sockeyes; while from the fact that the coho run follows so directly on that of the sockeye, the enforcement of the present close season practically prohibits any pack of cohoes.

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On Puget Sound the total pack this season was 871,500 cases, made up as follows :

Sockeyes	497,700
Spring-salmon. or Quinnat	20,200
Cohoës	90,400
Humpbacks	245,400
Dog-salmon.	17,800

The explanation given of the great preponderance of humpbacks over dog-salmon is, that these species run in alternate year, the present being the humpback year. These figures are approximate merely, the official returns being not yet available.

The total pack of the same district in 1898 is given by Mr. Little, State Fish Commissioner, as 400,200 cases made up as under :

Sockeye	252,000
Spring-salmon or Quinnat	11,200
Cohoës	98,600
Dog-salmon.	38,400

The pack of sockeyes being little more than one-half of the estimate for this year, and there having been no humpbacks put up.

In our own northern waters there were practically no cohoës packed.

The amount of salmon used fresh is nearly 1,000,000 lbs. over that of 1898, this increase being roughly, the amount handled by the Columbia Packing Co., which has recently entered into the business of cold storage on a large scale. The amount of dry-salted salmon (mainly for export to Japan), is less by 1,000,000 lbs. this year than last, the export last year having been 2,000 tons (4,000,000 lbs.) as against 1,500 tons (3,000,000 lbs.) this year.

This is an industry which was first tried in 1897, in which year 300 tons (600,000 lbs.) were shipped as an experiment. The fish thus exported are mainly the dog-salmon which were formerly of no commercial value, and the industry is one susceptible of considerable development. The smaller export this year, as compared with 1898, is accounted for, partly by the run of dog-salmon being smaller this year, but mainly by the fact that the big run of humpbacks (which would otherwise have been substituted by the Japanese for the dog-salmon) took place during the close season.

Of barrelled salt salmon the amount is, this year, 3,450 brls., as against 2,600 brls. in 1898, the increase being mainly the product of a saltery established this year on the Skeena River.

This also is an industry which, especially in years of good runs, when the capacities of the canneries are overtaxed, should be susceptible of an enormous increase. It is the opinion of some of those engaged in the business that if means were provided by which their product could be shipped with an official guarantee of its grade and quality a better and surer market could be obtained and the business would very soon attain large proportions.

STURGEON.

The catch of sturgeon is falling off, the total for this year being only 278,650 lbs. as against 1,137,696 in 1897 and 770,000 in 1898. It is too early to say whether this falling off is occasioned by the depletion of the river or merely one of those fluctuations to which all fishing industries are liable.

In 1898 there were 164 licenses for nets issued as against 88 this year.

There is a good deal of illegal fishing with unbaited hooks still carried on notwithstanding the vigilance of the officers and the seizure of several lines.

HALIBUT

The company engaged in the halibut fishery in Hecate Strait are well satisfied with the results of their operations, but it is to be regretted that these as well as other sea fisheries are not being more generally prosecuted.

GUANO.

The return of the product of fish guano is 550 tons as against 200 tons in 1898.

A well equipped factory was established for treating the offal from the canneries on the Fraser River and operated satisfactorily. This unfortunately was burned just at the close of the fishing season. However, the proprietors, Messrs. Wymonde & Co., are now rebuilding and will have it in good condition for next season's work. As there is every reason to expect that the canners will avail themselves next season more generally of this means of disposing of the offal, we may reasonably hope that this troublesome question has at last received a satisfactory solution so far as the Fraser River is concerned, and that if not wholly removed, the nuisance and unsanitary conditions engendered by the presence of the offal will be greatly mitigated.

On the Fraser River there are this year four canneries more than in 1898. There has been no increase in the number of these in other parts of the province, but several are likely to be built at different points on the northern coast for operation next season.

The fishing industry of British Columbia has already attained large proportions with every prospect of further development and some increase in the staff of guardians will be necessary to secure the observance of the regulations.

On the Fraser River it has been very difficult to enforce the strict observance of the weekly close time, the eagerness of the fishermen not to lose any of the run, making them throw out their nets before 6 p.m. on Sunday unless the guardian were actually present, and the beats of these guardians being far too extended for them to be able to watch more than a small portion of the river. Official flags to be hoisted at suitable points at 6 p.m. on Sunday would be of considerable effect in checking this practice as offenders could not then plead ignorance of the hour and the example of others.

Besides additional guardians, some provision for adequate steamer service is absolutely necessary for the proper supervision of the fisheries of the province.

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

C. B. SWORD,
Inspector of Fisheries.

SESSIONAL PAPER No. 22

A.—SCHEDULE of Salmon Canneries operated in British Columbia, Season of 1899.

Owners or Agents.	Name of Cannery.	District.	Locality.	Packed in 48-lb. Cases.
Cleave Canning Co	Cleave	Fraser River	New Westminster	15,415
Burn & Walker	Premier	"	"	5,750
F. Boutilier & Co.	Boutilier	"	"	11,000
Westminster Packing Co.	Westminster	"	"	8,706
Peter Birrell	B. C.	"	"	5,000
Fraser River Industrial Society	Industrial	"	"	5,738
St. Mungo Packing Co.	St. Mungo	"	"	12,970
A. Ewen & Co.	Ewen's	"	Lion Island	18,700
B. C. Canning Co.	Dear Island	"	Dear Island	9,200
Victoria Canning Co.	Delta	"	Ladner's	17,750
"	Havlock	"	Port Guichon	13,275
"	Wellington	"	"	16,923
Turner, Beeton & Co.	Fisherman	"	"	7,253
A. B. C. Packing Co.	Wadham	"	Ladner's	10,132
"	Canoe Pass and B. A.	"	Canoe Pass	13,000
"	Phoenix	"	Lulu Island	10,131
"	Brittania	"	"	13,105
Macdonald Bros.	Westham Island	"	Canoe Pass	8,014
Penzar & Crowder	Anglo-American	"	"	7,500
Butterman & Dawson	Brunswick No. 1	"	Steveston	8,938
"	" 2	"	Canoe Pass	8,709
Currie & McWilliams	Currie's	"	Westham Island	22,000
Albion Island Canning Co.	Albion	"	Albion Island	22,584
Canadian Pacific Canning Co.	Canadian Pacific	"	Lulu Island	11,468
J. H. Hume & Co.	Hume's	"	"	7,700
J. H. Todd & Sons	Beaver	"	"	11,409
B. C. Packing Co.	Colonial	"	"	15,400
Pacific Coast Packing Co.	Bain's	"	"	10,272
R. Ward & Co.	Imperial	"	Steveston	8,260
Turner, Beeton & Co.	London	"	"	8,156
Federation Canning Co.	Lighthouse	"	"	8,000
Canadian Canning Co.	Star	"	"	12,100
United Canneries Co.	Gulf of Georgia	"	"	28,500
R. Huston	Atlas	"	"	7,585
United Canneries Co.	Scottish Canadian	"	"	19,716
Canadian Canning Co.	Fraser	"	North Arm	9,082
"	Vancouver	"	"	17,890
Aeae Canning Co.	Aeae	"	"	7,650
Turner, Beeton & Co.	Terra Nova	"	"	11,680
Alliance Packing Co.	Alliance	"	"	6,629
Dinsmore Island Canning Co.	Dinsmore Island	"	"	10,000
Provincial Canning Co.	Provincial	"	"	8,000
Greenwood Canning Co.	Greenwood	"	"	3,950
J. H. Todd & Co.	Richmond	"	"	10,320
Welch Bros.	Keltic	"	"	5,536
United Canneries Co.	English Bay	"	English Bay	16,300
B. C. Canning Co.	Windsor	Skeena River	Skeena River	14,062
Carlisle Canning Co.	Carlisle	"	"	10,200
Globe Canning Co.	Globe	"	"	7,900
A. B. C. Packing Co.	North Pacific	"	"	18,200
"	British American	"	"	18,750
R. Cunningham	Skeena	"	"	14,750
Turner, Beeton & Co.	Inverness	"	"	15,500
Victoria Canning Co.	Standard	"	"	10,200
Anglo Alliance Canning Co.	Anglo-Alliance	"	"	3,000
Cunningham & Rhode	Lowe Inlet	"	Lowe Inlet	10,341
Victoria Canning Co.	Wannock	Rivers Inlet	Rivers Inlet	10,867
B. C. Canning Co.	Victoria	"	"	18,000
"	Rivers Inlet	"	"	18,000
Wadham & Co.	Wadham	"	"	19,610
A. B. C. Packing Co.	Good Hope	"	"	7,500
Butterman & Dawson	Brunswick	"	"	10,740
Vancouver Canning Co.	Vancouver	"	"	9,711
R. Draney	Namu	"	Namu Harbour	7,200
A. S. Spencer	Alert Bay	No. 7 District	Alert Bay	6,950
T. Earle & Co.	Clayoquot	No. 10 "	Clayoquot Sound	5,200
Federation Canning Co.	Naas Harbour	Naas River	Naas River	11,630
"	Mill Bay	"	"	7,812

765,519

64 VICTORIA, A. 1901

B.—BRITISH COLUMBIA

License No.	Vessels.	Masters.	Tons.	CREWS.		BOATS.	
				Whites.	Indians.	Boats.	Canoes.
5	Ainoko.....	G. Heater.....	75	6	24	2	12
8	Arietis.....	Wm. Heater.....	86	6	28	2	14
11	Beatrice.....	A. McDongall...	66	5	24	1	12
15	Borealis.....	T. Harold.....	47	6	19	2	9
19	City of San Diego.....	C. Campbell.....	46	6	20	2	10
14	Diana.....	A. Nelson.....	50	18	.....	6	.....
12	Dora Seward.....	H. F. Seward.....	94	7	34	2	17
22	Emma and Louisa.....	M. White.....	84	6	26	2	12
28	Entreprise.....	J. W. Anderson.....	69	9	22	3	11
13	Favourite.....	L. McLean.....	80	6	36	2	15
20	Geneva.....	Wm. Byers.....	92	10	26	3	13
17	Hatzie.....	J. Daley.....	72	6	24	2	12
23	Ida Etta.....	C. Campbell.....	69	7	28	1	14
25	Libbie.....	C. Hackett.....	92	6	24	2	12
3	Mary Taylor.....	J. W. Todd.....	43	21	.....	6	.....
29	Mermaid.....	C. Le Blanc.....	73	23	.....	11	.....
16	Minnie.....	V. Jakobson.....	46	6	20	2	10
4	Ocean Belle.....	R. O. Lavender.....	87	9	19	2	9
9	Otto.....	J. W. Gosse.....	86	7	28	2	14
1	Penelope.....	D. G. Macaulay.....	70	6	18	2	9
24	Teresa.....	G. Meyer.....	63	5	25	1	12
7	Umbrina.....	J. W. Peppitt.....	99	8	35	2	17
26	Victoria.....	T. Balcam.....	63	6	25	2	12
10	Viva.....	D. McPhee.....	92	6	31	2	15
27	Walter L. Rich.....	T. Cole.....	84	6	26	2	12
6	Zillah May.....	W. E. Baker.....	66	6	25	2	12
...	Indian catch.....	.....	.....	.....	.....	.....	.....
Totals			1,894	213	587	68	285

SESSIONAL PAPER No. 22

Sealing Report, 1899.

British Columbia Coast.		Vicinity Copper Island.		Behring Sea.		Totals.	Skins Branded.	Remarks.
Males.	Females.	Males.	Females.	Males.	Females.			
293	156			477	646	1,572	....
249	143			578	636	1,606	1	
163	147			387	381	1,078	1	
151	49			246	356	802	....
				504	426	930	2	
480	296					776	....
124	195			495	738	1,552	1	
	2			113	798	913	....
147	454			362	842	1,805	1	
101	170			559	588	1,418	1	
719	863			396	475	2,453	....
355	38			394	533	1,320	1	
				428	762	1,190	....
				357	422	779	1	
65	97			20	34	216	....
507	811	210	489	37	81	2,135	....
112	124			468	507	1,211	2	
468	235			129	627	1,459	....
398	327			536	444	1,705	....
426	193			189	420	1,222	....
				209	811	1,020	....
203	237			910	872	2,222	....
				641	762	1,403	2	
159	283			425	842	1,709	....
				119	390	509	....
270	267			590	322	1,449	3	
	892					892	....
5,384	5,979	210	489	9,569	13,715	35,346	16	

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the quantity and value of Fishing Materials and the Kinds of Fish in the Province of British Columbia, for the year 1899.

DISTRICT.	VESSELS AND BOATS.				FISHING MATERIALS.				KINDS OF FISH.					Number.				
	Vessels.		Boats.		Gill Nets.		Seines.		Salmon, in cans, lbs.	Salmon, salted, brls.	Salmon, dry salted, lbs.	Salmon, smoked, lbs.	Salmon, fresh, lbs.		Sturgeon, lbs.			
	Number.	Value.	Men.	Number.	Value.	Men.	Value.	Fathoms.								Value.	Fathoms.	Value.	Inns.
1 Fraser River.....	55	2200000	170	8405	170250	13400	408284	306213	1400	2100	3200	25014008	400	3000000	80000	1450590	2553650	1
2 River's Inlet.....	12	44500	36	610	31500	2480	104000	78000	200	300	100	4014144	350	.....	2000	20000	.....	2
3 Skeena River.....	10	31000	30	490	24500	1960	121000	90750	1000	1500	150	5899344	1000	.....	14500	70000	.....	3
4 Naas River.....	1	2500	3	100	5000	480	20000	15000	.....	50	800	933216	200	.....	10000	10000	.....	4
5 East Coast, Queen Charlotte Island.....	.....	.....	.....	23	3750	75	2500	1875	260	375	800	.....	150	.....	6000	2300	.....	5
6 West Coast, Queen Charlotte Island.....	.....	.....	.....	28	3800	112	3000	2250	300	450	275	.....	.....	.....	.....	.....	.....	6
7 Cape Scott to Comox.....	.....	.....	.....	36	4000	90	2900	2175	500	750	275	333600	100	.....	5500	30500	.....	7
8 Comox to Victoria.....	65	13000	195	80	4800	160	5750	4300	4000	6000	2500	.....	250	250	76000	260000	23000	8
9 Victoria to Cape Beale.....	7	1899	23	30	1590	120	3500	2625	1000	1500	2250	.....	250	.....	7500	23500	.....	9
10 Cape Beale to Cape Scott.....	3	750	12	25	1250	100	2750	2060	470	600	200	249600	750	.....	10000	4750	.....	10
Totals.....	153	3133550	469	4829	250350	18977	673684	505248	9050	13575	9800	36443912	3450	3000000	211500	1873550	278650	
Values.....	3644391	34500	120000	21150	187355	13933	

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RETURN showing the Quantities and Value of Fish, &c., in British Columbia—*Concluded.*

DISTRICTS.	KINDS OF FISH.												Totals.	Number.					
	Herring, fresh and salted, lbs.	Herring, smoked, lbs.	Oulachons, fresh, lbs.	Oulachons, salted, brls.	Oulachons, smoked, lbs.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Codfish, lbs.	Skill, brls.	Mixed fish, lbs.	Hair-seal, skins.			Fish oil, galls.	Fish, guano, tons.	Caviare, lbs.	Shad, lbs.	
1 Fraser River.....	250000	150000	250000	275	2500	1550000	1500000	35000	160000		160000	500	39500	550	4000	4500	2,970,033 30	1	
2 Rivers Inlet.....	20000					25000	300				5000	800	9000				412,369 40	2	
3 Skeena River.....			60000	625		5000	2500		1500		250	750	6000				620,196 90	3	
4 Naas River.....	5000		75000	900	20000	10000	1000		1500		750	2500	9500				116,234 10	4	
5 East Coast, Queen Charlotte Island.	30000	2500				30000			2500	35	12000	2000	28950				16,240 00	5	
6 West Coast, Queen Charlotte Island.	25000	2500				25000			10000	60	25000	2000	12250				9,775 00	6	
7 Cape Scott to Comox.....	15000	1000	125000	350	2500	10000	10000	6000	2900	15	10000	500	6500				53,385 00	7	
8 Comox to Victoria.....	250000	25000	100000	50	2000	400000	150000	33000	350000		250000	300	15000				124,325 00	8	
9 Victoria to Cape Beale.....	10000	2000				5000	5000		8000		8000	250	6250				9,912 50	9	
10 Cape Beale to Cape Scott.....	20000	4000				15000	10000		5000		8000	250	12500				41,197 50	10	
Totals.....	625000	187000	610000	2200	27000	2075000	328800	74000	537500	110	476000	7600	145200	550	4000	4500			
Values.....	18750	18700	30500	22000	2700	103750	32880	3700	26875	1100	23800	5700	43560	16500	1600	225			4,373,668 70
Oysters.....																	12,000 00		
Clams and mussels.....																	9,080 00		
Crabs and abalone.....																	22,500 00		
Shrimps and prawns.....																	5,000 00		
Estimate of fish not included in above.....																	350,000 00		
35,346 Fur-seal.....																	441,825 00		
Total value.....																	\$5,214,073 70		

D.—RECAPITULATION.

OF the Yield and Value of the Fisheries of **British Columbia** for the Year 1899.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, canned	Lbs. 36,443,912	0	10	3,644,391	20
" salted	Brls. 3,450	10	00	34,500	00
" dry, salted	Lbs. 3,000,000	0	04	120,000	00
" smoked	" 211,500	0	10	21,150	00
" fresh	" 1,873,550	0	10	187,355	00
Sturgeon	" 273,650	0	05	13,932	50
Caviare	" 4,000	0	40	1,600	00
Herring, fresh and salted	" 625,000	0	03	18,750	00
" smoked	" 187,000	0	10	18,700	00
Halibut	" 2,075,000	0	05	103,750	00
Trout	" 328,800	0	10	32,880	00
Oulachons, fresh	" 610,000	0	05	30,500	00
" salted	Brls. 2,200	10	00	22,000	00
" smoked	Lbs. 27,000	0	10	2,700	00
Smelts	" 74,000	0	05	3,700	00
Codfish	" 537,500	0	05	26,875	00
Skill	Brls. 110	10	00	1,100	00
Shad	Lbs. 4,500	0	05	225	00
Oysters	"			12,000	00
Clams and mussels	"			9,080	00
Crabs and abelonies	"			22,500	00
Shrimps and prawns	"			5,000	00
Estimate of fish not included in above	"			350,000	00
Fish, mixed	" 476,000	0	05	23,800	00
Hair-seals	Skins. 7,600	0	75	5,700	00
Fur seals	" 35,346	12	50	441,825	00
Fish oil	Galls. 145,200	0	30	43,560	00
Fish guano	Tons. 550	30	00	16,500	00
Total				5,214,073	70

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E.—CAPITAL in Fishing Plant and Material in British Columbia Fisheries, 1899

Vessels, Boats, Canneries, Nets, &c.	Number.	Value.	Total Values.
		\$ cts.	\$ cts
<i>Fisheries—</i>			
Vessels	153	313,550 00	
Boats	4829	250,350 00	
Scows, &c.		17,250 00	
Fathoms Gill-nets	673,684	505,248 00	
" Seines	9,050	13,575 00	
Lines, hooks, &c.		9,800 00	
Salmon canneries	69	1,380,000 00	
Cold storage-freezers	6	75,000 00	
Oil factories	2	35,000 00	
Salteries	2	5,000 00	
			2,604,773 00
<i>Fur Sealing—</i>			
Vessels (actually engaged)	26	84,500 00	
Boats "	68	6,800 00	
Canoes "	285	14,250 00	
			105,550 00
Total			2,710,323 00

Hands employed in fisheries, boats and canning	18,977
" vessels	4,829
Sailors and hunters in sealing (whites)	213
(Indians)	607
Total	24,626

APPENDIX No. 9

ONTARIO.

ANNUAL REPORTS OF INSPECTORS.

TORONTO, January 11, 1900.

HON. SIR L. H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—Respecting the fisheries in my division for the year 1899, I beg leave to report, as follows :—

The principal kinds of fish in my division are trout, whitefish, pickerel, herring, pike, sturgeon, eels, perch, catfish, bass, maskinonge and brook or speckled trout.

The herring and trout catch last year was exceedingly satisfactory, showing a very large increase over the previous year, owing largely to the open season which gave the fishermen from one to two months of extra fishing.

The whitefish catch in my division shows a small falling off, while in the catch of bass, maskinonge, perch and catfish the falling off is very marked, being about 50 per cent, (fifty) in each case.

Remunerative prices were received by the fishermen for their catch, which made last season a very profitable one.

The close season was not well observed, especially in the case of inland waters, where considerable netting was done. This accounts to a very great extent for the lessened amount of game fish, (bass and maskinonge) caught as compared with former years. I am giving special attention to this branch of the fisheries in my division, and hope to remedy the evil.

All of which is respectfully submitted,
Your obedient servant,

O. B. SHEPPERD,
Inspector of Fisheries.

MARKSVILLE, January 3, 1900.

Hon. Sir LOUIS DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—In compliance with your instructions, I have the honour of making the following report of the fisheries for the north-western division of the province of Ontario for the year ended December 31, 1899.

The number of men employed as well as the number of gill-nets, pound-nets, tugs, sail-boats and other fixtures, such as piers, freezers, ice houses, &c., and their value is slightly in excess of last year.

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As to the catch in Lake of the Woods, whitefish and pickerel aggregated same as last year, trout shows an increase. Fishermen claim the most noticeable difference is in sturgeon, which shows a decrease of one half the catch, which they claim was largely due to the long continued season of east winds, as the United States fisheries situated on the west side of the lake had a very heavy catch, and they attributed it largely to the same cause.

I would here recommend that your government ask the United States government to assist in the protection of our fishing interest in the Lake of the Woods district which are invaluable, for many American fishermen catch large quantities of sturgeon during spawning season, and thus threaten the total extermination of this species, one of the most valuable in all our northern lakes.

In Lake Superior the catch shows a slight increase over that of last year in whitefish and trout. In North channel of Lake Huron from St. Joseph Island to Little Current, whitefish and salmon trout almost depleted, and pickerel is the staple fish of this locality, Manitoulin Island, Duck, Squaw, Fitzwilliam and Bustard Islands gave an increased yield of whitefish and trout. I would here recommend that all pound-nets in my division should have one side of the pot 4 and one-half inches mesh so as to let the small fish escape. There was a good deal of illegal fishing this season as there were not sufficient officers of the Ontario government appointed to carry out the fishery regulations. If a fish hatching establishment were located at Sault St. Marie so as to serve both Lakes Superior and Huron, there is no doubt that it would give great satisfaction in these waters and would be of great benefit to them in every way.

I am sir, your obedient servant,

A. G. DUNCAN,
Inspector of Fisheries.

ONT

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, caught in the Province of

Number.	FISHING MATERIALS.											
	Tugs or Vessels.				Boats.			Gill Nets.			Pound Nets.	
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.	Number.	Value.
	<i>Lake of the Woods and Rainy River District.</i>					<i>%</i>				<i>%</i>		
1	Lake of the Woods.....	3	38	4500	10	20	950	49	10000	955	34	3500
2	Rainy Lake.....	1	15	1500	4	2	250	8	1350	420	4	800
3	Butler Lake.....					1	50	3	1000	102		
4	Eagle Lake.....					1	50	2	1000	160		
5	Lake Wabigoon.....					1	50	2	1000	100		
6	Lake Minnitakie.....					1	50	7	2500	250		
	Totals.....	4	53	6000	14	26	1400	71	16850	1927	38	4300
	Values.....\$											
	<i>Lake Superior.</i>											
1	Thunder Bay.....	9	168	9650	32	30	1870	46	288900	8035	26	2290
2	Lower Portion Lake Superior...	6	70	15100	40	11	1850	24	236600	11110	10	5000
3	Michipicoten Island.....	2		8000	20	1	150	2	109000	4390		
4	Lizard Islands.....	1	36	3600	8	6	1200	12	100000	4000		
5	Batchewana Bay.....	1	34	2000	5	2	300	4			5	2500
6	Point Mamanse.....	1		2000	5				27000	2020		
7	Goulais Bay and Parisian Island					2	200	6			5	2500
8	Sault Ste. Marie.....	1		100	2				600	700		
	Totals.....	21	308	39850	112	52	5570	94	762100	30255	46	12290
	Values.....\$											

NOTE—The Statistics of Ontario are taken from the Provincial Reports.

SESSIONAL PAPER No. 22

ARIO.

the Quantity and Value of all Fishing Materials ; also the Kinds and Quantities of Fish Ontario, during the Year 1899.

KINDS OF FISH.												TOTAL VALUE.	Number.		
Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Pickereel or Doré, lbs.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Perch, lbs.	Tullibee, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.	Sturgeon bladders, lbs.			%	cts.
	253894	23469	132100	56200		135948		14394	220	10674	380	44,042	54	1	
	36978		12962			11960				600	68	4,558	34	2	
	450	1900		200									254	00	3
	2500	2000	1900		500								525	00	4
	13615	12990	83500	2500			100	4000					6,906	20	5
	1601	592	300	1028					4000				323	40	6
	309038	40951	230762	59928	500	147908	100	18394	4220	11274	448				
	24723	4095	11538	2397	30	8874	3	1104	84	3382	358	56,489	48		
138226	243991	652504	33319	5333		6240			678			89,801	43	1	
	189619	765047	1514	3119		2772	100		500			92,054	00	2	
	13744	449790										46,078	52	3	
	57487	211839										25,782	86	4	
	58832	8904	914	175		1544						5,742	30	5	
	7456	64062										7,002	68	6	
	44100	24152	600	2944		1228						6,164	64	7	
	8000	6300										1,270	00	8	
138226	623229	2182598	36347	11571		11784	100		1178						
2764	49858	218260	1817	463		707	3		23			273,896	43		

SESSIONAL PAPER No. 22

and Value of Fish, &c., in the Province of Ontario—Continued.

KINDS OF FISH.											TOTAL VALUE.	Number.		
Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickereel or Dore, lbs.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Perch, lbs.	Catfish, lbs.			Mixed and coarse fish, lbs.	\$	cts.
		45	30		150	6800			100		500	299	10	1
		500	700			1500						170	00	2
		6000	22300		12000			9000				3,850	00	3
4		6406	3448		53590	4131		7065		500		4,153	92	4
		24440	27679		105366	3744		11931		1848		10,913	98	5
		58020	18620		43970	325		2650				8,874	10	6
		44300	1000		2600	6000		1000				4,074	00	7
16	1013	6285	41247		38183	3851		13484		3541		7,654	81	8
	6000	8297	7396		3114							1,679	06	9
		55735										4,458	80	10
			23822									2,382	20	11
					116933							5,846	65	12
				227		15073		415				645	98	13
							654			188	2684	96	68	14
											14880	297	60	15
28½	7013	585638	700346	227	400406	247699	654	73921	993	12570	26277	152,367	55	16
											7200	144	00	17
		16000	120000									13,280	00	18
		21000	10000									2680	00	19
54	14026	832666	976588	454	776312	289123	1308	119466	1093	18647	51541			
216	2815	66613	97658	36	38816	11565	78	7168	32	373	1031	223,958	43	

SESSICNAL PAPER No. 22

Quantity and Value of Fish, &c., in the Province of Ontario—Continued.

KINDS OF FISH.														TOTAL VALUE.	Number.	
Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Whitefish, brls.	Trout, brls.	Trout, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Sturgeon, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.			\$	cts.
		106169			129872		31636	8700				8000		23,570	52	1
16		38000			38000		4000							7,104	00	2
		7800			2300		1850							946	50	3
		3000			4000		1000	2000			55			771	10	4
		29560			76500		42800	3000				2000		12,314	80	5
		43200			89900		68500	800	41100		500	63750		19,654	00	6
72	3000	4071	22	15			76925	10465	524		1406	13855		5,645	19	7
		2850	10	43	3000									1,058	00	8
		550	8	22	9000			1000						1,284	00	9
		107000			432000		41000	42000	11000		5000	18000		56,610	00	10
		17000			626000		10000							54,460	00	11
39	37100	95820			145538	410	29600	2400	25576	1700		5501		27,566	58	12
		5000			247000				300				3816	25,118	00	13
		24000			219000									23,820	00	14
		210000			266000		277200	23000	48000	2000	5000			61,220	00	15
14		50000		33	170000		90000	14000	1000	1000				26,536	00	16
14	154200	66200	1	126½	539484		20000	10000						65,059	40	17
155	194300	810220	41	239½	2897594	410	694511	117365	127500	4700	11961	111106	3816			
620	3886	64818	410	2395	289759		34725	4695	7650	141	239	2222	1144	412,738	09	
241½	6750	2000	35	449½	745497				900					80,709	70	1
61	2800	13600		288	158325									20,100	50	2
...	18291	1083			216645		28584		5340	2058	11	11100		24,150	52	3
29	197901	4391		12	31760		183070		86413			36427		22,788	12	4
331½	225742	21074	35	749½	1152227		211654		92653	2058	11	47527				
1326	4515	1686	350	7495	115223		10582		5559	61		950		147,748	84	

64 VICTORIA, A. 1901

RETURN of the Number, Tonnage and Value of Vessels and Boats, and the

Number.	DISTRICTS.	FISHING MATERIAL.												
		Tugs or Vessels.				Boats.			Gill Nets.			Seines.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.	Number.	Yards.	Value.
	<i>Lake St. Clair.</i>													
1	River St. Clair.					14	245	34	1	300	30	11	755	545
2	Thames River					26	354	95				25	615	805
3	Lake St. Clair and Detroit River	1	20	600	2	52	1676	97				25	3329	1815
	Totals.	1	20	600	2	92	2275	226	1	300	30	61	4699	3165
	Values.													

SESSIONAL PAPER No. 22

Quantity and Value of Fish, &c., in the Province of Ontario—Continued.

Pound Nets.		KINDS OF FISH.											TOTAL VALUE.		Number.	
		Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Bass, lbs.	Pickeral or doré.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.				
Number.	Value.													\$	cts.	
.....	.....	50	400	.....	.....	108903	1000	.....	3996	.....	.....	28722	6,508	35	1
.....	.....	.....	.....	.....	2000	58931	5780	.....	787	1215	3042	219968	7,881	62	2
9	2575	.....	250	9126	1619	44028	20402	2598	74314	33145	9872	216177	14,012	13	3
9	2575	50	650	9126	3619	211862	27182	2598	79097	34360	12914	464917	.....	.....	.....
.....	.....	200	13	730	289	10593	1087	156	4746	1031	258	9298	28,402	10	.....

RETURN of the Number and Value of Tugs and Boats, and the Quantity and Value of Fish, &c., in the Province of Ontario—*Con.*

DISTRICTS.		FISHING MATERIAL.															
		Tugs or Vessels.			Boats.			Gill-nets.			Seines.			Pound-nets.			
Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.	Number.	Yards.	Value.	Number.	Value.	Number.	Value.	
		£			£				£			£		£		£	
<i>Lake Erie.</i>																	
1	20	1500	8	5	1100	15	126	9500	520	4	240	140	10	3000	1	3000	
2	98	10000	7	44	4510	59	.....	.....	.....	.....	.....	.....	44	1570	2	1570
3	102	17000	16	62	6700	83	.....	.....	.....	.....	.....	.....	73	28170	3	28170
4	76	14900	16	25	2255	40	5	900	75	.....	.....	.....	52	18780	4	18780
5	89	14500	15	7	759	12	2	17500	2000	.....	.....	.....	22	7200	5	7200
6	.....	.....	.....	26	785	63	3	1500	130	16	5632	1641	.....	.....	6	.....
7	.....	.....	.....	14	510	23	10	7700	410	.....	.....	.....	.....	.....	7	.....
8	58	3500	11	11	801	21	7	27200	1358	.....	.....	.....	14	2515	8	2515
9	56	7025	17	9	805	18	.....	62990	2850	.....	.....	.....	.....	.....	9	.....
10	.....	.....	.....	2	106	4	2	6200	380	.....	.....	.....	.....	.....	10	.....
11	.....	.....	.....	4	200	6	5	1850	1295	.....	.....	.....	1	400	11	400
12	.....	.....	.....	16	650	20	6	20000	1250	.....	.....	.....	.....	.....	12	.....
Totals.....		491	68425	90	225	19172	364	166	155340	10268	20	5872	1781	216	75765		

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantity and Value of all Fish, &c., in the Province of Ontario—Continued.

DISTRICTS.	KINDS OF FISH.												TOTAL VALUE OF ALL FISH.	Number.
	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickered or Dore, lbs.	Pike, lbs.	Sturgeon, lbs.	Perch, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.			$ cts.
<i>Lake Erie.</i>														
1 Pelee Island.....	218746	13780	.....	.....	8975	49495	12794	5480	.....	3155	1100	1700	9,433 01	1
2 County of Essex.....	788616	58814	.....	.....	161262	292682	20873	78917	.....	10528	90221	.....	46,882 69	2
3 County of Kent.....	3664130	68030	.....	.....	159833	273238	22436	86460	.....	735	192962	.....	105,461 27	3
4 County of Elgin.....	1145106	96911	.....	1365	582509	91811	16442	38256	.....	2091	59696	.....	66,490 23	4
5 Houghton and Long Point.....	166025	66120	.....	144	59981	89774	23681	9786	.....	784	21424	4491	18,732 53	5
6 Port Rowan Bay.....	2300	.....	.....	17691	52207	41261	.....	82433	7500	10490	138840	.....	11,691 66	6
7 Normandale.....	21373	.....	.....	2421	7677	2652	.....	19138	46	3571	4539	.....	1,850 17	7
8 East of Port Dover.....	185881	41773	240	9168	141847	350	18210	28702	.....	890	63549	133	18,205 59	8
9 Cayuga to Moulton's Bay, including Grand River, Low Banks.....	74938	83733	25	6511	77388	4640	530	34700	.....	500	15600	.....	*14,242 58	9
10 Port Colborne.....	300	1690	.....	.....	525	.....	300	3500	.....	.....	1880	.....	318 05	10
11 Ridgeway.....	2150	171	.....	102	8642	1950	1489	2335	.....	.....	7453	.....	883 39	11
12 Port Erie.....	.....	.....	.....	16100	8850	16350	25350	1400	.....	.....	2400	.....	3,995 50	12
Totals.....	6269565	431022	265	53502	1270696	864203	142375	391107	7546	33154	599164	6324	.....	.....
Values.....	125891	34482	26	4280	63535	34568	8542	11733	453	663	11983	1897	297,626 67	.....

*In No. 9 include 9 barrels Herring and 600 pounds of Maskinonge.

RETURN of the Number and Value of Tugs and Boats, Nets, &c., in the Province of Ontario—*Con.*

Number.	Tugs and Vessels.				Boats.		Gill-nets.			Seines.		Dip-nets.			
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.	Number.	Yards.	Value.	Number.	Value.
<i>Lake Ontario and Tributaries.</i>															
1	1	6	2000	3	2	10	7	*	276	60	276	27600	1614	1	300
2	10				10	540	22	276	27600	276	27600	27600	1614	2	300
3	6	2000	3	3	6	225	9	301	30100	945	30100	30100	945	3	301
4	2				2	21	4	4	2100	70	2100	4300	140	4	4300
5	3				3	100	6	6	4300	140	4300	18500	450	6	18500
6	3				3	300	6	6	18500	450	18500	46600	2355	6	46600
7	19				19	1022	31	456	46600	2355	46600	78000	5300	7	78000
8	17				17	12600	46	750	78000	5300	78000	6500	295	8	6500
9	3				3	275	9	9	6500	295	6500	33200	1985	9	33200
10	18				18	1500	24	16	3800	485	3800	34000	1155	10	34000
11	7				7	250	16	16	5800	485	5800	32130	1090	11	32130
12	18				18	325	30	26	34000	1155	34000	9000	750	12	9000
13	26				26	304	50	40	32130	1090	32130	8100	186	13	8100
14	37				37	1211	99	10	9000	1000	9000	560	4	560	
15	2	16	2000	6	35	900	75	10	8100	186	8100	4820	24	4820	
16	1	30	300	4	20	300	4	28	9850	750	9850	4820	24	4820	
17	18				18	394	31	24	4820	650	4820	336310	27630	18	336310
18	18				18	400	24	24	4820	650	4820	336310	27630	18	336310
Totals.	4	52	4300	13	282	20997	517	1859	336310	27630	336310	525	855	287	4721

*3 Machines.

SESSIONAL PAPER No. 22

RETURN showing the Kinds, Quantity and Value of all Fish, &c., in the Province of Ontario—Continued.

Number.	DISTRICTS.	KINDS OF FISH.												TOTAL VALUE OF ALL FISH. \$ cts.	Number.		
		Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel or dore, lbs.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Eels, lbs.	Perch, lbs.	Catfish, lbs.			Mixed and coarse fish, lbs.	
<i>Lake Ontario and Tributaries.</i>																	
1	Queenston		9000	300		5000	5300		3070	1400	18000					1,677 20	1
2	Niagara		675	31105			108667		18389		17357					9,556 30	2
3	Port Dalhousie		170094	12150			740			100	6689			13		4,617 81	3
4	Louth	40	25300	500							12000			600		1,088 00	4
5	Clinton		51250	1000					450		5000					1,298 00	4
6	Grimshy	4	105000	3200							5000					4,406 00	5
7	Burlington Beach		261331	51500	19000	100	1000		2340		6188					10,265 51	7
8	Haldon County		443000	600	3600	700	1000				400	900	1000	12000		9,675 00	8
9	Peel County		500	22450	7040	2200			80	100	1000			100	4800	1,034 80	9
10	County of York		149300	22450	4810				77		500			150	9000	5,521 62	10
11	County of Ontario		16000	3000	50						50					575 50	11
12	County of Durham and Northumberland		15400	9130	4650		200				12000					2,943 40	12
13	Rice Lake and Trent River					500	7620	600								2,814 18	13
14	County of Prince Edward		16391	63520	50142	3425	4600	115000	383	5100	3636	7130	10000	20000		16,890 46	14
15	Bay of Quinte		20100	26350	500	750	10250	114529	150		25730	90667	64700	90500		15,000 47	15
16	Lennox County and Napanee River	4	15570	1900		50	2275	30120			4994	31761	15350			2,893 99	16
17	Amherst Island and vicinity		6500	31010	4555	5200	2200	9905			2860			390827		5,223 91	17
18	Wolfe Island and vicinity		300	2100	4600		15503	1500			1000	3357	20638	19824		2,787 26	18
	Totals	48	1306211	256915	104177	17925	135232	318302	2633	33316	241177	198700	221391			98,359 41	
	Values	192	26124	20785	10418	1434	6761	12732	158	1999	2118	7235	3974	4428			

RETURN of the Number and Value of Tugs and Boats and the Quantity and Value of Fish, &c., in the Province of Ontario—*Con.*

Number.	DISTRICTS.		FISHING MATERIAL.						KINDS OF FISH.										TOTAL VALUE OF ALL FISH.			
	Number.	Value.	Boats.	Gill-nets.		Hoop nets.		Hearting, fresh, lbs.	White fish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel or dore, lbs.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Eels, lbs.	Perch, lbs.	Carfish, lbs.	Mixed and coarse fish, lbs.	\$	cts.	
1	489	32	71	2300	205	57	1050	5190	100	900	5000	11500	81016	110	700	3275	68375	45995	6,865	09	1	
2	245	30	24	1020	465	53	1060	1000	1700	8400	3779	79874	465	900	300	56740	21563	21563	6,136	84	2	
3	59	9	10	250	26	3	60	.....	.....	.....	240	1050	1300	830	2400	700	2610	4400	478	70	3
4	10	1	1	.....	.....	5	100	.....	.....	.....	.....	.....	250	538	150	75	7040	175	137	83	4
5	.....	.....	.....	.....	.....	.....	.....	1000	800	500	18900	.....	.....	24800	.....	200	300	.....	3,062	00	5
6	1000	800	14320	196750	200	160	272	50	1286	1920	10510	22340	34,387	16	6
Totals.....			106	803	72	41	3570	696	118	2270	7190	2660	12750	162100	290960	1833	5436	6470	94493
Values.....			144	208	2412	17973	638	6484	17817	110	326	194	2361	1889	51,127	62

SESSIONAL PAPER No. 22

RECAPITULATION of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, the Quantity and Value of all Fishing Materials, during the Year 1899, in the Province of Ontario.

Number.	DISTRICTS.												FISHING MATERIAL.												OTHER FIXTURES USED IN FISHING.			
	Tugs or Vessels.			Boats.			Gill-nets.			Seines.			Pound-nets.		Hoop-nets.		Night Limes.		Freezers and Ice Houses.		Piers and Wharfs.		Number.					
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards.	Value.	Number.	Yards.	Value.	Number.	Value.	Number.	Value.	No. hooks.	Value.	Number.	Value.	Number.	Value.					
1	4	53	6300	14	26	1400	71	16850	1927	%	%	%	%	38	4300					17	9200							
2	21	308	39850	112	52	5770	94	762100	30255					46	12900					12	80240							
3	23	260	24950	112	41	4685	69	137340	12400					108	20700					12	3150							
4	22	420	57700	133	128	10255	505	610731	7773					31	2000	4	40			8	1000	2						
5	12	274	33200	70	82	5448	173	352905	32024					49	7390					19	2210							
6					14	245	34	300						30	11	755	545					230	1	250				
7	1	20	600	2	52	1676	97							25	3329	1815				4	375							
8	23	499	68425	90	225	19172	364	153340	10268	20	5872	1781	805	26	354	95				*16	*21							
9	4	52	4300	13	282	20997	517	336310	27630	8	525	835		216	75765	2	100			88	31560	1	600					
10																				287	4721							
11					106	803	72	3570	696											118	2270	1450	56					
12																												
Totals.	109	1889	238925	541	1033	70305	1889	3685	2373446	192803	89	11097	3801	497	125820	411	7137	225575	740	211	337901	4	1303					

* Dip-nets.

RECAPITULATION of the Quantity and Value of all Fish

Number.	DISTRICTS.	KINDS							
		Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Whitefish, brls.	Trout, brls.	Trout, lbs.	Bass, lbs.	Pickered or dorc, lbs.
1	Lake of the Woods and Rainy River.....			309038			40951		230762
2	Lake Superior.....		138226	623229			2182598		36347
3	Lake Huron North Channel...	54	14026	832666		9	976588	454	776312
4	Georgian Bay.....	155	194300	810220	41	239½	2897594	410	694511
5	Lake Huron.....	331½	225742	21074	35	749½	1152227		211654
6	River St. Clair.....	50	400						108903
7	Lake St. Clair and Detroit River.....		250	9126					44028
8	Thames River.....							2000	58931
9	Lake Erie and Grand River...	9	6269565	431022			265	53502	1270696
10	Lake Ontario.....	48	1306211	259815			104177	17925	135232
11	Frontenac, Leeds, Carleton, Prescott, and Renfrew division.....		6190	1800			9300	9019	12550
12	Peterborough, Victoria and other inland counties.....		1000	800			14820	215650	200
	Totals.....	647½	8155910	3298790	76	998	7378520	300579	3580126

SESSIONAL PAPER No. 22

caught during the Year 1899, in the Province of Ontario.

OF FISH.									TOTAL VALUE OF ALL FISH.	Number.
Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Caviare, lbs.	Eels, lbs.	Perch, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.		
			³ / ₄ *448						\$ cts.	
59928	500	147308	11274		100	18394		4220	56,589 48	1
11571		11784			100			1178	273,896 43	2
289123	1308	119466			1093		18647	51541	223,958 43	3
117365		127500	3816		4700		11961	111106	399,558 09	4
		92653			2058		11	47527	147,748 84	5
1000		3996						28772	6,508 35	6
20402	2598	74314			33145		9872	216177	14,012 13	7
5780		787			1215		3042	219968	7,881 62	8
864203	600	142375	6324		391107	7546	33154	599164	297,626 67	9
318302	2633	33316		35309	241177		198700	221391	98,359 41	10
161940	110	1833		4150	4350		135765	72133	13,678 46	11
160	296850			1286	2120		10810	22340	37,449 16	12
1849774	304599	755932	21414	40745	681165	25940	421962	1595517	1,590,447 07	

* Sturgeon bladders.

RECAPITULATION

Of the Yield of the Fisheries of the Province of Ontario for the Year 1899.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Whitefish, salted.	Brls. 76	10	00	760	00
"	Lbs. 3,298,790	0	08	263,903	20
Herring salted.....	Brls. 647 $\frac{1}{2}$	4	00	2,590	00
" fresh.....	Lbs. 8,155,910	0	02	163,118	20
Trout, salted.....	Brls. 998	10	00	9,980	00
" fresh	Lbs. 7,378,520	0	10	737,852	00
Bass.....	" 300,579	0	08	24,046	32
Pickrel	" 3,580,126	0	05	179,006	30
Pike.....	" 1,849,774	0	04	73,990	96
Maskinonge.....	" 304,599	0	06	18,275	94
Sturgeon.....	" 755,932	0	06	45,355	92
Caviare.....	" 21,414	0	30	6,424	20
Bladders.....	" 418	0	80	358	40
Eels.....	" 40,745	0	06	2,444	70
Perch.....	" 681,165	0	03	20,434	95
Catfish.....	" 421,962	0	02	8,439	24
Coarse fish.....	" 1,595,517	0	02	31,910	34
Tullibee.....	" 25,940	0	06	1,556	40
Total 189)				1,590,447	07
" 1898				1,433,631	72
Increase.....				156,815	35

RECAPITULATION

Of all Fishing Tugs, Boats and Nets, &c., used in the Province of Ontario for Year 1899.

Articles.	Total Value.
	\$
109 tugs (1,886 tonnage, 541 men).....	238,925
1,033 boats (1,889 men).....	70,505
2,373,446 yards gill-nets.....	192,803
89 seines (11,097 yards).....	5,801
497 pound-nets	125,820
411 hoop-nets.....	7,137
44 dip-nets	1,569
22,575 night lines.....	740
211 freezers and ice houses.....	137,901
4 piers and wharfs.....	1,303
Total.....	782,504

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APPENDIX No. 10.

QUEBEC.

REPORT ON THE GULF OF ST. LAWRENCE FISHERIES FOR THE SEASON OF 1899, BY FISHERY OFFICER WM. WAKEHAM, M.D., COMMANDER OF "LA CANADIENNE."

GASPÉ BASSIN, 2nd January 1900.

To the Hon. Sir LOUIS H. DAVIES, K.C.M.G.
Minister of Marine and Fisheries.

SIR,—I have the honour to submit herewith the annual report of the Gulf Division Fisheries, together with the usual statistics for the season of 1899. The recapitulation shows an increase in the value of the fisheries of \$142,352.85 over the returns for 1898. This is due to a better return from the cod, herring and salmon fisheries, the lobster and mackerel fisheries on the other hand having fallen off. On the lower north shore from Natashquan eastward to the Strait of Belle Isle the summer cod-fishing was a failure. For the third season in succession the capelin failed to strike inshore. The deep water fall fishing along the same coast was however fair. This enabled the fishermen who were already heavily indebted, owing to the two previous bad years, to obtain the necessary winter supplies, thus doing away with necessity for Government aid, a thing always to be avoided if possible. Otherwise the season was an uneventful one, the fall was open, and free from severe storms.

COD.

Cod struck in about the middle of May as usual, and continued fairly abundant on the south coast fishing grounds all season. The inshore cod fishery shows no diminution, when bait is plenty the regular banks frequented by the boats show no decrease of their old time abundance; though the return to the gulf during the last two seasons of the dog-fish has caused considerable annoyance, and loss to fishermen. As stated in the opening paragraph, the summer cod-fishing on the Lower North Coast was for the third season in succession a failure. These failures seem to occur regularly, and generally for several years in succession. They are due to the movements of the capelin in June and July. The fishery is an inshore one, made almost entirely with trap-nets and seines, and when, from whatever cause, the capelin fail to strike into the bays, and among the islands, when the nets are fished there take no cod; when the capelin do strike in, the cod follow, and the fishery is always good, it never lasts more than about three weeks, but during even this short run the fishery is often enormous, the catches being only limited by the ability of the fishermen to handle them.

Foreign markets, especially in South America, show an improvement. The prices paid to fishermen by the large exporting firms were consequently advanced.

SALMON.

The yield of the salmon fishery shows a slight increase, this was confined entirely to the north shore, as along the coasts of Bonaventure and Gaspé the net fishing was

again below an average, while the fly fishing, for sport, was also in many rivers poor. This was due entirely to natural causes, the salmon struck the coast late, the winds during the netting season were not favourable, in most cases for good net fishing we require off shore winds, while for good sport fishing we need moderately high water, and showery weather. Neither of these prevailed, and consequently all salmon fishing, whether for market or sport, was slack. Breeding fish were very abundant in the river in the fall, the future of the fishery must therefore benefit materially by the shortened catch. On the north coast all the conditions were more favourable, and the catch, both by netters and anglers, was fully up to the average.

HERRING.

The herring fishery both in Bonaventure and Gaspé was good, the catch showing an increase of about 10,000 bbls. As herring were scarce in Newfoundland, and on the Newfoundland Labrador, prices were firm and our fishermen reaped the advantage. For several years back, increased attention has been paid to this fishery by the fishermen living on that part of the coast of Gaspé extending along the south shore of the Gulf from Gaspé Bay to Cape Chatte. The fish however are not put up as carefully as they might be, while the barrels used are poorly made and too slight to stand handling. The resulting product of the fishery therefore does not command the price it certainly would were more skill and care shown in the method of its preparation, both in curing and packing. At present our pickled herring are only marketed in our own Province. The output could be greatly increased,—the fat herring taken along our shores in the summer and fall are quite equal to those caught on the other side of the Atlantic, yet we find the United States, and even our own western markets, supplied with herring cured in Scotland and Holland. This is simply because our own herring are roughly and carelessly cured, and are put up in badly made barrels.

MACKEREL.

This fishing is now confined entirely to the Magdalen Islands, when the catch for this season was slightly below that of last year. In the Baie Chaleur a few mackerel were taken along the north shore of New Brunswick, but none whatever on the Quebec side. A few small schools were seen by passing vessels in the upper part of the Gulf between Manicouagan and Cape Chatte, but none were caught. It would seem that the schools which formerly spawned in our large bays, such as Gaspé and Seven Islands, where at one time considerable catches were made, have been entirely exterminated, or have altogether abandoned the grounds.

LOBSTERS.

The lobster pack continues to fall off, the total yield being about 10,000 pound tins below that of 1898, though in Gaspé and Bonaventure a slight increase in the pack is shown, this is due entirely to favorable weather conditions, and the increased number of canneries in operation, and traps fished. I very much fear that under the new regulations, which considerably lengthen the fishing at the Magdalen Islands, where the bulk of the packing is done, and where the lengthened season will be taken advantage of by the small packers, this diminution will go on with yearly increasing rapidity. The larger and more careful packers will everywhere close down long in advance of the close season, as they have always done.

Owing to the taking over of the licensing of the salmon and smelt fisheries by the Provincial Government of Quebec, the services of the fishery officers in Gaspé and Bonaventure were dispensed with. On the north shore, below Point des Monts, in Saguenay County, where we still continue to issue the net licenses, the officers were retained. The fishery statistics, however, are still being taken on the south shore by the officers detailed to collect the bounty claims.

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At Anticosti the extensive works projected by Mr. Menier are being vigorously pushed, large tracts of low and swampy land are being cleared, drained and brought under cultivation. The breakwater at Ellis Bay, now over half a mile long, is being rapidly extended to deep water, while the entrance to the bay is shown by a system of range beacons and buoys. The prosecution of all this work has entailed the employment of a couple of hundred hands, in addition to the local labour. These men are all Canadians and the supplies they require, when not furnished on the island, have been imported from Quebec. It is expected that a decision will be reached during the coming winter in the matter of the rights of the settlers at Fox Bay. Should this decision be favourable to Mr. Menier, as it can hardly fail to be, he proposes to put up extensive buildings on the shores of Fox Bay, for the purpose of carrying on there a general fishing business, when a large number of fishermen from Gaspé and the Maritime Provinces will find employment there.

I beg to append synopsis of the reports of those of the local officers who have furnished any.

SYNOPSIS OF THE REPORTS OF THE LOCAL FISHERY OVERSEERS.

Bonaventure Sub-division, extending from Maguasha to Paspebiac Point. *Mr. George Forrest* reports that the salmon fishing failed almost completely. Herring were abundant throughout the whole season. Cod were scarce in the early part of the season, but later they struck into the upper part of the Baie des Chaleurs in great abundance. The lobster fishery continues to fail. The yield is about the same, but this is only made by the greatly increased number of traps used. The prices of fish ruled high, and many more people than usual engaged in the fishery. The regulations were strictly observed.

Port Daniel Sub-division, extending from Paspebiac Point to Point Macquereau. *Mr. F. X. Chappatos* reports the salmon fishing a failure. Herring were plentiful. The codfishing was most abundant especially in the fall. The lobster pack shows about the same return as usual.

Gaspé Sub-division, extending from Point St. Peter to Fame Point. *Mr. Walter Langlois* reports a decrease in the salmon fishery of 28,583 lbs., as compared with 1898. Herring fishing was about as usual. Herring were taken at Point St. Peter and Chien Blanc as late as the 7th December. The codfishing was good, a total of 25,390 cwt. being taken in this subdivision. The price was good, being from \$1.25 to \$1.50 per cwt. better than last year. The lobster fishery continues to fail. The snelt fishing was good, the total catch for 18 seines being 84,000 lbs.; an increase of 38,000 as compared with last season. No mackerel were taken.

MAGDALEN ISLANDS.

Mr. J. A. Chevrier reports for the southern division of the islands that the spring seal hunt was a failure, only about 200 seals having been captured off Deadman Island. Herring were abundant, many vessels from the Maritime Provinces and the United States having loaded with herring in Pleasant Bay. The spring mackerel fishery was not as good as usual. This was due to unfavorable weather and other causes. The fall or fat mackerel fishery was also below the average. Mr. Chevrier attributes this to the setting of nets by foreign fishermen in vessels. He thinks there should be no nets set in Pleasant Bay or around Entry Island after the 1st August. He would also insist that all schooners be compelled to remain in harbour, and send out their boats to fish just as the shore boats go out, &c. He thinks that one of the cutters should be detailed to see that this is done, at least during the time of the mackerel and herring fishery.

The lobsters are diminishing yearly. He thinks the fishing should close on the 1st July and open again on the August 15th. No illegal lobster fishing was detected in his subdivision.

Mr. Procul Chevrier reports for the northern half of the islands, that the spring herring fishery began on the 28th April, and ended about the May 30th; during this time herring were very abundant. Lobster packing began on the 10th May, the fishing was good up to about the May 30th; but after that date it fell off rapidly. The increase shown in the pack is due entirely to the greater number of traps fished. A certain amount of illegal lobster fishing was done in the Lagoon between House Harbour and Grand Entry in spite of the fact that extra guardians were put on. Wherever traps were found in the Lagoons they were destroyed. The mackerel catch shows a decreased yield, the local fishermen attribute this very largely to the ravages of the Dog-fish. No seals were killed on the shore ice in the spring, innumerable seals were seen on the ice, but owing to contrary winds they never came on shore so as to permit the hunters to reach them. Cod were abundant especially in the fall, but very few people belonging to the northern islands now engage in this fishery.

Godbout sub-division, extending from Manicouagan to Jambons. *Mr. N. A. Comeau* reports only a moderate catch of salmon. This is in part due to the fact that the usual number of nets were not fished. The netting began on the May 24th and continued to the first week of July. Both cod and herring show a decrease, this was largely due to bad weather, bait was also scarce at times. Halibut are increasing in abundance. Lobster are decreasing in quantity, though the pack is kept up by the increased number of traps used, a decrease in the size of the lobster is also apparent. The winter seal hunt was a good one.

Moisie sub-division, Jambons to Pigou. *Mr. T. Migneault* reports that salmon net fishing began on the May 17th and closed on the July 10th. The fishing was good, better than that of 1898, though the nets were taken up in the River Moisie on the June 24th, fish ran in for some time later. Sport fishing was good, some 200 fish having been taken by the anglers. The cod-fishing was poor, but the price ran high, \$4.25 per cwt. being paid to fishermen on the spot. Herring which seem to have avoided Seven Islands Bay for several years back returned again this season, and fair catches were made.

Mingan sub-division, Pigou to La Corneille. *Mr. George DuBerger* reports the salmon net fishing as being a little less than last year, though, it may be considered a fair average fishing. The cod-fishing shows a decrease, especially at Esquimaux Point, when the boats which early in the season go down to Natashquan did nothing. The price of cod was however high, \$4.25 per cwt., this more than made up to the fishermen for the reduced catch.

Natashquan sub-division, La Corneille to English Point. *Mr. John W. Scott* reports the spring seal hunt a failure, only half the usual number of seals having been killed. The salmon fishing was good, it having yielded a return of 38,000 pounds, which was 15,000 pounds in excess of the catch in 1898. The cod-fishing was poor though the returns show an increase of 1300 cwt. over those of last season. The lobster pack shows a small increase, this was due to the fact that the usual packing season was extended by two weeks.

The above is humbly submitted.

WM. WAKEHAM,
Officer in charge of the Gulf Division Fisheries.

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REPORT ON THE FISHERIES ON THE SOUTH SHORE FROM LEVIS TO
BAIE DES CHALEURS, BY INSPECTOR N. LAVOIE.

L'ISLET, Que., January 18, 1900.

The Honourable Sir L. H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—In transmitting herewith the fishery statistics for the year 1899, of that part of my division extending from Levis to the division line between the counties of Rimouski and Gaspé, I deem it necessary to offer a few remarks.

Taken as a whole the yield of these fisheries shows an increase over that of 1898, as well as over that previous years. This may be ascribed to several causes, amongst which are the improved modes of fishing pursued in several localities especially between Montmagny and Levis, and in other parts of the division, between Capucins and Matane. Prices are also exceptionally good for some kinds of fish, such as cod, herring, salmon, &c., which, of course, goes towards swelling the totals. In other places, where the antiquated modes of fishing are the same as those pursued one hundred years ago, the results are not so flattering. I even noticed signs of decrease, which induces me to believe that a good many farmers who pursue fishing as a desultory practice, will give it up in the course of time.

Speaking generally, I may say that cod-fishing was about equal to that of 1898, but prices were more remunerative. Spring and fall fishing for herring was most abundant. Very few of the former are salted, being lean and poor at this time of the year. They are then sold fresh or used for manuring purposes. But the fall herring, which are caught from Sandy Bay going down, are mostly all salted, People use gill-nets for this fishery, while the spring herring are mostly caught in brush weirs. Salmon and shad fishing seem to have been somewhat better this year than last between St. Michael and Levis, but proved almost a complete failure between St. Michael and Matane. Eel-fishing was good at Levis and Beaumont, and very inferior from Beaumont downwards, with the exception of River Ouelle. The fishing gear used between St. Valier and Ste. Anne is antiquated, while it is of an improved kind between Berthier and Levis. Fishing for the so-called sardines was good from St. Denis to Rimouski and Sandy Bay. There seems to be a scarcity of small fish. Various causes are ascribed for this. Some people say it is due to sawdust, others put the blame on brush fisheries. I am inclined to think that contrary winds and natural changes of temperature, added to the above causes, may have had some influence on the disappearance of these fish.

I have no remarks to make on the local fishery overseers except that they do not appear to have anything particular to do.

I think it would be an improvement if I am charged with the collection of these statistics another year, to do this work during the month of October, from Levis to Claude River, at the same time as I am engaged on fishery bounty business. It would be a great saving of time and money, and would insure greater accuracy.

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

N. LAVOIE,
Fishery Inspector.

REPORT ON THE FISHERIES OF THE WESTERN DIVISION OF QUEBEC
BY INSPECTOR A. H. BELLIVEAU, FOR 1899.

Sir LOUIS H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—The so-called western district under my charge comprises all that part of the Province of Quebec lying south-west of the Saguenay River and Bellechasse County.

For the convenience of computing comparative statements, the fishery subdivisions of former years have been adhered to as much as possible. Without assistance, it would be almost impossible for one person to secure reliable statistics in so extensive an inland district as mine. The former reluctance of the fishermen to give an accurate estimate of their fish catch, fearing an increased license fee, should not now exist, as the statistics are required by the federal, while the fees are regulated and collected by the provincial Government. The great difficulty in most of these inland divisions is the excessive number of amateurs or residents fishing the neighbouring streams or lakes for amusement or for home consumption. I find that most of this catch was never before taken into consideration; most of the officers being under the impression that only the capture by licensed fishermen was required. I always endeavour to impress upon the suspicious fishermen that our only object in collecting and publishing annual statements is to show our fellow-citizens as well as foreigners the natural productiveness of our waters. We should be as proud of our piscine wealth as we are of our agricultural and mineral products. I have met foreigners who were astounded to learn that our lobster industry yielded over three and a half million dollars, that our salmon has reached five millions, while other branches as cod and herring are yielding annually four and two million dollars respectively. Many Canadians have still to learn that our waters yield over twenty million dollars annually. The two principal fresh water species, trout and whitefish are therein included with a value of over \$600,000 each.

Should the collection of fishery statistics continue to devolve on me, I will attempt to devise some means of enabling at least the most important fishermen of each locality to keep a better record of their catch than heretofore.

Island of Orleans.—Its Pêches Anglaises.

In that part of my district on the north side of the St. Lawrence, below Quebec, there was little difference in the yield of fisheries as compared with previous seasons. At the Island of Orleans, the hundred weirs encircling that island were less remunerative than usual. Salmon and shad have declined to such an extent, that the fishermen are now losing hopes of ever seeing them return to their former haunts. The principal fishes now captured in these weirs are eels and sardine-herring.

These *pêches anglaises*, as they are usually designated there, consist of a galvanized wire-netting, of about $1\frac{1}{4}$ inch square mesh, set on poles, (the holes of which are often drilled in the rock), from the height of tide to its lowest fall. The pound at the end of the leader, which in my opinion becomes a real trap-net, is divided into three compartments, the entrances of which are gradually getting smaller and narrower. The end or nose is planked at the bottom and covered on top with the same wire net as the remainder of the trap. This part of the trap has no regular fish escape, but it has a door, which I think, serves more to admit the owner inside at low tide than to give the fish an exit on Sunday. At the end of the fishing season this part of the *pêche* is floated ashore simply by removing the large stones used upon it as sinkers. There, it is kept altogether until the next season, when it is again floated with the tide to the end of the leader. This fishing apparatus costs from \$100 to \$600 according to size and height of tide, and it lasts from three to five years.

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These *pêches anglaises* are often set too close to one another. Every riparian owner thinks that he has the same right as his neighbour, and sets such a fishery on his fore-shore whether it will be profitable or not.

Murray Bay division. Speckled trout.

In the Charlevoix and Saguenay districts, excepting a shortage in salmon, the other species yielded an average catch. The quantity of speckled trout caught in the lakes of this district is enormous. Unfortunately the regulation prohibiting trout netting is often violated in these beautiful waters, and many tons of this game little fish are illegally shipped to the market by the settlers of the vicinity. On my first visit, I found these speckled beauties openly peddled to the numerous boarding houses of the locality. Subsequently, steps were taken to a more efficient protection. Upon my recommendation, an officer was appointed to specially supervise the shipping of illegal fish from the Murray Bay district. It seems shortsightedness on the part of the settlers to indiscriminately net these beautiful lakes, so accessible to the seekers of rest and sport in the numerous summer resorts of the famous Malbaie. No thorough sportsman will attempt angling in reputed netted waters. More revenue would be derived from attendance and supplies to the tourists than the paltry individual gain of a few boxes of netted trout. It is however wonderful to notice how long these waters have stood these illegalities and still be fairly productive of this game fish.

Lake St. John division.—Ouananiche.

In the Lake St. John districts a limited number of netting privileges is permitted by the local government, and no doubt the catch of fish is as large as ever, owing to the renewed exertions for its capture. Lake St. John, the home of the famous sporting Ouananiche, is seventy miles in circumference, being nearly as wide as long, that is, of a circular shape. It is fed by several important streams, with beautiful Indian names, such as the Ashuapmouchouan, &c. Here the wealthy tourists, attracted by the celebrated Saguenay trip, will not only find sport in whipping the ouananiche pools of the Décharges, but excitement as well in shooting the chain of swift and surging rapids, extending over sixty miles to Chicoutimi, constituting the head of the Saguenay River. A steamer crosses the lake from Roberval to the Décharge every day. To show the protective inclination of the lessee of these waters, it is sufficient to state that he is operating a private fish hatchery, situated about four miles above Roberval, from which millions of fry are annually liberated to restock neighbouring waters. Besides the Ouananiche, which is called the loveliest and most gamesome of the salmon kind, pike, doré and whitefish are also abundant in these waters.

INLAND DIVISIONS.

In the inland district proper, from Quebec to the Upper Ottawa, the fishery returns show a surplus value of \$37,000 over that of the preceding year. The mighty St. Lawrence with its numerous tributaries, from the boundary line to the old capital of the province, constitute the main portion of this vast district, especially if we include lakes St. François, St. Louis, and St. Pierre, which are merely enlargements of the said river. The principal kinds of fish in these waters are sturgeon, trout, pike, pickerel, catfish, eels and perch. The first five species yielded over 300,000 lbs. each, and all exceeded the previous catch, but shad and whitefish have considerably declined. The capture of trout in the inland waters of Portneuf, St. Maurice and Maskinongé counties, as well as the million little tom-cods caught through the ice fronting these counties, greatly help to make up the aggregate value of this division.

Lake St. Louis.

In Lake St. Louis, where netting and seining has been somewhat curtailed, the nightline fishing shows good results, over 200,000 lbs. of sturgeon being reported from this large expanse of water. The yield of eels, perch, catfish and other coarse fish is also considerable. Nearly the whole catch of this division, from Chateauguay, Beauharnois, &c., is shipped to the Montreal market. The fish are kept alive in reservoirs for that purpose until Wednesday of each week, when they are sub-divided in packages, ready to retail.

Lake St. Pierre—Its Verveux Fishing.

This Lake St. Pierre division shows a large increased value in its general fisheries, it is easily noted that Catfish and other coarse fish or *poisson-mou*, now constitute the staple part of the catch. In the county of Yamaska nearly 300,000 lbs. of such coarse fish is returned; in Richelieu over 150,000 lbs. and in Maskinongé and Berthier about 125,000 lbs. In the first and last of the above mentioned counties, eels and pickerel or doré form an important factor in the total aggregate.

In this sub-division, the largest and most important of my district, fishing is mostly carried on with hoop-nets or *verveux*. It is estimated that between three and four thousand of these fishing engines are to be found around Lake St. Pierre, whose numerous shallow bays and inlets are so suitably adapted to this mode of fishing.

These *verveux* may vary in size according to the depth of water they are to be set in, but they are all of a uniform shape and construction. Six strong hoops or ribs form the skeleton of the *verveux*, the central one being larger than the others, all about 18 inches apart, the whole being covered by a strong cotton net, divided in three compartments, from the last of which there is hardly an escape for the captives. A leader and two short wings of net complete this fishing apparatus. With a few poles it is easily set where the bottom is soft. Hence the bays of Richelieu and Yamaska districts, with their numerous islands bordered with rushes and water weeds, especially that of St. François and La Vallière, are so well adapted to this mode of fishing.

It is doubtful if one-tenth of the *verveux* in use in Lake St. Pierre are licensed. A fisherman paying fees for two or three will perhaps own ten, twelve, fifteen or even more. I know one family, father and sons, who own fully one hundred and fifty of these hoop-nets. Of course they claim that they never use them all at one time, but under favourable conditions there are but few on the dry land. Should every licensed fishing gear bear the number of its license, or some other distinct mark of recognition, it would greatly facilitate the duties of the officers in charge. The pole of indication in these illegal ones is cut short under the surface of the water, and thus nothing appears to the unobservant.

If properly regulated, there would not be much to say against *verveux* fishing. Their principal advantages are their limited cost, (about \$10) their durability and their facility to be handled by one person. Besides the fish caught therein are alive and uninjured, thus giving the conscientious fisherman the opportunity of liberating any protected or game fish thus found during its close season. The objection to the *verveux* comes not from its use, but its abuse. It is high time that stringent measures be adopted and enforced to regulate and perhaps yet save and popularize this mode of fishing wherever practicable. The chief objection to this gear is the diminished size of mesh now used in its construction. While our licenses allow a $2\frac{1}{2}$ inch mesh extension measure, a two inch one has been tolerated and now we often find a $\frac{3}{4}$ inch square mesh, especially in the end compartment of the *verveux*. With such a mesh is it to be wondered that complaints are repeatedly heard against the small fish caught and shipped to market from this district?

The tarring of these nets has also become a source of complaint from many quarters. Amongst others, Officer Riendeau of Montreal, strongly urges the total prohibition of its use, claiming that it is injurious to fish life. From my own observations so far, I am not thoroughly convinced that the effects of tarred nets when properly done, is so injurious as represented to be. It is claimed that while the tarred engine will last four

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or five years, the other will not last one season of constant use in the water. With such a difference it would be injudicious to condemn too hastily a process of such economic value. No doubt some are badly prepared remaining always sticky and almost polluting their immediate vicinity, while others are perfectly waterproof and dry to the touch. This goes to show that there is either a proper way to dye them or the right kind of tar to do it with. After this application of tar is partly dried, they should be immersed in water, then dried again in the hot sun for a long time until thoroughly hardened, before they should be allowed to be set. In fact the proper way would be not to use them at all the first year, or at least, not until the fall fishing. In the case of old nets re-tarred, one should note that every coat of tar applied means a reduction of the size of the mesh, hence the measurements should be made after the tarring process.

The way these hoop-nets are sometimes set at the mouths of small streams or creeks with wings extending almost across their channels, is also a cause of complaint and should not be tolerated, as the object is to capture all the parent fish returning to deep water after having spawned in the upper streams.

Therefore, having the above remarks in view and in order to prevent or at least to curtail and check the further destruction of immature fish, I have recommended that the following points be enacted by O. C in regulations to be vigorously enforced after one season's notice.

Length of wings not to exceed ten feet ; the mesh of wings and leader to be $1\frac{1}{2}$ inch square, and in the *verveux* proper $1\frac{1}{4}$ inch square when in the water. No *verveux* to be set during the months of July and August. None to be set at any time as to bar any channel or in any way prevent the passage of fish in such outlets. Hoop nets improperly tarred to be liable to seizure. Length of leaders and distances between each net as well as other disputes between fishermen to be settled on the spot by the fishery officers.

All such *verveux* found set in the water, without the license's number or other mark agreed upon, engraved on a float or metallic tag attached to the pole used to raise the net, would be liable to seizure and confiscation besides the usual fine

Tom-Cod.

Though apparently insignificant, the catch of tom-cod in the vicinity of Three Rivers deserves mention. Notwithstanding the excessive fishing of two centuries, these little fish seem as plentiful as ever. Their capture last year is estimated at 39,000 bushels, which at 60 cents each, brings a rather handsome remuneration, at a time when it is certainly most needed, by the indigent individuals then without other employment. It really becomes a genuine Christmas call and New Year's gift, as they invariably make their appearance in this locality about the New Year's festival time. Once a year, the tom-cod comes from the depths of the Atlantic towards our coasts for the purpose of depositing its eggs on the sandy bottom of some distant tributaries of Canada's greatest river, their own birth place. Late in the fall, they are noticed here and there in small groups as they ascend the St. Lawrence reaching Quebec in the beginning of December, but the main school of them proceed on their journey to the terminus which seems to be St. Maurice River, where they regularly appear about the 20th December, remaining less than a month. This little fish is then about ready to spawn, its eggs being nearly ripe; however, now begins their slaughter.

The fisherman first builds a shanty on the ice where he eats, sleeps and lives almost constantly while this manna lasts. An oblong opening of about ten feet is then cut in the ice, through which the deadly engine is set facing the current. This fishing gear consists of a sort of bag-net projecting from a rather slim wooden frame, forming the opening through which these *petits poissons* are caught and held captive as others follow and press in. When the operator thinks his bag-net is full enough, he raises it and empties its live contents on the ice. Thus each haul brings out from one to two bushels of these dainty little fish, which lay wriggling and frisking about until the crisp winter air stiffens them in all the various distortant positions imaginable. Those who escape, spawn a short distance up the St. Maurice river, and then again take the direction of

the sea their natural haunts and home. Though they seem to have hugged the northern shore of the St. Lawrence in their ascent, they now prefer the southern coast in their seaward trip. The immense quantity thus captured from Deschambault to Three Rivers for generations past, during the most important period of their reproduction, does not seem to have had visible effect on the supply. Like the real cod, they are so prolific that the few spawning ones can keep up the stock.

The tom-cod or *petit poisson*, as called in Three Rivers, and known in the United States as frost fish, belong to the cod family. Although it neither exceeds a foot in length nor a pound in weight, its resemblance to the true cod is so striking, that it is difficult to distinguish it from its young cousins. The shape of the head and body is the same, their colour, their three dorsal and anal fins are also identical.

Ottawa River Division.

The Ottawa River is no doubt the most important tributary of the St. Lawrence. Owing to increased fees, the number of licensed fishermen has perhaps diminished, but the quantities of fish especially the coarser grades, are still yielding large catches. Of late years more netting has been allowed in Lake Deschenes, and this also helps to swell the total aggregate of this division. No seines are allowed in this district, only gill nets and night lines.

The numerous inland lakes and streams of the Gatineau and Pontiac districts also contribute large quantities of trout, bass and pickerel. Many of these waters are now leased to private clubs for the purpose of recreation and sport. Were all the catches of the individual members of these different clubs added to that of the dispersed settlers for home consumption, the result would be surprising.

The Eastern Townships.

The eastern townships are also bespangled with magnificent lakes of all kinds and sizes, connected by beautiful streams, all so well adapted to the benefit and delight of the seekers of rest and sport. I will not attempt, in this report, the description of such waters as Lakes Memphremagog, Magog, Brome, Massawippi, St. Francis, Aylmer and Megantic, all within a comparatively short radius of Sherbrooke and other towns of easy railway access. Their proximity to such towns as well as to the United-States border renders them almost a sportsman's paradise, and thousands of our neighbouring tourists annually spend their summer vacation at these popular resorts.

Unfortunately these beautiful and once well stocked inland waters do not receive the efficient protection that their importance seems to warrant.

Respectfully submitted,

A. H. BELLIVEAU,
Inspector.

SESSIONAL PAPER No. 22

PROVINCE OF QUEBEC—Gulf of St Lawrence District.

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., and the Quantity and Value of Fish caught in the Province of Quebec, for the Year 1899.

RESTIGOUCHE SUBDIVISION (From Head of Tide to Maguasha Point.)

Number.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.						KINDS OF FISH.					
	Vessels.			Boats.			Gill Nets.			Seines.			Trawls.			Hand Lines.	Number.	
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Salmon, fresh, lbs.			Herring, salted, brls.	Herring, fresh, lbs.
1			\$	30	600	\$	5000	4000							35000	75	9500	1
<i>Bonaventure County.</i>																		
1	Restigouche																	

BONAVENTURE SUBDIVISION (Miguasha Point to Paspébiac Point.)

1	Maguasha and Nouvelle			75	1125	125	5600	2800	4	120	80				100	50	7200	200	3000	1
2	Carleton			120	1700	200	3500	8000	5	160	125				140	70	13300	400	4000	2
3	Maria			160	2250	275	5000	12000	3	90	75				200	100	21400	650	8000	3
4	New Richmond			16	180	30	50	750							30	15	20000	40	4000	4
5	Black Cape			35	450	70	80	2000							20	10	30000	40	400	5
6	Capelin			165	2200	300	625	5300	9	300	225	6	50	600	300	300	520	800	14000	6
7	Bonaventure			275	3750	500	900	7500	30	1000	750	35	280	1100	550	6000	1500	25000	7	
8	New Carlisle			40	500	65	80	1500	12	420	315	5	40	160	80	530	150	5000	8	
9	Paspébiac			1	350	4	200	7000	40	1400	1000	125	1200	900	450			600	10000	9
	Total			1	21 350	4	1086	62475	31200	3490	2570	171	1570	3250	1625	71950	4380	73400		

PORT DANIEL SUBDIVISION (Paspébiac to Point Macquereau.)

1	Hopetown			40	1560	65	70	1040	900	8	195	165	30	670	250	190	2775	220	6000	1
2	Nouvelle			65	1700	140	75	1200	1020	10	245	230	55	325	180	150	2775	600	6000	2
3	Shigawake			55	1300	70	80	1360	1326	6	180	270	10	180	200	180	16388	650	6000	3
4	Port Daniel			170	5100	265	250	3250	2475	20	600	650	60	500	500	460	16388	1250	6000	4
5	Gascons			165	6600	250	400	8000	5600	18	540	540	120	1000	500	460	5050	1100	6000	5
	Totals			495	16260	790	875	15050	11321	62	1760	1785	245	2605	1630	1440	27188	3820	6000	

64 VICTORIA, A. 1901

RETURN showing the Kinds and Quantities of
RESTIGOUCHE SUBDIVISION (From

Number.	DISTRICTS.	KINDS					
		Herring, smoked, lbs.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, fresh, lbs.
1	<i>Bonaventure County.</i> Restigouche			75			

BONAVENTURE SUBDIVISION

1	Maguasha and Nouvelle	10000			95		9000
2	Carleton	15000	5520	12	60		6000
3	Maria	18000			300		8000
4	New Richmond				60		1000
5	Black Cape	5000		3	20		500
6	Capelin	18000	3600	10	2000	2	7000
7	Bonaventure	30000	9600	15	4000	5	10000
8	New Carlisle	5000		10	500		1000
9	Paspebiac				6000	12	10000
	Totals	101000	18720	50	13035	19	52500

PORT DANIEL SUBDIVISION

1	Hopetown		24500		1500	10	
2	Nouvelle				900	6	
3	Shigawake		9450		650		
4	Port Daniel	5500	35808		3800	10	
5	Gascons		4150		5500	25	
	Totals	5500	73908		12350	51	

SESSIONAL PAPER No. 22

Fish, &c.—County of Restigouche—Continued.

Head of Tide to Maguasha Point).

OF FISH.											TOTAL VALUE OF ALL FISH.	Number.
Haddock, dried, cwt.	Hake, dried, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Eels, brls.	Tom cod or frost fish, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
.....	7000	273000	25	45000	.....	.....	.....	250	\$ 24,745 00	1

(Maguasha Head to Paspebiac Point).

.....	.....	.....	10000	.....	12	400	.....	32	24	2000	5,305 60	1
.....	.....	.....	1000	.....	9	200	.....	20	75	5000	9,002 50	2
.....	.....	.....	.....	.....	40	700	.....	100	75	6000	12,337 50	3
.....	.....	.....	8000	.....	5	200	.....	20	15	400	5,558 50	4
.....	.....	.....	500	.....	5	.....	.....	7	5	500	1,333 60	5
10	25	75	200	.....	2	.....	3	670	540	5500	16,710 75	5
25	40	4200	600	.....	10	.....	8	1340	1075	15000	36,686 50	7
5	15	200	500	.....	.....	.....	.....	170	125	1000	3,793 25	8
100	100	1500	800	.....	10	200	.....	2000	1500	3000	32,135 00	9
140	180	5975	21600	.....	93	1700	11	4359	3434	38400	122,863 20	

(Paspebiac to Point Macquereau).

30	.....	.....	.....	.....	.....	.....	.....	50	1000	500	1500	14,525 00	1
15	.....	.....	.....	.....	.....	.....	.....	45	600	300	1000	7,970 00	2
20	.....	.....	.....	.....	.....	.....	.....	20	355	250	1200	8,310 00	3
300	.....	.....	3000	15500	.....	.....	.....	200	2200	800	1800	36,424 20	4
400	.....	.....	.....	.....	.....	.....	.....	600	3150	1100	600	34,985 00	5
765	.....	.....	3000	15500	.....	.....	.....	915	7300	2950	6100	102,214 20	

RETURN showing the Number and Value of Vessels, Boats and

County

GRAND RIVER SUBDIVISION

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.							
		Vessels.				Boats.		Gill Nets.			Seines.		Trawls.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
				\$			\$			\$			\$		\$
1	Newport.....	150	4550	575	325	5850	3050	3	125	65	130	1040			
2	Pabos ...	66	2046	130	125	3362	1576	6	214	167	26	262			
3	Grand River.....	202	9960	545	457	9440	3651	5	240	150	133	1880			
4	Cape Cove.....	117	6490	279	243	4874	2194	7	290	140	49	490			
5	Percé and Bonaventure Island.....	110	3368	286	213	3900	1684	2	80	75					
6	Corner of Beach.....	25	875	45	56	1580	1000	9	250	210					
7	Malbaie and Barachois.....	120	6000	240	246	6200	2820	22	500	400					
8	Point St. Peter.....	1 52	1300	10	75	3000	140	130	2450	1050	4	100	120		
	Totals	1 52	1300	10	865	36289	2240	1795	37656	17025	58	1799	1327	343 3672	

GASPÉ BAY SUBDIVISION

1	Chien Blanc to Sandy Beach.....	261	7575	336	200	6600	4800	11	315	200				
2	Gaspé north and south.....	43	475	48	100	3500	2650	24	960	960				
3	Peninsula and Little Gaspé.....	74	1000	92	120	3954	3270	2	40	15				
4	Grande Grève to Ship Head.....	77	1900	77	70	1900	1300	7	180	195				
5	Cape Rosier to Jersey Cove.....	240	4500	266	100	3189	1000	3	60	50				
6	Griffin.....	126	1900	216	140	2800	850	1	25	10				
7	Fox River and Little Fox.....	203	2925	210	210	4350	1180	4	125	70				
8	Little Cape to Echourie.....	73	890	76	60	1200	310							
9	Point Jaune to Fame Point.....	45	418	56	25	480	138							
	Totals	1142	21583	1377	1025	27973	15498	52	1705	1500				

SESSIONAL PAPER No. 22

Fishing Materials, &c.—Province of Quebec—Continued.

of Gaspé.

(Point Macquereau to Point St. Peter's).

KINDS OF FISH.													TOTAL VALUE OF ALL FISH.	Number.		
Salmon, fresh, lbs.	Herring, salted, brls.	Herring, smoked, lbs.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, dried, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.			Fish as manure, brls.	\$	cts.
5375	550	.....	28460	7000	8	140	.....	.....	13000	250	5300	1000	500	42,457	00	1
13300	188	.....	9840	2770	4	60	.....	.....	4500	183	2685	300	165	18,975	00	2
4500	2534	2000	28230	15882	20	180	.....	.....	8000	720	11732	2150	750	91,389	60	3
.....	366	.....	27024	8510	12	.....	.....	.....	.....	300	8000	750	50	45,778	80	4
600	282	.....	17840	8910	.....	30	.....	.....	.....	410	7900	560	150	45,471	00	5
11150	100	.....	19200	1787	.....	.....	.....	.....	.....	75	1200	200	50	14,603	00	6
11200	710	.....	18000	8700	.....	35	.....	.....	5000	250	8000	1000	300	48,885	00	7
.....	130	.....	.....	5700	.....	10	.....	.....	.....	240	5000	530	300	26,755	00	8
46125	4860	2000	148594	59259	44	455	.....	.....	30500	2428	49817	6490	2265	334,314	40	

(Point St. Peter to Fame Point).

28500	480	.....	15300	2300	.....	.....	.....	500	.....	100	1500	750	.....	21,905	00	1
25000	10	.....	.....	.....	.....	.....	.....	1000	84000	.....	.....	.....	.....	9,340	00	2
17700	133	.....	4000	620	.....	.....	.....	500	.....	.....	400	150	.....	7,747	00	3
4500	225	.....	8500	1600	.....	.....	.....	.....	.....	75	1200	500	.....	11,310	00	4
.....	880	.....	11000	5850	3	2700	.....	.....	.....	250	4000	1000	.....	33,120	00	5
.....	340	.....	.....	4200	4	2200	.....	.....	.....	175	3000	800	.....	21,220	00	6
.....	550	.....	960	6400	7	6700	.....	.....	.....	300	5000	1200	.....	33,232	00	7
.....	243	.....	.....	1950	.....	750	.....	.....	.....	70	1300	500	.....	10,267	00	8
.....	240	.....	.....	1200	2	800	.....	.....	.....	50	800	450	.....	6,975	00	9
75700	3101	.....	39760	24120	16	.....	13150	2000	84000	1020	17200	5350	.....	155,116	00	

RETURN showing the Number and Value of Vessels, Boats and Fishing Materials, &c.—Province of Quebec—Continued.

County of Gaspé—Continued.

MONT LOUIS SUBDIVISION (Fane Point to Rivière à Pierre).

DISTRICTS.	BOATS.			FISHING GEAR OR MATERIALS.					KINDS OF FISH.							TOTAL VALUE OF ALL FISH.	Number.						
	Number.	Value.	Men.	Gill Nets.		Seines.			Salmon, fresh, lbs.	Herring, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod tongues and sounds, brls.	Halibut, lbs.	Trout, lbs.			Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
				Number.	Fathoms.	Value.	Number.	Fathoms.														Value.	
<i>Gaspé County—Con.</i>																							
1 Grand Etang to Chlorydorme.....	97	2100	111	196	6000	2900	2	80	50	770	350	1440	5025	10	13200	400	250	4600	820	126	27,072 00	1	
2 Petite Anse to Frégate Point.....	38	650	57	65	1625	825				90			1710	4	2000	100	100	1600	300	20	8,780 00	2	
3 Great and Little Vallée.....	47	1300	79	80	2000	1200	1	30	40	800	205	1060	2350	5	9000	120	2200	480	30		13,342 00	3	
4 Magdalen.....	19	370	28	31	670	460				1700	100		370					320	105		2,473 50	4	
5 Manche D'Épée and Gros Mâle.....	37	420	53	35	825	350				800	180		845						800	165		4,747 50	5
6 Anse Pleureuse to Rivière à Pierre	63	1080	88	105	2925	1550	2	60	60	3850	1040		1150		2000			1000	280		10,375 00	6	
Totals.....	301	5920	416	512	14045	7285	5	170	150	7920	1965	2500	11450	19	26200	400	470	10520	2050	170	66,730 00		

STE. ANNE DE MONTS SUBDIVISION (Rivière à Pierre to Cape Chatte).

1 Claude River.....	24	480	38	24	600	360				1600	296		458		3015			500	60		3,877 50	1
2 Marsout.....	4	80	8	3	77	45			600	37			60		1350			50	10		673 00	2
3 Martin River.....	3	60	4	3	75	45				30			46		500			60	80		492 00	3
4 Cape au Renard and Anse à Jean.....	6	120	7	6	150	90				113			24		550			140	18		672 00	4
5 Ste. Anne des Monts.....	121	2420	177	175	4725	2645			16160	2609			1970		9135	5000		2025	100	200	23,783 00	5
6 Cape Chatte.....	56	1120	70	70	1150	1050			2960	450			560		6030	5000		700	55	300	6,177 50	6
Totals.....	214	4280	304	281	6777	4215			21320	3526		3118		20580	10000			3475	323	500	35,675 00	

RETURN showing the Number, Tonnage and Value of Vessels, Boats and Fishing Materials, &c—Province of Quebec—Continued.

County of Gaspé—Continued.

MAGDALEN ISLANDS SUBDIVISION—SOUTH.

Number.	FISHING VESSELS AND BOATS.				FISHING GEAR OR MATERIALS.					KINDS OF FISH.							TOTAL VALUE OF ALL FISH.	Number.											
	Vessels.		Boats.		Gill Nets.		Seines.			Trap Nets.		Cod, dried, cwt.	Haddock, fresh, lbs.	Smelts, lbs.	Bels, brls.	Fish oil, galls.			Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.								
	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Number.	Fathoms.	Value.	Number.	Value.																		
<i>Gaspé County—Con.</i>																													
1	Entry Island	25	500	8	161	7400	365	1708	42700	10248	7	980	2000	.....	60	80	10080	20	.....	15	40	450	500	200	.....	3,600	50	
2	Amherst Island	18	809	5	215	10730	615	190	4750	1040	5	575	1800	.....	3200	1370	97724	4057	750	.....	110	3000	450	500	200	.....	72,320	30
3	Grindstone Island	43	1300	13	381	18350	990	19:8	49200	11708	12	1555	3800	1	400	3800	1803	172944	2654	200	.....	50	1950	1600	600	.....	91,242	60
Totals		66	431300	31	977	45085	2565	398:8	113100	23966	29	3130	7600	2	1020	7900	3706	370648	6731	1010	160	4965	2090	1100	200	167,163	40

MAGDALEN ISLANDS SUBDIVISION—NORTH.

1	House Harbour	.....	.....	.....	115	2875	302	460	11500	2300	.....	.....	.....	1	200	1537	1780	93120	798	.....	6	250	1187	250	.....	56,729	50
2	Grand Entry	.....	.....	.....	28	575	51	27	675	150	.....	.....	.....	5	1200	585	134	167968	300	.....	8	150	145	150	.....	39,281	10
3	Grosse Isle	.....	.....	.....	22	530	41	4	100	25	.....	.....	.....	.....	162	193	28760	156	.....	.....	.....	78	162	.....	.....	10,385	40
4	Bryon Island	.....	.....	.....	3	75	8	2	50	12	.....	.....	.....	.....	.....	30	68304	75	.....	.....	.....	30	30	.....	.....	14,404	80
Totals		.....	.....	.....	168	4075	402	493	12325	2487	.....	.....	.....	6	1400	2234	2137	558752	1329	.....	14	508	1524	400	.....	120,860	80

RETURN showing the Number, Tonnage and Value of Vessels, Boats, etc.

County of

GODBOUT SUBDIVISION

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.								
		Vessels.			Boats.			Gill Nets.		Seines.		Trap Nets.				
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
				\$			\$				\$			\$		\$
	<i>County Saguenay.</i>			\$		\$			\$						\$	
1	Manicouagan, Godbout, Pt. des Monts and Trinity Bay Caribou to Jambons	5	90	2600	10	135	2700	141	230	6900	6900	2	160	160	1	300

MOISIE SUBDIVISION

1	Ste. Marguerite.....					6	350	12	9	1275	1050	2	250	352		
2	Seven Islands.....	2	67	1300	10	23	2050	46	22	1498	1350	3	145	258		
3	Moisie.....	1	40	850	5	23	1500	51	35	4300	4100	2	50	125		
4	Pigou.....					1	25	2	1	25	15					
	Totals.....	3	107	2150	15	53	3925	111	67	7098	6515	7	445	735		

MINGAN SUBDIVISION

1	River aux Graines and Chaloupe.....					18	900	45				5	150	170		
2	Sheldrake and Thunder River.....					73	3640	173	6	600	500	15	600	1200	4	2000
3	Dock Ridge Point and Jupitagan.....					15	734	37	3	300	250	5	125	210		
4	Magpie.....					67	1665	146	8	1000	750	9	270	225		
5	St. John River.....	2	41	500	5	85	2875	180	20	2500	2000	5	300	350		
6	Longue Pointe and Mingan.....					23	970	66	15	1700	1500	4	176	250		
7	Romaine and Esquimaux Point.....	5	246	3000	37	120	6000	250	20	2000	1000	15	600	1300	3	600
8	La Corneille.....					3	200	4	3	250	150	1	50	50		
	Totals.....	7	287	3500	42	404	16984	901	75	8350	6150	59	2271	3755	7	2600

SESSONAL PAPER No. 22

and Kinds of Fish, &c.—Province of Quebec—Continued.

Saguénoy.

Manicouagan to Jambons.

KINDS OF FISH.														TOTAL VALUE OF ALL FISH.	Number.	
Salmon, fresh, lbs.	Herring, salted, brls.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod tongues and sounds, brls.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.			Seal skin, No.
45984	542	1	2016	932	7	8660	900	100	2000	10	2180	81	26	410	18,978 00	1

(Jambons to Pigou).

3380	5	...	...	165	1	1500	424	...	...	...	200	75	...	23	1,759 65	1
40000	67	...	...	487	2	2728	...	...	...	...	500	150	...	48	10,943 80	2
256087	...	...	...	425	15	2000	2100	...	...	...	475	150	...	50	53,907 40	3
...	...	...	...	5	...	...	...	...	...	...	15	10	...	4	44 50	4
299467	72	...	...	1082	18	6228	2524	...	...	...	1190	385	...	125	66,655 35	

(Pigou to Watsheeshoo).

...	...	...	...	1100	3	3500	...	...	...	24	750	325	...	6	5,596 00	1
3800	...	...	...	3700	11	13000	...	...	...	40	2600	1500	500	14	20,427 50	2
3335	...	...	...	880	...	5500	...	...	...	14	650	350	100	7	5,571 75	3
12400	600	...	...	3000	10	5000	...	...	...	25	2300	2000	300	12	21,435 00	4
33800	...	...	...	5500	12	10000	...	...	...	30	4300	3000	400	15	36,008 75	5
6510	...	...	...	1850	4	5000	...	...	...	15	2000	750	100	200	11,327 00	6
2800	43	...	...	2500	16	12500	...	...	...	30	4600	750	100	655	15,635 75	7
6110	...	...	8820	363	...	...	...	...	...	...	340	50	...	35	4,658 75	8
68755	643	...	8820	18893	56	54500	...	...	...	178	17540	8725	1500	944	120,660 50	

RETURN showing the Number, Tonnage and Value of Vessels, Boats

County of

NATASHQUAN SUBDIVISION

Number.	DISTRICT.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.							
		Vessels.				Boats.		Gill-Nets.			Seines.			Trap-Nets.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
<i>Saguenay County.</i>															
1	Watsheeshoo to Agwanus					38	3750	64	36	1240	1110	5	400	350	.....
2	Isle à Michon & Natashquan					4	250	8							.....
3	Natashquan Village.....	4	88	200	33	37	4000	75	95	3100	2500	7	525	450	.....
4	Natashquan River.....														.....
	Totals	4	88	200	33	79	8000	147	131	4340	3610	12	925	800	.....

ROMAINE SUBDIVISION

1	Kegashka & Musquarro.....					9	500	15	10	300	100	2	100	100	.....
2	Washeecootai & Romaine	1	25	500	4	8	320	12	15	800	350	2	100	75	.....
2	Coacoachoo.....					2	20	4	2	150	50				.....
	Totals	1	25	500	4	19	840	31	27	1250	500	4	200	175	.....

ST. AUGUSTIN SUBDIVISION

1	Wolf Bay & Etamamu					20	500	56	10	500	400	1	200	100	1	400
2	Point à Maurice & St. Mary					3	100	6	5	250	200					.....
3	Harrington					44	1320	90	30	1200	750	10	1500	1000	8	3000
4	Little Meecatina and Whale Head.....					36	820	38	25	1250	800	5	500	350	9	3600
5	Mutton Bay and Meecatina.....					50	1250	75	35	1400	850	10	1200	750	10	4000
6	Old Post and Big Meecatina					25	750	30	25	1050	750	3	600	500	5	2000
7	Kikapoe to St. Augustin					15	300	20	12	600	400	3	400	250	1	250
8	St. Augustin to Chicatica					18	540	23	10	750	500	3	400	250	2	500
	Totals					211	5580	338	152	7000	4650	35	4800	3200	36	13750

BONNE ESPERANCE SUBDIVISION

1	Nabitippi to Day Islands.....					13	650	23	8	1150	400	2	60	60	3	800
2	Old Fort—Burnt Island	1	20	400	3	35	1000	58	10	980	600	4	160	350	8	1600
3	Bonne Esperance.....	2	200	3000	12	50	1500	100	15	1200	900	6	300	1000	10	3000
4	Pidgeon Island to Salmon Bay.....	1	53	1000	8	56	1680	112	10	1000	750	9	740	1200	11	2750
5	Little Fishery to Belles Amours.....					25	1250	60	8	700	500	5	300	500	8	2400
6	Bradore Bay-Loney Point Greenly Island.....					80	3200	160	15	300	1800	10	1000	2000	16	4000
	Totals	4	273	4400	23	259	9280	513	66	8030	4950	36	2560	5110	56	14550

ANTICOSTI

1	Fox Bay and Salmon River.....					10	250	20	12	240	100	2	100	100	.....
2	English Bay					12	600	22	24	480	175	2	100	75	.....
3	Strawberry Cove.....					15	600	28	30	500	250	4	200	150
4	Shallop Creek					2	60	2	3	170	100			
	Totals					39	1510	72	69	1490	625	8	400	325

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and Fishing Materials, &c.—Province of Quebec—Continued.

Saguenay.

(Watsheeshoo to English Point).

KINDS OF FISH.														TOTAL VALUE OF ALL FISH.	
Salmon, fresh, lbs.	Salmon, salted, brls.	Herring, salted, lbs.	Lobster, preserved in cans, lbs.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Eels, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		Seal skins, No.
1600	23280	.....	.....	1600	500	.....	5	60	200	200	.....	50	\$ 5,778 50
4400	2400	1000	.....	1000	300	.....	.....	30	890	400	.....	35	6,450 75
39488	60	720	2000	.....	4400	900	1200	4	70	3100	600	.....	400	19,381 60
45488	60	26400	3000	.....	7000	1600	1200	9	160	4190	1200	.....	485	31,610 85

(English Point to Coacoachoo).

3000	.....	20	2400	400	.....	2000	1000	.....	.....	.....	300	100	.....	25	3,331 25
4500	.....	15	.....	250	.....	1500	1200	.....	.....	.....	200	50	.....	15	2,383 75
400	.....	.....	.....	.....	.....	.....	500	.....	.....	.....	90	.....	.....	30	194 50
7900	.....	35	2400	650	.....	35000	2700	.....	.....	.....	590	150	.....	70	5,909 50

(Coacoachoo to Chicatica).

2500	.....	.....	24000	500	.....	.....	1000	.....	.....	.....	390	100	.....	30	7,704 50
200	.....	.....	2880	100	.....	.....	500	.....	.....	.....	600	50	.....	173	1,537 25
200	.....	100	.....	3000	.....	.....	.....	.....	.....	.....	2165	500	.....	55	13,908 25
600	.....	15	26400	1800	.....	.....	250	.....	.....	.....	1700	300	.....	69	13,731 25
900	.....	109	1540	4000	.....	.....	1500	.....	.....	.....	4000	750	.....	310	19,786 50
1500	.....	75	.....	1500	.....	.....	1500	.....	.....	.....	2960	300	.....	580	8,813 00
5900	.....	.....	.....	350	.....	.....	6000	.....	.....	.....	1000	70	.....	230	3,872 50
800	.....	.....	1680	400	.....	.....	4000	.....	.....	.....	627	75	.....	109	2,932 85
12600	.....	299	56500	11650	.....	.....	14750	.....	.....	.....	13442	2145	.....	1556	72,286 10

(Chicatica to Blancs Sablons).

.....	25	65	960	1423	.....	.....	.....	.....	.....	.....	716	400	.....	.....	7,333 80
.....	15	15	3440	1000	.....	.....	2000	.....	.....	.....	725	100	.....	45	5,596 75
.....	60	315	.....	3232	.....	300	1000	.....	.....	.....	1616	350	.....	.....	16,227 80
.....	40	40	240	2900	.....	.....	2800	.....	.....	.....	1000	250	.....	.....	9,763 00
.....	10	370	.....	1045	.....	.....	.....	.....	.....	.....	123	120	.....	.....	6,146 90
.....	10	445	.....	3525	.....	1600	800	.....	.....	.....	3161	300	.....	280	18,018 90
.....	160	1250	4640	12225	.....	1900	6660	.....	.....	.....	7743	1520	.....	325	63,087 15

ISLAND.

.....	8	20	35900	30	.....	500	.....	.....	.....	.....	140	400	.....	30	8,229 50
.....	.....	25	.....	250	.....	750	.....	.....	.....	.....	125	75	100	.....	1,375 00
.....	.....	60	.....	1000	8	2000	.....	.....	.....	.....	500	150	60	.....	4,925 00
.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	120 00
.....	16	105	35900	1280	8	325	.....	.....	.....	.....	765	625	160	30	14,649 50

RECAPITULATION

Showing the Number of Vessels and Boats, Nets and all Fishing Materials, &c., in the Gulf Division, Province of Quebec, for the year of 1899.

COUNTY OF BONAVENTURE.

Number.	FISHING VESSELS AND BOATS.						FISHING GEAR OR MATERIALS.										
	Vessels.			Boats.			Gill-Nets.			Snares.			Trap-Nets.				
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	
1	Restigouche	1	21	350	30	600	100	25	5006	4000	103	3490	2370	171	1570	2	1
2	Bonaventure	1	21	350	1086	15055	1965	8205	62475	31200	62	1760	1785	245	2605	2	3
3	Port Daniel	1	21	350	495	16260	790	875	15050	11321	62	1760	1785	245	2605	3	3
	Totals	1	21	350	4	1611	2855	4105	82525	46521	165	5256	4355	416	4175		

COUNTY OF GASPE.

1	Grand River	1	52	1300	865	36289	2240	795	37656	17025	58	1799	1827	343	3672	1	1
2	Gaspé Bay	1	52	1300	1142	21583	1377	1025	27973	15498	52	1705	1500	170	150	2	2
3	Mont Louis	1	52	1300	301	5920	416	512	8850	7285	5	170	150	170	150	3	3
4	Ste. Anne des Monts	1	52	1300	214	4280	304	281	6777	4215	5	170	150	170	150	4	4
5	Magdalen Islands South	3	43	1300	381	13350	990	1968	49230	11708	12	1555	3800	1	400	5	5
6	Magdalen Islands North	1	52	1300	163	4075	402	493	12325	2487	6	1400	1400	6	1400	6	6
	Totals	4	95	2600	23	3066	5729	6074	147976	58218	127	5229	6777	7	1800	343	3672

COUNTY OF SAGUENAY.

1	Godbout	5	90	2600	135	2700	141	280	6900	6900	2	160	160	1	300	1	1
2	Moisie	3	107	2150	53	3925	111	67	7098	6515	7	445	735	7	2600	2	2
3	Mingan	7	287	3500	42	404	16984	901	75	8850	150	2271	3755	7	2600	3	3
4	Natashquan	4	88	2000	79	8000	147	131	4340	3610	12	925	800	12	925	4	4
5	Romaine	1	25	500	19	840	31	27	1250	500	4	200	175	4	200	5	5
6	St. Augustin	1	25	500	211	5580	388	152	7000	4650	85	4800	3200	86	13750	6	6
7	Bonne Esperance	4	273	4400	23	259	9280	513	66	8030	36	2560	5110	56	14650	7	7
8	Anticosti	1	25	500	39	1510	72	69	1490	625	8	400	325	8	400	8	8
	Totals	24	870	15150	127	1199	48819	2254	817	33900	163	11761	14260	100	31200		

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RECAPITULATION.
 Showing the Number of Vessels and Boats, Nets and all Fishing Materials, &c.—Gulf Division, Province of Quebec—Continued.
 COUNTY OF BONAVENTURE—Continued.

Number.	FISHING GEAR OR MATERIALS.				LOBSTER PLANT.				OTHER FIXTURES USED IN FISHERIES.										
	Smelt Nets		Hand Lines.		Canneries.		Traps.		No. of hands employed.		Freezers and Ice-houses.		Smoke & Fish Houses.		Piers and Wharfs.		Tugs, Strs. & Smacks.		
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
1	Restigouche	50	1000	3250	1625	5	890	5100	2550	93	30	670	179	21685	2	10000			1
2	Bonaventure	3	100	1630	1440	6	2250	10650	5750	261	6	1000	40	1350					2
3	Port Daniel	53	1100	4880	3065	11	3140	15750	8300	351	36	1670	219	23035	2	10000			3
	Totals																		

COUNTY OF GASPÉ—Continued.

1	Grand River	3	150	4363	1274	15	5100	30800	14590	434	13	1520	109	60750	10	3450			1
2	Gaspé Bay			3893	1465	10	3910	8550	5500	150	2	500	66	13000	16	4050			2
3	Mont Louis			883	833	2	800	2100	1050	20				2000	2	1000			3
4	St. Anne des Monts			429	429	32	16005	42550	25330	647	4	200			8	1900	2	300	5
5	Magdalen Islands South			1970	520	32	17876	47585	24107	968					21	3940	4	380	6
6	Magdalen Islands North			802	201	55													
	Totals	3	150	12290	4722	114	43691	131585	70577	2219	19	2220	187	75750	57	14340	6	680	

COUNTY OF SAGUENAY—Continued.

1	Godbout	2	60	260	78	1	400	100	30	7	21	400	2	50	1	250	1	600	1
2	Moisie			552	276			400	200		1	500	32	1650	3	500			2
3	Mingan			1733	823	2	300	400	200	9	1	700	64	14200	24	5900			3
4	Nataashuan			440	220	5	1590	1760	880	44			69	13900	12	2000			4
5	Romaine			70	35	1	50	200	100	4			6	250	3	30			5
6	St. Augustin			1042	186	13	2490	6100	3050	106			64	3800	52	2000			6
7	Bonne Esperance			1044	337	4	210	1450	725	18			48	9870	41	7340			7
8	Anticosti			148	68	4	500	2000	1000	30			25	900	1	500			8
	Totals	2	60	4989	2023	30	5450	12010	5985	218	23	1600	310	44620	137	18520	1	600	

RECAPITULATION

Showing the Kinds, Quantities and Value of Fish caught in the County of Bonaventure, for the Year 1899—Continued.

Number.	Divisions.	KINDS OF FISH.										Number.					
		Salmon, fresh, lbs.	Salmon, salted, brls.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	God tongues and sounds, brls.	Haddock, fresh, lbs.		Haddock, dried, lbs.	Hake, dried, cwt.			
1	Restigouche.....	35000		75	9500							75					1
2	Bonaventure.....	71950		4880	73400	101000		18720				50		19	52500	140	2
3	Port Daniel.....	27188		3820		5500		73908						51		765	3
	Total.....	134138		8275	82900	106500		92628				125		70	52500	905	180

COUNTY OF GASPE—Continued.

1	Grand River.....	46125		4860				148594						44			1
2	Gaspé Bay.....	75700		3101		2000		33760						16			2
3	Monts Louis.....	7420		1965				2500						19			3
4	Ste. Anne des Monts.....	21320		3526													4
5	Magdalen Islands South.....			7060				280748							1010		5
6	Magdalen Islands North.....			2284				358752									6
	Total.....	151065		22746		2000		830354						79	1010	455	

COUNTY OF SAUGENAY—Continued.

1	Godbout.....	45984		542				2016						7			932	1
2	Moisie.....	299467		72				8820						18			1082	2
3	Mingan.....	68755		643				26400						56			18893	3
4	Natashquan.....	45488		60				2400									3000	4
5	Romaine.....	7900		35				56500									650	5
6	St. Augustin.....	12600		299				4640									116500	6
7	Donne Esperance.....			160													12225	7
8	Anticosti.....			16				35000						8			1280	8
	Total.....	480194		3006		2000		136676						89			49712	

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RECAPITULATION

Showing the Kinds, Quantities and Value of Fish caught in the County of Bonaventure, for the Year 1899—Continued.

Divisions.	KINDS OF FISH.										TOTAL VALUE OF ALL FISH.	Number.		
	Hallibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Beils, brls.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.			Fish as manure, brls.	Seal skins, No.
1 Restigouche.....	5975	7000	.....	273000	25	45000	.....	.....	.....	.....	250	.....	24,745 00	1
2 Bonaventure.....	.....	21600	.....	.....	93	1790	.....	.....	4359	3434	38400	.....	122,863 20	2
3 Port Daniel.....	.....	3000	.....	15500	.....	.....	.....	7300	2950	6100	.....	.....	102,214 20	3
Totals.....	5975	31600	.....	288500	118	46700	926	11659	6384	44750	.....	.....	249,822 40	40

COUNTY OF GASPE—Continued.

1 Grand River.....	334,314 40	1
2 Gaspé Bay.....	.....	.....	.....	30500	.....	.....	2428	.....	6490	2265	.....	.....	155,116 00	2
3 Monts Louis.....	13150	2000	.....	84000	.....	.....	1020	.....	17200	.....	.....	.....	66,790 00	3
4 Ste. Anne des Monts.....	26200	400	.....	.....	.....	.....	470	.....	10520	170	.....	.....	35,675 00	4
5 Magdalen Islands South.....	20580	10000	.....	.....	.....	.....	.....	.....	3475	500	.....	.....	167,163 40	5
6 Magdalen Islands North.....	.....	.....	.....	500	160	.....	.....	.....	4965	1100	200	.....	120,800 80	6
Totals.....	59930	12400	.....	115000	174	.....	3918	.....	86485	17827	4435	200	879,919 60	60

COUNTY OF SAGUENAY—Continued.

1 Godbout.....	.....	900	100	2000	.....	.....	10	.....	.....	.....	26	410	18,978 00	1
2 Moisie.....	8660	2524	.....	.....	.....	.....	.....	.....	2180	81	.....	125	66,655 35	2
3 Mingan.....	6228	.....	.....	.....	.....	.....	.....	.....	1190	385	.....	944	120,660 50	3
4 Natashquan.....	54500	.....	.....	.....	.....	.....	178	.....	17540	8725	1500	485	31,610 85	4
5 Romaine.....	7000	1600	.....	1200	9	.....	.....	.....	4180	1200	.....	70	5,909 50	5
6 St. Augustin.....	3500	2700	.....	.....	.....	.....	.....	.....	590	150	.....	1556	72,286 10	6
7 Bonne Esperance.....	14750	.....	.....	.....	.....	.....	.....	.....	13442	2145	.....	325	63,087 15	7
8 Anticosti.....	1900	6600	.....	.....	.....	.....	.....	.....	7743	1520	.....	30	14,649 50	8
Totals.....	3250	.....	.....	.....	.....	.....	188	.....	765	625	160	3945	393,836 95	95
Totals.....	85038	29074	100	3200	9	.....	100	47640	14831	1686	.....	.....	.....	.....

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity
the Gulf Division, Province

Number.	COUNTIES.	FISHING VESSELS AND BOATS.						FISHING GEAR OR										
		Vessels.			Boats.			Gill Nets.			Seines.			Trap Nets		Trawls.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.
				\$			\$				\$			\$		\$		\$
1	Bonaventure	1	21	350	4	1611	32515	2855	4105	82525	46521	165	5250	4355	416	4175		
2	Gaspé	4	95	2600	23	3066	90497	5729	6074	147976	58218	127	5229	6777	7	1800	343	3672
3	Saguenay	24	870	15150	127	1199	48819	2254	817	44458	33900	163	11761	14260	100	31200	...	...
	Totals	29	986	18100	154	5876	171831	10828	10996	274959	138639	455	22240	25392	107	33000	759	7847

RETURN showing the kinds and quantities of Fish and Fish

Number.	COUNTIES.	SALMON.		HERRING.		MACKEREL		LOBSTERS.		COD.		
		Fresh.	Salted	Salted.	Fresh.	Smoked.	Fresh.	Salted.	Preserved in Cans.	Fresh in Shell.	Dried.	Tongues and Sounds.
		Lbs.	Brls.	Brls.	Lbs.	Lbs.	Lbs	Brls.	Lbs.	Cwt.	Cwt.	Brls
1	Bonaventure	134138	.....	8275	82900	106500	.....	92628	125	25385	70
2	Gaspé	151065	.....	22746	.....	2000	.....	830354	.....	106007	79
3	Saguenay	480194	176	3006	1	136676	49712	89	
	Totals	765397	176	34027	82900	108500	5391	1059658	125	181104	238

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and Value of all Fishing Materials and other fixtures used in the Fishing Industries in of Quebec, for the year 1899.

MATERIALS.				LOBSTER PLANT.					OTHER FIXTURES USED IN FISHERIES.								
Smelt Nets		Hand Lines		Canneries.		Traps.		No. of Men Employed.	Freezers and Ice houses		Smoke and Fish Houses.		Piers and Wharfs.		Tugs, Steamers and Smacks.		Number.
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
	¢		¢		¢		¢			¢		¢		¢		¢	
53	1100	4880	3065	11	3140	15750	8300	354	36	1670	219	23035	2	10000	.....	.....	1
3	150	12290	4722	114	43691	131585	70577	218	19	2220	187	75750	57	14340	6	680	2
2	60	4989	2023	30	5450	12010	5985	219	23	1600	310	44620	137	18520	1	600	3
58	1310	22159	9810	155	52281	159345	84862	2791	78	5490	716	143405	196	42860	7	1280	

Products in the Gulf Division, Province of Quebec.

HADDOCK.		HAKE.																Number.
Fresh.	Dried.	Dried.	Smoked.	Hallibut.	Trout.	Shad.	Smelts.	Eels.	Tom Cod or Frost Fish.	Squid.	Coarse and Mixed Fish.	Fish Oil.	Fish as Bait.	Fish as Manure.	Seal Skins.	TOTAL VALUE OF ALL FISH.		
Lbs.	Cwt	Cwt	Lbs	Lbs.	Lbs	Brls	Lbs.	Brls	Lbs.	Brls	Brls	Galls.	Brls.	Brls	No.	¢	cts.	
52500	905	180	.....	5975	31600	.....	288500	118	46700	926	.....	11659	6384	44750	.....	249,822	40	1
1010	455	.....	.....	59930	12100	.....	115000	174	.....	3919	.....	86485	17827	4435	200	879,919	60	2
.....	.....	.....	.....	85038	29074	100	3200	9	.....	188	160	47640	14831	1686	3945	393,836	95	3
53510	1360	180	.....	159943	73074	100	406700	301	46700	5032	160	145784	39042	50871	4145	1,523,578	95	

RECAPITULATION.

STATEMENT showing the Yield and Value of Fisheries of the Gulf Division, P.Q.,
for the Season of 1899.

Description.	Quantity.	Price.		Value.
		\$	cts.	\$ cts.
Salmon, fresh in ice	Lbs. 765,397	0	20	153,079 40
" salted	Brls. 176	15	00	2,640 00
Herring "	" 34,027	4	00	136,108 00
" fresh	Lbs. 82,900	0	01	829 00
" smoked	" 108,500	0	02	2,170 00
Mackerel, salted	Brls. 5,391	15	00	80,865 00
Lobsters, canned	Lbs. 1,059,658	0	20	211,931 60
" fresh, (whole)	Cwt. 125	5	00	625 00
Cod, salted	" 181,104	4	00	724,416 00
" tongues and sounds, salted	Brls. 238	10	00	2,380 00
Haddock, frsh.	Lbs. 53,510	0	03	1,605 30
" salted	Cwt. 1,360	3	00	4,080 00
Hake, salted	" 180	2	25	405 00
Halibut, fresh	Lbs. 150,943	0	10	15,094 30
Trout, fresh	" 73,074	0	10	7,307 40
Shad, salted	Brls. 100	10	00	1,000 00
Smelts, fresh in ice	Lbs. 406,700	0	05	20,335 00
Eels, salted	Brls. 301	10	00	3,010 00
Tommy cod, fresh	Lbs. 46,700	0	05	2,335 00
Squid	Brls. 5,032	4	00	20,128 00
Coarse and mixed fish	" 160	2	00	320 00
Fish oils	Galls. 145,784	0	30	43,735 20
Fish as bait	Brls. 39,042	1	50	58,563 00
Fish as manure	" 50,871	0	50	25,435 50
Seal skins	Pieces. 4,145	1	25	5,181 25
Total for 1899				1,523,578 95
" 1898				1,381,226 10
Increase for 1899				142,352 85

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RECAPITULATION

SHOWING Number of Men, Vessels and Boats, and Value of Material Employed in
Gulf Division Fisheries, Season of 1899.

Description.	Value.
	\$ cts.
29 vessels of 986 tons, manned by 154 men.....	18,100 00
5,876 boats fished by 10,828 men.....	171,831 00
274,959 fathoms of gill-net	138,639 00
455 seines of 22,240 fathoms.....	25,392 00
107 trap-nets.....	33,000 00
759 trawl lines.....	7,847 00
58 smelt nets.....	1,310 00
22,159 hand lines.....	9,810 00
155 lobster canneries employing 2,791 men.....	52,281 00
159,345 lobster traps.....	84,862 00
78 icehouses and freezers.....	5,490 00
716 smoke and fish houses.....	143,405 00
196 private piers and wharfs.....	42,860 00
7 tugs and smacks.....	1,280 00
Total value.....	736,107 00

RETURN of the Number of Fishermen, the Number of Boats, Nets, &c., and the
 Cape Chat to Point Lévis

Number.	DISTRICTS.							
	FISHING MATERIALS.							
	Boats.			Gill Nets.			Brush or Eel Weirs.	
	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.
	\$				\$		\$	
1	Capucins	17	136	21	18	450	216	
2	Petits Mechins	21	210	30	26	650	312	
3	Grands Mechins	26	260	35	37	925	444	
4	Ruisseau à Sem.	9	72	11	12	300	144	
5	Grosses Roches	24	208	36	25	600	300	
6	Ste. Félicité	49	392	56	62	1580	744	5 100
7	Matane	12	138	16	16	374	170	7 200
8	Rivière Blanche	22	378	24	36	895	400	
9	Sandy Bay	57	670	58	102	2469	1187	
10	Métis	7	100	6	2	50	30	5 450
11	Ste. Flavie	11	56	11	10	220	94	
12	Ste. Luce	2	10	11	3	204	450	11 600
13	Rimouski	8	130	28	1	60	30	18 1615
14	Sacré-Coeur and Islet à Canuel	9	234	14				11 580
15	Rivière Hatée			7				3 160
16	Bic and Cap à L'Original*	3	14	74				7 146
17	St. Simon, St. Fabien and St. Mathieu	4	19	7	1	4	10	7 146
18	Trois Pistoles*	9	54	9				35 380
19	Isle Verte	40	1503	36				21 2810
20	Cacouna	17	140	18				12 1120
21	Rivière du Loup*	5	25	5	12	128	72	5 510
22	St. André and Notre Dame du Portage	8	78	25				19 1090
23	Kanouraska	8	40	8				8 520
24	St. Denis	12	60	16				17 525
25	Rivière Ouëlle*	40	200	55	1	30	10	45 2000
26	Ste. Anne de la Pocatière	8	40	8				20 900
27	St. Roch	10	30	16				16 678
28	St. Jean Port Joli	21	63	21				23 862
29	L'Islet	1	15	19				20 695
30	Ile aux Grues and Ile aux Oies	5	25	15				15 1575
31	Cap St. Ignace	10	50	10	8	190	36	25 825
32	St. Thomas	7	30	10	4	360	1400	2 255
33	Berthier	10	50	10	7	470	2300	42 3400
34	St. Valier	9	115	9	6	570	2900	6 6050
35	St. Michel	8	40	8	4	345	2100	1 100
36	Beaumont	8	40	8	7	600	4465	1 200
37	Lévis and St. Nicholas	17	94	17	9	602	3750	
	Totals	534	£719	768	409	12136	21564	407 28492
	Values.	\$						

* NOTE.—In Nos. 16, 18, 21, add 12, 2 and 21 seals respectively. In No. 25 include 12 beluga (white whales) value \$213.

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Quantity of Fish Caught on the South Shore of the St. Lawrence River from Province of Quebec, for the Year 1899.

KINDS OF FISH.														VALUE.		Number.		
Salmon, lbs.	Shad, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickered, lbs.	Sturgeon, lbs.	Eels, lbs.	Sardines, brls.	Mixed and coarse fish, lbs.	Cod, lbs.	Halibut, lbs.	Fish Oil, galls.	\$		cts.	
		95	9000								850	35000	900	2900	3,188	50	1	
175		240	3500								800	45000	800	350	3,473	00	2	
870		250	10000		350						12000	45000	1700	325	3,946	50	3	
		70	6000								10000	30000	1300	180	2,124	00	4	
		90	11000								15000	45000	1000	350	3,078	00	5	
		650	40000								16	27000	45000	2500	370	5,920	00	6
		393	1200								130	10000	5274	1950	19	2,538	40	7
		447	8950									9500	11400	800	90	2,649	50	8
		1979	111600										3000			9,332	00	9
920		75	383000						200	15	3000					4,401	00	10
		2	8600										450			139	00	11
855		80	37400						200		579500					6,672	00	12
1015		100	3936300						3200	5	42400					40,597	00	13
490		739	2970000							230	34500					33,869	00	14
525		50	76000							13	7000					1,174	00	15
180	25	30	95400								2600			36		1,163	30	16
385	45	20	80800		4100			100	1250		7600					1,531	70	17
960			148000					200		11	2700			5		1,748	00	18
1990	195	75	301300					2130	250	400	426150					9,327	00	19
670	195	60	350000					400	280	797	93000					7,247	50	20
280	750	50	5000					1097		155	4800			63		974	97	21
10	50	50	207000					2470	9355	504	26800					4,764	50	22
	3500	15	4000					3400	3500	1340	1000					4,754	00	23
100		25	22500							5855	4500					1,929	30	24
200	1000	30	35000					2500	35000	15	3000			550		3,108	00	25
					15900				25190		4600					3,057	40	26
					15000				15050		6150					964	50	27
									13600		5400					2,370	00	28
				100					10900		4100					733	00	29
				15000					17250		4425					2,279	25	30
				756		700	330	10800	6960		23090					1,428	74	31
8	2500		1960		1000	2350	20000	5200			2500					2,046	90	32
16	230		1295		995	880	17900	59150			8550					4,898	70	33
280	3075		10430		9745	3875	17900	54300			6200					6,442	25	34
285	725		1575		400	575	4500	39000			5400					2,951	25	35
700	2600		2500		4500	2750	2000	58000			5600					4,649	50	36
449	2825		3650		4375	3150	7850	64700			5400					5,465	80	37
11363	17715	5635	8861550	37268	34450	21815	14110	92547	423890	4027	1405025	261674	14400	5248				
2273	1063	22540	88616	2981	3445	1745	705	5553	25703	12081	14050	13084	1440	1574	196,949	46		

RETURN of the Number and Value of Boats, Nets, &c., the Quantity and Value of Province of Quebec,

Number.	DISTRICTS.		FISHING MATERIALS.							
			Boats.			Gill-Nets.			Brush or Eel Weirs.	
			Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.
	<i>North Shore St. Lawrence.</i>			\$				\$	\$	
1	Island of Orleans.....				78	12	4400	2000	90	15300
2	County of Montmorency.....				35				17	3000
3	County of Charlevoix.....				23	4	160	60	110	1500
	<i>Saguenay District.</i>									
4	St. Firmin.....	6	250		7				5	100
5	Tadoussac.....	6	220		8	4	500	250	1	25
6	Bergeronnes.....	4	80		4	4	400	225		
7	Bon Désir.....	1	20		1	1	75	50		
8	Escoumains.....	7	120		7	5	400	350	2	50
9	Sault au Mouton.....	2	20		2				2	50
10	Mille Vaches.....	6	90		6	1	100	75	5	125
11	Portneuf.....	6	100		6	4	350	250	2	50
12	Sault au Cochon.....	2	20		2	1	100	60	1	20
13	Islets Jérémie.....	6	90		6	6	400	350		
14	Bersimis.....	2	20		2	1	80	50	1	20
15	Inland Waters.....									
16	*Lake St. John District.....				100					
	Totals.....	48	1030	287	43	6965	3720		236	20240
	Values.....	\$								

*In No. 16, include 98,000 lbs. ouananiche and 7,500 lbs. pike. Mostly estimated.

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Fish on the North Shore of the St. Lawrence, from Quebec City to Bersimis, for the Year 1899.

KINDS OF FISH.											Beluga (white whales) No.	Beluga oil, galls.	TOTAL VALUE.	Number.			
Salmon, lbs.	Shad, lbs.	Herring, salted, brls.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickrel, lbs.	Sturgeon, lbs.	Eels, lbs.	Sardines, brls.	Mixed and coarse fish, lbs.							
200	250	.....	4300	.....	4200	2700	12800	120500	.....	3000	.....	.....	.....	.....	\$	cts.	
.....	.....	.....	2500	3500	2100	1100	2600	24300	.....	4200	.....	.....	.....	.....	8,898	00	1
1500	100	20	.....	59000	.....	.....	.....	6000	50	16000	9	450	.....	.....	2,429	00	2
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,127	00	3
1400	.....	20	.....	2300	.....	.....	.....	.....	5	50000	110	5500	.....	.....	3,195	00	4
22500	.....	.....	.....	3200	.....	.....	.....	.....	.....	23000	71	3550	.....	.....	6,399	00	5
18400	.....	.....	.....	1100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,790	00	6
1950	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	390	00	7
12100	.....	22	.....	1200	.....	.....	.....	.....	11	35000	25	1250	.....	.....	3,486	00	8
.....	.....	26	.....	500	.....	.....	.....	.....	9	12000	.....	.....	.....	.....	301	00	9
3800	.....	52	.....	2200	.....	.....	.....	.....	16	48000	.....	.....	.....	.....	1,716	00	10
12600	.....	20	.....	2500	.....	.....	.....	.....	5	19600	.....	.....	.....	.....	3,041	00	11
2800	.....	5	.....	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	600	00	12
17400	.....	.....	.....	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,510	00	13
2400	.....	10	.....	1200	.....	.....	.....	.....	3	4400	.....	.....	.....	.....	693	00	14
12000	.....	.....	.....	19700	.....	.....	.....	.....	.....	1000	.....	.....	.....	.....	4,380	00	15
.....	.....	.....	12,500	17000	.....	38500	.....	.....	.....	50000	.....	.....	.....	.....	11,305	00	16
109050	350	175	19300	113700	6300	42300	15400	150800	99	266200	215	10750	.....	.....	.....	.....	.....
21810	21	700	1544	11370	504	2115	924	9048	297	2662	860	3225	.....	.....	61,260	00	.....

RETURN of the Number of Fishermen, Value of Boats, Nets, &c., the Quantity and Ottawa, in the Province of

Number.	DISTRICTS.	FISHING MATERIALS.										
		Boats.			Gill Nets.			Seines.			Hoop Nets.	
		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
	\$				\$			\$		\$		
1	Megantic Lake and vicinity											
2	Sherbrooke and vicinity											
3	Magog and Brome											
4	Missisquoi Bay	12	140	40				14	1200	700		
5	*Richelieu River	80	900	80				20	400	300	74 740	
6	Lake St. Francis	25	360	38	20	340	70				20 200	
7	Lake St. Louis	70	1050	125	10	180	35	15	600	300		
8	Montreal and vicinity	50	500	90	2	40	10	25	700	450		
9	Verchères and vicinity	88	880	90				20	520	400	6 54	
10	Richelieu County	40	320	65				8	120	90	30 150	
11	Yamaska County, including Yamaska and St. Francis Rivers	110	1140	180	20	400	80	61	580	440	120 1200	
12	Nicolet County	45	500	45	8	140	22	18	600	300	10 100	
13	Portneuf to St. Maurice	20	400	80				7	70	40		
14	Maskinongé and Berthier	60	500	60	3	70	10	16	320	130	30 100	
15	Terrebonne and Laval	25	200	50	10	170	75	6	120	30	5 25	
16	Lake Two Mountains	140	1900	160	76	1160	165					
17	Ottawa River	105	1800	110	300	9000	1000					
18	Gatineau Lakes and vicinity											
	Totals	870	10590	1213	449	11500	1467	210	5230	3180	295 2569	
	Values	\$										

* In No. 5 add 8 weirs for eels valued at \$45,000.

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Value of Fish, &c., in the Inland District extending from Quebec City to Upper Quebec, for the Year 1899.

KINDS OF FISH.													TOTAL VALUE.	Number.	
Shad, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickered, lbs.	Pike, lbs.	Maskimongé, lbs.	Sturgeon, lbs.	Eels, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Tom cods, bush.			\$	cts.
	16500	110200	4300	30400	30200	1200	1000	2500	5400		40600		16,262	00	1
	800	10400	6500	29200				1500	5000		7000		2,944	00	2
	630			45500			600				75000		3,109	00	3
			5800	6040	21250	100	4000	93930	19750	250	89000		8,985	30	4
			2500	7500	8100	4000	13000	5500	6800	6200	17500		2,752	00	5
			9100	13800	14800	7600	204900	31500	49300	23900	203000		20,637	00	7
4000			5800	8760	12600	4800	13800	16000	3500	3000	25000		4,137	00	8
1800			3330	12800	12400	1670	2400	14000	15130	600	64700		3,707	50	9
3900			3400	37900	41700	1450	15000	13000	43350		153700		8,673	50	10
4000	2000	4000	10500	33000	49000	17000	11000	28500	3000	91000	190000		12,450	00	11
20000	1000	500	6200	3000	3200	1500	6710	24200	8200	10200	120000		5,698	60	12
10000	2000	17000	1000	6700	2000		8000	7000	2000		21000	39900	27,525	00	13
		9000		11000	50000	20000	17000	5500	1000	19600	103000		7,452	00	14
41000		80000	600	3000	3400	500	1000	1200	4800	1200	25200		9,162	00	15
2000			3100	8300	12000	6600	8500	5400	45000	92300	111400		6,803	00	16
			43200	53300	59260	24000	68200	20000	43200	58500	90200		18,589	00	17
	8200	98400	15100	13500							8000		12,459	00	18
49800	31100	329500	120430	314700	319850	90420	375110	269730	255430	306750	1344300	39000			
2988	2488	32950	9634	15735	12794	5425	22507	16,184	7663	6135	13443	23400	171,345	90	

RECAPITULATION

OF the Yield and Value of the Inland Fisheries of Quebec (exclusive of the Gulf Division) for 1899.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon	Lbs. 120,413	0	20	24,082	60
Trout	" 477,650	0	10	47,765	00
Ouaniche	" 98,000	0	06	5,880	00
Whitefish	" 87,668	0	08	7,013	44
Herring, fresh	" 8,861,550	0	01	88,615	50
" salted	Brls. 5,810	4	00	23,240	00
Shad	Lbs. 67,865	0	06	4,071	90
Sardines	Brls. 4,126	3	00	12,378	00
Bass	" 148,545	0	08	11,883	60
Pickarel	" 371,110	0	05	18,555	50
Pike	" 327,450	0	04	13,098	00
Maskinongé	" 90,420	0	06	5,425	20
Sturgeon	" 483,057	0	06	28,983	42
Eels	" 848,920	0	06	50,935	20
Cod, fresh	" 261,674	0	05	13,083	70
Halibut	" 14,400	0	10	1,410	00
Tom cod	Bush. 39,000	0	60	23,400	00
Perch	Lbs. 255,430	0	03	7,662	90
Catfish	" 306,750	0	02	6,135	00
Coarse fish	" 3,015,525	0	01	30,155	25
Seal skins	No. 35	1	25	43	75
Beluga skins (or white whales)	" 227	4	00	908	00
Fish oil	Galls. 15,998	0	30	4,799	40
Total for 1899				429,555	36
" 1898				580,214	25
Increase				49,341	11

STATEMENT

OF the Fishing Material in the Province of Quebec (Gulf Division not included), 1899.

Articles.	Value.		Total Value.
	\$	\$	
1,452 fishing boats (2,268 men)	17,339		
901 gill-nets (30,601 fathoms)	26,751		
210 seines (5,230 fathoms)	3,180		
643 brush or eel weirs	48,732		
295 hoop-nets	2,569		
70,740 hook or night lines	1,224		
55 freezers and icehouses			99,795
			3,505
Total value			103,300

RECAPITULATION

Of the Fishing Vessels, Boats, Nets, &c., in the whole Province of Quebec, for the Year 1899.

Articles.	Value.		Total.	
	\$	cts.	\$	cts.
29 vessels (986 tons)	18,100	00		
7,328 fishing boats	189,170	00		
11,897 gill-nets (305,560 fathoms).....	165,390	00		
665 seines (27,470 fathoms).....	28,572	00		
107 trap-nets.....	33,000	00		
643 weirs (brush or eel).....	48,732	00		
295 hoop-nets.....	2,569	00		
58 smelt nets.....	1,310	00		
hand lines and night lines	11,034	00		
759 trawls	7,847	00		
			505,724	00
155 lobster canneries (2,791 hands)	52,281	00		
159,345 lobster traps.....	84,862	00		
			137,143	00
133 freezers and ic-houses.....	8,995	00		
716 smoke and fish houses.....	143,405	00		
196 piers and wharfs (fishing).....	42,860	00		
7 smacks and steamers	1,280	00		
			196,540	00
Total value.....			839,407	00

STATEMENT of Men engaged in the Fishing industries of Quebec, 1899.

Men.	Number.
Men in fishing vessels	154
" " boats.....	13,096
Persons in lobster canneries.....	2,791
Total.....	16,041

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APPENDIX No. II

REPORT

ON

FISH-CULTURE OPERATIONS

IN THE

DOMINION OF CANADA

1900.

REPORT BY PROFESSOR EDWARD E. PRINCE, COMMISSIONER AND
GENERAL INSPECTOR OF FISHERIES FOR THE DOMINION
OF CANADA, FOR THE YEAR 1900.

OTTAWA, December 31, 1900.

To the Honourable

Sir LOUIS H. DAVIES, K.C.M.G., &c., &c.
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report upon the operations carried on in connection with artificial fish-culture in the Dominion of Canada for the twelve months now ending. From this report, and from the several reports of the officers in charge of the hatcheries under the Department's control, it is apparent that very decided success has marked the work of the year, while in obedience to the rapidly increasing public interest in fish propagation and fish preservation, important steps have been taken to expand the scope of the work as a whole. The onward progress of fish-culture in Canada has been such that it is no exaggeration to say, that the Dominion occupies a leading place in this important enterprise. Certainly the disadvantages and failures which have chequered the development of artificial fish-propagation in many countries, have been practically unknown in the work conducted under this Department's auspices during the last thirty years. This is shown by the small percentage, in reality an inappreciable quantity, of fry which are deformed and unhealthy, as well as in the general absence of fungus and of so-called embryonic dropsy. In an art which involves so many processes, each demanding special skill and care, the procuring of eggs, the care of them after fertilisation and before transference to the hatchery, the transportation of the newly vivified eggs and laying them down in the incubation tanks, their proper care while undergoing the lengthy process of incubation, besides cleansing, picking &c., and finally the many important stages after the fry have hatched out and are being distributed, it is necessary to ensure the greatest skill and scrupulous management or the eggs to a large extent will be lost, and the fry injured and rendered sickly. It is the universal testimony of parties who have personally visited the hatcheries under this Department, or been present during the distribution and planting of the fry, that it would not be possible to greatly improve upon the efficiency of the work as carried on, or succeed in obtaining fry of the five or six species embraced in the Department's operations, more healthy, vigorous, and fitted to prove beneficial in recuperating the various waters planted with them.

Black Bass and Land-locked Salmon.

That valuable game fish, the Black Bass, has been receiving some attention during the year, and it was anticipated that a sufficient supply of advanced fry would have been available this season. The quantity at the Department's disposal was, however, insufficient, but with the means of propagation and rearing now completed under Departmental supervision it is expected that a quantity of the splendid food and game fish referred to will be ready for planting during the coming season. The details of the scheme are given on a subsequent page in this report. Rainbow trout were again hatched at Bedford, and a quantity of landlocked salmon were also incubated, though the greater portion were reserved for the Right Hon. Lord Strathcona and were sent in a semi-hatched condition to Glencoe, in Scotland. The particulars of this shipment are given later in this report.

New Hatcheries.

Last July, after much consideration and a careful analysis of various reports, official and unofficial, the Department authorized steps to be taken, towards the end of July last, for the erection of a capacious salmon hatchery in British Columbia on a site some distance up the South Thompson River, a large tributary of the Fraser River. This great stream pours into the Fraser over seventy miles below Kamloops, and it emerges from Shuswap Lake, a famous sheet of water long known as an important resort for Fraser River salmon when about to spawn. The lake is thirty-three miles above Kamloops, and about 280 miles from Vancouver or New Westminster. The building is now (December) erected and rapidly approaching the stage when hatching operations can be commenced. It is perhaps the largest and finest hatchery in the Dominion and has a capacity considerably in excess of that of the old hatchery, erected in 1884, about four miles above New Westminster on the lower Fraser. The average quantity hatched in the old institution was five or six millions; but the new hatchery will be capable of turning out easily ten million young salmon, or if necessary twelve or fourteen million eggs can be accommodated in the long tanks, nearly a hundred in number, with which the building is fitted. The old hatchery was one hundred and ten feet by forty feet wide, was two stories high, and was fitted on the lower flat with seventy-one hatching troughs each 35 feet long, 10 inches wide, and six inches deep, and calculated, at the time, to hold a thousand hatching trays, which would accommodate 3,000,000 quinnat or spring salmon ova, or 5,500,000 sockeye or blue-back salmon eggs. By doubling the trays in the troughs, a very inconvenient and risky measure, the late Superintendent of Fish-Culture estimated that he could double the quantity of eggs to be incubated in the hatchery should that be necessary. As a matter of fact the average quantity of sockeye ova hatched in the institution, during the sixteen years of its continuous operation, has been about five millions and a half per annum. By special arrangements and with extra precautions it was found possible, as in 1890, to hatch 6,640,000 young salmon, and 7,800,000 in 1894, while in the phenomenal year, 1896, the officer in charge at that time succeeded in successfully hatching on the incubating trays no less than 10,393,000 sockeye salmon. The new building, as already stated, has much greater capacity than the old one. Built on a substantial stone foundation covered and pointed with cement, and placed well above the level of Shuswap Lake, on the banks of which it is situated, there is no risk from floods if the water in the lake should rise to an unusual height. The floor is of concrete with inside drains, so that it is greatly superior to the damp wooden floor adopted in the old hatcheries, which on that account were subject to constant decay. The building is considerably larger than the former hatchery, being 169 feet by 35 feet wide and, as already stated, containing no less than 95 tanks each 25 feet long by a little over 10 inches wide and five inches deep. The supply of water from Granite Creek is obtained by the erection of a dam about 500 yards from the hatchery. The dam is substantially constructed of plank, with box, from which a pipe conveys the water, free from detritus and floating rubbish, and affords at the dam a head of no less than 10 feet. The building is a style of structure quite different from former hatchery buildings, and presents a

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number of features in construction and design devised by Lieutenant-Colonel Anderson and myself after much consideration and interchange of views. While the design is simple in the extreme, the roof is divided into a main roof and two subsidiary roofs, turrets are provided for purposes of ventilation, and a spacious portico, supported by pillars, all contribute to give the building a neat and pleasing appearance. The triple roof and external walls are shingled, and the building is in many respects one of the best on the continent. There will be ample accommodation for incubating several species of fish, including the rainbow trout and the steelhead, as well as other varieties of salmonidae, for which there is a growing demand on the part of the public, especially for stocking the numerous and famous angling waters in the province.

Work of new B. C. Hatchery.

The commercial fishes in the new B.C. hatchery, as in all the Department's hatcheries, are regarded as of prime importance, and chief attention will of course be given to valuable economic species. In the preliminary arrangements for determining the exact location, making an appropriate clearing, and securing a suitable supply of water, from the adjacent stream, the Department of Indian Affairs has most willingly and promptly done all that was possible to facilitate the matter by devoting a couple of acres (the area required) on the Indian Reserve for purposes of the hatchery site, and the Canadian Pacific Railway, through the kind offices of the President, Mr. T. G. Shaughnessy, and the General Manager, Mr. D. McNicoll, placed this Department under special obligation in the initial stages of the scheme. The completion of this important institution in the province of British Columbia is regarded on the Pacific Coast with the greatest interest generally, and substantial benefits to the vast salmon industry are looked for, in the course of a season or two. While the operations at the old hatchery were always estimated highly by those most deeply concerned in the salmon fishing and canning industries, yet it has always been felt that the Department was never able to secure the eggs of the early and most valuable runs of salmon. The later runs, while of importance, and not inferior for commercial purposes, so long as they alone were secured and millions of their fry planted annually, were thought to have had much to do with the postponement to a later period in the season of fishing and canning operations. These operations have gradually become later and later, year by year, and the fishermen and canners have generally attributed this to the fact that the hatchery filled its incubating trays with the very late runs only. All parties interested, therefore, hail with the utmost satisfaction the new system which will be carried out at the recently erected hatchery on Shuswap Lake, where early runs of parent salmon will be secured and the eggs and fry of these early fish hatched and reared in future. It has long been my desire to see a hatchery placed as near the headwaters of the Fraser River as possible, in order that eggs might be taken from the very first salmon that reach the upper spawning grounds. There are no less than seven of these important breeding grounds readily accessible from the new salmon hatchery. It is not too much to anticipate that a vast and very apparent improvement in the early runs of the salmon in the Fraser River will be accomplished after the new institution has been at work for an adequate period (two or three years at the outside). The erection of other new hatcheries was authorized during the past season.

Lobster and Salmon Hatchery, Gaspé, P.Q.

One at Gaspé, to replace the old decayed building, erected more than twenty-five years ago near the mouth of the Dartmouth River is being constructed without delay. The plan and arrangements of this building have long been out of date, and up to two or three years ago, operations were carried on with special and increasing difficulty. With the hearty concurrence of Rodolphe Lemieux, Esq., M.P., a new hatchery, presenting entirely novel features, has been decided upon, viz., a combined salmon

and lobster hatchery. In order to carry out this wholly new idea, a location had to be secured which would provide a supply of pure fresh water as well as a supply of salt-water. A suitable location at the south-east angle of Gaspé Basin was finally decided upon after I had made a personal inspection of every available site that had been brought to the Department's attention. Indeed I made an examination of all the creeks and mouths of streams emptying into the sea along the south shore of Gaspé Bay from Cape Haldimand to Mill Brook, up York River, as well as visiting certain streams on the north shore of the bay, along the north side, that is to say, of the estuary of Dartmouth River, from Peninsula, west. Neither upon that shore, nor the opposite shore of this estuary, was a site suitable for a combined salmon and lobster hatchery to be found. The old disused hatchery it may be remarked is situated upon the west shore of the estuary of the Dartmouth River.

As the stream of water which debouches into Gaspé Basin close to the new hatchery site and adjacent to the group of buildings so long associated with the great fish business of the Messrs. LeBoutellier, is very pure and regular in supply, indeed one of the residents on the spot stated it was the most constant of all the streams in the district, and could be depended upon when most other sources of water supply were frozen up; and, moreover, as sea water comes in from the open bay, and is of some depth just a short distance out from the hatchery, the success of this important experiment is assured. There are also facilities for the formation of a tidal pond, beside the hatchery, in which parent salmon can be retained until ready for spawning. Other institutions of this kind could be started at various points along the Atlantic coast should the planting of young salmon and young lobsters at Gaspé, from one hatchery, be demonstrated to prove beneficial to the local fisheries. Certainly no more suitable ground could be selected for this important experiment, as it will be possible to test, in a way not possible elsewhere the results of the planting of both species, in the course of a few seasons. One of the main difficulties in checking the results of lobster hatcheries is the extent of the area which it is attempted to stock. The same remark applies to some extent to salmon hatcheries. The Lobster Commission of 1898, of which I was chairman, received much evidence from lobster fishermen and canners, pointing to the beneficial results observed in Northumberland Straits from the department's lobster hatching operations. The schools of small lobsters, it was claimed, due to the planting of vast quantities of these young crustaceans, were noticed season after season in the Straits, and the view prevailed that the Bayview lobster hatchery, Cariboo Harbour, N.S., was greatly benefiting the lobster industry along the shores in question. If it prove feasible, some semi-hatched salmon eggs will be placed in the Gaspé hatchery in spring, so that they may go through the final stages of incubation in the new building, and be planted in the adjacent rivers, in early summer. Arrangements have also been decided upon for hatching some millions of lobsters there, probably in June or July, so that the hatchery, there is every reason to anticipate, will be in full operation during the coming season.

New C. B. Hatchery.

A third hatchery is also being erected in Inverness County, Cape Breton. An admirable site was selected by the Inspector of Fisheries and approved by influential men in the district. It is being built on a tributary of the North-east Margaree river, a river famous as a resort for salmon of the finest kind. The Margaree river was for some years seriously depleted by merciless poaching, but it has all the conditions for being one of the most prolific and valuable salmon rivers on the coast of the province. The old hatchery at Sydney, C.B., suffered from many disadvantages, being distant from salmon rivers of first-class importance, and not within easy reach of suitable planting grounds. The new hatchery will, on the contrary, have every advantage, viz., an abundant supply of excellent water, proximity of natural spawning grounds, resorted to by the schools of parent fish, and admirable localities within easy reach where the fry can be safely and expeditiously planted. Building operations are being pushed ahead with all speed; but it is doubtful if it will be sufficiently advanced to receive

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semi-hatched eggs from one of the salmon hatcheries on the mainland, though arrangements with this object in view have already been made by me.

New Restigouche Hatchery.

Of the splendid new salmon hatchery at Flatlands on the Restigouche river, N.B. some details were given in my report last year. Its first season was a complete success, though many circumstances made it difficult to carry on the work satisfactorily, the time for the erection of the building being extremely short, so that everything could not be completed, to receive the eggs and allow of there being placed at once in the tanks. Mr. A. Mowat spared no effort to keep the eggs in health and full vitality for fully two months subsequent to November 1, a feat that bears ample testimony to the skill and zeal of that able and expert officer. The new hatchery has been pronounced most admirable by all who have seen it and are qualified to judge, and on account of its location close to the Intercolonial Railway track, its ready access by road and water, and the capital internal and external arrangements, it is a model institution of its kind. As compared with the old Deeside hatchery, remotely situated, difficult of access in winter, and not near either the spawning location (the tide head retaining pond), or the distributing grounds on the Metapedia and important portions of the Restigouche waters, it will be readily seen that the present hatchery offers immense advantages over the old destroyed institution.

Stocking Lord Strathcona's Lakes.

For many years the hatching of landlocked salmon has appeared a desirable project to be taken up and included in the department's fish-culture work. I have on three different occasions authorized with the sanction of the Honorable the Minister, steps to be taken to secure supplies of eggs. In two of these instances it was found impossible to obtain the eggs, chiefly on account of the extremely local character of the fish, the comparatively few ova, which the parent fish produce, and the uncertainty as to the movements of the parent fish when about to deposit their eggs. These difficulties have been experienced by all who have attempted the hatching of land-locked salmon. In October, 1898, the Right Hon. Lord Strathcona expressed to me his desire to obtain some land-locked salmon to be planted in three small lakes or ponds on his Glencoe estate in Scotland. The experiment as proposed possessed special interest and importance, for the Western Highlands of Scotland seemed to provide precisely the conditions for a completely successful effort to establish this Canadian sporting fish in the British Islands. One of the lakes covers nine or ten acres, with a depth of a fathom or more, two other lakes, or ponds, are of smaller area; but through all there is an ample flow of pure water from the mountain streams in the vicinity. With great regret I found that it was impossible to ship a sufficient quantity of eggs to Scotland, though I made efforts to secure some in Quebec, and in several localities in New Brunswick, in which latter province are at least half a dozen lakes said to abound in land-locked salmon. Last fall, however, a more successful attempt was made, and early in April preparations were advanced for shipping a quantity not only of the land-locked variety of *Salmo salar*, but of that famous sporting fish the rainbow trout, which has been so extensively introduced into the Eastern States by sporting clubs and into Nova Scotia waters under the auspices of the Nova Scotia Fish and Game Society, in conjunction with this department. On April 13 last the eggs of the two species named were placed in a cool chamber on board the steamship *Yola* leaving Halifax, N.S., on that date for Liverpool. The most perfect arrangements had been made by Lord Strathcona for the proper reception of the eggs on arrival in England, and for their immediate despatch by rail to the north. They reached Argyllshire safely and without delay and on the trays being examined at the end of the journey some of them were found to be actually hatching out. The young fry were alive and vigorous, and the whole of the eggs were placed in a shallow stream, suitably protected and in a few days all the young fry had emerged. Had there been anything but the most perfect arrangements made by His

Lordship, or had the expert employees, authorized to take charge of the eggs on arrival on the other side of the Atlantic, failed to perfectly carry out their instructions, there can be no question that most of the eggs would have been lost, and the scheme would have totally failed. It was a matter of extreme satisfaction to Lord Strathcona that everything was so successfully carried out, and in a letter to me, dated May 16 His Lordship generously expresses his thanks, for the steps taken to carry out his wishes and introduce into these Western Scottish waters two such valuable and important Canadian fish as the land-locked salmon and the rainbow trout. Some authorities declare the latter to be a land-locked variety of that fine sporting species, and most excellent table fish, *Salmo gairdneri*, the Pacific steelhead. In order to thoroughly establish the two species mentioned in the waters on Lord Strathcona's estate at Glencoe, a further shipment is most desirable, and if an adequate supply of land-locked salmon eggs can be obtained this season, arrangements are contemplated for repeating the plan carried out this year at Lord Strathcona's suggestion.

Breeding of Black Bass.

But while the introduction of valued kinds of fish into new waters is most desirable, there is also included in the science of fish-culture, the propagation, in their natural waters, of fish which cannot be treated by the usual methods of artificial propagation, either from some peculiarity in the eggs themselves, or their deposition and incubation.

I have in previous reports referred to the eggs of black bass, maskinongé and other species as most unfavourable for incubation by the process which is so satisfactory and successful in the case of salmon, whitefish, trout, and other eggs of salmonoid fishes. The black bass is a most important fish. Its game qualities could hardly be surpassed, its comestible qualities place it in the front rank of table fishes, and it is always in demand in the fish markets. The parent black bass have very peculiar breeding habits and place their eggs in a nest which they guard most jealously until the young hatch out. These fish, like the sturgeon and some other species, refuse to yield their spawn, and the most feasible plan is to impound them in inclosures or ponds, allow the parent fish to naturally deposit their spawn and fertilize it, and either transfer the fertilized spawn to a hatchery, and incubate them artificially or allow them to hatch out in the pond, where deposited—keeping them under proper watch and care during the period of incubation, so that no enemies or unfavourable circumstances may interfere with the successful development of the fry.

During the present season the department has secured a suitable pond in the vicinity of the Bay of Quinte, where a large quantity of parent bass have for several years built their nests and spawned. The pond has been properly inclosed and protected, and has been reported to be teeming with small bass. Thirty or forty of these fry were submitted to me for expert examination, and for their age they certainly afforded evidence not only of abundant food in the inclosure, but of very rapid and satisfactory growth. The specimens were most healthy, and the experiment of rearing black bass, near Belleville, is likely to be a distinct success, and might justify other attempts of the same character. The experiment is at too early a stage to express any very decided views upon it; but it is precisely the method which I have for some years advocated, and of which I published full details in the report of this department three years ago (see my special report No. III. pp. 17 and 18, rep. of Dep. M. and F., 1897).

QUANTITIES OF FRY DISTRIBUTED.

The quantities of fry of the kinds hatched in the department's operations and annually distributed, of necessity, varies from year to year. In unfavourable years the amount of ova collected will fall below the average, and the statistics of fish-culture will thus show a decline, but this year, in spite of many obstacles, and a shortage in some hatcheries, the total quantity of fry distributed is so far in excess of the usual annual quantity that it has only once before been exceeded, viz., in the phenomenal year 1895. Indeed, apart from 1895, it has only twice been approached by the totals of any other year, viz: 1893 and 1894, when over 250,000,000 fry were planted from the government's

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hatcheries. This year the enormous total of 265,941,000 represents the entire output from the twelve hatcheries in operation.

The following table shows the numbers planted of various species propagated :—

Salmon (<i>Salmo salar</i>)	5,965,000
Sockeye (Pacific) Salmon (<i>Oncorhynchus nerka</i>)	6,200,000
Salmon-trout (<i>Salvelinus namaycush</i>)	4,446,000
Lake-whitefish (<i>Coregonus clupeiformis</i>)	129,330,000
Lobsters (<i>Homarus americanus</i>)	120,000,000
	265,941,000

The foregoing figures are exclusive, of course, of the 12,000 rainbow-trout eggs (*Salmo irideus*) and of the 10,000 land-locked salmon eggs (*Salmo salar sebago*) which were sent to Lord Strathcona.

For facility of reference the further table below specifies the name and location of each hatchery, also the quantities of young fish and of eggs in an advanced condition supplied by each establishment respectively, and the species of fry or the kind of eggs so distributed during the season.

No.	Name of Hatchery.	Number of Fry distributed.	Number of Eggs sent to other Hatcheries.	Number of Eggs received from other Hatcheries.	Species.
1	Bedford, N. S.	915,000			Atlantic salmon.
	"	55,000	22,000	87,000	Land-locked salmon and rainbow trout.
2	Bay View, N. S.	3,000,000		3,000,000	Lake whitefish.
3	Sydney, N. S.	120,000,000			Lobsters.
4	Dunk river, P. E. I.	Not operated.			
5	St. John river, N. B.	" " 905,000			Atlantic salmon.
	" "	212,000		250,000	Great lake trout.
	" "	2,840,000		3,000,000	Lake whitefish.
6	Miramichi, N. B.	1,620,000			Atlantic salmon.
7	Restigouche, N. B.	1,125,000			" "
8	Gaspé, P. Q.	Not operated.			
9	Tadoussac, P. Q.	1,400,000	200,000		" "
10	Magog, P. Q.	2,950,000		3,000,000	Lake whitefish.
	"	149,000		150,000	Great lake trout.
11	Newcastle, Ont.	2,950,000		3,000,000	Lake whitefish.
	" "	2,225,000	2,650,000		Great lake trout.
12	Sandwich, Ont.	84,000,000	13,600,000		Lake whitefish.
13	Ottawa, Ont.	1,590,000		2,000,000	" "
	" "	1,860,000		2,250,000	Great lake trout.
14	Fraser river, B. C.	6,200,000	500,000		Sockeye salmon.
15	Selkirk, Man.	32,000,000			Lake whitefish.
	Totals	265,996,000	16,972,000	16,737,000	

FISH

STATEMENT showing the Places where, and the Years in which, the several Fish Establishment, annually, since they

YEAR.	ONTARIO.			QUEBEC.			
	Newcastle.	Sandwich.	Ottawa.	Magog.	Tadoussac.	Gaspé.	Ristigouche.
	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.
1 1868-73.	1,070,000	.....	.....	.....	.....	.....	.....
2 1874....	35,000	.....	.....	.....	.....	.....	100,000
3 1875....	650,000	.....	.....	.....	60,000	110,000	600,000
4 1876....	700,000	8,000,000	.....	.....	150,000	50,000	300,000
5 1877....	1,300,000	8,000,000	.....	.....	1,180,000	1,051,000	600,000
6 1878....	2,605,000	20,000,000	.....	.....	707,000	650,000	1,015,000
7 1879....	2,602,700	12,000,000	.....	.....	1,250,000	1,597,000	1,470,000
8 1880....	1,923,000	13,500,000	.....	.....	1,155,000	730,000	1,500,000
9 1881....	3,300,000	16,000,000	.....	200,000	334,000	500,000	740,000
10 1882....	4,841,000	44,000,000	.....	975,000	660,000	530,000	1,400,000
11 1883....	6,053,000	72,000,000	.....	250,000	995,000	520,000	300,000
12 1884....	8,800,000	37,000,000	.....	100,000	985,000	859,000	940,000
13 1885....	5,700,000	68,000,000	.....	300,000	720,000	290,000	660,000
14 1886....	6,451,000	57,000,000	.....	1,400,000	1,627,000	576,000	1,380,000
15 1887....	5,130,000	56,500,000	.....	675,000	900,000	630,000	1,500,000
16 1888....	8,076,000	56,000,000	.....	3,475,000	850,000	800,000	1,720,000
17 1889....	5,846,500	21,000,000	.....	2,800,000	1,600,000	450,000	1,280,000
18 1890....	7,736,000	52,000,000	5,732,000	2,875,000	1,700,000	806,000	2,396,000
19 1891....	7,807,500	75,000,000	7,043,000	3,050,000	1,300,000	1,000,000	1,750,000
20 1892....	4,823,500	44,500,000	4,909,000	2,400,000	624,000	965,000	1,240,000
21 1893....	9,835,000	68,000,000	6,208,000	3,600,000	2,060,000	910,000	883,000
22 1894....	6,000,000	47,000,000	4,480,000	2,035,000	1,975,000	850,000	1,080,000
23 1895....	6,000,000	73,000,000	3,210,000	3,350,000	2,060,000	675,000	2,885,000
24 1896....	5,200,000	61,000,000	3,950,000	3,400,000	2,500,000	300,000	1,250,000
25 1897....	4,200,000	72,000,000	4,100,000	4,500,000	3,272,000	1,100,000	2,100,000
26 1898....	4,325,000	71,000,000	3,020,000	3,100,000	2,200,000	.....	1,135,000
27 1899....	4,050,000	73,000,000	3,700,000	3,098,000	2,125,000	.....	2,025,000
28 1900....	5,175,000	90,000,000	3,450,000	3,099,000	1,400,000	.....	1,125,000
Totals..	130,550,200	1,215,500,000	49,803,000	45,042,000	34,389,000	15,949,000	33,374,000

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CULTURE

Hatcheries have been erected ; also the number of Fry distributed from each were built, including the Year 1900.

NEW BRUNSWICK.		NOVA SCOTIA.			P. E. ISLAND.	BRITISH COLUMBIA	MANITOBA	Totals.	
Miramichi	St. John. River.	Bedford.	Sydney.	Lobster Hatchery, Bay View.	Dunk River.	Fraser River.	Selkirk.		
Fry.	Fry.	Fry	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	
60,000								1,079,000	1
150,000								510,000	2
60,000		395,000						1,570,000	3
320,000		1,000,000						9,655,000	4
665,000		1,400,000						13,451,000	5
1,025,000		1,740,000						2,042,000	6
805,000	170,600	730,000			500,000			21,684,700	7
770,000	50,000	680,000			375,000			21,013,000	8
640,000	588,000	850,000	315,000		1,060,000			22,949,000	9
925,000	72,600	800,000	659,000		1,210,000			55,859,000	10
795,000	811,000	1,000,000	853,000		1,000,000			83,784,600	11
900,000	155,000	670,000	772,000		1,100,000	1,800,000		53,143,000	12
945,000	2,181,000	950,000	1,179,000		400,000	2,625,000		81,067,000	13
900,000	2,479,000	4,230,000	1,415,000		500,000	4,414,000		76,724,000	14
1,290,000	4,142,000	4,390,000	1,559,000			5,807,000		79,273,000	15
850,000	3,570,000	3,850,000	2,034,000			4,419,000		88,109,000	16
1,022,000	3,492,000	3,860,000	1,953,000			6,640,000		47,700,000	17
1,503,000	3,165,000	2,550,000	1,000,000	7,000,000		3,603,800		90,213,000	18
1,310,000	2,378,000	2,620,000	690,000	63,500,000		6,000,000		115,772,300	19
975,000	3,299,000	3,180,000		153,600,00		5,764,000		135,959,500	20
1,010,000	4,096,000	3,805,000	288,000	160,000,000		7,800,000	14,500,000	258,314,000	21
1,200,000	4,060,000	3,815,000	195,000	168,200,000		6,390,000	19,000,000	254,919,000	22
1,430,000	4,068,000	4,225,000	243,500	100,000,000		10,393,000	4,500,000	294,040,000	23
1,558,000	4,155,000	5,450,000	496,000	90,000,000		5,928,000		202,459,500	24
1,557,000	3,290,000	3,000,000		85,000,000		5,850,000	9,000,000	198,859,000	25
1,605,000	3,980,000	4,025,000		100,000,000		4,742,000	20,000,000	192,477,000	26
1,620,000	3,957,000	3,970,000		120,000,000		6,200,000	32,000,000	222,350,000	27
								265,996,000	28
25,890,000	54,159,200	63,195,000	13,652,500	1,047,300,000	6,145,000	88,375,800	99,000,000	2,916,464,200	

It is not an unreasonable supposition that the fisheries of the Dominion benefit substantially by the planting of the enormous quantities of the fry of valuable food-fishes stated in the foregoing tables. The hatching of cod, haddock, mackerel, and other marine fishes, has not hitherto been attempted. The eggs of these fishes, indeed, are less favourable for incubation and treatment by artificial methods than the salmonoid family, and the vast number of eggs produced by each spawner (a single cod shedding 9 or 10 millions of eggs each season), the extremely delicate and fragile character of the ova and the young fry—indeed the futility of handling the fry, are the reasons which have deterred operations in Canada in that direction. If Canadian fish culture succeeds in doing anything to keep up the stock of fish in our salmon rivers, great lakes and streams, it is doing much, and if by introducing western species into eastern waters and *vice versa*, it may do more, it may be left to the unassisted methods of nature to recuperate the illimitable ocean, open to all the fishing fleets of the world, and well nigh impossible to efficiently protect from nefarious and excessively destructive methods of fishing.

I have the honour to be,
Your obedient servant,

EDWARD E. PRINCE,
Commissioner of Fisheries and General Inspector of Fisheries for Canada.

APPENDICES.

1.—FRASER RIVER HATCHERY, BRITISH COLUMBIA.

NEW WESTMINSTER, B.C., December 7, 1900.

PROFESSOR E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to report the operations of the Fraser River hatchery for the season 1899-1900.

The first lot of ova were placed in the troughs at the hatchery on September 28, the last on October 19, the total quantity secured being 7,496,000 eggs.

Of this lot 500,000 eggs were shipped to New Zealand; 720,000 eggs or 9.6 per cent of the total failed to hatch, and were picked out. The young fry after being hatched out did not at first thrive very well, possibly from some of the troughs being overcrowded and a further loss of 76,000 fry before distribution, is recorded, bringing up the percentage of loss in the hatchery to 10.6 per cent. Two hundred thousand of the fry were put into the creek of the hatchery to relieve the troughs and the balance of 6,000,000 were liberated in the Harrison River, the last lot being taken up on March 1, 1900. The first fish appeared on December 5, a great many of the first lot being out on December 10. The ova were all hatched out on January 19, the period of incubation varying from 73 to 90 days.

The average morning temperature of the water from September 28, to January 19, was 42.3°.

In the season before (1898-9) the last lot of eggs were placed in the hatchery on November 8, 1898, and the ova were all hatched out March 8, 1899, giving 120 days as the period of incubation, the average morning temperature of the water being 38.1°.

A leak in the dam during the summer let the water out, and in addition to having it patched up as well as possible, I had the flume extended across the dam to the creek above, so that in case of a similar failure of the dam during the winter, we might still be able to secure a supply of water for the troughs. There were very few fish this year in Morris creek, and we only secured two small shipments (about 310,000) of sockeye ova. Finding that there was no chance of stocking the hatchery this season with sockeyes, I had different streams where cohoes are usually plentiful, examined, with the view of substituting this variety, but regret to say without success. While a few fish could have been obtained at different points, the run was so poor everywhere that at no one point could we obtain sufficient to justify the expense, even had time permitted of the attempt to secure a sufficient supply of ova, by utilizing several different streams. Under these circumstances it may be necessary to close the hatchery for this season. The new hatchery near Tappan Siding, Shuswap lake, was begun in July and is now nearing completion. The building is 169 feet in length by 35 feet in width, and it has 2,375 lineal feet of hatching troughs besides reception tanks. The water will be supplied from Granite creek by a pipe line 1,400 feet in length.

Some provision will require to be made for accommodating the officer in charge and his assistants while the hatchery is in operation, and the streams from which the ova is to be obtained will require to be carefully examined and the necessary arrangements made to secure the ova before the salmon reach the lake next summer.

I have the honour to remain, sir,

Your obedient servant,

C. B. SWORD, *Officer in Charge.*

2.—BEDFORD HATCHERY, NOVA SCOTIA.

BEDFORD, N.S., December 4, 1900.

PROF. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit my annual report of the work done at the Bedford hatchery for the year 1900. Eggs were procured and laid down in the troughs from the following named places:—

November, 1899, Carleton, N.B., 1,000,000 salmon ova.
March, 1900, Sandwich, Ont., 3,000,000 whitefish.
April, 1900, Caledonia, New York, 72,000 rainbow trout.
April, 1900, Quebec, 15,000 land-locked salmon.

Of this lot 12,000 rainbow trout eggs and 10,000 land-locked salmon eggs were shipped to the Right Hon. Lord Strathcona, Glencoe, Argyllshire, Scotland, which I had the pleasure to hear arrived there in splendid condition.

The remainder of the eggs were hatched, with a very small percentage of loss, and distributed as follows:

Whitefish.

McPherson's lake, Pictou Co., N.S.	500,000
Goshen lake, Antigonish County, N.S.	500,000
Brazil lake, Yarmouth County, N.S.	500,000
Paradise lake, Annapolis County, N.S.	500,000
Lake Au Law, Inverness County, N.S.	800,000
Sandy lake, Halifax County, N.S.	200,000
Total	3,000,000

Rainbow Trout.

Micmac Game and Fishing Club, Halifax.	36,000
McFadden's lake, Albert County, N.B.	10,000
Prichard's lake, Pictou County, N.S.	7,000
Cold Brook Stream, King's County, N.S.	7,000
Total	50,000

Land-Locked Salmon.

Silver lake, Halifax County, N.S.	5,000
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Sea Salmon.

Nine Mile river, Halifax County, N.S.	75,000
Pennant river, Halifax County, N.S.	50,000
Annapolis river, Annapolis County, N.S.	75,000
Avon river, Hants County, N.S.	50,000
East river, Pictou County, N.S.	50,000
Carribou river, Pictou County, N.S.	50,000

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Cornwallis river, Kings County, N.S.....	75,000
Gaspereaux river, King's County, N.S.....	75,000
Lake New Horton, Albert County, N.B.....	50,000
Lochaber lake, Antigonish County, N.S.....	50,000
Morrell river, Prince Edward Island.....	75,000
Naufrage river, Prince Edward Island.....	75,000
Wheatley river, Painece Edward Island.....	75,000
Rawdon river, Halifax County, N.S.....	50,000
Sackville river, Halifax County, N.S.....	40,000
Total.....	915,000

It often occurs that application for fry are not received until too late to supply them, consequently applicants are disappointed. All applications should be made to the department not later than May 1, as the fry are usually all planted by the middle of June.

I might mention the fact that during the months of August, September and October large quantities of small salmon were seen at the head of Bedford Basin, and ascended the river in October, when the waters were high enough for them to get up stream.

During the past four years I have been planting a few thousand fry in Sackville river, say from 10,000 to 20,000 each year, which accounts for their showing up so well in the basin now.

About four years ago some 80,000 salmon fry were planted in the head-waters of the Tantramar river, Westmorland County, N.B., and last year (it is reported) large numbers of salmon were taken in the shad nets off Westcock and near the mouth of the river in which the fry were planted. I have been told by some of the aged inhabitants of Sackville, N.B., that salmon had not been caught in these localities, for forty years previous, and attributed this catch to the supply furnished from this hatchery.

I am satisfied that good results will follow when the fry is planted in suitable streams.

Last month I received from the Carleton pond 500,000 salmon eggs. There is a large space in the trough where rainbow trout or other eggs can be handled. As there is a large demand for rainbow trout, I think that it would be advisable to procure more eggs this season and stock some of our lakes where our native trout have been exterminated.

During the past summer the roof of the hatchery has been shingled, a new cupola built, and the necessary repairs made. One new drain was constructed and two old ones reopened. One chimney was found to be broken at the roof and in very dangerous condition, it was rebuilt from the roof and the other two chimneys repaired. The outside of the building received two coats of paint, and it is now in good order. The interior is in good working order, except the supply tank which is old and tender, and two floor troughs are also somewhat rotten these may require renewing next year.

In all other respects the hatchery is now in better condition than it has been for many years.

I am, sir,

Your obedient servant,

ALFRED OGDEN.

3.—ST. JOHN RIVER HATCHERY, NEW BRUNSWICK.

GRAND FALLS, N.B., November, 27, 1900.

PROF. EDWARD E. PRINCE,
 Dominion Commissioner of Fisheries,
 Ottawa.

SIR,—I respectfully beg to submit herewith my annual report of the transactions and the work done and performed at the Rapide des Femmes, St. John river fish hatchery, during the present year under my supervision.

In the month of November last, as has already been reported, there were laid down in the hatching troughs in this establishment about 1,100,000 sea salmon eggs, and in the month of March of this year I received a further supply of ova, consisting of 250,000 salmon trout eggs from Newcastle, and 3,000,000 whitefish eggs from Sandwich, Ontario; these I met by instruction at McAdam Junction in charge of Mr. William Parker, and by myself conveyed the shipment to the hatchery. The eggs were all in good condition, and continued to do fairly well during the winter and we succeeded in hatching out a good percentage, as can be seen by the tabulated statements of the quantity of young fry distributed last spring and summer.

Whitefish Fry distribution, April 25.

Harvey Lake, York county.....	320,000
Lake George, York county.....	320,000
Lake Yohoe, York county.....	320,000
Oromocto lake, York county.....	320,000
Mohanneous river, Charlotte county.....	320,000
Baldhead lake, York county.....	320,000
Forest lake, York county.....	320,000
Forest lake, York county.....	240,000
Baulieu pond, Victoria county.....	240,000
Pond at the hatchery, Victoria county.....	120,000
	<hr/>
	2,840,000

Salmon-trout Fry, June 14.

Harvey lake, York county.....	32,000
Oromocto lake, York county.....	32,000
Mohanneous lake, Charlotte county.....	32,000
Tomlinson lake, Victoria county.....	24,000
Lake George, York county.....	32,000
Beaulieu Pond, Victoria county.....	20,000
Long lake, Victoria county.....	20,000
Pond at the hatchery.....	20,000
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	212,000

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Sea Salmon fry, June 25.

Skiff lake, York county.....	150,000
St. Croix river, Charlotte county.....	150,000
Newcastle, Miramichi.....	45,000
Tobique river, Victoria county.....	180,000
St. John river, N.B.....	380,000
Total.....	905,000

Recapitulation.

Whitefish fry distributed.....	2,840,000
Salmon-trout fry distribution.....	212,000
Sea-salmon fry.....	905,000
Total number distributed.....	3,957,000

The work of distributing was completed July 16, 1900. Then our attention was turned to renovating the house, putting it in as proper shape as possible for the next season's operation, such as cleaning, washing, varnishing the trays, troughs, and tanks, &c., and renewing the paint on various parts of the interior of the hatching room.

Therefore I consider the house, now, in good condition for the winter operation. Apart from the foregoing, the only other addition made to the building was three new ladders, one a ground ladder, and two roof ladders, one at each flue or chimney.

Stripping the Salmon, collecting Ova, &c.

On the 25th day of last October we left the Grand Falls for Carleton, St. John West, having shipped the egg cases and trays a week in advance. The next morning I met Mr. Alexander Mowat and Mr. Ogden, and as usual Mr. Joseph O'Brien had all the arrangements made ready for us to begin work. After I ascertained that the fish were sufficiently ripe we commenced to take the spawn, Mr. Mowat and myself. In two days we filled five cases for Mr. Ogden. He then left for home, and on November the first I sent four cases of eggs in charge of Frank McCluskey to our own hatchery. On the sixth I left for home with three more cases containing in all about 1,000,000 of eggs, there was still a number of fish in the pond to be stripped when I left. Mr. O'Brien informed me that he had received a letter from you giving the balance of the eggs to Mr. Mowat for his hatchery on the Restigouche—consequently, as my cases had been a long time packed, I did not think that it would be prudent to keep them any longer from the hatchery. How many more fish remained in the pond when I left, I do not know. There was according to my tally 377 fish manipulated during the time that I was present, 241 females and 136 males. The fish were all in good condition, free from any disease whatever.

The eggs in the hatchery are apparently doing well with every prospect of a good yield next spring. We have a fine supply of good pure water in the house at present, with every prospect of a continuous abundance during the winter. The only repairs necessary to the hatchery is a new platform and steps at the hatchery door, which is needed at present, all of the foregoing is most respectfully submitted.

I am sir,

Your obedient servant,

CHAS. McCLUSKEY,
Officer in Charge.

4.—MIRAMICHI HATCHERY, NEW BRUNSWICK.

SOUTH Esk, N.B., November 22, 1900.

Professor EDWD. E. PRINCE,
Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit the following report on the operations at this fish hatchery for the past year.

As stated in my last annual report, there were 1,715,000 salmon ova collected and placed in this hatchery during the autumn of 1899. The approximate loss from the time of gathering the ova until distribution was completed, amounted to 95,000, leaving a balance of 1,620,000 fry, which were distributed over the following streams, viz :—

Name of River.	Number of Fry.
North-west Miramichi river and tributaries.....	525,000
Main South-west Miramichi river.....	200,000
Little South-west Miramichi river and tributaries.....	500,000
Sevogle river.....	200,000
Renous river.....	70,000
Barnaby river.....	50,000
Stewart's brook.....	10,000
Warrens pond Kensington, P. E. I.....	25,000
Bells lake, Cape Traverse, P. E. I.....	40,000
Total.....	1,620,000

As several applications were received by me for fry for Barnaby river, I thought it advisable to add that river to the list. This is a very good stream to plant fry in, but owing to a lumber boom at its mouth, very few full grown salmon can enter it until late in the season, after the lumber has been removed. The transfer of ova to Prince Edward Island, to fill applications of Messrs. Bell and Leslie, was very successfully performed, as in each shipment the fry were landed at their destination in excellent condition. The only objection to this transfer was that, in my opinion the planting grounds were not the most suitable that might have been selected by the different applicants, but no doubt this matter can be better arranged if any fry are carried from here to the island during the coming season's distribution, or at any future time.

In addition to the number of fry already mentioned, there was about 40,000 shipped from Grand Falls hatchery, to fill an application made by R. H. Armstrong, Esq., of New-Castle. This gentleman applied for 250,000 ova from that hatchery, but the matter having been allowed to stand until it was too late to ship the ova, this number of fry was sent instead. About one-third of the shipment were lost in transit owing to the very warm weather at the time, and an unavoidable delay at St. John. They were placed in the hatchery here as soon as received and the dead fry removed. There was a balance of 25,000 saved from the lot and they were planted on the head-waters of the North-west Miramichi in the waters of the club of which Mr. Armstrong is manager. On the whole, the past season's distribution of fry was very successful and highly satisfactory.

Repairs.

During the summer season, about \$200 was expended in keeping this hatchery and the buildings and appliances in connection therewith in good running order. I may say that all the out-buildings are now in first-class condition and will not require any repairs for quite a number of years. A few necessary repairs were put on the interior of the hatching room, but I did not think it advisable to expend any great amount on that part of the building, as it will be necessary in the near future, to replace the present hatching troughs and tanks with a new set. The supply pipes are a source of great annoyance and outlay, as they have outlived their usefulness. Quite an improvement could be made by replacing the four old wooden pipes that now convey the water from the supply dam to the hatchery, by one good sized iron pipe. I would recommend that the outside of the building be painted next year, as it has a very shabby appearance at present. It will also be necessary to have a new scow built for towing purposes, as the one in use up to the present is completely worn out.

Collection of Ova.

After having put the nets and appliances necessary for capturing parent salmon in good condition, the work of procuring this season's supply was commenced on September 17. The fish were obtained in the same manner as in former years, viz., by means of seining the pools in the non tidal waters of the North-west Miramichi, and by a trap-net on the Little South-west Miramichi. The total number of fish obtained from September 17 until the work was completed on December 24 was 373, of this number, 121 were taken from the trap-net on the Little South-west, and the remaining 252 were obtained from the seining operation on the North-west Miramichi. A much larger number could have been obtained, in the same length of time, and for the same expenditure, if it were not for the high water that prevailed in all the streams from October 12, until the close of the season. This freshet made it very difficult to operate the nets and also allowed nearly all the fish to pass up beyond our reach. As the fish were beginning to spawn, and as a sufficient supply for this hatchery had been obtained, the nets were removed on October 24, and collection of ova at the retaining pond was commenced. It was found that the fish consisted of 230 females and 143 males. The work of stripping these fish continued until November 10. The total number of ova obtained therefrom amounted to 1,620,000, showing an average yield from each fish of over 7,000. These ova were all placed in hatching troughs here, and are presenting a very promising appearance at the present date.

General Remarks.

During the summer months, I had considerable correspondence with several gentlemen regarding the matter of procuring them a supply of sea trout ova, but as they allowed the season to get too far advanced before finally deciding what arrangements they could make to receive the ova, the matter was allowed to drop. I am of the opinion that it would be advisable for the department to allow me to obtain a number of parent trout next season, in order that the various applications for trout fry might be filled. It would not materially add to the running expense of this hatchery to collect and hatch about 100,000 trout ova, as the parent fish can be obtained very conveniently and at a moderate cost. The applications for both salmon and trout fry are increasing every year. In regard to this matter of applying for fry, quite a number of parties made application during the past season when it was too late, not understanding the matter. In every instance where it was thought that the waters, in which it was proposed to plant the young fry was suitable, the usual blank application forms were supplied the persons desiring the young fry. Great interest is manifested in this artificial work by the American sportsmen who are visiting the Miramichi in greater numbers every year, as well as by the managers of the different fishing clubs, who are generally resident citizens. Quite a number of these gentlemen have given assurance that they

are perfectly satisfied that the work is materially benefiting their streams, and are highly pleased with the manner in which the Government fosters the fisheries of our rivers. Good catches have been reported by the anglers on all the streams, from which I could obtain information. The value of our river and bay fisheries for commercial purposes must also not be overlooked. Generally speaking, the netting and shipping interests have had another successful season, and with very few exceptions, the fishermen and dealers agree that they are being greatly benefited by the judicious planting of fry from this hatchery every season, and the opinion is frequently expressed that the output of fry should be doubled, if possible. And while on this point, I may say that I would strongly advocate replacing the present hatchery with one having nearly twice the capacity, and more modernly fitted up, in order that the work be extended, and a much larger output of fry be made annually, although good work is being done at present, it is worthy of the attention and consideration of the department, that it is being carried on under a great many disadvantages, owing to the limited space and the want of improvements and the way in which the hatchery is generally arranged.

In concluding this report, it may be added, that every effort is made to not only perform the routine work in a thorough and careful manner, in order that the best results may be obtained from the operation of this hatchery, but also every opportunity is taken advantage of to acquire a practical knowledge and closer acquaintance with the habits of the fish frequenting our rivers and lakes and also with the general study of fish-culture in its different branches.

I am, sir,
Your obedient servant,

ISAAC SHEASGREEN.

5.—RESTIGOUCHE HATCHERY.

RESTIGOUCHE HATCHERY, November 24, 1900.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—It is with great pleasure that I submit my annual report upon the operations of the Restigouche hatchery during the past year of 1900.

As stated in my report for 1899 about 1,500,000 eggs were collected at the Tide Head pond, operations ending November 1. But as the work of building the new hatchery at Flat Lands did not commence before November 6, we were obliged to retain the eggs in the packing cases for two months, it being the 1st January before the new hatchery was in a condition for the reception of the eggs. These eggs then by skillful manipulation were kept two months before being laid down in the hatching troughs in running water. Notwithstanding this 75 or 80 per cent of the eggs were hatched and brought forth fine healthy fry. This I believe is unprecedented, as about three weeks were conceded to be the time limit that fish eggs could be kept out of water without injury.

Distribution of Fry.

The fry were distributed both by water and by rail in the following localities:—

Restigouche river from Hatchery to Kedgwick.....	600,000
Metapedia river conveyed by rail.....	525,000
Total.....	1,125,000

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These were all liberated in the best of condition. I regret to report it was found impossible to plant the usual number in the Upsalquitch, owing to the river being completely jammed with logs at the falls. We were unable to navigate through them with the present cumbersome apparatus, which I trust will give place another year to the improved tow-barge, which I have already recommended for this important work.

The Retaining Pond.

This pond at Tide Head was reconstructed and the Government nets placed in fishing order as soon as the freshet would admit, but a great deal of hardship and trouble were experienced in perfecting this work, and I regret to report that the catch of fish was not as large as I would have liked or anticipated, but the elements over which we have no control must rule. The unusual late spring and great snow freshet sending thousands upon thousands of valuable saw-logs out to sea, prevented getting the nets set before 15th and 20th of June, just two weeks later than usual. Even at this date there was so much debris running, which tore the nets and kept them from fishing the first week. Consequently only 281 fish were captured in both nets. These were placed in the divisions on the 18th of October, when the work of collecting the eggs was proceeded with, and continued until the 3rd of November. Some 1,400,000 eggs were obtained and deposited in the new hatchery in perfect condition. The parent fish never looked better and were again returned to sea after being stripped. No loss occurred.

Carleton Pond.

In obedience to instructions I left for St. John on October 23, to render assistance there. Over 500 fish were manipulated, two-thirds proving to be females. The yield was great, and after the usual supplies were sent forward to Rapide des Femmes and Bedford hatcheries, a surplus of over a half million were transferred to the Restigouche and laid down in fine condition, making a good total of about two millions of eggs in this hatchery at the present time. This will permit of supplies of semi-hatched eggs being sent to some of the new hatcheries in the spring, if desired.

I cannot speak too highly of the Carleton pond, it is the most perfect place in the world for the retaining of the parent salmon. The mother fish and eggs are always in perfect condition. I would certainly recommend that the number of parent fish be increased, so that the new hatchery now being built and others can be supplied with these fine fish.

The new Hatchery at Flat Lands.

This institution is now in perfect running order and almost thoroughly equipped. Great praise is given the contractor and others for the fine location and beautiful build ing. Mr. McAllister, our late member, expresses himself thus: The new hatchery is a credit to Flat Lands, a credit to the contractor, and to the Government. There is a never-failing supply of good water, and the whole equipment is first-class. The upper flat is nicely fitted up for dwelling and now occupied by the caretaker and his family. I am sure it is one of the finest hatcheries in the Dominion, and affords every facility for hatching and rearing large numbers of fry.

The sheet iron tanks which I have already recommended can now be introduced, thus filling up the vacant space left for this purpose. With the introduction of these tanks we will be in a position to hold over and feed 100,000 fry until they are six months old. This, I think to be of great importance and ought to be adopted at once. The cost of feeding will not be very great.

We are also in need of a small retaining pond at the hatchery. This can be made by excavating. Should sides and bottom require cementing, cost would probably reach \$200. I would urge the importance of this pond. Quite a number of the fry could be retained until three and four years old and marked before liberating. The work would

be most interesting and productive of valuable information, regarding the movements, migration and growth of the Atlantic salmon, which we know so little about.

I would suggest the fitting of a fish car, with tanks, etc., similar to those in use in the United States. This scheme would admit of all kinds of adult fish being transferred from one point to another in the Dominion, and many lakes and rivers stocked with parent fish in addition to the fry and parr.

Results of Artificial Planting.

I heard a great deal from many sources and sections of the good results attending the artificial work. In the Sackville river at the head of the Bay of Fundy, where fry have been planted, I heard of immense quantities of immature salmon being taken in the nets this year and last. Also in a lake near Sussex, N.B., which has been stocked with fry, lots of the two and three year old fish have been caught during the past season. Some were sent to me for identification and proved to be three year old salmon. There are many other places I have heard of with equal results. Our own rivers were simply alive with parr and smolt this year. The men at the retaining pond say they saw great schools of these little fish attempting to work their way through the grating inclosing the parent salmon, on their migration to sea.

General Remarks.

Notwithstanding the spring being fifteen days later than usual, the fish struck in very early, the first salmon being caught at Dalhousie on the 8th of May. Many of the nets were not set and very little angling done before the 12th of June, consequently the first big run of fish escaped. Still anglers had fine sport. Four or five rods about 15th June, at Metapedia, brought in thirty-one salmon for that day's catch. Mr. King, lessee of the Kedgwick River, took twelve salmon in one day in June. This was 75 miles above Metapedia. This is sufficient evidence to show that large numbers of fish have been running into the rivers in May.

The guardians just returned from the headwaters of the Kedgwick, report that the river was filled with breeding fish this autumn. The riparian committee have been doing excellent work the last few years by leasing out some of the licensed nets in the estuary. They ought to be encouraged in this good work by both governments, as this combined with the good protection and artificial work, will make the far-famed Restigouche the greatest commercial and sporting river in the world.

All of which is respectfully submitted.

I am, sir, your obedient servant,

ALEXANDER MOWAT,
Fishery Officer.

6.—TADOUSSAC HATCHERY, QUEBEC.

TADOUSSAC, December 7, 1900.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—In answer to your letter of the 12th ultimo, I have the honour to submit my annual report of the work done at the Tadoussac hatchery for the season 1900. From the 2,000,000 of salmon eggs laid down in the hatchery last fall, 1,800,000

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hatched out and in the month of June, 1,400,000 salmon fry were distributed in the following rivers and lakes :—

Ste. Marguerite river	260,000
Baude river	300,000
Chisholm river	300,000
Mowat's lakes	300,000
Roberval hatchery	100,000
Murray river	50,000
Ste. Anne river	50,000
Kenogami lake	10,000
Hatchery lake	30,000
	1,400,000

As reported in time, there was no distribution of salmon fry in the upper Saguenay, on account of a loss of 400,000 fry caused by an accident in the iron tube. The water stopped running down, the iron tube being blocked by something. I sent for a blacksmith with tools to take away the part of the tube holding the key; there we found four (4) big eels, blocking entirely the whole tube at the key. The kind of key placed in the tube by Mr. Wilmot in the building of the hatchery was one used for steam, and being crooked, those four big eels, from 3 to 4 feet long, were jammed in the tube at the key. We had great trouble to clear it. This fall a new key has been put up to the tube, to allow the water to pass full size of the tube, so in future any eels, fish or anything coming down from the Hatchery lake by the tube, will fall in the long 80 feet tank. As usual, the departmental nets were set up in May for the capture of the parent salmon. 520 salmon were kept in the salmon pond in good condition, until ready to spawn in the end of October and beginning of November. Of that number we have collected from the 300 big female salmon, 3,350,000 of eggs. From that number 200,000 carefully packed in green moss and thin cloth, have been sent to the Roberval hatchery in charge of my son, and laid down by himself in the hatchery. The eggs were in splendid condition when he left Roberval. The 3,150,000 laid down in our hatchery filled up well the whole building. Everything in the hatchery is in good working order. The old wood stove being broken, I bought a coal stove in place. The hatchery is now heated by two coal stoves, being more convenient for keeping a regular temperature during the nights. The Mowat's lakes, as usual, have received a good portion of the salmon fry during the distribution. The lakes are always teeming with young salmon going down to the Grand Cove on the St. Lawrence river, about four miles below the Bay of Tadoussac. The salmon fishing has been very good for the net fishermen and for the anglers in the salmon rivers. Splendid catches have been made by the gentlemen of the Ste. Marguerite New York Salmon Club. The head guardian of the Ste. Marguerite river for the New York Club, after his return of inspection of the river, reports that he never saw so many parent salmon on the spawning beds. I have also been told that the River à Mars on the Ha Ha Bay, the property of William Price, Esq., was well stocked with parent salmon. In previous reports I spoke of the necessity of repairing the dam of the salmon pond, being opened at one end by the pulling down of the old hatchery a few years ago. The temporary closing of the pond, as reported before, by a fence of boards and wire nets set up on long pickets, is not quite safe in heavy winds and strong tides. I hope something will be done early next spring to close the dam of the salmon pond. Twenty-five more large cans for the distribution of salmon fry next May are much needed. From the 3,150,000 eggs on the trays in the very best condition, we will have a large distribution of fry next season.

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

L. N. CATELLIER.

7.—MAGOG HATCHERY, QUEBEC.

MAGOG, November 27, 1900.

Prof. E. E. PRINCE,
Dom. Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit herewith a report of the operations at this hatchery during the year 1900.

On February 21, I received at Magog railway station, from Mr. William Parker, 3,000,000 whitefish eggs from Sandwich, Ontario, and 150,000 salmon-trout eggs from Newcastle, Ontario; they all arrived in very good condition, and continued to do well during the period of incubation. The hatchery was in good condition, with a plentiful supply of beautiful clear water. The distribution of young fry from the hatchery commenced on May 2 and continued until June 8, being planted in the following lakes:—

Salmon-trout.

Lake Magog, County of Brome and Stanstead	30,000
Lake Fortin, County of Beauce	23,000
Lake Nick, County of Brome	5,000
Lake Massawippi, County of Stanstead	10,000
Trouser Pond, County of Brome	10,000
Brome Lake, County of Brome	10,000
Lake Lyster, County of Stanstead	10,000
Spooner Pond, County of Richmond	10,000
Breaches Lake, County of Wolfe	10,000
Lac La Peche, County of Champlain	15,000
Lac des Iles, County of Champlain	10,000
Lake Gendron, County of Sherbrooke	6,000
Total	149,000

Whitefish.

Lake Memphremagog, County Brome and Stanstead . . .	1,225,000
Lake Megantic, County Megantic	200,000
Lake Massawippi, County Stanstead	475,000
Key Pond, County Sherbrooke	300,000
Oxford Pond, County Brome and Sherbrooke	500,000
Brome Lake, County Brome	200,000
Lac Le Peche, County Champlain	50,000
Breaches Lake, County Wolfe	50,000
Lake Lyster, County Stanstead	50,000
Total	2,950,000

It is most gratifying to me, and no doubt most pleasing to you, to know that the above large number of tender young fry were planted in the several waters herein mentioned without any appreciable loss, particularly when we consider that a great part of them had to be conveyed over three hundred miles and part of the journey the worst kind of a wagon road, you will very easily conceive the amount of care and attention

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it requires to be in a position to report to you such gratifying results of the year's operations.

Repairs.

As mentioned in my last year's report that the penstock in the hatchery was leaking badly, I found on taking it out that it was completely rotted out; I had it replaced at a cost of ten dollars. The floor is also badly rotted and as it is very old it will be necessary to have it replaced by a new one in another year. I would strongly recommend the purchase of three ladders, one ground ladder and two for the roof, one to each chimney. This is necessary in case of fire.

I am, sir, your obedient servant,

ALEX. FINLAYSON,
Officer in charge.

8.—NEWCASTLE HATCHERY, ONTARIO.

NEWCASTLE, December 10, 1900.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries.

SIR,—I have the honour to submit a report of the fish cultural operations carried on at this hatchery during the past year.

The following schedule will show you the points of distribution, also the numbers and kinds of fry distributed and placed in each locality last spring.

Whitefish.

Lake Ontario, Hamilton.....	300,000
“ Toronto.....	300,000
“ Cobourg.....	300,000
“ Consecon.....	300,000
Bay Quinté, Belleville.....	300,000
“ Picton.....	300,000
Lake Simcoe, Barrie.....	300,000
Lake Couchiching, Orillia.....	300,000
Georgian Bay, Meaford.....	300,000
“ Collingwood.....	250,000
Total distribution whitefish.....	2,950,000

Salmon-trout.

Lake Ontario, Toronto.....	150,000
“ Hamilton.....	150,000
“ Kingston.....	125,000
“ Cobourg.....	125,000
“ Picton.....	125,000
“ Consecon.....	125,000
“ Newcastle.....	100,000
“ Bowmanville.....	100,000

Bay Quinté, Belleville	125,000
Georgian Bay, Collingwood	125,000
" Meaford	125,000
" Wiarton	200,000
Lake Huron, Southampton	125,000
" Simcoe, Barrie	125,000
" Couchiching, Orillia	125,000
Lakes Haliburton, per applications	125,000
" on Bay Quinté Ry.	150,000
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Total distribution salmon-trout	2,225,000
" whitefish	2,950,000
Eggs shipped to Ottawa	2,250,000
Eyed eggs shipped to Magog	150,000
" " Grand Falls, N.B.	250,000
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Total distribution from Newcastle	7,825,000

I beg to inform you that the fry were all in first-class condition and deposited in the different waters.

According to your instruction on October 1, I proceeded to Wiarton with two assistants, to procure the usual supply of salmon-trout ova for Newcastle, Ottawa and other hatcheries in the Lower Provinces. We arrived at Wiarton in the evening of the 1st October.

We had some difficulty in starting our operations, as on pulling our Pile Driver into the open water, we found on examination that she was totally unsafe and in such a decayed condition, as to necessitate pulling her into the dry dock to undergo some repairs, which necessitated about a week's delay.

We succeeded in getting our nets set about the 29th October, and on the 6th November secured about 96 trays of eggs in good condition.

We experienced some very rough and trying weather all through November, and encountered great difficulties in operating our nets and doing our spawning. The continued north-east and east winds made it almost impossible to do our work with safety, and made it a matter of much anxiety to me that whether the weather would permit us securing a sufficient supply of ova to stock the several hatcheries in the Dominion. However, I am happy to say at present time of writing, we secured some 4,500,000, out of which quantity Mr. John Walker, of the Ottawa hatchery, received 1,500,000, which leaves a balance in this hatchery of 3,000,000 in good condition and to all appearances doing well.

Our plant in Wiarton is in good condition, all and except our spile driver, which is now totally unfit for another year's operations, which I will have to ask from \$125 to \$150 to replace the same to continue our operations there. The hatchery is in first-class condition and to all appearance will need nothing extraordinary for some years to come.

We had, while in Wiarton, the pleasure of a visit from Professor A. B. Macallum of Toronto University, to secure a supply of ova from the female fish and the milt from the male for scientific purposes. I have the pleasure to inform you that he went home well pleased with his visit, the arrangements for which had been made by your instructions, although the weather was very stormy the day we went to raise our nets.

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

WM. ARMSTRONG,
Officer in charge.

9.—OTTAWA HATCHERY, ONTARIO.

OTTAWA, November 27, 1900.

Prof. E. E. PRINCE,
Commissioner of Fisheries, &c.

SIR,—I have the honour to submit my annual report of the operations carried on in the Ottawa fish hatchery during the year 1900.

On November 8, 1899, were received from Mr. W. Armstrong, of the Newcastle hatchery, about 2,250,000 salmon trout eggs which had been collected at Wiarton, Ont. The eggs were deposited in the hatching trough in good condition. Also in the month of February, 1900, I received from Mr. W. Parker, of the Sandwich hatchery, about 2,000,000 whitefish eggs. The eggs were in good condition when received.

The fry hatched out strong and healthy in the month of April and first week of May. The work of distributing the fry was done by Mr. Cunningham and Mr. A. M. Ross of the Fisheries Department. I am pleased to say that the work was done in a very satisfactory manner and very successfully.

The fry having been deposited in the following named waters :—

Salmon-Trout.

Clayton Lake.....	30,000
Mount Tremblant Lake.....	60,000
Charleston Lake.....	180,000
Sharbot Lake.....	60,000
Eagle Lake.....	50,000
Rock Lake.....	150,000
Victoria Lake.....	140,000
Villa Mon Repos Lake.....	50,000
Three Rivers Lake.....	70,000
Rideau Lake.....	90,000
Lac Noir.....	60,000
Lac des Sables.....	100,000
Commandant Lake.....	100,000
No. 7 Lake (Joliette).....	60,000
Christie Lake.....	30,000
Bass Lake.....	60,000
St. Gabriel Lake (Labelle).....	40,000
Little Whitefish Lake.....	60,000
Blue Sea Lake.....	100,000
Millers Lake.....	40,000
Wensley Lake.....	40,000
Clear Lake.....	60,000
Meach's Lake.....	100,000
Whelan's Lake.....	30,000
Shipped to lakes in P. E. Island.....	100,000
	<hr/>
	1,860,000
	<hr/>

Whitefish.

Sharbot Lake.....	300,000
Eagle Lake.....	150,000
Mississippi Lake.....	150,000
Black Lake.....	300,000
Bass Lake.....	180,000
Rideau Lake.....	240,000
Clayton Lake.....	90,000
Mount Tremblant.....	180,000
	1,590,000

On November 20, I received about 1,500,000 salmon-trout eggs, which are now in the hatching troughs for this season's operations.

The hatchery is in good repair and condition for the work this year.

I remain, sir,
Your humble servant,

JOHN WALKER,
In charge of Ottawa Hatchery.

10.—SELKIRK HATCHERY. MANITOBA.

SELKIRK, November 30, 1900.

To Prof. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to again report on the operations and results at the hatchery at this place.

I find now, after three years experience in this institution, that the season has very much to do with the success of our efforts to hatch out whitefish eggs.

In the fall of 1898 winter set in, and the river was frozen over the very day the ova was placed in the jars, and our efforts that season were crowned with highly satisfactory results.

Last season and this have been quite the reverse, high temperature and open water, with its consequent admixture of mud, together with most unsuitable jars, combined to make it almost impossible to have a satisfactory showing.

After the date of my last report the winter continued open and mild, and we experienced endless trouble with fungus right up to the end of the hatching season, and the ultimate results were less than we anticipated, or had every reason to expect.

The number of applications for fry were in excess of last year, or any former year, and on receiving directions from your office the output of the hatchery was distributed as follows :—

Applicant.	Lake.	Quantity.
Inspector E. W. Miller, N.W.T.....	Qu'Appelle Lake.....	5,000,000
Overseer Fitzgerald, Grenfell.....	Crooked Lake.....	5,000,000
Capt Smith, Ninette.....	Pelican Lake.....	3,500,000
Geo. Lawrence, M.P.P.....	Killarney.....	3,500,000
	Lake Winnipeg.....	15,000,000
Total quantity of fry distributed.....		32,000,000

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I went myself with the fry to the Qu'Appelle lakes, and on arrival at Qu'Appelle station, where I was met by Inspector Miller, we took waggons to Fort Qu'Appelle, where the fry was planted after a ride of about 375 miles, the last 20 being in a waggon in a hot sun.

I cannot say that I was satisfied with the condition of the fry at the time of planting, and would suggest that these waters be stocked from some other source.

Mr. Page, of the hatchery staff, who had charge of and superintended the planting about 25 miles out from Grenfel, in Crooked Lake, is of the same opinion, and is convinced that successful plantings cannot be made at such a distance, and with the same means of transportation.

Notwithstanding that it took two full days from the time of leaving the hatchery to reach Ninette, the fry were healthy and vigorous, and a very satisfactory planting was effected, in Pelican Lake, about a quarter of a mile from the station. Thanks to Capt. Smith and Mr. Yellowlees, and others of Ninette, who rendered assistance.

Mr. Page also took the stock to Lake Killarney, reaching there in one day. He reports favourably on the condition of the fry, and expects to hear of good results in the course of three years.

All the fry tanks were then filled, and with the assistance of the tug *Viking*, and crew, Messrs. Page and Ward—both of the hatchery staff—planted them as far out in Lake Winnipeg as the ice would admit. The remainder, not being a sufficient quantity to warrant any expense in planting, was allowed to go in Red River.

On receipt of your instructions by wire on the night of the 12th of October, I at once notified Mr. T. K. McKenzie, of your acceptance of his offer to provide a supply of ova for the hatchery, and on the night of the 15th, I started with his outfit, on board the tug *Highlander*, to superintend operations at the mouth of Black River.

On landing at Black River we found quite a few whitefish in shallow water, but were mostly males. By the 20th we found fishing good and spawn running freely, and in seven days we had sufficient ova to fill all the trays we had.

On my arrival in Selkirk on the night of Sunday, the 28th, I found the hatchery in perfect readiness to receive the eggs, and by the night of the 29th had them all placed in the jars, and every jar in the place full.

Owing to the continued warm and windy weather the river water was unfit for use on account of mud and high temperature, and the supply from the artesian well was insufficient to run the battery, so we were compelled to use about half of each.

For a time it looked as though we should suffer a total loss from fungus, but I put on some extra help for a short time, and now that the weather has become colder, and the river frozen over, prospects are much brighter, and we have every reason to hope for average results.

The improvements made in the hatchery, authorized last September, have put the institution in good working order, and everything would be in very satisfactory shape if we only had the proper hatching jars such as I understand the department is arranging to supply, and the suction pipe extended farther into the river, so as to avoid silting every year.

The outside painting and part of the inside, was not done this fall, as we were pressed for time, and it was thought that it could be better done in the spring.

I beg to again draw attention to the pressing necessity of a fence around the grounds. A good portion of the old fence which you saw when visiting the institution last fall, is now down to the ground, leaving the whole front of the premises open and unprotected, and presenting a most dilapidated looking spectacle. I would be much pleased to receive instructions at an early date to have the fence renewed, so the posts could be gotten out this winter, and the fence built in the spring as soon as the frost is out.

I would also suggest that tenders be invited this winter, for a supply of wood for the next season, believing that quite a saving could be effected in price. Inviting tenders in the spring of the year leaves the competition confined to the very few who take out a stock during the winter for speculation. You will no doubt remember that last season we had but one offer.

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The close of the hatching season for whitefish being the best spawning time for sturgeon, the staff at the hatchery as well as myself would be much pleased if you would permit some experiments next spring in the direction of hatching out some sturgeon. The sturgeon can be taken in the river here, and the period of incubation being so short, the cost, outside the men's wages, would be very nominal. I therefore hope you may be pleased to authorize something in this line next spring.

The register shows the usual number of visitors, and Mr. Page as well as the rest of the staff, are always very courteous in answering the numerous questions asked regarding the process of taking and hatching the eggs.

The existence of the hatchery here is creating an interest, and disseminating a knowledge of fish and fish-culture in this locality, which did not exist prior to the establishment of the institution at this place.

There are two or three rivers emptying into Lake Winnipeg, which have natural falls of water, where hatching could be carried on at a very small cost compared with a location such as the one here where steam has to be employed. I have in former reports recommended the establishing of other hatcheries in this province, and I beg to again urge that the matter receive the attention of your Department.

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

F. W. COLCLEUGH,
Officer in charge.

11.—BAY VIEW LOBSTER HATCHERY.

BEDFORD, N.S., December 4, 1900.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit my report of the work done at the Bay View Lobster Hatchery for the season of 1900.

On May 15 last, I arrived at Bay View, and at once commenced to put all appliances in order for the season's operations. On the 17th, I engaged the steamer *May Queen* had her employed three days in distributing boxes among the factories for the collection of ova.

The pump was started on May 24 and 21,000,000 eggs were brought to the hatchery on that date by *May Queen* and placed in the jars for incubation.

From that time up to June 20 ova were collected from fifteen factories between Saddle Island, Caribou, and around Pictou Island, and 120,000,000 of fry were hatched and distributed in Pictou Bay.

The young lobster first appeared in the incubators on June 13, which is earlier than any year previously.

The distribution of fry was also earlier, having commenced on the 21st and ended on the 30th June.

Incubation was more rapid this season than ever before since the opening of this hatchery, which probably can be accounted for by the lack of gales and storms, which permitted a higher temperature of water.

This has been a very successful season for lobster fishing and packing, and much of the increase of fish is attributed to this hatchery, by both packers and fishermen.

As previously reported some temporary repairs were made to this wharf which has been badly damaged by ice during the previous winter.

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It is quite probable that during the coming winter the top of the outer block will be carried off by ice, which will seriously interfere with next season's operations, unless some means can be devised to extend the suction pipe to the channel independent of the outer pier.

I have made arrangements for the necessary repairs to the steam boiler, which are but trifling.

The fresh water reservoir previously reported as almost decayed out, was made to hold water, last spring, by cementing the inside, but a new one will probably be required next season.

I am, sir,

Your obedient servant,

ALFRED OGDEN.

12.—SANDWICH HATCHERY.

SANDWICH, December 17, 1900.

To Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—In accordance with the rules of the department and in compliance with your instructions, I take pleasure in submitting my annual report of the work connected with the fish hatchery here under my supervision.

According to last year's report this hatchery contained 100,000,000 whitefish eggs, from which were turned out 85,000,000 young fry and semi-hatched eggs, which were disposed of as follows:—

Eyed eggs.

Newcastle, Ont.	3,000,000
Ottawa, Ont.	2,000,000
Magog, Que.	3,000,000
Bedford, N. S.	3,000,000
St. John, N. B.	3,000,000
Total	14,000,000

Young fry.

Point Edward, Lake Huron	4,000,000
Belle Isle, Detroit River	3,000,000
Fighting Island, Detroit River	4,000,000
In Bay below Fighting Island	4,000,000
Stony Island, Detroit River	4,000,000
Bois Blanc Island, Detroit River	6,000,000
In Lake below Bois Blanc Island	6,000,000
Pigeon Bay, Lake Erie	6,000,000
Bar Point, Lake Erie	4,000,000
Colchester, Lake Erie	3,000,000
Kingsville, Lake Erie	1,000,000
Leamington, Lake Erie	1,000,000
Rondeau, Lake Erie	1,000,000

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Port Stanley, Lake Erie	1,000,000
Hamilton, Lake Ontario	1,000,000
Niagara, Lake Ontario	1,000,000
Toronto, Lake Ontario	1,000,000
In River at hatchery	20,000,000
Grand total	85,000,000

All the above fry were placed in the water at the above named points in good condition.

This fall we have secured and laid in the hatchery 110,000,000 whitefish eggs, which are in excellent condition.

The total catch of fish this autumn is accounted for as follows :—

Liberated	9,995
Sold.	1,950
Salted....	100
Lost	75
Used.	60
Hotel Dieu (Hospital).....	20
	<hr/>
	12,200

The catch of fish.

Upon the authority of some of the old fishermen, the up river run of the fish, owing to the warm weather, was with one exception later by two weeks than it has been any season for the last forty-five years.

Although the fish were unusually late in coming into the river it was one of the best seasons for collecting eggs for the past 17 years, as the fish, when taken, were almost ready to spawn, and as a consequence we did not have to hold them as long in the racks as other years before we got the eggs.

As will be observed the above figures show that we have not caught as large a quantity of fish as last year. In this respect I wish to state that we did not require as many for the reason that we got the eggs so much quicker and better than in former years. When we 'reeled up' we were catching from 30 to 50 at a haul, which shows that the whitefish continue to gradually increase in the waters here.

Repairs.

In conclusion, I wish to also report that I have, with your approval, laid a new waste pipe from the hatchery to the river. I have had the interior and exterior of the hatchery repainted and the foundation under the boilers, pumps, racks and tanks renewed.

I remain,
Your obedient servant,

WILLIAM PARKER,
Officer in charge.

ANNEX A.

REPORT ON OYSTER CULTURE BY THE DEPARTMENT'S EXPERT
FOR THE SEASON OF 1900.

OTTAWA, December 20, 1900.

To the Honourable
Sir LOUIS H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit my report on oyster culture for the season of 1900.

Just previous to the opening of navigation I left Ottawa and proceeded to New Glasgow, N.S., where I inspected the steam launch *Davies*, and found that she could be used by me in Murray River, P.E.I., for the purpose of planting oysters there, and as soon as she was ready for sea, took charge of her until the close of the lobster season, when I handed her over to Commander Spain, at Pictou, N.S.

MURRAY HARBOUR, P.E.I.

In last year's report it will be seen that a portion of my time was devoted in preparing a bed in Murray Harbour and partially planting the same with young oysters, but owing to the lateness of the season was unable to finish it, and on my arrival this spring I made a careful examination of the bed, and found the oysters alive and in a healthy condition, and from appearance have every reason to believe the area selected is a suitable one, the ground was very clean, there is a good current running over the area on both flood and ebb tides, it is also well sheltered from the weather, as it is apparently landlocked, the most wind that affects it is from the westward, which sweeps down Murray River and does not amount to much.

After arrangements had been made to secure the remaining quantity of oysters from Richmond Bay for stocking the beds, they were caught and forwarded in small consignments to Georgetown by train, and thence to Murray Harbour by steamer, thus ensuring quick dispatch. The oysters were taken from their native beds one day, and transplanted by myself on the beds in Murray River on the following day. One hundred and twelve barrels were secured and planted this spring. These all arrived in good condition and gave me splendid satisfaction. I have not had an opportunity of visiting the area since, as my time has been taken up elsewhere.

Since the above beds have been planted a warden has been appointed to guard against poaching on the reserved area.

TRACADIE, N. S.

After completing the reserved area in Murray Harbour I visited Tracadie and examined the reserved area in the harbour, and after a fair trial of the grounds, came to the conclusion that the oysters are not doing as well as was expected. I find a large percentage of deaths since my last visit. The oysters appear to have matured and are gradually dying after becoming grown. The shells have grown large and very thick, and the oysters that are alive appear to be in good condition. On my previous visit I found a small percentage of deaths, but nothing of very serious moment considering the time and distance of transit, etc. I cannot account for this death rate, as both arms are fed with the water through the same channel, and are identically the same as far as

the soil is concerned, both being sheltered from the sea, as both arms are landlocked. The bottom is clean where I have planted the oysters, and the water clear.

I also visited the North-West Arms which is connected to the East Arm by a narrow ship of water, and found the whole area where oysters exist covered with last year's spat, and everything is looking very healthy. The large oysters are scarce. I took up about two barrels of small oysters from the West Arm and laid them down on a certain portion of the reserve to see if they will live and grow. I am of the opinion that it would be advisable to close down the North-west Arm from public fishing for a period of two years, to let the young ones mature, as by so doing it would bring the quantity of oysters up again. Of late years these oyster beds have been nearly exhausted, owing to the fishermen catching up nearly all the stock that exists there, it would be to their future advantage to give the beds a rest for a certain period. Only four fishermen fished there last year and their total catch merely amounted to between twenty and thirty barrels.

Having finished the above grounds I returned to Pictou with the steam launch and handed her over to Commander Spain who immediately placed her on the lobster protection service. I then proceeded to Charlottetown and secured the services of a small tug, the *Nelson*, and after placing my oyster gear on board sailed for Shediac, N.B., to inspect the oyster areas in that locality.

SHEDIAC, N. B.

On my arrival here I examined the whole area and found the beds in a healthy condition, the oysters having grown to a large size, are full of fish, and several young ones of various sizes are to be found growing on the beds.

The eel grass which covers the whole of the bay is a great detriment to the floating spat finding a clean suitable bottom to settle upon, and I find on examination of several of the smaller uncultivated beds where the eel grass has grown over them that large oysters are to be found, but very few small ones; if this grass were to be removed it would give a large area of clean soil for the spat to settle and thrive upon. By past experience with these grounds I find that when the grass or weed has been thoroughly removed it does not grow again and the shells on the clean beds will catch the spat. Some of these old beds are completely covered over with eel grass, and unless it is removed the oysters will eventually die and the beds become covered over with weed and sediment.

A few hauls of the dredge on the large bed were as follows: Southern side, 86 oysters, 19 brood; 42 oysters, 24 brood; 71 oysters, 16 brood. Eastern side, 24 oysters, 10 brood; 19 oysters, 10 brood; 15 oysters, 15 brood. On the northern and middle part of bed, 67 oysters, 19 brood; 83 oysters, 31 brood; 76 oysters, 48 brood, and 67 oysters, 37 brood.

On No. 2, or Hannington bed, eastern part, 61 oysters, 48 brood; 40 oysters, 22 brood; 19 oysters, 16 brood. On the western side 47 oysters, 24 brood; 18 oysters, 10 brood, and 47 oysters, 58 brood.

On bed No. 3, southern part, 49 oysters, 52 brood; 160 oysters, 81 brood. Northern side, 65 oysters, 60 brood, and 62 oysters, 42 brood.

On my arrival here the water was very clear and the bottom of the beds could be distinctly seen from the deck of the steamer, and several fresh marks were noticeable where poaching had been carried on, as the mark of the rakes or tongs were clearly seen. I found two different pieces of tongs which had been broken while being used on the beds. Stakes were also found which were placed by poachers to mark the beds, so that they could go without loss of time and begin their illegal fishing. I was informed that several persons were caught fishing on these beds by the fishery officers and the guilty ones were fined.

Before finishing my work here I proceeded to Richmond Bay, P.E.I., to inspect the beds there, and to obtain some oysters for the Paris Exposition, particulars of which will be found in this report.

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Later on my time was also taken up in removing the weed and eel grass from some of the smaller beds on the bay, this has the effect of making a larger oyster growing area and will enhance the value of the beds in this locality.

While I was here instructions were received by Inspector Chapman from the Department, informing him of their intention to open these beds for oyster fishing to licensed fishermen in the locality for a period of three weeks, when my time was devoted to inspecting the fleet of fishermen, seeing as far as possible that no small oysters were landed from the beds, and obtaining the amount of oysters caught daily.

As near as could be ascertained the approximate number of oysters taken during the above period amounted to between eleven and twelve hundred barrels. There were one hundred and seventy-five oyster licenses issued, and it was difficult to obtain from every individual the exact quantity actually caught each day, but the above figures are about as fair and true as could be ascertained. The men were engaged six days during the first week, four days the second week, and four days the last week, bad weather stopping the fishing on the other days.

After working as long as it was possible as far as the weather was concerned, I brought my work to a close for the season by removing the beacons from the areas I had been engaged on, and returned to Charlottetown, and after taking the oyster gear out of steamer handed her over to her owners.

RICHMOND BAY, P.E.I.

Having examined the oyster areas in this bay, they appeared to be in a flourishing condition, and fishermen remarked that oysters have not been so plentiful for years, both as regards marketable oysters and small ones.

Many of the beds, where illegal dredging has been carried on and very few oysters originally existed on the tops of the beds, are now covered with small oysters too young for market. The dredging has had the effect of cleaning the shells and culch so that it was in a fair way to receive the spat during the spawning season.

I would not advise opening the bay up for dredging, as so many boats would commence operations if permitted to do so, that it would soon ruin the industry, and what little dredging is done (if any) does no harm; there are some men who are strongly opposed to it, while others favour it in moderation.

In Grand River oysters appear to be scarce, although there is a good supply of very small ones. The scarcity is, I believe, owing to overfishing, and I would respectfully suggest that this area be closed for the space of one season as an experiment.

In fact it would be a great advantage if several areas in this bay and elsewhere were closed alternately each season, but it would be a difficult matter to lay off areas and keep persons from fishing upon them, although I do think this area might be closed from the bridge down to the ferry wharf for the space of one season.

Sample.—The sample of oysters caught around Bideford River, Narrows and other adjoining rivers appear to have improved both in quantity and size at the opening of this season, and the fishermen were satisfied with their catch; they are careful in throwing out the small ones, which has the effect of improving the sample by separating the young oysters from the full grown ones. This gives the bed a better chance to develop all round. This rule should be insisted upon all over the bay, and the fishermen should land only marketable oysters which would bring them a better price. I believe the majority of the packers do all they can to avoid taking the small ones, but it is the fishermen themselves who are so careless, although I must say there is a decided improvement in the cull with many of the fishermen, no doubt due to the extra vigilance on the part of the officers on shore.

In other parts of the bay the oysters appear as if they were caught too soon, and if they were left for another year they would grow, fatten and make very fine oysters. Owing to the number of fishermen who annually fish here, the beds are almost drained dry as it were, but the rapidity of the growth of the oyster is remarkable, or these beds would never last as they do.

Size Limit.—There is one thing which should receive the Department's serious attention, and that is the size limit. Clause No. 6 of the oyster regulations reads as follows:—'No person shall fish for, catch, kill, buy, sell, or have in possession, any round oysters of a less size than two inches in diameter of shell, nor any long oysters measuring less than three inches of outer shell.'

This two-inch measurement was never intended for Prince Edward Island. I specially pointed out when framing these regulations that Caraquet oysters were very small, and a diameter of two inches was given as a minimum size, although it was never clearly stated in the regulations or license, and if this two-inch size were abolished altogether, it would be a great advantage to the beds, fishermen, packers and consumers, and greatly enhance the value of the whole industry.

A three-inch oyster is really too small for market, but when it comes down to two inches it is out of character altogether. Several complaints have been made of the small size limit that is at present in force, and until a change is made the fishermen will not throw over an oyster which is really of a legal size, although utterly unfit for market.

ALTERATION OF SEASON.

Several of the fishermen and packers approve of oyster fishing to commence on the 1st October instead of the present date (16th September).

By starting later in the season the shell of the oyster becomes much harder and is not so liable to break in transit, which causes a loss to both shipper and receiver, and if sent any considerable distance oysters are more liable to spoil in September than if they were shipped in October.

If the season were shortened till the 1st of October, I do not think there would be any material difference in the quantity of oysters caught and less oysters would be spoilt, as they would be in better condition and keep longer.

There are also a lot of young men who will fish for a short time after the season opens, causing a glut in the markets which brings the price down, and after the weather becomes colder and wild will stop fishing after taking the cream of the oysters, leaving the hardest of the work to the more persevering and regular oyster fishermen.

Several of these men are also engaged in agricultural pursuits, and if the season did not open until October their crops would be garnered, but all are anxious to commence oyster fishing at the opening, as it is a means of bringing ready money on the sale of their catch, and often their farms are neglected and crops spoiled.

I am of opinion, however, that the present season gives general satisfaction, and before making any alteration in the dates I think it would be advisable to send a circular to the men who are engaged in packing and sending off large quantities of oysters, as they are the ones it affects the most and the risk of the sale is on their shoulders.

OYSTERS SENT TO PARIS EXHIBITION.

Having received instructions to select a few choice samples of oysters for exhibition purposes, I obtained and forwarded five barrels, and two half barrels. One barrel and a half was taken from the reserved area in Shediac, N.B. These oysters were a large sample, as the beds had not been fished upon for years, of a uniform size, and very full of fish. The other four and a half barrels were secured from Richmond Bay, Indian Island, and Bideford River, P.E.I. These oysters were of a smaller sample, round and deep, cup shaped, well-fished and of an even size. They were all carefully selected, packed, and shipped to Paris, the result being that the Island oysters gained the highest award. This is very gratifying and speaks well for our oysters, as there was much to contend with, considering the time of year they were shipped (September 24), the distance they were sent, the rough handling while in transit, and the time they were out of water while on the passage would naturally cause them to lose some of their flavour, while oysters could be sent from French and English beds within a few hours of their being caught and arrive in as fresh condition as they were when taken from the beds.

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STEAMBOAT REQUIRED.

During the time I have been engaged on the work of oyster culture with the department, there has always been a difficulty in chartering a suitable steamer for my work, some have given satisfaction, while others have proved themselves to the contrary. I respectfully wish to call the department's attention to the necessity of either having a serviceable boat built for the work, or to purchase, if one could be found suitable. It would be in the interest of the department to own a boat, as my time is engaged on the water from the opening to the close of navigation, and two years' hire would more than pay for one being built, which could be arranged with every accommodation to suit my work. As the area to be looked after covers New Brunswick, Nova Scotia and Prince Edward Island, it is desirable to have a serviceable boat suitable to make a passage in ordinary weather, with a roomy deck, also accommodation for the crew, as there are times when one has to live on board, while making a passage or is stormbound. The chief items are a boat of very good speed, power, and shallow draught of water not exceeding four feet, as some of the beds are lying in very shoal water and the channels in these landlocked areas are very intricate. A boat of this description would not cost much to build and would be very economical to run and keep up.

Other subjects relating to oyster culture have been published in my previous reports, and further reference to them here does not appear to be necessary.

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

ERNEST KEMP,
Oyster Expert.

APPENDIX No. 12.

REPORT ON THE FISHERIES PROTECTION SERVICE OF CANADA BY
COMMANDER O. G. V. SPAIN, FOR THE SEASON OF 1900.

OTTAWA, December 10, 1900.

To the Honourable

SIR LOUIS H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries, &c., &c.

SIR,—I have the honour to report on the work of the Fisheries Protection and Fisheries Intelligence Bureau services, under my charge for the past season as follows:—

The vessels comprising the fleet are shown in the following table:—

Acadia, Commander O. G. V. Spain ;
La Canadienne, Commander W. Wakeham ;
Curlew, Captain Pratt ;
Petrel, Captain Dunn ;
Osprey, Captain Knowlton ;
Kingfisher, Captain Kent ;
Brant, Captain McKinnon ;
Stanley, Captain Brown ;
Constance, Captain May ;
Quadra, Captain Walbran.

This last named vessel was employed, when occasion required, as a fisheries protection cruiser, on the Pacific coast.

This season, on account of the extra work in reference to patrolling, necessitated by the stringent enforcement of the lobster regulations in different localities, (there are now six different seasons for legally catching lobsters on various parts of the coast), the two vessels *Stanley* and *Brant* were placed at my disposal for a short period, during the very busy time.

The patrols of the different cruisers were generally as follows:—

The *Acadia* patrolling the coasts of Nova Scotia, Cape Breton, Prince Edward Island and part of New Brunswick and Quebec, and as usual, generally superintending the fleet. During the latter part of the season an accident happened to one of the boilers, which necessitated her paying off and going out of commission rather earlier than usual.

La Canadienne.—This vessel works independently of the rest of the fleet, and was under the charge of Commander Wakeham. Her usual patrol was on the Labrador and Quebec coasts. Commander Wakeham's report will be forwarded with that of the fishery inspector.

Curlew.—This vessel is employed in the Bay of Fundy and on the Nova Scotia coast, and has done excellent work in many ways.

Petrel.—Again employed in Lake Erie. She has also been very serviceable on occasions, in assisting the lighthouse and buoy service.

Osprey.—This schooner's station was altered for this season and she patrolled the Prince Edward Island and Cape Breton coasts, with headquarters at Souris and Georgetown.

Kingfisher.—Stationed on the Nova Scotia and Cape Breton coasts, with headquarters at Canso. Both these schooners have done good work.

Brant.—This is the new vessel, built in Prince Edward Island, chiefly for the lighthouse supply service. I consider she is well up to her work. She has been principally engaged in putting a stop to illegal lobster fishing in Northumberland Strait and on the Prince Edward Island coast.

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Stanley.—Patrolling the Cape Breton coast, principally for a short period in the fall of the year. This vessel is rather too large and expensive for the class of work I have to deal with.

Constance.—This vessel has been entirely under the control of the Customs Department, and I understand has most ably carried out her instructions in putting a stop to smuggling.

A report of the details of the work of each captain will be found herewith, together with the more particular movements of the ship under his command.

In addition to the above named cruisers, three tugs were again employed this year, as follows :—

Davies.—This vessel is owned by the department, and was under the charge of first officer Graham, with a crew from the *Acadia* and *Osprey*. She patrolled Northumberland Strait, and after that was over she was lent to the Customs to look after their business in Halifax Harbour during the winter.

Florence C.—A chartered tug, under command of first officer Demers, and a crew from the *Curlew*. She patrolled the south-east coast of Nova Scotia, and was under the immediate directions of inspector Hockin.

Sea Bird.—Was hired for two months in the late fall, and was attached as a tender to the *Kingfisher*. Captain Kent reports that this vessel, with slightly more accommodation, would be an excellent boat for the work.

I found that fishermen obeyed the regulations for the protection of the lobsters much better than in previous years. This may be, and in my opinion is, due to the very strict patrol that was kept up all round the coasts.

My thanks are due to the captains, officers and men of the service, who have performed their arduous duties to my satisfaction.

The season, taking it all round, has not been an eventful one, very few United States mackerel seiners being in North Bay, the captains of the cruisers understanding their work, and the masters of fishing vessels fairly well understanding and obeying the rules, as to exactly what rights they have in our ports.

The following are the instructions still in force, to the officer commanding the Fisheries Protection Service :—

INSTRUCTIONS TO COMMANDERS OF GOVERNMENT VESSELS ENGAGED IN THE PROTECTION OF THE INSHORE FISHERIES OF CANADA.

DEPARTMENT OF FISHERIES,

OTTAWA, March 16, 1886.

SIR,—In the performance of the special and important services to which you have been appointed you will be guided by the following confidential instructions.

For convenience of reference, these have been divided under the different headings, of *Powers, Jurisdiction, Duties, and General Directions*.

POWERS.

The powers with which you are invested, are derived from, and to be exercised in accordance with the following statutes, among others :—‘The Fisheries Act’ (31 Vic., cap. 60, of Canada); ‘An Act respecting Fishing by Foreign Vessels’ (31 Vic., cap. 61, of Canada), and the subsequent statute entitled :—‘An Act to amend the Act respecting Fishing by Foreign Vessels,’ made and passed the 12th May, 1870 (33 Vic., cap. 15, of Canada); also, ‘An Act to further amend the said Act, (34 Vic., cap. 23, of Canada).’

‘Chapter 94 of the Revised Statutes (third series) of Nova Scotia’ (of the ‘Coast and Deep Sea Fisheries’), amended by the Act entitled : ‘An Act to amend cap. 94 of the Revised Statutes of Nova Scotia’ (29 Vic., cap. 35).

An Act passed by the legislature of New Brunswick entitled: 'An Act relating to the Coast Fisheries, and for the prevention of Illicit Trade' (16 Vict., cap. 69).

Also an Act passed by the legislature of Prince Edward Island (6 Vic., cap. 14) entitled: 'An Act relating to the Fisheries, and for the prevention of Illicit Trade in Prince Edward Island, and the coasts and harbours thereof.

Also from such regulations as have been passed or may be passed by the Governor General in Council, or from instructions from the Department of Fisheries, under the 'Fisheries Act,' hereinbefore cited.

As fishery officer you have full authority to compel the observance of the requirements of the *Fisheries Acts* and regulations by foreign fishing vessels and fishermen in those parts of the coasts of Canada to which, by the Convention of 1818, they are admitted to privileges of taking or drying and curing fish concurrent with those enjoyed by British fishing vessels and fishermen.

You will receive instructions from the Customs Department authorizing you to act as an officer of the Customs, and in that capacity you are to see that the revenue laws and regulations are duly observed.

JURISDICTION.

Your jurisdiction with respect to any action you may take against foreign fishing vessels and citizens engaged in fishing is to be exercised only within the limits of 'three marine miles' of any of 'the coasts, bays, creeks or harbours,' of Canada.

With regard to the Magdalen Islands, although the liberty to land and to dry and cure fish there is not expressly given by the terms of the convention to United States fishermen, it is not at present intended to exclude them from these islands.

DUTIES.

It will be your duty to protect the inshore fisheries of Canada in accordance with the conditions laid down by the Convention of the October 20, 1818, the first article of which provides:—

'Whereas differences have arisen respecting the liberty claimed by the United States, for the inhabitants thereof to take, dry and cure fish, on certain coasts, bays, harbours and creeks, of His Britannic Majesty's dominions in America, it is agreed between the high contracting parties, that the inhabitants of the said United States shall have, for ever, in common with the subjects of His Britannic Majesty, the liberty to take fish of every kind on that part of the southern coast of Newfoundland, which extends from Cape Ray to the Rameau Islands, on the western and northern coast of Newfoundland, from the said Cape Ray to the Quirpon Islands, on the shores of the Magdalen Islands, and also on the coasts, bays, harbours and creeks from Mount Joli, on the southern coast of Labrador, to and through the Straits of Belle Isle, and thence northwardly indefinitely along the coast without prejudice, however, to any of the exclusive rights of the Hudson's Bay Company; and that the American fishermen shall also have liberty, for ever, to dry and cure fish in any of the unsettled bays, harbours and creeks, of the southern part of the coast of Newfoundland, here above described, and of the coast of Labrador; but so soon as the same, or any portion thereof, shall be settled, it shall not be lawful for the said fishermen to dry or cure fish at such portions so settled, without previous agreement for such purpose with the inhabitants, proprietors or possessors of the ground.'

'And the United States hereby renounce for ever any liberty heretofore enjoyed or claimed by the inhabitants thereof, to take, dry, or cure fish on or within three marine miles of any of the coast, bays, creeks or harbours of His Britannic Majesty's dominions in America, not included within the above mentioned limits; provided, however, that the American fishermen shall be admitted to enter such bays or harbours, for the purpose of shelter and repairing of damages therein, of purchasing wood and of obtaining water, and for no other purpose whatever. But they shall be under such restrictions as may be necessary to prevent

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their taking, drying or curing fish therein, or in any other manner whatever abusing the privileges hereby reserved to them.'

By this you will observe, United States fishermen are secured the liberty of taking fish on the southern coasts of Labrador, and around the Magdalen Islands, and of drying and curing fish along certain of the southern shores of Labrador, where this coast is unsettled, or if settled, after previous agreement with the settlers or owners of the ground.

In all other parts the exclusion of foreign vessels and boats is absolute, so far as fishing is concerned, and is to be enforced within the limits laid down by the Convention of 1818, they being allowed to enter bays and harbours for four purposes only, viz.,—*for shelter, the repairing of damages, the purchasing of wood, and to obtain water.*

You are to compel, if necessary, the maintenance of peace and good order by foreign fishermen pursuing their calling and enjoying concurrent privileges of fishing or curing fish with British fishermen, in those parts to which they are admitted by the Treaty of 1818.

You are to see that they obey the laws of the country, that they do not molest British fishermen in the pursuit of their calling, and that they observe the regulations of the fishery laws in every respect.

You are to prevent foreign fishing vessels and boats which enter bays and harbours for the four legal purposes above mentioned, from taking advantage thereof, to take, dry or cure fish therein, to purchase bait, ice, or supplies, or to tranship cargoes, or from transacting any business in connection with their fishing operations.

It is not desired that you should put a narrow construction on the term 'unsettled.' Places containing a few isolated houses might not, in some instances, be susceptible of being considered as 'settled' within the meaning and purpose of the convention. Something would, however, depend upon the facts of the situation and circumstances of the settlement. Private and proprietary rights form an element in the consideration of this point. *The generally conciliatory spirit in which it is desirable that you should carry out these instructions, and the wish of Her Majesty's Government that the rights of exclusion should not be strained,* must influence you in making as fair and liberal an application of the terms as shall consist with the just claims of all parties.

Should interference with the pursuits of British fishermen or the property of Canadians appear to be inseparable from the exercise of such indulgence, you will withhold it and insist upon entire exclusion.

United States fishermen should be made aware that, in addition to being obliged, in common with those subjects of Her Majesty with whom they exercise concurrent privileges of fishing in colonial waters, to obey the laws of the country, and particularly such Acts and regulations as exist to ensure the peaceable and profitable enjoyment of the fisheries by all persons entitled thereto, they are peculiarly bound to preserve peace and order in the *quasi* settled places to which, by the liberal disposition of Canadian authorities, they may be admitted.

Wheresoever foreigners may fish in Canadian waters, you will compel them to observe the fishery laws. Particular attention should be directed to the injury which results from cleaning fish on board their vessels while afloat, and the throwing overboard of offals, thus fouling the fishing, feeding and breeding grounds. 'The Fisheries Act' (section 14) provides a heavy penalty for this offence.

Take occasion to inquire into and report upon any modes of fishing, or any practices adopted by foreign fishermen, which appear to be injurious to the fisheries.

You will accost every foreign fishing vessel within the limits described, and if that vessel should be either fishing, preparing to fish, or should obviously have been fishing within the prohibited limits, you will, by virtue of the authority conferred upon you by your Commission, and under the provisions of the Acts above recited, seize at once (resort to force in doing so, being only justifiable after every other effort has failed) any vessel detected in violating the law, and send her or take her into port for condemnation.

Copies of the Acts of Parliament subjecting to seizure and forfeiture any foreign ship, vessel or boat which should be either fishing, preparing to fish, or should obviously

have been fishing within the prohibited limits, and providing for carrying out the seizure and forfeiture are furnished herewith for your information and distribution.

Should you have the occasion to compel any foreign fishing vessels or fishermen to conform to the requirements of the 'Fisheries Act and Regulations,' as regards the modes and incidents of fishing, at those places to which they are admitted under the Convention of 1818, particularly in relation to ballast, fish offals, setting of nets, hauling of seines, and use of 'trawls' or 'bultows,' more especially at or around the Magdalen Island, your power and authority under such cases will be similar to that of any other fishery officer appointed to enforce the fishery laws in Canadian waters (*Vide Fisheries Act*).

If a foreign ship, vessel or boat be found violating the convention or resisting consequent seizure, and momentarily effects her escape from the vicinity of her capture or elsewhere, she remains always liable to seizure and detention if met by yourself in Canadian waters, and British waters everywhere if brought to account by Her Majesty's cruisers. But great care must be taken to make certain of the identity of any offending vessel to be so dealt with.

All vessels seized must be placed, as soon as possible, in the custody of the nearest customs collector, and information, with a statement of the facts, and the deposition of your sailing master, clerk, lieutenant, or mate, and of two at least of the most reliable of your crew be dispatched with all possible diligence to the government. Be careful to describe the exact locality where the violation of the law took place, and the ship, vessel or boat was seized. Also corroborate the bearings taken, by sounding, and by buoying the place (if possible), with a view to actual measurement, and make such incidental reference to conspicuous points and land marks as shall place beyond doubt the illegal position of the seized ship, vessel or boat.

Omit no precaution to establish on the spot that the trespass was or is being committed within three miles of land.

As it is possible that foreign fishing craft may be driven into Canadian waters by violent or contrary winds, by strong tides, through misadventure, or some other cause independent of the will of the master and crew, you will consider these circumstances, and satisfy yourself with regard thereto, before taking the extreme step of seizing or detaining any vessel.

On capture, it will be desirable to take part of the foreign crew aboard the vessel under your command, and place some of your own crew, a measure of precaution, on board the seized vessel; first lowering the foreign flag borne at the time of capture. If your ordinary complement of men does not admit of this being done, or if because of several seizures the number of your hands might be too much reduced, you will, in such emergency, endeavour to engage a few trustworthy men. The portion of foreign crew taken on board the government vessel, you will land at the nearest place where a consul of the United States is situated, or where the readiest conveyance to any American consulate in Canada may be reached, and leave them there.

When any of Her Majesty's vessels about the fishing stations or in port are met with, you should, if circumstances permit, go on board and confer with the naval commander, and receive any suggestions he may feel disposed to give, which do not conflict with these instructions, and afford him any information you may possess about the movements of foreign craft; also inform him what vessels you have accosted and where.

Do not fail to make a full entry of all circumstances connected with foreign fishing vessels, noting their names, tonnage, ownership, crew, port, place of fishing, cargo, voyage and destination, and (if ascertainable) their catch. Report your proceedings as often as possible, and keep the department fully advised on every opportunity, where instructions would most probably reach you at stated intervals.

Directions as to the stations and limits on which you are to cruise, and any further instructions that may be deemed necessary will, from time to time, be conveyed to you.

Considerable inconvenience is caused by Canadian fishing vessels neglecting to show their colours. You will draw the attention of masters to this fact, and request them to hoist their colours without requiring them to be hailed and boarded.

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It cannot be too strongly urged upon you, nor can you to earnestly impress upon the officers and crew under your command, that the service in which you and they are engaged should be performed with forbearance and discrimination.

The government relies on your prudence, discretion and firmness in the performance of the special duties entrusted to you.

I am, sir, your obedient servant,

(Sd.) GEORGE E. FOSTER,
Minister of Marine and Fisheries.

I have found it difficult on occasions to make our own vessels use the bounty flag. The flying of this flag often saves the cruisers a large amount of unnecessary cruising, as it is sometimes impossible to tell a Canadian from a United States schooner at a distance.

LICENSES TO FOREIGN VESSELS.

The same Order in Council being passed as before, sanctioning the continuance of the issue of *modus vivendi* licenses to United States fishermen, similar permits were issued in 1900.

The form of the licenses is as follows:—

License to United States Fishing Vessels.

(Name) *Master or Owner* of the *United States Fishing Vessel* _____, having paid to the undersigned, Collector of Customs at the port of _____, the sum of \$ _____, being one dollar and fifty cents per registered ton, the privilege is hereby granted to said fishing vessel to enter the bays and harbours of the Atlantic coasts of Canada, for the purchase of bait, ice, seines, lines, and all other supplies and outfits, and the transhipment of catch, and shipping of crews.

This license shall continue in force for the year 1896, and is issued in pursuance of the Act of the Parliament of Canada of 1892, entitled, 'An Act respecting Fishing Vessels of the United States,' 55-56 Victoria, chapter 3.

This license, while conferring the above-mentioned privileges, does not dispense with a due observance by the holder, or any other person, of the laws of Canada, and will become null and void, and forfeited forthwith, and the vessel will become ineligible to obtain a license in future, if any goods or supplies, or other advantages obtained hereunder, are sold or transferred to any United States fishing vessel that has not obtained a license.

Dated this _____ day of _____ A.D., 189 _____

Collector of Customs at the port of

.....

For Minister of Marine and Fisheries.

SCHEDULE of United States Fishing Vessels to which Licenses were issued under the Act entitled 'An Act respecting Fishing Vessels of the United States of America' during the Year 1900.

Name of Vessel.	Port of Registry.	Tonnage.	Port of Issue.	Fee.
				\$ cts.
Levanter	Salem, Mass.	28	Yarmouth, N.S.	42 00
Patriot	Gloucester "	58	Halifax, N.S.	87 00
Emma Osier	Eastport "	22	North Head, N.B.	33 00
James S. Steele	Gloucester "	50	Yarmouth, N.S.	75 00
W. H. Moody	" "	48	Halifax, N.S.	72 00
John L. Nickerson	" "	92	Pubnico, N.S.	138 00
Meteor	" "	96	Yarmouth, N.S.	144 00
James R. Clark	Salem "	66	" "	99 00
Eleazer Boynton	Gloucester "	63	Pubnico, N.S.	94 50
Columbia	" "	89	" "	133 50
Essex	" "	84	" "	126 00
Senator Saulsbury	" "	77	" "	115 50
Elector	" "	84	Tusket, N.S.	126 00
Blue Jacket	" "	86	" "	129 00
Wm. E. Morrissey	" "	93	" "	139 50
Senator Gardner	" "	94	Yarmouth, N.S.	141 00
Winona	" "	78	Pubnico, N.S.	117 00
Maggie and May	" "	88	Yarmouth, N.S.	132 00
Mabel D. Hines	Beverly "	92	Tusket, N.S.	138 00
Thetis	Gloucester "	67	" "	100 50
Mystery	" "	89	Pubnico, N.S.	133 50
Fernwood	" "	96	Yarmouth, N.S.	144 00
Corsair	" "	78	Shelburne, N.S.	117 00
Parthia	" "	77	Yarmouth, N.S.	115 50
Hazel Oneita	" "	73	" "	109 50
Shanandoah	" "	77	Barrington, N.S.	115 50
L. I. Flaherty	" "	124	Shelburne, N.S.	186 00
Alice R. Lawson	" "	85	Tusket, N.S.	127 50
Virginia	" "	81	Yarmouth, N.S.	121 50
Masconoma	" "	67	Pubnico, N.S.	100 50
Golden Hope	" "	75	" "	112 50
Robin Hood	" "	65	" "	97 50
Helen F. Whittier	" "	92	Yarmouth, N.S.	138 00
Salem R. Crane	Salem "	52	Digby, N.S.	78 00
Lawrence A. Munroe	Gloucester "	84	Barrington, N.S.	126 00
Lucille	" "	72	Halifax, N.S.	108 00
Grayling	" "	87	Barrington, N.S.	130 50
Emma E. Witherell	" "	81	Lockeport, N.S.	121 50
Howard Holbrook	" "	68	Yarmouth, N.S.	102 00
Harry G. French	" "	67	" "	100 50
Hattie A. Heckman	" "	73	Halifax, N.S.	109 50
Ralph A. Hodgdon	" "	59	Canso, N.S.	88 50
Richard Lester	" "	47	North Sydney, N.S.	70 50
Speculator	" "	77	Canso, N.S.	115 50
Edward Trevo	" "	66	Port Mulgrave, N.S.	99 00
Margaret	Beverly "	107	Tusket, N.S.	160 50
D. A. Wilson	" "	61	" "	91 50
A. S. Cuswell	Gloucester "	46	Canso, N.S.	69 00
Effe M. Morrissey	" "	83	Pubnico, N.S.	124 50
Mabel Leighton	" "	48	Souris, P. E. I.	72 00
Procyon	" "	85	North Sydney, N.S.	127 50
Orpheus	" "	74	" "	111 00
S. R. Lane	" "	48	Lockeport, N.S.	72 00
Latona	" "	71	Canso, N.S.	106 50
Judique	" "	89	" "	133 50
Sea Fox	Provincetown, Mass.	79	St. Peters, N.S.	106 50
Ada S. Babson	Bucksport, Mass.	99	" "	148 50
Louis and Rosie	Booth Bay "	48	Pubnico, N.S.	72 00
A. T. Gifford	Gloucester "	58	North Sydney	87 00
Anna L. Sanborn	Beverly "	17	Yarmouth, N.S.	25 50
Bessie M. Devine	Gloucester "	91	Amherst, M. I., Que.	137 10
Daniel C. Baker	Eastport, Me.	33	Campobello, N. B.	49 50
Willie L. Swift	Provincetown, Mass.	69	St. Peters, N.S.	103 50
Freddie W. Alton	" "	67	" "	100 50
Preceptor	Gloucester, Mass.	89	Port Hawkesbury	133 50
Ruth M. Martin	Boston "	94	Shelburne, N.S.	141 00

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SCHEDULE of United States Fishing Vessels to which Licenses were issued—*Continued.*

Name of Vessel.	Port of Registry.	Tonnage.	Port of Issue.	Fee.	
				\$	cts.
Edith McIntyre.....	Booth Bay, Mass....	126	St. Peters, N.S.....	189	00
S. L. Foster.....	Cranberry Isles, Mass	30	Canso, N.S.....	45	00
George Temple.....	New York, N.Y....	44	Yarmouth.....	66	00
Esperanza.....	Rockland, Me.....	24	Halifax, N.S.....	36	00
Thalia.....	Gloucester, Mass....	78	Digby, N.S.....	117	00
T. W. Holmans.....	" ".....	44	Port Mulgrave, N.S....	66	00
Marguerite.....	" ".....	81	Barrington, N.S.....	121	50
Anglo-Saxon.....	" ".....	72	Arichat, N.S.....	108	00
Rigel.....	" ".....	87	Canso, N.S.....	130	50
Hattie and Lottie.....	Boston ".....	96	Halifax, N.S.....	144	00
Helen Miller Gould.....	Gloucester ".....	99	".....	148	50
A. R. Crittendon.....	" ".....	56	Liverpool, N.S.....	84	00
Total.....		5,652		8,478	60

Number of vessels.....	78
Amount of tonnage.....	5,652
Amount received for fees.....	\$8,478 60

The following is the statement of the number of licenses issued to United States fishing vessels in each season since 1888 :—

1888.....	36
1889.....	78
1890.....	119
1891.....	98
1892.....	108
1893.....	71
1894.....	53
1895.....	47
1896.....	77
1897.....	40
1898.....	79
1899.....	80
1900.....	78

Attached is a list of United States fishing vessels which have entered Canadian ports from October 31, 1899, to October 31, 1900, showing the number of times each vessel entered. The large number of these total entries, 248 vessels and 1,009 entries will illustrate to what a great extent United States fishermen make use of our ports.

LIST of United States Fishing Vessels which have entered Canadian Ports from October 31, 1899, to October 31, 1900, showing the net Tonnage and the number of times each Vessel entered the several Ports.

Number.	Name of Vessel.	Net Tonnage.	Arichat.	Barrington.	Canso.	Georgetown, P. E. I.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Louisburg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P. E. I.	Whitehead.	Yarmouth.	Total entries.
1	A. E. Whyland...	96			3				1	3									1		8
2	A. R. Crittenden	56			3				3		2		1				3		1		13
3	A. S. Caswell	46		2	2										1		3			1	10
4	A. S. Sanford	17																		3	3
5	A. T. Gifford	59			1	1		2				2	1			1	2				10
6	Ada R. Donovan	72				1		1													1
7	Addie M. Story	40																		1	1
8	Admiral Dewey	78	1		1	4							1								7
9	Agnes B. Gleason	44															1				1
10	Aleina	53															1				1
11	Alice M. Parsons	43							1	1							2				4
12	Alice R. Lawson	85			1	1				2											4
13	American	99								1							1				2
14	Anglo Saxon	72	3											2			1				6
15	Anna L. Sanborn	33								1											1
16	Annie E. Lane	30								1										4	5
17	Annie Greenlaw	69			2		1	1	1								10				15
18	Annie Wesley	65			1			2													3
19	Arbitrator	72															1				1
20	Arbutus	86			2				1		1										4
21	Argo	79			2					1											3
22	Arthur D. Story	98															1				1
23	Atlanta	75			1			1													2
24	Belle Franklin	52		5																	5
25	Belle J. Neale	95															2				2
26	Bertha D. Nickerson	89				1							2								3
27	Bertha May	75		1																	2
28	Bessie M. Devine	91										1								1	1
29	Blanche	78															2				2
30	Blue Jacket	86			4							1									5
31	Boyd & Leeds	36		2						1							1				4
32	Canopus	68																		1	1
33	Carleton Belle	104			1												1				2
34	Caroline Vought	78				1		1	1								3			1	7
35	Carrie W. Babson	62											1						1		1
36	Cecil H. Low	75	1														1				2
37	Centennial	86				1													1		2
38	Columbia	89			6	1					1						1				9
39	Commonwealth	60							2	1	1						3				7
40	Conductor	50			1			1	1				2								5
41	Corsair	79	1											2			1	1	1		4
42	D. A. Wilson	61			3				1			2					1				7
43	Dido	78							1												1
44	Dora A. Lawson	93																			1
45	E. C. Hussey	41			1															1	2
46	E. H. King	89															2				3
47	Edith M. Prior	78															3				4
48	Edith S. Walen	83		1			2	1									1				5
49	Edith S. Wells	52						1													1
50	Edward A. Perkins	86			1	1															2
51	Edward A. Rich	58		1					1								2			1	5
52	Edward S. Eveleth	61											1								1
53	Edward Trevo	66			2	1		6	1	1						1	3				15
54	Edwin B. Holmes	49															1				1
55	Effie M. Morrisey	83			1			1				1					1				4
56	Eleazer Boynton	63			5												1	1			7
57	Electa A. Eaton	73							3								1				4
58	Electra	84				1															1
59	Eliza B. Campbell	69			3		1										1				5
60	Eliza H. Parkhurst	84				1		1									6				8
61	Ellen F. Gleason	42			2				3					1		1				1	8

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LIST of United States Fishing Vessels which have entered at Canadian Ports from October 31, 1899, to October 31, 1900, &c.—Continued.

Number.	Name of Vessel.	Net Tonnage.	Arichat.	Barrington.	(Canso.	(Georgetown, P.E.I.	Halifax.	Liscombe.	Liverpool.	Lokeport.	Louisburg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P.E.I.	Whitehead.	Yarmouth.	Total entries.
62	Elsie M. Smith.....	83							2				1				1		2		6
63	Emma E. Wetherell..	82			2				4	2									1		9
64	Enma and Helen.....	62							2	1	1						2				4
65	Esperanza.....	24					2		2								1				7
66	Essex.....	68		4					2	2											9
67	Ester Anita.....	71					1	1	3	2			3				3				13
68	Everett Pierce.....	65			1					2											3
69	F. S. Willard.....	36																		1	1
70	F. W. Homans.....	44			1				1					1		1		1			5
71	Fannie Hayden.....	20																		2	2
72	Fannie S. Orne.....	80							1												1
73	Fannie W. Freeman..	64															1				1
74	Fernwood.....	96			1		1			1			3							2	8
75	Flora L. Nickerson..	63															3				3
76	Florence.....	63					1		1								1				3
77	Florence E. Stream..	66															3				3
78	Freddie W. Alton....	67								1											1
79	Gardner W. Tarr.....	62																		1	1
80	George F. Edmunds..	110			1		1					1							1		4
81	George Temple.....	44							1								1			4	6
82	Georgie Campbell....	78							1					1	1	1	1				5
83	Gladstone.....	74																	1		1
84	Gloriana.....	76			1								1				1			1	4
85	Golden Hope.....	75							1	1							3				5
86	Golden Rod.....	98					1					1							1		3
87	Grace Choate.....	39							1												1
88	Grace Darling.....	47					1		4								2				7
89	Grayling.....	87	1				1		2	1							4				9
90	Harry G. French.....	67		1	1			1		1			1				2				7
91	Harvard.....	76					1														1
92	Harvester.....	96			1				1				1				3				6
93	Hattie A. Heckman..	72					1			1							2				4
94	Hattie Evelyn.....	66					1										2				3
95	Hattie L. Trask.....	48			1		1	1									4				8
96	Hattie & Lottie....	96					1													1	2
97	Hattie M. Graham....	105			1														1		2
98	Hazel Oneita.....	72					1													1	2
99	Helen F. Whittin....	92			1					1			2		1					2	7
100	Helen G. Wells.....	66					2										1				3
101	Helen M. Gould.....	99					1														1
102	Helen May Butler....	33					1														1
103	Henri N. Woods.....	84			2				1										1		5
104	Henry Ellsworth....	56														1			1		1
105	Henry M. Stanley....	82			1		1		1				1				2				6
106	Henry W. Longfellow..	77															1				1
107	Herald of the Morning.	68							1												1
108	Hiram Lowell.....	95					1		1								1		1		4
109	Horace B. Parker....	62														1					1
110	Howard Holbrook....	68			1					1							1				3
111	Indiana.....	88															2				2
112	Iolanthe.....	49															2				2
113	J. E. Garland.....	57															1			1	2
114	James R. Clark.....	66		1						1										15	17
115	James S. Steele.....	50			1												1			1	3
116	Jennie B. Hodgdon..	85						1									1				2
117	John J. Flaherty....	124									1		1				1				3
118	John L. Nicholson....	92			7															1	8
119	John S. Presson....	63				1			1						1			1			4
120	John Nye.....	58							4												4
121	Joseph B. Maguire..	61											1								1
122	Joseph P. Johnson..	93															1				1
123	Joseph Row.....	97			1								1						1		3
124	Joseph W. Dauphiney.	80															1				1

List of United States Fishing Vessels which have entered at Canadian Ports from October 31, 1899, to October 31, 1900, &c.—*Continued.*

Number.	Name of Vessel.	Net Tonnage.	Arsicat.	Barrington.	Canso.	Georgetown, P. E. I.	Halifax.	Liscombe.	Liverpool.	Lockport.	Louisburg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P. E. I.	Whitehead.	Yarmouth.	Total entries.
125	Jubilee.....	87						1									3				4
126	Judique.....	89				3									1		1			1	6
127	Julia Costa.....	97															1				1
128	Juniata.....	49															3				3
129	Kearsarge.....	78							1												1
130	Kentucky.....	91											3								7
131	Latona.....	71		2	3												4				7
132	Laurel.....	73											1				1		1		1
133	Lavanter.....	28		1						2										6	9
134	Lawrence A. Munro.....	84		2	4					1			3		1	1					12
135	Lawrence Murdoch.....	42					1										1			1	3
136	Lena & Maud.....	75										2									2
137	Lewis H. Giles.....	94									1		5						1		7
138	Lizzie Giffin.....	71					1														1
139	Lizzie M. Center.....	77											1								1
140	Lizzie M. Stanwood.....	76					1		4												5
141	Lizzie Mand.....	49								1											1
142	Loring B. Haskell.....	67											1								2
143	Lorna Doone.....	48							3												3
144	Lottie E. Hopkins.....	47							1	1											2
145	Louis & Rosie.....	48			1				1												2
146	Lucille.....	71			3		2					1			1		4				11
147	Lucinda L. Lowell.....	77															2				2
148	M. H. Perkins.....	50															1				1
149	M. S. Ayer.....	76			1																1
150	Mabel D. Hines.....	92			4		2														6
151	Mabel Leighton.....	48				2		1				1	1		1		2	1			9
152	Madonna.....	79								1											1
153	Maggie and May.....	88					1				2		2							1	6
154	Margaret.....	107	1		5	1	1						2			1			1		12
155	Margaret Leonard.....	31															1			1	2
156	Margaret Mather.....	66						1	2								1				4
157	Marguerite.....	81		3																	3
158	Marguerite Haskins.....	72										1									1
159	Marshall L. Adams.....	125					1														1
160	Martha A. Bradley.....	72							2							2		1			5
161	Mary A. Gleason.....	65															2				2
162	Mary F. Chisholm.....	70			4																1
163	Masonomo.....	67						1		1							3			1	6
164	Mathew Keaney.....	69		2																1	3
165	Mattie Winship.....	73							1											1	2
166	Maud M. Story.....	53								2						1	1				4
167	Mermaid.....	76	1																		1
168	Metor.....	96			6												1			1	8
169	Miranda.....	76	2		1				2								1				6
170	Monarch.....	92			1											1					2
171	Mondego.....	76															2				2
172	Monitor.....	98			1				2		1						2				6
173	Mystery.....	89	1		5		1		1	1					1						10
174	Nannie C. Bohlin.....	96					2		2				1	1			2				7
175	Nellie Dixon.....	68							2								1			7	10
176	Nelson Y. McFarland.....	65							1												1
177	Nereid.....	69															4				5
178	Niagara.....	78					1		2									1			4
179	Norman Fisher.....	51							1												1
180	Norman Johnson.....	51							1												1
181	Norunbega.....	91						1						1							2
182	Nourmahal.....	86							1	1	1	1					4			1	9
183	Ogla.....	77							1				1								2
184	Oliver F. Killam.....	43															1				1
185	Oliver Wendell Holmes.....	75			1																1
186	Olympia.....	50											2								2
187	Oregon.....	79													1	1					2

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LIST of United States Fishing Vessels which have entered at Canadian Ports from October 31, 1899, to October 31, 1900, &c.—*Concluded.*

Number.	Name of Vessel.	Net Tonnage.	Ports of Call														Total Entries.				
			Arichat.	Barrington.	Canso.	Georgetown, P. E. I.	Halifax.	Liscombe.	Liverpool.	Lockport.	Louisburg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.		Shelburne.	Souris, P. E. I.	Whitehead.	Yarmouth.
188	Orpheus.....	74	2		1			4		6		1	1			2		1		18	
189	Parthia.....	77	1		3							2						1		7	
190	Patriot.....	58	1		1		3		1							1				7	
191	Pauline.....	51														1				1	
192	Pendragon.....	68	1				1													2	
193	Phalia.....	72																	1	2	
194	Pinta.....	69													1	1				2	
195	Polar Wave.....	86															1			1	
196	Preceptor.....	89					1					1								2	
197	Priscilla Smith.....	89																	1	1	
198	Procyon.....	85			2							1			1					4	
199	Puritan.....	62		1		1			1											4	
200	Quickstep.....	77	1					1								2				4	
201	Ralph E. Eaton.....	69																	1	1	
202	Ralph F. Hodgdon.....	60	1		1	1	1	1	1							1	1	1		9	
203	Ralph Russell.....	48														1				1	
204	Ramona.....	58														2				2	
205	Reporter.....	59							1											1	
206	Richard Lester.....	47			1				1			1								3	
207	Richard Wainwright.....	98			1															1	
208	Rigel.....	87			1											4				6	
209	Robin Hood.....	65			1					2			1							6	
210	Rozella.....	34							1							1				2	
211	Ruth M. Martin.....	93			2		1	1								5				9	
212	S. F. Maker.....	78			1											3				4	
213	S. L. Foster.....	30			3				1		1									5	
214	S. P. Willard.....	87					1	2								3				7	
215	S. R. Hane.....	47							1	2		1								3	
216	Samuel R. Crane.....	52														1			2	3	
217	Sea Fox.....	71					3	1												4	
218	Senator.....	77			1			1												2	
219	Senator Gardner.....	94									1	2							1	4	
220	Senator Saulsbury.....	77			7							1	1	1	1	1				11	
221	Sheffield.....	61		6												2				8	
222	Shenandoah.....	77		2					1	1										6	
223	Sigfrid.....	51			1															1	
224	Speculator.....	77			1		1								1	5		1		9	
225	Stella.....	78						1												1	
226	Susie Hooper.....	50			2			1								1				4	
227	Tacoma.....	71													1	1				2	
228	Talisman.....	88						1	1											2	
229	Thalia.....	78							2	2						1				6	
230	Thetis.....	67			2		1				2	2						1		8	
231	Thomas Brundage.....	69																	1	1	
232	Thomas Sumner.....	70						1												1	
233	Tidal Wave.....	66			1		1									1				3	
234	Titania.....	77					1			1	1	1				2				7	
235	Triton.....	67														3				2	
236	Valkyria.....	104					1								1		1			3	
237	Vandalia.....	87																	1	1	
238	Vera.....	77							1						1	1				4	
239	Vigilant.....	87			2		1					2				4				9	
240	Virginia.....	81			1				3		1	1			1				1	8	
241	Volant.....	96			1											5				6	
242	Vyking.....	95							1											1	
243	W. E. Morrissey.....	93				3						3		1	1					8	
244	W. H. Moody.....	48				2		4												6	
245	W. M. Young.....	86													1					1	
246	William H. Rider.....	45				1										1				2	
247	William Matheson.....	72					1													1	
248	Winona.....	78				6		1				1								8	
Total.....		17640	19	37	168	5	79	24	122	51	28	4	79	17	15	27	222	11	22	79	1009

OFFICERS' REPORTS.

Reports of Captains Commanding Canadian Cruisers, as follows :

CRUISER 'CURLEW'.

St. JOHN, N.B., December 31, 1900.

Commander O. G. V. SPAIN, R.N.,
Commanding Fisheries Protection Service.

SIR,—I have the honour to submit to you herewith my annual report on the various duties performed by this ship during the past season of 1900. While laid up at this port last winter, the boilers and machinery were put in thorough repair, including the shipping of a new propeller. Other minor repairs were made throughout the ship, rendering her staunch and seaworthy, and on Easter Monday, April 16, the ship was placed in commission, ship's company signed on the ship's book, and at noon, we steamed down to our cruising grounds at the mouth of the Bay of Fundy. On inquiring at the various fishing stations we found that fish of all kinds were beginning to strike in on the fishing grounds, weir building was being rapidly pushed forward, and every preparation was being made by the fishermen in their various ventures, anticipating a prosperous seasons work.

Owing to the strong rivalry among the numerous weir owners, engendered by their intense desire to secure good weir locations, numerous weir disputes resulted, requiring considerable time and patience from us in their settlement. The Easport sardine syndicate, having contracted with the majority of the weir owners to pay them \$4 per hoghead for the catch of herring in their weirs, was the cause of the extraordinary energy displayed by the weir owners. Only a few years ago a weir owner would feel offended if he was not offered at least \$5 per hoghead. However, it is a pleasure to report that many times during the year the prices for fish went far above \$4 per hoghead, for on one occasion, at the mouth of the Magaguadavic River, during November, I was an eye witness to sardine herring being bought at \$22.75 per hoghead.

In connection with the foregoing work my time was fully occupied in distributing bounty cheques, issuing instructions to the several fishery officers, landing lighthouse supplies, and other work required in connection with the various fisheries. Fishery matters were proceeding harmoniously when your telegram arrived on May 18, ordering us to cruise on the Nova Scotia coast between Cape Sable and Prospect, with a view to meet the United States mackerel seiners on their first arrival on that coast. Fogs and gales prevented us from proceeding there till May 21, when we steamed across the Bay of Fundy, replenishing our bunkers at Yarmouth, and at noon of the 23rd, we had Cape Sable abeam. No foreign fishing vessels were sighted, but that evening, at sunset when anchoring at Lockeport, we were informed that two United States seining schooners had called there a few days previously, having arrived directly from Gloucester. I was informed that those two vessels were unsuccessful in their search for mackerel, owing to the bad weather off the coast.

I might state here that the first mackerel taken on the south shore this spring were taken in the nets off Green Island, Cape Sable, on May 12, several days later than the first catch last spring. The first mackerel each season are generally taken in the traps located near Yarmouth, between May 8, and 12.

At the urgent solicitation of some of the leading citizens of Lockeport, we decided to spend the Queen's birthday there, and, in honour of the day, the customary salute was fired and the ship decorated with bunting in rain-bow fashion. Resuming our cruise along the coast to the eastward we found the local fishermen enjoying fair catches

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of mackerel in their nets, but no foreign seining vessels were sighted. At Lunenburg, on May 26, I was informed by the fishermen that only one of the United States fleet had got any mackerel in that vicinity. The schooner's name was the '*Nourmahal*,' and she had taken twenty-six barrels of fine mackerel eight miles off Cross Island, on the 22nd instant.

Two days were occupied here by blowing down boiler and repairing an open seam in the funnel, then we returned westward as far as Brazil Rock, sighting no foreign seiners on the trip.

A perceptible decrease could be noticed in the number of United States mackerel seiners on the Nova Scotia coast this spring seeking mackerel, which can be attributed to the unusually large hauls made by them on the American coast, and gave them a splendid season's work there. The fishery reports show that they have made some remarkably large hauls of mackerel on the Massachusetts and Maine coasts, in fact, surpassing the catches of previous seasons. It is to be regretted that they fail to show up in the same abundance in our waters, but, having very few vessels on the lookout for them on our coasts, we were somewhat in the dark regarding our mackerel schools and their movements.

Several of the Halifax pilot schooners carry with them, during the mackerel season, a seine and boat, and without interfering with their regular pilotage duties manage to take several good hauls of mackerel each season, thereby extending their income to a considerable extent.

Cruising between Sambro and Cape Sable was continued until June 10, returning then to the Bay of Fundy. At Yarmouth we replenished our bunkers, and on June 12, with Captains Smith and Douglas on board, we proceeded to Grand Manan, and those gentlemen inspected the life-boat station at Seal Cove. The following day we ran over to Digby, our visitors leaving the ship there.

Inspecting the various fisheries in the bay occupied our time for the remainder of the month, finding them all progressing favourably, weir building almost completed, and all the larger sized craft busily engaged on the several fishing grounds. Several of the Eastport sardine factories were in operation, but nearly all of their herring that they were canning were from the Canadian side, very few herring, at that date, being taken in the American weirs.

While at St. John on June 29 we had the pleasure of a visit from you, with a view to investigate at Grand Manan the fishing for pollock by the rather startling method of exploding charges of dynamite among the schools. At Grand Manan you procured information regarding this practice, and gave me instructions as to my course with reference to it.

This method of fishing, I might observe here, was conceived during the winter months by a fisherman who was familiar with the method of exploding the dynamite signal bombs on Gannet Rock by a small battery. The idea struck him that exploding dynamite in the water among the schools of pollock would be a lazy and at the same time a paying method of fishing, even if it did prove destructive to the fisheries in the near future. While at White Head, Grand Manan, receiving bounty claims recently, I was informed by the fishermen of that place who had been using dynamite, that they were well pleased with the method and the numbers of fish killed. They invariably insisted that they carried on their unpopular practice over three marine miles seaward from the Old Proprietor Ledge at all times, but I very much doubt their statements.

I sincerely trust that you will have some regulation enacted that will prevent boats from fitting out for dynamiting fish of any kind, or, some other method of stopping the practice, which undoubtedly must have an injurious effect. I am reliably informed that more fishermen will engage next season in dynamiting fish, if something is not done to prevent it.

We were busily employed in the waters of Quoddy till July 11, when another cruise of the Nova Scotia coast was commenced. Dense fogs delayed us somewhat, but on July 14 we rounded Cape Sable, arriving at Halifax next morning at daylight. Our machine gun, with ammunition, was issued to us there, and the steamer *Florence C.* was received from the owners and taken by us into the fisheries service.

On the 17th, in company with the *Florence C.*, we proceeded to Liscombe and Isaac's Harbour where her crew was shipped and her outfit completed, and she began her work enforcing the lobster regulations on the coast between St. Margaret's and Chedabucto Bays.

Arriving at Louisbourg on July 21, the ship was bunkered, calling into North Sydney on the 23rd. Mr. Bertram, inspector of fisheries for Cape Breton, joined our ship here, and we set out for a cruise of inspection of the fisheries around the north part of the Island. We called at Ingonish, Aspy and Pleasant Bays, Meat Cove, and other places, arriving at Cheticamp on the 25th, having visited nearly all the lobster factories as we skirted the coast. We remained there a day, while the inspector visited a wonderful salmon river, where some improvements were in progress.

Returning northward from there, cruising along the shore, North Sydney was reached on the 28th, and Mr. Bertram, on leaving the vessel expressed his satisfaction with his trip and the good results that would surely follow our unexpected appearance at the several lobster factories in Cape Breton.

Telegraphic orders were received from you at this time, directing us to return westerly, and at the same time narrowly observed the several harbours for illegal fishing. Louisbourg was visited for bunkering purposes, and on the 3rd of August we resumed our progress to the westward. August 5, in a dense fog, we rounded Cape Sable, arriving at Eastport, Maine, next morning at daylight, where you joined us for a run on the St. Croix River to St. Stephen. Next day you left us at St. John, and we immediately returned down the bay.

Fishery matters of various kinds occupied our attention until September 13, when once more we turned the ships heads towards Cape Breton. That night we anchored at Shelburne, and on the 16th put into Isaac's Harbour, where six seamen were shipped to complete our complement. Some target practice was indulged in here, for the benefit of the new men, in view of an apparent desire among the crew to again bring over to the Bay of Fundy the Challenge Cup for rifle shooting. Georgetown, P.E.I., was reached on Saturday, September 22, and the athletic sports which occupied the 24th and two following days, I can safely state, excelled all our meetings of previous years. The several events were very warmly contested, and, although circumstances of a nature not always under control prevented us from carrying the rifle shooting cup back among the fierce tides and fogs of the Bay of Fundy, still we feel that its possession has only been postponed for a year, and we also feel that it is for the good of our service if we annually allow this cup to pass from ship to ship in the fleet.

Steaming through the Gut of Canso, Louisbourg was reached on September 28, where we were compelled to spend five days in scaling boiler and bunkering ship. Leaving that historic place astern on October 4, we proceeded to skirt along the coast on our return to the waters of Passamaquoddy. Calling at Arichat, Canso, and the numerous other ports en route, orders were received from you to proceed to Campobello, and assist there in the annual Fish Fair Regatta. Arriving there on the 18th, I found that the Society's officers had appointed me as one of the judges of the sailing races. All the aquatic sports were very successful, being started and finished from the stern of *Curlew*.

Enforcing the lobster and other fisheries regulations, among the numerous bays and inlets that compose this district completely occupied our time till Sunday, November 11, when we steamed from St. John to the island of Grand Manan and there began the collection of the fishermen's bounty claims, and transacted other business, in order to clear up the season's work. With the exception of a run to Yarmouth on the 2nd instant, the bounty work was completed sufficiently on the 17th instant to permit of us steaming to this port, paying off the ship's company, and placing ship out of commission.

A supplementary report, showing the cost and other particulars of the several departments of this ship is nearing completion and will be submitted to you very shortly.

I have the honour to be, sir,

Your obedient servant,

JOHN H. PRATT,

Commanding Curlew.

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CRUISER 'KINGFISHER.'

GRAND MANAN, N.B., Dec. 20, 1900.

Captain O. G. V. SPAIN,
Commanding Fisheries Protection Service of Canada.

SIR,—I have the honour to report on the work performed by the Dominion cruiser *Kingfisher* under my command, during the season of 1900.

The ship commissioned on April 16, and sailed on the 25th for Port Hawkesbury, where we arrived on the morning of the 27th. While there I received orders to proceed to Charlottetown but, owing to the large fields of drift ice in North Bay, could not reach that port until the May 2. The ship's company were measured for uniforms by Messrs. John McLeod & Co., tailors, while in port.

On May 7, instructions were received to proceed to cruise east of Halifax, making Liscomb headquarters. On May 26 a fleet of American seiners (thirteen in number) passed to the eastward. Large schools of mackerel were sighted by us a day before the fleet arrived. On the 29th of that month I cruised east calling at Louisburg and Sydney. The seiners found no fish after passing Louisbourg—most of their catch was taken west of Canso.

We returned west on June 7, cruising off Canso until the 25—we then proceeded to Port Hawkesbury to have the ship cleaned and painted and to have some repairs made to the step of foremast. June 28 we hauled over on the slip and on July 4, all repairs being completed, the ship was launched.

We sailed on the 5th with orders to take up station from Liscomb to Scatarie with headquarters at White Haven, which is noted for its beautiful harbour extending far into the interior, the head of which teems with those speckled beauties so eagerly sought after by the sportsmen. I continued to cruise about this station as far west as Liscomb, calling frequently at Isaac's Harbour—one of the prettiest little towns on the south-east coast of Nova Scotia.

The catch of lobsters on my station this season has been very good. The lobsters were larger than previous years, owing (the packers claim) to the rigid enforcement of the regulations re close reason. I may say I saw very little if any disposition to break the law and fish lobsters after the close season commenced. I had the steam tender *Sea Bird* in connection with the *Kingfisher* which enabled me to visit all the small coves and harbours which it would have been impossible to enter with a deep draught vessel like the *Kingfisher*. This steam tender, which was employed one month, was very effective and did splendid work. Her speed of ten knots enabled me to cover a lot of ground in a day.

I wish to call your attention to what I consider a valuable spawning ground for herring and I am of the opinion it should be protected. The locality to which I refer is a part of the coast extending from western head of Fisherman's Harbour or Cape Mocomodome as marked in Admiralty Chart, westerly to Bickerton Harbour; extending off shore as far as the Pollux Rocks, also taking in the Castor Shoals. I visited Fisherman's Harbour about September 10—at that time the boats were taking herring in large quantities—from eight to fifteen barrels per boat. I boarded the boats myself and found they were all white with spawn-nets, boats, and all the gear fully as much as you will see in the spawning season at the south-west head of Grand Manan. I am strongly of the opinion that this section should be protected by close season as the herring fishery is not very extensive in that part of the coast and this if protected would be a most valuable feeder. The great drawback to the shore fishermen on that coast is the bait. With the present system of cold storage being introduced by the department along the coast in connection with this protection of the herring spawning ground, I believe in a few years the supply of bait would be ample for all purposes.

On October 25 I sent the steam tender to cruise on the Cape Breton coast while with the *Kingfisher* I proceeded west making Shelburne headquarters, calling at Lunenburg on the way. Large schools of mackerel were seen by me off Halifax on the night of the 26th of that month—at the same time the *Helen Millie Gould* Captain Sol.

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Jacobs scooped in 400 barrels in one haul. We were only a little distance in shore of him when he made the catch.

I cruised off Shelburne till November 20, when I paid the ship out of commission. After paying off, the foremast was taken down and examined and, as it was found to be rotten, we had it replaced with a new Oregon pine stick, after which the ship was moored for the winter and housed in to protect the decks.

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

W. H. KENT,
Commanding Dominion Cruiser Kingfisher.

CRUISER 'CONSTANCE.'

QUEBEC, Dec. 6, 1900.

To Commander O. G. V. SPAIN,
Fisheries Protection Service,
Ottawa.

SIR,—In accordance with your instructions, I have the honour to submit to you the following report which is a summary of the work performed by the Revenue Cruiser *Constance* during the season of navigation just closed.

On January 24 last my engineers and stokers began the work of overhauling the engine and boiler, and fitting out ready for the summer's work.

February 19, Messrs Davies & Sons began work to extend deck-house aft, to cover in the after companion, and finished same on April 6. This work was very much required for the safety of the ship, and quite an addition to the comfort of those who have to pass nearly three fourths of their lives on the water.

April 5, crew arrived on board and were put to work at once to cut the ship clear of the ice. April 6, left our winter quarters at Indian Cove, Levis, and proceeded up to Quebec, where the crew were employed painting ship, taking in coal, ship's stores, provisions &c.

April 17, ship was reported as all ready for sea, and in reply received my instructions to proceed on my usual cruise down the gulf.

April 19, left Quebec cruising along the north shore and towards the east end of Anticosti, returning to Quebec on May 4.

May 6, returned on my cruise down the gulf with Fred. L. Jones, Esq., Inspector Customs, and delegation on board, arriving at Fox Bay, Anticosti on the 10th where the above gentlemen landed and returned to Quebec with same on 14th.

On June 1, Messrs. Fred. L. Jones and party arrived on board at Rimouski to take passage for Fox Bay, landing them there on the 4th, and returned to Quebec on the 12th waiting there further instructions.

From June 14, to July 16, our cruise was between Quebec, Anticosti, Gaspé coast, Northumberland Straits and Bay Chaleur.

July 18, to August 18, cruising along the Nova Scotia coast to Yarmouth. St. Mary's Bay, Bay of Fundy to Grand Manan Island, East port, Maine, St. John, N.B., and Digby, N.S., hence to Sydney, C.B., and Gut of Canso, returning to Gaspé on August 20.

August 21 to 28, cruising between Gaspé, Rimouski and the west end of Anticosti.

August 29, to September 8, was in Davie's dry dock, Levis, during which time we shipped new propeller, scraped and painted ship, had wheel chains overhauled and new pins made for wheel chain sheaves, &c.

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September 9, received instructions from Mr. Fred. L. Jones to proceed to the Magdalen Islands to try and intercept the schooner *Gold Hunter* reported to be from St. Pierre Miquelon, and arrived at Grindstone on the 11th, where we found out from the collector of the port that she had arrived some days previous to our arrival. September 15, left the Magdalen Islands for up the gulf, via Anticosti, arriving at Quebec on the 18th.

September 21, was again instructed to proceed to the Magdalen Island to watch for the arrival of the above named schooner on the second trip from St. Pierre Miquelon. On the way down we were detained by an easterly gale and only arrived off Amherst Island light on the night of September 25-26, succeeded this time to intercept this vessel and seized her with nine barrels and kegs of liquors for contravention of the Customs Act.

From September 29, to October 21, our cruise was from Magdalen Island to Souris, P.E.I. Port Hawkesbury, Cheticamp, C.B., and the Northumberland Straits

By instructions received, arrived at Dalhousie, N.B., October 22, to meet Mr. Fred L. Jones, Inspector of Preventive Service.

From October 23 to 26, with Mr. Jones on board, cruised along the Baie des Chaleur and the Coast of Gaspé, at same time distributed some of the proclamation notices between Cape Rosier and Cape Chat.

October 31, arrived at Gaspé for coal.

November 5, by orders received, arrived at Quebec pending further instructions.

November 8, left Quebec for down the gulf, cruising along the south shore, and distributing ballot boxes between Cape Chat and Griffin Cove, arriving in Gaspé Basin on the night of the 13th for further instructions.

November 15, received orders to proceed to Quebec and arrived there on the 18th, meeting in with strong westerly winds and heavy falls of snow on the passage up.

November 20, was instructed to prepare ship to go into winter quarters.

November 30, placed ship safely for the winter in the Louise Basin. Paid off officers and crew—leaving the *Constance* in charge of Michel Dickey, as watchman, until further instructed.

During the night of September 12, experienced a terrific hurricane from the south-west, veering towards midnight to the north-west and north. It was with great difficulty we succeeded in getting under way from Amherst Harbour and reaching a safe anchorage under Grindstone Island.

During this gale the church steeple at House Harbour was blown down, a Halifax schooner was driven ashore, and went to pieces close to the *Constance* and much other damage was done to property on shore.

Again on the night of October 11, we experienced a similar blow while anchored in Egmont Bay, P.E.I., and after a most anxious night put into Summerside for shelter.

During this gale a large number of vessels were driven ashore at Sydney and other places. We counted eight, a few days later, stranded in the Gut of Canso.

On the night of October 16, we met with another furious gale and snow storm off Shippegan, N.B., from N.N.E., during which time we shipped one heavy sea, shifting the fore companion smashing in the windows of the chart room, and flooding petty officers quarters and deck.

Without exception, the months of October and November have been the worst for a continuance of strong gales and snow storms I have ever experience in the gulf, and when we consider the many wrecks and fatal disasters that have occurred of late we should feel thankful to be once more in a port of safety for the winter.

During the past season we boarded and searched forty-four vessels and covered over 15,500 miles.

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

G. M. MAY.

ANNEX A

DETAILED REPORT OF THE FISHERIES INTELLIGENCE BUREAU.

HALIFAX, N. S., Dec. 31, 1900.

Commander O. G. V. SPAIN,
Commanding Fisheries Protection Service of Canada.

SIR,—I have the honour to submit the annual report of the Fisheries Intelligence Bureau for the season of 1900.

In connection with the bureau during the past year the stations comprised the following, viz: Fifty-five reporting and twenty-four bulletin. Two new reporting stations were established, as follows: Queensport, in charge of W. P. Scott, and Port Malcolm, in charge of R. G. Proctor.

The following is a summary received from the various stations showing the result of fishing operations for the season of 1900 :—

NOVA SCOTIA.

CANSO.

Report from A. N. Whitman & Sons.

Codfish.—The inshore catch of codfish shows a diminution as compared with previous years, but it has been fully demonstrated that a fine body of fish is to be found from fifteen to fifty miles from this port, in what might be considered an intermediate between the inshore grounds and the great outer banks, and during a considerable part of the season squid are to be obtained on these grounds, in great abundance.

We are convinced that no such body of fish can be found anywhere along our coast in such close proximity to the seacoast, and with the bait in such abundance. The presence of the bait is the probable cause of the abundance of the fish; and while the bait continues to visit the grounds, codfish may be expected to frequent the same localities. There has been a considerable addition to our fleet this year of crafts suitable for the prosecution of this fishery and they have met with gratifying success.

Haddock.—The haddock fishery of the fall of 1899 and winter of 1900 was of much the same character as usual, closing a little earlier than some winters. This has become one of our most important branches of business. In addition to the quantity shipped away fresh in ice to the upper provinces, quite an extensive finnan haddie business has sprung up which bids fair to eclipse the fresh fish business.

Already thousands of dollars worth of haddies are shipped, giving employment to a number of hands in the preparation of them and the manufacture of the tidy boxes in which they are packed. A new smoke house has been erected this year which will bear comparison as to equipment with any in the old world or the new.

Hake.—Hake are not caught in any considerable quantity here. Occasionally a visit to the grounds west of Sable island will give us a larger supply of a fish that is taking its place side by side with the better known codfish.

Pollock.—Pollock continue to be caught in considerable quantities, and are growing in the esteem of the West India consumers of fish. They certainly constitute a very excellent substitute for the more popular codfish. When properly cured, without too much salt, they are an excellent food fish.

Mackerel.—The catch of mackerel here this season has been disappointing notwithstanding the larger quantities caught on the coast of the United States and the considerable summer catch west of Halifax. Of those caught here the larger part has been of mixed size.

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Herring.—The quantity of herring caught on the coast in 1900 was small and its looks as though we might not look for the record of earlier years to be reached again. As the demand for these fish is on the decline, the catch is not of so much importance as it was forty years ago. Then almost everybody ate herring; now many never see them. A considerable increasing quantity is required for smoking, especially kippers and bloaters, and often the supply is not sufficient for these purposes.

Lobster.—The catch of lobsters showed no sign of falling off, and very high prices prevailing made the season one of the most profitable in the annals of the trade to the fishermen, but thoroughly unprofitable to the packers. This condition will have to change as no one cares to work many years in succession without some profit, and on this part of the coast the packers profit has been wiped out for some time past.

Squid.—The catch of squid for bait inshore this year has been disappointing and the result has been the loss of some thousands of dollars which might have been earned in the supplying of bankers, besides the loss to our shore fishermen due to the want of bait. Not many miles from land this bait fish has been plentiful for a great part of the season and a good body of fish has followed them. The laudable efforts of the Dominion government to establish bait freezers along the coast are meeting with gratifying success, and it looks as though in a few years every fishing port of any importance would be supplied with one. Properly managed they must materially add to the catch of fish.

Markets.—It looks as though we were going to be shut out of the United States market for the cheaper kinds of fish for some time to come. The Government of that country is evidently determined to do nothing to promote trade between the two countries except it be of the 'Jug' handled sort. Fortunately the population of our own country is growing rapidly and bids fair to grow even more rapidly in the coming years, affording a larger market each year for the produce of the sea.

We shall probably be able to hold our own in Porto Rico in spite of the hostile tariff established there, and in the markets of the world we can more than hold our own with our neighbours across the border.

We predict that in the coming years a trade both home and foreign in canned goods and small fancy packages will grow up that will give to Nova Scotia a prominence in that department of trade that will surprise even the most far sighted observers of the conditions of to-day.

CLARK'S HARBOUR.

Reporter: Mr. J. Lewis Nickerson.

Cod were first reported May 12th in fair quantities and continued such up to the middle of July. During the remainder of the season very light catches were made owing to the scarcity of bait. Seasons shipment estimated at 2,000 quintals.

Haddock fishing commenced May 15, with light catches, and varied from fair to poor throughout the season. 1,000 quintals were shipped during the season.

Herring were not reported here until September 5, when they appeared plentiful outside but were scarce in shore. The seasons catch, however, is very good, and is estimated at 1,500 bbls. This is a very large increase, in comparison with previous years.

Lobsters were first taken on December 15, and the catches until May 1, were good, February excepted. The number of crates of live lobsters shipped during the season was 3,804.

The total pack of cases canned is as follows:—

	Cases.
Cape Sable Packing Co.....	2,100
Jas. C. McGray.....	550
	2,650

Mackerel appeared first on May 17, but very few were taken during the season. The traps secured only 50 bbls.

Bait was very scarce at this station this season and greatly handicapped fishing.

DIGBY.

Reporter: Mr. J. M. Viets.

Alewives were taken in fair quantities on May 31.

Cod were first reported in fair quantities on May 15, and catches alternated from this to poor throughout the month. In June, with the exception of the first four days when the fishing was fair, the fish were reported plentiful for the whole month and good hauls were made. During July the fishing varied from good to poor and all the boats returned with half fares, owing to the scarcity of bait, which was very hard to obtain on this side of the Bay of Fundy, and several vessels were compelled to seek on American shores, for this important fish product. For the remainder of the season, the fish were reported very scarce. The total season's catch is estimated at 204,000 lbs., which is valued at \$7,140.

Haddock were not reported until June 8, when they were taken in fair quantities and again during the latter part of the month. The catches were very light afterwards until October 1, when they were reported plentiful. Total catch is estimated at 232,000 lbs., and valued at \$6,960.

Hake did not appear until June 12, when the catches varied from good to fair to the end of the month. There was a marked improvement in this fishery for the balance of the season, and from July 3 to October 1, hake was plentiful. From this date to October 15, fair fishing was reported. The seasons catch is estimated at 1,291,000 lbs., and valued at \$25,820.

Halibut.—This fishery was not reported, but the fishing has been considered fair. The Digby fleet operate off Yarmouth and land all their fares at that port.

Herring struck in on May 15 in fair quantities and continued so until June 5, afterwards becoming scarce for the remainder of the season, excepting a few days in August, when they were reported fair. The catch has been a small one and is estimated at 35 bbls., valued at \$100.

Lobsters were taken in fair quantities from May 21 to June 17, after which they were plentiful and good catches were reported daily to the close of the season. Total season's catch is valued at \$16,071.

Mackerel appeared in fair quantities on August 7, and were taken in hauls varying from good to fair during the month. On the 17th of same month they were reported schooling in St. Mary's bay.

It was reported on December 7 that the schooner *Quickstep* Captain Arthur Longmire, arrived at this port with 85,240 barrels of fresh fish on board. This was a result of four days fishing and was valued at \$1,604 40, and is considered the largest fare ever landed for a Digby market.

Mr. Viets says:—'This fishing district is not as good this season in all kinds of fish as formerly. There is a marked shrinkage of fish in the Bay of Fundy. Bait has been scarce and consequently the Digby fleet was handicapped. Fishermen complain that the American syndicate block them in getting bait from the Canadian traps on the north shore and further say that they often have to wait a week for bait as the syndicate attend to the requirements of the American fishermen first. Lobsters have actually decreased although the season's catch shows fairly well. There are many more pots for one lobster now than formerly and more ground gone over. The sardines factories are playing havoc with herring, consequently bait is scarce, and, as a matter of course fish fed is scarce and the fish are deserting their usual haunts.

HALIFAX.

Mackerel.—The catch this season here and vicinity was reported on an average fair. A big haul of this fish was reported at Herring Cove on Sunday morning

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August 5. Over 100 barrels were taken from one net. This was the first big catch of mackerel made at the Cove during the past twenty-five years. On or about October 30 the American schooner *Helen M. Gould* arrived at this port, having just made a catch off Sambro, a distance about 15 or 20 miles off the harbor on her way home from the North Bay in which she used all her barrels, and was obliged to put in here to obtain salt and barrels. She was reported to have 340 barrels of large mackerel. The *Harvard* at this port on November 1 had 150 barrels.

The schooner *Helen M. Gould* stocked \$40,660 the crew sharing \$863.75 and is reported to be the best stock of the season, and the highest ever made in mackerel fishing in any season. A number of vessels have made stocks of about \$25,000.

ISAAC'S HARBOUR.

Reporter : *Mr. Simon M. Giffin.*

Alewives were not reported, but 100 barrels were taken during the season.

Cod were first reported on June 5, fair, and were taken, catches varying from good to poor during the remainder of the month. The fishing was fair from July 5 to 18, and scarce afterwards until August 11, when the fishing was again fair. Two days later, the 13th, codfish were plentiful, after which scarce to the first week in October, when very good catches were reported. Total catch for Isaac's Harbour, 500 quintals. Total for Fisherman's Harbour, Drum Head, and New Harbour was 1,500 quintals.

Hake were also not reported, but 100 quintals were taken this season.

Haddock although not reported, were taken in a catch estimated at 100 quintals.

Halibut were reported the first week in October, and about 200 pounds were taken.

Herring struck in fair quantities on June 30, and similiar catches were reported during July and August. On September 3, there was an improvement in this fishery and they were reported plentiful. September 8, saw the fish appearing in great abundance and excellent stops were made. The total catch for the season is estimated at 1,400 barrels.

Lobsters were reported fair on May 15, and varied in catches from good to fair until June 8, afterwards becoming scarce to the close of the season.

Mackerel were first taken on May 26, when 600 were reported in Goose Island trap and on the 28th 100 per fleet net were captured. Light and unimportant catches were made during June, but on the 21st of same month 100 were reported in traps at Goose Island. For the remainder of the season mackerel were scarce. Total catch 100 barrels.

Salmon, about 50 barrels were taken this season.

Squid, 100 barrels were taken during the season.

Trout, the catch this season reported at 100 barrels.

LIVERPOOL.

Reporter : *Mr. J. H. Dunlap.*

Alewives were taken in fair catches from May 17 to 30. Nothing was reported afterwards.

Cod were first reported on May 15, plentiful inshore, but the offshore fishery was poor. For the balance of the month fairly good hauls were taken. On the 26th, the fishing was reported good on the outside grounds as bait became fair, and in June the catch varied from good to fair. For the remainder of the season, codfish were taken in hauls from good to poor, when bait could be secured.

Haddock were taken in light quantities from July 31 to August 4.

Herring were reported fair on July 8, and to the 20th, from good to poor stops were made. On the 10th, herring of a small size were reported schooling along the

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coast and on August 25, a few were captured in nets. Herring were reported plentiful on September 15, at Port Mouton and a small quantity taken in nets.

Launce, fair catches were taken on May 9.

Lobsters were reported plentiful on May 7 and 8, and were taken in catches from fair to poor to the end of the month. For the remainder of the season the fishing was poor.

Mackerel appeared rather early this season, and on May 26, 12 of a medium size were taken to a boat. Large quantities were also reported on this date 14 miles offshore. The American schooner *Nellie Dixon* arrived in port on June 11, with 40 barrels. Schooling was reported on the 19th, 10 miles offshore and on the 22nd, in this harbour. For the balance of the month the fish was plentiful with traps averaging 30 barrels and drag seines from 30 to 75 barrels. On July 8 and 13, fair fishing was reported, although they were outside the harbour, mackerel were plentiful on the 21st, and 9 barrels of large size fish were reported in traps, and on the 30th, 12 barrels of large mackerel were trapped. During the first week in August, fair quantities were taken and schools reported. Dogfish was very annoying and fish were scarce until the 25th, when fair catches were made by nets. A few were taken in September.

Salmon of a small size were reported at Milton on July 4.

Trout were taken in fair catches on May 8.

Squid, when reported on August 3 and 13 were fair.

LOCKEPORT.

Reporter: J. R. Ruggles.

Cod were first taken in good quantities on May 2, and although the weather was very rough, during the month good catches were reported. On the 21st, one boat got 32 quintals, and another reported 51 quintals on the 25th. Fair catches were made daily from June 4 to July 15, when bait was reported plentiful, and excellent hauls were made from this date until August 20. During the remainder of the season the inshore fishery was poor, but the bank fisheries were very good. The season's catch is considered a little below that of last year's, and in addition to the total catch, 149 barrels or 5,364 gallons of cod oil are reported as having been extracted.

Haddock although not reported, appear to have been taken in fair quantities. The total season's catch, as per statement, shows a decrease of 25,696 pounds in comparison with last year's report.

Hake were also not reported and the total season's catch was 28,807 pounds which is 12,348 pounds below that of last season.

Halibut were first taken on May 19, with good catches. On the 21st, one boat reported 900 pounds. The total catch is estimated at 3,000 pounds, which is 2,000 a pounds less than the catch of 1899.

Herring were first reported in fair quantities on July 19, and continued fair for about one week. They improved somewhat in August, and were reported plentiful in nets and traps on the 7th and 11th, and also on September 14. In November, large quantities were reported and good catches were being made with very favourable prospects for a fall's clean up. The season's catch is estimated at 4,600 barrels or 920,000 pounds which is an increase over last year's catch by 2,700 barrels.

Lobster fishing commenced on May 2, and the catches during the month varied from good to fair. About the 4th instant, the fishing was prevented by heavy sea, resulting in a serious loss of traps, &c. The fishing was poor afterwards to the close of the season.

Number of live lobsters taken for export..... 59,000

“ “ canned.....1,454 cases or 62,792 lbs.

The number of lobsters canned exceeded last year's by 454 cases but the quantity exported was 53,000 smaller.

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Mackerel.—First appearance of any note was on June 8, when 100 were reported in nets at Western Head and the catches were light throughout the season. About 45 barrels or 9,000 pounds were taken this season.

Clams.—During the past season, 1,361 barrels were taken for bait.

Pollock were not reported, but the season's catch is estimated at 3,841 pounds.

Salmon.—Few were reported at Western Head on May 23 and 28.

CATCH of Fish at Lockeport for 1900.

Name of Vessel.	Catch.	Oil.
	lbs.	brls.
Lawrence.....	265,000	45
Helene.....	348,500	19
A. M. Gordon.....	340,000	22
Springwood.....	567,000	15
Agatha.....	390,000	22
Alina.....	263,500	13
Lottie A. Burns.....	357,000	13
Edith.....	90,100	
Altina.....	85,000	
Jennie B.....	39,950	
Charlie Richardson.....	76,500	
Icelda.....	43,500	
News Boy.....	68,000	
	2,934,050	149
Boats, etc.....	450,000	or gals. 5,364
Total.....	3,384,050	gals. 5,364

Proportion of cod.....	3,304,526
" haddock.....	50,760
" hake.....	25,380
" pollock.....	3,384
Total.....	3,384,050

LUNENBURG.

Reporter : Mr. W. A. Zwicker.

Cod were reported plentiful on May 5, and good hauls were made daily up to June 3. From this date to the 27th, the fishing was fair after which the fishery became good and continued so until to July 10. From then to the 28th, fair fishing was again reported, and from the 31st, to August 14, good results were obtained. For the following two weeks, owing to the scarcity of bait and the troublesome dogfish, the fishery was poor, but from the 30th, to September 22, fair catches were reported. During the next five days, the fish were scarce, but again appeared plentiful on the 29th, and remained so up to the middle of October with few exceptions when the weather was stormy. The catch is considered an average one. The Labrador catch was a very poor one but the Shore Soundings, Sable Island, Western and Grand banks were reported good and North Bay, Middle and Queero banks very good.

Dogfish were very plentiful on our shores this season and bankers report them the same on the Middle and Quero Banks.

Haddock were first reported on June 4, the catches were good up to the 27th, but from this date to the end of the season the catch was fair, and is considered above the average.

Herring.—the first bank herring were taken on May 22, when two boats averaged 5 brls., and up to 27th, the catch was reported very good. On the 28th and 29th, good catches were made and from June 8 to 25. From this date to July 7, the fishing

was very good and traps were averaging from 40 brls. to 200 brls. of fish. Fair fishing was reported from July 25, to August 14, and poor from this date to September 7, when there was an improvement in the fishing and to the 22nd, the catch was good, afterwards becoming scarce for the remainder of the season. The total catch is below the average.

Goods stops were made on July 17, 18 and 19.

Lobster fishing commenced December 15, 1899, and was reported fair until January 31, but the February and March catches were poor. During these months the total catch was exported alive to the United States. From April 1, to May 3, good catches were made and fair from May 5, to the 31st, or the close of the season. About 25 per cent of the large ones of the April and May catch were also shipped alive to the United States, the remainder of the larger and all the smaller ones were sold to the local packers. The catch for the season was an average one, and as prices were higher than usual, the fishermen were better remunerated than in 1899.

Mackerel.—The first mackerel were taken in nets on May 18, and very little was done until the 25th, when good catches were made for the next three days. From the 29th, to June 23, fair fishing was reported with traps averaging 40 and 50 brls. From the 23rd, to July 3, the fish were plentiful and traps varied from 15 to 100 brls. The fishery was fair from the 3rd to 6th. On the 7th, they again appeared plentiful and continued so for two days. From the 10th to 14th, the catches were fair and remained so, owing to prevalence of dogfish until the 25th, when one boat averaged 60 large mackerel. 70 brls. were trapped on the 31st, and during the early part of August from 30 to 75 brls. were taken in traps. On the 29th, 250 fish were reported in traps and on September 14, 50 were taken in nets. From October 15, to November 15, the catch was fair, making the total catch for the season the best at this station for a good many years.

Squid were scarce in shore all this season but the bankers report a fair supply on the banks from July 10 to the close of the season.

LUNENBURG BANKING FLEET.

	Lbs.		Lbs.
Atlanta.....	460,000	Kandahar.....	410,000
Ahava.....	440,000	Robert F. Mason.....	250,000
Lillie B. Hirtle.....	510,000	Tyler.....	255,000
Aleaca.....	420,000	Clara E. Mason.....	200,000
Ellen L. Maxner.....	320,000	Strathcona.....	320,000
Blenheim.....	400,000	O. P. Silver.....	300,000
Basil M. Geldert.....	390,000	J. A. Silver.....	260,000
Panama.....	430,000	Wisteria.....	310,000
Maggie M. W.....	425,000	J. M. Young.....	270,000
Columbia.....	390,000	B. L. Anderson.....	300,000
Gladys B. Smith.....	620,000	Beatrice L. Corkum.....	410,000
Kuvera.....	360,000	Luetta.....	456,000
Nonpariel.....	400,000	Hilda C. Corkum.....	460,000
Acalia.....	50,000	J. H. Ernest.....	240,000
St. Clair Geldert.....	290,000	Harry Smith.....	200,000
Bonanza.....	310,000	Milo.....	320,000
Gleaner.....	260,000	Muriel.....	400,000
La France.....	320,000	Dictator.....	260,000
Huron.....	310,000	Shamrock.....	320,000
Secret.....	360,000	Clarence Smith.....	300,000
Bona Fides.....	260,000	Viking.....	420,000
Renown.....	310,000	Ontario.....	360,000
Werra.....	360,000	Frances Williard.....	270,000
St. Helena.....	240,000	Minto.....	380,000
Edward Roy.....	260,000	Baden Powell.....	280,000
Urania.....	300,000	Mascot.....	350,000
Erminie.....	280,000	Lilla D. Young.....	450,000
New Era.....	380,000	Lena Oxner.....	380,000
Arbitrator.....	160,000	Arcana.....	320,000
Britannia.....	190,000	Torato.....	280,000
L. E. Young.....	260,000		

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LUNENBURG BANKERS.—(TRAWLERS), LAHAVE.

	Lbs.		Lbs.
Majestic.....	410,000	Merl M. Parks.....	395,000
Harold J. Pasks.....	540,000	Protector.....	375,000
Pavis.....	356,000	Comrade.....	336,000
Grace.....	440,000	Reliance.....	320,000
Roma.....	340,000	Alberta.....	360,000
Guardian.....	335,000	Talmouth.....	310,000
Millie Mace.....	350,000	Alaska.....	290,000
Athlon.....	380,000	Iona.....	395,000
Karino.....	370,000	Carlraine.....	426,000
Leopold.....	340,000	Alma Nelson.....	500,000
Victoria.....	252,000	Minnie S. Heckman.....	340,000
Carrie.....	320,000	Beluga.....	220,000
Puritan.....	260,000	Flora W. Sperry.....	280,000
Mindoro.....	270,000	Lillian.....	395,000
Ungara.....	402,000	Klondike.....	362,000
Loraine C.....	240,000	Punia.....	190,000
Enterprise.....	245,000	Cayuga.....	340,000
Companion.....	420,000	Mary Myrer.....	460,000
Calla Lilly.....	185,000	Willie C.....	260,000
Harry Lewis.....	300,000	D. M. Owen.....	300,000
Yosemite.....	418,000	Perfect.....	180,000
St. Vincent.....	200,000	Annie G. Hall.....	175,000
Glondon.....	430,000	Madeira.....	370,000
Barcelona.....	370,000	L. B. Currie.....	330,000
Premier.....	300,000	Avis.....	350,000
Collector.....	450,000	Citizen.....	445,000
Uruguay.....	540,000	Monitor.....	300,000
Jennie Myrtle.....	500,000	Emulator.....	430,000

LAHAVE NORTH BAY FLEET.

	Lbs.		Lbs.
Minnie B.....	60,000	Algoma.....	170,000
Nightingale.....	200,000	Mischief.....	160,000
Carrie B.....	190,000	Fern.....	180,000
Britannia.....	170,000	Cambrian.....	160,000
Rowena.....	140,000		

LABRADOR MEN.

	Lbs.		Lbs.
Garland.....	40,000	Valiant.....	40,000
Garnet.....	50,000	Mazie.....	25,000
Grenada.....	35,000		

MAHONE BAY BANKING FLEET

	Lbs.		Lbs.
Hattie L. M.....	430,000	Kimberly.....	300,000
Vernie May.....	400,000	Mildred.....	320,000
J. W. Mills.....	450,000	Elva M.....	150,000
Hazel B. Mosher.....	320,000	Delta M.....	150,000
Roe.....	270,000	Snow Queen.....	130,000
Lawrence.....	200,000	Daisy Linden.....	415,000
Unique.....	340,000	Blanch A. Colp.....	300,000
C. U. Mader.....	280,000	Energy.....	360,000
Flo. F. Mader.....	360,000		

LUNENBURG NORTH BAY FLEET.

	Lbs.		Lbs.
Maggie M. Z.....	220,000	Minnie M. Cook.....	380,000

LUNENBURG LABRADOR FLEET.

	Lbs.		Lbs.
G. A. Smith.....	60,000	Jennie May.....	120,000

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MAHONE BAY, LABRADOR.

	Lbs.		Lbs.
Irene, M. B.	40,000	D. A. Mader	220,000
C. A. Chisholm.....	10,000	C. A. Ernest.....	16,000
Monarch.....	60,000	Senovar	16,500
Nova Zembla.....	16,000		

MUSQUODOBOIT HARBOUR.

Reporter : Mr. George Rowlings.

Alewives were only reported twice during the month. First on May 21, in good quantities, and again on the 25th, when the catches were fair. This fishery has been poor for the last three years, and our reporter says: 'That such places as Chezzitcook river, Petpiswick river and Lake Porter, where there are no dams or obstructions, thus affording a free and open passage, they appear to have forsaken and Ship harbour is the only place where caught with few exceptions.

Cod were not reported until June 1, and then in fair quantities which continued throughout the month. They were taken in fair catches on July 6, and were not reported again owing to rough heavy seas until the 18th, when good and fair catches were made to the end of the month and throughout August. The fishing was poor for remainder of the season.

Haddock were first reported on May 15, in fair quantities and the catches were similar to cod throughout the season.

Halibut were reported on August 3, and September 10.

Herring first struck in on June 26, in fair numbers and were not seen again until July 3 when fair catches were made. They were again reported fair on of August 13 and 27, but were very scarce until October 11, when a few were taken. The catch is considered a little better than last year's.

Lobsters were reported on May 9, in fair quantities but the fishing was greatly retarded by rough weather throughout the season. On May 21 many lobster traps were destroyed by the heavy seas. The season's catch will compare favourably with last year's.

Mackerel were first reported June 29, when boats averaged 8 and 10 doz. fish. They were taken in fair catches the first and last week in June and also on August 3, when some boats reported 100 fish. During the remainder of the season they were taken in irregular intervals. This fishery showed an improvement over the last catch, but has not been as good as in former years. One reason given is that the fish may pass along the coast either inside or outside off the range of the nets, and only a few may be caught.

Salmon were reported fair on June 16 and 18, and good on July 2. They were again fair on July 27, but scarce to the close of the season. The season's catch was very much better than last year's.

Trout were more plentiful this season than last.

PORT LA TOUR.

Reporter : Mr. J. W. Taylor.

Alewives.—About 60 were reported in nets on May 21.

Cod season opened up on or about May 8 with catches averaging from one-quarter to three-quarter quintals per man to the close of the month. During June bait was very scarce in shore, but both fish and bait were reported plentiful on the 14th. 15 miles off Cape Negro when $\frac{1}{2}$ quintal was taken per man. Strong easterly winds prevented boats from obtaining both branches which struck in plentifully, and everything continued dull until July 12 and the following week when fair reports were received. Bait was again difficult to secure owing probably to the troublesome dogfish which now put in appearance and from this to the remainder of the season very light catches were made. The total season's catch is estimated at 1,000 quintals or 50 per cent below that of last year.

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Halibut were reported only the first week in July in fair quantities, and the catch is 50 per cent lower than last season.

Halibut were reported on October 8.

Herring.—The first report received of this fishery was on July 23, when herring of a small size were reported schooling in this harbour. They were taken on August 10 and 14 in fair catches when boats averaged three-quarter quintal per two men. The off-shore shallows were reported doing very well but inshore dogfish were very destructive to the nets. On September 22 and few days later the boats averaged 5 or 6 barrels of fish, but very few were taken during the remainder of the season. The season's catch is probably about 300 barrels of small size fish salted for lobster bait, and 100 barrels of large fish for exportation.

Lobsters were very scarce during May and averaged one fish to 2 traps and one-quarter large. This continued throughout the season and the catch is considered a scant average. The prices obtained were very satisfactory and the change of the close season our reporter says: "is considered very beneficial to lobster fishing.

Mackerel were reported fair on the 26th of June, but on the 23rd, 500 were reported in nets at West Baccaro, and very light catches were made for the balance of the season.

Pollock.—The catch is below that of the last season, and will not exceed 200 quintals.

Squid were very scarce this season and greatly retarded fishing. On the 14th, of June and August 6, bait were reported fairly plentiful on off-shore grounds and when not obtainable clams were utilized instead.

The American sch. *Henry M. Stanley* arrived (in for shelter) on June 5, with 200 barrels large mackerel bound for Gloucester.

PORT MULGRAVE.

Reporter : *Mr. David Murray* :

Cod were very scarce at this station the past season.

Herring.—The usual spring run of fish was reported very good at Harbour-au-Bouche for the month of May, but very scarce at neighbouring districts. No fall catch reported.

Lobsters were reported good during the season, with prices accordingly.

Mackerel.—The catches of this fish in the spring were reported good but that of the summer and fall a complete failure. The prices of No. 3 mackerel were low, and many barrels remained unsold.

Squid appeared the early part of the fall very plentifully, a considerable portion was frozen and is now being disposed of as bait at Arichat and Canso and some were exported to United States.

The inshore fishery has been a total failure for the last two years, and some boats did not secure even a single mackerel.

After the operations of the spring fishing shall have ceased, many of our young men hire themselves to Gloucester where there are good demands for experienced fishermen. Several who went from here early in the season averaged from \$630 to \$1,500 for extra season's labour.

PORT MALCOLM.

Reporter : *Mr. R. G. Proctor* :

Alwives were taken in light quantities from May 24 to June 10.

Cod.—During the past season, this fishery has been poor, and consequently no reports have been received.

Herring struck in on June 10, and were taken in fairly good catches during the season, up to September 25.

Lobsters and Mackerel were reported very scarce this season, and as a result fishing operations were suspended in both branches.

About 53 vessels, one american, baited here this season, and 1,060 bbls. of bait were disposed of at \$4 per bbl. yielding \$4,240. A very small quantity of fish was salted, as nearly all the fish caught were sold for bait.

EAST PUBNICO.

Reporter: Mr. J. A. D'Entremont:

Cod.—First appeared on May 25, with poor catches which continued until June 16, when good and fair hauls were made which lasted throughout the season. On the whole the season's catch has been considered an average one as the following results will show:—

Schooner "Civilian".....	3,000 quintals.
" "Hazel Glen".....	2,000 "
" "Uncle Sam".....	1,800 "
" "Souvenir".....	1,300 "
" "Aurore".....	1,500 "
	9,600

Haddock was taken in fair quantities during July.

Herring.—The only report this season, was on July 28, when the fish struck off Murder Island.

Lobsters.—The season opened on May 2, with very good catches which only lasted for a short period, afterwards they were poor for the remainder of the season. The catch is considered a poor one.

Mackerel were first taken on May 22, in light quantities, which continued for a few weeks, afterwards becoming very scarce, although large schools were reported off-shore, none came in the harbour.

This branch of the fishery is considered a failure this season.

QUEENSPORT.

Reporter: Mr. W. P. Scott:

Cod when reported during the season were taken in fair quantities.

Herring were reported fair in July. Nothing afterwards.

Lobsters, fair catches were reported on May 2, but for the remainder of the month from good to poor quantities were taken.

Mackerel, a few were taken on May 30, and fair on July 24. On this date they were reported schooling off this station.

Squid first made its appearance on July 6, but were reported in traps on the 20th of same month.

SALMON RIVER.

Reporter: Mr. Thomas O'Leary.

Cod were not reported until July 16, when the catches were good, and on the 20th fair hauls were made. The following day, the 21st, cod were reported plentiful at Sober Island. During the remainder of the season from good to fair fishing was reported.

Haddock, when reported on August 29 were taken in fair quantities.

Halibut were reported good at Sober Island on July 21.

Herring were first reported on August 15, when good catches in nets were taken at Sober Island and were scarce afterwards until September 22, when nets averaged two hrls. A few were reported in nets on September 29.

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Lobster.—This is the only branch of the fishing industry that is prosecuted to any extent at this station and during the past season the operations of this fishery were greatly interrupted by bad weather. On May 1, the fishing was fair and three days later, the 4th, very good reports, were received which varied from this to poor to the end of the month. They were taken in June and to the close of the season in catches varying from fair to poor.

Mackerel were only reported on August 24, when the fishing was fair.

SAND POINT.

Reporter: Mr. R. A. Bolman:

Cod were in fair supply from June 1 to September 30, inclusive. About July 21 the fish were reported plentiful 10 to 15 miles off shore and continued so for a fortnight, when bait became scarce and consequently fishing poor, attributed to the ravages of the troublesome dogfish. On August 27 bait was obtainable and all branches of fishing varied from fair to good until September 26. Bad easterly weather drove the bait off shore and as a result all fish were scarce. On the whole the catches per small boats were light owing to the scarcity of bait and will not exceed 15 quintals per man. Off-shore shallops 800 quintals.

The Bank Queero fleet made fairly good catches with hand lines and salt clam bait. The fleet composed of five sails, each landed half fares on their first trip, in the second they reported full fares. Total catch 10,000 quintals, with 106 men.

Alewives were taken in light quantities from May 1 to June 15, and were used fresh for bait per off-shore shallops.

Haddock, light and regular catches were made throughout the season, and the total catch per small boats is estimated at 200 quintals. Shallops 100 quintals.

Halibut was taken in fair quantities close inshore.

Herring were very scarce the early part of the season up to August 22, when a school of large size fish struck inshore and the catch was far from fair to good up to September 26. Easterly wether then set in and the fish disappeared for the balance of the season. Total catch 1,400 barrels, of which 200 were used fresh for bait, 100 salted for lobster bait and the balance salted for market.

Lobster, fishing commenced on January 1, from that date until the middle of March the catch was fair, when bad weather destroyed the traps and nothing was done up to the middle of April. From then until the close of the season the catch was fair. The lobsters averaged two-thirds large and all $10\frac{1}{2}$ fish were shipped in crates to Boston during the season. Those below $10\frac{1}{2}$ were forwarded to New York in barrels up to April 1. From said date the smaller ones were sold to Lockeport factory. The catch was below that of last season, but, as prices were 50 per cent higher, the results were very profitable for the fishermen.

Mackerel.—The fishing for the past season has been almost a complete failure, there having been but about 20 barrels taken. 14 barrels No. 2 large salted for market. 6 barrels of same quality fresh locally consumed.

Salmon were reported in light catches this season.

SPRY BAY.

Reporter: Mr. Jas. E. Conrad:

Cod were first reported in fair quantities on June 3, from which date until June 9, the catches were poor. Afterwards there was an improvement in this fishery and good catches were made during the month. For the remainder of the season light catches were reported. The season's catch is just one half of last year's as the estimate is 250 quintals.

Haddock were very scarce throughout the season, and the catch will not exceed 50 barrels.

Herring were reported to have struck in on June 2, when for about one week good hauls were made but nothing of any importance was reported until September 14, when they appeared plentiful, and varied from that to scarce for the remainder of the season. Total catch of the season 800 barrels.

Loxster fishing commenced May 2, and varied from good to fair during the balance of the month. Very poor catches were reported to the close of the season.

Mackerel were first taken on May 28, but the catches have been very light throughout the season. Schools were reported near this station on June 20, and again off Tangier on August 6. The catch is estimated at 10 barrels.

Pollock, about 20 quintals were taken during the season.

Dogfish have been very plentiful and troublesome this season, and our reporter writes as follows:—"I think the government could do nothing better for the fishermen than by giving them a bounty of say 25 cents per hundred for dogfish. By this means they would become scarce, thereby allowing other fish that are more useful to be caught, and further adds, he is of the opinion that seining on our shores has a great deal to do with making mackerel scarce.

WHITEHEAD.

Reporter : Mr. J. E. Dillon :

Alewives struck in about May 5, and fair quantities were taken throughout the season. Total catch about 200 barrels.

Cod was not reported until June 9, owing partly to the unsettled weather. From June 16 to August 24 the catches were very light, especially in July when dogfish put in an appearance and bait was hard to obtain. From this date (August 24) to September 11, fair quantities were taken and during the early part of October fair and regular catches were made. Season's catch 3,000 quintals.

Haddock appeared May 26, in good quantities and continued so until June 5. Catch estimated at 1,500 quintals.

Herring was reported on May 5. The fish was scarce during the latter part of the month, but between the 18th and 25th of June some good catches were reported. Fair quantities were taken the first week in July. Dogfish struck off here again on July 10, and all branches were dull from July 10 to August 13. A week later good hauls were reported. Total catch of season estimated at 4,000 barrels.

Halibut was not reported, but the total catch is estimated at 2,000 lbs.

Loxsters were fair May 5, and were taken in light catches until the close of the season. Season's pack 3,000 cases, an increase of 1,000 cases over last year.

Mackerel were first taken May 26, in large quantities. 3,000 were reported in one trap on the 28th. During the early part of June the catches were poor, but from the 20th to July 4, some boats averaged from 100 to 600 per boat. Season's catch 1,500 barrels.

Pollock were reported plentiful June 2, and 40 quintals were taken on the 4th in traps. Some good catches were reported during the season. Catch estimated at 1,000 quintals.

Salmon.—Although not regularly reported, the catch is estimated at 4,000 lbs.

Squid was difficult to procure the early part of the season but were reported plentiful in the month of October.

Nearly all the fishing boats were damaged or destroyed in the hurricane of October 11.

WOOD'S HARBOUR.

Reporter : Mr. W. Luther Crowell.

Cod.—This branch of the fishing industry was dull this season owing to the scarcity of bait.

Herring struck in on September 1, and very small catches were made up to the 15th after which none were caught.

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Mackerel were first taken in traps on May 15, and only a few were reported up to June 1. Total catch below an average.

Lobsters were taken in fair quantities from December 15, 1899 to February 1, 1900 and from March 1 to May 15, afterwards were scarce, making the season catch an average one.

YARMOUTH.

Reporter : Mr. F. L. Hatfield.

Alewives were taken on May 1 in fair quantities, and fairly good catches were made during the month. The total catch is reported better than last year's.

Cod appeared in fair quantities on May 12, and the average catch for the balance of the month and also in June, was reported fair. During July the troublesome dogfish was plentiful, and all branches of fishing were dull until the 13th, when codfishing was fair. They were also taken in fair hauls on the 17th and 30th. Fair reports were received on August 6 and 8, and poor afterwards until September 10 when a few were taken. The local boat fishing was not as good as last year's, and the total catch is considered not up to the average.

Haddock were reported on May 18 in fair quantities, and throughout the season were taken in similar catches to cod.

Halibut.—Fair catches were reported from May 1 to 25, and also on 7 and 8 June. Very little was done in this fishery for the remainder of the season.

Herring were first reported on May 15, when a few were taken in nets. They were very scarce until June 19, when one trap reported 12 bbls. of small herring. On the 28th, 100 small fish were taken in traps at Murder Island. Dogfish now put in an appearance and everything was dull until July 30, when heavy schools of medium and small herring were reported on shore. The fishery improved somewhat in August, and on the 2nd herring of a large size were reported plentiful and again on the 20th. A few were taken on September 10, but scarce afterwards.

Lobsters.—Fair catches were made on May 2, and high winds prevented further fishing until the 10th, when fair reports were again received and continued so up to the 31st. On this date they were reported plentiful, and good catches were made. There were 19 factories large and small engaged in this fishery this season, and the total output is estimated at 20,000 cases. The catch is considered about the same as last year's.

Mackerel were first taken this year in Yarmouth bar trap on May 14, and on the 16th, 79 barrels were trapped at Cranberry Head. On the 23rd, four traps had 80 barrels fish and seven traps reported 325 ice barrels on the 25th. During the remainder of the month and also in June good reports were received from the traps. On June 2 the traps were damaged considerably by heavy seas. Mackerel were scarce afterwards up to August 8, when 1,000 medium were taken in nets. The catch was not up to the average of last year's.

Salmon were taken in fair quantities in May.

Shad were reported plentiful on May 12 and 14, but scarce after.

Smelts.—Fair quantities were taken on May 12 and 14.

Trout were taken in catches varying from very good to fair in May.

WEST ARICHAT.

Reporter : Mr. C. P. LeLacheur.

Alewives.—The catch of these fish is steadily declining each year; this season being the poorest ever known.

Cod.—Codfish struck in about June 1, and light catches were made daily during the month. In July and August the catches varied from light to fair, but through the remainder of the season was poor. During the first part of June and again in September, scarcity of bait prevented successful fishing. The total catch this season is estimated to be the smallest in many years.

Herring were first taken about June 20, and light catches were made on the in-shore grounds for a few nights. From the middle of July to August 15 fair to good catches were made off shore. The fishing, however, was variable and the total catch is considerable below the average. The price ruled higher this season than last, and this to a certain extent will make up for the shortage of catch. The fish were of a fine quality and no difficulty was experienced in curing those taken in August, as was the case in former years.

Haddock.—Light catches of haddock were made in June and July, but through the remainder of the season the fishing was poor. These fish are not taken now in as large quantities as was the case some years ago and a marked decline was noticeable in this summer's catch compared with last. Late fall and winter trawlers, however, have often reported good haddock fishing in this bay.

Lobsters were taken first here on April 14, and fair catches were made daily until the end of the month, when they commenced falling off and continued to decline from day to day until June 16, when the fishing stopped. The total catch at this station is estimated one-third better than last year's, and as prices were good throughout the season our fishermen were well remunerated for their hard labour.

The weather this season was favourable for fishing, no drift ice interfered with the work, and although sometimes rough, no time was lost through bad weather. Our fishermen moved their gear into deeper water this season, where, with a reduced number of traps, better results were obtained. The greater part of the lobsters taken here were canned, though several shipments of live lobsters were made to the United States.

Mackerel.—Made their appearance about the latter part of May but very few were taken until the last of June, when a small catch of medium sized fish was made. Light catches were occasionally made during the first week of July, but the total catch was very light scarcely exceeding one hundred barrels.

On the whole the fishing at this station has been poor this season. There is a shortage in the catch of cod, haddock and herring, lobsters only having shown an increase. Our fishermen contend, that, had they means of procuring a steady supply of bait, a far better result might be had in the catch of cod and haddock.

ARICHAT.

Reporter: Mr. J. T. Jean.

Cod.—Few cod were taken the earlier part of the season but the first report of any importance was received on August 3, when the catches were fair. They were again reported fair on the 14th and 18th, and were poor afterwards until September 2, when bait was poor amid a season's plenty. In October fair fishing was reported and several good hauls were made.

Haddock were first reported on May 25, and were taken in quantities varying from fair to poor until October 9, when they were reported plentiful. The spring run of haddock our reporter says, was very late, and the catch small, and further adds, that the chief advantage of an early run of haddock is that the heads are used by the fishermen for lobster bait, when the latter is scarce.

Hake were only reported on June 2, and then in good catches.

Herring struck in on June 18, in fair quantities, but the catch has been very poor throughout the season.

Mackerel were reported fair from June 21 to 27, and again on July 10 and 11, but the catches of both herring and mackerel are considered the poorest for a number of years.

Lobsters. Fair catches were made during the month of May, but were scarce afterwards to the close of the season. The catch is considered a fair one but as prices were high a large number of fishermen realized fair proceeds.

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CHETICAMP.

Reporter. Mr. Chas. E. Aucoin.

This fishing district is composed of the five following stations viz. Cheticamp proper, Cheticamp island, Pleasant bay, Cape rouge and Grand Etang. The two first named stations have gone pretty much hand in hand throughout the season—the fluctuations in quality and quantity of the one corresponded greatly with those of the other. In the descending order of magnitude the station of Cape Rouge has been placed last, a somewhat remarkable thing, as that station had always excelled any of the others in the mackerel fishery. One new boat was registered this year, making the total number now at twenty-two. The majority of those boats belongs to the fishermen themselves, the rest are owned by the merchants.

Cod were not reported until May 29 owing to the large quantities of ice which remained on shore during the early part of the season. A few fish, however, were taken in nets on the 14th and the average catch in June and July varied from good to poor. In August the catches alternated from fair to poor to the 17th, when there was a lull and nothing was done until the 25th. On this date and for the next four days the fishing was fair afterward becoming very good on the 31st. Fair catches were reported on September 5, 6 and 27, but poor for the remainder of the season.

Haddock were reported fair on May 26 and were taken in similiar catches in June. The July and August catch varied from good to fair and on September 5 and 6 fair reports were also received.

Hake.—Fair reports were received on May 29 and again in June and July but nothing afterwards. Cod, hake and haddock have shown better in quality than in quantity and there is no doubt that a highly exceptional school of them has this year struck our portion of the Gulf.

Herring as usual struck in early about May 9, but in small quantities. A few were taken in nets, but the greater part which was used by the fishermen for bait purposes was obtained from the Magdalen Islands where it is teeming a large portion of the spring. Of the herring which frequent our coast, it may be said that the spring species is very lean and is almost wholly unfit for domestic use; whereas, the fall one is a short, thick, fat herring, very tasteful, a palatable dish which would grace the tables of many a stately dining-room. This sort of herring will enter bays and inlets for the purpose of depositing their spawn. Generally, a fair quantity is captured.

Halibut were reported in fair quantities on August 4, and is now looked upon as a fish of the past. Still, a revival in the catch of this fish has been shown at Cheticamp Point this year, when a few were got varying from thirty to one hundred pounds in weight.

Lobsters were plentiful on May 9, and were taken catches varying from good to fair up to 20, when they were scarce for the remainder of the month. The traps were considerably damaged by N.W., gales on or about the 19th. During June the catches were light until the close of the season. The impediment to the success of this fishery has been the usual gales of April and May incurring heavy losses to the fishermen in damages to lobster traps. It seems that the quality of lobster is much more inferior now than it was ten or twelve years ago. The quantity also seems to have greatly diminished. This is attributed, no doubt, to the ravages done to seed lobsters, for it is very certain that every year sees the destruction of hundreds of these crustaceans.

Mackerel.—First appeared on June 2, when from 10 to 40 were caught. They were reported fair on the 5th, and varied from this to poor during the month, excepting the 13th, when they were plentiful. Mackerel were again plentiful on July 23, and fair on August 9, when one boat captured 200 fish. Good reports were received from the Island on the 30th, but this fishery was poor afterwards until October 15, when fair quantities were taken. Mackerel has a poor record, probably the poorest in the history of the fisheries. It struck the shore in numerous shoals, but merely on a flying visit, giving the watchful fishermen an opportunity to

catch a few barrels. Everything tends to show that this fish will ere long forsake our shores. Since a few years, its play on the coast has been very singular, and to all appearances, it does instinctively seek a greater suitability in well provided grounds.

Salmon appeared in fair quantities from June 21 to 25 inclusive and were scarce afterwards until the 30th, when they were reported very plentiful in Little River, with pools pretty full. The catch in July varied from good to poor and they reported fair on August 4, but poor for the remainder of the season. Salmon has paid fairly well but better with the nets set at ocean than with those in Little River. Owing no doubt to the enforcement of existing regulations by the Fishery Overseer and guardians, the salmon netter has been very much harassed. The pools have been full a large part of the summer, and left quite undisturbed. Nothing outside of what was casual has hindered the retreating salmon from perfecting their spawn.

Squid were first taken on July 21, in fair quantities and the catch varied from very good to poor throughout the season. This fish is quite indispensable to codfishing and a great boon to fishermen. It is a singular fact that after a moderate breeze or even the slightest disturbance of the waters, it will sink, and not to reappear again on the surface for some time. It has also been said that rain was very effectual in causing squid to vanish, and that the fishermen were almost sure to be handicapped on the day following a rainy night. The question of erecting a bait freezer at Cheticamp proper has been brought up this summer, but without any final result.

Trout were reported very plentiful on June 7.

Dogfish appeared on the coast this season about August 4, and doubtless has caused great havoc and depredation among all kinds of fish. It would be considered a wise course for the Government to make provisions for the entire annihilation of this fish, as in all probability it will in a very short time reign supreme.

Smelts.—Our reporter calls the attention of the Fishery Bureau, to a better protection service in the smelt fishery and says:—"I am fully aware that millions of these make their way up the Cheticamp River in the early spring and a great portion of them are totally destroyed. I have been a witness to thousands of these tiny fishes spread about on both banks of the river with their yellow spawn most pitifully withering in the sun.

DESCOUSSE.

Reporter: Mr. R. F. Burke:

Cod.—The inshore cod fishery was very poor this season, and was not reported until July 27, when fair catches were made. The smaller boats catch totalled 40 quintals, but the offshore fisheries were more vigorously prosecuted by the usual 5 sails, from this station, and their season's catch is estimated at 2,200 quintals.

Hake.—The only catch reported during the season, was on May 30, when fair catches were made.

Herring struck in on the 16 and 26 of June in fair quantities. Nothing was afterwards reported until September 3, when for the following five days good catches were made. The catch, however, is considered a failure, not over 50 barrels taken the whole season.

Lobsters were taken in good quantities on May 2, and fair catches were reported for the balance of the month, which continued until the 15 of June, afterwards becoming scarce to the close of the season. The fishery this season is in advance of last year's, both in regards to quantity and quality of the fish. Season's catch about 1,500 lbs.

Mackerel were first reported in nets on May 30. During June some netters averaged from 40 to 200 fish. They were again reported fair on July 27, and also on September 6, when few were taken in nets and by hooks. Although mackerel remained in the bay longer than any previous year, the catch is reported as an exceedingly small one, and 7 barrels will represent the inshore fishery for this season. 50 barrels were taken offshore by the five vessels fishing out of this station this season.

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GABARUS.

*Reporter: Mr. R. McLean:**Caplin.*—Very few were reported during the season.

Cod were caught on May 26, in light quantities until the 8 of June when they were first reported fair, with boats averaging from 2 to 4½ quintals, after which the fishery steadily improved and from the 12 to the remainder of the season codfish was very plentiful and some good catches were made. The fishery, at times, was greatly handicapped by the scarcity of bait and also by unfavorable weather. The fall fishing is considered a failure as stormy weather, gales of wind, and rain have continued since September. One whale boat was wrecked on the 19 of September. Had favorable weather prevailed, good hauls would have been made, as report has it that cod were plentiful. It is reported on the 7 of November a few boats out of Foucher captured 7 quintals of cod. Season's catch 1,750 quintals.

Haddock were not reported, but 80 quintals were taken during the season.

Herring struck in fair quantities about June 26, when they gradually improved and on the 30. 800 and 500 were reported in nets. During July a fine run of large fish appeared in the bay and good catches varying from 700 to 2,200 were made in nets. To the close of the season fair catches were reported. Notwithstanding the unsettled weather throughout the season, the catch of 750 barrels is considered a good one and is 211 barrels in excess of last year's, which was the best catch reported at this station for the past 18 years.

Lobster fishing opened fair on May 8, and continued so for the next twelve days, when rough weather greatly interfered with the fishing for the balance of the month but to the close of the season fair and regular catches were reported. The catch for the season is considered a good one.

Mackerel.—About 30 fish were taken first in deep water on the 25 of May and continued light until the 31, when boats averaged from 200 to 1,900 fish. The early part of June several good hauls were reported, and catches ran as high as 1,000 mackerel. The season's catch of 280 barrels is considered a good one, and is 200 barrels more than last season.

Pollock about 20 quintals were taken during the season.*Squid* appeared September 6, in the bay, but would not jig or land.

HAWKESBURY.

Reporter: Mr. J. C. Bourinot:

Alewives were reported very plentiful on June 22, but scarce afterwards to the close of the season.

Cod were only reported on June 4, when the fishing was good.

Herring struck in on June 18, plentifully, and on the 22nd very good catches were made. They were fair on the 25th, and scarce after until the September 11 when fair quantities were again taken. Herring were reported very plentiful on September 15, and poor for the balance of the season.

Lobsters were taken in fair quantities on May 2, and the season's catch varied from good to poor.

Mackerel were reported during June and July in catches varying from very good to fair. Nothing after for the remainder of the season.

INGONISH.

Reporter: Mr. J. M. Burke:

Cod, the fishing season opened during the first week of May when for about ten days the catch was very good but there being so few engaged at this branch only a small quantity was taken in comparison to others years. The fish were fairly plen-

tiful during the remainder of May, also in June and July, and in fact throughout the season the catch per boat is far below the average.

Haddock were taken first about the middle of May and were in abundance for about ten days. The schools lasted three weeks and the few engaged at certain trawling grounds at this station reaped a great harvest, as there are only a few places where haddock can be caught and therefore those that get those berths first are the only ones to profit thereby.

Herring. The spring run struck in the first week of May in small quantities and were used entirely for bait for cod and lobster fishing. There were a few summer herring this season, but not enough were caught even for home consumption.

Lobsters were taken the first week of May and the second week saw all the factories in full operation. During the first six weeks the catch was a fair one, gradually decreasing towards the middle of July, when they became very scarce owing somewhat to a scarcity of codfish offal which is largely used for bait.

Mackerel visited this station between May 18 and 25, and were quite plentiful for about a fortnight. They were chiefly of a medium size, and boats got from five to fifteen barrels, according to their outfit of nets and attention paid to them. The spring catch of mackerel was the largest for a number of years. A few summer mackerel were taken in shore-fast nets in July and August. None were taken after September 1.

Salmon appeared the last week in May and the catch was small all through the season. Fair prices were obtained for both fresh and salted fish. The season's catch was far below the average.

Squid was reported between July 1 and 10, in fair quantities, but was very irregular throughout the entire season.

L'ARDOISE.

Reporter : Mr. John M. McIsaac.

Cod were not reported regularly, as this important fishery is not prosecuted to any extent and the catches were poor throughout the season.

Haddock appeared in fair quantities on May 28, and a few days later. Light catches were reported from June 4 to 9 and continued poor for the remainder of the season. The catch is considered a very poor one, in comparison with former years, as this fishery was the principal line one at this station.

Herring were very scarce in the past season, the boats getting scarcely sufficient for local use.

Lobsters were reported on May 9, and were taken in light and regular catches until June 23, afterwards becoming scarce to the close of the season. The catch is reported a fair one, but as prices obtained were higher, the results have been considered vary good, if not better than in former years.

Mackerel first appeared May 29, fair in deep water and very scarce in shore. On June 4, light catches were also reported but nothing afterwards. Mackerel is getting scarcer each season but of a finer quality, and the catch this season is considered 25 per cent, both numerically and financially below that of last years.

LOUISBOURG.

Reporter : Mr. H. C. V. Lavatte.

Cod were taken on May 31, with boats averaging 1 quintal. The catch in June and July was on an average fair. They were again fair on August 9 and afterwards poor, owing to the scarcity of bait and the presence of dogfish until October 3, when boats averaged 2 quintals.

Haddock were reported on May 31, and were taken June in catches from good to fair. A few were reported on September 5.

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Herring were taken in fair quantities during June and July. On June 6, boats averaged 100 fish and 2 brls. were taken on the 11th.

Mackerel were reported on May 26, when boats averaged 30 fish and on the 28th 2 brls. were caught. On June 7 and 12, they mixed with herring and 100 were taken per boat. Fair quantities were reported on June 23 and 29, and poor after until August 30, when a few were hooked. A small quantity were jigged on September 5.

Lobster fishing commenced May 12 with fair prospects and continued, so to the close of the season.

MABOU.

Reporter: Lewis McKeen.

Cod were reported about May 18, and were numerous up to the end of the month. After that period fresh bait become scarce and as the fishermen were chiefly engaged in prosecuting the lobster fishery, very little attention was paid to that branch of fishing industry.

Herring made their appearance first on May 5, and were plentiful till about the 19th, when they slacked off. The July catch was almost 'nil'. Owing to boisterous weather very few fall herring were netted.

Mackerel was first reported on June 25. During July they were very plentiful; large schools appearing frequently and were of large size, but as they would not take the hook the catches were light on account of not meshing well.

Lobsters were first reported on May 6, the first catch being packed on the 7th, which was some ten days later than in 1899. The catch was fair up to the 29th. During the remainder of the season the pack was somewhat below the average. The catch for this season was a little less than that of 1899, which was partly due to the fact that the season was some fifteen days shorter than usual.

Throughout July and up to August 17, fishing was poor, after that date line fishing improved and during the remainder of the month and part of September, cod and hake were plentiful. A large number of boats and nets were destroyed by the hurricane of September 13, and as dogfish had previously appeared on the fishing grounds, fishermen decided not to prosecute the fisheries any longer.

MARGAREE.

Reporter: Mr. M. A. Dunn.

Alewives struck along the coast early in May in very light catches, and whatever was caught during the latter part of the month.

Cod.—The first fishing reported was with trawls, on May 16, and the catches both with hand lines and trawls were light until about June 15, after which good hauls were made whenever the weather permitted and bait was obtainable. On the 25th, from 200 to 400 per boat were taken, and from this date to the end of the season the catch varied from good to poor. During the latter part of the season the destructive dogfish lessened the catch of this fishery as well as the other branches of the fishing industry considerably. The season's catch is considered, however, about an average one.

Haddock and Hake.—The former made its appearance about June 9, the latter on or about July 20. No large fares in these branches were reported, but the catches varied from fair to poor during the latter part of the season.

Herring first appeared about May 12, but in light quantities until about July 3. Good catches were made to the 18th, when from 50 to 100 were taken in nets. Fair fishing was reported from the 21st to 26th, and on the 27th, they were reported taking the hook freely at Margaree Island. During August and September, when circumstances were favourable the catches were good, but owing to stormy weather and the large quantities of dogfish around the coast, it was only seldom that nets

could be kept in fishing order, and later in the season, the nets were not out at all. The fishermen report more herring this season than has been for some years.

Lobster fishing commenced about May 8, and continued good until June 1, afterwards gradually decreasing to the close of the season. During the best part of the lobster season, the weather was rough and as a result, the catch was small. On July 8, the lobster gear was out of working order on account of the past storms. It is reported that the quantity on the coast was as good as formerly, but the season's catch was somewhat smaller.

Salmon were first reported on June 6, and the catches were light to July 1. On this date good catches were made which continued up to the 20th. During the remainder of the season the catch gradually slackened off and is considered an average year's.

Mackerel were reported on June 27, and were light both in quality and quantity. Only a few were taken up to July 14, when a small catch of large fish were made. On the 23rd, from 50 to 200 were taken in nets and a little later large schools were reported on the coast, but would not take the hook. During August, from 100 to 200 were taken with jigs and from 100 to 300 per boat were reported. Nothing was done in this branch for the remainder of the season, and the catch has been almost a total failure.

Squid appeared on July 23, and were taken in quantities varying from good to poor for the balance of the season.

Trout were taken in fair quantities on May 19 and 21.

MEAT COVE.

Reporter: Mr. A. B. McDonald.

Cod.—This very important food product is not prosecuted here to any extent, as the fishermen cannot find a market to reward them for their labours, and only sufficient is taken for home consumption.

Herring were first reported on May 16 in fair quantities and continued so until the 23rd when they became scarce. Fair catches were made the first week in June, afterwards poor throughout the month. Towards the latter part of August they became more plentiful and good catches of a superior quality were reported.

Lobsters.—The fishing was a fair average and catches were very regular throughout the season. The weather was favourable, and the fish was fully up to size of former years.

Mackerel was a complete failure this season, only fair catches being made in July in nets. Several schools were noticed along the shore, but would not take the hook. This fish for some reason unknown is abandoning their haunts here each year and not more than 20 barrels were taken.

Dogfish were plentiful and very annoying this season, and a number have been taken for their oil.

PETIT-DE-GRAT.

Reporter: Mr. Peter T. Fougere.

Cod were reported about May 26, when 100 were taken per boat. The June catch was poor and the catches for the remainder of the season were fair whenever the weather was favourable. On September 29 arrived the schooner *Bonnie Glen* with 110 quintals, and *J. B. M.* with 80 quintals from North Bay.

Dogfish appeared in August and have been very troublesome and destructive for the balance of the season.

Haddock were first reported on trawls on or about May 19. On the 26th 100 per boat were taken, and the catch was very light for the remainder of the season.

Hake.—The inshore fishery was not reported, but the schooner *Vanguard* from North Bay reports one trap of this fish.

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Herring were reported on July 28 in nets and on 11 August, 100 barrels were caught and sold for \$4.75 per barrel. Schooners *Iona* and *Baleka* arrived in port from Grand Banks with full fares on the same date and are seeking to sell. Two vessels from Magdalene Islands with 40 barrels and 70 barrels respectively arrived in on August 4, and on 22 September 150 barrels were captured.

Lobsters were reported on May 1 in fair quantities, and the catch to the last of May varied from good to poor. During the remainder of the season from fair to poor catches were reported. The prices averaged in May from \$3 to \$3.50 per cwt.

Mackerel were reported the first week in June and on the 16th two vessels from here arrived from Magdalene Islands, one with 50 barrels, the other with 65 barrels, and reported mackerel plentiful at the Islands and all vessels with full fares. One vessel arrived on August 11 with 14 barrels.

Salmon were reported June 5, and fair quantities were taken during the month and the first part of July.

Squid was late appearing here and greatly retarded fishing, fair catches were reported later in the season.

PORT HOOD.

Reporter : Mr. E. D. Tremaine.

Cod made their appearance on May 22, with fair prospects, which was a week later than last year. On the 30th inst. they were reported very good and from that date until June 7, fair catches were made when the fishing became poor up to July 14. For the next ten days fair fishing was again reported afterwards becoming poor, with few exceptions, for the remainder of the season owing to the scarcity of bait and to the voracious dogfish. The catch is considered below an average.

Haddock were reported plentiful on May 31, and were taken in fair quantities during the season, excepting the months on August and October when they were scarce. The catch is about an average one.

Hake did not appear until June 14, and the catches were poor until about July 9, when fair fishing was reported daily. During September the catch varied from good to fair and better results would have been obtained had not the unwelcomed dogfish put in an appearance.

Herring struck in on May 7, and from this date until June 3, were on an average fair, after which the fishing was poor for the balance of the month. Fair quantities were reported on July 5, and at intervals, during the remainder of the season. The fish caught during the summer and fall were large and of a good quality.

Lobster fishing commenced the last week in April and the catches were reported good until the latter part of June, when the fishing was poor and continued so to the close of the season. The catch this season, however, is considered a good one.

Mackerel were taken on July 18, and the next ten days in fair quantities. They were also reported fair on August 9 and 27. The catch is considered a poor one, not over 100 brls. taken the whole season.

Squid.—Fair catches were reported between July 26 and 28.

Dogfish.—Although not so plentiful as in former years were very destructive particularly in September, when the operations of the cod, haddock and hake fisheries were very much retarded.

ST. ANNS.

Reporter : Mr. Thos. D. Morrison.

Cod were very scarce the early part of the season and as far as reported the only catches made during the entire season were from June 9 to 26, when from good to poor hauls were obtained daily.

Herring.—On April 16, the harbour was clear of ice and light catches of herring were made until the 20th, when drift ice prevented fishing for six days. Herring, however, struck in very plentifully on May 1, and remained so for the next

six or seven days, when good catches were made up to the 11th. From now until the 15th the fishing was fair. Excellent hauls were made to the 27th, and afterwards poor until July 3, when fair fishing was reported daily to the 11th. Nothing was done afterwards.

Haddock.—During the first week in June fair catches were reported daily, which continued to the 12th. Fishing was poor after in this branch.

Lobsters were reported fair on May 5, but from the 8th to 24th, good and regular catches were made each day. On the 26th and 28th fair reports were received, after which the fishing was poor until June, when fair quantities were taken. On May 28 the lobster traps were wrecked by storms which left the catch small.

Salmon were taken in fair quantities each day from June 16 to 23 but on the 25th were reported plentiful.

Squid were reported on June 12, three weeks earlier than usual, and were taken in catches throughout the season from very good to fair. Ten bankers baited here in May, and some reported fishing good on the banks.

ST. PETER'S.

Reporter : Mr. H. D. Urquhart.

Alewives.—When reported were scarce. About 5 brls. were taken this season.

Cod and Haddock.—Nothing was done here this season in these branches, but the Grand Bank fishermen all made good fares and reported cod plentiful off shore.

Herring struck in on May 10, when fair catches were made. They were not reported afterwards until July 17, when the run struck in large numbers and about 50 brls. will represent the total catch.

Lobsters.—This branch of the fishing industry opened between April 10 and 15. During May the catch varied from fair to poor, but improved somewhat in June, when regular catches were reported daily. There was a greater number engaged in lobster-fishing this season than any preceding year. The catch is considered an average one.

Mackerel first appeared May 25, and were of a smaller size than those of the year previous. They did not come in the bay, the catches being made off L'Ardoise. In the second run, 15 brls. were captured (No. 3). During August a few brls. of number two's were taken.

Salmon.—The catch this season was fair, about 30 brls. were taken.

PRINCE EDWARD ISLAND.

ALBERTON.

Reporter : Mr. J. P. Brennan.

Cod were first reported on May 25, and fair catches were made from that date, with few exceptions to July 5, after which the fishing was poor until August 3, when fair hauls were taken throughout the month. From September 10 to 22, the catches varied from good to fair. Very little was done afterwards, particularly in October, when the fishing operations in general were entirely suspended.

Haddock were taken in fair quantities on August 13 and 15, but poor after in this branch.

Hake were not reported until September 6, and then in fair quantities. From the 10th to 16th they were plentiful and good hauls were taken daily. On the 18th, they were reported in fair catches which continued up to the 22nd, but poor after.

Herring were first reported on May 2, when they struck in at North Cape, Tignish, and also this station. They appeared very plentiful on the 5th and for the next five days good catches were made. During the last two weeks of the month the catches varied from fair to poor and were scarce after for the remainder of the season.

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Lobsters were taken in very good quantities on May 5, but the catches at this station were from good to poor to the close of the season. Very stormy weather prevented successful fishing this season.

Mackerel appeared 10 days earlier than last year, and were reported fair from May 19 to 24. They were reported in nets on July 3 and the catch for the balance of the month was fair and was again fair on August 6. Nothing was afterwards reported.

Bait was obtainable the greater part of the season at this station.

BLOOMFIELD OR MIMINEGASH.

Reporter: Mr. John Doyle.

Cod were not reported until June 5 and up to the 13th, were very plentiful and from now to the end of the month were taken in fair catches. From July 3 to 11, and 27th to 31st fair hauls were made. During August the catches varied from good to poor for the entire month. The fishing was fair on September 3 and 4, but nothing was reported after owing to the stormy weather, which suspended fishing operations for the remainder of the season.

Hake appeared in fair quantities on July 28, and remained so with few exceptions to September 4. Bad weather prevented a further prosecution of this fishery.

Herring struck in fair quantities on May 8 and continued so to the 19th. On the 22nd they became quite plentiful and the catches until the 25th were good, after which they were scarce to the close of the season.

Lobsters were reported on May 8, three days earlier than last season and were taken in catches varying from fair to poor up to and including the 21st. They were scarce to the end of season, owing to the disagreeable weather which greatly impeded the fishing.

Mackerel were first taken on June 13, when a fair catch was reported in nets. They were scarce after until July 10, when they were reported taking the hook freely at West Point—a distance of about 20 miles west—Good catches were made from the 13th to the 17th and on the 27th, they were reported schooling on the coast. The first week in August saw the fish fair and on the 10th mackerel were plentiful but would not net or take the hook well.

The fall-fishing in general, this season, has been greatly retarded by the very disagreeable weather which has prevailed from the beginning of the second week in September to the remainder of the season.

GEORGETOWN.

Reporter: Mr. Chas. Owen.

Codfish struck in shore about May 26 and good catches of large fish were made up to June 15, when a small sized run of cod appeared plentifully to the 30th, and bait becoming scarce the fish moved off to the banks where fishing was reported good while bait could be procured.

Hake has been plentiful this season and a much larger quantity landed than in previous years. During the latter part of the season the weather was stormy and interfered very much with the fishing, the fishermen being obliged to leave their trawls and seek shelter. The amount of destruction and loss of nets and trawls by the severe hurricanes which swept this coast has been a serious drawback to the fishermen who have to bear the entire loss.

Herring fishing commenced about April 15 when only a few were caught daily. From April 20 to May 25 the catch improved and large quantities of lobsters were reported in the Bays and rivers, with good netting up to the end of the month. Bankers began to arrive seeking bait on April 9 and continued arriving up to May 31. Small fat herring were plentiful during the latter part of October, in the rivers and bays. The quantity secured for lobster and cod fisheries is estimated at about 5,000 barrels.

Buildings are now being erected here for the curing and smoking herring industry, and it is hoped that during next season a profitable business will be conducted.

Lobsters were reported about May 1, from which date good to fair catches were made to the 22nd. On the 15th, traps averaged 3 and 4 barrels, and owing to a greater number of traps in use, the catch per trap was less. The catch is somewhat larger than for 1899, and the season's fishing has been profitable both for fisherman and packer.

Mackerel were first reported when they were seen schooling off Panmure Island on June 9. They were again reported similarly on the 18th. The fishing has been better this season than for some years past. The catch has not been large and netting was the chief means of capture. All attempts with hook and line proved a failure with the exception of an occasional spurt. A number of schools were observed between Pictou and Boughton Island and on several occasions it has been observed that schools of mackerel played close to nets and avoided them, or only a small number would be found meshed.

MALPEQUE.

Reporter: Mr. Jas. McNutt.

Cod appeared in fair quantities about May 25, and varied from fair to poor in the months of June, July and August. During the balance of the season the fishery was interrupted by windy weather, but the catch is considered a fair average one.

Herring appeared about May 1, in fair quantities, which continued so until the 10th, when they were plentiful and good catches were reported, the fishermen getting sufficient for bait and home consumption.

Lobster fishing commenced about May 10, and the catch was fair until June 5, afterwards becoming poor until the close of the season. On May 14, the catch averaged 100 per boat. The total season's catch was below that of last year's but the prices obtained were higher.

Mackerel.—This fishery was better in comparison to the last few years. They appeared quite plentiful during July and part of August, but scarce afterwards. The greater quantity of those taken in July was of a very inferior quality. Mr. McNutt says, 'I would suggest that the taking of mackerel in nets during the month of June be prohibited, for they are of a very poor quality and of little profit to any one, besides killing the spawned fish.'

NEW BRUNSWICK.

CARAQUET.

Reporter: Mrs. E. Blanchard.

Cod were taken in catches varying from good to fair throughout the season.

Herring.—A few were reported the early part of the season in nets but on May 9, from 5 to 10 bbls. were netted. They were not afterwards reported until August 2, when good stops were made.

Lobsters—Fair quantities were taken on May 28 and June 19.

Mackerel were reported fair on July 3.

Clam bait was plentiful during the season.

ESCOMINAC.

Reporter: Mr. J. J. Keary.

Cod were reported in fair quantities from June 15 to 20. On the latter date they were reported plentiful and afterwards scarce until the 25th when good catches were again made.

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Herring struck in plentifully on May 9, and were taken in catches varying from good to poor for the balance of the month. This fishery, like the other branches of the fishing industry, were not reported regularly, but the total catch for the season is considered a good one.

Halibut were reported very plentiful on May 14.

Lobsters were reported fair on May 8, and plentiful on the 12th. The catches varied from fair to poor for the remainder of the season. The season's catch is considered a poor one.

Salmon were taken in fair quantities on May 28, and during the balance of the season from good to fair catches were reported. The catch this season, was a good one.

Shad first put in an appearance on May 26, in fair quantities, but improved in June and were taken in catches from good to fair during the month. The catch this season was a poor one.

Mackerel first appeared on June 22, and the catches were fair until the 26th. About 1,800 fish were taken at this station this season and the catch is considered a poor one. A portion of the salmon and mackerel catch was exported fresh, and the remainder was frozen.

GRAND MANAN.

Reporter : Mr. Charles Dixon.

Cod appeared on May 12, when one small boat reported a catch of 2 quintals which was the first for the season. The first dispatch was received on the 17th, and reported cod very plentiful and continued from this to fair throughout the month, with boats averaging from 4 to 6 quintals a day on bulk head and hand lines 6 quintals. During the first week in June the fish were very plentiful, but fair for the balance of the month, and also throughout July, afterwards becoming scarce for the remainder of the season. The total catch is about the same as last year's, 500 quintals.

Haddock were also reported on May 17, and in very good catches which lasted to the end of the month. Throughout June and July the catches varied from very good to poor, and in August and September from fair to poor. During these two periods some good hauls were reported and the season's catch is estimated at 800 quintals or an excess of 300 quintals over last year's.

Hake were first reported on June 3, when 3 quintals were taken per boat. Light catches were made until July 3, when they appeared very plentiful and were taken in catches varying from very good to poor throughout the balance of the month and also in August. Some boats had from 2 to 6 quintals. During the early part of September from very good to fair catches were made, but nothing afterwards. Season's catch 3,500 quintals or a decrease of 500 quintals in comparison with last year's. 300 barrels fish oil were put up this season.

Halibut were reported on June 16.

Herring were reported on May 13 at Dark Harbour Pond, but of a very inferior quality. They did not appear again until July 23, when herring of a large size were reported on soundings and in nets, some nets averaging 2 barrels fish. They were also reported on July 29, in weirs at Long Island and in nets at South Head. In August the fish were reported plentiful at South Head and on soundings. During September good netting of large fish were made at South Head. Few were taken in weirs at Cheney's Head, in October but were too small to be utilized for any purpose. 5,000 half-barrels of pickled herring were taken and 600,000 boxes of small size fish or 'medium' were smoked. About 15,000 barrels of fresh fish were exported to United States. The output of one kippered herring factory at North Head was 2,000 cases, or about 100,000 lbs. fish.

Lobsters were reported on May 17, in fair quantities and the fishing was considered good to the close of the season. This season two factories canned 300,000 lbs., and about 150,000 lbs. of fresh lobsters were shipped to United States-

Mackerel were reported schooling off Pointe Lepreaux on August 19.

Pollock were plentiful during the season and about 4,000 quintals were taken. On May 27, one American schooner was reported soiling and returned home to land fare, and about one month later on June 26, American and other vessels were reported destroying pollock with dynamite off the old ledges.

Squid were very scarce during the early part of the season, but from the middle of July, herring bait was obtainable for the remainder of the season.

Dogfish appeared plentiful the latter part of July and also during the month of August.

SHIPPEGAN.

Reporter: Mrs. A. Hammon.

Cod was first taken about May 29 in large quantities. During June the catch was fair and regular, afterwards becoming very scarce inshore, but the bank fishery was good and large hauls were made when not interfered with by bad weather. The catch, though not as large as last year's, is considered an average one and is estimated at 11,000 quintals, a great quantity of which was shipped to foreign ports.

Lobster fishing commenced May 9, in fair quantities and continued so until the close of the season. The fishery was carried on a larger scale this season than before. More factories were in working order, but as the weather was very unfavourable and the catch very small, several of the canneries were compelled to suspend operations in June, and consequently the season's pack is not considered up to the average.

Mackerel were reported on July 23, in nets, but were very scarce and not over 50 barrels were taken the whole season.

Herring did not visit here this season but appeared on the Caraquet Banks July 9. They were taken in fair supply throughout the season.

Salmon were reported fair on June 5, and remained so during the balance of the month. The catch was an average one, most of which was shipped in ice to United States.

The fisheries in general here this season is not as good as those of former years excepting cod, which is given as an average one.

In the storm of September 12, 5 schooners and 20 men were lost from this station and a similar number from Caraquet, which was a great loss to the merchants and distress to poor families.

QUEBEC.

DOUGLASTOWN

Reporter: Mr. Chas. Viets.

Cod were taken in good hauls on May 26, and from good to fair for the balance of the month. During June, July, August and September the catches varied from very good to poor, and fair fishing was reported the early part of October, but poor afterwards, owing to the high winds which prevailed. The bank fishing was reported good this season.

Herring were reported in fair quantities on May 1 and the catch for the remainder of the month varied from very good to poor. They were taking good catches on June 14, 25 and 27. From July 7 to 14, herring were from very good to fair, afterwards poor until September 3 and 4, when good stops were made.

Lobsters when first reported on May 10 were fair and were taken in catches varying from good to poor to the close of the season.

Mackerel.—A few were taken at Sand Beach on July 24.

Salmon were first reported in small quantities at Gaspé Basin on May 23, but were fair on the 26th and 28th, and during June were taken in catches from good to poor. They were not reported afterwards.

Trout were taken in fair quantities from May 28 to 31, and from June 1 to 7.

SESSIONAL PAPER No. 22

Squid.—Fair supplies were obtained on July 25 and 28, and also in August. During September they appeared in quantities varying from very good to poor, and were again fair on October 1, 2 and 3. Clam bait was plentiful in the month of May.

GRAND RIVER.

Reporter: Mrs. John Carberry.

Cod were first reported on May 29 in fair quantities, and the catch inshore continued so for the balance of the season. On the banks codfish were fairly plentiful and good fares were reported to the latter part of August, after which a combination of bad weather and scarcity of bait impeded fishing.

Herring struck in good quantities on May 2, and varied from very good to poor until August, when fishing in general was poor and remained so until the end of October, when herring re-appeared in fair quantities.

Lobsters were reported very plentiful on May 8, but a little later on, bad weather prevented fishing, and the season's catch is considered a poor one.

Mackerel continues very scarce and no reports were received of catches.

Salmon first appeared on June 2 in fair quantities. The catch during the season was small, but fish were of an unusually large size.

Caplin were reported in light quantities throughout the season.

Smelts—The season's catch is considered a fair one.

Squid appeared early in July and sufficient was taken for bait.

Dogfish were in evidence as usual, but were reported to have not been as troublesome as in former years.

LONG POINT.

Reporter: John Vibert.

Caplin were very plentiful on June 14.

Cod were reported fair on June 14, but plentiful on August 7.

Salmon were taken on June 14, the catch was a fair one.

MOISIE RIVER.

Caplin.—Good catches were reported on July 2 and 29.

Cod were fair on July 24 and on August 2, 7 and 28. They were plentiful on September 26.

Salmon were reported plentiful on June 16.

Launce were taken in very good catches in July.

Squid were fair on July 24.

NEWPORT POINT.

Reporter: Mrs. Meunier.

Cod appeared about May 30, and were taken in fair and regular quantities during June and July, after which there was a marked improvement in the fishery. Codfish were very plentiful on August 1, and varied from that to poor during the remainder of the month. Fair catches were reported for the balance of the season, and the total catch is estimated at 10,800 drafts.

Herring struck in good quantities about May 1 to 18, and good catches were made. During the remainder of the season, fair and somewhat irregular catches were reported. Total catch for this season is 2,000 brls. which is one-quarter of last year's catch.

Caplin were first reported on June 11. Very few were taken afterwards.

64 VICTORIA, A. 1901

Lobsters were taken in catches varying from good to fair, from May 1 to 31 inclusive, and to the close of the season, with few exceptions, fair catches were reported. Total pack estimated at 275 cases.

Salmon.—Fair catches were reported from May 29 to July 8.

Squid struck in fair quantities from July 25 to 31. During August the fish varied from very good to fair. Light catches were also reported September 1.

PASPEBIAC.

Reporter : Miss Ada Beck.

Caplin were first taken on June 2 in fair quantities but from the 4th to 7th, inclusive good catches were reported. They were again fair from the 13th to 21st, very few were afterwards taken.

Cod first appeared on June 1, and the catches throughout June, July and August, were fair and regular. Owing to the scarcity of bait and the inclemency of the weather very little was done in this important branch of the fishing industry up to September 21, when cod-fish were reported plentiful. They were again fair on October 4. Nothing afterwards.

Herring struck on May 1, in fair catches which continued for the following day and again on the 12th. They were reported plentiful on the 17th, 18th, 19th and 25th, and fair on the 23rd, and also on June 1. The fishing was poor afterwards to the close of the season.

Salmon—Fair quantities were reported on May 29, and June 7.

Squid were taken in fair quantities on July 23 and 24, and from August 4 to 9. Very good catches of squid were reported on September 21.

PERCE.

Reporter : Mr. E. G. Tuzo.

Caplin were reported on June 25 in fair quantities, but on the following day were plentiful, and afterwards scarce to the end of the month.

Cod first appeared on May 18, and were taken in good and fair catches to the last of the month. During June the catches were reported good when the weather permitted. Fair fishing was reported in September and from good to poor the early part of October.

Herring struck in very plentifully on May 1, and continued so until the 23rd, with few fair exceptions, and remained fair until June 6, when they were reported plentiful and varied from this to poor to the close of the month. In July, although, the weather was very stormy, catches from very good to poor were made at intervals and in August and September fair and regular stops were made. The fish were not reported in October.

Lobsters were reported in fair quantities on May 3, and the catches varied from good to poor throughout the season. The catch is considered about the same as last years.

Mackerel.—Few were reported going on September 5.

Salmon were reported in fair quantities on May 29.

Squid.—Although reported in good quantities a few days only in July, August and October, were very scarce throughout the season.

On the whole the summer's fishing is considered good, but the fall fisheries have been below the average owing to the very disagreeable weather which prevailed at that period of the season.

SESSIONAL PAPER No. 22

POINTE ST. PETER.

Reporter : Mrs. P. Bond.

Cod first appeared on May 25, and wire taken in light catches until the 30th inst. From said date until August 2, the catches ran from good to fair, but were reported scarce afterwards, attributed to unfavourable weather and the scarcity of bait. Throughout the latter part of September and October, there was a marked improvement in the catches. Season's catch estimated at 4,000 quintals.

Herring struck in on May 1 in fair quantities, but were scarce afterwards. Good catches were reported during October.

Lobsters fishing commenced about May 1 and light catches were reported throughout the season.

Salmon were reported from fair to scarce this season.

Squid appeared in large quantities July 26, but afterwards were reported very irregular during the season.

SEVEN ISLANDS.

Reporter : Mr. P. E. Vignault :

Cod were reported scarce the early part of the season up to August 20. From this date and until October 20, fair quantities were taken whenever the weather would admit.

Herring was taken in small quantities during May.

Salmon appeared the last week in May. During June the fish were reported to be very plentiful outside the rivers, but river fishing was very poor.

Squid were in good supply in September and October.

ST. JOHN'S RIVER.

Caplin were taken on June 9 and 14, in good quantities, but were reported very plentiful during July.

Cod were first reported on June 9, fair but plentiful from July 3 to 18. On the 20th they were reported very plentiful. Good catches were also made on October 3.

Launce were very plentiful in June.

Salmon fair reports were received on May 9.

SHELDRAKE.

Caplin were reported plentiful in June.

Cod.—Fair quantities were reported in May and June. On October 3, they appeared plentiful.

Launce.—Good catches were reported in June.

Lobsters were reported plentiful in June.

Salmon and Sardines were reported fair in June.

ST. MARGUERITE.

Cod, fair quantities were taken on July 24.

Launce when reported were very plentiful.

Salmon were fair on July 2 and 29.

ANTICOSTI.

Reporter: Mr. Alfred Malouin:

ENGLISH BAY AND STRAWBERRY COVE.

Caplin appeared plentifully on June 13, and were in great abundance to July 19.

Cod, fishing opened up on June 3 with fair prospects, and were taken in catches from fair to poor during the month. On July 11 and 12, fair hauls were made but not withstanding the unfavourable weather, good fares were reported on the 16th and 17th. From the 13th to the end of August, cod were fair and boats average from $1\frac{1}{2}$ to 3 drafts. Owing to the scarcity of bait and stormy weather, very little was done in this branch.

Herring struck in June 1, very plentifully and continued so to the 13th, when fair reports were received. They were again very good on the 14th, but scarce afterwards.

Squid were taken in fair quantities on August 27, and September 13, and were scarce for the remainder of the season.

ENGLISH BAY AND STRAWBERRY COVE CATCH.

Dryfish	662 quintals.
Greenfish in barrels.	219 barrels.
Herring for bait.	60 "
" salted in barrels.....	26 "
Halibut	11 "
Eels.....	9 "
Shallop Creek, Salmon.....	13 "
" " Trout.....	5 "

FOX BAY.

Cod appeared in good quantities on May 28, but were very plentiful on the 30th, when good catches were made. They were taken in catches from fair to poor during June, and scarce for the balance of the season.

Herring struck in plentiful on May 25, and remained so to the 31st, when they were reported scarce. They were again in great abundance from June 5 to 22, when fair reports were received.

Lobsters were taken in fair quantities from June 13 to July 23.

Lobster factories output were 887 cases and 100 barrels of herring were taken for bait. One Halifax vessel fishing lobsters at Fox bay and coves between here and Salmon river caught, 200 barrels of herring as bait, and her catch of lobsters must have been large, but lost a large quantity having to go to the North Shore to boil and can them.

The name of this vessel and her total catch could not be ascertained.

Five schooners fishing cod at Fox bay captured 700 quintals.

SOUTH-WEST POINT.

Caplin were taken in good and regular catches from June 12 to 29, and were very plentiful from July 1 to 17.

Cod were reported plentiful on June 29, and July 16 to 17. They were taken in fair quantities on August 27.

Squid were very good on August 30, and scarce for the remainder of the season.

SESSIONAL PAPER No. 22

MAGDALEN ISLANDS.

Reporter : Mr. J. A. Le Bourdais.

Cod struck the south-west part of the coast about May 10, in fair quantities and continued so mostly throughout the season. The fish were taken by trawlers at some distance off the Islands and the few boats engaged in this fishery reported good catches when the weather was favorable.

Herring.—The spring run struck in April 19, in very large quantities and good catches by nets are reported at Amberst Harbour and from other localities until May 15. Excellent catches of large and fat herring were reported during July and several boats called in for bait. Large quantities were taken here for bait and also for local consumption. Herring was more abundant this season than for many years past.

Lobsters.—First appeared May 2, with good prospects as herring was in great abundance. The fishery was fair from May 7, and remained so until the 17th, when strong easterly weather set in and destroyed mostly all the traps and fishing gear around the islands. After all the traps were repaired and got ready for use again, the lobster season was almost over. The catch, however, can be considered a fair one, as there are now 10 to 20 boats engaged in this fishery as compared with 1 or 2 in former years.

Mackerel appeared May 30, and light catches were made in nets. Large schools struck in June 2 and 4, and the boats made good hauls and reported the fishing as being the best for the past ten years. Fall mackerel did not take the hook freely before July 24, when fair catches were made in different parts of the islands and remained so without any change throughout August and September.

The past season would have been called good fishing in all branches but on account of rough and stormy weather the fishermen were, only permitted to carry on their operations about one-third of the season—hence the catch on the whole can be considered a fair one. It is estimated, during the recent storms along the Magdalen coast that the fishermen lost nets and fishing gear to the amount of 10,000 dollars.

I have the honor to be, sir,
Your obedient servant,

A. D. MACKERROW,
Clerk in charge F. I. Bureau.

SUPPLEMENT

TO THE

THIRTY-THIRD ANNUAL REPORT OF THE DEPARTMENT OF MARINE AND FISHERIES
BEING PARTLY FOR THE FISCAL YEAR ENDED JUNE 30, 1900, AND
PARTLY FOR THE CALENDAR YEAR 1900.

MARINE

REPORTS

OF THE

HARBOUR COMMISSIONERS

FOR

TORONTO, MONTREAL, QUEBEC, THREE RIVERS, BELLEVILLE, NORTH SYDNEY AND PICTOU

THE PILOTAGE AUTHORITIES

THE HARBOUR AND SHIPPING MASTERS, CERTAIN PORT WARDENS, TOGETHER
WITH STATEMENT OF WRECKS AND CASUALTIES.

CHIEFLY UP TO THE

31st DAY OF DECEMBER, 1900.

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY

1901

OTTAWA, September, 1901.

Hon. Sir LOUIS HENRY DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit herewith the Supplement to the thirty-third Annual Report of the Marine Branch of the Department of Marine and Fisheries, being for the year 1900, containing a statement of merchant shipping, wrecks and casualties, list of certificates granted to masters and mates ; the reports of the harbour commissioners of Toronto, Belleville, Montreal, Quebec, Three Rivers and North Sydney ; list of harbour masters ; reports of harbour masters generally ; reports of pilotage commissioners ; reports of port wardens, and list of shipping masters.

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

F. GOURDEAU,
Deputy Minister Marine and Fisheries.

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APPENDIX No. 1.

MERCHANT SHIPPING.

The total number of vessels remaining on the register books of the Dominion on December 31, 1900, including old and new vessels, sailing vessels, steamers and barges, was 6,735, measuring 659,534 tons register tonnage, being an increase of 37 vessels and a decrease of 19,818 tons register, as compared with 1899. The number of steamers on the registry books on the same date was 2,101, with a gross tonnage of 293,096 tons. Assuming the average value to be \$30 per ton, the value of the registered tonnage of Canada, on December 31 last, would be \$19,786,020.

The number of new vessels built and registered in the Dominion of Canada during the last year was 297, measuring 22,329 tons register tonnage. Estimating the value of the new tonnage at \$45 per ton, it gives a total value of \$1,004,805 for new vessels.

A statement follows, showing the number of vessels and number of tons on the register books at the different ports of registry in the Dominion, on December 31 last, along with a comparative statement of the tonnage from 1874 to 1900. A statement is also published of the number of vessels built and registered in the Dominion during the last year, and a comparative statement of the number of new vessels built and registered from 1874 to 1900, both inclusive.

STATEMENT showing the number of Vessels and number of Tons on the Register Books of the Dominion of Canada, on December 31, 1900.

PROVINCE OF NEW BRUNSWICK.

Name of Port.	Total Number of Sailing Ships and Steamers.	Number of Steamers.	Gross Tonnage of Steamers.	Total Net Tonnage of Sailing Ships and Steamers.
Chatham	331	41	1,929	7,161
Dorchester	4	Nil.	Nil.	1,515
Moncton	14	1	20	2,444
Richibucto	16	2	79	2,737
Sackville	12	3	65	674
St. Andrews	151	7	590	3,105
St. John	399	68	7,564	61,072
Total	927	122	10,247	78,708

PROVINCE OF NOVA SCOTIA.

Amherst	5	Nil.	Nil.	117
Annapolis	47	1	32	5,657
Arichat	131	1	66	5,211
Barrington	44	1	43	1,432
Canso	16	Nil.	Nil.	367
Digby	176	4	149	8,313
Guysboro	20	Nil.	Nil.	839
Halifax	462	60	7,725	21,630
Liverpool	76	4	233	5,425

STATEMENT showing the number of Vessels and number of Tons on the Registry Books, &c.—*Continued.*

PROVINCE OF NOVA SCOTIA—*Concluded.*

Name of Port.	Total Number of Sailing Ships and Steamers.	Number of Steamers.	Gross Tonnage of Steamers.	Total Net Tonnage of Sailing Ships and Steamers.
Lunenburg	298	6	423	25,872
Maitland	19	Nil.	Nil.	14,836
Parrsboro'	130	1	189	29,612
Pictou	56	19	1,110	5,785
Port Hawkesbury	81	2	43	2,594
Port Medway	18	1	138	1,599
Shelburne	101	3	68	5,619
Sydney	97	13	802	6,358
Truro	2	Nil.	Nil.	160
Weymouth	35	1	21	2,782
Windsor	110	15	2,663	57,525
Yarmouth	197	23	4,528	25,084
Total	2,121	155	18,243	226,817

PROVINCE OF QUEBEC.

Amherst (Magdalen Islands)	18	Nil.	Nil.	639
Gaspé	33	1	709	1,959
Montreal	560	197	60,934	91,308
Paspebiac	11	3	88	873
Quebec	625	139	21,799	43,367
Total	1,247	330	83,530	138,136

PROVINCE OF ONTARIO.

Amherstburg	6	3	63	160
Belleville	24	17	622	935
Bowmanville	3	Nil.	Nil.	609
Brockville	23	22	478	301
Chatham	29	18	883	1,518
Chippewa	3	2	263	153
Cobourg	6	1	23	586
Collingwood	71	69	7,405	5,457
Cornwall	3	3	198	128
Deseronto	16	12	1,315	1,110
Dunnville	1	1	87	57
Goderich	46	28	859	1,928
Hamilton	48	41	6,060	4,987
Kingston	170	79	13,329	24,432
Lindsay	39	39	1,552	1,455
Napanee	1	Nil.	Nil.	122
Oakville	2	Nil.	Nil.	126
Ottawa	359	196	18,197	27,947
Owen Sound	44	41	6,226	4,419
Peterboro'	31	27	954	841
Pictou	18	8	1,786	2,113
Port Arthur	19	19	3,167	2,050
Port Burwell	6	4	43	129
Port Colborne	3	2	92	321
Port Dover	14	7	201	709
Port Hope	50	30	2,662	4,701
Port Rowan	6	1	15	283
Port Stanley	7	7	1,164	739
Prescott	40	18	1,251	7,173
Sarnia	29	20	7,918	6,809

SESSIONAL PAPER No. 23

STATEMENT showing the number of Vessels and number of Tons on the Registry Books, &c.—*Concluded.*

PROVINCE OF ONTARIO—*Concluded.*

Name of Port.	Total Number of Sailing Ships and Steamers.	Number of Steamers.	Gross Tonnage of Steamers.	Total Net Tonnage of Sailing Ships and Steamers.
Saugeen.....	10	10	616	404
Sault St. Marie.....	28	23	758	857
St. Catharines.....	93	53	4,469	11,325
Toronto.....	275	218	19,805	17,552
Wallaceburg.....	28	16	1,106	1,865
Whitby.....	3	Nil.	Nil.	514
Windsor.....	56	29	7,516	6,297
Total.....	1,610	1,064	111,083	141,112

PROVINCE OF PRINCE EDWARD ISLAND.

Charlottetown.....	176	21	3,966	14,251
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PROVINCE OF BRITISH COLUMBIA.

New Westminster..	140	87	10,801	8,962
Vancouver.....	124	91	15,654	12,717
Victoria.....	251	136	29,779	29,416
Total.....	515	314	56,234	51,095

PROVINCE OF MANITOBA.

Winnipeg.....	128	84	6,146	7,147
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YUKON TERRITORY.

Dawson.....	11	11	3,647	2,268
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SUMMARY.

New Brunswick.....	927	122	10,247	78,708
Nova Scotia.....	2,121	155	18,243	226,817
Quebec.....	1,247	330	83,530	138,136
Ontario.....	1,610	1,064	111,083	141,112
P. E. Island.....	176	21	3,966	14,251
British Columbia.....	515	314	56,234	51,095
Manitoba.....	128	84	6,146	7,147
Yukon Territory.....	11	11	3,647	2,268
Total.....	6,735	2,101	293,096	659,534

64 VICTORIA, A. 1901

COMPARATIVE STATEMENT showing the number of Vessels and number of Tons on
from 1874 to 1900,

Provinces.	1874.		1875.		1876.		1877.	
	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.
New Brunswick.....	1,144	294,741	1,133	307,926	1,154	324,513	1,133	329,457
Nova Scotia ..	2,787	479,669	2,786	505,144	2,867	529,252	2,961	541,579
Quebec.....	1,837	218,946	1,831	222,965	1,902	228,502	1,951	248,399
Ontario.....	815	113,008	825	114,990	889	123,947	926	131,761
Prince Edward Island...	312	48,388	335	50,677	338	50,692	342	55,547
British Columbia	35	3,611	40	3,685	40	3,809	43	3,479
Manitoba			2	178	2	178	6	246
Total	6,930	1,158,363	6,952	1,205,565	7,192	1,260,893	7,362	1,310,468

	1883.		1884.		1885.		1886.	
	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.
New Brunswick.....	1,107	315,906	1,096	308,132	1,060	288,589	1,042	269,224
Nova Scotia	3,037	541,715	2,942	544,048	2,988	541,832	2,929	526,921
Quebec.....	1,739	216,577	1,628	202,842	1,631	203,635	1,650	232,556
Ontario.....	1,133	140,972	1,184	142,387	1,223	144,487	1,248	140,929
Prince Edward Island...	241	49,446	234	39,213	227	36,010	225	30,658
British Columbia.....	94	9,046	116	11,403	123	11,834	134	11,900
Manitoba	24	2,778	55	5,722	63	5,439	65	5,578
Total	7,374	1,276,440	7,254	1,253,747	7,315	1,231,856	7,294	1,217,766

	1892.		1893.		1894.		1895.	
	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.
New Brunswick.....	946	181,779	1,010	156,086	1,003	136,257	975	122,417
Nova Scotia	2,731	425,690	2,715	396,263	2,710	371,435	2,683	343,356
Quebec.....	1,408	162,638	1,426	161,121	1,427	160,590	1,454	158,776
Ontario.....	1,347	141,750	1,370	146,665	1,480	148,525	1,508	148,609
Prince Edward Island...	196	22,706	188	20,970	191	19,650	190	19,323
British Columbia.....	298	23,448	315	24,900	336	26,455	346	25,988
Manitoba	81	6,118	89	6,534	98	6,715	106	7,307
Yukon District								
Total	7,007	964,129	7,113	812,539	7,245	869,624	7,262	825,836

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the Registry Books of the Dominion of Canada, on December 31, in each year, both inclusive.

1878.		1879.		1880.		1881.		1882.	
Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.	Number of Vessels.	Registered or net Tonnage.
1,142	335,965	1,135	340,491	1,097	336,976	1,087	333,215	1,065	308,980
3,003	553,368	2,975	552,159	2,977	550,448	3,025	558,911	2,026	546,778
1,676	248,349	1,975	246,025	1,889	233,341	1,830	224,936	1,754	215,804
958	135,440	1,006	136,987	1,042	137,481	1,081	139,998	1,112	137,061
322	54,250	298	49,807	288	45,931	273	45,410	248	41,684
51	4,482	60	4,701	63	5,049	74	6,296	84	7,687
17	1,161	22	1,924	21	1,992	24	2,130	23	2,783
7,469	1,333,015	7,471	1,332,094	7,377	1,311,218	7,394	1,310,896	7,312	1,260,777
1887.		1888.		1889.		1890.		1891.	
1,027	255,126	1,009	239,332	1,013	218,873	981	209,460	969	193,193
2,845	498,878	2,851	485,709	2,855	464,431	2,793	464,194	2,778	461,758
1,586	189,064	1,498	178,526	1,455	168,500	1,399	164,003	1,404	162,330
1,275	139,548	1,330	139,502	1,352	141,839	1,312	138,738	1,345	138,914
225	29,031	218	26,586	224	25,506	231	26,080	195	23,316
149	12,789	167	14,249	176	15,241	196	16,024	246	19,767
71	5,871	69	5,744	77	6,091	79	6,475	78	6,197
7,178	1,130,247	7,142	1,089,642	7,153	1,040,481	6,991	1,024,974	7,015	1,005,475
1896.		1897.		1898.		1899.		1900.	
964	115,506	923	103,584	903	89,257	920	86,288	927	73,708
2,669	317,526	2,204	283,056	2,167	262,176	2,121	243,457	2,121	226,817
1,469	158,649	1,480	158,077	1,378	144,447	1,375	144,586	1,247	138,136
1,525	146,522	1,424	135,349	1,452	134,180	1,488	135,234	1,610	141,112
174	16,540	174	15,812	178	15,979	171	14,660	176	14,251
363	26,622	364	28,604	444	40,304	488	44,415	515	51,095
115	7,934	115	7,272	121	7,439	126	9,108	128	7,147
.....	.....	.....	.....	.....	.....	9	1,604	11	2,268
7,279	789,299	6,684	731,754	6,643	693,782	6,698	679,352	6,735	659,534

LIST of Ports at which Vessels may be Registered, showing the number of New Vessels Built and Registered in the Dominion of Canada during the year ended December 31, 1900.

PROVINCE OF NEW BRUNSWICK.

Name of Port.	Total Number of Sailing Ships and Steamers.	Total Net Tonnage of Sailing Ships and Steamers.
Chatham.....	10	352
Dorchester.....	Nil.	Nil.
Moncton.....	Nil.	Nil.
Richibucto.....	Nil.	Nil.
Sackville.....	Nil.	Nil.
St. Andrews.....	Nil.	Nil.
St. John.....	12	410
Total.....	22	762

PROVINCE OF NOVA SCOTIA.

Amherst.....	Nil.	Nil.
Annapolis.....	4	540
Arichat.....	7	262
Barrington.....	Nil.	Nil.
Canso.....	5	74
Digby.....	11	222
Guysboro'.....	Nil.	Nil.
Halifax.....	5	174
Liverpool.....	9	1,110
Lunenburg.....	39	3,707
Maitland.....	1	264
Parrsboro'.....	8	881
Pictou.....	2	552
Port Hawkesbury.....	2	46
Port Medway.....	2	250
Shelburne.....	9	726
Sydney.....	Nil.	Nil.
Truro.....	Nil.	Nil.
Weymouth.....	4	124
Windsor.....	3	234
Yarmouth.....	6	250
Total.....	117	9,416

PROVINCE OF QUEBEC.

Amherst, (Magdalen Islands).....	Nil.	Nil.
Gaspé.....	Nil.	Nil.
Montreal.....	23	2,990
Paspebiac.....	1	20
Quebec.....	26	1,291
Total.....	50	4,301

PROVINCE OF BRITISH COLUMBIA.

New Westminster.....	17	2,050
Vancouver.....	17	591
Victoria.....	9	1,196
Total.....	43	3,837

PROVINCE OF MANITOBA.

Winnipeg.....	3	109
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PROVINCE OF ONTARIO.

Name of Port.	Total Number of Sailing Ships and Steamers.	Total Net Tonnage of Sailing Ships and Steamers.
Amherstburg	Nil.	Nil.
Belleville	Nil.	Nil.
Bowmanville	Nil.	Nil.
Brockville	Nil.	Nil.
Chatham	Nil.	Nil.
Chippewa	Nil.	Nil.
Cobourg	Nil.	Nil.
Collingwood	2	28
Cornwall	Nil.	Nil.
Deseronto	Nil.	Nil.
Dunnville	Nil.	Nil.
Goderich	3	95
Hamilton	1	2
Kingston	4	315
Lindsay	6	65
Napanee	Nil.	Nil.
Oakville	Nil.	Nil.
Ottawa	10	2,019
Owen Sound	5	714
Peterboro	3	56
Picton	Nil.	Nil.
Port Arthur	1	6
Port Burwell	1	5
Port Colborne	Nil.	Nil.
Port Dover	1	17
Port Hope	Nil.	Nil.
Port Rowan	Nil.	Nil.
Port Stanley	Nil.	Nil.
Prescott	Nil.	Nil.
Sarnia	Nil.	Nil.
Saugeen	2	78
Sault Ste. Marie	2	29
St. Catharines	4	46
Toronto	13	262
Wallaceburg	Nil.	Nil.
Whitby	Nil.	Nil.
Windsor	Nil.	Nil.
Total	58	3,737

PROVINCE OF PRINCE EDWARD ISLAND.

Charlottetown	3	106
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YUKON TERRITORY.

Dawson	1	61
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SUMMARY.

New Brunswick	22	762
Nova Scotia	117	9,416
Quebec	50	4,301
Ontario	58	3,737
Prince Edward Island	3	106
British Columbia	43	3,837
Manitoba	3	109
Yukon Territory	1	61
Total	297	22,329

COMPARATIVE STATEMENT of New Vessels Built and Registered in the Dominion

Provinces.	1874.		1875.		1876.		1877.		1878.		1879.	
	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.
New Brunswick.....	90	42,027	65	33,483	61	31,040	54	31,158	56	27,368	43	19,067
Nova Scotia.....	175	84,480	177	67,106	194	53,771	219	47,980	166	49,784	126	39,208
Quebec.....	73	20,796	103	22,825	51	17,800	62	19,253	46	10,870	29	7,421
Ontario.....	50	10,797	53	7,760	47	5,397	28	3,316	30	2,409	42	2,464
Prince Edward Island..	88	24,634	83	19,838	62	14,571	62	17,026	38	10,382	20	5,279
British Columbia.....	5	276			1	121	2	204	2	45	5	788
Manitoba.....							2	48	1	15		
Add new vessels built in Canada which proceeded to the United Kingdom under a Governor's pass without being registered.	6	7,746			3	2,721	2	1,943	1	663		
Add new vessels which left Quebec for registration in Germany..					1	480						
Total.....	496	190,756	480	151,012	420	130,901	432	120,928	340	101,536	265	74,227

Provinces.	1887.		1888.		1889.		1890.		1891.		1892.	
	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.
New Brunswick.....	18	2,909	32	2,530	50	4,792	35	5,572	43	6,296	21	1,873
Nova Scotia.....	87	12,310	116	12,965	126	19,645	150	33,907	130	35,528	105	16,446
Quebec.....	28	2,888	23	2,669	27	3,759	25	4,880	46	4,200	34	2,620
Ontario.....	66	2,993	62	5,095	45	3,259	41	4,917	44	2,662	34	3,684
Prince Edward Island..	7	601	12	1,412	12	1,503	12	2,008	5	1,000	9	967
British Columbia.....	9	376	18	448	12	840	15	876	41	2,364	46	2,887
Manitoba.....	8	439	1	11	8	548	7	218	3	122	6	296
Yukon Territory.....												
Total.....	224	22,516	264	25,130	280	34,346	285	52,378	312	52,145	255	28,773

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of Canada, on December 31, in each year, from 1874 to 1900, both inclusive.

1880.		1881.		1882.		1883.		1884.		1885.		1886.	
Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.
63	18,896	57	18,259	66	16,820	72	21,103	46	12,888	34	7,736	34	4,931
126	31,257	150	40,465	117	26,711	202	35,765	178	42,032	102	24,703	93	20,948
33	8,219	56	5,673	26	6,785	42	6,594	32	3,815	29	4,556	27	2,683
44	3,610	54	6,111	55	4,369	34	4,311	58	4,446	45	4,509	52	2,075
21	3,359	15	4,351	15	8,508	17	5,343	21	5,189	11	1,707	12	1,318
.....	.....	2	85	8	1,631	5	849	15	675	6	648	8	154
1	100	3	116	1	289	2	125	37	3,366	13	320	3	98
271	65,441	336	74,060	288	60,113	374	74,050	387	72,411	240	43,179	229	32,207
.....	.....	.....	.....	1	1,029	.....	.....	.....	.....	.....	.....	.....	.....
.....
271	65,441	336	74,060	289	61,142	374	74,090	387	72,411	240	43,179	229	32,207

1893.		1894.		1895.		1896.		1897.		1898.		1899.		1900.	
Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.	Number of Vessels.	Registered or Net Tonnage.
119	2,819	40	2,534	27	714	24	627	33	1,738	31	790	31	798	22	762
111	15,089	123	8,721	89	4,762	97	7,704	54	4,259	67	4,962	92	7,594	117	9,416
53	4,220	55	4,412	49	4,335	36	3,969	49	4,227	51	4,139	33	5,943	50	4,301
49	4,126	64	3,137	52	3,732	38	1,757	50	3,850	46	1,872	52	3,419	58	3,734
3	634	3	183	1	196	3	111	3	226	5	372	3	56	3	106
19	944	25	1,900	18	1,709	22	1,466	26	2,429	72	12,228	51	2,734	43	3,837
8	608	11	356	14	822	7	512	16	365	6	159	13	554	3	109
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	61
362	28,440	326	21,243	250	16,270	227	16,146	231	17,094	278	24,522	277	21,098	297	22,320

APPENDIX No. 2.

TORONTO HARBOUR COMMISSIONERS' REPORT FOR THE YEAR
ENDED DECEMBER 31, 1900.SECRETARY of the Toronto Harbour Trust in account with the Commissioners for the
year ending December 31, 1900.

DR.	GENERAL BALANCE SHEET.		CR.
	\$	cts.	\$
Wharf property.....	43,073	72	Profit and loss.....
Office furniture.....	591	91	58,105
Debenture Can. Per.....	4,000	00	74
Cash in bank.....	10,423	91	
Cash in hand.....	16	20	
	58,105	74	58,105
			74

We have examined the books and vouchers and have compared the balance sheet, as above, with the said books and vouchers, and we certify the same to be correct and to represent a true statement of the affairs of the Trust at this date, December 31, 1900.

W. R. HARRIS,
S. BRUCE HARMAN,
Auditors.

ARTHUR B. LEE, *Chairman,*
W. P. HUBBARD,
W. A. GEDDES,
J. T. MATTHEWS,
Commissioners.

COLIN W. POSTLETHWAITE,
Harbour Master.

TORONTO, January 1, 1901.

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RECEIPTS and Expenditure of the Toronto Harbour Trust for the year 1900.

RECEIPTS.	\$ cts.	EXPENDITURE.	\$ cts.
Cash in bank, January 1.....	5,619 02	Charges	450 00
" hand " 1.....	7 55	Insurance.....	27 50
Canadian Pacific Railway Company..	4,149 34	Premium and interest..	125 00
Harbour dues.....	10,778 28	Tools.....	3 50
City of Toronto, placing buoys.....	66 67	Salaries.....	1,869 96
Rents, boat sites at Don.....	8 00	Lights, buoys and beacons.....	151 89
Sale of old material.....	315 00	General repairs.....	281 88
Fine, Capt. McGrath.....	20 00	Printing and stationery.....	38 89
Interest on deposit account.....	309 45	Dredging.....	3,604 88
Premium and interest.....	38 35	Office expenses and rent.....	789 90
Commercial Union Assurance Co.....	5,800 00	Expenses clearing wharf after elevator fire	38 65
		Solicitors' fees.....	250 00
		Engineers' fees.....	35 00
		Incidental repairs.....	4 50
		Can. Per. debenture.....	4,000 00
		Harbour bonds (matured).....	5,000 00
		Cash in bank.....	10,423 91
		Cash in hand.....	16 20
	27,111 66		27,111 66

Examined and found correct,

W. R. HARRIS,
S. BRUCE HARMAN,
Auditors.

TORONTO, January 1, 1901.

Dr.	PROFIT AND LOSS.	Cr.	
	\$ cts.	\$ cts.	
Charges	450 00	Balance from ledger..	50,092 20
Insurance.....	27 50	Harbour dues.....	10,778 28
Premium and interest..	125 00	Canadian Pacific Railway Company..	4,149 34
Tools.....	3 50	Interest on deposit.....	309 45
Salaries.....	1,869 96	Sale of old material.....	315 00
Lights, buoys and beacons	85 22	Fine, Capt. McGrath.....	20 00
Repairs, general.....	281 88	Premium and interest.....	38 35
Printing and stationery.....	38 89	Rent, boat-house sites.....	8 00
Dredging.....	3,604 88		
Office expenses and rent.....	789 90		
Wages, cleaning wharf.....	38 65		
Solicitors' fees.....	250 00		
Engineers' fees.....	35 00		
Incidental repairs.....	4 50		
Balance to credit of profit and loss....	58,105 74		
	65,710 62		65,710 62

Examined and found correct,

W. R. HARRIS,
S. BRUCE HARMAN,
Auditors.

TORONTO, January 1, 1901.

STATEMENT OF ACCOUNTS FOR YEAR 1900 IN DETAIL.

1899.		PROPERTY ACCOUNT.	\$ cts.	\$ cts.
Dec. 31....	Amount per ledger folio 2.....			43,073 72
		FURNITURE ACCOUNT.		
" 31....	Amount per ledger folio 3.....			591 91
		GENERAL REPAIR ACCOUNT.		
April 27....	Lumber, repairing Queen's Wharf.....		135 40	
May 21....	1 keg wire nails.....		3 60	
June —....	Wages, carpenter and man.....		109 68	
" —....	Cartage of lumber, &c.....		2 00	
Oct. 29....	Ads. for tenders for repairs at Queen's Wharf.....		31 20	281 88
		INSURANCE ACCOUNT.		
Jan. 31....	Premium on light-houses.....		17 50	
" 31....	" store-house.....		10 00	27 50
		SALARY ACCOUNT.		
Dec. 24....	C. W. Postlethwaite, harbour master.....		1,110 00	
" 24....	William Hall, deputy harbour master.....		759 96	1,869 96
		OFFICE EXPENSE ACCOUNT.		
April 25....	Charts of Great Lakes and mounting same.....		4 25	
May 5....	Repairing map of the harbour.....		4 00	
" 5....	Plumbing, deputy harbour master's house.....		1 10	
Sept. —....	Waterworks account for year's supply.....		4 10	
Oct. 6....	Subscription to <i>Globe</i> for year.....		5 00	
" 8....	Arcade Printing Company, water-gauge report forms.....		3 00	
Dec. 26....	Diaries for office and wharf.....		2 75	
" 26....	Petty cash, Xmas boxes, stamps, &c.....		24 20	
" 26....	Office rent for 12 months.....		650 00	
" 26....	Rent of two telephones for 12 months.....		90 00	789 90
		DREDGING ACCOUNT.		
May 21....	Advertising for tenders.....		36 00	
.....	McNamee & Simpson, contractors.....		3,331 32	
.....	Kivas Tully, engineer.....		165 56	
.....	J. B. Allen, check clerk.....		72 00	3,604 88
		INTEREST ACCOUNT.		
May 31....	Interest on deposit in Bank of Toronto.....		140 80	
Nov. 30....	" ".....		168 65	309 45
		FEEES.		
.....	Kivas Tully, professional services.....		35 00	
.....	McCarthy, Osler, Hoskins & Creelman, professional services.....		250 00	285 00
		CHARGES.		
Jan. 31....	Bonus to harbour master and deputy.....		150 00	
Dec. 24....	Commissioners' and auditors' fees.....		300 00	450 00

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STATEMENT OF ACCOUNTS FOR YEAR 1900 IN DETAIL—*Concluded.*

1900.	PRINTING AND STATIONERY.	\$ cts.	\$ cts.
Jan. 31...	Arcade Printing Company, annual statements	15 00	
April 27...	" " " 1,200 manifest forms	5 00	
May 5....	Box Davis' pens.....	1 50	
" 5....	2 bottles ink and 1 bottle red ink.....	1 75	
Nov. 9 .	Copp, Clarke Company, office letter paper.....	6 50	
.....	Petty cash, stamps, &c.....	9 14	
			38 89
	LIGHTS, BUOYS AND BEACONS.		
April 27...	Paint and oil for Can. buoys	11 27	
May 21....	Notice to ariners and posting same.....	10 34	
Oct. 31....	New dinghy for Queen's Wharf.....	40 00	
Dec. 14....	Placing buoys per contract.....	43 00	
" 14....	Gas for light-houses for year.....	42 48	
" 14....	Various soundings.....	4 80	
		151 89	
July 6...	Paid by city for placing buoys, per agreement.....	66 67	
			85 22
	DEBENTURE ACCOUNT.		
" 1....	Paid five Harbour bonds, \$1,000 each.....	5,000 00	
.....	Half year's interest at 5 per cent per annum.....	125 00	
			5,125 00
	SALE OF OLD MATERIAL.		
Aug. —....	Sale of stone, sheet iron, iron bolts and rods from elevator fire		315 00
	RENTS ACCOUNTS.		
Oct. —....	Rent collected from lessees of boat-house sites on commissioner's property at Don at \$1 a piece.....		8 00

COMPARATIVE STATEMENT of Goods arrived per Steamer and Sailing Vessel for Years 1899 and 1900.

Description of Goods.	1899.	1900.
General merchandise..... tons.	18,918	20,294
Coal..... "	187,715	164,806
Wood..... cords.	109	1,283
Lake stone..... toise.	2,909½	2,490
Building stone..... tons.	523	.....
Fruit..... brls.	4,472	5,285
"..... boxes.	4,271	4,709
"..... baskets.	403,743	508,729
"..... bags.	682	725
Fire bricks.....	6,500	473,700
Lumber..... feet B.M.	468,000	.....
Grain..... bush.	54,030	.....
Sheep, hogs and calves.....	36	155
Horses, cattle and vehicles.....	183	122
Oil in bulk..... brls.	.....	25,000

COLIN W. POSTLETHWAITE,
Harbour Master.

FIFTIETH ANNUAL REPORT.

To the Commissioners of the Harbour of Toronto :

GENTLEMEN,—I have the honour to submit my annual report for the year 1900.

The harbour was clear of ice on the 8th April, the same day as last year, having been closed to navigation for 101 days.

The harbour froze over on the 14th December, and became quite solid, but the ice broke up again on the 26th December, and on 1st January there was open water.

The first arrival in the Spring was the Steam Barge *St. Joseph*, Captain Frank Conlin, on the 3rd April, 1900, with coal for Messrs. Dickson & Eddy. The last to arrive was the schooner *Snow Bird*, Captain Alfred Thomas, on the 17th December, with stone. The Steam Barge *Gordon Jerry* is still bringing coal from the wrecked Schooner *Au usta* near Port Credit.

The number of arrivals at this port during the season of 1900 is 3469, a decrease of 179 as compared with 1899.

	1899.	1900.	Increase.	Decrease.	Tonnage.	
					1899.	1900.
Propellers loaded.....	376	457	81		118,468	127,382
" light.....	30	33	3			
Steamers loaded.....	2,357	2,244		113	923,265	909,932
" light.....	1	2	1			
Schooners loaded.....	876	724		152	99,149	72,470
" light.....	8	9	1			
	3,648	3,469	86	265	1,140,882	1,109,784

The trade of this port, therefore, is about $2\frac{1}{4}$ million tons.

There are 65 vessels wintering here this season, viz. : 11 steamers, 15 schooners, 12 sailing yachts, 4 propellers, 9 steam launches, 4 steam tugs, 10 ferry steamers and 4 dredges, representing in all about 12,780 tons register.

Cash receipts from all sources, including cash on hand from last year and \$5,800 from The Commercial Union Assurance Co., insurance on burnt elevator, amount to \$27,111.66.

Expenses of all kinds, including payment of five harbour bonds for \$1,000 each, and the purchase of a Canada Permanent Loan and Savings Co. bond for \$4,000 amount to \$16,671.55, leaving a cash balance of \$10,440.11.

The coal receipts for this year by vessels are as below : anthracite coal 142,272 tons, bituminous coal 22,534 tons, in all 164,806 net tons, being a decrease of 22,909 tons compared with last year. This falling-off in the coal receipts is attributable to a strike declared at the Pennsylvania mines on the 29th September, when 140,000 men quit their work. The strike continued seven or eight weeks, and when the mines were again working it was too late in the season for the vessels to profit by the trade. The total quantity of coal imported by rail and vessel into Toronto, during the year, per returns from the Government at Ottawa, is as follows, viz. : Anthracite, 316,944 tons ; bituminous, including screenings, 444,666 tons ; in all 761,610 as against 725,486½ in 1899.

The fruit trade continues to be a good source of revenue, 519,448 packages having been brought to this port by water this year, as against 413,168 packages last year, resulting in an increase in dues amounting to \$282.54 over last year.

Dredging has been done wherever trade required it, but the work has been chiefly confined to opening the channels leading to the coal docks, it being impossible to fight against the sand and mud flowing so copiously into the harbour from the river Don.

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The highest water this year was 13 inches above zero on the 8th May, the lowest was 16 inches below zero on the 21st November, during a gale from the south-west. The average level for the year is $1\frac{1}{2}$ inches above zero, half an inch below last year.

The lamps at the Queen's wharf were lighted for the first time in the Spring on the 9th April, and they were practically discontinued on 17th December, but the irregular trips of the *Gordon Jerry* have required a lighting up on two or three occasions since that date.

The buoys were placed out on the 24th April, and were taken in again on the 14th December.

The Government Engineer, in charge of the Harbour Works at the Eastern entrance to the harbour, reports as follows :

"Five cribs have been sunk in place in extension of west pier at Eastern entrance to the harbour, and some repairs done to the east pier at the south end. The dredge was employed during the past season in deepening the channel in the centre between the piers to 19.6 feet below zero of the gauge at Queen's Wharf.

"The fog-horn was sounded on 24 occasions, viz. : Thrice in April, once in May, twice in June, five times in July, once in September, six times in October, four times in November, and twice in December.

"There have been several disasters on Lake Ontario this season, not unattended with loss of life. The steamer *Picton* was lost with all hands, off Long Point, on 1st July; the schooners *T. R. Merritt* and *Alacore* were wrecked on 12th September, near Oswego; the *Fabiola* on 21st October, off the Main-Ducks; the *Fred. L. Wells*, off Oswego, on 6th November; the *Augusta* went ashore near Port Credit on 24th November, and the steam-barge *Jenny* struck the piers at Frenchman's Bay, and sank in shoal water, on the 21st November."

Repairs to the crib-work, on the east side of the road-way leading to the Queen's Wharf are now under contract, involving an expenditure of about \$2,500. The contractors, Messrs. Medler & Arnot, are making satisfactory progress, and the work will, no doubt, be completed by the 14th January according to agreement.

A new business, that of carrying oil in bulk, in tank vessels, has been commenced this year, and it promises to develop into a trade of considerable importance. Twenty-five thousand barrels, or about one million gallons of oil in bulk, have been brought into this port this season, in tank vessels, and as the Queen City Oil Company have gone to considerable expense in attaching machinery to their wharf, for conveying oil to their reservoirs, the trade is not likely to decrease in the future.

The precipitation for the year, per information furnished by Mr. R. F. Stupart, Director of the Meteorological Observatory, is as follows, viz. : Rain, 22.130 inches; Snow, reduced to water, 74.6 inches; total 29.590 inches, or about half an inch more than in 1899.

I am, gentlemen,
Your obedient servant,

COLIN W. POSTLETHWAITE,
Harbour Master.

TORONTO HARBOUR WORKS.

TORONTO, January 9, 1901.

SIR,—I have the honour to report that the following quantities of dredging were done at the wharfs and slips by Messrs. McNamee & Simpson, contractors, at the rate of 12c. per cubic yard, and as some portion of the dredging had to be dumped in 100 feet of water, as required by the Board of Health, the additional price was 6c. per cubic yard.

	Cubic Yards.
Medlar & Arnot's Wharf.....	1,397
Elias Rogers & Co.'s Wharf and entrance.....	11,911
Princess Street Wharf and entrance.....	7,898
Scott Street Slip.....	1,132
Total.....	22,338

There was also dredging at the Frederick Street Slip, which was done by the day, costing \$142.50. Some dredging was done in the western channel in removing the deposit from the Pathurst Street sewer, by the sand pump belonging to the city, which was reported as incomplete last year. There was not any dredging done on the Range course.

Tenders were received on the 5th November, 1900, for repairs to the cribwork on the east side of the roadway to the Queen's Wharf as required by the Canadian Pacific Railway Company for their switch for unloading timber on the east side of the wharf. The tender of Messrs. Medlar & Arnot being the lowest was accepted, and the work is now nearly completed.

I remain,
Your obedient servant,

KIVAS TULLY,
Engineer.

A. B. LEE, Esq.,
Chairman Toronto Harbour Commissioners.

APPENDIX No. 3.

QUEBEC HARBOUR COMMISSIONERS' REPORT FOR THE YEAR ENDED
DECEMBER 31, 1900.*(Under the Quebec Harbour Commissioners Act, 1899.)*

QUEBEC, January 2, 1901.

To the Honourable
 Sir L. H. DAVIES, M. P.,
 Minister of Marine and Fisheries,
 Ottawa.

SIR,—In compliance with the requirements of the Act 62-63 Victoria, chapter 34 (The Quebec Harbour Commissioners Act, 1899), I have the honour to report as follows on the doings of the Quebec Harbour Commissioners for the year 1900 :—

CHIEF ENGINEER'S REPORT.

The annexed report (marked A) from the Chief Engineer, Mr. St. Geo. Boswell, conveys information in regard to all matters coming under his care, such as the progress made with the improvements to the river front, construction of new wharfs and sheds, and maintenance of the Commissioners' docks, wharfs, &c.

WHARFINGER'S REPORT.

The annexed report (marked B), from the Wharfinger, Mr. Patrick Flynn, gives the usual information regarding the number of vessels using the Louise docks and the railway traffic over this portion of the Commissioners' property during the year 1900.

HARBOUR MASTER'S REPORT.

The annexed report (marked C) from the harbour master, Mr. James C. Sullivan, gives information in regard to the opening and closing of navigation in the harbour, formation of ice, disposal of ballast, &c. During the past season no ballast was dumped into the river, all that was brought here, with the exception of one vessel which was discharged at Lévis, being utilized by the Commissioners in their works.

PREMISES LEASED.

Renewals for one year of the premises leased were granted to the following tenants : Messrs. W. Carrier, store No. 11 ; E. M. Lennon & Co., stores No. 7 and 8 ; John S. Thom, store No. 10 ; Quebec Coal Co., Reynar's wharf ; A. R. Pruneau & Co., Marmett's wharf ; Whitehead & Turner, shed on Wellington wharf ; E. C. Benson and Jos. Gingras, East India wharf and store No. 5 ; Fred Drouin, wood lots No. 1 and 2 ; A. E. Clint & Co., wood lots No. 3 and 12 ; Jas. C. O'Donnell, wood lots Nos. 5 and 6 ; and Julien Lapointe, wood lots Nos. 7 and 8.

The stone store formerly occupied by Messrs. Verret, Stewart & Co., was leased to the Ste. Thérèse Furniture Co. for one year, with a right of renewal for two more years.

Properties remaining unlet were the Atkinson's wharf and salt store on the East India wharf.

GREAT NORTHERN RAILWAY COMPANY.

Elevator, Guarantee, &c.—Modifications in the agreement by which the Commissioners guaranteed the interest at 3 per cent per annum on \$200,000 of bonds to enable the Great Northern Railway Company to erect a grain elevator of not less than a million bushels capacity at this port, have been granted. The principal changes that were allowed were: the extending of time for the completion of the elevator and marine tower, and subdividing the guarantee so that \$175,000 of it could be applied to the elevator building proper, and \$25,000 to the marine tower. These modifications have received the sanction of the Dominion Parliament by the Act 63-64 Victoria, chapter 54.

Elevator site.—The ground granted to the Great Northern Railway Company having been found insufficient to construct an elevator of the capacity that they were bound to put up, additional ground was given to them, and they were also allotted a site on the inside of the cross wall for their marine tower.

The Commissioners are pleased to state that, both of these buildings (grain elevator and marine tower) have been completed and fitted up, and that the steamship *Albanian* of the Leland Line, loaded a full cargo of grain from this elevator in November last.

Elevator approaches.—In order to give better railway approaches to the elevator building, the commissioners have demolished a part of the old offices facing on Dalhousie Street, and have granted a lease to the Great Northern Railway Company, allowing of their laying tracks on the ground thus cleared. Particular care has been taken in this lease that the communication with the Louise docks and Pointe-à-Carcy wharf shall in no way be hampered.

Workshops on embankment.—Last year the Commissioners granted under long lease to the Great Northern Railway Company, a site at the north-western extremity of the Louise embankment for the erection of workshops in which their rolling stock would be built and repaired. The main building is now completed and fitted up and work is being carried on in it.

Extension of time to establish a line of Steamers that will make Quebec their terminal point.—By a resolution passed on April 23, the Commissioners extended the time limit to January 1, 1901, to the Great Northern Railway Company to establish a line of steamers that would make Quebec their terminal point, and would load here full cargoes of grain and other produce from Parry Sound or points on the Great Northern Railway. Sailings of such steamships to be not less frequent than once a fortnight. Compliance with this resolution would free this first line from the major portion of the Commissioners' harbour charges.

NEW WORKS AND WORKS UNDER CONSTRUCTION.

A new freight shed, four hundred and fifty-two feet in length by eighty feet in width has been constructed on the south Quay wall of tidal harbour at which there is thirty feet of water at low water. The cost of this shed has been \$21,731.12.

New Coal Wharf.—The work of building a new coal wharf at the western end of the tidal harbour was commenced this spring and has nearly been completed. This wharf will have a frontage of four hundred feet, a minimum depth of twenty-five feet of water, and will give an area available for the reception of coal of fifty thousand superficial feet. Cost of construction to date has been \$36,091.01.

Extension of Pointe-à-Carcy Wharf.—The work of extending this wharf so as to give it a frontage of 600 feet is now almost completed. The cost to date has been \$176,862.10.

Full information in regard to these works will be found in the Chief Engineer's report.

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REPAIRS TO PROPERTY.

Careful attention has been paid during the year to the various properties of the Commissioners to maintain them and bring them up to a first class condition. Store No. 4, damaged by fire in 1899, has been completely renovated. See Engineer's report for details.

CANADIAN PACIFIC RAILWAY COMPANY'S GRAIN ELEVATOR EMBANKMENT.

The grain elevator on the embankment, the property of the Canadian Railway Company has been sold to the Quebec Terminal Company, and Commissioners hope to see it as well as the large elevator of the Great Northern Railway Company in active operation during the incoming season.

EXCHANGE OF LANDS.

In 1892, a deed was passed between the Commissioners, the Quebec and Lake St. John Railway, and Charlevoix Railway Companies, in which in return for a beach lot which the Commissioners ceded to these companies, they were to transfer to the Commissioners the unincumbered title to a strip of forty feet in width along the St. Charles River in front of their properties. Difficulties and delays arose in completing this matter; but this year it has been settled and the Commissioners placed in possession of the unincumbered title to the lands in question.

OFFICIAL INSPECTION OF DECK LOADS.

The Honourable Mr. Dobell brought this question before the Commissioners at their meeting of April 2 last, who then pronounced themselves strongly in favour of such an inspection, believing that the cost of making it would be but a small charge on the trade, that deck loads would then be more carefully loaded, and underwriters knowing that this official inspection was imperative would have more confidence, and it would tend to reduce the present excessive rates of marine insurance.

DEATH OF MR. E. J. ANGERS.

The Commissioners have to record with deep regret the death of their notary, the late Mr. E. J. Angers, which occurred on February 12, 1900. Mr. C. F. Delage was elected to replace Mr. Angers as notary to the Commissioners, on February 26.

SALE OF BONDS.

The balance of the first preference bonds (\$200,000) authorized under the provisions of 61 Victoria, chapter 48, and 62-63 Victoria, chapter 34 (The Quebec Harbour Commissioners Act, 1899) were disposed of by public tender, and although the time of sale turned out not to be very opportune, the Commissioners obtained par for these bonds.

EXPENDITURE ON CAPITAL ACCOUNT.

Particulars of the expenditure on capital account for 1900 will be found in a statement accompanying this report. This expenditure has been almost all for the work of extending the Pointe-à-Carcy wharf frontage, the building of the new coal wharf, wet dock, and the new freight shed fronting the tidal dock.

REVENUE AND EXPENDITURE.

The Commissioners' revenue for 1900 was \$81,982.52, an increase of \$4,634.46 over that of 1899, and the expenditure (including interest on \$350,000 of first preference bonds) \$53,094.15, leaving a surplus, which includes the \$13,845.48 charged to the Department of the Interior for the ground occupied for immigration purposes, of \$28,888.37. The principal increases have been in property earnings, \$1,697.30, and interest, \$3,428.24. Customs and harbour receipts show a slight decrease of \$392.13.

GRAVING DOCK.

The lengthening of the graving dock, Lévis, has been completed, and it is now ready for docking purposes to its full extent.

This dock is now six hundred feet long; width of entrance, sixty-two feet; depth of water on sill at low water, seven feet six inches.

While, as was stated in their last report, the Commissioners believe that the lengthening of this dock will prove a great boon to the trade of the St. Lawrence; they would also reiterate their opinion that, a second graving dock should be built in Quebec that would be able to accommodate the largest steamers now afloat or likely to be afloat for some years to come, which the graving dock at Lévis, even with its increased length, cannot do.

ACTING CHAIRMAN.

During the absence in Europe of the Chairman (Mr. J. B. Laliberté) Mr. Narcisse Rioux was the presiding officer, having been unanimously elected by the Board as acting chairman.

ICE CUTTING.

During the winter of 1899-1900, 44,821 blocks of ice have been cut for local use, an increase of 2,371 blocks over the cut of the previous year.

Care has been taken that all this ice cut for domestic purposes is perfectly pure and taken from localities in the harbour that have been selected after an analysis of the ice had been made.

To this report are annexed the various statements conveying the information yearly forwarded to your department in connection with the harbour, as also a complete statement of the Commissioners' accounts for the year.

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

JAS. WOODS,
Secretary-Treasurer.

A.

HARBOUR ENGINEER'S OFFICE,
QUEBEC, January 2, 1901.

JAMES WOODS, Esq.,
Secretary-Treasurer,
Harbour Commission,
Quebec.

DEAR SIR,—I have the honour to submit herewith the following with reference to the various works in connection with the maintenance and improvement of the harbour of Quebec, executed during the year 1900.

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NEW WORK.

During the winter 1899-1900 a considerable number of men were given employment, preparing the frame-work for a new freight shed to be erected on the south quay wall of tidal harbour, and in preparing the timber for a new coal wharf to be constructed at the western end of the wet dock. In order to place the floor of the above referred to freight shed above the reach of the highest flood tides, it was necessary to raise the whole surface over the site of the shed two and one-half feet. This required the construction of about 1,200 cubic yards of cribwork, and providing about 7,000 cubic yards of filling material. Of the filling material, 3,000 cubic yards were supplied by the contractors of the Great Northern elevator, free of cost; the balance being furnished by carters at 20 cents per cubic yard. This work was begun in the last week of March and, together with the construction of the foundations for the shed, consisting of piles and cribwork, was completed in the middle of May last. The work of erecting framework of shed was begun on May 16, and was finished on June 20; the rest of the woodwork was finished by July 6.

This freight shed is 452 feet long and 80 feet wide, and has been completely sheathed with galvanized iron; the floor is placed so as to be 3 inches above the railway lines placed at the back of the shed.

To finish the railway facilities to this freight shed and to the Great Northern elevator, it was necessary to re-arrange the railway lines on the Pointe-à-Carcy wharf. This has been done, and 2,100 feet of new railway lines have been laid down.

The southern extension to the Pointe-à-Carcy wharf has been completed, with the exception of a portion of dredging of the custom-house pond, still remaining unfinished; the work consisting essentially of building up the cribwork of the pond face of pier to coping level, filling up the gap left in the cribwork for the passage of dump scows, placing the fenders, coping pieces, and cast iron mooring posts on the St. Lawrence and pond faces, and planking the surface of quay for 20 feet in from the coping line. The Great Northern Railway Company have constructed a 1,000,000 bushel grain elevator, on the site granted to them by the Harbour Commissioners for the purpose, and have, in connection with the elevator, erected a marine tower for unloading barges, on the wet dock quay of cross-wall, south of entrance. Conveyor galleries from elevator and marine tower have been carried down the south quay wall of tidal harbour in line with the face of freight shed, so that vessels berthed at this pier can be loaded from the elevator or directly from barges at the marine tower.

The elevator was first put in use on November 17 last, on which date the loading of the ss. *Albanian* was begun.

At the western end of the wet dock a new coal wharf, with a frontage of 400 feet, has been constructed; this wharf which is now completed with the exception of a part of the back filling and the surface planking, will have a minimum depth of water of 25 feet, when the grading of the wet dock, off the face of the wharf, has been completed. The area available for the reception of coal at this wharf will be 50,000 superficial feet.

The dredging for the foundations of this wharf, as well as the grading of a part of the wet dock off its face, was done by the Government dredge No. 6, which was loaned by the Department of Public Works to the Harbour Commissioners during the past season.

GENERAL.

The Harbour Commissioners' dredge was employed, during the past season, dredging in the custom-house pond, removing silt from the tidal harbour, and dredging in the wet dock.

The Harbour Commissioners' store, No. 4, which had been damaged by fire in September, 1899, was repaired during the winter of 1899-1900, and made ready for occupation on May 1 last.

Elm fenders and chocks have been placed on the face of the Grand Trunk wharf, and the top timbers of the wharf have been renewed.

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The minor repairs required to keep the various properties of the Commissioners in good condition, consisting of railway track renewals, re-metalling roadways, replanking coal platforms, replacing fenders, painting entrance gates, freight sheds and shops, and sheathing the east end of store, No. 11 with Canada plate, have been executed.

The arc and incandescent electric range lights, heretofore situated on the battery, have been removed, and have been replaced by duplicate incandescent lights established in the marine tower. These new lights were put in operation on November 2.

The cross-wall draw bridge was operated for the first time the past season on April 12, and for the last time on December 7, on which date the wet dock was frozen over. The entrance gates to the wet dock were shut for the first time on May 2, and remained in operation until November 24.

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

ST. GEORGE BOSWELL,
Chief Engineer.

B.

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, January 2, 1901.

JAMES WOODS, Esq.,
Secretary-Treasurer,
Harbour Commission,
Quebec.

SIR,—I have the honour to submit the following with reference to the traffic of the Louise docks.

During the past season fifty (50) ocean mail steamers of one hundred and seventy-six thousand two hundred and three (176,203) tons register used the docks for landing immigrants, baggage, &c., and nine hundred and forty tons (940) of western freight.

Seventy-eight (78) steamships of two hundred and thirty-six thousand, one hundred (236,100) tons register landed nine thousand two hundred and forty-eight (9,248) tons of general cargo.

Thirty-one (31) steamships of ninety-two thousand seven hundred and fifty-four (92,754) tons register landed nine thousand five hundred and twenty-two (9,522) tons of salt.

Eleven (11) sailing vessels of three thousand one hundred and fifty-three (3,153) tons register landed three thousand four hundred and seventy-eight (3,478) tons of molasses.

Twenty-one (21) ferry boats landed one thousand (1,000) tons of general cargo from different steamships at Lévis.

Thirty-two (32) lower port steamers of four thousand two hundred and thirty-four (4,234) tons register landed nine hundred and ninety-six (996) tons of general cargo.

Four (4) American barges of three hundred and seventy-five (375) tons register landed four hundred (400) tons of sugar, resin, etc.

Seven (7) schooners of three hundred and fifty (350) tons register landed seven thousand and seventy seven (7,777) railway ties.

Twenty-five (25) steamships of twenty-nine thousand two hundred and sixty-seven (29,267) tons register landed sixty-two thousand and eighty-nine (62,089) tons of coal.

Ten (10) lower port steamers of seven hundred and twenty (720) tons register landed one thousand and twenty-five (1,025) tons of coal.

One (1) sailing vessel of six hundred and fifty-nine (659) tons register landed one thousand (1,000) tons of coal.

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Three (3) barges of four thousand and eighty-eight (4,088) tons register landed five thousand five hundred and eighty-two (5,582) tons of coal.

Five (5) lake schooners of two thousand two hundred (2,200) tons register landed four thousand three hundred and twenty-eight (4,328) tons of coal.

One hundred and thirty-eight (138) American barges of thirteen thousand seven hundred and twenty-eight (13,728) tons register landed twenty-five thousand nine hundred and sixty-four (25,964) tons of hard coal.

Twenty-six (26) lower port steamers of two thousand six hundred and forty-four (2,644) tons register shipped eleven hundred and twelve (1,112) tons of general cargo.

One (1) barge of twelve hundred and sixty-two (1,262) tons register shipped four thousand five hundred (4,500) railway ties.

Seven (7) steamships of twenty thousand five hundred and ninety-three (20,593) tons register shipped twelve hundred and ninety (1,290) tons of asbestos.

Seven (7) barges of eight hundred and seventy tons (870) tons register shipped seventeen thousand eight hundred (17,800) railway ties.

Fifty-one (51) steamships of twenty-two thousand six hundred and five (22,605) tons register loaded part cargo of timber and deals.

Twenty-two (22) steamships of thirty-five thousand eight hundred and ninety (35,890) tons register loaded full cargoes of timber and deals.

Four (4) sailing vessels of two thousand seven hundred and twelve (2,712) tons register loaded full cargoes of timber and deals.

One (1) barkentine of three hundred and twenty-one (321) tons register discharged a full cargo of timber.

The ss. *Albanian* of eighteen hundred and seventy-five (1,875) tons register loaded part cargo of grain from the Great Northern Railway Company's elevator and balance of cargo in lumber.

The surface traffic has required the employment of five thousand seven hundred and eighteen (5,718) cars, being a decrease of two hundred and two (202) cars over the previous year.

During the past season the different ocean mail steamers landed twenty thousand four hundred (20,400) steerage passengers at the immigration station, Louise docks, who were forwarded to their future homes by the Canadian Pacific Railway Company.

No record has been kept of cabin passengers.

Four hundred and twenty one (421) barges and one hundred and twenty-seven (127) schooners paid moorage during the season.

There are wintering in the Louise docks seventeen thousand two hundred (17,200) Quebec standard of lumber, besides coal, railway ties, &c.

There is stored in the freight sheds on the Louise docks and Commissioners' wharf, the following quantities of salt, viz. :

In the new shed, Commissioners' wharf, eleven hundred and eighty-one (1,181) tons.

In the cross wall shed eleven hundred and thirty-seven (1,137) tons.

In the breakwater shed, six hundred and fourteen (614) tons, which the owners are obliged to remove before the opening of navigation.

There are wintering in the upper and lower basins :

Two (2) steamships.

Four (4) steam schooners.

One (1) sailing vessel.

Seventeen (17) tow boats.

One (1) barkentine.

Seven (7) pontoons.

Thirty-four (34) American barges.

Two (2) ferry boats.

Twenty-two (22) sailing schooners.

Three (3) passenger steamers.

Thirty-seven (37) lighters.

One (1) steam dredge.

One (1) steam yacht.

The following vessels, which had suffered accidents on their outward trip, were accommodated in the Louise docks, where in some cases after having discharged a portion of their cargoes, they were repaired, reloaded and proceeded to sea, viz. :

SS. *Mont Blanc* went ashore between Lotbinière and Cap Santé, and after discharging a part of her cargo, arrived in Quebec and went into the Louise docks for survey, and after making repairs reloaded part cargo and proceeded to sea.

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SS. *Ottoman* struck a boulder on leaving Montreal, and after discharging a greater part of her cargo, came to Quebec, where she discharged the balance of her cargo and went into the graving dock at Lévis for repairs.

Sailing vessel *Anna Camp* after being run into by the ss. *Bjorvin*, below Quebec, returned for survey in the Louise docks, and the season being too late for repairs is now wintering here.

The docks are used from November 20 for wintering a large number of vessels of various tonnages where they find safe quarters to the opening of navigation.

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

P. FLYNN,
Wharfinger.

C.

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, January 2, 1901.

JAMES WOODS, Esq.,
Secretary-Treasurer,
Harbour Commission,
Quebec.

SIR,—I have the honour to submit the following report with reference to the harbour of Quebec for the year 1900.

Navigation was open in the harbour all winter.

The ice in the tidal basin and wet dock broke up on April 13.

The ice in the River St. Charles and North Channel broke up on April 14.

Local navigation from the Lower St. Lawrence was opened on March 28 by the arrival of schooner *Marie Elise* entering the Louise Docks to load full cargo.

Sch. *Marie Anne* left the harbour for the Lower St. Lawrence (light) on March 20.

Sch. *Marie Elise* left the harbour for Murray Bay with full general cargo on April 4.

Steam sch. *Marie Joséphine* left the harbour for the Gulf of St. Lawrence with general cargo on April 5.

Local tugs were towing in the harbour on April 10.

Revenue cutter ss. *Constance* entered Louise basin to coal on April 14.

SS. *St. Olaf* left with passengers and full general cargo for the North Shore, Gulf of St. Lawrence, on April 17.

Government mail tender steamer *Rhoda* left for Rimouski on April 21.

SS. *Amasis*, the first ocean freight steamer from sea (light), arrived on April 23 to load a full cargo of lumber.

SS. *Vancouver* first ocean passenger steamer from sea arrived on April 24, and after landing passengers and freight at the breakwater, entered the Louise basin to await the passing down of the ice in the river between Quebec and Montreal.

SS. *Jacone*, the first fruit steamer from the Mediterranean, arrived in the harbour on April 24 and put into Indian cove to await the passing down of the ice in the river between Quebec and Montreal.

The ss. *Lake Megantic*, the first ocean royal mail steamer, arrived on April 24, and after landing passengers and freight at the breakwater, entered the Louise basin to await the passing down of the ice in the river between Quebec and Montreal.

The ice in the river between Quebec and Montreal commenced passing down on April 25.

First passenger and freight steamer of the Richelieu and Ontario Navigation Company from Montreal, ss. *Carolina*, arrived on April 27.

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All local pontoons were placed in position in the harbour on April 27.

First ocean steamer coal laden ss. *Active* for Quebec arrived in the harbour on May 2.

The first passenger and freight steamer of the Richelieu and Ontario Navigation Company for the Saguenay left on May 1.

The ss. *Vancouver*, first ocean passenger steamer outwards, left the harbour on May 1.

The first ocean sailing vessel from sea, Bk. *Prince Eugene*, in ballast, arrived on May 15.

H. M. S. *Crescent*, *Tribune*, *Psyche* and *Quail* arrived and anchored in the harbour on June 27, and left on July 10, with the exception of H. M. S. *Psyche*, which left on the 18th for the Island of Anticosti.

Six (6) ballast vessels discharged two thousand four hundred and fifty (2,450) tons of ballast into the Commissioners' properties, subdivided as follows :

	Tons.
Louise Basin (siding).....	550
Point à Carcy (new wharf).....	1,400
New wharf (Lévis).....	500
	2,450

The cost of obtaining this ballast has been two hundred and eighty-one dollars (\$281), or about 11½ cents per long ton.

In addition to the routine work of the harbour and office, two hundred and forty-five (245) ocean sea-going steamers have been berthed in the Louise docks and break-water and at Pointe-à-Carcy wharfs.

Twenty-six (26) sea-going vessels have been berthed at the same wharfs.

The harbour regulations have been distributed to all vessels using the harbour during the season of navigation and the carrying out of their provisions attended to.

The last ocean sailing vessel with cargo, Bkt. *Bahama*, arrived in the harbour on November 13.

The ss. *Albanian* arrived in the Louise docks on November 16 to load a full cargo of grain and lumber for Europe.

The last ocean steamer, with coal cargo, ss. *Poline*, arrived in Louise docks on December 2.

The Richelieu and Ontario Navigation Company's ss. *Saguenay* made her last trip to the Saguenay on November 17.

The Richelieu and Ontario Navigation Company's ss. *Quebec* made her last trip between Quebec and Montreal on November 25.

The last ocean mail steamer, ss. *Lake Champlain*, left for sea on November 28.

The last ocean steamer ss. *Bray Head*, Captain S. J. Arthurs, and ss. *Theane*, Captain Andrew Stonehouse, R.N.R., of the Algoma Central R.R. Company, left the Louise docks on December 2.

The last ocean freight steamer, ss. *Peleki*, left the harbour on December 5.

The ice in the tidal basin and wet dock formed on December 6.

The ice in the north channel, connecting the Island of Orleans with the north shore, formed on December 15.

Notices have been posted in suitable localities, warning parties from discharging rubbish of any kind into the harbour, docks, &c., and every precaution is being taken to prevent any violation of the regulations of the Commissioners in that respect.

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

JAS. C. SULLIVAN,
Harbour Master.

Dr.

REVENUE AND EXPENDITURE.

1900.	\$	cts.	1900.	\$	cts.
Dec. 31. To Tonnage dues.....	11,350	53	Dec. 31. By Officers' salaries, including the engineering expenses and cost of superintending the new works in course of construction.....	9,993	96
Import ".....	4,789	28	Schooners reporters salaries.....	376	25
Export ".....	4,384	35	Revision of laws.....	500	00
Harbour ".....	2,177	72	Legal expenditure.....	853	91
<i>Property Earnings</i> —			Notarial.....	116	10
Louise docks, wharfs and stores under lease	38,644	09	Property expenditure and taxes, insurance and maintenance of Commissioners' docks, wharfs and stores.....	30,751	51
Due by and charged to the Department of the Interior for ground occupied for immigration purposes.....	13,845	48	Commissioners.....	2,170	00
<i>Interest Account</i>			Dredging expenses—		
<i>Beach and Deep Water Lots</i>			Dredge repairs.....	557	54
<i>Sundries</i>			Sundries.....	671	68
			Harbour Master's service.....	1,229	22
			Range lights.....	164	95
			Hardware for general use.....	140	00
			Stationery.....	265	61
			Report and annexures, 1899.....	351	85
			Auditors for 1899.....	381	00
			Quebec Gas Company.....	200	00
			Bell Telephone Company.....	115	86
			Removing snow.....	86	15
			Guarantee company for sec. treas. and book-keeper.....	75	00
			Placing and removing buoys.....	60	00
			Harbour Master, St. Thomas, attending and reporting ballast vessels.....	50	00
			Subscription to publication Quebec and Lévis at opening of twentieth century.....	50	00
			Expenses connected with reception of press delegations from Minnesota and the west.....	150	00
			Ballast for and expenses of small dredge working at Lévis.....	175	00
			Printing, advertising and sundries.....	114	00
			Twelve months' interest to 1st January, 1901, on \$350,000 of first preference bonds at 4 per cent per annum.....	724	38
			Balance, composed as follows:—		
			Surplus of receipts from Customs and earnings of Louise docks, wharfs and stores over working expenses and interest on \$350,000 of first preference bonds.....	14,000	00
					15,042 89

Anchors	264 38
Timber	2,011 09
Tools	3,112 47
Pile driver	317 32
Office furniture	3,688 33
Bills receivable	1,062 01
	4,641,118 17

MEMO.—The arrears of interest due on Government debentures is not included in this statement.

JAS. WOODS,
Secretary-Treasurer.

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, January 2, 1901.

We hereby certify that we have examined the statement of assets and liabilities of the Quebec Harbour Commissioners for the year 1900, and we have found same in all particulars the true position of the Trust at that date.

L. A. BERGEVIN, }
ALEX. J. MESSERVEY, } *Auditors.*

QUEBEC, January 31, 1900.

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EXPENDITURE ON CAPITAL ACCOUNT FOR THE YEAR 1900.

HARBOUR IMPROVEMENTS, RIVER FRONT.

Pointe-à-Carcy extension.....	\$ 25,131 29	
Breakwater curve, &c.....	2,089 64	
	-----	\$ 27,220 93
New freight shed.....		21,731 12
New coal wharf.....		36,091 01
Office furniture.....		13 36
Tools account.....		375 21
Pile driver.....		283 62
		\$85,715 25

COMPARATIVE STATEMENT of the Revenue of the* Commissioners for the Years 1899 and 1900.

	1899.	1900.	Difference in 1900.	
	\$ cts.	\$ cts.	\$ cts.	
Tonnage dues.....	12,343 84	11,350 53	993 31	Decrease.
Import.....	3,915 98	4,789 28	873 30	Increase.
Export.....	4,547 78	4,334 35	163 43	Decrease.
Harbour.....	2,286 41	2,177 72	108 69	"
Property receipts.....	50,812 27	52,509 57	1,697 30	Increase.
Interest.....	2,135 59	5,563 83	3,428 24	"
Beach and deep water lots.....	1,273 69	1,190 24	83 45	Decrease.
Sundries.....	32 50	17 00	15 50	"
	77,348 06	81,982 52	4,634 46	Increase.

HARBOUR COMMISSIONER'S OFFICE,
 QUEBEC, January 2, 1901.

JAS. WOODS,
Secretary-Treasurer.

QUEBEC, January 31, 1901.

To the Chairman and Commissioners,
 Quebec Harbour Commission.

GENTLEMEN,—We beg respectfully to report that we have audited the books and vouchers of the Commission for the year 1900, and we are pleased to state that we have found everything correct and in good order.

We beg to tender our thanks to the secretary for the courtesy and the facilities which he placed at our disposal while auditing.

We have the honour to be, gentlemen,
 Your obedient servants,

L. A. BERGEVIN,
 A. MESSERVEY,
Auditors.

APPENDIX No. 4.

BELLEVILLE HARBOUR COMMISSIONERS' REPORT FOR YEAR ENDED
DECEMBER 31, 1900.

BELLEVILLE, January 15, 1901.

To the Honourable
The Minister of Marine and Fisheries,
Ottawa.

SIR,—The Harbour Commissioners of the city of Belleville beg to submit herewith a statement of the receipts and expenditure in connection with the harbour for the year ending December 31, 1900.

The report of the harbour master for the same period is also inclosed.

It was considered advisable to rebuild and repair some of the piers at the mouth of the river during the low water season. This has been done in an economical and satisfactory manner under the supervision of the harbour master.

The dredge, although only a short time in the harbour during the autumn, did excellent work in removing a large portion of the shoal west of the island, increasing the capacity of the channel at that point.

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

GEORGE WALLBRIDGE,
Chairman, Harbour Commissioners of Belleville, Ont.

SESSIONAL PAPER No. 23

STATEMENT of Receipts and Expenditure of the Harbour Commissioners of Belleville, Ont., for the Year ending December 31, 1900.

DR.	Receipts.	\$	cts,	\$	cts.	Expenditure.	\$	cts.	\$	cts.
	Harbour dues collected during the year, as per harbour master's statement.....			3,069	34	Buoys, placing, removing and renewals.....			17	00
	Rent of small house on river bank for 13 months to November 30, 1900.....			32	50	Booms, swinging and removing.....			100	00
	Material received from the Bay of Quinté Bridge Company for material from dredging.....			85	00	Piers, rebuilding and repairing.....			521	10
						Dredging, paid for coal for use of dredge (supplemental) rip-rap.....			85	00
						Harbour improvement, for repairs to embankment and Salaries—			99	97
						Harbour master, 12 months.....	600	00		
						Tally clerk, tallying logs.....	85	00		
						Office expenses—				
						Rents of office, store-house and boat-house.....	30	00		
						Repairs to office.....	2	50		
						Fuel for office.....	5	50		
						Stationery, postage, &c.....	10	40		
						Balance in bank and on hand.....			48	40
	Balance on hand January 1, 1900.....			3,186	84				1,556	47
				1,418	69				3,049	06
				4,605	53				4,605	53

THE CANADIAN BANK OF COMMERCE.

SIR,—This certifies that the account of the undersigned with the Canadian Bank of Commerce up to the close of business on December 31, 1900, as shown in pass book, has been examined and found correct, the balance being \$3,034.36 in favor of the undersigned. The cheques paid by the bank and charged in said pass book have been returned to the undersigned.

HARBOUR COMMISSIONERS OF BELLEVILLE,

per GEO. WALLBRIDGE,
Chairman.

To the Manager.

DOMINION OF CANADA, Province of Ontario, County of Hastings, <i>To Wit:</i>	}	In the matter of the Report of the Harbour Commissioners of the city of Belleville, for the year ending December 31, 1900.
--	---	--

I, GEORGE WALLBRIDGE, of the city of Belleville, in the county of Hastings, merchant, do solemnly declare that:

1. I am chairman of the Harbour Commissioners of Belleville.
2. That annexed hereto is a statement of the receipts and expenditures of the Harbour Commissioners of Belleville for the year ending December 31, 1900.
3. That the said statement is true and correct as therein set forth.
4. That nothing is wilfully omitted therefrom which should be stated therein, or improperly inserted therein, to the best of my knowledge, information or belief.

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of 'The Canada Evidence Act,' 1893.

Declared before me at the city of Belleville,
 in the county of Hastings, this 15th
 day of January, A.D. 1901.

GEO. WALLBRIDGE.

G. MASSON,
Notary Public.

SESSIONAL PAPER No. 23

BELLEVILLE, January 15, 1901.

To the Honourable
The Minister of Marine and Fisheries,
Ottawa.

SIR,—The undersigned harbour master of the city of Belleville begs to submit the following report for the year 1900 :

Navigation opened in Belleville harbour on April 16, and closed on December 5.

Import dues on	13,500 tons coal.....	\$ 1,350 00
"	" 313½ tons tomatoes	31 35
"	" 1,369 tons merchandise.....	136 90
"	" 312 tons potters' clay	18 72
"	" 200 tons quarry plant.....	20 00
"	" 78½ tons salt.....	7 85
"	" 50½ tons cement.....	5 05
"	" 3,550 bushels wheat	4 42
"	" 5,150 bushels corn.....	6 43
"	" 400 bushels pease.....	0 50
"	" 333,523 feet lumber.....	16 66
"	" 460,000 shingles.....	13 80
"	" 235,000 lath	2 95
		\$ 1,614 63

Export dues on	222,613 logs, &c	\$ 1,217 96
"	" 215,000 feet of timber.....	21 50
"	" 450½ tons merchandise.....	45 05
"	" 447 tons talc.....	44 70
"	" 58 tons cheese	5 80
"	" 3 tons cement.....	0 30
"	" 2 tons salt.....	0 20
"	" 85,000 brick.....	4 25
"	" 188½ tons iron.....	18 85
"	" 25,458 bushels barley.....	31 82
"	" 31,439 bushels wheat.....	39 30
"	" 10,773 bushels peas	13 50
"	" 6,465 bushels rye.....	8 08
"	" 21½ tons coal oil	2 15
"	" 12½ tons nails.....	1 25
		\$ 1,454 71

Total amount derived from imports.....	\$1,614 63
Total amount derived from exports.....	1,454 71

\$ 3,069 34

The imports show a slight falling off from last year owing principally to a smaller quantity of coal being brought in by vessel.

The exports show that a larger number of logs were brought down the river this year than last.

All of which is respectfully submitted.

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

D. COLLINS,
Harbour Master.

64 VICTORIA, A. 1901

DOMINION OF CANADA
 Province of Ontario, county of Hastings,
To Wit: } In the matter of the report of the Harbour
 Master of the city of Belleville for the
 year ending December 31, 1900.

I, DANIEL COLLINS, of the city of Belleville, in the county of Hastings, Harbour Master, do solemnly declare that:

I am harbour master at the city of Belleville.

That my report hereunto annexed contains a true, correct and full statement of the revenue from the harbour at the city of Belleville for the year ending December 31, 1900.

That the said report is in all respects true and correct to the best of my knowledge information and belief.

And I make this solemn declaration, conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of 'The Canada Evidence Act' of 1893.

D. COLLINS.

Declared before me at the city of Belleville, }
 in the county of Hastings, January 15, }
 1901.

G. MASSON,
A Notary Public.

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APPENDIX No. 5.

THREE RIVERS HARBOUR COMMISSIONERS' REPORT FOR THE YEAR
ENDED DECEMBER 31, 1900.HARBOUR COMMISSIONERS' OFFICE,
THREE RIVERS, March 23, 1901.

SIR,—I have the honour, by the direction of the Harbour Commissioners of Three Rivers, to forward herewith, for the information of the Honourable the Minister of Marine, statements of receipts and disbursements of the Commission for the year ending December 31, 1900. Also a comparative statement of trade and navigation of the port and district during the same year.

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

GEORGE BALCER,
Secretary.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

COMMISSIONERS :

ALEX. HOULISTON, Esq., Chairman,
R. S. COOKE, Esq., HENRY E. HART, Esq.,
L. D. PAQUIN, Esq., P. A. DROLET, Esq.,
GEORGE BALCER, Secretary.

Upon examination of our last year's statements it was very generally conceded that the transactions of 1900 could not, by any means, come up to those of 1899. A combination of circumstances, like those which prevailed at that time, seldom occurring twice in succession. A deficit of some importance was reasonably expected ; and this the more so as the particular situation created during the season of navigation 1900, by the withdrawal for the South African war service of a very large portion of the shipping from the St. Lawrence, affected our port perhaps more than it did Montreal or other centres. But when contrary to expectation, the aggregate value of our '*direct*,' foreign trade, nevertheless reaches the figures of that unprecedented year 1899, and our '*indirect*' trade, i. e. traffic obliged to pass through other ports on account of lack of *sufficient* accommodation in our harbour—more than double this amount, further hesitation becomes useless ; the value of our port as a shipping centre must finally cease to be questioned and the importance of our *own* resources at last be recognized.

We consequently close, with no small degree of legitimate satisfaction, the first chapter of the evolution of our harbour. For henceforth new and most powerful factors will enter the field, adding not only their mighty influence and activity, but also their just claims for improvements and proper accommodation, so urgently needed by the daily increasing traffic and rapid development of our transactions.

Comparing the present statement with the one of 1899, we remark that with twenty-eight steamers less in 1900 (nearly sixty-six per cent of the average number of vessels during the last half decade) our *exports* by sea from the port of Three Rivers declined

about twenty-five per cent. *Imports* by the same route gained, on the other hand, over 100 per cent. The loss sustained is entirely borne by the lumber trade:—forty-nine million feet in 1900 as against seventy-six million in the previous year; a difference of thirty-five per cent. Serious as this difference appears, it must not, however, be taken as a sign of depression, neither as a falling off in the importance of this particular trade. No; for never in the past has our export of lumber by sea attained anything like fifty million feet. Besides, in 1899, the average value of the lumber shipped to Great Britain, was about \$12 per M. feet B.M., whereas in 1900 the average attained nearly \$15. Then again in 1899, the immense stock of lumber which had accumulated in our yards for some years past, could take advantage of the superabundance of tonnage and low freights offering to ship out to the last deal, whereas in 1900 the scarcity of vessels, and consequently abnormal increase in freights (70s. to 75s. per *Petg-Std.* as against 42s. to 44s. 6d. in 1899) prevented the most enterprising from risking further shipments. Thus it happened that in spite of a very good market abroad, our merchants were forced to keep their stock on this side of the Atlantic; and no less than forty million feet of sawn lumber is wintering over upon our wharfs and in our lumber yards, awaiting the opening of navigation to reach, as soon as possible, their final destination.

A further proof of the vitality of our old staple, lumber, as well as the prospects for next season's shipments will be found in the enormous quantity of logs which will be cut this winter in our district. In the St. Maurice territory alone, the number will be near three millions, and in the other surrounding rivers about another million. No doubt a very large proportion of these will be used by our pulp and paper mills and also as pulp wood for export; but an equally respectable quantity will be turned into lumber for both European and American markets.

In addition to the above, the products of the Grand'Mère and other industrial establishments already under operation; including those at Shawenigan and Three Rivers which will be ready for work in the course of the season, and leaving out every other project under consideration, an idea may be formed as to the extent of traffic our next year's statement will have to report upon.

At all events the situation, at present, may be summed up as follows:—

Those times have passed when the Harbour Commissioners of Three Rivers could, but with difficulty, approach the shipping community, and timidly extol and plead the merits of their port;—when every step at Ottawa was considered a begging expedition, solely intended to worry the Government with idle talk and delusive hopes—may the demand under consideration have been ever so reasonable, the improvements asked for ever so pressing. To day the change is complete. There is no more question of local influence, or favours of any kind. A union of powerful interests will know how to impress and follow up its claims, not to obtain privileges or doubtful protection, but just consideration for the enormous capital engaged. And unless the Government will leave to its fate, or nip in the bud the marvellous growth of an industrial expansion second to none in the history of the country, it cannot but yield to evidence.

When, for instance, an establishment like the Grand' Mère which turns out annually over \$2,000,000 worth of pulp and paper alone, half of which is exported to Great Britain, and Three Rivers the nearest point of shipping, only twenty-seven miles distant, cannot command more than ten per cent of such freight—something must be wrong, something left to be done to remedy such an anomalous condition.

The Belgo-Canadian Company at Shawenigan is preparing for even a larger output, exclusively for European markets, and lack of sufficient accommodation in our harbour shall prevent this company as well as others, from taking advantage of the shortest route and the nearest centre—as is already the case with the every day increasing stock of our dairy products.

The idea is simply preposterous.

We consequently trust that besides *direct* communication by steam and electric railways between the rising manufacturing towns along the St. Maurice river and deep-water at Three Rivers, our wharfs in a western direction, will be extended not less than up to the Windmill point. For experience has shown that the improvements recently made and the wharfs at present under construction—considered at the time of extraordinary importance—are to-day scarcely sufficient for our ordinary traffic

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Therefore the Canadian Pacific Company, and other railroad companies; the various establishments in and around Three Rivers join the Harbour Commissioners in their demands to the Government to take into immediate and serious consideration their pressing request and most legitimate claims.

COMPARATIVE STATEMENT OF EXPORTS AND IMPORTS FOR THE PORT AND DISTRICT OF THREE RIVERS FOR THE YEAR ENDING DECEMBER 31, 1900.

In maintaining the distinct feature of our annual reports as to the division of traffic into transactions liable to be controlled by official returns, and transactions effected via other ports, we find the aggregate volume of *direct* foreign trade, as per usual custom and consular returns, amounts to \$2,231,695, as against \$2,235,150 in 1899; a difference only slightly below the last mentioned figures.

It is divided into

Exports	\$1,650,405
Imports	581,290

thus continuing in the main, the progress noted in our former reports.

In 1899 exports figured	\$1,856,850
Imports	378,200

We have just mentioned the reason why last season's shipments fell short of the figures of 1899. It is therefore evident that under ordinary circumstances the result of 1900 would have by far exceeded the result of any preceding year. At any rate the difference in exports is fully made up by the progress in imports. And—although the greater proportion is at present produced in the Dominion—we note with pleasure an increase in plants and machinery for new industries, and raw material and goods for general manufacturing purposes.

While *direct* transactions with Great Britain and other foreign countries, as well as with the United States are thus holding their own, *indirect* transactions out-pass by far the same class of traffic of former years. We are, for instance, informed by the Laurentide Pulp Company, whose mills were last year for the first time in regular working order, that their output of pulp and paper amounted to 60,000 tons, valued at \$2,535,000; of which only \$400,000 worth are mentioned in our returns and about a similar amount claimed for home consumption; the balance exported coming under the second heading. In dairy produce our production of cheese for the English market, via Montreal, is fully in keeping with the usual output, while butter is now largely on the increase. Our hay continues, as usual, to reach various American markets without coming under further notice, and a large proportion is shipped by every outgoing cattle steamer. Many other products also take an irregular route to reach their destination.

At all events, we certainly will not be far wrong in valuing our combined transactions with foreign countries in 1900 at \$4,500,000, two millions more than in 1896; and of this fairly respectable amount 88 per cent is on account of export.

The following is the summary statement of exports:—

To the United States—

Lumber, thousand feet B.M., 19,500	\$	198,672
“ other		15,590
Pulp wood, cords, 62,171		223,510
Pulp and paper		176,712
Produce of the field and farm		36,380
“ “ mines		84,773
Brimstone, crude		18,260
Other manufactures and produce		24,925
Household effects		6,500

\$ 785,322

To Great Britain—		
Lumber, thousand feet B.M., 44,570.....	£	627,481
Paper and cardboard.....		165,160
	£	<u>792,641</u>
To France—		
Lumber, feet B.M., 662,000.....	£	10,268
Pig iron.....		1,800
Sundries.....		287
	£	<u>12,355</u>
To Belgium—		
Lumber, feet B.M., 700,000.....	£	9,596
Pig iron.....		1,600
	£	<u>11,196</u>
To Spain—		
Lumber, feet B.M., 1,736,000 feet.....	£	20,855
To Australia—		
Lumber, feet B.M., 1,140,000.....	£	15,318
Paper.....		12,338
	£	<u>27,656</u>
To South Africa—		
Hay.....	£	380
Total exports.....	£	<u><u>1,650,405</u></u>

IMPORTS.

From the United States—		
Plant, hardware and machinery.....	£	153,415
Metal or metal goods.....		22,134
Drugs, chemicals, &c.....		6,272
Firebrick, sand, stone, &c.....		12,857
Coal and coke.....		19,050
Breadstuffs and provisions.....		12,623
Cotton and woollen goods.....		11,449
Fancy goods.....		3,032
Leather (glove).....		28,071
Other manufactures.....		6,725
Wood.....		3,749
Raw tobacco.....		3,749
Prints and stationery.....		932
Sundries.....		10,549
Settlers' effects.....		30,907
	£	<u>326,297</u>
From Great Britain—		
Cotton and woollen goods.....	£	6,551
Dress and fancy.....		7,454
Other manufactures.....		1,405
Leather.....		875
Rags for paper mills.....		9,516
	£	<u>25,801</u>

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From France—	
Dress and fancy goods.....	\$ 1,700
Church ornaments, bells	2,659
Books.....	1,832
Wine and brandies.....	1,633
Sundries.....	447
	<hr/>
	\$ 8,271
From Germany—	
Leather (glove).....	\$ 6,128
Furs.....	1,753
Dress and fancy goods.....	562
Wine.....	230
	<hr/>
	\$ 8,673
From Holland—	
Gin.....	\$ 5,120
	<hr/>
From Austria—	
Furs.....	\$ 662
	<hr/>
From Belgium—	
Furs.....	\$ 343
	<hr/>
From Spain—	
Wine.....	\$ 113
	<hr/>
From Italy—	
Sulphur.....	\$ 139,530
	<hr/>
From Lower Provinces—	
Coal.....	\$ 66,480
	<hr/>
Total imports.....	\$ 581,209
	<hr/>
Grand total 'direct' transactions—	
Exports.....	\$ 1,650,405
Imports.....	581,290
	<hr/>
	\$ 2,231,695
	<hr/>

GEORGE BALCER,
Secretary.

Harbour Commissioners' Office,
Three Rivers, March 11, 1901.

STATEMENT of Number and Tonnage of Sailing Vessels and Steamers entered inward and outward of the port and out-ports of Three Rivers for the year 1900.

OCEAN TRAFFIC.

RETURN OF VESSELS INWARDS.			RETURN OF VESSELS OUTWARDS.		
	No.	Tons.		No.	Tons.
Total arrivals.....	63	130,343	Total departures.....	63	130,343
Steamers.....	60	127,232	British and Canadian.....	54	116,551
Sailing vessels.....	3	3,111	Norwegian.....	6	7,837
			French.....	2	3,899
			Italian.....	1	2,056

PORT OF THREE RIVERS.

ARRIVED.			RETURN.		
Steamers.....	45	95,042	Great Britain.....	23	51,738
Sailing vessels.....	2	2,331	Inland ports.....	19	36,892
			Antwerp.....	3	5,627
			France.....	1	1,919
			Spain.....	1	1,197

OUT PORT: BATISCAN.

Steamers.....	4	8,540	Great Britain.....	4	8,540
---------------	---	-------	--------------------	---	-------

LAKE ST. PETER: PIERREVILLE, LOUISEVILLE.

Steamers.....	11	23,650	Great Britain.....	9	20,473
Sailing vessels.....	1	780	France.....	1	1,980
			Spain.....	1	1,197
			Australia.....	1	780

UNITED STATES TRAFFIC.

	Number.	Tonnage.
Port of Three Rivers; U. S. canal boats.....	449	44,452
Out ports, barges " ".....	151	15,065
Total.....	600	59,517

INLAND TRAFFIC.

Bateaux not registered.....	195	
Schooners and barges.....	68	8,232
Tugs and steamboats.....	130	14,265
Total.....	393	22,497

(Rich. and Ont. Nav. Cos. Steamers, market and local boats not included.).

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RECAPITULATION.

Ocean traffic.....	63	130,343
United States traffic.....	600	59,517
Local traffic.....	393	22,497
Grand total.....	1,056	212,357

RECEIPTS AND DISBURSEMENTS OF THE HARBOUR COMMISSIONERS OF THREE RIVERS FOR THE YEAR 1900.

Receipts.

Commissioners' Office—	
Tonnage dues, on vessels.....	\$ 338 62
Harbour dues on goods, inwards.....	174 49
“ “ “ outwards.....	479 89
Commutation.....	1,356 80
Rent of wharfs and moorage.....	239 49
	<u>\$ 2,589 29</u>
Custom House—	
Tonnage dues on vessels.....	\$2,666 76
Harbour dues on goods, inwards.....	2,013 61
“ “ “ outwards.....	2,506 74
Moorage dues.....	432 09
	<u>7,619 20</u>
Total receipts.....	\$10,208 49
Sale of debentures.....	\$31,500 00
Interest on deposit.....	161 69
	<u>31,661 69</u>
Bank deposit and cash, January 1, 1900.....	18,389 68
	<u>\$60,259 86</u>

Disbursements.

Administration—	
Current expenses.....	\$ 319 06
Salaries and commissions.....	2,216 57
Rent.....	200 00
Printing and stationery.....	77 32
Refunds and legal expenses.....	247 39
	<u>\$ 3,060 34</u>
Engineer's office.....	\$ 81 22
Repairs and general harbour expenses.....	1,143 18
	<u>1,224 40</u>
Interest and sinking fund.....	5,811 45
	<u>\$10,096 19</u>
Disbursements—	
Construction account.....	\$41,056 54
Plant and tools.....	68 44
	<u>41,124 98</u>
On capital.....	9,038 69
Deposit in bank and cash, December 31, 1900.....	
	<u>\$60,259 86</u>

GEORGE BALCER,
Secretary Treasurer.

THREE RIVERS, January 15, 1900.

RECEIPTS AND DISBURSEMENTS OF HARBOUR COMMISSION OF THREE RIVERS FOR THE YEAR 1900.
RECEIPTS.

MONTHS.	COLLECTION OF HARBOUR DUES.										PROCEEDS FROM			
	Commissioners' Office.					Custom House.					Sale of debentures.	Notes issued.	Other sources.	
	On Goods.		Com-mutation.	Rent of wharf and Moorage.		Tonnage dues.	On Goods.		Moorage dues.					
	Inwards.	Outwards.		Inwards.	Outwards.									
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
January	36	27	58	39	47	74	100	00	40	00				
February			1	75	73	42	5	00	15	00				
March	18	00	21	68	500	00								
April	3	68	2	20	17	30			5	95				
May	33	53	6	40	15	48			6	50	800	00	400	00
June	14	04	43	54	30	74	100	00	28	17	200	00	200	00
July	15	90	4	77	5	31	1	80	0	95	300	00	300	00
August	2	83							10	45				
September	105	15	2	90					30	92	500	00	1,000	00
October	23	57	27	53					1	55	200	00	200	00
November	14	40	18	66					100	00	1,366	76	506	74
December	71	50	10	10	245	74	135	00					10,000	00
	338	62	174	49	479	89	1,356	80	239	49	2,666	76	2,013	61
													2,506	74
														432
														09
														18,551
														37

* Deposit and cash.

Recapitulation.

Commissioners' office—	
Tonnage dues.....	\$ 338 62
Harbour dues—inwards.....	174 49
" outwards.....	479 89
Commutation.....	1,356 80
Rent of wharfs and moorage.....	239 49
	<u>\$ 2,589 29</u>

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Custom-house—		
Tonnage dues.....	\$ 2,696 76	
Harbour dues—inwards.....	2,013 61	
" outwards.....	2,506 74	
Moorage.....	432 09	
	<u>7,619 20</u>	
Total collection.....		\$ 10,208 49
Proceeds from—		
Sale of debentures.....	\$ 31,500 00	
Interest on deposits.....	161 69	
Deposit in bank and cash, January 1, 1900.....		<u>31,661 69</u>
		<u>18,389 68</u>
		<u>60,259 86</u>

RECEIPTS and Disbursements of Harbour Commission of Three Rivers, &c.—*Concluded.*
DISBURSEMENTS.

MONTHS.	EXPENSES FOR ADMINISTRATION.					DISBURSEMENTS CHARGEABLE TO							
	Current expenses.	Salaries and Commissions.	Rent.	Printing and Stationery expenses.	Travelling and other expenses.	Refunds.	Engineer's office.	Repairs.	Construction account.	Plants and Tools.	Property account.	Interest account.	Divers.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
January.....	56 58	157 33	50 00	.....	.....	23 43	10 30	14 05	2 151 05	.....	.....	2,262 50	477 50
February.....	16 35	157 33	50 00	.....	.....	173 88	15 85	.....	3 155 15	.....	.....	125 00	.....
March.....	22 81	157 33	50 00	.....	.....	.....	13 27	6 75	1 370 02	.....	.....	.....	.....
April.....	12 85	181 33	50 00	.....	.....	.....	2 50	236 14	4 326 51	8 00	.....	.....	.....
May.....	18 14	165 33	.....	.....	.....	.....	.....	108 47	223 10	.....	.....	.....	.....
June.....	16 85	165 33	.....	.....	.....	.....	.....	46 90	302 25	.....	.....	.....	.....
July.....	33 18	165 33	50 00	6 35	*25 00	17 51	.....	28 50	232 50	.....	.....	.....	.....
August.....	28 40	165 33	.....	1 50	.....	7 57	.....	288 76	232 50	.....	.....	.....	.....
September..	13 93	165 33	.....	14 02	.....	.....	7 25	61 75	232 50	.....	.....	.....	.....
October.....	17 07	165 33	.....	.....	.....	.....	2 50	59 95	232 50	.....	.....	.....	.....
November...	38 05	165 33	50 00	.....	.....	.....	5 05	56 97	9 353 00	.....	.....	.....	.....
December...	45 35	405 94	.....	55 45	.....	.....	24 50	464 32	11 222 39	.....	.....	.....	.....
	319 06	2,216 57	200 00	77 32	25 00	222 39	81 22	1,143 18	41,056 54	68 44	.....	4,856 45	955 00

* Legal.

Recapitulation.

Administration—	
Current expenses.....	\$ 319 06
Salaries and commissions..	2,216 57
Rent.....	200 00
Printing and stationery....	77 32
Legal expenses.....	25 00
Refunds.....	222 39
	\$ 3,060 34
Disbursements on revenue—	
Engineer's office.....	\$ 81 22
Repairs and general har-	
bour expenses.....	1,143 18
	1,224 40

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Interest on debentures.....\$	4,856 45	
Sinking fund.....	955 00	
	<hr/>	5,811 45
Total expenses on revenue.....		\$10,096 19
Disbursements on capital—		
Construction account.....	41,056 54	
Plants and tools.....	68 44	
	<hr/>	41,124 98
Total disbursements.....		\$ 51,221 17
Deposit in bank and cash December 31, 1900.....		9,038 69
		<hr/>
		60,259 86
		<hr/>

GEORGE BALCER,
Secretary-Treasurer.

THREE RIVERS, January 15, 1901

APPENDIX No. 6.

REPORT OF THE PICTOU HARBOUR COMMISSIONERS FOR THE YEAR
ENDED DECEMBER 31, 1900.

Pictou, N.S., January 10, 1901.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to inclose you accounts of the Harbour Commissioners of the Port of Pictou, for the year ending December 31, 1900; also, a statement from the Collector of Customs for this port.

Yours very truly,

HENRY G. IVES,
Secretary.

STATEMENT of account of Harbour Dues at the Port of Pictou, N.S., for Year ending
December 31, 1900.

1899.	RECEIPTS.	\$ cts.	\$ cts.
Dec. 31..	By Balance in bank of Nova Scotia.....		70 00
1900.			
Dec. 31..	Receipts harbour dues during year 1900, 50,139 tons at 1½c. per ton.....		752 08
			822 08
	EXPENDITURE.		
" 31..	To Jas. A. Fraser, harbour master, during year ending December 31, 1900.....	266 66	
" 31..	Deposited to the credit of Harbour Commissioners.....	430 42	
			697 08
" 31..	Balance in Bank of Nova Scotia.....		125 00

JAS. A. RUSSELL,
Acting Collector of Customs.

Pictou, December 31, 1900.

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HARBOUR COMMISSIONERS, Port of Pictou, N.S., in account with Henry G. Ives, Secretary.

1900.		\$ cts.	1900.		\$ cts.
Jan. 12	To Jas. Kennedy, repairs to New Glasgow wharf.....	4 75	Jan. 1	By Balance per account.....	891 63
Mar. 28	Geo. Chisholm, lumber for ballast, wharf buoy.....	24 00	Dec. 31	Amount deposited by Collector of Customs.....	430 42
April 5	D. Johnson, labour, material, ballast, wharf buoy.....	24 63	" 31	Amount of deposit receipt.....\$ 2,500 00	
May 3	Joseph Graham, wharfinger at New Glasgow.....	25 00	" 31	Amount of interest on deposit receipt.....	87 50
" 5	Mell. McDonald, poles for East River.....	4 40			2,587 50
" 9	Putting out buoys and bushing channel to East River.	30 00			
" 9	Jno. McRae, bushing Middle River.....	8 00			
" 22	Thos. Fraser, bushing West River.....	8 00			
June 9	Duncan Johnson, launching buoy.....	2 00			
" 20	Painting buoys.....	3 00			
Sept. 11	Fixing buoys at loading ground.....	3 00			
" 13	W. B. Ives, typewriting..	1 30			
" 14	Roderick Graham, bushing East River.....	20 00			
Dec. 12	Secretary's salary.....	100 00			
" 17	Taking in buoys.....	24 00			
" 31	Deposit receipt 49651 (January 2, 1901).....	2,587 50			
" 31	Balance in Bank of Nova Scotia.....	1,039 97			
		3,909 55	Jan. 1	Balance in Bank of Nova Scotia,	3,909 55
					1,039 97

HENRY G. IVES,
Secretary.

Pictou, January 2, 1901.

APPENDIX No. 7.

REPORT OF THE HARBOUR COMMISSIONERS OF NORTH SYDNEY FOR
THE YEAR ENDED DECEMBER 31, 1900.OFFICE OF HARBOUR COMMISSIONERS,
NORTH SYDNEY, C.B., May 15, 1901.To the Honourable
The Minister of Marine and Fisheries,
Ottawa.

SIR,—The Harbour Commissioners for this port beg to submit herewith a statement of receipts and expenditure in connection with the harbour for the year ending December 31, 1900. Also the number of vessels that arrived here during the year, giving the total tonnage and classification.

The Dominion Iron and Steel Company, Limited, have made large importations of iron ore and material that entered into construction of their extensive works at Sydney, which accounts to a great extent for the increase of 100 ocean steamers, having a tonnage of 270,000 tons over the preceding year.]

The Commissioners have much pleasure in stating that notwithstanding the large number of vessels using this port, there is not one report of any vessel taking the bottom while entering or leaving the harbour, in fact not a vessel stranded during the year between Scattarie and St. Paul's.

Ship owners and masters, however, have been urging the necessity of improvement in our harbour lights and those in this vicinity, and the Commissioners understand that your engineer, who investigated this matter, will recommend certain changes which will remove some of the difficulties complained of.

The expenditure during the past year has been chiefly in connection with the repairs and extension of the breakwater. The unusually heavy gales during the latter part of the year damaged the work considerably, but the whole front of the breakwater has now been faced with good piling and well secured.

There has been no interruption to shipping at this port during the past winter months. The ss. *Bruce* has made regular trips during the winter season connecting with the Newfoundland railway.

Your obedient servant,

WM. HACKETT,
Secretary.

NUMBER, tonnage and classification of vessels that arrived at this port during the year ending December 31, 1900, navigated by 27,456 men.

	No.	Tonnage.
Ocean steamers	691	860,075
Ships	1	1,468
Coasting steamers	158	49,963
Barques	8	5,808
Barkentines	13	4,324
Brigantines	13	1,919
Schooners	875	67,310
	<hr/>	<hr/>
	1,759	990,867

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Coal shipments—

	Tons.
Nova Scotia Steel Co., Ltd.	216,300
North Sydney Coal Mining Co.	7,000
Dominion Coal Co, Ltd. (fiscal year).....	2,044,877

HARBOUR COMMISSIONERS' Statement of Receipts and Expenditure for the Year ending December 31, 1900.

1900.		RECEIPTS.	\$ cts.	1900.		EXPENDITURE.	\$ cts.
Jan.	1	Amount on hand	2,680 35	Jan.	31	Paid W. H. Lane, printing	2 50
"	6	Received harbour dues	17 08	Feb.	6	" W. F. Tutly, truckage	2 00
"	13	" "	22 17	March	9	" J. Beaton, acct. of piling	29 11
"	20	" "	32 35	April	3	" Wm. McInnis " "	53 75
Feb.	10	" "	58 70	"	5	" Neil McSween " "	22 39
April	3	" "	52 53	"	5	" freight on piling	9 00
"	18	" "	85 50	"	12	" R. Scooplie, acct. piling	21 28
"	26	" "	44 34	"	12	" J. Treen, plans, spect., copy	22 50
"	27	" "	28 05	"	17	" McMullin & Ball, piling	322 57
May	12	" "	78 81	May	21	" freight on logs and piling	13 50
"	18	" H. Snyder	10 00	June	18	" J. W. Gordon	93 33
"	19	" Harbour dues	71 68	"	25	" Davis & Henderson	5 13
"	26	" "	27 48	"	25	" Record, printing	3 75
"	31	" "	68 62	Sept.	10	" Discount on Bruce cheque	0 50
June	9	" "	79 56	"	10	" Telegrams	0 75
July	31	" "	585 17	"	17	" J. D. McNeill, acct. logs	87 63
"	31	" "	31 55	"	22	" Black Bros. & Co. rope & exp.	11 24
Sept.	10	" "	174 30	"	22	" labour on breakwater	106 75
"	26	" Captain LeBlanc	3 00	"	24	" G. B. Ingraham	51 25
Oct.	15	" Harbour dues	325 00	"	29	" N. S. Herald, printing	8 25
"	15	" "	44 34	Oct.	2	" Intercolonial Ry., freight	28 80
Dec.	11	" "	48 99	"	6	" labour on breakwater	286 38
"	11	" "	306 75	"	17	" Angus McLean, acct. logs	60 84
"	28	" "	47 70	"	19	" Jas. Connell, iron and bolts	67 30
"	31	" "	688 70	"	20	" labour on breakwater	273 96
				"	31	" Hy. Ball, acct. logs	30 25
				"	31	" Rod. McDonald, acct. logs	12 50
				Nov.	3	" labour on breakwater	245 90
				"	6	" J. J. Johnson for hardwood	51 30
				"	16	" tug "Zaidee," towing scows	14 00
				"	16	" Sidney Salter, lumber acct.	31 79
				"	17	" paid labour on breakwater	149 75
				"	17	" Wm. Moore, truckage	3 50
				"	19	" R. Musgrove, iron, bolts, etc.	113 07
				"	26	" Intercolonial Ry., freights	20 25
				Dec.	3	" John Walsh, storage	4 50
				"	5	" W. F. Tutly, ballast, trucking	42 75
				"	14	" Michael Morrison, labour	10 00
				"	14	" McDonald & Treen, b.w. ex.	543 45
				"	19	" J. D. McKinnon, acct. logs	161 33
				"	19	" Bent & Cahoon	2 37
				"	20	" A. A. McDonald, acct. logs	24 37
				"	20	" unloading car logs	2 50
				"	28	" P. McDonald	275 00
				"	31	" M. W. Lawlor	181 67
				"	31	" Office	75 00
				"	31	" J. Shean, harbour master	400 00
				"	31	" V. E. Bown, acct pd. Mrs.	
				"	31	" Bown	22 50
				"	31	" Wm. Hackett	400 00
						Balance on hand	1,210 51
			5,612 72				5,612 72

PETER J. McDONALD }
 M. H. LAWLOR, } Harbour Commissioners.
 WM. HACKETT, }

APPENDIX No. 8.

REPORT OF THE PILOTAGE DISTRICT OF MONTREAL FOR THE YEAR
ENDED DECEMBER 31, 1900.

HARBOUR COMMISSIONERS OF MONTREAL,
SECRETARY'S OFFICE, MONTREAL, February 28, 1901.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour, by direction of the Harbour Commissioners of Montreal, as the Pilogage Authority, to transmit, for the information of the Honourable the Minister of Marine and Fisheries, the following report of the Pilotage District of Montreal for the year ended December 31, 1900 :

The accompanying statement gives the names, earnings, &c., of all the pilots for the past season, and shows a decrease in the latter of \$9,597.99, which may be accounted for by the absence from the St. Lawrence of a number of vessels chartered as transports for South Africa.

The total amount of pilotage dues was received from the following services, namely :

BRITISH.

Steamships.	\$53,290 25	
Sailing vessels.....	280 35	
		————— \$53,370 60

FOREIGN.

Steamships.....	\$11,457 84	
Sailing vessels.....	161 25	
		————— 11,619 09
Total.....		————— \$65,189 69

Before the opening of the season, the selection of pilots for special service was made in conformity with by-law 109 of the Commissioners, on application being made by the pilots.

On April 18, pilot Elzéar Bellisle, sixty-six years of age, was granted a renewal of his license for another year, after having filed a medical certificate to the effect that his eyesight was normal, and after being examined under the provisions of by-law 103.

Before the opening of navigation, pilot François Desjordy, of Lavaltrie, who had been on the pension list since May 1, 1897, on account of impaired eyesight, submitted medical certificates to the effect that his sight was irreparably impaired. In view thereof he was placed permanently upon the pension list from May 1, 1900.

Pilot Louis Mayrand, of Ste. Anne de la Péraide, who was licensed on December 9, 1880, submitted a medical certificate to the effect that his hearing was irreparably impaired, and in view thereof the Commissioners placed him on the pension list from May 1, 1900.

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Pilot Jean Arcand, of Deschambault, who was licensed on December 10, 1879, submitted a medical certificate to the effect that his eyesight was irreparably impaired, and in view thereof he was placed on the pension list from October 1, 1900.

Three new pilots were granted branches after complying with all the requirements of the by-laws. They are, Anthime Perrault, of Deschambault, on May 1 ; Achille Bélanger, of Lotbinière, on May 19, and J. N. Raymond, of Deschambault, on October 2.

With these additions, there are fifty-five pilots on the list, which is the number allowed by by-law No. 99.

In April, an examination of apprentice pilots was held at which there were seven candidates, of whom Messrs. J. N. Raymond and Henri Bourassa were successful ; and in December another examination was held, at which there were six candidates, of whom Messrs. J. E. Pleau, George Veillet, Melville Labranche, Azarias Paquin and Damien Paquet passed a satisfactory examination. They were all granted permits in accordance with by-law No. 96 of the Commissioners.

The following list gives the names, age, residence and date of license of each apprentice pilot now serving his time under this authority :

LIST OF APPRENTICE PILOTS.

No.	Name.	Age.	Residence.	Date of License.
1	*Pleau, J. E.....	30	Ste. Anne de la Pérade.....	November, 11, 1890.
2	*Veillet, George.....	31	" ".....	July 19, 1892.
3	*Labranche, Melville.....	26	Portneuf.....	October 11, 1892.
4	Gagnon, Albert.....	25	Three Rivers.....	" 11, 1892.
5	*Paquin, Azarias.....	27	Deschambault.....	" 11, 1892.
6	Gignac, Arthur.....	27	Portneuf.....	" 11, 1892.
7	*Paquet, Damien.....	27	Deschambault.....	May 30, 1893.
8	§Bourassa, Henri.....	25	".....	October 24, 1893.
9	Angers, Alfred.....	24	Ste. Anne de la Pérade.....	January 30, 1894.
10	Gariépy, J. A. U.....	21	St. Albans.....	June 2, 1896.

* Passed examination, [see report.]

§ Permit issued 26th April, 1900, [Art. 96, Harbour Commissioners' By-laws.]

Thirty-three applicants to be placed on the list of apprentice pilots have been examined, and the following were given until June 1, 1901, to take out their license as apprentices, and to rank in the following order :

LIST OF APPLICANTS FOR LICENSE OF APPRENTICE PILOT,

No.	Name.	Residence.	Date of Application.
1	Gariépy, Jos. Phil. Arth.	Lachevrotière	January 16, 1894.
2	Frenette, Oswald.	Portneuf	March 1, 1894.
3	Hamelin, Chas. B.	Champlain	November 17, 1896.
4	Perron, Tancrède.	Deschambault	" 28, 1896.
5	Angers, J. B.	Ste. Anne de la Pêrade	" 28, 1896.
6	Fatoine, J. B., jr.	Sydney, C.B.	December 3, 1896.
7	Frenette, Delavoie.	Portneuf	January 25, 1897.
8	Gauthier, Laurent J.	Deschambault	March 26, 1897.
9	Perrault, fils, David.	"	April 8, 1897.
10	Hamelin, Fortunat.	"	" 19, 1897.
11	Gauthier, Cyriac.	"	May 9, 1897.
12	Royer, fils, Joseph	606 St. Valier St., Quebec.	" 23, 1897.
13	*Perrault, Jcan.	Deschambault	" 25, 1897.
14	Carpentier, Eugène.	Champlain	June 28, 1898.
15	Fortier, J. Philéas.	St. Jean, Isle of Orleans.	August 27, 1898.
16	Rivard, Frs. Xavier	Grondines	September 12, 1898.
17	Myrand, Joseph.	Lachevrotière	November 6, 1898.
18	Arcand, Arthur.	Portneuf	" 9, 1898.
19	*Frenette, Georges.	"	" 9, 1898.
20	Gariépy, Hercule	Deschambault	" 18, 1898.
21	Paquin, Emile.	"	December, 2, 1898.
22	Arcand, Alfred.	Grondines	April 11, 1899.
23	Bouillé, Henri.	Deschambault	August, 5, 1899.
24	Lachance, Napoléon	Riv. Lafleur, Isle of Orleans.	" 6, 1899.
25	*Labranche, L. George.	Portneuf	" 16, 1899.
26	Larochelle, Eugène.	St. Michel de Bellechasse	November 11, 1899.
27	Rodrigue, Emile.	Deschambault	January 30, 1900.
28	Perron, Théod.	"	April 14, 1900.
29	Arcand, Arthur	Champlain	May 1, 1900.
30	§Gagnon, Henri	"	" 9, 1900.
31	Rousseau, Oscar	St. Michel de Bellechasse	" 10, 1900.
32	Dussault, Bona	St. Albans, Portneuf Co.	" 14, 1900.
33	Paquin, Côme	Deschambault	July 5, 1900.
34	Labranche, Chas. Ed.	Portneuf	" 26, 1900.
35	*Arcand, Joseph Arthur.	Champlain	August 6, 1900.
36	Boudreau, Anthime	Deschambault	" 11, 1900.
37	Gariépy, Laurent.	"	September 21, 1900.

§ Has not been examined.

* To furnish another certificate as to eyesight.

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The amounts received and expended by the Harbour Commissioners, as Pilotage Authority of the district, apart from their receipts and disbursements, in trust for the Montreal Decayed Pilots' Fund, of which the annual report and statements have been sent you, were as follows :

RECEIVED.

From J. A. T. Perrault, fee of pilot's license.....	\$	10	00
A. Bélanger ".....		10	00
J. N. Raymond ".....		10	00
Fees on 9 licenses as apprentice pilots at \$5 each.....		45	00
Pilots 2 p.c. of the pilotage dues on sundry vessels.....		12	99
Collector of Customs, Sorel, 2 p.c. of the pilotage dues on vessels to and from Sorel.....		10	77
Collector of Customs, Three Rivers, 2 p.c. of the pilotage dues on vessels to and from Three Rivers and Batis-can.....		30	40
Collector of Customs, Montreal, 2 p.c. of the pilotage dues on vessels to and from Montreal.....		1,228	90
Total.....	\$	1,358	06

EXPENDED.

By Wm. Miray, expenses from Quebec to Montreal <i>re. A. Bellisle vs. the Commissioners</i>	\$	18	00
W. Lorient, Quebec, bailiff's fees.....		0	87
Five pilots, attendance at examination of apprentice pilots.....		323	30
Dominion Express Company, parcel to Quebec.....		0	35
Geoffrion, Geoffrion, Roy & Cusson, professional services.....		164	40
Urquhart & Wright, stenographers' fees <i>re investigations ss. Ottoman</i>		21	30
L. Gauthier, pilot, expenses <i>re investigation ss. Ottoman</i>		5	00
Five pilots, attendance at examination of applicants for apprenticeship.....		192	45
Contribution towards the expenses of the pilotage office at Quebec which were \$955.81, including agent's salary of \$500.....		600	00
Printing, stationery, &c.....		43	50
Pilots' certificates.....		39	00
Total.....	\$	1,408	17

The above statement shows that the expenses were \$50.11 over the receipts, which with the deficiency of \$757.44 from 1899, leaves an over-expenditure for six years of \$807.55.

The tariff of pilotage dues which has been in force since March, 1877, is as follows :

From the harbour of Quebec to Three Rivers and the opposite side of the River St. Lawrence, or any place above Portneuf and below Three Rivers :

For the pilotage of any vessel in tow, or propelled by steam (except as hereinafter mentioned), for each foot of draught of water :

Upwards.....	\$	1	50
Downwards.....		1	50

For the pilotage of any sea-going vessel propelled by steam, for each foot of draught of water :

Upwards.....	\$ 1 75
Downwards.....	1 75

For the pilotage of any vessel under sail, for each foot of draught of water :

Upwards.....	\$ 2 60
Downwards.....	1 90

From the harbour of Quebec to Sorel and the opposite side of the River St. Lawrence, or any place above Three Rivers and below Sorel :—

For the pilotage of any vessel in tow, or propelled by steam (except as hereinafter mentioned), for each foot of draught of water :

Upwards.....	\$ 1 50
Downwards.....	1 50

For the pilotage of any sea-going vessel propelled by steam, for each foot of draught of water :

Upwards.....	\$ 1 87½
Downwards.....	1 87½

For the pilotage of any vessel under sail, for each foot of draught of water :

Upwards.....	\$ 3 15
Downwards.....	2 10

From the harbour of Quebec to the harbour of Montreal, or to any place above Sorel and below the harbour of Montreal :

For the pilotage of any vessel in tow, or propelled by steam (except as hereinafter mentioned), for each foot of draught of water :

Upwards.....	\$ 2 00
Downwards.....	2 00

For the pilotage of any sea-going vessel propelled by steam, for each foot of draught of water :

Upwards.....	\$ 2 50
Downwards.....	2 50

For the pilotage of any vessel under sail, for each foot of draught of water :

Upwards.....	\$ 4 20
Downwards.....	2 80

From the harbour of Montreal to Sorel, or to any place above Sorel and below Hochelaga, and from Sorel, or any place above Sorel and below Hochelaga, to the harbour of Montreal, for each foot of draught of water for each such pilotage :

Upwards.....	\$ 1 00
Downwards.....	1 00

For the removal of any vessel from one wharf to another, within the limits of the harbour, or from any of the wharfs into the Lachine canal ; or out of the said canal to any of the wharfs in the harbour ; or from the foot of the current ; or from Longueuil

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into the harbour ; or from the harbour to the foot of the current or to Longueuil ; for each service \$5.

The following are the mishaps which called for investigation :

On August 29, the ss. *Thor*, from Quebec upwards, in charge of pilot Jean Arcand, grounded outside the channel, in a bank of sand and sawdust. The pilot explained that a sudden indisposition which affected his sight caused him to mistake a red buoy for a black one, and filed a medical certificate to the effect that his eyesight was seriously affected, and at the same time asked to be superannuated. In view of these facts and considering that the vessel sustained no damage, the request was granted, after the complaint against the pilot had been withdrawn.

Leaving port on October 10, the ss. *Ottoman*, in charge of pilot Prudent Beaudet, touched off Ile Ronde and sustained injury. The agents of the line asked for an investigation, which was held, no blame being attached to anybody, but the Commissioners decided to call the attention of steamship agents to the advisability of vessels retaining the tugs until they are fully under the control of their rudder.

On November 4, after undergoing repairs, the ss. *Ottoman* on leaving port struck the Dobell wharf. The pilot attributed the cause of the mishap to the jamming of the steering gear, and after a careful investigation the Commissioners came to the following conclusion : 'That from the evidence adduced, the Commissioners find that where the mishap occurred, the channel has a width of 1,000 feet and the full depth of water, but have failed to discover the real cause of the mishap, and cannot attach any direct blame to the persons in charge of the vessel.'

And made the following recommendation: that before leaving port, captains and pilots of vessels ascertain that all the machinery is in perfect working order, and that there is sufficient steam to propel the vessel at full speed, and work the steering gear effectually.

The water in the channel kept at a very satisfactory depth throughout the season, except in the three last months when it went below the normal (27 ft. 6 in.) several times. From May 1 to December 1, the highest mark reached was 35 feet 1 inch, and the lowest 26 feet 9 inches on November 18.

Appended is a list of vessels which passed down during the latter part of the season, drawing 26 feet and over, with the relative depth in the channel on the day of passage, as indicated by the Government gauge at Sorel.

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STATEMENT showing the Draught of Steamships for part of Season of 1900, drawing 26 feet and over.

Date.	Steamers.	Draught when stationary in harbour by Pilot's report.	Depth of water in channel by Sorel Gauge.
		Ft. in.	Ft. in.
Aug. 1.....	SS. Sarmatian, down.....	27 0	29 4
" 3.....	Iona ".....	26 0	29 0
" 4.....	Montfort ".....	26 6	28 10
" 4.....	Roman ".....	27 0	28 10
" 4.....	Manchester Commerce ".....	26 0	28 10
" 8.....	Pomeranian ".....	26 4	28 8
" 10.....	Amarynthia ".....	26 3	29 0
" 11.....	Vancouver ".....	26 0	29 2
" 22.....	Devona ".....	26 0	28 3
" 23.....	Monteagle ".....	26 5	28 2
" 25.....	Dominion ".....	26 0	28 2
" 30.....	Rapidan ".....	26 3	28 0
" 31.....	Cambroman ".....	26 6	27 9
Sept. 5.....	Sarmatian ".....	26 6	27 0
" 5.....	Ottoman ".....	26 1	27 0
" 8.....	Roman ".....	26 0	27 3
" 11.....	Pomeranian ".....	26 5	27 8
" 11.....	Montreal ".....	26 2	27 8
" 15.....	Vancouver ".....	26 0	27 7
" 18.....	Hurona ".....	26 3	27 6
" 23.....	Ramore Head ".....	26 0	27 8
" 27.....	Monteagle ".....	26 6	27 9
" 28.....	Dominion ".....	26 2	27 11
Oct. 5.....	Lake Ontario ".....	26 0	27 9
" 6.....	Cambroman ".....	26 6	28 2
" 10.....	Sarmatian ".....	26 8	28 8
" 13.....	Roman ".....	26 0	28 6
" 16.....	Pomeranian ".....	27 0	27 8
" 31.....	Monteagle ".....	26 0	27 9
Nov. 13.....	Sarmatian ".....	26 9	28 0
" 17.....	Pomeranian ".....	26 8	27 0
" 19.....	Amarynthia ".....	26 0	28 0

The semaphores at Cap Santé and Cap à la Roche were worked throughout the season, and were of great benefit to the pilots passing at those places at the lower stages of the tide.

In view of reports that certain vessels had been discharging ashes in the channel, the same notice to mariners as was issued in former years was sent to the shipping firms and agents.

The usual edition of tide-tables which were furnished by the Department of Marine and Fisheries was issued by the Commissioners, in both English and French, and was distributed among the pilots and shipping firms.

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

DAVID SEATH,
Secretary.

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HARBOUR COMMISSIONERS OF MONTREAL,
SECRETARY'S OFFICE, MONTREAL, January 9, 1901.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour, by direction of the Harbour Commissioners of Montreal, to transmit you herewith, for the information of the Honourable the Minister of Marine and Fisheries, the usual statements (1) Receipts and disbursements of the Montreal Decayed Pilots' Fund, for the year ended December, 31 1900, and (2) Assets of the Fund at December 31, 1900.

The following is an abstract of the former :

RECEIPTS.

5 per cent of pilotage dues collected at Montreal.....	\$ 3,113 44
“ “ “ Three Rivers and Batiscan.....	76 00
“ “ “ Sorel.....	26 94
“ “ “ payable on war vessels.....	4 75
	<hr/>
	\$3,221 13
Interest on investment and cash in bank.....	2,340 17
	<hr/>
Total.....	<u>\$5,561 30</u>

DISBURSEMENTS.

Pensions to old pilots and widows of pilots and minors.....	\$5,161 89
Audit of the fund for 1899.....	25 00
Postage stamps and stationery.....	10 00
Legal opinion.....	5 00
	<hr/>
Total.....	<u>5,201 89</u>

Showing a gain for the year of \$359.41.

Before the opening of navigation Pilot François Desjordy, of Lavaltrie, who had been on the pension list since May 1, 1897, on account of impaired eye-sight, submitted medical certificates to the effect that his sight was irreparably impaired. In view thereof he was placed permanently upon the pension list, from May 1, 1900.

Pilot Louis Mayrand, of Ste. Anne de la Pérade, who was licensed on December 9, 1880, submitted a medical certificate to the effect that his hearing was irreparably impaired. In view thereof he was placed on the pension list from May 1, 1900.

Pilot Jean Arcand, of Deschambault, who was licensed on December 10, 1879, submitted a medical certificate to the effect that his eye-sight was irreparably impaired, and in view thereof the Commissioners placed him on the pension list, from October 1, 1900.

Widow Placide Gaillardet, of St. Grégoire le Grand, who had been a pensioner for fifteen years, died on December 26, 1899, and, as is customary, the pension for the current quarter was paid to her legal heir.

Old Pilot Joseph B. Dorval, of Cap de la Madeleine, a pensioner for seventeen years, died on November 2, 1900.

At the close of the year there were twenty-three pensioners, namely eleven widows, eleven old pilots, and the minors of one pilot.

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

DAVID SEATH, *Secretary.*

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Aug. 6..	To City of Montreal, six months' interest to July 1 on \$5,000 of 5 per cent Montreal city stock.....	125 00	July 24..	Riddell & Common, audit of this fund for the year ending December 31, 1899.....	90 00
" 14..	Pilot P. Bélanger, 5 per cent pilotage dues on ss. <i>Sarrathona</i> , from Quebec to Montreal, draught 13 feet 6 inches.....	1 67	" 31..	Geoffrion & Co., examination of will of the late Geo. Raymond, old pilot.....	25 00
" 31..	Collector Customs, Montreal, & Trinity dues, collected in August.....	547 25	Aug. 1..	By pensions paid to the following for three months ended July 31—	5 00
Sept. 30..	Collector Customs, Montreal, & Trinity dues, collected in September.....	380 36		Heirs L. Bellisle, Deschambault.....	37 33
Oct. 1..	Pilot J. S. Labranche, 5 per cent pilotage dues on ss. <i>Carlo</i> , Montreal to Quebec, draught 11 feet.....	1 37		Widow L. D. Bouillé ".....	29 33
" 10..	Pilot G.-o. Arcand, 5 per cent pilotage dues on H.M.S. <i>Tribane</i> , from Quebec to Montreal and return, draught 19 feet.....	4 75		" " A. Dufresne ".....	37 33
" 31..	Collector Customs, Montreal, & Trinity dues, collected in October.....	466 84		" " V. Gagnon, Champlain.....	32 00
Nov. 3..	Pilot A. Bélanger, 5 per cent pilotage dues on American tug <i>W. S. Gratton</i> , from Quebec to Montreal, draught 10 feet.....	1 25		" " J. O. Hamelin ".....	37 33
" 3..	Pilot Geo. Perrault, 5 per cent pilotage dues on ss. <i>Tampica</i> , from Montreal to Quebec, draught 14 feet.....	1 75		" " J. Léveillé, Montreal.....	37 33
" 14..	Pilot C. Bellisle, 5 per cent pilotage dues on ss. <i>Eureka</i> , from Montreal to Quebec, draught 11 feet 6 inches.....	1 43		" " A. Lisé ".....	37 33
" 15..	Pilot A. Bélanger, 5 per cent pilotage dues on ss. <i>A. D. Thomson</i> , from Montreal to Quebec, draught 14 feet.....	1 75		" " D. Mathieu, Grondines.....	32 00
" 16..	Pilot A. Bellisle, 5 per cent pilotage dues on ss. <i>Paraguay</i> , from Montreal to Quebec, draught 12 feet 6 inches.....	1 55		" " Z. Mayrand, Contrecoeur.....	37 33
" 22..	Collector Customs, Three Rivers, & Trinity dues, collected at Three Rivers and Batiscan for season of 1900.....	76 00		" " E. Naud, Sorel.....	32 00
" 30..	Pilot J. N. Raymond, 5 per cent pilotage dues on SS. <i>Assumption</i> , from Montreal to Quebec, draught 14 feet 3 inches.....	1 79		" " J. Toupin, Champlain.....	32 00
" 30..	Collector Customs, Montreal, & Trinity dues, collected in November.....	364 05		" " Z. Bouillé ".....	90 00
Dec. 5..	Pilot Geo. Arcand, 5 per cent pilotage dues on ss. <i>Georgetown</i> , from Montreal to Quebec, draught 13 ft. Collector Customs, Montreal, & Trinity dues, collected in December.....	1 61		" " D. Cayen, Portneuf.....	90 00
" 8..	Collector Customs, Montreal, & Trinity dues, collected in December.....	40 10			
	Carried forward.....	8,938 14			
					4,531 89

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DAVID SEATH, Treasurer, in Account with the Montreal Decayed Pilots' Fund.

STATEMENT OF THE FUND.

Nos.	Series.		\$	ct
		Montreal harbour debentures—		
20 and 102	R	Due July 5, 1906, interest at 6 per cent, 2 × \$ 500	1,000	00
42 and 117-119	R	" 5, 1906 " 6 " 4 × 1,000	4,000	00
84	R	" 5, 1906 " 6 " 1 × 2,000	2,000	00
21 and 45-49	D	" 5, 1915 " 5 " 6 × 1,000	6,000	00
164-172	F	" 5, 1917 " 4 " 9 × 1,000	9,000	00
289-290	G	" 5, 1918 " 4 " 2 × 1,000	2,000	00
64-65	H	" 5, 1921 " 4 " 2 × 1,000	2,000	00
139-142	H	" 5, 1921 " 4 " 4 × 1,000	4,000	00
231-246	J	" 5, 1924 " 4 " 16 × 1,000	16,000	00
		City of Montreal consolidated fund—		
165	.....	Due July 1, 1910, interest 5 per cent, 50 × \$100.....	5,000	00
		Cash in Montreal City and District Savings Bank at 3 per cent....	3,325	40
		" hands of harbour commissioners and deposited in City and District Savings Bank on January 10, 1901.....	493	99
			54,819	39

DAVID SEATH,
Treasurer.

MONTREAL, December 31, 1900.

We hereby certify that we have examined the entries for the year 1900, as recorded in the preceding pages, and have found them to agree with vouchers on file. Also, that debentures and certificates to the amount of \$54,819.39, as described in statement on opposite page, have this day been submitted for our inspection.

RIDDELL & COMMON, C.A.,
Auditors.

MONTREAL, February 8, 1901.

APPENDIX No. 9.

REPORT OF THE PILOTAGE AUTHORITY OF QUEBEC FOR THE YEAR
ENDED DECEMBER 31, 1900.

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, January 15, 1901.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to transmit you, herewith in duplicate, the Commissioners' report as Pilotage Authority for the year 1900, as also the various statements containing the information yearly conveyed to your department.

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

JAS. WOODS,
Secretary-Treasurer.

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, January 2, 1901.

To the Honourable Sir L. H. DAVIES, M.P.,
Minister of Marine and Fisheries,
&c., &c., &c.,
Ottawa.

SIR,—In compliance with the requirements of the 'The Pilotage Act,' 36 Victoria, chapter 54, section 22, I have the honour to submit the following report from the Quebec Harbour Commissioners as Pilotage Authority, for the year 1900.

SERVICE OF THE PILOT STATIONS.

The operations of the year began on April 19, by the departure of the pilot schooner *La Vigie* for the pilot station with eight pilots on board.

On April 30 the pilot schooner *La Mouette* left with twelve pilots, and on May 7, 15, 18, 30, twenty-five pilots in all were sent down via the Intercolonial Railway.

As usual the pilot stations have been provided with pilots during the season through the Intercolonial Railway and the pilot schooners, and no complaints of delay in getting their pilots have been made to the Commissioners.

The Corporation of Pilots having asked the Commissioners to sanction by-laws making changes in their pilotage stations, the Commissioners on July 12, addressed a circular letter to all the steamship lines, noting the changes that the pilots were asking for, and inquiring if the shipping interest had any suggestions to offer, either as to the locations of the pilotage stations or in securing a better service from them. In reply to this inquiry a letter was received from M. D. A. Watt, Honorary Secretary, Shipping Interest, Montreal, inclosing a reply, signed by the principal steamship lines, recommending :

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'That Father Point be made the sole station and all the pilots embarked and landed there. That heretofore the facilities provided at this station have been inefficient and inadequate. The pilot boats should be replaced by a steam tender of sufficient size and power to perform the work, and they further suggested that the Dominion authorities be approached with a view to the granting of pratique to healthy vessels, and the landing and embarking of mails with the pilotage service, and they also pointed out the necessity which exists for a shelter wharf at Father Point.'

The Commissioners, who had been for some time previous to this in communication with the Corporation of Pilots in regard to establishing a steam tender service at the pilotage station, appointed a special committee to consider the whole question. This committee has examined Capt. Dorion, of the steamer *Rhoda*, and some of the most experienced of the Lower St. Lawrence pilots, but so far have not made any definite recommendation.

OLD PILOTS.

Previous to the opening of navigation the pilots (eight in number) who had attained the age of sixty-five and over, were summoned before the Commissioners under the authority of the 32nd section of the Pilotage Act, in order to ascertain whether they could continue in the exercise of their duties for the ensuing year. These old pilots had previously to this all passed an examination before a specialist, selected by the Pilotage Authority, as to their eyesight, colour sight and hearing, and upon this final examination before the Commissioners, were all found competent to perform their duties, and their licenses were accordingly renewed for one year.

REMOVALS AND SUPERANNUATIONS.

There has been no application for superannuation by the pilots during 1900.

One pilot, Mr. Nazaire Curodeau, who has been absent from his duties for two consecutive years, without leave, was removed by the Commissioners from the active list, and his branch cancelled under the authority of the 30th section of the Pilotage Act.

DEATHS.

Four pilots have died during the year, viz.:—Aug. Couillard Després, admitted June 3, 1856; Arthur Doiron, admitted July 24, 1888; Jean Delisle, admitted January 5, 1866; Jean Gobeil, admitted January 17, 1862.

The Commissioners are pleased to note and record that these pilots, three of whom have a very lengthened service, (Mr. Després' extending to nearly half a century) have left a clear and unblemished record, not one accident or complaint appearing against their names in the register.

ADMISSIONS TO PRACTISE.

The limitation established by section 24 of the Pilotage Act, as to the granting of licenses having again been reached through the deaths and removals of pilots in 1900, the three remaining apprentices who had completed their term and had been waiting admission for some years, were, after a most thorough examination by the Pilotage Authority, in which they were assisted by Messrs. R. Demers and A. Santerre, two of the most experienced pilots on the river, admitted to practise as branch pilots for and below the harbour of Quebec, their names being:—

Léonidas Lachance, admitted February 27, 1900; Eudore Langlois, admitted March 28, 1900; Frs. X. E. alias William Doiron, admitted March 28, 1900.

This clears the list of the apprentice pilots eligible for admission as pilots, as the two remaining apprentices have been absent from the fall of 1877, and may be considered as dead.

TRIALS.

One complaint was made and came before the Commissioners during the season of 1900, that of the master of the ss. *Turret Bay*, against his pilot, Jos. Larochelle, No. 80, for running that vessel ashore on Goose Island. Case was heard on November 5, 10, 17 and 19, the pilot being found guilty and suspended for nine months.

PILOTAGE EARNINGS.

According to a return received from the Secretary-Treasurer of the Corporation of Pilots for and below the harbour of Quebec, their gross earnings for the season have been \$111,737.89. Out of this \$107,939.47 was received from 778 British vessels, and the balance, \$3,798.42, from 45 foreign vessels.

The total expense (including percentage for pension fund) has been \$22,566.02, leaving a net balance of \$89,171.87 to be divided among 120 pilots, which would give net earnings of \$743, the payments actually made amounting to \$746 each.

RANGE AND RIVER LIGHTS.

The building of the Great Northern Railway Company's elevator having been found to interfere with the utility of the range lights on the battery, they were removed from there and placed on the marine tower on the cross wall. This change has restored their usefulness and has met with the approval of the Corporation of Pilots. The Government having leased a site for the erection of the lighthouse on the west point of the Island of Orleans, the Commissioners trust to see this much needed improvement in operation at the opening of the ensuing season of navigation.

Permanent Lighthouse Traverse.—The Chief Engineer of the Department of Marine and Fisheries, accompanied by Hon. Mr. Dobell and a number of our most experienced pilots, paid a visit of inspection to this pier in July last, and after this inspection, Hon. Mr. Dobell reported to the Commissioners that the pilots had expressed themselves as well satisfied with the location of the lighthouse in the Traverse.

DIRECTORS OF THE CORPORATION OF PILOTS.

At their annual meeting on the 10th day of December last, the Pilots elected the following directors to their Corporation for the ensuing year:—Messrs. L. E. Morin, Ed. Larochelle, sr., Arbel Bernier, Théophile Corriveau, Jos. Pouliot, jr., and Léon Labrecque, and at a subsequent meeting of the new board, held on December 11, Mr. L. E. Morin was unanimously re-elected president.

Annexed to the present report are the various statements not herein alluded to, which contain all the information yearly conveyed to your department by the Commissioners in their capacity of pilotage authority.

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

JAS. WOODS,
Secretary-Treasurer.

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PILOTAGE TARIFF.

RATES of Pilotage for the Harbour of Quebec and below, as per by-law passed by the Quebec Harbour Commissioners on June 18, 1891, and sanctioned by His Excellency the Governor General in Council on June 26, 1891.

TABLE I.

RATES of Pilotage for the Harbour of Quebec and below for each foot of draught of water.

From.	To.	From May 1 to Nov. 10.	From Nov. 10 to Nov. 19.	From Nov. 19 to Mar. 1.	From Mar. 1 to May 1.
Bic Island or any place below the anchorage of Brandy Pots, off Hare Island.....	Anchorage or mooring ground in the basin or harbour of Quebec...	\$3.87	\$4.95	\$6.02	\$4.41
To anchorage ground at the Brandy Pots, off Hare Island, or any place above the said anchorage ground and below St. Roch's Point.	" "	$\frac{2}{3}$ of this sum.	$\frac{2}{3}$ of this sum.	$\frac{2}{3}$ of this sum.	$\frac{2}{3}$ of this sum.
St. Roch's Point or any place above this point and below the Pointe-aux-Pins, on Crane Island.....	" "	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	" "
Pointe-aux-Pins or Crane Island or any place below St. Patrick's Hole.	" "	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	" "
The anchorage or mooring ground in the basin or harbour of Quebec.....	Bic Island or the place where the pilot shall be discharged in the river below Quebec..	\$3.40	\$4.46	\$5.54	\$3.93

TABLE II.

RATES of Pilotage for the Harbour of Quebec and below.

From	To	—
Any wharf in the harbour of Quebec between Pointe-à-Carcy below and the west end of the Allan's wharf above, both inclusive.....	Any other wharf within said limits.....	\$ 2 50
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....	5 00

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.

J. B. LALIBERTÉ,
Chairman.

JAS. WOODS,
Secretary-Treasurer.

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, January 2, 1901.

STATEMENT showing the number of Pilots for and below the Harbour of Quebec, on the active list, on December 31, 1900, the number who retired, struck off the active list, or died during the year, the number temporarily suspended, the number who were unable to serve, the number in charge of Government steamers, &c.

Number.	Name.	Age.	Residence.	NUMBER OF PILOTAGE EFFECTED.			Casualties and Remarks.
				Inwards.	Outwards.	Movages.	
1	Charles Francis Brown	73	Quebec.	3	3	2	
2	Paul Pâquet.	69	St. John, Orleans	3	4	3	
3	Joseph Pouliot.	74	"	3	3	3	
4	George Normand.	70	Crane Island	3	3	3	
5	David Damours.	68	Trois-Pistoles.	5	2	3	
6	Numa Lachance.	66	St. Michel, Bellechasse.	4	3	3	
7	Joseph Gravel	74	Quebec	3	3	2	
8	Jean-Bte. Pouliot.	59	St. John, Orleans.	4	2	3	
9	Joseph Faquet.	63	Quebec.	3	4	3	
10	Louis Edmond Morin	62	"	15	14	1	Employed by the Thomson Line. President of the Corporation of Pilots. Re-elected at last election.
11	Moïse Lachance	63	St. John, Orleans.	3	4	2	Employed by the Black Diamond Line.
12	Joseph S. Brown.	65	Quebec.	6	9	1	"
13	Hubert Raymond.	61	"	8	8	1	"
14	Achille Janours	61	St. Valier	3	4	3	Sick all the season.
15	Joseph Pouliot.	57	St. John, Orleans.	0	0	0	One of the directors of the Corporation of Pilots. Re-elected at last election.
16	Emond Laroche, sr.	57	Quebec.	0	0	0	Office keeper.
17	Laurent Godbout.	57	"	0	0	0	Employed by the Black Diamond Line.
18	Adelme Pouliot.	61	St. Laurent, Orleans.	3	3	3	
19	Bart. Pepin dit Lachance.	55	St. John,	4	4	1	
20	Frs. Nav. Delisle	55	Quebec.	4	3	2	
21	Damien Eugène Boulanger	57	Tadoussac	0	0	0	Master of Saguenay Station.
22	Cyprien Langlois.	56	St. John, Orleans.	4	2	3	
23	Jean Delisle.	55	"	0	0	0	Died May 27, 1900.
24	Charles Normand.	54	Quebec.	11	11	1	Employed by the Black Diamond Line.
25	Napoléon Rioux.	55	Stc. Petronille, Orleans	4	2	3	
26	Jean-Bte. Tremblay.	57	Quebec.	0	0	0	One of the directors of the Corporation of Pilots. Re-elected at last election.
27	Ray. Baquet dit Lamontagne.	55	Notre-Dame, Levis.	15	18	1	Employed by the Elder-Dempster Line.
28	Frs. Nav. Linaire	54	St. Valier	5	6	1	Employed by the Franco-Canadienne Line.
29	Moïse Pouliot.	52	St. John, Orleans.	4	3	2	
30	Paul Gobeil	54	"	3	4	2	

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31	Chs. Alarie Raymond.....	52	Château-Richer.....	3	1	Employed by the Thomson Line.	
32	Victor Vézina.....	55	Quebec.....	15	14	Employed by the Allan Line.	
33	L. B. O. Goutron dit Larochele..	53	St. Michel, Bellechasse.....	17	18	One of the directors of the Corporation of Pilots.	Re-elected
34	Chs. Hermie alias A. Bernier...	55	"	0	0	at last election.	
35	Louis Robert Demers.....	54	Quebec.....	15	15	Employed by the Quebec SS. Company.	
36	Vital Phippen Chamberland.....	60	St. Michel, Bellechasse.....	3	4		
37	Joseph G. Dupil.....	53	Quebec.....	18	16	Employed by the Allan Line.	
38	Joseph Fortier.....	56	St. John, Orleans.....	10	10	"	Black Diamond Line.
39	Nestor Lachance.....	55	"	15	19	"	Holme Line.
40	Cyrille Audet dit Lapointe.....	55	St. Michel, Bellechasse.....	3	1	Sick during two months.	
41	Joseph Lapointe.....	57	St. Laurent, Orleans.....	4	3		
42	Pierre Pepin dit Lachance.....	51	Montreal.....	6	6	Employed by the Black Diamond Line.	
43	Théophile Gourdeau.....	56	Lanzon, Levis.....	3	3	"	"
44	Isidore Noel.....	50	St. John, Orleans.....	0	0	Master of pilot schooner.	
45	Jean Evariste Adam.....	56	Trois-Saumons.....	0	0	Sick all the season.	
46	Alfred Larochele.....	50	St. Michel, Bellechasse.....	18	14	Employed by the Elder-Dempster Line.	
47	Théophile Corriveau.....	53	Quebec.....	15	15	Intercolonial Coal Mining Co.	
48	Elzéar Godbout.....	52	"	10	11	Black Diamond Line.	
49	Pierre Gobeil.....	52	St. John, Orleans.....	2	4	"	Head Line.
50	Théodule Pepin dit Lachance.....	55	Montreal.....	15	15	"	Black Diamond Line.
51	Achille Treflé Simard.....	49	St. Joseph, Levis.....	24	22	"	Ross Co. Line.
52	Jean-Bte. Patoiné.....	49	Montreal.....	12	12	"	Black Diamond Line.
53	Narc. Lavoie.....	51	St. Luc, Rimouski.....	4	3	"	Allan Line.
54	Joseph Emilio Couillard.....	49	Quebec.....	8	8	"	Thomson Line.
55	Louis Albert Royer.....	55	"	6	7	"	Donaldson Line.
56	Adélar Sautterre.....	49	"	16	22	"	Black Diamond Line.
57	Onésime Noël.....	48	St. John, Orleans.....	15	15	"	Allan Line.
58	Napoléon Baillargeon.....	50	St. Petronille, Orleans.....	3	4	"	Thomson Line.
59	Frs. Frs.-Xav. Benier.....	48	Quebec.....	16	18	"	Black Diamond Line.
60	Frs.-Xav. Demeule.....	48	St. John, Orleans.....	3	3	"	Leyland Line.
61	Louis Honoré Lapierre.....	50	Notre-Dame, Levis.....	15	15	"	Elder-Dempster Line.
62	Jos. Eugène Lachance.....	46	St. John, Orleans.....	14	16	"	Black Diamond Line.
63	David Arthur Bouffard.....	46	St. Laurent.....	3	4	"	Leyland Line.
64	Jean Théophile St. Laurent.....	49	Quebec.....	15	17	"	Elder-Dempster Line.
65	Jacques George Dugas.....	48	St. Joseph, Levis.....	3	3	"	Black Diamond Line.
66	Joseph Victor Gourdeau.....	53	St. Petronille, Orleans.....	7	7	"	
67	Louis alias Treflé Delisle.....	46	Trois-Pistoles.....	3	3	"	
68	J.-Bte. Couillard.....	49	Cap St. Ignace.....	3	3	"	
69	Chs. Pelletier.....	50	St. Michel, Bellechasse.....	4	2	"	
70	Nazaires Delisle.....	51	Quebec.....	3	3	"	
71	J. E. Bonaventure Lavoie.....	48	St. Luc, Rimouski.....	4	2	Employed by the Hamburg American Packet Co.	
72	Adjutor Baillargeon.....	46	Quebec.....	18	18	"	Allan Line.
73	Samuel Rioux.....	47	"	22	14	"	Black Diamond Line.
74	Charles Octave Clavet.....	46	St. Michel, Bellechasse.....	7	7	"	Dominion Line.
75	Paul Lachance.....	44	Quebec.....	19	18	"	
76	Arcadius Jovin.....	50	St. Luc, Rimouski.....	4	4	"	
77	Leon Labrecque.....	50	St. Laurent, Orleans.....	0	0	One of the directors of the Corporation of Pilots.	Re-elected
						at last election.	

STATEMENT showing the Number of Pilots for and below the Harbour of Quebec—Concluded.

Number.	Name.	Age.	Residence.	NUMBER OF PILOTAGES EFFECTED.			Remarks and Casualties.
				Inwards.	Outwards.	Movages.	
78	Paul Lachance	45	St. John, Orleans.	8	8	2	Employed by the Ross Co. Line.
79	Joseph Pouliot	44	"	0	0	0	One of the directors of the Corporation of Pilots. Re-elected at last election.
80	Joseph Jarochelle	43	St. Michel, Bellechasse.	3	1	2	Employed by the Carbray-Routh Co. Line.
81	Adjutor Lachance	42	"	8	9	1	"
82	Frs. Goudreau	49	Quebec	21	15	2	Ross Co. Line.
83	Arthur Koenig	49	L'Islet	4	2	2	"
84	Eugène Auctil	41	St. Jean Port Joli	0	0	0	Master of pilot schooner.
85	David Dumas	47	Notre-Dame, Lévis	3	3	2	Employed by the Black Diamond Line.
86	Joseph Lachance	46	St. Laurent, Orleans	8	8	1	"
87	Paul Pâquet	42	St. John, Orleans	4	3	3	"
88	Alphonse Pouliot	48	Château Richer	2	4	2	"
89	Elzéar Normand	41	L'Islet	4	1	2	"
90	Jean-Bér. Bernier	41	"	19	16	1	Donaldson Line.
91	Joseph Pâquet	39	St. John, Orleans	3	2	3	"
92	Jean A. Lachance	38	Quebec	4	3	3	"
93	Arthur Baillargeon	43	"	3	3	2	"
94	Joseph Vézina	39	St. Laurent, Orleans	3	3	3	"
95	Herménégilde Guérard	42	St. Thomas, Montmagny	4	4	4	"
96	Elzéar Desrosiers	47	Quebec	6	6	2	Black Diamond Line.
97	John J. A. Irvine	44	Green Island	0	0	0	Master Red Island lightship.
98	Frédéric Bouffard	43	St. Laurent, Orleans	3	3	3	Employed by the Black Diamond Line.
99	Jules Asselin	39	St. Michel, Bellechasse	4	5	3	"
100	Prudent Marnen	41	Beauport	4	3	3	"
101	Lucien Lachance	39	Quebec	15	15	0	Thomson Line.
102	Alfred Dion	42	Notre Dame, Lévis	9	8	1	Black Diamond Line.
103	Camille Bernier	42	Quebec	20	16	1	Domimon Line.
104	Moïse Blouin	49	St. John, Orleans	4	3	3	"
105	Moïse alias Laurent Godbout	47	Quebec	15	15	1	Elder-Dempster Line.
106	Alfred Godreau	47	Cap St. Ignace	3	3	3	"
107	Alfred Raymond	39	Kamouaska	3	4	3	"
108	Philéas Lachance	40	St. John, Orleans	11	12	1	"
109	Joseph H. Talbot	38	Berthier	20	17	2	"
110	Moïse Arthur Lachance	37	St. John, Orleans	3	2	1	"
111	Louis Frs. Thivierge	34	"	4	3	3	Hamburg Packet Co. Line.

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112	Joseph Emilien <i>alias</i> Emile La- chance.....	34	"	5	2	3	Carbray-Routh Line.
113	Alphonse Asselin.....	35	St. Michel, Bellechasse.....	8	8	1	"
114	Edmond Larochelle.....	34	"	7	6	1	"
115	Joseph Plante.....	34	St. Paul's Bay.....	2	3	2	"
116	Alphonse Piquet.....	34	St. John, Orleans.....	3	5	2	"
117	Paul <i>alias</i> Napoléon Pouliot.....	41	"	3	3	3	Elder-Dempster Line.
118	Adélaïde Bernier.....	39	Quebec.....	17	16	1	"
119	Adélaïde Vézina.....	30	St. Michel, Bellechasse.....	3	3	3	"
120	Jean-Bie, Pouliot.....	30	St. John, Orleans.....	4	4	2	"
121	Joseph Thiviange.....	31	"	4	2	3	"
122	Leonidas Lachance.....	30	"	3	3	2	"
123	Eudore Langlois.....	38	"	4	2	3	"
124	Frs.-X. Eustache <i>alias</i> William Dorion.....	40	St. Joseph, Lévis.....	3	4	3	"

Certified.

JAS. WOODS,
Secretary-Treasurer.

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, January 2, 1901.

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List of Apprentice Pilots immediately under the Quebec Harbour Commissioners Pilotage Authority, on December 31, 1900.

Number.	Names.	When Indentured.	Remarks.
1	Georges Dugas.....	April 11, 1871.....	Absent since the fall of 1877.
2	Ernest Nolet.....	March 19, 1874.....	Absent since the fall of 1878.

Certified,

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, January 2, 1901.

JAS. WOODS,
Secretary-Treasurer.

STATEMENT of Trials held, during the year 1900, before the Quebec Harbour Commissioners, under the authority of the Pilotage Act, 36 Vic., chap. 54 and 45 Vic., chap. 32, sec. 4.

Name of Pilot Tried.	Nature of Complaint.	Date of Trial.	Result.
Joseph Larochelle.....	Running the ss. <i>Turret Bay</i> ashore on Goose Island on October 29.	November 5, 10, 17 and 19.	Found guilty and suspended for nine months from November 1.

Certified,

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, January 2, 1901.

JAS. WOODS,
Secretary-Treasurer.

QUEBEC, December 31, 1900.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to forward a detailed statement, in duplicate, of the moneys received and expended for the Decayed Pilot Fund of Quebec for the year just ended; also a similar statement, in duplicate, of the moneys received and expended by the Corporation of Pilots; all of which revised and certified:

The total amount of receipts was.....	\$111,737 89
The total expenditure was.....	22,566 02
	\$89,171 87
Leaving a balance of.....	
To be distributed among 120 pilots, giving a net dividend of.....	743 00

Forty-five foreign vessels paid in \$3,798.42, and seven hundred and seventy-eight British vessels paid in \$107,939.47.

All of which is respectfully submitted.

F. X. DION,
Secretary-Treasurer.

STATEMENT of Moneys received and disbursed by the Corporation of Pilots for the Decayed Pilot Fund of Quebec, &c.—Continued.

<i>Eighteen Widows at \$84—Con.</i>		\$ cts.	<i>Six Widows at \$51.</i>		\$ cts.
"	Marticotte, Isaïe	84 00	Widow	Dandurand, Jacques.....	51 00
"	Morency, Joseph.....	84 00	"	Keable, André, died Feb. 18, 1900	15 35
"	Ruelland, Pierre.....	84 00	"	Morency, Guillaume.....	51 00
"	Thivierge, Louis.....	84 00	"	Pelletier, David F.....	51 00
		1,373 97	"	Rouleau, Pierre, died May 18, 1900	28 02
			"	Dallaire, Napoléon	51 00
					247 37
<i>Nine Widows at \$82.</i>			<i>Six Widows at \$48.</i>		
Widow	Adam, J. E., died April 18, 1900	37 44	Widow	Caron, Fabien.....	48 00
"	Babin, Damase	82 00	"	Côté, Magloire.....	48 00
"	Demers, Edouard	82 00	"	Langlois, Louis, arrears.....	9 60
"	Doiron, Eustache.....	82 00	"	" year	48 00
"	Fortin, Nicholas.....	82 00	"	McNeil, Thomas.....	48 00
"	Genest, Amable.....	82 00	"	Turgeon, Alfred.....	48 00
"	Gaudreau, François.....	82 00	"	Larochelle, Laurent.....	48 00
"	Lapointe, Jos., arrears.....	16 25			
"	" year	82 00			297 60
"	Leclerc, Louis Olivier.....	82 00			
		709 69			
<i>Five Widows at \$80.</i>			CHILDREN.		
Widow	Cinq-Mars, David	80 00	Child of	Boutin, Thos., inf., arrears..(1)	4 50
"	Crépault, Louis.....	80 00	"	" acct	11 20
"	Curodeau, Pierre.....	80 00	"	Dugas, Jean, inf., acct.....(1)	16 80
"	Mercier, Magloire.....	80 00	"	Forbes, Isaac, inf., arrears.(2)	8 25
"	Roy, Alexis.....	80 00	"	" year	41 20
		400 00	"	Fortin, N., inf., arrears.....(1)	9 00
			"	" acct	5 60
<i>Nine Widows at \$75.</i>			"	Giroux, Jean, inf.....(1)	22 40
Widow	Després, George.....	75 00	"	Jahan, Joseph, inf.....(1)	22 40
"	Fournier, Amable.....	75 00	"	Langlois, Joseph, inf.....(1)	22 40
"	Glynn, Dennis.....	75 09	"	Touissant, P., inf.....(1)	22 40
"	Langelier, Fabien.....	75 00	"	Plante, Joseph, inf.....(1)	22 40
"	Langlois, Julien.....	75 00	"	Noël, François, inf.....(1)	22 40
"	Laroche, J.-Bte.....	75 00	"	Chouinard, Chs., inf.....(1)	22 40
"	Lavoie, A. (L.M.).....	75 00	"	Gobeil, Jean, inf.....(1)	22 40
"	Noël, Henri.....	75 00	"	Asselin, Louis, inf.....(1)	22 40
"	Ross, Pierre.....	75 00	"	Dion, Charles, inf.....(1)	22 40
		675 00			320 55
<i>Eight Widows at \$72.40.</i>			RECAPITULATION OF PENSIONS.		
Widow	Talbot, J.-Bte.....	72 40	10	Pilots at \$150	1,213 35
"	Langlois, Philéas.....	72 40	4	" 136.....	434 55
"	Côte, François.....	72 40	2	" 122.....	244 00
"	Dion, Jean.....	72 40	1	" 120.....	120 00
"	Koenig, C. F.....	72 40	3	" 110.....	240 63
"	Lachance, Ovide.....	72 40	1	" 70.....	52 50
"	Lévesque, Joseph.....	72 40	—		
"	Pineau, Benjamin.....	72 40	21	Pilots.....	
		579 20	26	Widows at \$88	2,236 41
<i>Six Widows at \$60.</i>			18	" 84.....	1,373 97
Widow	Côté, Célestin.....	60 00	9	" 82.....	709 69
"	Desrosiers, P.....	60 00	5	" 80.....	400 00
"	Dion, Joseph.....	60 00	9	" 75.....	675 00
"	Lachance, F.-X.....	60 00	8	" 72 40.....	579 20
"	Turgeon, Edouard.....	60 00	6	" 60.....	341 05
"	Doiron, A., pensioned Feb. 24, 1900.....	41 05	6	" 51.....	247 37
		341 05	6	" 48.....	297 60
			—		
			93	Widows.....	
			16	Children at \$22.40.....	320 55
					9,485 87
			130	Pensioners.....	

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STATEMENT of Moneys received and disbursed by the Corporation of Pilots for the Decayed Pilot Fund of Quebec, &c.—*Concluded.*

DR.	\$ cts.	CR.	\$ cts.
RECEIPTS.		By Pensions and relief paid during the year 1900—	
To Balance of 1899.....	31,627 07	By relief	499 31
To Trustees of Quebec roads, 1 year's interest to July 1, 1900, on \$22,800 at 6 per cent.....	1,368 00	By arrears of pensions to December 31, 1899.....	82 60
The City of Quebec, 1 year's interest to July 1, 1900, on \$9,000 at 7 per cent.....	630 00	Quarter ending January 31, 1900....	2,394 73
Treasury Department, 1 year's interest to July 1, 1900, on \$20,000 at 5 per cent.....	1,000 00	" April 30, 1900.....	2,371 80
The Church Wardens of St. Fulgence, 1 year's interest on \$2,500 at 5 per cent.....	125 00	" July 31, 1900.....	2,339 39
Thomas Gray, 1 year's interest on \$2,400 at 5 per cent.....	120 00	" October 31, 1900.....	2,287 35
Savings Banks—1 year's interest, Bank Nationale and Quebec Bank.....	745 43	Loan to Church Wardens St. Valier... ..	8,000 00
Contributions of pilots.....	7,701 88	" Corporation of Pilots.....	2,500 00
Captain Irvine, on account.....	25 00	Salary of Secretary-Treasurer and assistant.....	550 00
		General expenses.....	16 00
		Deposits in savings banks—	
		Banks Nationale and Quebec.....	22,100 00
		Balance on hand.....	151 20
			43,342 38
	43,342 38	STATEMENT OF FUND.	
		Moneys loaned.....	67,200 00
		Money in savings banks.....	22,100 00
		" Sec.-Treasurer's hands.....	151 20
			89,451 20
		Deduct arrears of pensions due this day.....	141 00
			89,310 20

F. X. DION,
Secretary-Treasurer.

We, the undersigned, officially appointed to examine the books and accounts of the Corporation of Pilots, certify to having found them correct.

ADOLPHE LABRECQUE,
Accountant.

ADÉLARD SANTERRE,
ADÉLARD BERNIER,
Auditors.

QUEBEC, December 31, 1900.

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F. X. DION in current account with the Corporation of Pilots of Quebec to December 31, 1900.

Dr.	\$ cts.	Cr.	
To Balance of 1899.	1,266 14	By Expenses pilot boats....	\$ 570 63
Reserve fund	500 00	Less	0 30
Pilots' retirement fund.....	1,000 00		570 33
Customs, Montreal.....	59,429 20	General expenses.....	\$1,512 10
" Three Rivers.....	2,808 68	Less	119 96
" Sorel.....	956 88		1,392 14
" Batiscan.....	345 26	Pilots' expenses	502 17
" Chicoutimi.....	811 00	Provisions	\$1,229 51
" St. Thomas.....	268 63	Less	14 52
" Trois Pistoles.....	179 95		1,214 99
" Rivière-du-Loup.....	511 03	Pilot boat <i>La Mouette</i>	2,725 00
Loan from pilot's fund.....	2,500 00	" <i>La Vieille</i>	235 46
Fines.....	40 00	" <i>La D. Price</i>	39 00
Lost time.....	784 72	Cooks' wages.....	344 00
Interest—Current account, Bank		Apprentices' wages.....	235 26
Nationale.....	65 50	Seamen's wages.....	301 39
Pilotage collected at Quebec.....	46,427 26	Indemnity to captains.....	260 00
		" directors.....	600 00
		" Saguenay station....	250 00
		Pilot boat shares.....	5,500 00
		Insurance.....	96 76
		Rent.....	\$ 477 38
		Less.....	50 00
			427 38
		Legal advisers.....	210 00
		Pilotage remitted	1,910 26
		Retired pilot's fund	1,000 00
		Decayed "	7,701 88
		Salaries of employees.....	1,550 00
		Reserve fund.....	500 00
		Dividends.....	89,520 00
		Balance.....	808 23
	117,894 25		117,894 25

F. X. DION,
Secretary-Treasurer.

We, the undersigned, officially appointed to examine the books and accounts of the Corporation of Pilots, certify to having found them correct.

ADOLPHE LABRECQUE,
Accountant.

ADELARD SANTERRE,
ADELARD BERNIER,
Auditors.

QUEBEC, December 31, 1900.

APPENDIX No. 10.

REPORT OF THE PILOTAGE AUTHORITY, VICTORIA, B.C., FOR
YEAR ENDED DECEMBER 31, 1900.PILOTAGE AUTHORITY,
VICTORIA, B.C., January 9, 1901.F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour, by direction of the Commissioners, to transmit herewith the pilotage returns for the Pilotage District of Victoria and Esquimalt, in the province, of British Columbia, for the year ending December 31, 1900, as required by section 22 of chapter 80 of the Revised Statutes of Canada, 1886, in the hope that the same will reach your department in ample season for embodiment in the supplement to your annual report, of which kindly furnish me with a copy when issued as has hitherto been your custom. Our Chairman (Mr. Rithet) is temporarily absent in San Francisco or he would have signed returns.

I have the honour to be, sir,
Your most obedient servant,EDGAR CROW BAKER,
*Secretary-Treasurer, P.A.*PILOTAGE RETURNS, Victoria and Esquimalt Pilotage District, B.C.,
January 1 to December 31, 1900.

LICENSED PILOTS.

No.	Name.	Age.	Date of Issue.	Seniority.	Remarks.
1	John Thompson.	51	April 23, 1880. . . .	Dec. 4, 1878.	Originally a B. C. Pilot.
2	Samuel W. Buckman. . .	50	March 6, 1891. . . .	March 6, 1891. . . .	Victoria and Esquimalt District,
3	John Newby.	51	April 10, 1891. . . .	April 10, 1891. . . .	"
4	Thomas Bebbington. . .	54	Feb. 25, 1893. . . .	Feb. 25, 1893. . . .	Originally a N. W. and "Yale Pilot.

N.B.—The foregoing is a list of licensed pilots, who are the only ones who have prosecuted such calling in the above-named district.

There are no masters and mates acting under license from this Pilotage Authority, all the certificates previously granted having expired by effluxion of time.

Clauses I., II., III., page 213, supplement to 19th annual report, with reductions on pages 200 and 201, supplement to 21st annual report, and also those on pages 181 and

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182, supplement to the 26th annual report (*i.e.* Orders in Council, July 1, 1893), apply to this year also.

Same Acts and parts of Acts as last year apply to 1900, and list of exempted vessels, and Puget Sound rates remain the same.

EDGAR CROW BAKER,
Secretary-Treasurer.

VICTORIA, B.C., December 31, 1900.

PILOTAGE DUES collected, January 1 to December 31, 1900.

Month.	British.	Foreign.	Total.	Remarks.
	\$ cts.	\$ cts.	\$ cts.	
January.....	424 75	666 75	1,091 50	} N. B.—The total \$17,484.85 does not include sums of \$400 collected from Puget Sound steamers and \$97.76 pilotage outwards in certain cases to credit of Pilotage Authority.
February	364 50	642 00	1,006 50	
March.....	468 50	967 37	1,435 87	
April.....	619 50	903 25	1,522 75	
May.....	521 75	1,366 75	1,888 50	
June.....	761 75	942 50	1,704 25	
July.....	483 50	1,231 00	1,714 50	
August.....	425 00	995 38	1,420 38	
September.....	516 50	906 60	1,423 10	
October.....	574 25	1,110 00	1,684 25	
November.. . . .	576 00	892 75	1,468 75	
December.....	336 50	788 00	1,124 50	
	6,072 50	11,412 35	17,484 85	

EDGAR CROW BAKER,
Secretary-Treasurer.

VICTORIA, B.C., December 31, 1900.

SESSIONAL PAPER No. 23

CR.

RECEIPTS AND EXPENDITURE, January 1 to December 31, 1900.

DR.

Date.	Nature of Receipt.	Amount.	Date.	Head of Service.	Amount.
1900.		\$ cts.	1900.		\$ cts.
January 1.....	To Balance from last year.....	986 10	February 28....	By V. and E. Pilots, division surplus, 1899.....	986 10
Jan. 1 to Dec. 31.	Pilotage dues, 12 months.....	17,484 85	Jan. 1 to Dec. 31.	V. and E. Pilots, earnings as per receipts.....	15,736 37
" "	Certificate fees, Puget Sound steamers.....	400 00	" "	Secretary-treasurer, 12 months salary.....	600 00
" "	Pilotage outwards, in certain cases to credit of Pilotage Authority.....	97 76	" "	Office expenses, rent, fuel, light, &c.....	333 80
		18,968 71	December 31....	Balance to credit of Pilotage Authority.....	1,312 94
					18,968 71

EDGAR CROW BAKER,
Secretary-Treasurer.

Approved and certified correct.

MATTHEW T. JOHNSON,
HERBERT G. LEWIS, } *Commissioners.*

VICTORIA, B.C., January 9, 1901.

APPENDIX No. II.

REPORT OF THE PILOTAGE AUTHORITY OF NANAIMO, B.C., FOR THE
YEAR ENDED DECEMBER 31, 1900.

NANAIMO, B.C., January 16, 1901.

To the Deputy Minister of Marine and Fisheries,
Ottawa, Ont.

DEAR SIR,—I have the honour to inclose statement and accounts of Nanaimo Pilotage Authority for the year ending December 31, 1900, as required by the Pilotage Act, 1886.

You will observe by the report that another pilot was added to the staff during the present year. This was found necessary to meet the increased volume of business.

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

TULLY BOYCE,
Secretary.

PILOTAGE returns for the year ending December 31, 1900.

LICENSED PILOTS.	
Name of pilot.	Age.
Morrison, Daniel	60
Bendrodt, James Peter	40
Christensen, James.	59
Butler, James Edgar	39
Owen, William David	34
Yates, Albert Francis	48

RATES OF PILOTAGE.

Half pilotage	\$ 1 per foot draught.
Full "	2 " "
Gulf "	10 " diem.

Special rates for mail steamers and tugs.

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PILOTAGE DUES collected, January 1 to December 31, 1900.

	British.	Foreign.	Total.
	\$ cts.	\$ cts.	\$ cts.
January	655 00	1,504 50	2,159 50
February	817 00	1,480 00	2,297 00
March	842 00	1,392 50	2,234 50
April	477 00	1,115 50	1,592 50
May	910 00	1,238 50	2,148 50
June	894 50	1,553 00	2,447 50
July	665 00	1,698 50	2,363 50
August	872 00	1,658 50	2,530 50
September	817 00	1,565 00	2,382 00
October	849 00	1,540 50	2,389 50
November	965 00	1,716 50	2,681 50
December	1,018 00	1,143 00	2,161 00
	9,781 50	17,606 00	27,387 50

RECEIPTS AND EXPENDITURE, January 1 to December 31, 1900.

	\$ cts.	\$ cts.		\$ cts.	\$ cts.
To pilotage dues for twelve months, per inclosed statement	27,387 50		By Salary, secretary and treasurer	600 00	
Examination fee	25 00		Office rent, janitor, fuel, &c.	180 00	
License fee	50 00		Postage, printing and stationery	84 55	
		27,462 50	Office furniture and safe	207 55	
			Fee to examiners	25 00	
			Donation to ex-pilot Sabiston	600 00	
			Commission to collectors	553 46	
			Pilot station expense	1,789 56	
			Travelling and personal expense	2,435 00	
			Net earnings	20,937 38	6,475 12
			Division of license fee	50 00	
					20,987 38
		27,462 50			27,462 50

Approved and certified correct.

THOS. DOBESON,
Chairman.

TULLY BOYCE,
Secretary.

THOMAS A. CONNELL,
HARRY B. SHAW,
JAS. S. KNARSTON, } Commissioners.

APPENDIX No. 12.

REPORT OF THE PILOTAGE AUTHORITY OF YALE AND NEW WESTMINSTER, FOR THE YEAR ENDED DECEMBER 31, 1900.

VANCOUVER, B.C., January 5, 1901.

The Honourable
The Minister of Marine,
Ottawa.

SIR,—I have the honour to forward herewith statement of accounts and of the affairs of the Yale and New Westminister Pilotage Authority for the year just completed.

At a meeting of the Commissioners held in my office to-day, my accounts were audited and signed by the Commissioners, and I was instructed to forward same to you.

You will notice that there is a considerable decrease in the earnings of the pilots during 1900, attributable to the decline in the Klondike traffic.

About two months since the books of this authority were audited by Mr. Stumbles, representing your department, and I have the honour to inclose copy of the certificate given me by him, for your information. Mr. Stumbles expressed the opinion that the work of bookkeeping should be made as simple as possible, and authorized me to curtail the work in this connection as might seem desirable. With this view, I will discontinue keeping the Inwards and Outwards Report books (which originated with myself), from which I have been in the habit of furnishing you with statistics of the yearly tonnage in and out of the port, and whether under British or Foreign flag.

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

C. GARDINER JOHNSON,
Secretary, Yale and New Westminister Pilotage Authority.

VANCOUVER, B.C., November 19, 1900.

CHAS. GARDINER JOHNSTON, Esq.,
Yale and New Westminister Pilotage Authority,
Vancouver, B.C.

SIR,—I hereby certify that I have examined the books of the Pilotage Authority and have checked the receipts and accounts and find that the entries have been carefully made. I have also examined the bank book in which the deposits are entered in the Bank of Montreal here, and have found that the cheques issued for amounts paid to pilots, pilotage expenses account, and office expenses, correspond with the amount of earnings and have found the balance up to September 30, in the bank to be the correct

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amount. I also certify that I consider the books and records are carefully and systematically kept.

Be good enough to keep this certificate on file as the evidence of my having audited your books.

I am, sir,
Your obedient servant,

(Sgd.) W. W. STUMBLES.

No. of License.	Name of Pilot.	Age.	Service in.	Remarks.
1 First Class.	William Ettershank.	58	Licensed to pilot vessels of any size or description within the limits of Yale and New Westminster Pilotage Authority.	Active.
2 " ..	George W. Robertson.	50		
3 " ..	H. Robson Jones.....	44		
4 " ..	William Johnson. ...	44		

NOTE.—Pilotage dues now in force are same as approved by Order in Council, Saturday, April 28th 1894.

INWARDS.

48 British steamers.....	\$2,376 75
203 Foreign steamers.....	3,682 00
21 British sailing vessels.....	603 75
32 Foreign sailing vessels.....	761 25
	\$7,423 75

OUTWARDS.

47 British steamers.....	\$2,521 00
203 Foreign steamers.....	3,815 75
22 British sailing vessels.....	804 25
32 Foreign sailing vessels.....	1,150 00
	8,291 00
	\$15,714 75

Remaining in port on December 31, 1900.—*Saga*, \$21.25 ; *Alsterthal*, \$27.00 ; *Miowera*, \$28.50 ; *Miowera*, \$52.50 ; *Miowera*, \$48.75 ; *Empress of India*, \$65.00.

C. GARDINER JOHNSON,
Secretary, Yale and New Westminster Pilotage Authority.

RICHARD ALEXANDER,
Chairman.

VANCOUVER, B.C., January 5, 1901.

RECEIPTS.

Balance in bank, January 5, 1900.....	\$ 801 77	
Pilotage earnings for year 1900.....	15,714 75	
		<u>\$16,516 52</u>

DISBURSEMENTS.

Paid pilots, January 5, 1900.....	801 77	
Paid pilots during year 1900.....	11,249 80	
Office expense account, 1900.....	900 00	
Pilotage expense account, 1900.....	2,893 48	
Balance in bank.....	671 47	
		<u>16,516 52</u>

C. GARDINER JOHNSON,
Secretary Yale and New Westminster Pilotage Authority.

RICHARD ALEXANDER,
Chairman.

VANCOUVER, B.C., January 5, 1901.

LEDGER BALANCE.

Assets.

Bank of Montreal.....	\$ 671 47	
Bank of Montreal—		
Savings department.....	\$ 530 43	
Interest, 1900.....	15 90	
		<u>546 33</u>
		\$1,217 80

Liabilities.

Reserve fund.....	\$ 530 43	
Interest, 1900.....	15 90	
		<u>\$ 546 33</u>
Pilotage earnings not disbursed...	671 47	
		<u>1,217 80</u>

C. GARDINER JOHNSON,
Secretary, Yale and New Westminster Pilotage Authority

RICHARD ALEXANDER,
Chairman.

VANCOUVER, B.C., January 5, 1901.

APPENDIX No. 13.

REPORT OF THE PILOTAGE AUTHORITY OF HALIFAX, FOR THE
YEAR ENDED DECEMBER 31, 1900.

HALIFAX, N.S., January 11, 1901.

Hon. Minister of Marine and Fisheries,
Ottawa.

SIR,—I beg leave to transmit for the information of the department, the inclosed returns of the Pilotage Authority of the district of Halifax, N.S., viz. :—

- Statement of receipts and expenditure.
- Statement of superannuation fund.
- Return inward of vessels, British and Foreign.
- Return outward of vessels, British and Foreign.
- List of licensed pilots.
- List of pensioners.
- Balance sheet.

Respectfully,
Your obedient servant,

J. TAYLOR WOOD,
Secretary-Treasurer.

OFFICE OF PILOT COMMISSIONERS,
December 31, 1900.

RECEIPTS AND EXPENDITURES.

CR.	\$ cts.	DR.	\$ cts.
Balance on hand, December 30, 1889 ..	1,798 53	Salary	400 00
Outward pilotage.....	2,001 45	Rent.....	325 00
Commissions.....	1,726 34	Printing, telephone, legal expenses, &c ..	412 91
Interest	429 51	Superannuation.....	3,671 59
Licenses, bonds, &c.....	186 00	Deposit savings bank	
		Balance	1,332 33
Total.....	6,341 83	Total	6,341 83

J. TAYLOR WOOD,
Secretary-Treasurer.

SUPERANNUATION FUND.

CR.		\$ cts.	DR.		\$ cts.
Balance, December 30, 1899.....		15,884 71	Union Bank.....		838 39
Commissions		856 08	" (special)		5,323 56
Interest.		629 51	Savings Bank.....		7,296 85
Licenses, bonds, &c.....		186 00	Dominion stock.....		5,200 00
Transferred from general account.....		2,000 00			
		19,526 30			
Less paid pensions		807 50			
Total		18,658 80	Total		18,658 80

J. TAYLOR WOOD,
Secretary-Treasurer.

RETURN of Vessels entered Inwards at the Port of Halifax, N.S., from January 1, 1900,
to December 31, 1900 (subject to compulsory Pilotage).

BRITISH.

Schooners.	Brigantines.	Barquen- tines.	Barks.	Ships.	Barges.	Steamers.	Tonnage.	Pilot Fees.
80	14	4	3	1	17	634	918,751	\$ cts. 14,775 00

FOREIGN.

37	2	6	39	1	5	149	251,802	4,567 50
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RETURN of Vessels entered Outward at the Port of Halifax, N.S., from January 1, 1900,
to December 31, 1900 (subject to compulsory Pilotage).

BRITISH.

Schooners.	Brigantines.	Barquen- tines.	Barks.	Ships.	Barges.	Steamers.	Tonnage.	Pilot Fees.
15	2	4	3	1	3	585	896,873	\$ cts. 7,816 55

FOREIGN.

9	2	6	38	1	5	147	248,739	2,499 35
---	---	---	----	---	---	-----	---------	----------

J. TAYLOR WOOD,
Secretary-Treasurer.

OFFICE OF COMMISSIONERS OF PILOTS,
December 31, 1900.

LIST of Pilots, Port of Halifax.

No.	Name.	Residence.	Age.
1			
2	William Fleming	Halifax	34
3	James Holland	Duncan's Cove	64
4	William Baker	Halifax	65
5			
6	Frank Thomas	Herring Cove	25
7			
8	William Hayes	Herring Cove	26
9	Hugh Monroe	Halifax	65
10	Jeremiah Holland	Duncan's Cove	68
11	Edward Byers	Halifax	59
12	James Hanrahan	Ferguson's Cove	63
13	William Beazley	"	60
14	John Hayes	Halifax	50
15	James Spears	"	42
16	John F. Beazley	"	40
17	William Gorman	Herring Cove	26
18	Charles F. Martin	Halifax	35
19	William White	Ferguson's Cove	43
20	Thomas Hayes	Halifax	41
21	Thomas Reno	Herring Cove	40
22	Frank Mackey	Halifax	28
23	Henry Latter	"	36
24			
25			
26	James Fleming	Halifax	61

J. TAYLOR WOOD,
Secretary-Treasurer.

LIST of persons on the Pension Roll.

Name.	Age.	Residence.	Amount of Pension per annum.
			\$ cts.
Wm. Fleming	87	Ketch Harbour	125 00
John Johnston	77	Bear Cove, Halifax County	125 00
Patrick Hayes	78	Herring Cove "	125 00
Bernard Gallagher	75	Halifax	125 00
Joseph Reno	74	Herring Cove, Halifax County	125 00
Mrs. Lucinda Nickerson	66	Sambro "	30 00
Mrs. Mary Smith	64	Halifax	30 00
Mrs. Mary Glazebrook	55	"	30 00
Mrs. Charles Martin	68	"	30 00
Mrs. Daniel Martin	42	"	30 00
Thomas Martin	14	"	15 00
Elizabeth Martin	8	"	15 00
Barbara Martin	7	"	15 00
Catherine Martin	5	"	15 00
Mary Glazebrook	11	"	15 00
Charles Glazebrook	9	"	15 00
			865 00

J. TAYLOR WOOD,
Secretary-Treasurer.

BALANCE SHEET.

DR.	\$ cts.	CR.	\$ cts.
Cash.....	1,332 33	Superannuation fund.....	18,658 80
Union Bank, special deposit.....	5,323 56	Outward pilotage.....	3,732 33
" superannuation.....	838 39		
Savings Bank.....	7,296 85		
Dominion stock.....	5,200 00		
Union Bank.....	2,400 00		
	22,391 13		22,391 13

E.O.E.

J. TAYLOR WOOD,
Secretary-Treasurer.

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APPENDIX No. 14.

REPORT OF PILOTAGE AUTHORITY FOR DISTRICT OF MIRAMICHI,
N.B., FOR THE YEAR ENDED DECEMBER 31, 1900.

NEWCASTLE, MIRAMICHI, December 31, 1900.

The Deputy Minister of Marine and Fisheries,
Ottawa.SIR,—I have the honour to inclose herein the pilotage returns of the district of
Miramichi, New Brunswick, for the year ending December 31, 1900.

I am, sir, your obedient servant,

R. R. CALL,
*Secretary-Treasurer to Pilot Commissioners.*PILOTAGE RETURNS for the Pilotage District of Miramichi, N.B., year ending
December 31, 1900.

Class of Vessel.	No.	Total.
Vessels reported inwards—		
British steamers	28	
" sailing vessels	22	
Foreign steamers	15	
" sailing vessels	75	
		140
Vessels reported outwards—		
British steamers	28	
" sailing vessels	18	
Foreign steamers	15	
" sailing vessels	75	
		136
Vessels removed—		
British steamers	18	
" sailing vessels	1	
Foreign steamers	2	
" sailing vessels	26	
		47

R. R. CALL,
*Secretary-Treasurer to Pilotage Commissioners.*J. C. MILLER,
Chairman.

PILOTAGE RETURNS for the Pilotage District of Miramichi, N.B., year ending
December 31, 1900.

Class of Vessel.	Amount.	Total.
	\$ cts.	\$ cts.
Total amount of pilotage inwards—		
British steamers	1,708 32	
" sailing vessels.....	512 03	
Foreign steamers.....	767 25	
" sailing vessels.....	2,127 56	
		5,115 16
Total amount of pilotage outwards—		
British steamers	2,070 02	
" sailing vessels.....	464 00	
Foreign steamers.....	615 48	
" sailing vessels	2,740 50	
		5,890 00
Total amount of removals—		
British steamers	130 00	
" sailing vessels.....	6 00	
Foreign steamers.....	16 00	
" sailing vessels.....	196 00	
		348 00
		11,353 16

R. R. CALL,

Secretary-Treasurer to Pilot Commissioners.

J. C. MILLER,

Chairman.

RATES of Pilotage chargeable at Miramichi, N.B., on all vessels, British and Foreign,
for the year 1900.

When inward bound.....	\$2.25 per foot.
And in addition to the above for all vessels propelled wholly or in part by steam.....	2c. per reg. ton.
When outward bound.....	\$2 per foot.
And in addition to the above for all vessels propelled wholly or in part by steam.....	2c. per reg. ton.
For the removal and mooring of vessels over 300 tons.....	\$4
And where the distance of removal exceeds four miles, fifty per cent additional on the above rate. Removals within a distance of one mile are not compulsory, but when pilots are requested by captains to perform this service, the charge is.....	\$4
Steam tug boat towings one or more coal barges with cargo inwards may depart outwards after having paid full pilotage for tug and barges Inwards without paying any outward pilotage, except on the the tug	

NATIONALITY of Vessels piloted inwards, year 1900.

Norwegian	73	Dutch	2
British.....	50	Swedish.....	2
Italian.....	5	Danish.....	1
American.....	3	French.....	1
Russian.....	3		
			140

R. R. CALL,

Secretary-Treasurer to Pilotage Commissioners.

J. C. MILLER,

Chairman.

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PILOTAGE Returns for the Pilotage District of Miramichi, N.B., for the year ending
December 31, 1900.

No.	Name.	Age.	For what service.	Remarks.
2	Louis Jimmo.....	46	Full service.....	
6	Francis Martin.....	66	"	
7	Maxime Martin.....	55	"	
9	Angus McLean.....	67	"	
10	Alexander Wilson.....	54	"	
11	Robert J. Walls.....	49	"	
22	Wm. Walls, sr.....	46	"	
26	John McCallum.....	48	"	
27	James Nowlan.....	49	"	
28	Dudley P. Walls.....	54	"	
29	George Sutton.....	49	"	
30	James A. Nowlan.....	45	"	
31	George T. Tait.....	43	"	
32	Joseph Jimmo.....	45	"	
33	James McCallum.....	56	"	
35	John Martin.....	41	"	
36	Asa Walls.....	41	"	
37	Wm. Walls, jr.....	43	"	
38	John Nowlan.....	44	"	
39	Patrick Nowlan.....	41	"	
40	Hugh McLean.....	33	Inward only.....	
41	Michael J. Jimmo.....	33	Full license.....	{ Did not pilot in 1900. { Boat-keeper of <i>Mabel</i>
42	George M. Nolan.....	44	"	
43	Chris. C. McLean.....	53	"	
44	George Savoy.....	56	"	

R. R. CALL,

Secretary-Treasurer to Pilotage Commissioners.

J. C. MILLER,

Chairman.

PILOTAGE RETURNS for the Pilotage District of Miramichi, N.B., year ending
December 31, 1900.

No.	Names of Boats.	Tonnage.	Captains.	First Licensed.	Last Licensed.
14	Empress.....	25·57	Geo. Savoy.....	May, 1878..	Sold.
15	Princess Louise.....	20·85	Asa Walls.....	" 1879..	May, 1899.
16	Senator Snowball.....	30·95	Jas. A. Nowlan.....	" 1897..	" 1899.
17	Mabel.....	22	Geo. Savoy.....	" 1900..	" 1900.

64 VICTORIA, A. 1901

STATEMENT showing the Yearly Expenditure by the Pilots on account of the Pilot Schooners during the past Seven Years.

Names of Boats.	Paid by Pilots in 1894.	Paid by Pilots in 1895.	Paid by Pilots in 1896.	Paid by Pilots in 1897.	Paid by Pilots in 1898.	Paid by Pilots in 1899.	Paid by Pilots in 1900.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Two Brothers.....	398 77	501 56	412 56	Sold.....			
Empress.....	430 78	387 90	405 68	310 64	318 25	{ Sold .. 17 62 }	
Princess Louise.....	391 84	381 21	329 14	305 05	322 19	395 46	351 30
Senator Snowball.....				325 32	329 23	442 63	376 99
Mabel.....							199 47
	1,221 39	1,270 67	1,147 38	941 01	969 67	855 71	927 76

R. R. CALL,

Secretary-Treasurer to Pilotage Commissioners.

J. C. MILLER,
Chairman.

THE MIRAMICHI PILOTS IN ACCOUNT WITH R. R. CALL, SECRETARY-TREASURER.

STATEMENT showing Distribution of the \$10,219.28 on hand, as per Pilotage Returns forwarded to the Deputy Minister of Marine and Fisheries, January 10, 1900.

1900.		\$ cts.
March 8..	To paid George Savoy, fitting out schooner <i>Empress</i>	20 00
" 8..	Sundry telegrams.....	5 15
" 8..	D. G. Smith, amount of account for printing.....	4 00
" 8..	Miramichi Steamship Navigation Company, for tickets.....	3 75
" 8..	J. P. Searle, rent, pilots' office.....	20 00
" 8..	E. Johnson, stationery for pilots' office.....	0 90
" 8..	N. Cunningham, ballast for schooner.....	3 86
" 8..	A. & R. Loggie, rent warehouse.....	10 00
" 8..	R. J. Walls, sundry expenses pilots' office.....	19 94
" 8..	Alex. Martin, balance pension 1899.....	55 00
" 8..	R. J. Walls, to retire note on account schooner <i>Princess Louise</i>	300 00
" 8..	Mrs. Mary Martin, allowance.....	75 00
" 8..	" share in pilot schooner.....	127 58
" 8..	Mrs. Margaret Nowlan.....	127 58
" 9..	Angus McEachran.....	127 58
" 9..	Sundry accounts schooner <i>Senator Snowball</i>	442 63
" 9..	" " <i>Princess Louise</i>	395 46
" 9..	" " <i>Empress</i>	17 62
" 9..	R. A. Lawlor, balance legal expenses.....	480 00
" 9..	New pilots while injunction was pending.....	400 00
" 9..	Balances in full to Geo. Savoy, Angus McEachran and new pilots.....	337 17
" 9..	Balances in full to old pilots, as per receipts.....	7,246 06
		10,219 28

R. R. CALL,

Secretary-Treasurer to Pilotage Commissioners.

J. C. MILLER,
Chairman.

MIRAMICHI PILOTAGE AUTHORITY

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The Miramichi Pilots in account with R. R. Call, Secretary-Treasurer.

1900.		DR.	\$	cts.
July	18..	To Paid Capt. A. Allen, putting pilots on vessels.....	7	00
"	18..	" Robt. J. Walls, to retire note account repairs to <i>Princess Louise</i>	324	00
"	18..	" Geo. Watts, account against <i>Princess Louise</i>	37	99
Aug.	18..	" Geo. Stothart's account against <i>Senator Snowball</i>	9	09
"	18..	" Geo. Watts' " " ".....	30	15
"	18..	" John Wilson's " " <i>Princess Louise</i>	96	72
"	18..	" " " " <i>Senator Snowball</i>	22	03
"	18..	" Asa Walls, fitting out <i>Princess Louise</i>	40	00
"	18..	" Robt. J. Walls, premium insurance seine.....	9	00
"	18..	" M. S. Hocken's account against <i>Senator Snowball</i>	66	13
Sept.	18..	" Robt. J. Walls, to retire note account repairs to <i>Princess Louise</i>	270	41
"	18..	" J. D. Creaghan's account against <i>Princess Louise</i>	8	00
"	18..	" J. P. Searle, rent pilots' office to April, 1901.....	20	00
Oct.	18..	" Robt. J. Walls' account for horse-hire.....	7	00
"	18..	" John Wilson's account against <i>Princess Louise</i>	13	17
"	18..	" Geo. Stothart's " " ".....	3	38
"	18..	" Alexander Martin, pension for 1900.....	75	00
Nov.	17..	" Robt. J. Walls, to retire note repairs to <i>Princess Louise</i>	117	50
"	17..	" Miramichi Steam Navigation Co., for tickets.....	7	50
"	17..	" C. A. Gunn, fixing anchor.....	6	00
"	17..	" Arch. McLean, for sundries, schooners.....	6	61
"	17..	" J. B. Snowball Co., Ltd., for marline.....	1	10
"	29..	" Wm. Walls, sr., for money advanced.....	10	00
"	29..	" E. Johnson, stationery, &c., for pilots' office.....	2	55
"	29..	" Geo. Watts' account sundries <i>Princess Louise</i>	25	82
"	29..	" V. A. Danville, for following accounts paid by him:—A. C. McLean's account, \$4.81; estate J. R. Goggin, 75c; E. Burk, \$4.40; W. S. Loggie Co.'s account, \$3.45—all against <i>Senator Snowball</i> ; also paid for cutting <i>Senator Snowball</i> out from wharf, \$4.....	17	41
Dec.	6..	" Asa Walls, cutting out <i>Princess Louise</i> from wharf.....	5	00
"	6..	" Geo. Watts', account against <i>Senator Snowball</i>	6	27
"	6..	" E. Burke's account against <i>Princess Louise</i>	1	45
"	6..	" Anslow Bros., account for printing, &c.....	3	00
"	6..	" Francis Martin, refund on account seine.....	0	45
"	6..	" Secretary-treasurer, postage, stationery, &c.....	3	47
"	6..	" R. R. Call, secretary-treasurer, commission on \$11,813.26 at 3 per cent.....	354	40
"	12..	" 20 pilots, \$8,361.20; and 4 pilots, \$1,844.46.....	10,205	66
			11,813	26
CR.				
Dec.	12..	By Amount collected pilotage inward.....	5,115	16
"	12..	" " " outward.....	5,890	00
"	12..	" " for removals.....	348	00
"	12..	" " earned by pilots outside.....	460	10
			11,813	26

R. R. CALL,
Secretary-Treasurer.

J. C. MILLER,
Chairman.

APPENDIX No. 15.

REPORT OF THE PILOTAGE AUTHORITY OF THE COUNTY OF CHARLOTTE, N.B., FOR THE YEAR ENDED DECEMBER 31, 1900.

St. ANDREWS, N. B., December 31, 1900.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to hand you inclosed pilotage returns of the district of the County of Charlotte for the year ending December 31, 1900.

I am, sir, your obedient servant,

C. E. O. HATHEWAY,
Commissioner and Secretary.

PILOTAGE Returns for the district of the County of Charlotte, Province of New Brunswick, for year ending December 31, 1900.

Names of Pilots acting.	Residence.	Age.	Date of License.
Wellington Cline.....	Parish of West Isle	59 years	April 9, 1890.
Joseph Boyd.....	" Campobello.....	65 "	June 4, 1900.

One pilot schooner licensed, 11 tons register, Joseph Boyd, master. Three licenses to masters of barges: 2 of 439 tons each, 1 of 433 tons—total 1,311 tons.

Amount of Pilotage collected by Pilots.

British vessels, \$87.29 ; foreign vessels, \$142.90 ; total, \$230.10.

No.	Description of Vessels Piloted.	Nationality.	Tonnage.	No.	Description of Vessels Piloted.	Nationality.	Tonnage.
3	Schooners	British.....	729	1	Barque	Foreign	600
3	"	Foreign	820				2,149

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Receipts by Pilotage Authority.

License to one pilot boat	\$ 5 00	
“ one pilot	6 00	
“ three masters of barges	18 00	
Received for regulations	1 00	
		—————\$30 00

Charges.

Postage and stationery	\$ 1 00	
Allowed Commissioner, St. Stephens, St. George	5 00	
“ Commissioner and secretary, St. Andrews	24 00	
		—————\$30 00

C. E. O. HATHEWAY,
Commissioner and Secretary.

ST. ANDREWS, N.B., December 13, 1900.

Rates of Pilotage in the District.

Longest pilotage distance, inwards or outwards, \$2.25 per foot draught of water.
 Second “ “ 1.60 “
 Third “ “ 1.50 “

From or to Campobello, 20 cents per foot less than above rates.

Fourth pilotage distance, inwards or outwards, \$1 per foot draught of water.

From November 1 to April 1, 20 cents per foot in addition to above rates.

To or from St. Andrews harbour to ballast ground, vessels 80 tons and under 300 tons, \$2.50 each ; 300 tons and upwards, \$3 each.

Removing a vessel from one loading place or harbour, to any other loading place or harbour inside St. Andrews Bay, vessels 80 tons up to 200 tons, \$4 ; over 200 tons and up to 300 tons, \$5 ; over 300 tons and up to 400 tons, \$6 ; exceeding 400 tons, \$8 each.

Removing a vessel from any loading place inside St. Andrews Bay to any harbour or loading place outside St. Andrews Bay and within the district pilotage inwards or outwards, vessels 80 tons and under 200 tons, \$6 ; 200 tons and under 300 tons, \$8 ; 300 tons and under 400 tons, \$10 ; 400 tons and upwards, \$12 each.

C. E. O. HATHEWAY,
Commissioner and Secretary.

APPENDIX No. 16.

REPORT OF THE PILOTAGE AUTHORITY OF HARVEY, N.B., FOR
THE YEAR ENDED DECEMBER 31, 1900.LIST of vessels reported Inward paying Pilotage dues at the port of Harvey for the year
ending December 31, 1900.

Description of Vessel.	Name and Nationality.	Tonnage.	Amount of Pilotage.
			\$ cts
Bark	P. G. Blanchard, Nor.	1,213	25 00
Ship	Black Adder, Nor.	917	24 00
Bark	Matheld, Nor.	834	22 50
"	Spind, Nor.	435	22 00
S.S.	Benedeck, Br.	1,758	34 00
Bark	Benjamin Bangs, Nor.	1,082	20 00
S.S.	John Christie, Nor.	974	23 00
Bark	Hilden, Nor.	1,142	26 00
S.S.	Estry, Br.	1,924	19 00
"	John Christie, 2nd voyage, Nor.	974	18 50
Bark	Westmorland, Br.	698	8 50
		11,951	247 00

GEO. A. COONAN,
Secretary to Pilot Commissioners.

HARVEY, N.B., December 31, 1900.

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APPENDIX No. 17.

REPORT OF THE PILOTAGE AUTHORITY OF ST. JOHN, N.B., FOR THE
YEAR ENDED DECEMBER 31, 1900.OFFICE OF PILOTAGE AUTHORITY,
DISTRICT OF ST. JOHN, N.B., January 4, 1901.F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—Inclosed herewith please find our annual returns for pilotage, for this district, for the year ending December 31, 1900, all of which I trust you may find in order

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

J. U. THOMAS,
Secretary.

STATEMENT of Receipts and Expenditures for the year ended December 31, 1900.

INCOME ACCOUNT.	\$ cts.	\$ cts.
RECEIPTS.		
Licenses to 29 pilots at \$5.....	145 00	
" 6 boats at \$10.....	60 00	
		205 00
25 cents per foot on outward pilotage from Port of St. John to date.....	2,007 41	
25 " " " " " Musquash ".....	12 75	
		2,020 16
EXPENDITURES.		
J. & A. McMillan, stationery.....	24 13	
Auditing accounts for 1899.....	25 00	
Office rent, one year.....	100 00	
Salary secretary-treasurer, one year to date.....	800 00	
Sundries.....	25 33	
		974 46
Amount transferred to Pilot Fund account.....		1,250 70
		2,225 16

J. U. THOMAS,
Secretary.

STATEMENT of Pilot Fund Account for year ended December 31, 1900.

PILOT FUND ACCOUNT.		\$ cts.	\$ cts.
DR.			
To pensions paid pilots		806 25	
" " widows and children		766 25	
To balance			1,572 50
			10,123 81
CR.			
By balance December 31, 1899			10,179 57
Interest on Dominion Savings Bank deposits, 12 months to July 1, 1900:—			
Per pass. book No. 744		132 18	
" " 10,260		133 86	
Amount brought from income account			266 04
			1,250 70
			11,696 31
By balance to credit of Pilot Fund Account, December 31, 1900			10,123 81

J. U. THOMAS,
Secretary.

STATEMENT of Finances of the St. John Pilot Commissioners as per audit,
December 31, 1900.

INVESTMENT ACCOUNT.		\$ cts.	\$ cts.
On deposit Dominion Savings Bank per pass book No. 744		4,539 14	
" " " " No. 10,260		4,596 54	
			9,135 68
CURRENT ACCOUNT.			
On deposit in Bank of New Brunswick			988 13
			10,123 81

J. U. THOMAS,
Secretary.

SESSIONAL PAPER No. 23

PILOTS' individual earnings for the year 1900.

	\$	cts.	\$	cts.
Total amount of pilotage received.....	31,598	42		
Less—25 cents per foot from outward pilotage for office expenses, Pilot Fund, &c.....	2,007	41		
			29,591	01
<i>Contra.</i>				
Bennett, James.....	1,446	43		
Cline, Richard.....	2,130	30		
Cline, Richard B.....	1,002	65		
Cline, Alfred.....	469	10		
Conlin, Patrick.....	113	45		
Daley, Charles.....	412	50		
Doyle, James.....	1,500	55		
Doherty, Joseph.....	3,245	57		
Lahey, William.....	657	12		
Lahey, Frank L.....	1,575	30		
Mantle, James E.....	472	01		
Miller, James H.....	1,585	93		
Murray, William.....	424	12		
Quinn, William.....	1,383	45		
Reed, James.....	569	50		
Rogers, Bart.....	1,786	30		
Spears, John.....	545	23		
Spears, Henry.....	1,230	38		
Spears, Martin.....	1,121	48		
Spears, James S.....	543	76		
Sherrard, John L. C.....	1,214	61		
Stone, Thomas J.....	677	14		
Scott, William.....	808	83		
Scott, Richard.....	826	85		
Thomas, John S.....	1,802	90		
Thomas, Robert.....	415	78		
Traynor, Thomas.....	1,629	77		
			29,591	01

J. U. THOMAS,
Secretary.

RETURN of Vessels arriving at the Port of St. John, N.B., subject to pilotage, for the year ending December 31, 1900.

	British.	Foreign.	Total.
Schooners.....	138	158	296
Brigs and brigantines.....	5	2	7
Barques and barquentines.....	25	40	65
Ships.....	3	9	12
Steamers.....	168	22	190
	339	231	570
Amount of pilotage received.....	\$22,997 05	\$8,601 37	\$31,598 42

J. U. THOMAS,
Secretary.

LICENSED Pilots, Port of St. John, N.B., for the year 1899-1900.

Name.	Age.	Residence.	Remarks.
Bennett, James	43	St. John, N.B.	
Cline, Richard	75	"	
Cline, Richard B.	30	"	
Cline, Alfred	43	"	
Conlin, Patrick	50	"	
Daley, Charles	64	"	
Doyle, James	63	"	
Doherty, Joseph	54	"	
Lahey, William	71	"	
Lahey, Frank L.	29	"	
Mantle, James E.	54	"	
Miller, James H.	23	"	
Murray, William	26	"	
Quinn, William	53	"	
Reed, James	54	"	
Rogers, Bart	43	"	
Spears, John	51	"	
Spears, Henry	49	"	
Spears, Martin	43	"	
Spears, James S.	55	"	
Sherrard, John L. C.	66	"	
Stone, Thomas J.	47	"	
Scott, Richard	49	"	
Scott, William	44	"	
Thomas, John S.	52	"	
Thomas, Robert	59	"	
Traynor, Thomas	47	"	
McAnulty, John	62	Musquash, N.B.	Licensed for Musquash only.

J. U. THOMAS,
Secretary.

APPENDIX No. 18.

REPORT OF THE PILOTAGE AUTHORITY OF SHEDIAC, N.B., FOR THE YEAR ENDED DECEMBER 31, 1900.

F. GOURDEAU, Esq.,
Deputy Minister of Marine,
Ottawa.

SIR,—The pilotage authority for the port of Shediac, N.B., beg leave to submit the following report for the year ended December 31, 1900.

Names of Pilots in District.	Age.	Service.
1 Edward McDonald	68	Full district.
2 Docity P. LeBlanc.....	62	"
3 Thomas McGrath.....	54	"
4 Olaf Hendrickson.....	48	"
5 Paul P. LeBlanc	55	"

Number of vessels reported liable to pay pilotage :

	Inwards.	Outwards.
British sailing vessels, none.....		
Foreign "	21	21
	<u>21</u>	<u>21</u>

Nationality of above vessels reported inwards during A.D. 1900—Norwegian, 21.
The total amount received for pilotage services for the year was as follows:—From foreign vessels, \$918.63.

This amount was all paid to the above pilots.

The rates of pilotage for the district are as follows:—For pilotage inwards and outwards, \$1.50 per foot draught of water ; each remove \$4.

Yours respectfully,

W. A. RUSSELL,
Secretary to the Pilotage Commission of Shediac.

APPENDIX No. 19.

REPORT OF THE PILOTAGE AUTHORITY FOR THE PILOTAGE DISTRICT OF ST. MARY'S AND LISCOMB, N.S., FOR THE YEAR ENDED DECEMBER 31, 1900.

EDWARD QUINN, PILOT No. 1, FOR ST. MARY'S.

Date of Arrivals.	Where from.	Rig.	Name of Vessel.	Port of Registry.	Register Tonnage.	Name of Master.	RATE OF PILOTAGE.					
							Inwards.	Outwards.	Total.			
							\$	cts.	\$	cts.	\$	cts.
900.												
Jun 17.		Schooner	Morancy	Lubeck	159	W. Henderson	5 00	7 00			12 00	
" 23.		"	Magie Smith	Lunenburg	84	Burke	3 36				3 36	
July 14.	109 days on s. dredge St.	Lawrence at \$3 per day									327 00	
											342 36	

JOHN BYERNS, PILOT No. 3, FOR ST. MARY'S.

July	Sydney	Schooner	Marye Smith	Lunenburg	84	Burke	1 28	3 36			3 36	
"	"	"	J. R. Kelly	Halifax	32	Hilchey	2 56	1 28			2 56	
Aug.	"	"	H. M. Crosby	"	64	Pebrine	2 56	2 56			5 12	
Sept.	"	"	"	"	64	"	2 56	2 56			5 12	
Nov.	Cardigan Bridge	"	Minnie Mac	"	76	W. McConnell	3 04	2 56			3 04	
Dec.	Halifax	"	Alma	New York	120	Lent	5 00	7 00			12 00	
"	"	"	Viola	St. John	124	W. Henderson	5 00	7 00			12 00	
											48 32	

HENRY J. PYE, PILOT No. 1, FOR LISCOMB.

May 28.	Arundal	Barque	Ungetonis Venner	Arundal, Norway	502	E. Pedetson	12 00	14 00			26 00	
June 26.	Liverpool	"	Aarvak	Possgrund	1,013	Jinil	16 00	18 00			34 00	
Aug. 6.	"	"	Douria	Arundal	1,437	Bie		22 00			22 00	

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" 17..	New York.....	Schooner.....	Exception.....	American.....	320	9 00	26 00
" 14..	Liverpool.....	Ship.....	Charles S. Whitney.....	Parsboro.....	1,647	24 00	24 00
				Levi Ackins.....			123 00

CHARLES G. RILEY, PILOT No. 3, FOR LISCOMB.

May 18..	Belfast.....	Barque.....	Bella.....	Norway.....	508	12 00	26 00
" 28..	Arundal, Norway.....	"	Charlotte Padburg.....	Arundal.....	589	12 00	26 00
June 14..	New Castle.....	"	Douria.....	Norway.....	1,437	20 00	20 00
July 27..	London.....	"	Longfellow.....	"	770	14 00	30 00
				Sanderson.....			102 00

ARTHUR MCKINLAY, PILOT No. 5, FOR LISCOMB.

Aug. 14..	Liverpool.....	Ship.....	Charles S. Whitney.....	Parsboro.....	1,647	22 00	22 00
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WILLIAM PRIDE, ^{Secretary}
Secretary to Commissioners.

APPENDIX No. 20.

REPORT OF THE PILOTAGE AUTHORITY OF PICTOU, N.S., FOR THE YEAR ENDED DECEMBER 31, 1900.

PORT OF PICTOU,
December 31, 1900.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

DEAR SIR,—Inclosed please find pilotage returns for the port of Pictou for season ending 1900.

I am,
Your obedient servant,

W. H. NOONAN.

TOTAL Amount received for Pilotage Dues for season ending 1900.

	\$ cts.	\$ cts.
Total amount received for dues for season ending 1900		2,333 24
Of this amount—		
Received from steamships.....	2,057 49	
" sailing vessels.....	275 75	2,333 24
Of this amount—		
Received from British ships.....	1,153 04	
" foreign "	1,180 20	2,333 24

Certified Master—A. B. Boulanger, ss. *Campana*.

MEMORANDUM of earnings of Pilots, 1900.

No.	Name.	Residence.	Age.	Amount.
				\$ cts.
1	J. Fraser.....	Chance Harbour.....	69	135 00
2	W. A. Cooke.....	Pictou.....	62	151 50
3	C. A. Cooke.....	".....	54	312 68
4	G. W. Powell.....	Pictou Landing.....	49	312 68
5	D. S. Smith.....	Pictou.....	49	1,016 40
6	A. Smith.....	".....	43	538 64
7	McG. Fraser.....	Pictou Landing.....	32	167 00
				2,321 22

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RECEIPTS and Expenditures of all moneys received by or on behalf of the Pilotage Authority, in respect of Pilots or Pilotage.

RECEIPTS.		\$ cts.	\$ cts.
Received pilotage dues, as per statement.....		2,333 24	
" from 6 pilots, renewing bonds.....		6 00	
" Capt. Boulangier, ss. <i>Campana</i> , coasting license.....		40 00	
Balance due secretary.....		902 79	
			3,282 03
EXPENDITURES.			
Paid pilots for pilotage.....		2,321 22	
" secretary for services.....		200 00	
Balance from 1899.....		760 81	
			3,282 03

Examined and found correct.

JOHN R. DAVIS.
WM. FRASER.

APPENDIX No. 21.

REPORT OF PILOTAGE AUTHORITY OF SYDNEY, C.B., FOR THE YEAR
ENDED DECEMBER 31, 1900.

NORTH SYDNEY, C.B., January 10, 1901.

F. GOURDEAU, Esq.,
Deputy Minister of Marine,
Ottawa.

SIR,—I beg to wait on you with returns in connection with the Pilotage Authority district of Sydney for the year ending December 31, 1900, showing :

Balance due per account	\$1,263 42
Amount on deposit	1,000 00
	\$2,263 42

which, I trust, will be found correct.

Your obedient servant,

DANIEL McLEAN,
Secretary.

NORTH SYDNEY.

	Number.	Tonnage.
British steamers	108	59,567
Foreign "	113	139,937
British sailing vessels	47	8,369
Foreign "	12	7,119
Relief	11	1,667
	291	186,659

PILOTAGE RECEIVED.

From British vessels	\$ 1,804 76
" foreign "	3,760 33
" relief "	33 50
	\$ 5,598 59

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INTERNATIONAL.

	Number.	Tonnage.
British steamers	228	357,552
Foreign "	149	258,141
British sailing vessels	13	2,927
Foreign "	14	6,345
Relief	12	1,949
	416	626,914

PILOTAGE RECEIVED.

From British vessels	\$ 11,823 50
" foreign "	9,057 00
" relief "	45 50
	\$ 20,926 00

RECAPITULATION.

Port.	Number of Vessels.	Tonnage.	Amount.
North Sydney	291	186,659	\$ cts. 5,598 59
International	416	626,914	20,926 00
	707	813,573	26,524 59

MASTERS LICENSED.

No.	Name.	Vessel.	Class.	Amount.
				\$ cts.
2	G. Hall	Rembrandt	Barge	100 00
4	D. C. Fraser	Bonivesta	Steamer	100 00
5	E. Couillard	Greetlands	"	100 00
8	M. M. Florian	Gradee	Barge	100 00
9	J. Reed	Cape Breton	Steamer	100 00
10	D. A. Scott	Harlaw	"	100 00
11	W. H. Gould	Louisburg	"	100 00
12	H. Boulanger	Tiber	"	100 00
16	P. LeChaux	Polino	"	100 00
				900 00

STATEMENT of Relief.

Date.	Name.	Amount.
1900.		\$ cts.
Feb. 21.....	Family Maurice Doyle.....	30 00
" 21.....	Pilot John Curren.....	20 00
April 10.....	Widow Madore.....	20 00
June 1.....	Family Doyle.....	30 00
" 18.....	Pilot Peter Burke.....	30 00
July 6.....	Margaret Petrie.....	15 00
" 15.....	Isabel McGillivray.....	15 00
" 15.....	Mary Petrie.....	30 00
" 24.....	Mrs. Daly.....	15 00
" 24.....	Widow McInnis.....	15 00
" 24.....	Widow Madore.....	20 00
Oct. 2.....	Widow McGillivray.....	30 00
" 8.....	Widow Brown.....	30 00
" 8.....	Widow Daly.....	15 00
Dec. 12.....	Margaret Petrie.....	15 00
" 17.....	Widow McInnis.....	15 00
" 29.....	Catherine McGillivray.....	30 00
" 31.....	Widow Carroll.....	30 00
		405 00

DR.

SYDNEY Pilotage Authority.

CR.

1900.	\$ cts.	1900.	\$ cts.
To paid total pilotage.....	\$26,524 59	By Total pilotage, per returns.....	26,524 59
Less—Relief.....	79 00	License to pilots.....	87 00
	\$26,445 59	Boats licensed.....	16 00
" Commission.....	1,322 27	Masters licensed.....	900 00
	25,123 32	Balance on hand.....	718 00
Salary—Collectors, secretary and treasurer.....	1,250 00	Interest on deposit.....	35 00
Head collector's office—Rent and fuel.....	50 00	Deposit receipt, Union Bank.....	1,000 00
Expenses of five commissioners....	150 00		
Books, printing and stationery....	15 88		
Telegrams and sundries.....	7 55		
Bank charges, drafts, Sydney.....	16 22		
Relief per statement.....	405 00		
Amount deposit bank.....	1,000 00		
Balance carried down.....	1,263 42		
	29,281 39		29,281 39
		January 10, 1900.	
		By Balance brought down.....	1,263 40
		Amount on deposit, Union Bank....	1,000 00
			2,263 40

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EACH Pilot's Earnings for Year 1900.

No.	Name.	Amonnt.
		\$ cts.
1	William Ratchford.....	773 02
2	J. B. Cann.....	773 02
3	J. T. Mullins.....	773 02
4	Andrew Ratchford.....	773 02
5	John Fraser.....	773 02
6	Jas. B. McGillvray.....	773 02
7	Angus McNeil.....	773 02
8	John Carroll.....	773 02
9	G. B. Brown.....	773 02
10	L. Connell.....	773 02
11	James Carroll.....	773 02
12	D. D. Petrie.....	773 02
13	John McNeil.....	773 02
14	Peter Burke.....	773 02
15	James Shanahan.....	773 02
16	William Brown.....	773 02
17	Thomas Ratchford.....	773 02
18	G. D. Townsend.....	773 02
19	John B. McGillvray.....	773 02
20	L. Ling.....	773 02
21	James Fraser.....	773 02
22	Tom McNeil.....	773 02
23	J. T. Laffin.....	773 02
24	Thomas Roberts.....	773 02
25	Joseph Brown.....	773 02
26	Bernard Mullins.....	773 02
27	D. A. McInnis.....	773 02
28	E. D. Cann.....	773 02
29	Walter Handregan.....	773 02
APPRENTICES.		
1	William Langille.....	386 53
2	Vincent McGillvray.....	386 53
3	Michael Curran.....	386 53
4	Thomas Rudderham.....	386 53
5	Alford Richardson.....	386 53
6	John Mahon.....	386 53
7	Louis Carroll.....	386 56
		25,123 32

A. GANNON,
Head Collector.

APPENDIX No. 22.

REPORT OF PILOTAGE AUTHORITY FOR CARAQUET, N. B., FOR THE
YEAR ENDED DECEMBER 31, 1900.

CARAQUET, N.B., December 27, 1900.

To the Honourable Sir L. H. DAVIES,
Minister of Marine,
Ottawa.

SIR,—I beg to inclose herewith statement of pilotage fees paid in the pilotage district of Caraquet during the year 1900, also my statement of account with the Pilot Commissioners.

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

PHILIP RIVE,
Secretary to Pilot Commissioners.

SESSIONAL PAPER No. 23

STATEMENT of Pilotage paid during 1900, in the Pilotage District of Caraque.

Name of Vessel.	Nationality.	Rig.	Tonnage.	Date of Arrival.	Name of Pilot.	Date of Sailing.	Name of Pilot.	Amount of Pilotage In and Out.
								\$ cts.
Alliance.....	British.....	Schooner..	59	May 12....	Chas. Vibert.....	June 6....	Chas. Vibert.....	22 60
".....	".....	".....	99	Aug. 17....	".....	Aug. 22....	".....	23 30
George and Mary.....	".....	".....	83	" 21....	Gers. Poulain.....	Sept. 21....	No pilot.....	12 00
Hibernica.....	".....	Brigantine	148	Sept. 10....	Joseph Jeulain.....	Oct. 28....	Chas. Vibert.....	26 00
Pride of the West.....	".....	Schooner .	99	" 12....	Chas. Vibert.....	" 25....	Gers. Poulain.....	23 20
Alliance.....	".....	".....	99	Oct. 4....	".....	Nov. 14....	Chas. Vibert.....	21 80
Mary Classon.....	".....	Brigantine	182	Nov. 5....	".....	" 20....	".....	21 50
								150 40

STATEMENT OF SECRETARY'S ACCOUNT.

PHILIP RIVE, in account with Pilot Commissioners during the Year 1900.

Dr.	
To cash received Pilot Xavier Poulain, boat license.....	\$ 1 00
" Alex. Wilson, ".....	1 00
" Chas. Vibert, ".....	1 00
" Auguste Poulain, ".....	1 00
" Lazare Gauvin, ".....	1 00
" Jos. X. Chiasson, ".....	1 00
	<u>\$ 6 00</u>
Cr.	
By Postage and stationery.....	\$ 1 00
" Salary.....	5 00
	<u>\$ 6 00</u>

CARAQUET, December 27, 1900.

PHILIP RIVE,
Pilot Commissioner and Secretary to Pilot Commissioners.

APPENDIX No. 23.

REPORT OF THE PILOTAGE AUTHORITY OF BATHURST, N.B., FOR THE YEAR ENDED DECEMBER 31, 1900.

STATEMENT showing the number of vessels, collections and disbursements, Pilotage District of Bathurst, N B., season 1900.

Pilots.	BRITISH VESSELS.				FOREIGN VESSELS.				Grand Total.	Disbursements.	
	Inwards.		Outwards.		Inwards.		Outwards.			To whom.	Amount.
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.			
	Total.		Total.		Total.		Total.				
Wm. H. Daly.....	6	\$ 100 22	6	\$ 87 80	10	145 80	10	122 80	516 62	Pilots Hachey, Daly and Reynolds, Commissioners and Secretary....	\$ 490 80 25 82 516 62
Nazaire Hachey.....											
Frederic Reynolds.....											

Pilotage rates—
 Outside bar, \$1.20 per foot in and 80c. per foot out.
 Inside bar, \$1.40 " \$1.00 "
 Steamers, 1c. per ton extra in and out.

Pilots—
 W.M. H. DALY,
 NAZAIRE HACHEY,
 FREDERIC REYNOLDS.

Commissioners—
 JOHN E. O'BRIEN, Chairman.
 P. J. BURNS,
 THOS. LEAHY,
 SAMUEL MELANCON,
 FRANK CURRAN.

J. H. STEWART,
Secretary.

APPENDIX No. 24.

REPORT OF THE PILOTAGE AUTHORITY OF BUCTOUCHE, N.B., FOR
THE YEAR ENDED DECEMBER 31, 1900.

BUCTOUCHE, N.B., January 5, 1901.

Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—Inclosed herewith I send returns of the Pilotage District of Buctouche, N.B., for the year 1900, which I hope will be found satisfactory.

Your obedient servant,

JOHN C. ROSS,
Secretary of Buctouche Pilotage Authority.

BUCTOUCHE, N.B., January 4, 1901.

1st. Names and ages of pilots licensed :—

Calixte Léger	Age 68 years.
Joseph Crossman	“ 49 “

2nd. The above pilots are licensed to undertake the pilotage of vessels of every description within and throughout the pilotage district of Buctouche.

3rd. Pilotage dues are charged as per section 12 of Rules and Regulations for the District, viz.: One dollar and fifty cents per foot draught of water, both inward and outward bound.

4th. Total amount of pilotage dues paid, \$80.75. Of this amount \$38.75 and \$42.00 were paid respectively by two foreign vessels, (Russian and Norwegian), the only ones liable for pilotage under the regulations. No pilotage was received from schooners or vessels by which employment of pilot was optional.

5th. The pilotage dues as above were paid to the pilots who performed their duties as such to the respective vessels.

6th. No new licenses were issued during the year, nor any expenses incurred by the pilotage authority.

JOHN C. ROSS,
Secretary of Buctouche Pilotage Authority.

APPENDIX No. 25.

REPORT OF THE PILOTAGE AUTHORITY FOR KINGSTON, KENT CO.,
N.B., FOR YEAR ENDED DECEMBER 31, 1900.

KINGSTON, KENT Co., N.B., November 30, 1900.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

DEAR SIR,—I hereby send you report from the Pilotage Commissioners of the port of Richibucto, N.B., for season of 1900, viz. :

The Pilot Commissioners held annual meeting in Messrs. J. & W. Brait's office, Kingston, Kent County. Hudson, Jardine and Gordon present; Edward Walker represented by J. D. Walker, and William Brait by A. B. Carson; chairman, John Jardine. Agreed, that any steamers loading at this port shall pay \$1.50 per foot pilotage inwards and outwards, also 4 cents per ton register.

The following pilots, William Irving, James Long, Albert Long, William Long and John Curwen, having agreed to the rules and regulations of pilots, are granted pilot licenses for this season.

Position of bar from lighthouse on south beach N.E. by N. 400 fathoms distant from L.W.O.S. on beach to buoy, from thence across bar N.E. by E. 200 fathoms. Depth on bar, L.W.O.S., 11 feet. Pilots report a shoal making in the channel about one mile inside of bar, S.W. from outside of north beach with only 10 feet 6 inches at L.W.

Fourteen vessels loaded and sailed from this port, registering 7,905 tons, this season. No casualties to report.

Yours respectfully,

JAMES GORDON,
Secretary to Commissioners.

APPENDIX No. 26.

REPORT OF THE PILOTAGE AUTHORITY OF THE COUNTY OF RICHMOND, N.S., FOR THE YEAR ENDED DECEMBER 31, 1900.

Report of the Pilotage Authority of the pilotage district of the county of Richmond, for the year 1900. Only one pilot, John Gayetche, piloted in and out of the harbour of Arichat.

British brig <i>Breault</i> , 151 tons.....	\$11 25
“ barquentine <i>Hebro</i> , 220 tons.....	13 50
“ “ “ “	13 50
	<hr/>
	\$38 25

There is but very little to do for pilots now in these ports. Steamers are exempt, and they monopolize all the shipping.

ISIDORE LE BLANC,
Secretary.

ARICHAT, February 4, 1901.

APPENDIX No. 27.

REPORT OF PILOTAGE AUTHORITY FOR PORT OF LOUISBOURG, N.S.,
FOR THE YEAR ENDED DECEMBER 31, 1900.

Vessels paid pilotage—

British.....	123
Norwegian.....	157
French.....	6
American.....	16
Italian.....	1
Swedish.....	3
Total.....	306

Amount received for pilotage.....	\$ 6,992 91
Secretary's commission.....	\$ 279 71
Expenses.....	44 33
Rebates.....	696 87
Paid pilots.....	5,972 00
	—————\$ 6,992 91

Average paid each pilot, \$744.

NAMES OF PILOTS.

John Power, Edward Kelly, Pierce Pope, John E. Tutty, Daniel A. Townsend,
Philip W. Townsend, George Dickson and Joseph W. Wilcox.

Respectfully submitted,

PHILIP TOWNSEND,
Secretary to Pilotage Authority.

LOUISBOURG, N.S., February 1, 1901.

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APPENDIX No. 28.

PILOTAGE AUTHORITY FOR THE DISTRICT OF PARRSBORO', N.S., FOR
THE YEAR ENDED DECEMBER 31, 1900.

AMOUNT of Pilotage collected for the year was as follows :—

DR.	—	CR.	—
	\$ cts.		\$ cts.
14 British vessels paid.....	819 75	Paid pilot Robert Anderson.....	425 71
14 foreign ".....	416 50	" " James George.....	225 90
Received license fees on 4 barges at \$35 each.....	140 00	" " George E. Pettis.....	461 04
Received commission on collection at Advocate Harbour.....	18 22	Placed to credit of commission account	281 82
	1,394 47		1,394 47

NAMES and Ages of Pilots.

Names.	Age.	—
Robert Anderson.....	47	Full for district.
James George.....	60	" "
George E. Pettis.....	62	" "
Baxter McLelland.....	42	For district of Spencer's Island only.
J. Ephraim Morris.....	38	" " Advocate Harbour "

The rates vary from 75 cents to \$2.75 per draught foot on sailing vessels and 50 cents extra on steamers.

E. GILLESPIE,
Secretary Parrsboro' Pilotage Authority.

PARRSBORO', N.S., December 11, 1900.

APPENDIX No. 29.

REPORT OF THE PORT WARDEN OF MONTREAL FOR THE YEAR
ENDED DECEMBER 31, 1900.

MONTREAL, January 9, 1901.

Honourable Sir L. H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour, by direction of the Council of this Board and in compliance with section 31 of the Act governing the Port Warden Office, 45 Vic. chap. 45, to transmit herewith documents as follows:—

1. The Port Warden's report for the year 1900.
2. Audited statement of receipts and expenditure of the Port Warden's office for the year ending December 31, 1900.
3. Statement of investments of the Port Warden Surplus Fund.

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

GEO. HADRILL,
Secretary.

MONTREAL, December 31, 1900.

To the President and Council
of the Montreal Board of Trade.

GENTLEMEN,—I have the honour to submit the annual report of the business of this office, with statements of exports, receipts and expenditures for the year 1900.

Navigation opened by the arrival from sea of the s.s. *Lake Megantic* at 5 p.m., Thursday April 26, followed at 7 p.m. by the ss. *Vancouver*, and closed with the departure for sea, at 1 p.m., December 3, of the ss. *Paliki*, one of the Algoma Central Steamship Company's vessels, which loaded part cargo of steel at Conneant, Ohio, Lake Erie, completing her cargo here with lumber for Cardiff.

The ss. *Paliki* is the fourth vessel this company has sent this fall from the lakes for winter employment in Europe or elsewhere.

This is a new departure brought about by the deepening of the canals and channels of the St. Lawrence, from the great lakes, which promises in the not very distant future to assume very large proportions. There is already another company, viz., the North Western Transportation Company, building steamers to run direct between Chicago and Liverpool.

The close of this season has been phenomenal, the last sailing was almost unprecedentedly late, being the latest departure for sea since the year 1864, the weather open and mild for some time after the last vessel sailed.

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The first sailing vessel to arrive was the schr. *Golden Hind*, from Barbados, with a cargo of molasses, on May 20.

The first vessel to enter the Gulf of St. Lawrence this season by the Straits of Belle Isle was the ss. *Endeavour* which reported having passed Belle Isle 9.20 p.m., June 20. Saw no ice.

The season of 1900 has been remarkable for the inauguration of two important incidents, namely: the opening of direct trade from the west by the way of the great lakes and the St. Lawrence canals to European ports, and the departure hence of a steamer light to load a cargo of grain, &c., at Quebec. This was the ss. *Albanian* of the Leyland Line, which sailed hence on November 3 to take the first cargo of grain to be loaded from the new elevator at Quebec. The grain came direct from the west over the Great Northern Railway. This event also inaugurated the opening of the road for through western traffic to Quebec.

Four hundred and sixteen over-sea or foreign-going vessels of all kinds were entered at this office with a tonnage of 1,038,234 tons, a decrease of eighteen vessels, and 54,721 tons, compared with last year.

The business to the lower ports this season consisted of, entered, two hundred and seventy-one vessels of all classes, with a tonnage of 327,559 tons, a decrease of seventy-three vessels and 74,766 tons.

Clearance of vessels loaded for the lower ports were as follows: Eighty-four vessels of all classes, with a tonnage of 63,171 tons, as against 105 vessels of all classes last year, with a tonnage of 91,045 tons, a decrease of twenty-one vessels and 27,874 tons.

One hundred and eighty-seven vessels cleared for the lower ports in ballast, being solely in the coal carrying trade.

Thus you will see there has been a marked all round decrease in tonnage entering and leaving the port this past season.

The falling off of tonnage in the foreign trade may be accounted for by the continued employment of a number of steamers, belonging to the regular lines frequenting this port as transports in connection with the war in South Africa, but the large diminution of tonnage in the lower port trade at the early part of the season was brought about by the almost prohibitory hull insurance rates demanded for the St. Lawrence trade, and the *rs.* B.N.A. clause in Atlantic charters. Later in the season it was more or less affected by the inability to procure coal in sufficient quantities, resulting in the vessels being taken off and placed on foreign voyages from Quebec and elsewhere.

The only vessel loaded this year for South America at this port, was the schooner *Glenrosa*, 486 tons, for Rosario.

The water in the river has ruled higher this year than last, the lowest water recorded in the ship channel was on November 2, Montreal gauge, 27 feet 3 inches, Sorel gauge, 26 feet 6 inches, whereas in 1899 the lowest water recorded was on November 27, Montreal gauge, 26 feet 8 inches, Sorel gauge, 26 feet 2 inches.

The large decrease in the shipments of lumber was principally caused by the disastrous fire which took place at Hull and Ottawa on April 26, destroying an immense quantity of deals and boards cut and prepared for shipment. The decrease of shipments in other commodities appear to have been caused by the want of the necessary tonnage when required, (and when it could have been satisfactorily and profitably filled), owing to the aforesaid discriminating rates of insurance on hulls and cargoes, which is so detrimental to the prosperity of this port, and advantageous to the United States ports to which the shipments are diverted.

With the exception of the accidents to the ss. *Ottoman*, we had no disasters of any import to report on the river between this port and Quebec.

The shipments of various kinds for the past season manifested and reported at this office are as per attached statement.

All of which is respectfully submitted.

ARCHIBALD REID,
Port Warden.

PORT WARDEN'S OFFICE.
STATEMENT OF Receipts and Expenditure for the Year ending December 31, 1900.

DR.

CR.

1899.	\$ cts.	1900.	\$ cts.
Dec. 31.. To Balance, cash in bank.....	7,459 82	Dec. 31.. By Paid salaries, &c.—	\$ cts.
Cash in Port Warden's hands.....	186 63	Archd. Reid, Port Warden.....	2,500 00
Outstanding accounts, 1899.....		A. T. Crighton, Deputy Port Warden.....	1,800 00
Dividend from estate J. C. and G. D. Warrington.....		J. N. Bales ".....	1,500 00
Revenue derived as under—		W. J. Anderson, book-keeper.....	1,500 00
10,376 683 bushels wheat.....		J. F. Scanlan, clerk.....	600 00
301,896 " buckwheat.....		S. Hayes, junior clerk.....	360 00
1,690,999 " pease.....		J. A. Vibert, allowance.....	100 00
1,021,790 " barley.....		Superannuation allowance—	
528,839 " rye.....		Archd. Reid, port warden.....	300 00
4,893,297 " oats.....		A. T. Crighton, Deputy Port Warden.....	200 00
11,361,333 " corn.....		J. N. Bales ".....	200 00
167,765 " flaxseed.....		W. J. Anderson, book-keeper.....	100 00
8,760 tons oil-cake.....		J. A. Vibert.....	179 94
5,308 " minerals.....		Board of Trade—	
18 " phosphates.....		Secretarial expenses.....	1,000 00
1,068 barrels ashes.....		Rent, fuel and taxes.....	312 58
486,200 " flour, meal, &c.....	364 36	Telephones, light, cleaning office.....	234 62
253,418 " apples.....	633 95	Lloyd's register and shipping books.....	35 42
93,769 head oxen and horses.....	937 69	Books, printing and stationery.....	113 95
31,625 " sheep.....	79 10	Cab and car-fares.....	28 00
242,873 tons sundries.....	4,917 46	Miscellaneous expense.....	35 44
9,752 " hay.....	195 04	Alf. W. Hadrill, auditor.....	60 00
232,449,185 feet sawn lumber.....	1,161 87	Outstanding accounts, 1900, written off.....	11,159 95
Port warden's fees (inwards).....	205 50	Balance, cash in bank.....	16 86
" " (outwards).....	2,308 00	Cheques from Board of Trade for interest due December 31.....	8,285 57
Special surveys.....	153 50	Cash in Port Warden's hands.....	2,340 25
Damaged cargo certificates.....	132 50		133 42
Interest bank account.....	163 91		
Treasurer, Board of Trade, interest on investments.....	3,030 50		
To balance.....	10,759 24		
1901.			
Jan. — To balance.....	21,936 05		

Audited and found correct.
ALF. W. HADRILL, Auditor.
E. & O. E.
ARCHIBALD REID,
Port Warden.

MONTREAL, January 7, 1901.

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STATEMENT of the Investments of the Surplus Funds of the Port Warden's Office at Montreal, and of interest accruing therefrom during the year ended December 31, 1900.

Date.	—	Amount.	Per cent for 12 mos.	Interest.
		\$		\$ cts.
Feb. 16, 1880.	Expended \$2,380.34 in purchase of Dominion Government stock.....	2,300	3½	80 50
Aug. 16, 1880.	Expended \$7,254.11 in purchase of city of Montreal Registered Stock.....	7,000	5	350 00
April 18, 1884.	Expended \$5,031.34 in purchase of city of Montreal four per cent Registered Stock (Nos. 1720, 1721, 1722, 1723, 1724, 5 at \$1,000.....	5,000	4	200 00
Mar. 14, 1887.	Expended \$10,320.75 in purchase of city of Montreal Consolidated Fund Stock.....	10,000	4	400 00
	Loans to Montreal Board of Trade Building Fund to December 31, 1900.....	50,000	4	2,000 00
	Total.....	74,300		3,030 50

FRED. W. EVANS,
Treasurer.

GEO. HADRILL,
Secretary.

MONTREAL, January 8, 1901.

APPENDIX No. 30.

REPORT OF PORT WARDEN AT QUEBEC, FOR THE YEAR ENDED
DECEMBER 31, 1900.PORT WARDEN'S OFFICE,
QUEBEC, December, 1900.F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—As required by the 30th section of the Port Warden Rules, I beg respectfully to submit the following annual statement of the business transacted in this office during the year ending December, 1900, as follows :—

Sixty-six steamers were surveyed for clearance outward after taking part cargo on board at this port, having previously shipped part cargo of grain and other goods at Montreal.

Sixteen steamers and eleven sailing vessels were surveyed, their hatches opened and cargo examined on their arrival from sea.

Two steamers were surveyed on account of damage sustained by stress of weather at sea.

Three steamers were surveyed on account of grounding and stranding in the River St. Lawrence below and above Quebec.

Two surveys were held on account of collision damage.

Four surveys were held on damaged goods in store and on wharfs.

The receipts and disbursements of this office were as follows :—

Receipts from all sources.....	\$727 50
Expenses.....	327 50
	<hr/>
Balance net receipts.....	\$400 00

Besides the above there were several vessels damaged by stranding and otherwise that did not come under the Port Warden Rules.

There were no shipments of live stock from this port during this season.

With much respect,

I am your obedient servant.

W. SIMONS,
Port Warden.

APPENDIX No. 31.

REPORT OF PORT WARDEN AT HALIFAX, FOR THE YEAR ENDED
DECEMBER 31, 1900.

HALIFAX, N.S., December 31, 1900.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my report for the year ending December 31, 1900, accompanied by a statement of the receipts and expenditure during that period.

Surveys were held by me on twenty-two steamers and two sailing vessels which arrived at this port in a damaged condition during the year. The necessary repairs were made to the vessels and those of them bound to other ports with their cargoes proceeded to their destinations, where those of them now due have arrived safely. The steamers *Lindisfarne* and *Paliki* are still in port undergoing repairs.

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

DAVID HUNTER,
Port Warden.

STATEMENT of Receipts and Expenditure of the Port Warden, Halifax, N.S., from
January 1 to December 31, 1900.

DR.	\$ cts.	CR.	\$ cts.
To amount of fees received.....	1,714 50	By paid assistants, office expenses, &c.	1,289 00
		Amount reverting to Port Warden.	425 50
	1,714 50		1,714 50

I hereby certify that the above is a true and correct statement of the receipts and expenditure of the Port Warden at Halifax, N.S., during the year 1900.

DAVID HUNTER,
Port Warden.

APPENDIX No. 32.

REPORT OF THE PORT WARDEN FOR THE PORT OF NORTH SYDNEY
FOR THE YEAR ENDED DECEMBER 31, 1900.PORT WARDEN'S OFFICE,
NORTH SYDNEY, C.B., January 3, 1901.F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit to you my annual report, which is as follows :—
During the past season I have held surveys on 9 steamships, 1 barque, 9 schooners.
Of this number three were merely for certificates of seaworthiness ; the others had more
or less repairs done here.

My total fees received were	\$ 152 00
Office rent and expenses	40 00
	<hr/>
Net fees received	<u>\$ 112 00</u>

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

ANDREW NISBET,
Port Warden.

APPENDIX No. 33.

REPORT OF THE PORT WARDEN FOR THE PORT OF PICTOU FOR THE
YEAR ENDED DECEMBER 31, 1900.

PORT OF PICTOU, N.S., January 3, 1901.

1 Norwegian barque, one survey.....	\$ 8 00
British s.s. <i>Minnie</i> , two “	36 00
“ schooner <i>Ada</i> , one “	8 00
“ barque <i>Assuna</i> , two “	36 00
	<hr/>
	\$88 00
Assistance and sundry expenses at surveys ..	48 00
	<hr/>
Cash received for the year.....	\$40 00
	<hr/> <hr/>

W. C. MUNRO,
Port Warden.

APPENDIX No. 34.

REPORT OF THE PORT WARDEN OF RIMOUSKI FOR THE YEAR ENDED
DECEMBER 31, 1900.

RIMOUSKI, P.Q., January, 1901.

SIR,—I have the honour to inform you that I collected no money whatever and visited no steamers during the year 1900.

ELZÉAR HEPPEL,
Port Warden.

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APPENDIX No. 35.

REPORT OF THE PORT WARDEN FOR THE PORT OF PORT HAWKESBURY FOR THE YEAR ENDED DECEMBER 31, 1900.

PORT HAWKESBURY, December 31, 1900.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit to you my annual report of the doings of this office, accompanied by a statement of the fees collected by me and also the attendant expenses during the past year.

Inclosed please find a list of vessels arriving at this port in a damaged condition on which surveys have been held during the year now closed.

The damaged vessels were all repaired here and arrived safely at ports of destination.

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

D. W. HENESEY,
Port Warden.

STATEMENT of Receipts and Expenses for the year 1900.

Two surveys held on schooner <i>Frances Willard</i>	\$23 00
“ “ steamer <i>Samantha</i>	23 00
One survey held on schooner <i>Quick Step</i>	5 00
“ “ schooner <i>Thorridon</i>	5 00
“ “ ss. by tug's diver on ss.	Nil.
Two surveys held on barquentine <i>Hebe</i>	13 00
	—————\$69 00
Fees paid surveyors—	
Paid William Duff, shipwright	5 00
“ Captain Henesey	5 00
“ Captain Philport	5 00
	————— 15 00
Reverting to Port Warden	\$54 00

I do hereby certify that the above is a true statement.

D. W. HENESEY,
Port Warden.

APPENDIX No. 36.

REPORT OF THE PORT WARDEN FOR PRINCE EDWARD ISLAND FOR
THE YEAR ENDED DECEMBER 31, 1900.

PORT WARDEN'S OFFICE,
PRINCE EDWARD ISLAND, December 31, 1900.

TO SIR L. H. DAVIES,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report of the business of my office during the past season.

I regret to say that we have had an early close of navigation which prevented some produce from being shipped from the Island.

I am glad to report that there has been no loss of any grain-laden vessels from the Island this season.

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

H. P. WELSH.

RECEIPTS and Expenditure of the Port Warden's Office, Prince Edward Island, for the
year ending December 31, 1900.

Date.	Receipts.	Amount.	Date.	Expenditure.	Amount.
1900.		\$ cts.	1900.		\$ cts.
	To fees derived from grain-laden vessels.....	84 00		By Expense of office.....	8 00
	Damaged goods.....	58 00		Commissions to deputies....	33 00
	Survey on hatches.....	3 00		Balance.....	130 00
	Other surveys.....	26 00			
		171 00			171 00

I hereby certify the above to be a correct statement.

H. P. WELSH.

CHARLOTTETOWN, P.E.I., December 31, 1900.

APPENDIX No. 37.

REPORT OF THE PORT WARDEN OF YARMOUTH, N.S., FOR THE YEAR
ENDED DECEMBER 31, 1900.

YARMOUTH, N.S., December 31, 1900.

Sir I. H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries.

SIR,—I now forward you my report as Port Warden of Yarmouth, N.S., for the year ending December 31, 1900.

I have been called on five times for survey of hatches, once for certificate of seaworthiness, and twice on vessels arriving in distress.

Net amount of fees was \$41.

I remain,
Your obedient servant,

EBEN SCOTT,
Port Warden.

APPENDIX No. 38.

REPORT OF THE PORT WARDEN AT ST. ANDREWS, N.B., FOR THE
CALENDAR YEAR ENDED DECEMBER 31, 1900.

Jan.	21—	Survey on hatches schooner	<i>Hanz</i>	\$ 2 50
Feb.	20—	“	“ <i>Gypsum Queen</i>	2 50
Mar.	2—	“	“ <i>Adelene</i>	2 50
“	12—	“	“ <i>Wm. Doren</i>	1 00
“	23—	“	“ <i>Walter M. Young</i>	2 00
“	28—	“	“ <i>Ella U. King</i>	2 50
June	4—	Survey on pilot boat No. 1		1 00
				<hr/>
				\$14 00
				<hr/> <hr/>

JOHN WREN,
Port Warden.

I hereby certify that this is a true and correct statement of all fees collected at the Port of St. Andrews for the year 1900.

JOHN WREN,
Port Warden.

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APPENDIX No. 39.

REPORT OF THE PORT WARDEN AT CHATHAM, N.B., FOR THE YEAR
ENDED DECEMBER 31, 1900.

CHATHAM, N.B., December 31, 1900.

Department of Marine and Fisheries,
Ottawa.

DEAR SIRs,—Inclosed please find copy of the only survey held by me as Port Warden for this port for the season of 1900. The river and harbour are now closed by ice.

Your obedient servant,

W. MUIRHEAD.

PORT OF CHATHAM, N.B., November 15, 1900.

At the request of Ole J. Laading, master of steamship *Bjorgvin*, of Bergen, Norway, 1785 tons register, I, William Muirhead, Port Warden of the Port of Chatham, N.B., J. J. Brown, Master Mariner, and Robert Walls, Pilot Master, proceeded on board said steamship for the purpose of holding a survey on said steamship *Bjorgvin*, she having been in collision with a barque, supposed to be the *Anna Kemp*, off the Pilgrim Rocks, below Quebec, when bound from Montreal to Miramichi. We, said surveyors, found three plates on the port bow dented by said collision and rivets broken and started, and recommend the renewing of all bad or started rivets and the caulking of seams on all sheets started by said collision.

On the 17th inst. we, the above named surveyors, again visited said steamship and found twenty-four (24) rivets renewed and seams caulked and ship making no water. We consider her seaworthy and fit to proceed to her port of destination in Great Britain.

WILLIAM MUIRHEAD,
*Port Warden.*J. J. BROWN,
*Master Mariner.*ROBERT WALLS,
Pilot Master.

APPENDIX No. 40.

REPORT OF THE PORT WARDEN AT HOPEWELL CAPE, N.B., FOR
THE YEAR ENDED DECEMBER 31, 1901.

HOPEWELL CAPE, January 3, 1901.

Hon. Minister Marine and Fisheries,
Ottawa.

DEAR SIR,—Although our port has been visited by a much larger amount of tonnage than usual, I am glad to say that not one accident has come under my notice or my services as Port Warden have not being required.

Most respectfully yours.

H. J. BENNETT,
Port Warden.

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APPENDIX No. 41.

REPORT OF THE PORT WARDEN FOR ANNAPOLIS, N.S., FOR THE
YEAR ENDED DECEMBER 31, 1900.

ANNAPOLIS, N.S., December 31, 1900.

F. GOURDEAU, Esq.,
Deputy Minister of Marine and Fisheries.
Ottawa.

SIR,—I have the honour to submit my report for the year ending December 31, 1900, accompanied by a statement of receipts and expenditure during that period.

September 11.—Held survey on Norwegian barque *Ingolf* as she lay stranded on flats; recommended cargo to be discharged; vessel laid on blocks for further survey.

September 28.—I held second on barque *Ingolf*; after a careful examination of vessel inside and outside found she could not be made seaworthy; condemned the vessel to be sold for the best interest of all concerned.

October 14.—Norwegian barque *Ingolf* sold at auction to E. Lumtalam, of St. John, for \$920; vessel now lies on her side at Acadia pier.

October 8.—Held a survey on ss. *Loughrigg Holmes*, of Mayport, England; broke her moorings when loading cargo at Acadia pier; after part of keel grounded on flats. After an examination of steamer found her tight; gave her a certificate of seaworthiness.

December 3.—Held survey on Br. ss. *Louisiana*; broke her moorings when loading cargo at Acadia pier; she touched after part of keel on flats. After a careful examination of steamer found her tight; gave her a certificate of seaworthiness.

December 11.—Held a second survey on Br. ss. *Louisiana* as she lay at anchor. The said steamer in coming up the river from her anchorage to the Acadia pier to finish loading cargo was struck by heavy ebb tide, forced on north side of port, and struck propeller on rock. For damage to propeller please see diver's report attached. After a careful examination of steamer found her tight, and in our opinion seaworthy. We recommend steamer on arriving at her port of destination to be placed in dry dock for examination of bottom, damaged propeller to be taken off and replaced with new, and the vessel placed in as good and efficient repair as she was before the accident occurred.

Fees collected.....	\$70 00
Paid for assistant.....	30 00
	<hr/>
Net revenue.....	\$40 00

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

SIMON W. RILEY,
Port Warden.

ANNAPOLIS, N.S., December 9, 1900.

At the request of Capt. John Kelly, master of ss. *Louisiana*, I proceeded from Halifax, N.S., to the Port of Annapolis to examine the propeller and bottom of ss. *Louisiana*, vessel having been aground. On Sunday the 9th inst. I went down at slack tide in the morning and examined propeller; found one blade broken off and about six inches of tip of another; examined stern post and rudder and found them in good order; I went down again at slack tide, repeated examination of propeller, and found as above reported, and found ship's bottom as far as I could see in good order and condition.

Steamer did not ground on flats.

APPENDIX No. 42.

REPORT OF THE PORT WARDEN FOR WHITNEY PIER, C.B., FOR THE
YEAR ENDED DECEMBER 31, 1900.

WHITNEY PIER, C.B., January 3, 1901.

To SIR L. H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour of forwarding the following report of proceedings of this office during the year.

Surveys have been held on 59 steamers and fees collected as follows :—

Survey on hull seaworthiness	\$ 472 00
Office rent and expenses	60 00
	<hr/>
	\$ 412 00
	<hr/> <hr/>

The offices discharged were of the usual description.

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

JAMES CORLIN,
Port Warden.

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APPENDIX No. 43.

REPORT OF THE PORT WARDEN FOR VANCOUVER, B.C., FOR THE
YEAR ENDED DECEMBER 31, 1900.

VANCOUVER, B.C., January 4, 1901.

To SIR L. H. DAVIES, K.C.M.G.,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour of submitting to you my annual report as Port Warden of
the port of Vancouver, B.C., for the year ending on December 31, 1900.

Amount of fees received for the surveys of hulls, hatches and cargoes, \$272.00.

I have the honour to be, sir,
Your obedient servant,MALCOLM McLEOD.
Port Warden.

APPENDIX No. 44.

REPORT OF THE PORT WARDEN FOR VICTORIA, B.C., FOR THE YEAR
ENDED DECEMBER 31, 1900.

VICTORIA, B.C., January 4, 1901.

The Deputy Minister of Marine and Fisheries,
Ottawa.SIR,—I have the honour of submitting my annual report as Port Warden for the
port of Victoria and Esquimalt, B.C., for the year ending on December 31, 1900.

Amount of fees received for surveys on the hatches of	
43 vessels.	\$ 215 00
Amount received for surveys on cargoes, hulls, &c.	467 50
Total fees received.	<u>\$ 682 50</u>

I have the honour to be, sir,
Your obedient servant,CHAS. E. CLARKE.
Port Warden.

APPENDIX No. 45.

HARBOUR MASTERS.

TABLE showing the names of Ports proclaimed under certain Dominion Acts, the provisions of which are found in Chapter 86, Revised Statutes of Canada, for the appointment of harbour masters; the dates of proclamation; the names of the harbour masters appointed; the dates of the appointment of harbour masters; the amount which each of their salaries is not to exceed; and the amount of fees collected by each of them during the calendar year ended December 31, 1900, and the overplus, if any, paid in to the credit of the Receiver General.

PROVINCE OF ONTARIO.

Name of Port.	Date of Proclamation.	Name of Harbour Master.	Date of Appointment.	Amount from the fees of office salary not to exceed.		Amount collected in 1900.		Amount paid over to Receiver General.
				\$	cts.	\$	cts.	% cts.
Collingwood	Mar. 3, '77	Andrew Lookerbie	Mar. 3, '77	200	00	74	00	.....
Depôt Harbour	June 15, '98	J. F. Pratt	June 15, '98	200	00	80	00	.....
Fort William	July 7, '91	Thos. E. Oakley	May 21, '97	400	00	54	00	.....
French River	June 20, '93	E. Borron, jun	June 20, '93	200	00	22	50	.....
Goderich	April 28, '76	William Marlton	May 8, '94	300	00	24	50	.....
Midland	July 22, '82	John White.	July 13, '97	200	00	92	50	.....
Parry Sound	Mar. 24, '83	John Purvis	Oct. 9, '00	200	00	.....	.....	.....
Penetanguishene	Feb. 2, '77	Francis Dusome.	June 3, '81	200	00	32	00	.....
Port Arthur	May 12, '84	B. Guerard	May 21, '97	200	00	.....	.....	.....
Port Stanley	Jan. 15, '98	Frank E. Shepherd	Jan. 15, '98	200	00	.....	.....	.....
Rondeau	" 4, '78	W. R. Fellowes	Dec. 17, '88	100	00	16	00	.....
Southampton	Sept. 23, '75	W. H. Johnston	Oct. —, '82	100	00	61	50	.....
Sarnia	July 25, '85	Robert McAdam	May 3, '86	300	00	.....	.....	.....

PROVINCE OF QUEBEC.

Amherst	Sept. 14, '78	John Cassidy	Sept. 2, '78	200	00	14	00	.....
Bersimis	July 31, '91	Earl D. Chase	July 31, '91	200	00	.....	.....	.....
Carleton	Dec. 8, '81	Joseph E. Cullen.	Mar. 30, '96	200	00	.....	.....	.....
Chicoutimi	June 17, '85	Ainsworth Sturton	June 8, '86	200	00	.....	.....	.....
Grand Entry	Feb. 19, '92	Hugh Clarke.	Dec. 8, '98	200	00	.....	.....	.....
Grand River	June 19, '00	Geo. Beaudin	April 3, '00	100	00	.....	.....	.....
Gaspé	Sept. 25, '74	Francis G. Eden	" 3, '89	500	00	.....	.....	.....
House Harbour	Aug. 9, '87	C. Lafrance	Dec. 10, '96	200	00	7	00	.....
Lachine	April 19, '80	.....	.....	.....	.....	.....	.....	.....
Matane	Oct. 19, '77	L. J. Levasseur	Dec. 12, '96	200	00	48	50	.....
Métis.	Feb. 7, '78	J. H. Ferguson	Mar. 10, '96	200	00	42	00	.....
New Carlisle	" 25, '89	John C. Hall	Jan. 17, '95	200	00	5	00	.....
New Richmond	April 15, '82	Henry Leblanc.	April 3, '82	200	00	46	00	.....
Oak Bay	Mar. 27, '80	Jas. D. Sowerby	Mar. 22, '80	200	00	.....	.....	.....
Paspebiac	May 22, '77	W. L. Kempffer	Sept. 21, '00	150	00	5	00	.....
Port Daniel	Mar. 25, '89	J. Enright	" 11, '90	200	00	9	50	.....
Rimouski	" 5, '77	A. P. St. Laurent	May 13, '96	200	00	15	00	.....
Rivière Ouelle	July 22, '82	.....	.....	100	00	.....	.....	.....
Rivière du Loup	June 19, '00	P. E. Tremblay	June 19, '00	100	00	40	00	.....
St. Thomas	Jan. 2, '86	L. Dionne	Oct. 22, '96	200	00	22	00	.....
St. Johns	} Within the Harbour of Montreal.	} G. H. Farrar	Mar. 20, '97	500	00	629	50	129 50
Sorel			May 20, '90	300	00	298	50	.....
Trois Pistoles	Mar. 28, '98	Edouard T. Pettigrew	April 11, '99	100	00	18	00	.....

TABLE showing the names of Ports proclaimed under the Dominion Acts, &c.—*Con.*

PROVINCE OF NEW BRUNSWICK.

Name of Port.	Date of Proclamation.	Name of Harbour Master.	Date of Appointment.	Amount from the fees of office salary not to exceed.	Amount collected in 1900.	Amount paid over to Receiver General.
				\$ cts.	\$ cts.	\$ cts.
Alma.....	May 2, '98	Gideon W. Parsons.....	May 2, '98	100 00	39 00	.....
Bathurst.....	" 30, '73	M. T. Daley.....	April 21, '96	200 00	78 00	.....
Black's Harbour and Beaver Harbour.....	Sept. 22, '83	E. W. Cross.....	Sept. 17, '83	100 00	17 50	.....
Buctonche.....	May 30, '73	H. Hutchinson.....	April 17, '97	100 00	6 50	.....
Campbellton.....	" 30, '73	A. J. Venner.....	" 12, '93	200 00	115 00	.....
Campobello.....	" 30, '73	W. E. Sulis.....	Dec. 16, '92	100 00	Nil.	.....
Cape Tormentine.....	" —, '95	John W. Tucker.....	May 7, '95	200 00	73 00	.....
Carquet.....	" 30, '73	Louis Poirier.....	April 17, '83	150 00	6 50	.....
Chatham.....	" 30, '73	R. J. Walls.....	" 13, '98	300 00	267 00	.....
Cocagne.....	" 30, '73	H. Bourgeois.....	Mar. 12, '97	100 00	.....	.....
Dalhousie.....	" 30, '73	W. S. Smith.....	" 19, '88	200 00	201 00	.....
Dorchester.....	" 30, '73	James Shea.....	Oct. 25, '00	200 00	.....	.....
Fredericton.....	" 30, '73	Vacant.....	.....	.....	.....	.....
Grand Manan, North.....	Aug. 22, '89	Newton L. Thomas.....	Oct. 9, '00	100 00	.....	.....
Grand Manan, South.....	" 22, '89	Abel Wilcox.....	Aug. 22, '89	100 00	4 50	.....
Gull Rock Channel.....	Jan. 14, '98	Wm. L. Kent.....	Jan. 14, '98	100 00	Nil.	.....
Great Shemogue.....	May 17, '75	Vacant.....	.....	100 00	.....	.....
Harvey.....	" 30, '73	Jas. E. Bishop.....	June 22, '97	100 00	63 00	.....
Heron Channel.....	July 15, '97	Duncan Robertson.....	July 15, '97	200 00	42 00	.....
Hillsborough.....	May 30, '73	John O'Shaughnessy.....	April 13, '98	100 00	133 00	.....
Hopewell Cape.....	Aug. 25, '91	John H. Christopher.....	June 26, '99	200 09	59 00	.....
Ledge of St. Stephens.....	May 30, '73	W. McBean.....	" 12, '94	100 00	.....	.....
Letete, &c.....	Sept. 22, '83	Jacob Cook.....	Nov. 26, '97	100 00	3 00	.....
Little Shippegan and Miscou Gully.....	May 1, '86	Donald Harper.....	April 19, '86	100 00	.....	.....
Little Shemogue.....	Sept. 5, '88	Vacant.....	.....	100 00	.....	.....
Moncton.....	May 30, '73	E. P. Cook.....	April 11, '95	200 00	.....	.....
Musquash.....	Mar. 26, '74	J. McNulty.....	Sept. 28, '96	100 00	13 00	.....
Newcastle.....	May 30, '73	John Niven.....	July 7, '73	300 00	169 00	.....
North Joggins.....	" 30, '73	Vacant.....	.....	.....	.....	.....
Port Elgin and Baie Verte.....	Feb. 6, '73	R. Anderson.....	June 2, '93	200 00	.....	.....
Pokemouche.....	July 7, '83	Alfred Blanchard.....	Mar. 7, '99	100 00	.....	.....
Richibucto.....	May 30, '73	James Alexander Jardine.....	May 11, '74	200 00	57 50	.....
Rockland.....	" 30, '73	Vacant.....	.....	.....	.....	.....
Sackville.....	" 30, '73	John A. Bowser.....	Aug. 8, '98	200 00	.....	.....
St. Andrew's.....	" 30, '73	John Wren.....	May 6, '84	100 00	59 00	.....
St. George.....	" 30, '73	Geo. W. McKenzie.....	" 10, '00	100 00	5 00	.....
St. Martin and Quaco.....	" 14, '74	Joseph Carson.....	" 14, '74	100 00	5 00	.....
Shediac.....	" 30, '73	Alexander McQueen.....	" 19, '76	300 00	87 00	.....
Shippegan.....	" 30, '73	John DeGrace.....	Aug. 10, '80	100 00	6 00	.....
Tracadie.....	" 7, '74	Theodore Savoy.....	Sept. 23, '99	100 00	7 50	.....
Waterside.....	Sept. 3, '89	Wm. Riley Copp.....	" 3, '89	100 00	.....	.....
West Isles.....	Feb. 4, '79	Thos. K. Parker.....	Feb. 4, '79	200 00	.....	.....

PROVINCE OF NOVA SCOTIA.

Advocate.....	May 15, '80	Wm. Mills.....	Mar. 17, '99	100 00	18 00	.....
Annapolis.....	Mar. 12, '75	John Lindgren.....	July 7, '98	200 00	115 00	.....
Apple River.....	Aug. 14, '86	Robt. D. Field.....	Sept. 9, '90	200 00	15 50	.....
Arichat.....	April 22, '79	C. P. Terrio.....	.....	200 00	18 50	.....
Baddeck.....	Sept. 23, '75	Alex. McAulay.....	Dec. 10, '90	100 00	.....	.....
Barrington.....	July 10, '82	B. Kenney.....	July 6, '93	200 00	24 50	.....
Bayfield.....	" 11, '79	John McDonald.....	" 11, '79	200 00	Nil.	.....
Bay St. Lawrence.....	April 21, '87	G. Zwicker.....	April 21, '87	200 00	.....	.....
Bear River.....	Sept. 25, '74	Wm. McFadden.....	Sept. 27, '97	100 00	36 50	.....
Beaver Harbour.....	July 24, '80	Henry Hawboldt.....	" 22, '88	100 00	2 50
Big Harbour.....	June 9, '83	Donald McKenzie.....	May 28, '83	100 00

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TABLE showing the names of Ports proclaimed under the Dominion Act, &c.—*Con.*

PROVINCE OF NOVA SCOTIA—*Continued.*

Name of Port.	Date of Proclamation.	Name of Harbour Master.	Date of Appointment.	Amount from the fees of office salary not to exceed.		Amount collected in 1900.		Amount paid over to Receiver General.
				¢	cts.	¢	cts.	
Bourgeoise River.....	May 1, '86	E. C. Bouchie.....	April 19, '86	100	00	13	00	.....
Bridgewater.....	" 6, '74	William Oakes.....	Jan. 28, '96	100	00	82	00	.....
Bras d'Or, including New Campbellton.....	" 6, '74	Wm. Livingstone.....	Feb. 13, '94	200	00	.....	.....	.....
Cape Canso.....	June 6, '76	William A. H. Oliver.....	Mar. 2, '99	100	00	143	50	.....
Cape Negro or North East Harbour.....	May 18, '81	A. D. Perry.....	May 18, '81	200	00	16	50	.....
Chester.....	Sept. 8, '83	A. C. Corkum.....	July 8, '96	100	00	15	00	.....
Cheticamp.....	April 20, '76	Fulgence Aucoin.....	April 15, '76	100	00	.....	.....	.....
Clark's Harbour.....	June 1, '81	J. B. Brannen.....	June 1, '81	200	00	8	50	.....
Clementsport.....	May 1, '77	J. M. LeCain.....	Oct. 18, '98	150	00	8	00	.....
County Line to Grand Narrows.....	June 9, '83	Vacant.....	.....	.....	.....	.....	.....	.....
Crow Harbour.....	Sept. 30, '88	A. Ehler.....	Aug. 30, '97	100	00	.....	.....	.....
D'Escousse.....	Jan. 23, '85	Arthur Pertus.....	March 6, '90	100	00	30	00	.....
Digby.....	Feb. 19, '78	Israel Hersey.....	May 23, '97	200	00	65	00	.....
East Bay.....	Aug. 25, '83	Donald McInnis.....	April 5, '86	100	00	.....	.....	.....
Fourchie.....	May 22, '89	Neil MacLean.....	May 22, '89	100	00	1	00	.....
Gabrouse.....	March 3, '68	John Wm. Hardy.....	Nov. 2, '86	100	00	.....	.....	.....
Glasgow and Cape Beaton Pier, Sydney.....	Oct. 30, '80	Angus McQuarrie.....	Oct. 30, '80	300	00	54	50	.....
Guysborough.....	Jan. 15, '89	Abram Bigsby.....	July 27, '00	100	00	.....	.....	.....
Halifax.....	No proclamation required by Act.....	J. E. Butler.....	Sept. 21, '93	1,800	00	1,876	50	76 50
Hantsport.....	June 27, '84	Edward Davison.....	June 7, '84	225	06	164	50	.....
Ingonish, North Bay of.....	Mar. 22, '81	William Thomson.....	Mar. 24, '81	200	00	.....	.....	.....
" " South ".....	Oct. 9, '84	John J. Donovan.....	Dec. 26, '98	100	00	.....	.....	.....
International Pier, Sydney.....	" 30, '80	Michael J. Neville.....	Oct. 30, '80	300	00	464	00	164 00
Isaac's Harbour.....	" 30, '89	Thomas W. Cook.....	June 19, '00	100	00	1	00	.....
Jeddore.....	Sept. 20, '90	Wm. Jennox.....	Sept. 20, '90	100	00	6	50	.....
Jordan Bay.....	Oct. 25, '76	M. D. McKenzie.....	Oct. 25, '76	150	00	.....	.....	.....
Kelly Cove.....	Feb. 17, '99	Jos. B. Huskins.....	Feb. 17, '99	100	00	.....	.....	.....
LaHave or Getson's Cove.....	Mar. 12, '75	George Henry Zwicker.....	Feb. 25, '75	300	00	24	75	.....
L'Ardoise, Upper and Lower.....	Aug. 22, '84	George Burke.....	Aug. 20, '84	100	00	2	00	.....
Lingan.....	July 12, '81	Thomas Laffin.....	July 12, '81	200	00	.....	.....	.....
Liscomb.....	May 18, '81	Lewis Wilson.....	Feb. 20, '00	200	00	34	00	.....
Little Bras d'Or Lake between McKay's Point and Grand Narrows.....	April 25, '84	Daniel Campbell.....	April 17, '99	100	00	.....	.....	.....
Little Bras d'Or Lake from McKay's Point to Washadebuck Rivers.....	" 25, '84	Alex. J. McNeil.....	" 25, '84	100	00	.....	.....	.....
Little Glace Bay.....	Aug. 3, '74	E. Douglas Rigby.....	May 8, '84	200	00	10	00	.....
Little Narrows and Cranberry Point.....	June 9, '83	K. McLennan.....	Nov. 1, '97	100	00	1	00	.....
Liverpool.....	Jan. 19, '77	Isaac V. Dexter.....	Oct. 7, '99	200	00	99	50	.....
Lockeport.....	May 18, '81	E. A. Capstick.....	May 18, '81	200	00	.....	.....	.....
Louisburg.....	Mar. 17, '79	H. C. V. Lavatte.....	Oct. 13, '98	200	00	.....	.....	.....
Lunenburg.....	Dec. 3, '75	John Loye.....	Dec. 10, '96	150	00	147	50	.....
Mabou.....	June 23, '80	John McInnes.....	July 11, '00	100	00	0	50	.....
Mahone Bay.....	May 16, '87	Lewis Knaut.....	Feb. 3, '98	200	00	.....	.....	.....
McNair's Cove.....	Mar. 12, '75	Ronald McEachen.....	Mar. 8, '75	150	00	.....	.....	.....
Main à Dieu.....	July 31, '86	Vacant.....	.....	.....	.....	.....	.....	.....
Marble Mountain.....	May 26, '92	D. McDonald.....	July 26, '92	200	00	1	50	.....
Margaretsville.....	Mar. 26, '78	Robert Early.....	Mar. 26, '78	100	00	.....	.....	.....
Margaret's Bay.....	July 16, '75	Peter Francis Boutillier.....	July 7, '75	100	00	19	00	.....

TABLE showing the names of Ports proclaimed under the Dominion Acts, &c.—*Con.*PROVINCE OF NOVA SCOTIA—*Concluded.*

Name of Port.	Date of Proclamation.	Name of Harbour Master.	Date of Appointment.	Amount from the fees of office salary not to exceed.	Amount collected in 1900.	Amount paid over to Receiver General.
				\$ cts.	\$ cts.	\$ cts.
Margaree	June 12, '86	Nicolas Deagle	Feb. 27, '93	100 00		
Marie Joseph	Jan. —, '95	John Davis	Jan. 23, '95	100 00		
Middle South Island	April —, '96	S. Wynacht	April 1, '96	100 00		
Merigomish	Mar. 26, '78	D. McGregor	Mar. 22, '93	100 00	2 80	
Meteghan Harbour	June 8, '97	B. F. Robichaud	June 8, '97	100 00	7 00	
Meteghan River	Feb. 10, '88	L. A. Comeau	" 1, '97	100 00	10 00	
Musquodoboit	May 19, '82	David Williams	May 19, '82	100 00	7 00	
New Haven	June 9, '83	H. A. McLeod	Aug. 17, '89	100 00		
Neil's Harbour	" 9, '83	A. Hayman	May 28, '83	100 00		
Northport	" 27, '82	John M. Burne	June 27, '82	100 00	33 50	
North-west Cove, Coleman's Cove and Aspotogan Harbour	Dec. 22, '76	P. Boutillier	June 30, '92	200 00		
Parrsborough	Oct. 22, '73	Edward Walter Beaty	Oct. 22, '73	300 00	164 00	
Petit de Grat	June 5, '95	S. Bondrot	June 5, '95	200 00	2 50	
Petite Rivière Bridge	July 7, '83	John Nelson Parks	April 27, '88	100 00		
Plaster Harbour	May 6, '74	Vacant				
Port George	" 1, '77	Charles B. Weaver	May 1, '77	150 00		
Port Greville	Mar. 13, '80	Wm. Cochrane	Oct. 26, '98	200 00	28 00	
Port Hawkesbury	July 16, '75	Daniel Henesey	July 9, '75	200 00	116 00	
Port Hood	" 16, '75	John H. Murphy	" 9, '75	200 00	1 00	
Port la Tour	April 14, '81	Wm. Sholds	Feb. 15, '98	200 00	3 00	
Port Lorne	Mar. 27, '86	Freeman Beardsley	June 9, '97	200 00	4 00	
Port Maitland	May 26, '85	Josiah Ellis	Dec. 10, '96	200 00		
Port Morien	Mar. 3, '79	Hector McDonald	Mar. 3, '79	400 00	13 00	
Port Mulgrave	" 8, '76	David Murray	Oct. 12, '92	200 00	46 50	
Port Medway	June 25, '79	S. Manthorn	Feb. 2, '99	200 00		
Pubnico	Sept. 27, '82	D. Q. Amireau	Sept. 27, '82	100 00	52 50	
Pugwash	Oct. 22, '93	C. T. De Wolfe	May 6, '95	100 00	93 00	
Ritcey's Cove	Sept. 26, '84	J. B. Ritcey	April 21, '96	100 00	27 50	
River John	Mar. 26, '78	H. Campbell	June 11, '91	100 00		
St. Ann's	April 20, '81	George Fader	Dec. 29, '00	200 00	8 50	
St. Mary's River	May 18, '81	Wm. Pride	" 20, '93	200 00	8 50	
St. Peter's	Jan. 24, '81	Peter McNeil	Sept. 17, '83	200 00	Nil.	
Sambro	Dec. 27, '79	Ben Smith	May 27, '90	200 00	19 50	
Sheet Harbour	May 14, '74	H. Hall	April 13, '98	200 00		
Shelburne	Aug. 27, '77	John C. Morrison	May 4, '97	200 00	164 00	
Ship Harbour	June 2, '84	Conrad Marks	June 2, '84	100 00	42 00	
Smith's Mountain, St. Ann's	" 8, '83	Geo. E. Fader	April 11, '98	100 00		
Spencer's Island	May 22, '99	Baxter McLellan	May 22, '99	100 00		
Sydney	" "	Angus McQuarrie	" "		54 50	
Tatamagouche	Feb. 27, '78	W. McKenzie	Mar. 29, '93	200 00		
Tidnish	July 5, '82	Charles R. Fields	June 30, '84	100 00	15 50	
Tiverton	April 13, '00	Joel Blackford	April 3, '00	100 00		
Torbay and Whitehaven	May 18, '81	Andrew Haley	Dec. 10, '97	200 00		
Tusket	Mar. 18, '75	Charles W. Hatfield	Mar. 7, '87	100 00		
Tusket Wedge	Dec. 19, '99	Hilaire LeBlanc	Dec. 19, '99	100 00		
Victoria Pier, South Bar, Sydney	July 25, '84	Ernest Richardson	Nov. 1, '97	200 00		
Wallace	Oct. 22, '73	Jas. D. Patton	Feb. 14, '96	100 00		
West Arichat	Aug. 20, '90	A. B. Poirier	Oct. 7, '96	100 00	15 50	
West Bay	May 8, '84	John McLunes	May 9, '84	100 00	2 00	
West Port	Mar. 8, '87	Geo. Welsh	Jan. 29, '98	200 00	42 50	
Weymouth	May —, '94	R. Payson	May 29, '97	200 00		
Whycocomagh	Oct. 29, '75	Neil McKinnon	Oct. 8, '75	100 00		
Wood's Harbour	Feb. 19, '92	S. K. Woods	July 19, '92	200 00		
Yarmouth	Mar. 18, '75	Ebenezer Scott	Oct. 19, '77	250 00	236 50	

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TABLE showing the names of Ports proclaimed under the Dominion Acts, &c.—*Con.*

PROVINCE OF PRINCE EDWARD ISLAND.

Name of Port.	Date of Proclamation.	Name of Harbour Master.	Date of Appointment.	Amount from the fees of office salary not to exceed.		Amount collected in 1900.		Amount paid over to Receiver General.	
				\$ cts.	\$ cts.	\$ cts.	\$ cts.		
Alberton	July 15, '74	John McKay	May 11, '97	200 00	10 00	.....	.....	.....	.....
Bay Fortune	April 10, '75	John R. Coffin	April 29, '78	200 00	.....	.....	.....	.....	.....
Brudenell	July 25, '85	Vacant .....	.....	200 00	.....	.....	.....	.....	.....
Cape Traverse	May 23, '84	Vacant .....	.....	100 00	.....	.....	.....	.....	.....
Cardigan River, including Cardigan Bridge	July 2, '78	Hercules McDonald	July 2, '78	200 00	.....	.....	.....	.....	.....
Cardigan River, from head of river to north bank Mitchell River	May 16, '78	D. Stewart	May 7, '97	100 00	.....	.....	.....	.....	.....
Cove Head	" 15, '80	James D. McMillan	" 15, '80	100 00	.....	.....	.....	.....	.....
Charlottetown and Hillsboro River	July 15, '74	David Small	Feb. 19, '77	400 00	90 50	.....	.....	.....	.....
Crapand	" 15, '74	Wesley Myers	June 17, '74	200 00	6 00	.....	.....	.....	.....
Egmont	" 15, '74	George Bollum	Nov. 3, '85	200 00	.....	.....	.....	.....	.....
Georgetown	" 15, '74	Samuel Hemphill	Dec. 1, '87	200 00	38 00	.....	.....	.....	.....
Grand River	April 10, '75	Wm. Chas. Jenkins	May 4, '97	200 00	.....	.....	.....	.....	.....
Grand River, down to and including Poplar Point and Chapel Wharf	May 16, '78	Vacant .....	.....	200 00	.....	.....	.....	.....	.....
Malpeque	July 10, '74	J. Champion	Dec. 10, '96	200 00	.....	.....	.....	.....	.....
Miminegash	April 17, '80	Jno. McCormick	May 1, '99	100 00	.....	.....	.....	.....	.....
Montague Bridge	" 7, '97	Welton Porter	April 7, '97	200 00	15 00	.....	.....	.....	.....
Murray Harbour	June 17, '74	Wm. Miller	June 17, '74	200 00	4 00	.....	.....	.....	.....
Murray River	May 16, '78	Geo. McLeod	Feb. 9, '97	200 00	6 50	.....	.....	.....	.....
New London	July 15, '74	Wm. Bell	Aug. 25, '96	200 00	3 00	.....	.....	.....	.....
Pinette	" 15, '74	Daniel McAulay	Dec. 18, '97	200 00	.....	.....	.....	.....	.....
Port Hill	" 15, '74	W. C. Brown	June 20, '98	200 00	2 50	.....	.....	.....	.....
Pownal	" 10, '79	Michael Haley	Mar. 30, '97	100 00	.....	.....	.....	.....	.....
Rollo Bay	April 10, '75	Vacant .....	.....	200 00	.....	.....	.....	.....	.....
Rustico	May 17, '75	Felix Buote	March 1, '97	200 00	1 50	.....	.....	.....	.....
St. Peter's Bay	April 10, '75	Albert Anderson	Oct. 16, '98	200 00	.....	.....	.....	.....	.....
Souris East and West	" 10, '75	Wm. McDonald	Sept. 21, '99	200 00	29 50	.....	.....	.....	.....
Summerside	July 15, '74	Wm. Stymest	Oct. 20, '97	200 00	65 50	.....	.....	.....	.....
Tignish	April 22, '90	Vacant .....	.....	.....	.....	.....	.....	.....	.....
Tracadie	May 17, '75	Donald Campbell	Aug. 27, '95	200 00	.....	.....	.....	.....	.....
Tryon	April 12, '77	Vacant .....	.....	200 00	.....	.....	.....	.....	.....
Vernon River Bridge	May 19, '74	John Finlay	Oct. 9, '84	200 00	.....	.....	.....	.....	.....
West River	" 17, '75	Vacant .....	.....	200 00	.....	.....	.....	.....	.....
Wood Island	" 22, '99	.....	May 22, '99	100 00	11 00	.....	.....	.....	.....

PROVINCE OF BRITISH COLUMBIA.

Chemainus	March '97	Lewis G. Hill	March 2, '97	200 00	401 50	201 50
Comox	April '96	Geo. H. Rowe	April 25, '97	200 00	170 00	.....
Nanaimo and Departure Bay	" 10, '75	Harry Cooper	Feb. 25, '97	500 00	93 50	.....
New Westminster	Jan. 23, '80	P. T. Powers	" 13, '99	400 00	74 00	.....
Quadra	April 17, '77	Vacant .....	.....	300 00	.....	.....
Vancouver, including Burrard Inlet	Feb. 22, '88	Malcolm McLeod	Jan. 14, '97	600 00	545 50	.....
Victoria and Esquimalt	Mar. 20, '75	C. E. Clarke	Nov. 3, '94	600 00	636 50	36 50

F. GOURDEAU,
Deputy Minister of Marine and Fisheries.

APPENDIX No. 46.

STATEMENT showing the results of certain returns respecting Shipping and Discharging of Seamen, received by the Department of Marine and Fisheries, in accordance with the provisions of Chapter 74, Consolidated Statutes of Canada, from Shipping Masters throughout the Dominion, for the half-years ended June 30 and December 31, 1900.

NOTE.—Names printed in italics are Shipping Masters appointed under the Act, the others the Collectors of Customs who act as Shipping Masters.

QUEBEC.

Name of Port.	Name of County.	Name of Shipping Master.	For half-year ended June 30, 1900.		For half-year ended December 31, 1900.		Total Seamen Discharged.	Total Amount.
			Seamen Shipped.	Seamen Discharged.	Seamen Shipped.	Seamen Discharged.		
Escoumins	Bonaventure.	John Topping.						\$ cts.
Gaspé	Gaspé	<i>F. G. Edén.</i>						
Magdalen Islands.	"	P. L. Joncas.						
Montreal	Montreal	<i>Wm. Guvaignan.</i>	1,387	587				869 60
New Richmond.	Bonaventure	R. W. H. Dincock.						
Paspébiac	"	P. C. Beauchesne.	4	1	15	12	19	11 10
Quebec	Gaspé.	W. Flynn				Nil.		
Rimouski	Quebec.	<i>J. U. Grégoir.</i>	114	40	89	140	203	86 50
St. Johns	Rimouski	J. A. Martin.						
Sorel	St. Johns	H. W. Wood.						
Three Rivers.	Richelieu.	Joseph Mathieu.						
	Three Rivers.	P. B. Vanasse.						

NEW BRUNSWICK.

Alma	Albert.	D. Cleveland.						
Bathurst	Gloucester.	John F. Baldwin.						
Buctouche.	Kent	J. J. LeBlanc.						
Chatham	Northumberland.	<i>J. J. Brown.</i>	30	10	98	21	128	55 30
Cocagne.	Kent	A. K. Dysart.						
Dalhousie.	Restigouche.	W. Montgomery						
Dorchester.	Westmoreland.	Walter Dobsou						
Fredericton	York.	A. F. Street.						

STATEMENT showing returns respecting shipping and discharging Seamen, &c.—*Concluded.*

BRITISH COLUMBIA.

Name of Port.	Name of County.	Name of Shipping Master.	For Half-year ended June 30, 1900.			For Half-year ended December 31, 1900.			Total Seamen Shipped.	Total Seamen Discharged.	Total Amount.
			Seamen Shipped.	Seamen Discharged.	Amount.	Seamen Shipped.	Seamen Discharged.	Amount.			
Ahouset	Clayoquot	C. R. McDougall.									
Clayoquot	"	John Grace.									
Hesquiat	Vancouver	A. J. Brabant.									
Kynquod	Nanaimo	W. J. Feker	148	74	96 20	57	125	205	139	162 20	
Masset Inlet	Queen Charlotte Id.	Charles Harrison.									
New Westminster	New Westminster	Peter Grant				28	2	28	2	14 10	
Ucluclet	Barclay Sound	Geo. Fraser	146	56	89 80					120 60	
Vancouver	New Westminster.	D. McPhaiden.		309	416 70	270	253	270	253	261 90	
Victoria	Victoria	H. C. Lewis	648			419	464	1,067	773	764 40	

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APPENDIX No. 47.

LIST of Certificates of Competency granted to Masters and Mates of FOREIGN SEA-GOING VESSELS, during the year ended June 30, 1900.

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was passed.	Fee.
	1899.					\$ cts.
3357	July 27..	G. B. Harrold.....	2nd Mate..	Folkestone, Eng.....	Victoria, B.C.	8 00
3358	" 27..	E. E. Whistler.....	Master....	Victoria, B.C.....	"	15 00
3359	Aug. 4..	W. J. Farrell.....	Mate.....	Halifax, N.S.....	Halifax, N.S..	8 00
3360	" 9..	James A. Wallis.....	Master....	Auckland, N.Z.....	"	15 00
3361	Sept. 21..	James F. Rogers.....	2nd Mate..	Yarmouth, N.S.....	"	8 00
3362	" 21..	John F. Baxter.....	Mate.....	Victoria, B.C.....	Victoria, B.C.	8 00
3363	" 21..	Robert C. Lawe.....	"	Ireland.....	"	8 00
3364	" 25..	Irving Lewis.....	Master....	Sydney, N.S.....	Halifax, N.S..	15 00
3365	" 27..	Wm. John Breen.....	"	St. John, N.B.....	St. John, N.B.	15 00
3366	" 27..	Ernest P. Dill.....	"	Newport, N.S.....	"	8 00
3367	" 27..	Wm. Read.....	Mate.....	Sunderland, Eng.....	"	8 00
3368	" 27..	Geo. M. Stevenson.....	2nd Mate..	Windsor, Eng.....	"	8 00
3369	Oct. 18..	Nicholas Mosher.....	Master....	Avondale, N.S.....	Halifax, N.S..	15 00
3370	" 18..	Frank R. Churchill.....	Mate.....	Halifax, N.S.....	"	8 00
3371	" 18..	James W. Dalrymple.....	2nd Mate..	Truro, N.S.....	"	8 00
3372	" 27..	John R. Clarkson.....	Mate.....	New York, U.S.....	St. John, N.B.	8 00
3373	" 27..	Thos. A. Wallace.....	Master....	St. John, N.B.....	"	8 00
3374	" 27..	Noah Amos.....	2nd Mate..	Baie Verte, N.B.....	"	8 00
3375	Nov. 7..	Maynard Fielden.....	"	Hantsport, N.S.....	Halifax, N.S..	8 00
3376	" 7..	A. Richardson.....	"	Quebec.....	"	8 00
3377	" 14..	James Campbell.....	"	Inverness, N.S.....	Victoria, B.C.	8 00
3378	" 20..	Percival Mann.....	Mate.....	Burlington, N.S.....	Halifax, N.S..	8 00
	1900.					
3379	Jan. 3..	Thos. A. Hillgrove.....	Master....	Parrsboro, N.S.....	"	15 00
3380	" 31..	Wm. Hensman.....	"	Halifax, N.S.....	"	15 00
3381	Feb. 19..	Ronald V. Bennett.....	Mate.....	Hopewell, N.B.....	St. John, N.B.	8 00
3382	Mar. 22..	Edmond McCarty.....	2nd Mate..	Halifax, N.S.....	Halifax, N.S..	8 00
3383	" 22..	Geo. Enos Mader.....	"	Mahone Bay, N.S.....	"	8 00
3384	" 22..	Edmond Thompson.....	Master....	Yarmouth, N.S.....	"	15 00
3385	April 7..	Guy Wilson.....	"	Essex, Eng.....	Vancouver, B.C.	15 00
3386	" 24..	Frank M. Seeley.....	2nd Mate..	Halifax, N.S.....	Halifax, N.S..	8 00
3387	" 24..	Henry A. Lee.....	Master....	"	"	15 00
3388	May [3..	Alfred W. Howard.....	"	St. John, N.B.....	St. John, N.B.	15 00
3389	" 9..	Thos. F. Morrison.....	Mate.....	Londonderry, N.S.....	Halifax, N.S..	8 00
3390	" 14..	Stennett Rafuse.....	2nd Mate..	La Have, N.S.....	Yarmouth, N.S.	8 00
3391	" 14..	Robert Whittaker.....	Master....	Manchester, G.B.....	"	15 00
3392	June 22..	Angus J. MacDonald.....	Mate.....	Pinnette, P.E.I.....	St. John, N.B.	8 00
3393	" 22..	Arthur S. Warner.....	2nd Mate..	Liverpool, Eng.....	"	8 00
3394	" 22..	Byron F. Abbott.....	Master....	Yarmouth, N.S.....	Yarmouth, N.S.	15 00
3395	" 22..	Geo. F. Stewart.....	Mate.....	Lancashire, Eng.....	Victoria, B.C.	8 00
3396	" 26..	James McGrath.....	Master....	Parrsboro, N.S.....	Halifax, N.S..	15 00
3397	" 26..	John Vaughan.....	2nd Mate..	Walton, N.S.....	"	8 00

LIST of Certificates of Competency granted to Masters and Mates of INLAND and COASTING Vessels, during the year ended June 30, 1900.

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was passed.	Fees.
	1899.					\$ cts.
2755	July 5.	Xavier Emond	Master.....	Vaudreuil, P.Q.	Ottawa	15 00
2756	" 5.	Jeffery Gillert	"	Musquodoboit H'br, N.S.	Halifax.....	15 00
2757	" 5.	Peter Taylor	"	New Westminster, B.C.	New Westminster	15 00
2758	" 5.	Bap. Ordano	Mate.....	Victoria, B.C.	Victoria.....	6 00
2759	" 5.	Edward McCaskrie	Master	"	"	15 00
2760	" 6.	S. Shipman	"	Richard's Landing, Ont.	St. Catharines.	15 00
2761	" 6.	C. B. Tipping	Mate.....	Sloean City, B.C.	Victoria.....	6 00
2762	" 6.	Chas. J. Berglund	"	New Westminster, B.C.	"	6 00
2763	" 10.	Herbert Martin	Master.....	Halifax, N.S.	Yarmouth	15 00
2764	" 10.	Francis Mackey	"	"	Halifax.....	15 00
2765	" 11.	Wallace Travis	"	Northesk	St. John.....	15 00
2766	" 13.	John Dick	Mate.....	Fergus, Ont.	St. Catharines.	6 00
2767	" 14.	W. A. Newcomb	"	Hopewell Cape, N.B.	St. John.....	6 00
2768	" 17.	W. A. Cooper	"	New Castle, N.B.	"	6 00
2769	" 17.	John W. Cochran	Master.....	Fox River, N.S.	"	15 00
2770	" 21.	Chas. MacPherson	"	Georgeville, P.Q.	Ottawa.....	5 00
2771	" 21.	Peter Lalonde	"	Cornwall, Ont.	"	15 00
2772	" 22.	Remi Dupuis.....	"	New Westminster, B.C.	Victoria.....	15 00
2773	" 22.	Herbert Murray	Mate.....	Barriefield, Ont.	Kingston.....	6 00
2774	" 22.	John Corkey	Master.....	Kingston, Ont.	"	15 00
2775	" 22.	Guy Lorraine	Mate.....	Parnsborro, N.S.	Yarmouth.....	6 00
2776	" 22.	L. E. Donnelly	"	Kingston, Ont.	Kingston.....	6 00
2777	" 24.	Wm. T. Goodwin	"	Toronto, Ont.	St. Catharines.	6 00
2778	" 27.	H. W. Lockwood	Master.....	Westport, Ont.	Kingston.....	6 00
2779	" 27.	H. C. A. Cartwright	"	Belleville, Ont.	"	5 00
2780	" 27.	Geo. T. Smith	"	Noody Quoddy, N.S.	Halifax.....	15 00
2781	" 27.	Wm. T. Windsor	"	Calender, Ont.	Kingston.....	5 00
2782	" 27.	Joseph LeFort	Mate.....	Roberval, Que.	Quebec.....	6 00
2783	" 27.	Alfred E. Harris	"	Goxes Landing, Ont.	Kingston.....	6 00
2784	" 27.	A. D. Bradshaw	"	Lindsay, Ont.	"	6 00
2785	" 27.	D. McG. Hackett	Master.....	Amherstburg, Ont.	St. Catharines.	15 00
2786	Aug. 3.	N. A. Beach	"	Georgeville, P.Q.	Ottawa.....	5 00
2787	" 5.	Thos. R. Hall	"	Clarina, P.O.	"	5 00
2788	" 5.	Freak A. Tully	"	Warsaw, Ont.	"	5 00
2789	" 9.	Wm. Jensen	Mate.....	Victoria, B.C.	Victoria.....	6 00
2790	" 11.	Bernard, Koop	"	Yarmouth, N.S.	Yarmouth.....	6 00
2791	" 18.	John M. Milne	Master.....	Kingston, Ont.	Kingston.....	15 00
2792	" 18.	W. H. White	"	Lakefield, Ont.	"	15 00
2793	" 21.	Geo. A. Hamilton	Mate.....	Bobcageon, Ont.	"	6 00
2794	" 21.	Walter D. Ellis	"	Trenton Falls, Ont.	"	6 00
2795	" 22.	C. W. Burgoyne	Master.....	"	"	5 00
2796	" 22.	Squire Hicks	"	Japperton, B.C.	New Westminster	15 00
2797	" 23.	Thos. M. Ernest	"	Lunenburg, N.S.	Lunenburg.....	15 00
2798	" 24.	Chas. Gould	"	Waubanchene, Ont.	St. Catharines.	15 00
2799	" 26.	David McCormick	"	Pelee Island, Ont.	"	15 00
2800	" 26.	Archie J. Emenau	"	Lunenburg, Ont.	Lunenburg.....	15 00
2801	Sept. 19.	Leslie T. Merriam	"	Port Grenville, N.S.	St. John.....	15 00
2802	" 19.	John A. McIntosh	"	French River, Ont.	St. Catharines.	15 00
2803	" 19.	John S. Curry	"	St. John, N.B.	St. John.....	15 00
2804	" 19.	Wm. P. Shea	"	Gordon Creek, Ont.	Ottawa.....	15 00
2805	" 19.	Edward Paradio	Mate.....	Kingston, Ont.	St. Catharines.	6 00
2806	" 20.	J. E. McGlade	"	Brockville, Ont.	Kingston.....	6 00
2807	" 21.	Geo. A. Baker	Master.....	Yarmouth, N.S.	Yarmouth.....	15 00
2808	" 21.	John E. Belyea	"	Pentanguishene, Ont.	St. Catharines.	15 00
2809	" 22.	Wm. Henry Benrose	"	Maxwell, Ont.	"	15 00
2810	" 23.	Arnold T. Mabee	"	Wickham, N.B.	St. John.....	15 00
2811	" 25.	Frederick L. Foote	"	Cedar Lake, N.S.	Yarmouth.....	15 00
2812	" 26.	Charles J. Blomquist	"	Victoria, B.C.	Victoria.....	15 00
2813	" 26.	George H. Ritchie	Mate.....	Arrowhead, B.C.	"	6 00
2814	" 26.	Charles Hansen	"	Golden, B.C.	"	6 00
2815	" 27.	Alexander Veilleux	"	Sorel, P.Q.	Quebec.....	6 00
2816	" 28.	Richard Farries	Master.....	James Bay, Ont.	Ottawa.....	15 00
2817	" 29.	Wm. James Smith	"	Richard's Landing, Ont.	St. Catharines.	15 00

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LIST of Certificates of Competency granted to Masters and Mates of INLAND and COASTING VESSELS, &c.—Continued.

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was passed.	Fee.
	1899.					\$ cts.
2818	Sept. 29.	John M. Purtilt.....	Master.....	St. Catharines, Ont.....	St. Catharines.....	15 00
2819	" 30.	Theophile Dominique.....	".....	Rat Portage, Ont.....	Winnipeg.....	15 00
2820	Oct. 3.	Wm. McLean.....	Mate.....	Collingwood, Ont.....	St. Catharines.....	6 00
2821	" 3.	Wilfred Girard.....	".....	Carillon, Que.....	Ottawa.....	6 00
2822	" 4.	N. A. Putney.....	Master.....	North Hatley, Que.....	".....	5 00
2823	" 4.	Patrick Gallagher.....	".....	St. John, N.B.....	St. John.....	15 00
2824	" 10.	Ferdinand Moreau.....	".....	Waubaushe, Ont.....	St. Catharines.....	15 00
2825	" 11.	John Ritcey.....	".....	Liverpool, N.S.....	Sydney.....	15 00
2826	" 13.	R. E. Hungerford.....	Mate.....	Lindsay, Ont.....	Kingston.....	6 00
2827	" 13.	Sydney Smith.....	Master.....	Little Current, Ont.....	St. Catharines.....	15 00
2828	" 13.	Wm. Meakin.....	".....	French River, Ont.....	".....	15 00
2829	" 13.	Wm. John Corbett.....	Mate.....	Owen Sound, Ont.....	".....	6 00
2830	" 13.	Hiram Beveridge.....	Master.....	Milbourne, N.S.....	Yarmouth.....	15 00
2831	" 17.	Richard A. Mather.....	".....	Victoria, B.C.....	Victoria.....	15 00
2832	" 18.	Charles R. Glenn.....	Mate.....	Cheverie, N.S.....	St. John.....	6 00
2833	" 18.	Joseph A. Sabean.....	Master.....	St. John, N.B.....	".....	15 00
2834	" 23.	J. B. Menard.....	".....	Lumsden's Mills, Que.....	Ottawa.....	15 00
2835	" 24.	Geo. A. Dick.....	Mate.....	Barriefield, Ont.....	Kingston.....	6 00
2836	" 24.	Henry E. Burke.....	Master.....	Lunenburg, N.S.....	Lunenburg.....	15 00
2837	" 24.	Wm. Henry Giles.....	".....	Gravenhurst, Ont.....	St. Catharines.....	15 00
2838	" 24.	Arsène Godin.....	Mate.....	Ile St. Ignace, Que.....	Quebec.....	6 00
2839	" 27.	Noah Amos.....	".....	Baie Verte, N.B.....	St. John.....	6 00
2840	Nov. 6.	Wm. H. Holden.....	Master.....	Gore Bay, Ont.....	Spanish River.....	15 00
2841	" 9.	Patrick Young.....	Mate.....	Young's Point, Ont.....	Kingston.....	6 00
2842	" 15.	Ole Alfsmo.....	Master.....	Trail, B.C.....	Victoria.....	15 00
2843	" 24.	Geo. S. Powell.....	Mate.....	Victoria, B.C.....	".....	6 00
2844	" 24.	Walter J. Verge.....	".....	".....	".....	6 00
2845	" 24.	Frank W. Reid.....	".....	New Westminster, B.C.....	".....	6 00
2846	" 24.	E. J. Ruxton.....	".....	Victoria, B.C.....	".....	6 00
2847	" 27.	Wm. B. Vansickle.....	Master.....	Lynden, Ont.....	St. Catharines.....	15 00
2848	" 27.	Arthur G. Balkwill.....	".....	Vancouver, B.C.....	N. Westminster.....	15 00
2849	" 28.	Emile C. Mack.....	".....	Lunenburg, N.S.....	Lunenburg.....	15 00
2850	Dec. 6.	Jules O. Provost.....	Mate.....	Montreal, Que.....	Ottawa.....	6 00
2851	" 14.	E. T. McLennan.....	Master.....	Vancouver, B.C.....	Victoria.....	15 00
2852	" 14.	Chas. E. Beveridge.....	".....	Yarmouth, N.S.....	Yarmouth.....	6 00
2853	" 16.	Geo. D. Robertson.....	Mate.....	Vancouver, B.C.....	Victoria.....	6 00
2854	" 16.	Daniel Martin.....	Master.....	Victoria, B.C.....	".....	15 00
2855	" 18.	Samuel Geo. Parkin.....	".....	Lindsay, Ont.....	Kingston.....	15 00
2856	" 19.	Albert Stiles.....	".....	Thurso, Que.....	Ottawa.....	15 00
2857	" 19.	Arthur Doucett.....	".....	Cape St. Mary, N.S.....	Yarmouth.....	15 00
2858	" 29.	Joseph B. Scott.....	Mate.....	Guysboro', N.S.....	St. John.....	6 00
2859	" 30.	Robert S. Misener.....	".....	Providence Bay, Ont.....	St. Catharines.....	15 00
	1900.					
2860	Jan. 4.	James W. Rigney.....	Master.....	Sarnia, Ont.....	".....	15 00
2861	" 4.	John S. McQueen.....	".....	Amherstburg, Ont.....	".....	15 00
2862	" 4.	Forman L. Pothier.....	".....	Tusket Wedge, N.S.....	Yarmouth.....	15 00
2863	" 9.	Henry Coyle.....	".....	Kingston, Ont.....	Kingston.....	15 00
2864	" 18.	James Fittsimmons.....	Mate.....	Arrowhead, B.C.....	Victoria.....	6 00
2865	" 23.	Theophilus Boudrot.....	Master.....	Di-cousse, N.S.....	Sydney.....	15 00
2866	" 23.	James H. McLean.....	".....	Wallaceburg, Ont.....	St. Catharines.....	15 00
2867	" 24.	Bertram Campbell.....	".....	Bracebridge, Ont.....	".....	15 00
2868	" 25.	Geo. E. Churchill.....	Mate.....	Yarmouth, N.S.....	Yarmouth.....	6 00
2869	" 25.	Isaac S. Foote.....	Master.....	Pembroke, N.S.....	".....	15 00
2870	" 26.	Wm. McKenzie.....	Mate.....	Shrigley, Ont.....	St. Catharines.....	6 00
2871	" 26.	Laurent Vigneault.....	Master.....	House Harbour, N.L. Q.....	Quebec.....	15 00
2872	" 26.	Luc Pelletier.....	".....	L'Islet, Que.....	".....	15 00
2873	" 27.	Lucien Bernier.....	".....	Lotbinière, Que.....	".....	15 00
2874	" 27.	Prudent Parent.....	".....	Lévis, Que.....	".....	15 00
2875	" 29.	Herbert Hiscock.....	Mate.....	New Westminster.....	Victoria.....	15 00
2876	" 31.	Wm. Chas. Playter.....	Master.....	Collingwood, Ont.....	St. Catharines.....	15 00
2877	Feb. 1.	Wm. H. Readman.....	".....	West Gravenhurst, Ont.....	".....	15 00
2878	" 3.	John W. McLeod.....	".....	Charlottetown, P.E.I.....	Sydney.....	15 00
2879	" 3.	Mitchell Decker.....	".....	Lockeport, N.S.....	Yarmouth.....	15 00

LIST of Certificates of Competency granted to Masters and Mates of INLAND and COASTING VESSELS, &c.—Continued.

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was passed.	Fee.
	1900.					\$ cts.
2880	Feb. 6.	Robert McLaren	Master..	Chatham, Ont	St. Catharines	15 00
2881	" 6.	Hector McInnis.....	"	Meaford, Ont.	"	15 00
2882	" 7.	Harry Boulton	Mate.....	Collingwood, Ont.	"	6 00
2883	" 31.	John Neil McKinnon.....	Master..	Murray Harbour, P.E.I.	Sydney, CB.	15 00
2884	" 7.	Emile Seguin.....	"	Hudson Heights, P.Q.	Quebec.	15 00
2885	" 13.	Alfred Cluett.....	Mate.....	Halifax, N.S.	Halifax, N.S.	8 00
2886	" 16.	Harry F. Brown.....	Master..	Victoria, B.C.	Victoria, B.C.	15 00
2887	" 16.	Geo. E. Robertson.....	Mate.....	"	"	6 00
2888	" 16.	Arthur F. Dougherty.....	Master..	"	"	15 00
2889	" 17.	Wm. James Ferguson.....	"	Warton, Ont.	St. Catharines.	15 00
2890	" 17.	Jeddiah J. Embree.....	"	Nelson, B.C.	Victoria, B.C.	15 00
2891	" 17.	George Lawrence.....	Mate.....	Warton, Ont.	St. Catharines.	6 00
2892	" 19.	James J. Moore.....	"	Nelson, B.C.	Victoria, B.C.	6 00
2893	" 19.	Omer Blinn.....	Master..	Digby, N.S.	Yarmouth, NS	15 00
2894	" 22.	James Nowlan.....	"	Chatham, N.B.	Chatham, N.B.	15 00
2895	" 23.	Fred'k Smeltzer Reeve.....	Mate.....	Warton, Ont.	St. Catharines.	6 00
2896	" 24.	James A. Willett.....	Master..	Main-à-Dieu, C.B., N.S.	Sydney, N.S.	15 00
2897	" 27.	James C. Merchand.....	"	Penbrooke, Ont.	Kingston, Ont.	15 00
2898	" 27.	John Lawrence.....	Mate.....	Kingston, Ont.	"	6 00
2899	Mar. 7.	Jacob Crouse.....	Master..	Bridgewater, N.S.	Lunenburg NS	15 00
2900	" 7.	Thos. B. Greenaway.....	Mate.....	Port Dalhousie, Ont.	St. Catharines.	6 00
2901	" 7.	Chas. Henry Knight.....	Master..	Warton, Ont.	"	15 00
2902	" 7.	Wm. Henry Wright.....	"	Toronto, Ont.	"	15 00
2903	" 7.	Wm. Osborne Street.....	Mate.....	New Westminster, B.C.	Victoria, B.C.	6 00
2904	" 7.	Bernard N. Melancon.....	Master..	Port Gilbert, N.S.	Yarmouth, NS	15 00
2905	" 5.	Wm. S. Johnston.....	"	Owen Sound, Ont.	St. Catharines.	15 00
2906	" 9.	Loren Walters.....	"	Lunenburg, N.S.	Lunenburg NS	15 00
2907	" 9.	John Henry Innes.....	"	Port Mouton, N.S.	Halifax, N.S.	15 00
2908	" 9.	Temam Beck.....	Mate.....	Lunenburg, N.S.	Lunenburg NS	8 00
2909	" 9.	Thomas Hare.....	Master..	North Sydney, N.S.	Sydney, N.S.	15 00
2910	" 9.	Phillip Cain.....	"	New Westminster, B.C.	N. West'inst'er	15 00
2911	" 9.	Albert E. Cullis.....	"	Bruce Mines, Ont.	St. Catharines.	15 00
2912	" 9.	Angus K. McDonald.....	"	Vancouver, B.C.	N. West'inst'er	15 00
2913	" 13.	Lesley Martindale.....	"	Lions Head, Ont.	St. Catharines.	15 00
2914	" 16.	Wm. Robinson.....	"	Pentanguishene, Ont.	"	15 00
2915	" 17.	Murdoch MacLean.....	Mate.....	New Westminster, B.C.	Victoria, B.C.	6 00
2916	" 17.	Alfred Sallgrem.....	"	Arrowhead, B.C.	"	6 00
2917	" 17.	John Webber.....	"	Victoria, B.C.	"	6 00
2918	" 17.	Alfred R. Bissett.....	Master..	"	"	15 00
2919	" 17.	Wm. Bartlett.....	"	Vancouver, B.C.	"	15 00
2920	" 17.	Joseph B. Weeks.....	Mate.....	Okanagon Landing, B.C.	"	6 00
2921	" 17.	Wm. C. Marsh.....	Master..	Victoria, B.C.	"	15 00
2922	" 21.	Phidime Menard.....	"	L'Islet, Que.	Quebec	15 00
2923	" 21.	Albert Croteau.....	"	L'ecleuvre, Que.	"	15 00
2924	" 22.	Donald W. Stewart.....	"	St. Peters, N.S.	Halifax, N.S.	15 00
2925	" 22.	John O. McCulloch.....	Mate.....	Walton, N.S.	"	6 00
2926	" 22.	Geo. Enos Mader.....	"	Mahone Bay, N.S.	"	6 00
2927	" 23.	Geo. Everett McLeod.....	Master..	Parssboro, N.S.	Yarmouth, NS	15 00
2928	" 23.	Samuel George Mortimer.....	"	Vancouver, B.C.	Victoria, B.C.	15 00
2929	" 23.	Daniel Meisner.....	"	Lunenburg, N.S.	Lunenburg NS	15 00
2930	" 23.	Wm. Edwin Curtis.....	"	Ladner, B.C.	N. West'inst'er	15 00
2931	" 23.	Thos. John Boyter.....	"	Little Current, Ont.	St. Catharines.	15 00
2932	" 23.	Eaton Chute.....	"	Hampton, N.S.	Lunenburg NS	15 00
2933	" 23.	Archibald Geldert.....	"	Lunenburg, N.S.	"	15 00
2934	" 26.	Magloire Lachance.....	"	St. Jean de Orleans, P.Q.	Quebec.	15 00
2935	" 26.	Wm. Thos. Windsor.....	"	Callender, Ont.	Kingston, Ont	5 00
2936	" 27.	Thos. McA. Gaskin.....	"	Kingston, Ont.	"	15 00
2937	" 27.	Joseph Mason.....	"	Collingwood, Ont.	St. Catharines.	15 00
2938	" 27.	Wm. John Boyd.....	"	"	"	15 00
2939	" 29.	Edward Fleming.....	"	Elgin, Ont.	Kingston, Ont.	15 00
2940	" 29.	Arthur Black.....	Mate.....	Prescott, Ont.	"	6 00
2941	" 30.	Wm. Henry Porter.....	"	Fort Erie, Ont.	St. Catharines.	6 00
2942	" 31.	Wm. H. McCulley.....	Master..	Port Carling, Ont.	"	15 00
2943	April 4.	Joseph Gagnon.....	"	Keewatin, Ont.	Rat Portage..	15 00
2944	" 7.	Havelock Newcomb.....	"	Yarmouth, N.S.	Yarmouth, NS	15 00

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LIST of Certificates of Competency granted to Masters and Mates of INLAND and COASTING VESSELS, &c.—Continued.

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was passed.	Fee.
	1900.					\$ cts.
2945	April 7.	Geo. S. Diggdon.....	Master.....	Port Medway, N.S.,....	Yarmouth, NS	.....
2946	" 7.	Benj. E. Dewey.....	Mate.....	Gravenhurst, Ont.....	St. Catharines.	6 00
2947	" 10.	Archie McInnis.....	Master.....	Tiverton, Ont.....	St. Catharines	15 00
2948	" 10.	Arthur St. Martin.....	".....	St. Joseph de Sorel, Que.	Quebec.....	15 00
2949	" 10.	Paul Jos. Cooper.....	".....	Wine Harbour, N.S.....	Halifax.....	15 00
2950	" 10.	Redmond Keating.....	Mate.....	Port Mulgrave, N.S.....	Sydney.....	6 00
2951	" 10.	Geo. R. Longley.....	".....	St. Catharines, Ont.....	St. Catharines	6 00
2952	" 10.	Peter James Shaw.....	Master.....	Lakeport, Ont.....	".....	15 00
2953	" 10.	Benj. C. Newell.....	".....	Clark's Harbour, N.S.....	Halifax.....	15 00
2954	" 11.	David Kernaghan.....	".....	Lakeport, Ont.....	St. Catharines	15 00
2955	" 14.	Vincent J. Peoples.....	Mate.....	Port Mulgrave, N.S.....	Sydney.....	6 00
2956	" 14.	Angus McInnis.....	".....	Tiverton, Ont.....	St. Catharines	6 00
2957	" 14.	David J. Burke.....	Master.....	Midland, Ont.....	".....	15 00
2958	" 17.	Arthur John Harris.....	".....	Vancouver, B.C.....	N. Westm'ster	15 00
2959	" 17.	John Alward.....	Mate.....	Toronto, Ont.....	St. Catharines	6 09
2960	" 19.	Henry Arthur Eagles.....	Master.....	Chatham, N.B.....	Newcastle.....	15 00
2961	" 19.	Charles Williams.....	".....	Belleville, Ont.....	Kingston.....	15 00
2962	" 20.	Walter H. Taylor.....	".....	Nelson, B.C.....	Victoria.....	15 00
2963	" 20.	James J. Bartlett.....	Mate.....	Vancouver, B.C.....	".....	6 00
2964	" 20.	Henry Crocke.....	".....	Victoria, B.C.....	".....	6 00
2965	" 20.	Albert Rafuse.....	Master.....	Quebec, N.S.....	Lunenburg.....	15 00
2966	" 20.	L. J. H. Dorion.....	Mate.....	Chateau Richer, Que.....	Quebec.....	6 00
2967	" 20.	Wm. Bloomfield.....	Master.....	Kingston, Ont.....	Kingston.....	15 00
2968	" 24.	Sennett Rafuse.....	Mate.....	La Have, N.S.....	Yarmouth.....	6 90
2969	" 24.	Alexr. Baillargeon.....	".....	Windsor, Ont.....	St. Catharines	6 00
2970	" 24.	Wm. Henry Oliver.....	Master.....	Kingston.....	Kingston.....	15 00
2971	" 24.	Alex. Strum.....	".....	Lunenburg, N.S.....	Lunenburg.....	15 00
2972	" 24.	John Alfred Young.....	".....	Sydney, N.S.....	Sydney.....	.....
2973	" 30.	John McDonald.....	Mate.....	Harbour du Bouche, N.S.	".....	6 00
2974	" 30.	Michael J. Tierney.....	Master.....	Sheenboro', Que.....	Ottawa.....	15 00
2975	" 30.	Alex. H. Bernie.....	Mate.....	Moortown, Ont.....	St. Catharines	6 00
2776	May 2.	Hugh Hiley.....	Master.....	Indiantown, N.B.....	St. John.....	15 00
2977	" 2.	James H. Matthews.....	".....	Point Wolfe, N.B.....	".....	15 00
2978	" 2.	Martin Mahoney.....	Mate.....	Hamilton, Ont.....	St. Catharines	6 00
2979	" 4.	W. A. McPherson.....	Master.....	Pictou Landing, N.S.....	Pictou.....	5 00
2980	" 4.	Frank Poirier.....	".....	Montreal, Que.....	Quebec.....	15 00
2981	" 7.	Alphonse Forgues.....	Mate.....	Notre Dame de Lévis, Q.	".....	6 00
2982	" 7.	Sylvester Berry.....	Master.....	Providence Bay, Ont.....	Spanish River.	15 00
2983	" 10.	Geo. R. Brown.....	".....	Parron's Point.....	Kingston.....	15 00
2984	" 10.	Herbert H. Allan.....	".....	Liverpool, N.S.....	Yarmouth.....	15 00
2985	" 10.	Albert Barras.....	Mate.....	St. Joseph de Lévis, Que.	Quebec.....	.....
2986	" 10.	Burpee Tupper.....	Master.....	Spencer's Island, N.S.....	St. John.....	.....
2987	" 14.	John W. S. Rutherford.....	".....	Wiarion, Ont.....	St. Catharines	15 00
2988	" 14.	Alex. McLellan.....	".....	Southampton, Ont.....	".....	15 00
2989	" 14.	Geo. Spencer.....	".....	North Sydney, N.S.....	Sydney.....	15 00
2990	" 14.	Wm. J. Cunningham.....	Mate.....	Midland, Ont.....	St. Catharines	6 00
2991	" 16.	Peter Longe.....	Master.....	Southampton, Ont.....	".....	15 00
2992	" 16.	Lauchlin McDonald.....	".....	Framboise, C.B.....	Sydney.....	15 00
2993	" 16.	Wm. E. James.....	".....	Combermere, Ont.....	Ottawa.....	5 00
2 994	" 16.	John McKellar.....	".....	Victoria, B.C.....	Victoria.....	15 00
2995	" 18.	John Chas. Hudson.....	".....	Combermere, Ont.....	Ottawa.....	15 00
2996	" 18.	Fritz Mayers.....	".....	New Westminster, B.C.....	N. Westm'ster	15 00
2997	" 18.	Alexr. Brown.....	".....	Vancouver, B.C.....	Victoria.....	15 00
2998	" 21.	Alexr. Larsen.....	Mate.....	Ottawa, Ont.....	Ottawa.....	6 00
2999	" 23.	Geo. A. Haines.....	".....	Summerstown, Ont.....	".....	6 00
3000	" 23.	John Hall.....	Master.....	Lunenburg, N.S.....	Lunenburg.....	15 00
3001	" 23.	Jas. R. Judge.....	".....	Vancouver, B.C.....	N. Westm'ster	15 00
3002	" 23.	Oscar Lalonde.....	Mate.....	Windsor, Ont.....	St. Catharines	6 00
3003	" 23.	Humphrey G. Newcomb.....	Master.....	Yarmouth, N.S.....	Yarmouth.....	15 00
3004	" 23.	James Johnson.....	Mate.....	Granville, N.S.....	".....	6 00
3005	June 4.	John D. Williams.....	Master.....	Canso, N.S.....	Sydney.....	15 00
3006	" 4.	Henry Hebb.....	".....	Lunenburg, N.S.....	Lunenburg.....	15 00
3007	" 7.	Peter Eligh.....	".....	Ottawa, Ont.....	Ottawa.....	.....
3008	" 4.	Thos. N. S. Kelly.....	".....	Bridgeworth, Ont.....	".....	15 00
3009	" 4.	Thos. Strong.....	".....	Port Elgin, Ont.....	St. Catharines	15 00

LIST of Certificates of Competency granted to Masters and Mates of INLAND and COASTING VESSELS, &c.—*Concluded.*

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was passed.	Fee.
	1900.					\$ cts.
3010	June 4.	Robt. H. Sims.....	Master.....	Ladner, B.C.....	N. Westm'ster	15 00
3011	" 7.	Michl. Bausette.....	Mate.....	Windsor, Ont.....	St. Catharines.	6 00
3012	" 11.	Chas. A. Chapman.....	".....	Ellershouse, N.S.....	Yarmouth....	6 00
3013	" 14.	Joseph C. Wallis.....	Master.....	Port Carling, Ont.....	St. Catharines.	15 00
3014	" 14.	Frank S. Crow.....	".....	Chatham, Ont.....	".....	15 00
3015	" 14.	Alphonse J. Dallain.....	".....	Victoria, B.C.....	Victoria.....	15 00
3016	" 19.	Joseph Lebreche.....	".....	Hull, Que.....	Ottawa.....	15 00
3017	" 19.	Louis Berthiau.....	".....	Ottawa, Ont.....	".....	15 00
3018	" 21.	James Dewitt.....	".....	Mouth of Jemseg, N.B.....	Fredericton....	15 00
3019	" 21.	James W. Cates.....	".....	Victoria, B.C.....	Victoria.....	15 00
3020	" 21.	Geo. W. Graham.....	Mate.....	Arrowhead, B.C.....	".....	6 00
3021	" 21.	Charles Joyce.....	".....	Bronte, Ont.....	St. Catharines.	6 00
3022	" 22.	Edward Shaw.....	".....	Pegmouth, N.S.....	Yarmouth....	6 00
3023	" 22.	Loran J. McKinnon.....	".....	Plymouth, N.....	".....	6 00
3024	" 23.	Edwin L. Reed.....	Master.....	Nairn Centre, Ont.....	Fort Francis....	15 00
3025	" 23.	John Egan, jr.....	Mate.....	Killarney, Ont.....	St. Catharines.	6 00
3026	" 26.	Bernard Fricksen.....	Master.....	Dalhousie, N.B.....	Dalhousie....	15 00
3027	" 27.	Western S. Kelley.....	".....	Bridgenorth, Ont.....	Kingston.....	15 00
3028	" 30.	Ovila Laing.....	".....	Grand Piles, Que.....	Quebec.....	15 00

LIST of Certificates of Service granted to Masters and Mates of INLAND and COASTING Vessels, during the year ended June 30, 1900.

Number of Certificate.	Date of Certificate	Name.	Grade.	Address.	Where Examination was passed.	Fee.
	1899.					\$ cts.
3346	July 24.	S. U. Gucker.....	Master.....	Lindsay, Ont.....	Kingston....	8 00
3347	Sept. 19.	Wm. T. Greenwood.....	".....	Chatham, Ont.....	St. Catharines.	8 00
3348	" 21.	J. F. Lillecrap.....	".....	Lakefield, Ont.....	Kingston....	8 00
3349	Oct. 3.	Wm. Ashford.....	".....	Newcastle, N.B.....	Newcastle....	4 00
	1900.					
3350	Feb. 12.	Benj. C. Newell.....	Master.....	Clark's Harbour, N.S.....	Yarmouth....	8 00
3351	April 7.	D. S. McCorquodale.....	".....	Chicago, U.S.....	St. Catharines.	8 00
3352	" 20.	Geo. Walshe.....	".....	Canso, N.S.....	Sydney.....	
3353	May 3.	Asa F. Nickerson.....	".....	St. Johns, Nfld.....	Halifax.....	
3354	" 14.	Edouard Veillet.....	".....	Quebec, Que.....	Quebec.....	8 00
3355	" 14.	Edward Blewett.....	".....	Lindsay, Ont.....	St. Catharines.	8 00
3356	" 23.	Alexander McKay.....	Mate.....	Lucknow, Ont.....	".....	4 00

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APPENDIX No. 48.

STATEMENT of Wrecks and Casualties reported as having occurred to British, Canadian and Foreign Sea-going Vessels, in Canadian Waters, and to Canadian Sea-going Vessels, in other Waters, for the twelve months ended June 30, 1900.

Date of Casualty.	Name of Ship.	Age of Ship.	Port of Registry.	How Rigged. Iron or Wood, Steam or Sail.	Register Tonnage.	Port sailed from. Port bound to.	Place where Casualty happened.	Cause and Nature of Casualty.	Lives Lost.	Remarks.
1898.										
Oct. 20	Arthur		Quebec	Sloop			Green Island, River St. Lawrence.			Total loss.
1899.										
Aug. 3	Atlanta	22	Parrsboro, N.S.	Schr., wood, sail.	37	Economy, N.S. to River Herbert, N.S.	Spencer's Island, Minas Channel, N.S.	Vessel sprang a leak in a gale and stranded.		Partial loss, 100
Sept. 9	Avola	7	Windsor, N.S.	Bktn., wood, sail.	450	Quebec to Carnarvon	At sea	Thick fog caused a collision with another vessel.	1	Partial loss.
April 12	Aleides	13	Glasgow	Schr., steel, steam.	2181	St. John, N.B., to Glasgow.	Reed's Point, St. John Harbour.	Vessel collided with the steamer <i>Cumberland</i> .		No loss.
Oct. 21	A. Gibson	15	St. John, N.B.	Schr., wood, sail.	97	St. John, N.B., to Salem	S.W. end of Isle of Haute, Me.	Vessel went ashore.		Total loss, 700
Nov. 27	Amitea	16	"	"	115	Shulee, N.S., St. John, N.B. to Barbadoes, W.I.	Bay of Fundy	Damaged in heavy gales.		Partial loss, 800
Sept. 5	Almerian	2	Liverpool	Schr., steel, steam.	1910	Antwerp to Quebec, to N.B.	Beaumont Reef, River St. Lawrence.	Stranded—fault of the pilot.		Partial loss.
Feb. —	Alpha	25	Yarmouth, N.S.	Schr., wood, sail.	211	Yarmouth, N.S., to Lunenburg, N.S.	Coffin's Island, North Atlantic.			Trifling loss.
Sept. 7	A. J. McKean	3½	Lunenburg, N.S.	"	83-50	Nelson, N.B., to Cape Tormentine.	Martin's Shore, between Tignish and Keldon Cape, P.E.I.	Vessel driven ashore by a heavy gale.		Total loss, 2,800
Aug. —	Anglian			Steamer			Sunk at Five Fingers, B.C.	Sunk at Five Fingers, B.C., by coming in contact with a snag. Vessel was raised and resumed business. No further particulars obtainable.		

STATEMENT of Wrecks and Casualties reported as having occurred to British, Canadian and Foreign Sea going Vessels in Canadian Waters, &c.—Continued.

Date of Casualty.	Name of Ship.	Age of Ship.	Port of Registry.	How Rigged. Iron or Wood. Steam or Sail.	Register Tonnage.	Port sailed from. Port bound to.	Place where Casualty happened.	Cause and Nature of Casualty	Lives Lost.	Remarks.
1899.										\$
Nov.	8 Avoca	12	Windsor, N.S.	Bktn, wood, sail.	449-72	Newport to Para, Brazil	Vessel parted her chains in a gale and drifted on shore.			
"	14 Alferetta S. Sharpe.	20	New York, U.S.	Schr., wood, sail.	240	St. John, N.B., to New York.	Sixty-five miles east of Cape Cod Highland Light, N. Atlantic.	Heavy weather, vessel lost anchors and masts and became a wreck. Casualty caused by a gale of wind.		Total loss, 6,000 Cargo, 531 Total loss.
"	7 Avola		Windsor, N.S.	Bktn, wood, sail.	449-72	Newport				
Jan.	-- Arbutus	14	St. John, N.B.	" "	386	Black River to New York.	Was never heard of after sailing.	Sailed from Black River, Jamaica, and was never heard of afterward.	8	Total loss, 6,000
Sept.	6 Avon	6	Chatham, N.B.	Schr., wood, sail.	49	Charlottetown, P.E.I., to Tracadie, N.B.	Between Tracadie and West Cape, P.E.I.	Vessel was found dismasted.	3	Total loss, 1,000
Dec.	9 Annie Blanche ..	4	Parrsboro, N.S.	" "	68	Windsor, N.S., to Boston, U.S.	Dog Bar Breakwater, Gloucester, Mass., U.S.	Vessel went into Gloucester for harbour and not knowing the Breakwater, ran on it.		Partial loss, 1,100
.....	Austria	15	Windsor, N.S.	" "	1773	Bristol to Belfast	Unknown, (lost at sea).	This vessel was lost at sea. Registry closed September 29, 1899 Certificate of registry lost with the vessel. Sailed January 9, 1899.	22	Total loss.
Dec.	-- Avona	12	Norwegian ..	Schr., steel, steam.	1863	Cardiff to North Sydney C.B.	Ten miles off Sow Point, C.B.	Casualty caused by heavy wind.		Partial loss.
1900.										
Jan.	19 Allen McIntyre	8	St. John, N.B.	Schr., wood, sail.	200	Pensacola to St. Croix, W.I.	North Atlantic	Wrecked in a gale		Total loss, 5,500 Cargo, 5,500 Partial loss, 1,200
"	4 Abbie Keast	1	" "	" "	77	Port Johnson, U.S., to St. John, N.B.	Off Eaton's Neck, Long Island Sound, U.S.	Seriously damaged in a collision by the other vessel changing her course.		

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Date	Name of Vessel	Owner	Port of Origin	Destination	Cargo	Cause of Wreck	Losses	Total Loss
" 25	Annie L. Taylor	Sydney, N.S.	Barge	Halifax Harbour, N.S.		Collision		Total loss.
Mar. 11	Bennohr	Leith	Schr., steel steam.	San Francisco to Oyster Harbour, B.C.		Stranded		Trifling accident.
June 28	Bessie Markham	Chatham, N.B.	Barque, wood, sail.	Philadelphia to St. John, N.B.		In collision in fog	Total loss, 1,500	Total loss, 1,500
Sept. 18	Bon Accord	New Westminster, B.C.	Steamer	Wharf at New Westminster, B.C.		Fire broke out in some hay stored near the vessel,	Total loss, 9,000	Total loss, 9,000
1900.	C. C. Van Horn						Total wreck.	Total wreck.
1899.	Canadian	Victoria, B.C.	Sloop, wood, steam.	White Horse, Selkirk, to Dawson.		Ignorance of river seems to have been the cause of casualty.	Trifling accident.	Trifling accident.
Mar. —	Crescent	Lunenburg, N.B.	Schr., wood, sail.	Lunenburg, Turk's Island and Lunenburg.		Somewhere between Turk's Island and Lunenburg.	7 Total loss, \$5,000 Cargo, 350	Total loss, \$5,000 Cargo, 350
Nov. 20	Canary	St. John, N.B.	" "	St. John to New York		Half Mile from Cross Rip Lightship, Nan-tucket Shoal, U.S.A.	Total loss, 3,000 Cargo, 680	Total loss, 3,000 Cargo, 680
Dec. 15	Corinto	Parrsboro', N.S.	" "	Parrsboro, N.S., to Calais, Me.		Beaver Harbour to Bay of Fundy, N.B.	Partial loss, 160	Partial loss, 160
Nov. 22	Culdoon	St. John, N.B.	Bktn., wood, sail.	Malta to Sydney, C.B.		North Atlantic, lat. 41° 55', long. 55° 12'.	" 300	" 300
" 4	Caldera	Pictou	Ship, wood	Buenos Ayres to Plymouth.		South Atlantic, lat. 35° 29'S, long. 48° 54' W.	" "	" "
1900.							" "	" "
Jan. 17	Charlevoix	Parrsboro', N.S.	Schr., wood, sail.	New York to St. John, N.B.		Mouth of Gloucester Harbour, Mass.	" 1,500	" 1,500
Feb. 3	Charlevoix	"	" "	Loading at St. John, N.B.		Forward house destroyed by fire.	" 200	" 200
1899.							" "	" "
Dec. —	Cingo	Sbelburne, N.S.	" "	Boston to North Sydney.		Bridgeport Head, C.B., N.S.	" 1,500	" 1,500
1900.							" "	" "
Jan. 13	City of Seattle	Tacoma, U.S.	Schooner, iron, steam.	Lynn Canal, Alaska		Lost propeller	Partial loss.	Partial loss.
April 14	Chieftain	St. John, N.B.	Schr., wood, sail.	St. John, N.B., Apple River, N.S., to St. John, N.B.		On beach West Advocate, N.S., Bay Fundy	" 400	" 400

STATEMENT of Wrecks, and Casualties reported as having occurred to British, Canadian and Foreign Sea-going Vessels in Canadian Waters, &c.—Continued.

Date of Casualty.	Name of Ship.	Age of Ship.	Port of Registry.	How Rigged. — Steam or Sail. — Iron or Wood.	Register Tonnage.	Port sailed from. — Port bound to.	Place where Casualty happened.	Cause and Nature of Casualty.	Lives lost.	Remarks.
1900.										
May 5	Clara Rankin	32 Yrs	Boston, Mass.	Schr., wood, sail.	143	Digby, N.S., to Boston, Mass.	Near Briar Island, Bay Fundy.	Heavy cross sea.		Partial loss. 200
Mar. 22	Canara	16	St. John, N.B.	Ship, wood, sail.	1488	New York, Shelburne to West Australia.	North Atlantic, lat. 60° W., long. 40° 30' N.	Heavy sea and heavy gale. Vessel sprung a leak, sold at auction.		Cargo 80 Total loss, 11,300
Feb. 13	Colorado	36	San Francisco, U.S.	Barge, wood, sail.	985	Alaska to Tacoma, Wash.	Month of Adams River, B.C.	(Following tug).		Partial loss, 3,000
July —	Comrade	32	St. John, N.B.	Schr., wood, sail.	77	Apple River, N.S., to St. John, N.B.	Martins Head, St. John Co., Bay Fundy.	Went ashore in thick fog.		" 300
1899.										
Aug. —	Daisy		Aricat, N.S.	Schooner		Arichat on a fishing voyage.	Cape Breton coast, N.S.	Sprang a leak and sank.		Total loss, 500 Cargo, 500 Total loss.
1898.										
Nov. 27	Daniel Simmons		Digby, N.S.			Boston to Gilbert's Cove, N.S.		This vessel is supposed to have foundered with all on board.		"
1893.										
Sept. —	Daisy		Quebec, Que.	Screw steamer.	3-42		Lake Edward, P.Q.	Vessel destroyed by fire. No further particulars obtainable.		"
Oct. 7	Derwentholm	12	Maryport	Schooner, iron, steam.	1331	Montreal	Near Sydney Harbour, N.S.	Error in bearings.		Trifling accident.
1900.										
Feb. 23	Douglas	13	St. John, N.B.	Barque, wood, sail.	477	Barbadoes to Manzanilla.	La Falle Reef, Vache Island, Hayti.	Unknown current; reef not marked on the chart.		Total loss, 8,000
May 23	Danube	31	Victoria, B.C.	Schooner, iron, steam.	887	Victoria, B.C., to Alaska.	Otter Rock, Victoria Harbour, B.C.	Driven ashore by strong gale and stranded.		Partial loss, 2,500

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1899.	Aug. 10	Ella Sayer.....	1	Newcastle.....	F. & A., steel, steam.	1617	West. Hartlepool to Quebec.	River St. Lawrence....	Run into by ss. <i>Philadelphia</i> while at anchor.	"	
1898.	Sept. 15	Edgar.....	7	New Westminster, B.C.	Wood, steam.	114	Lying at wharf at New Westminster, B.C.	Wharf at New Westminster, B.C.	Fire broke out in some hay stored near the vessel.	Total loss,	9,000
1899.	Nov. 16	E. Norris.....	11	St. John, N.B.	Schr., wood, sail.	95	Bear River, N.S., to Boston, Mass.....	Supposed to have capsized off Cape Ann, U.S.	Capsized; crew never heard of; vessel picked up bottom up and towed into Salem, Mass., Nov. 20.	Cargo loss,	2,000 400
"	"	Etta Vaughan.....		Shelburne, N.S.	"	97	Shelburne, N.S., Montague, P.E.I., to Shelburne, N.S.	West entrance to Canso Harbour, N.S.	Strong wind and dark night caused casualty; vessel ran ashore.	Partial loss,	300
1897.	Nov. 24	E. W. Forest...	46	Halifax, N.S.	"	40-95	Halifax, N.S., to Spry Bay, N.S.	Spry Bay, N.S.	Vessel dragged anchor and went ashore in a gale.	Total loss.	
1899.	Sept. 4	Edna S.....	14	(British).....	Schr., wood, steam.	51	Halifax, N.S., to Newfoundland.	Wild Cove, Nfld	Driven ashore in a gale.	"	
	Oct. 7	Estelle.....	1	Chatham, N.B.	Schr., wood, sail.	92	Charlottetown, P.E.I., to Boston.	Near Arichat, C.B.	Vessel dragged anchor and went ashore.	Partial loss.	
1900.	Mar. —	Eagle.....	23	St. Andrews, N.B.	"	11	Buck Bay to Eastport, Me.	Bay of Fundy, off White Horse.	Foundered.....	Total loss.	
	May 31	E. Merriam.....	17	Parrsboro', N.S.	"	.....	Hillsboro', N.B., to New York, N.S.	Long Island Sound, U.S.	Collision.....	"	
	Oct. 4	Fred. H. Gibson.	6	St. John, N.B.	"	419	Mobile to Uruguay....	Off Coast of Florida, Gulf of Mexico.	Vessel sprang a leak in a heavy gale.	Partial loss,	4,000 300
1899.	Nov. 13	Florence Guest..	21	Annapolis, N.S.	"	36	Kingsport, N.S., to Moncton, N.B.	Advocate Harbour Beach, N.S., Bay Fundy.	Vessel ran ashore.....	Partial loss.	
"	"	Flash.....	22	Digby, N.S.	"	10-38	Westport, N.S. (fishing).	White Head Island, Grand Manan, Bay of Fundy.	Very heavy storm; ship parted her chains and drifted on the rocks.	Total loss,	225
1900.	Mar. 6	Free Trade.....	4	Parrsboro', N.S.	"	77	Parrsboro', N.S., to St. John, N.B.	Outer Missee Point, St. John Co., N.B.	A blinding snowstorm the cause of the loss of this vessel.	"	2,200 230
	Feb. 2	Falmouth.....	23	Windsor, N.S.	Bktn., wood, sail.	501	New York, U.S., to Port Greville, N.B.	Mouth of St. John Harbour, N.B.	Vessel stranded in a big wind and heavy sea and low water.	Partial loss,	600
	May —	Francis Willard..	3 mo.	Lunenburg, N.S.	Schr., wood....	97	Halifax, N.S., to fishing ground.	Dover, near Cape Canso, N.B.	Fog.....	"	550

STATEMENT of Wrecks and Casualties reported as having occurred to British, Canadian and Foreign Sea-going Vessels in Canadian Waters, &c.—Continued.

Date of Casualty.	Name of Ship.	Age of Ship.	Port of Registry.	How Rigged. Iron or Wood. Steam or Sail.	Register Tonnage.	Port sailed from. Port bound to.	Place where Casualty happened.	Cause and Nature of Casualty.	Lives lost.	Remarks.
1899.										
Oct. 25	Greenland	2 Yrs	Parrsboro', N.S.	Barque, wood, sail.	626	Philadelphia to Turk's Island.	Tunk's Island, British West Indies.	This vessel reported lost by despatch; no particulars given; crew saved.	.....	Total loss, 35,000 \$
1898.										
Sept. 10	Gladys	14	New Westminster, B.C.	Wood, steam..	211	Lying at wharf, New Westminster, B.C.	Wharf at New Westminster, B.C.	Warehouse on wharf took fire.	.....	" 7,000
1899.										
July 14	Grace Rice	16	Yarmouth, N.S.	Schr., wood, sail.	120	Yarmouth to Porto Rico.	.....	.....	.....	" 2,500
1900.										
May 8	Greville	13	Parrsboro', N.S.	"	57	St. John, N.B., Wolfville, N.S.	to 2 miles off Black Point, Partridge Island, Bay of Fundy.	Cargo of lime caught fire.	.....	Partial loss, 50 Cargo, 200
1899.										
Sept. 6	Harry	7	"	"	422	Walton, N.S., to New York.	Walton River, Minas Basin, N.S.	Vessel broke loose from bow and drifted ashore.	.....	Partial loss, 1,000
1900.										
Nov. 26	Hera	30	Seattle West..	"	381	Seattle to Honolulu...	Cape Flattery, North Pacific.	Cargo of lime ignited and set vessel on fire.	.....	Total loss.
1899.										
Feb. 11	Howard Young	7	Lunenburg, N.S.	"	98-74	P. E. Island to Lunenburg, N.S.	Lunenburg Harbour, N.S.	Vessel dragged her anchor and became a total loss.	.....	" 3,000
1899.										
Oct. 28	Irene	13	St. John, N.B.	Schr., wood, sail.	90	Boston, Mass., to St. John, N.B.	Booth Bay, Me....	Struck by a squall.....	.....	Partial loss, 500 Cargo, 50
"	Iona	21	Parrsboro, N.S.	"	29	St. John, N.B., to Matland, N.S.	Cobiquid Bay, N.S....	Stranded.....	.....	Total loss, 275
"	Iodine	14	"	Bk., wood, sail	539	Greenland to Philadelphia.	Atlantic Ocean, off Newfoundland.	Casualty caused by hurricane. Vessel abandoned at sea. Two of crew swept overboard. Balance of crew rescued by the <i>Philadelphian</i> .	2	" 8,000

WRECKS AND CASUALTIES

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Date	Name	Origin	Destination	Material	Cause	Loss
June 22	Ida	Halifax, N.S.	North side Sydney Harbour, Lockman's Point, N.S.	Sail	Casualty caused by heavy snowstorm.	Partial loss.
June 22	Irene	St. John, N.B.	Salmon River, N.B., to Cape Cod bearing 30 miles south.	Schr., wood, sail.	Put into St. John leaking.	"
Nov. 13	Julia Franklin	Charlottetown, P.E.I.	Halifax, N.S., to Margaree, N.S.	"	Vessel stranded in a gale.	Cargo, Partial loss, 200
"	John T. Collinan	St. John, N.B.	New Bedford, Mass., to St. John, N.B.	"	Vessel at anchor in West Quoddy. Blow in gale heavy. When tide went down, vessel pounded hard.	Cargo, Partial loss, 400
Dec. 31	Junno	"	Joggins, N.S., to Digby, N.S.	"	An old ship got into a little heavy sea, started leaking and had to be run ashore to save the life of crew.	Partial loss, 1,000
1900.	Jennie C.	Yarmouth, N.S.	Beaver Harbour, N.B., to St. John, N.B.	"	Round Reef as it should have been.	Cargo, 350
Jan. 26	J. C. Hamelin, jr.	Liverpool, N.S.	Portland, Me., Turk's Island, Portland, to Me.	Bk., wood, sail	The buoy was not on the Round Reef as it should have been.	Partial loss, 175
1899.	John H. Kennedy	Digby, N.S.	Bear River, N.S., to Grand Manan, N.B.	Schr., wood, sail.	Hurricane carried away masts and totally disabled the vessel.	Partial loss.
"	Kelvin	St. John, N.B.	Buenos Ay to New York.	Bk., wood, sail	Vessel was damaged while being towed and became a total loss.	Total loss, 1,000
Sept. 15	Lebbie	Shelburne, N.S.	Victoria, B.C., Alaska, to Victoria, B.C.	Schr., wood, sail.	Vessel lost her masts through stress of weather.	Partial loss, 3,000
July	Laura L.	Yarmouth, N.S.	Halifax to Labrador.	"	Lost.	Total loss, 1,100
Mar.	Louisburg	Montreal	"	"	No particulars.	Cargo, Partial loss, 3,000
July 12	Louise	Seaback, Wash.	Victoria Harbour, B.C.	"	This was burnt to the water's edge lying up in Victoria Harbour.	Total loss.
1900.	Levuka	Parrsboro, N.S.	Parrsboro, N.S., to St. John, N.B.	Schr., wood, sail.	Vessel got caught in a big gale.	Partial loss, 600
1899.	Lady Aberdeen	Sydney, N.S.	Gaspé, P.Q., to Port Hastings.	"	Stranded.	Total loss.
1900.	Lorne	Victoria, B.C.	Victoria, B.C., to Tacoma, Wash.	Sloop, wood, steam.	Mistake in the navigation of the vessel.	Partial loss, 200

STATEMENT of Wrecks and Casualties reported as having occurred to British, Canadian and Foreign Sea-going Vessels in Canadian Waters, &c.—Continued.

Date of Casualty.	Name of Ship.	Age of Ship.	Port of Registry.	How Rigged. Iron or Wood. Steam or Sail.	Register Tonnage.	Port sailed from. Port bound to.	Place where Casualty happened.	Cause and Nature of Casualty.	Lives lost.	Remarks.
1898.		Yrs							\$	
July 1	Marquis of Dufferin.	new	Vancouver, B.C.	Schr, wood, steam.	629	Vancouver to Alaska.	Four miles off Carmanah Point on Vancouver Island, B.C.	Steamer went to pieces.	.....	Total loss.
1899.										
April 30	Mary Grace	.....	Parrsboro, N.S.	Schr, wood, sail.	20	Cheverie, N.S., Somerville, N.S.	Basin of Mimas, Cambridge Creek, N.S.	Run on a point in a snow-storm.	.....	" 200
Nov. 13	Maggie Lynds	....	St. John, N.B.	" " "	67	Moncton, N.B., to Parrsboro, N.S.	Advocate Harbour Beach.	Vessel dragged her anchors and went ashore for a lighthouse.	.....	" 600
" 7	Maggie Miller	....	" " "	" " "	93	St. John to Beverly, Mass.	Whiteback Ledge, just outside Salen Harbour, U.S.A.	Mistook an electric light for a lighthouse.	.....	Partial loss, 350
Dec. 1	Melinda	.....	Parrsboro, N.S.	" " "	88	Yarmouth, N.S., to Parrsboro, N.S.	Dartmouth, Point Freeport, N.S.	Stranded; ran too close and struck a ledge.	.....	Total loss, 1,500
Nov. 12	Martha D. McLean.	33	Digby, N.S.	" " "	49	Digby, fishing	Salis Point, Annapolis Basin, N.S.	Casualty caused by heavy storm.	.....	" 1,500
1898.										
June ..	May Queen	.....	Halifax, N.S.	Iron steamer.	90	.....	Baddeck Harbour, C.B.	Destroyed by fire.	.....	Total loss 1,000
1899.										
Dec. 9	Minnie A	.....	Halifax, N.S.	Schr, wood, sail.	41	Charlottetown, P.E.I. to New Glasgow, N.S.	Northumberland Straits, Canada.	Mistook light in house for the Pictou Light, in a snow storm.	.....	Partial loss, 300 Cargo, 600
1898.										
Oct. 16	Mary	.....	.....	.....	.....	.....	Near Miminegash, P.E. Island.	Vessel sprang a leak and foundered; crew saved. No other information.	.....	Total loss.
1899.										
June 30	Maiden City	St. John, N.B.	Bk, wood, sail	771	St. John, N.B., to Barbados, Buenos Ayres	South Atlantic	Vessel leaky; finally condemned and sold at Barbados.	1	Total loss Cargo, 6,000 6,780

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1900.	Feb.	Miami	9	New York, U.S. Steamer.	2,292	San Francisco	British Columbia coast	Pilot misjudged distance from land.	Total loss.
1899.	Nov. 12	Mary E. Whorf..	29	Digby, N. S.	77	Tiverton to Parrsboro.	Petit Passage, Digby Co., N.S.	Vessel stranded in heavy gale.	Total loss 1,000
1900.	Jan. 3	Moss Glen	15	Port Medway, N.S.	150	Halifax to Azua, San Domingo, New York	Canselo Point, S. coast San Domingo.	Vessel became water-logged and foundered.	Total loss.
1899.	Dec. 27	M. J. Soley	6	Parrsboro, N.S. Steamer.	99	Boston to Wolfville, N.S.	Bridge Ledge, American coast	Casualty caused by compass being out of order.	Partial loss, 2,500
1900.	Feb.	May Queen	41	St. Andrew's, N.B.	30	Woodward's Cove, Grand Manan, N.B.			Total loss.
1899.	July 19	Nancy Anna				Diligent River, N.S.			Total loss.
		Nordica	12	Vancouver, B.C.				Wreck of steam launch reported, no particulars	Total loss.
	Oct. 26	Nugget	3	Annapolis, N.S. Steamer.	123	Annapolis, N. S., to Turk's Island.	Grand Turk, Turk's Island.	Vessel ran ashore and became a total loss.	Total loss, 5,000
	Dec. 8	Nellie Blanche	12	Parrsboro, N.S.	80	Windsor, N. S., to Lynn, Mass.	Off Spencer's Island, Bay of Fundy, N.B.	Spring a leak in Bay, and put in to Parrsboro, N.S.	Partial loss, 200
	July 12	Nahleen		new Victoria, B. C. Steamer	590		Victoria Harbour, B.C.	Vessel burnt to water's edge in Victoria H'br.	Total loss.
	Sept. 6	Nadid		Norwegian			Four miles east of Pugwash Light.	Vessel wrecked in heavy gale.	Total loss.
1900.	April 20	North Star	1	American	34	Astoria to Oyster Harbour.	Discevery Is'd., Entrance Channel, B.C.	Incompetency of officers.	Partial loss, 1,500
	Jan. 28	Olive Louise	1	Lunenburg, N.S. Steamer.	85-46	Lunenburg to Halifax, N. S.	Lunenburg Harbour	Casualty caused by compass being out of order.	Total loss 4,500
1899.	Aug. 31	Parisian	18	Glasgow	3,385	Liverpool to Montreal.	Opp. Molson's wharf, Montreal.	Grounded	Trifling accident.
	Aug. 10	Philadelphian	8	Liverpool	3,322	Liverpool to Liverpool.	River St. Lawrence.	Run into SS. <i>Ella Sayer</i> . Claims no lights were shown by SS. <i>Ella Sayer</i>	No serious damage
	June 16	Penelope	17	Victoria, B. C. Steamer.	71	Victoria to Behring Sea	3 miles west of Beachy Head, B.C.	Careless navigation in foggy weather.	Trifling loss

STATEMENT of Wrecks and Casualties reported as having occurred to British, Canadian and Foreign Sea-going Vessels in Canadian Waters, &c.—Continued.

Date of Casualty.	Name of Ship.	Age of Ship.	Port of Registry.	How Rigged. Iron or Wood. Steam or Sail.	Register Tonnage.	Port sailed from. Port bound to	Place where Casualty happened.	Cause and Nature of Casualty.	Lives lost.	Remarks.
1899.		Yrs								
July 23	Phoenix.....	17	Parrsboro, N.S.	Schr., wood, sail.	396	Windsor, N.S., to New York.	Near mouth of River, Am. coast.	Damaged while being towed.	.....	Partial loss, 1,000
Aug. 23	Rossland.....	1	Vancouver, B.C.	Steamer, wood	28	Arrowhead to Robson, B.C.	Narrows betw. Upper & Lower Arrow L, B, C	Caught fire.....	.....	Partial loss, 1,600
.....	Ramillies.....	7	Cardiff.....	Schr., steel,	1,904	Montreal to London..	Two miles above Batis-can.	Collided with SS. <i>Tur-vel Court.</i>	.....	Partial loss.
June 18	Royalist.....	4	London.....	" " steam.	2,024	Shields to Sydney....	Richelieu Rapids, River St. Lawrence.	Something wrong in connection with engine pipes	.....	Trifling loss.
Dec. 8	Roland.....	11	Parrsboro, N.S.	Schr., wood, sail.	93	Parrsboro, N. S., to Boston.	Hog Island to Machias Bay, Me.	Went ashore in a gale....	.....	Partial loss, 550
1900.										
Jan. 8	Robert Ewing...	8	Parrsboro, N.S.	" " "	399	United States to West Indies.	South side of Gulf of Florida.	Foremast broke in the gale.	.....	Partial loss, 25,000
May 13	Roger Drury....	27	Boston, Mass..	" " "	307	Hillsboro, N. B., to Newburg, N. J.	Round Reef to St. John Harbour, N.B.	Chains parted owing to heavy sea.	.....	Partial loss, 250
1899.										
July 26	Satellite.....	7	Charlottetown P.E.I.	" " "	96	Baddeck, N.S., to Philadelphia to Halifax.	Joe Folger Bank, Delaware Bay.	Ran on shoal and sank....	.....	Amount of loss not reported.
Sept. 22	Scotsman.....	4	Liverpool....	F. & A. steel steamer.	120	Liverpool to Quebec...	N. E. end of Belle Isle, N. Atlantic.	Stranded in a fog.....	11	Total loss. Amt. of loss not reported
Nov. 16	Safe Guide.....	37	Halifax, N.S..	Schr., wood, sail.	35	Salmon River or Sheet Harbour.	3 miles off St. Peter's Is. near en. to Ohtwn, Hbr	Sprung a leak and sank...	.....	Total loss, 600
Nov. 12	Susan and Annie	23	Parrsboro, N.S.	" " "	79	Parrsboro to Boston...	Placentia Island, Me.	Ran ashore.....	.....	Total loss, 300
Nov. 21	Sarah.....	.....	St. John, N.B.	" " "	23	Campello, N. B., to St. John, N.B.	Halfway between Red Buoy & Beacon Light St. John Hbr., N.B.	Fault of SS. <i>Montross</i> , 5 strikes on starboard side and lost everything moveable.	.....	Cargo, 150 Partial loss, 400 Cargo, 50
Sept. 21	Swan.....	11	New Westminster, B. C.	Schr., wood, steam.	17	Lying at the city wharf Vancouver.	At wharf, Vancouver..	Sank while lying at the wharf, Vancouver.	Partial loss, 60

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Date	Name	Origin	Destination	Passengers	Tonnage	Material	Particulars	Loss
Oct. 1898.	Stratton.						Steamer sunk in Yukon. Total loss. No particulars	Total loss.
Oct. 1900.	Snowdrift.						Vessel totally wrecked. No further particulars.	Total loss.
Jan. 1899.	St. Maurice.	4 Parrsboro', N.S.	St. John, N.B., to Washington, U.S.	272	Schr., wood, sail.		Captain made mistake in the light and vessel went ashore.	Partial loss, 800 Cargo, 350
Dec. 1900.	Salina.	14 "	Philadelphia to Cienfuegos.	296	Bk., wood, sail		Vessel never heard of after leaving port.	Total loss, 15,000
May 1899.	Sarrantha.	14m Liverpool	Philadelphia, U.S., to Miramichi, N.B.	1,810	Schr., steel, stn			Trifling accident.
Oct. 1899.	Tees	6 Victoria, B.C.	Victoria, B.C., to Skagway.	331	" "		Stranded on reef	Extent of damage not reported.
Aug. 1897.	Two Sisters						Register closed in 1898.	Total loss.
Aug. 1897.	Tyrrell.						Stranded at Five Fingers, B.C.	Partial loss.
Oct. 1897.	Thos. W. Holder.	24 Liverpool, N.S.	Liverpool, N.S., to New Haven, N.S.	199	Schr., wood, sail.		No particulars could be obtained of this stranding further than that this vessel sustained serious damage.	Total loss, 4,000 Cargo, 6,000
Nov. 1897.	Tacoma.	9 Parrsboro', N.S.	Cuba to New York.	210	" "		Wrecked in a hurricane.	Total loss, 7,000
Nov. 1900.	Trial.							"
June 1899.	Trial.	4 New Westminster, B.C.	Halifax, N.S., to Cape Negro, N.S.	22	Wood, steam.		Parted chains and went ashore in a gale and became a total loss.	"
Oct. 1898.	Uncle John.	18 American.	Eureka, Cal., to Puget Sound.	273	Bk., wood, sail		Stranded running too close to shore.	" 20,000
Nov. 1898.	"	1 St. Andrews, N.B.	Grand Manan.	11-25	Sloop, wood, sail.		Vessel went to sea in a gale and was lost.	" 400

STATEMENT of Wrecks and Casualties reported as having occurred to British, Canadian and Foreign Sea-going Vessels in Canadian Waters, &c.—*Concluded.*

Date of Casualty.	Name of Ship.	Age of Ship.	Port of Registry.	How Rigged. — Iron or Wood. — Steam or Sail.	Register Tonnage.	Port sailed from. — Port bound to.	Place where Casualty happened.	Cause and Nature of Casualty.	Lives lost.	Remarks.
1998.		Yrs								\$
Sept. 29 1899.	Venezuela	10	Lunenburg, N.S.	Schr., wood.	94	Lunenburg, N.S., to Liverpool, N.S.	Fisherman's Cape, N.S.	Casualty caused by thick fog.	.....	Total loss.
Nov. 17	Vere B. Roberts.	1	Parrsboro', NS	Schr., wood, sail.	124	Joggins, N.S., to Yarmouth, N.S.	Inharbour at Westport, Brier Island, N.S.	Vessel was run into by the Government steamer <i>Lansdowne</i>.	.....	Partial loss, 103
April — 1900.	Walter Summer..	8	Moncton, N.B.	" ..	147	.....	Coast Honduras, C.A., April 9, 1899.	No particulars further than that she was wrecked could be obtainable.	.....	Total loss.
Feb. 10 1899.	Walter L. Rich..	13	Victoria, B.C.	" ..	86	Victoria, B.C., to Village Islands, B.C.	Village Bay, Village Island, B.C.	Vessel drifted on end of reef in a wind storm.	.....	Partial loss, 1,000
.....	Wasp .....	.....	Gaspé	" ..	30.65	Pence to Gaspé	St. Lawrence River....	Driven ashore by wind.	.....	Total loss.
Nov. 11 1900.	Yukon	New	Parrsboro', NS	" ..	79	Spencer's Island, N.S., to St. John, N.B.	Twelve miles west of Digby Gut, Bay of Fundy.	Lost, sails in a storm, drifted to leeward and went ashore.	.....	" 2,000
March 7	Yosemite	38	Victoria, B.C.	Wood, steam..	1,525	Victoria to Vancouver.	Haro Strait, British Columbia.	Stranded	Partial loss 200

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STATEMENT of Wrecks and Casualties reported as having occurred to Canadian Inland Vessels and to other Vessels in the Inland Waters of Canada, during the twelve months ended June 30, 1900.

Date of Casualty.	Name of Ship.	Age of Ship.	Port of Registry.	How Rigged. Iron or Wood, Steam or Sail.	Register Tonnage.	Port sailed from. Port bound to.	Place where Casualty happened.	Cause and Nature of Casualty.	Lives lost.	Remarks.
1899.										\$
Sept. 12	Albacore.	23	Bowmanville, Ont.	Schr., wood, sail.	327	Hamilton to Oswego, N.Y.	Oswego, N.Y.	Damaged in a gale.	.....	Partial loss.
Oct. 15	Brick.	.....	.....	.....	.....	.....	Flower Pot Island, Georgian Bay.	Strong wind drove vessel ashore.	.....	Total loss.
.....	Comfort	4	Chatham, Ont.	Wood, steam.	13	Marine City to Sombra	St. Clair River, Sombra Dock.	Damaged by fire.	.....	Partial loss, 500
Oct. 9	City of Parry Sound.	11	Collingwood, Ont.	Wood, steam.	334	Collingwood to Owen Sound.	Town Dock, Collingwood.	Destroyed by fire.	.....	Total loss, 15,000
1899.										
Aug. —	Delight.	10	Sault Ste. Marie, Ont.	Tug, wood, steam.	13-77	.....	Burnt Dock, Richards Landing, Ont.	Fire.	.....	"
.....	E. Windsor.	.....	Wallaceburg, Ont.	Steamer.	58	Wallaceburg, Ont., to Chatham, Ont.	River St. Clair	Broke in two.	.....	"
Nov. —	Frank Reed	13	Owen Sound, Ont.	.....	.....	.....	Barrie Island, Georgian Bay, Ont.	Wrecked.	.....	"
Sept. 3	Lisgar.	.....	St. Catharines, Ont.	Schr., wood, sail.	323	Sarnia to Depot Harbour, Ont.	Lake Huron.	Became a total loss in a gale.	5	4,000
Dec. 5	Niagara.	.....	St. Catharines, Ont.	Schr., wood, steam.	12	Parry Sound to Buffalo	East of Long Point, Lake Erie.	Wrecked in bad weather.	12	"
Nov. —	P. M. Campbell	10	Collingwood, Ont.	Screw, wood, steam.	33	Little Current	Manitoulin.	Fire.	.....	"
" —	Persia	.....	St. Catharines, Ont.	.....	.....	.....	At Wharf, Toronto.	Damaged by fire.	.....	Partial loss.
1900.										
Jan. —	Rimouski.	16	Ottawa, Ont.	Schr., wood, steam.	85	Canso to Halifax.	Green Island Ledges, Lunenburg, N.S.	Wrecked in rough weather.	.....	Total loss, 9,000
Sept. 20	St. Andrew.	15	Owen Sound, Ont.	Screw steamer	722-25	.....	Lake Superior, Ont.	.....	.....	"
" —	T. R. Merritt.	26	Hamilton, Ont.	Schr., wood, sail.	327-77	Hamilton, Ont., to Oswego, N.Y.	Eight miles west of Oswego, N.Y.	Wrecked in a storm.	.....	" 5,000

APPENDIX No. 49

REPORT OF THE MONTREAL HARBOUR COMMISSIONERS FOR THE YEAR ENDED DECEMBER 31, 1900.

(This report not complete; have received as yet only portion relating to Harbour Master's Office.)

REPORT OF THE HARBOUR MASTER OF THE PORT OF MONTREAL, FOR THE YEAR 1900.

HARBOUR MASTER'S OFFICE,
MONTREAL, February 9, 1901.

DAVID SEATH, Esq.,
Secretary Harbour Commissioners,
Montreal.

SIR,—I beg to submit for the information of the Harbour Commissioners of Montreal, the following as my annual report for the year ending December 31, 1900. Appended thereto will be found six comparative statements showing respectively for the past ten years:—

1. The number, tonnage, and classification, of sea-going vessels that arrived in port.
2. Those that arrived from the Maritime Provinces.
3. Number, and tonnage, of inland vessels.
4. The dates of the opening, and closing, of navigation, etc.
5. The number, and tonnage, belonging to the different nationalities.
6. The number, and tonnage, of vessels consigned to the different agents.

From these statements it will be seen that 726 sea-going vessels arrived in port during the past season, with a tonnage of 1,393,886 tons, a decrease of 75 vessels and 123,725 tons, from the previous years.

Of these vessels 679 were built of iron and steel, with a tonnage of 1,380,648, and forty-seven were built of wood, with a tonnage of 13,238.

Of inland vessels, there arrived 8,347, with a tonnage of 1,669,494 tons, a decrease of 530 vessels and 229,603 tons; making a grand total of vessels of all classes of 9,073 vessels and a tonnage of 3,063,380 tons, a decrease of 605 vessels of all classes, and 353,328 tons, from the previous year.

Some of the principal items of exports and imports (as obtained from the best sources of information) were:—

EXPORTS.

LUMBER—To the United Kingdom and continental ports:

1899.	1900.
288,862,521 feet.	239,222,380 feet, a decrease of 49,640,141 feet.

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LUMBER—To the River Plate :

1899. 1900.
1,201,266 feet. 463,765 feet, a decrease of 737,501 feet.

	1899.	1900.	
GRAIN—Wheat,	9,852,131 bushels.	10,596,361 bushels.	
Corn,	13,274,750 "	11,180,235 "	
Peas,	1,252,549 "	1,663,697 "	
Oats,	3,926,564 "	5,026,404 "	
Barley,	1,081,147 "	1,023,655 "	
Rye,	366,061 "	510,155 "	
Flaxseed,	609,350 "	125,892 "	
Buckwheat,	179,195 "	306,171 "	
Total,	30,541,747 "	30,432,570 "	

Showing a decrease of 109,177 bushels.

	1899.	1900.		
Flour	1,320,372 barrels.	1,260,441	decrease . . .	59,931 barrels
Meal	40,554 "	53,611	increase . . .	13,057 "
Eggs	117,643 cases.	251,113	"	133,470 cases.
Cheese	1,816,985 boxes.	2,335,601	"	518,616 boxes.
Butter	462,115 pkgs.	261,768	decrease . . .	200,347 pkgs.
Apples	286,473 barrels.	268,068	"	18,405 barrels.
Cattle	81,804 head.	92,180	increase . . .	10,376 head.
Sheep	58,277 "	34,838	decrease . . .	23,439 "
Horses	4,739 "	6,584	increase . . .	1,845 "
Hay	12,000 tons.	14,519	"	2,519 tons.

IMPORTS.

	1899.	1900.		
Coal from Great Britain . .	20,650 tons.	11,233	decrease . .	9,417 tons.
" United States . .	259,492 "	312,085	increase . .	52,593 "
" Maritime Prov. . .	965,014 "	743,528	decrease . .	221,486 "
Total	1,245,156 "	1,066,864	decrease	178,310 "

Of the above quantities there were discharged :

	1899.	1900.		
In the harbour	1,023,539 tons.	975,833		
In the canal	221,617 "	91,013		
Cement	200,368 barrels.	281,337	increase . . .	80,969 barrels
Scrap iron	11,886 tons.	6,556	decrease . . .	5,330 tons.

NOTES.

There arrived in the harbour, belonging to the British North Atlantic fleet namely, H.M.S. *Tribune*, on July 3, and left again on July 9.
There is a decrease in the number and the tonnage of the vessels arriving during the season, but this is accounted for by the fact that many of the regular line steamers were employed during the season as transports to South Africa and to China, which had they made their regular trips to Montreal, would have given a substantial increase in tonnage over last year.

Owing to the large harbour improvements now being carried out some of the lines had to give up part of the space assigned to them last spring, but provision was made for them elsewhere and on the whole I think very little inconvenience was felt. The whole respectfully submitted.

JAMES McSHANE,
Harbour Master.

PORT OF MONTREAL.

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

Years.	Steamships. Tonnage.	Ships. Tonnage.	Barques. Tonnage.	Brigs. Tonnage.	Brigantines. Tonnage.	Schooners. Tonnage.	Total Number of Vessels.	Total Tonnage.	Number in Port.
1891.....	631 903,043	11 16,113	15 11,054	1 149	9 2,127	58 6,171	725	938,657	46, Aug. 19
1892.....	658 1,004,396	8 11,705	21 15,405	1 149	4 809	43 4,243	735	1,036,707	39, July 12
1893.....	737 1,128,658	3 4,014	11 8,893	.....	5 1,856	48 8,356	804	1,151,777	42, " 19
1894.....	684 1,079,313	3 4,324	14 9,609	.....	5 901	28 2,762	734	1,096,909	22, May 23
1895.....	592 1,055,611	1 1,545	9 7,714	.....	7 1,689	31 2,827	640	1,069,386	25, June 18
1896.....	669 1,200,543	5 7,350	6 4,003	.....	9 2,052	20 2,520	709	1,216,468	37, July 29
1897.....	752 1,368,395	.....	8 3,958	.....	7 1,745	29 4,904	796	1,379,002	40, " 28
1898.....	830 1,567,436	2 3,023	12 10,031	.....	5 1,478	19 2,104	868	1,584,072	42, Aug. 1
1899.....	773 1,509,668	.....	7 3,530	.....	3 1,048	18 3,365	801	1,517,611	39, July 29
1900.....	692 1,382,675	.....	2 891	.....	4 875	28 9,445	726	1,393,886	27, June 28

J. McSHANE,
Harbour Master.

PORT OF MONTREAL.

COMPARATIVE STATEMENT showing the Number, Tonnage and Classification of Sea-going Vessels that arrived in Port from the Maritime Provinces the past ten years.

Years.	Steamships. Tonnage.	Ships. Tonnage.	Barques. Tonnage.	Brigs. Tonnage.	Brigantines. Tonnage.	Schooners. Tonnage.	Total Number of Vessels.	Total Tonnage.
1891.....	272 260,702	.....	2 1,462	.....	2 520	29 3,067	305	266,751
1892.....	289 275,040	.....	3 2,215	1 149	2 340	36 2,214	331	280,958
1893.....	333 324,188	.....	.....	1 169	.....	34 2,577	368	326,934
1894.....	349 362,945	.....	3 2,323	.....	4 609	23 2,230	379	362,107
1895.....	256 296,256	.....	.....	.....	5 1,070	30 2,734	291	300,060
1896.....	252 292,880	.....	1 178	.....	4 734	15 1,188	272	294,981
1897.....	298 364,936	.....	.....	.....	2 376	31 1,051	311	366,363
1898.....	327 372,274	.....	.....	.....	.....	14 1,397	341	373,671
1899.....	336 415,825	.....	.....	.....	.....	7 646	343	416,471
1900.....	279 352,002	.....	.....	.....	1 169	15 2,564	295	354,735

J. McSHANE,
Harbour Master.

SESSIONAL PAPER No. 23

PORT OF MONTREAL.

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

Years.	Number of Vessels.	Tonnage.	Greatest Number in Port at one time.
1891.....	5,268	1,119,484	151, Sept. 7
1892.....	5,200	1,049,600	159, Aug. 6
1893.....	5,244	1,153,600	158, July 25
1894.....	4,666	979,809	172, May 20
1895.....	4,498	943,717	165, July 20
1896.....	4,832	1,004,117	160, June 11
1897.....	6,384	1,134,346	200, July 30
1898.....	6,941	1,807,892	216, Aug. 12
1899.....	8,877	1,899,097	219, July 28
1900.....	8,347	1,669,494	195, June 25

J. McSHANE,
Harbour Master.

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, the past ten years.

Years.	Opening of Navigation.	Closing of Navigation.	First Arrival from Sea.	Last Departure for Sea.
1891.....	April 17 ...	Dec. 17....	April 27....	Nov. 21
1892.....	" 13....	" 23....	" 23....	" 27
1893.....	" 24....	" 4....	May 3....	" 23
1894.....	" 12....	" 26....	April 27....	" 24
1895.....	" 20....	" 6....	" 27....	" 25
1896.....	" 22....	" 19....	" 28....	" 23
1897.....	" 17....	" 19....	" 30....	" 24
1898.....	Mar. 31....	" 12....	" 26....	" 28
1899.....	April 24....	" 30....	" 27....	" 29
1900.....	" 21....	" 10....	" 26....	Dec. 3

J. McSHANE,
Harbour Master.

PORT OF MONTREAL.

STATEMENT showing the Nationality and Tonnage of Sea-going Vessels that arrived in Port during the Season of 1900, and were navigated by 28,085 seamen.

Nationality.	Number of Vessels.	Tonnage.
British.....	566	1,173,729
Norwegian.....	110	169,014
German.....	11	22,559
American.....	33	17,902
French.....	3	5,275
Swedish.....	2	3,248
Italian.....	1	2,159

J. McSHANE,
Harbour Master.

PORT OF MONTREAL.

NUMBER and Tonnage of Sea-going Vessels consigned to the following Merchants during the Season of 1900.

No.	Name of Firms.	Steam.	Tonnage.	Sail.	Tonnage.	Total Vessels.	Total Tonnage.
1	Kingman & Co.....	180	259,591			180	259,591
2	Elder, Dempster & Co.....	82	228,682			82	228,682
3	H. & A. Allan.....	70	210,729			70	210,729
4	The R. Redford Co., Ltd.....	92	199,270	1	307	93	199,577
5	Furness, Withy & Co., Ltd.....	49	137,676	1	400	50	138,076
6	McLean, Kennedy & Co.....	42	96,537			42	96,547
7	D. Torrance & Co.....	27	93,336			27	93,336
8	F. Leyland & Co., Ltd.....	15	30,430			15	30,430
9	Carbray, Routh & Co.....	23	24,779			23	24,779
10	Hy. Dobell & Co.....	25	19,404			25	19,404
11	J. G. Brock & Co.....	16	18,464	5	355	21	18,819
12	Masters.....	23	13,031	11	5,686	34	18,717
13	Petersen, Tate & Co.....	12	12,699			12	12,699
14	A. Poindron.....	6	9,709			6	9,709
15	The Intercolonial Coal Co.....	9	7,803			9	7,803
16	J. Major & Son.....	4	4,915			4	4,915
17	McArthur Bros.....	2	4,296			2	4,296
18	Seven others.....	15	11,324	16	4,463	31	15,787
	Total.....	692	1,382,975	34	11,211	726	1,393,886

J. McSHANE,
Harbour Master.

SESSIONAL PAPER No. 23

WEATHER REPORT FOR 1900.

Date.	Wind (at 8 to 9 a.m.)	(Temperature at 8 to 9 a.m.)	Remarks.
Jan. 1.	North	Zero	Snowing.
" 2.	North-east	10 above	Fine day.
" 3.	West	Zero	"
" 4.	East	18 above	Snowing.
" 5.	South-East	36 "	Dull day.
" 6.	West	24 "	Fine day.
" 7.	North	32 "	Rainy day.
" 8.	East	17 "	Fine day.
" 9.	"	22 "	Dull day.
" 10.	West	39 "	Fine day.
" 11.	"	4 below	"
" 12.	North	20 "	"
" 13.	South-east	12 above	"
" 14.	North-east	20 "	" Crossing at Longueuil in vehicles.
" 15.	West	30 "	Dull day.
" 16.	"	28 "	Fine day.
" 17.	North-east	6 below	"
" 18.	West	28 above	Sleet and rain.
" 19.	North-east	40 "	Dull day.
" 20.	West	39 "	Raining.
" 21.	North-west	Zero	Fine day.
" 22.	East	38 above	"
" 23.	West	41 "	Dull day.
" 24.	South-east	2 below	Fine day.
" 25.	West	35 above	"
" 26.	East	8 "	Snowing.
" 27.	North-east	2 "	Windy day.
" 28.	West	28 "	Fine day.
" 29.	"	18 "	"
" 30.	North-west	24 "	"
" 31.	East	20 "	"
Feb. 1.	North-west	6 below	"
" 2.	South-west	Zero	"
" 3.	West	14 above	"
" 4.	North-west	20 "	Snowing.
" 5.	East	26 "	Fine day.
" 6.	West	20 "	Snow storm.
" 7.	"	10 "	Fine day.
" 8.	East	30 "	Rain.
" 9.	West	36 "	Dull day.
" 10.	East	24 "	Fine day.
" 11.	North-east	25 "	"
" 12.	South-west	36 "	"
" 13.	South	42 "	Heavy rain.
" 14.	North-east	22 "	Strong wind. Ice shoved front of city.
" 15.	West	23 "	Dull day.
" 16.	East	18 "	Fine day.
" 17.	West	16 "	"
" 18.	East	26 "	"
" 19.	North-east	22 "	Snowing.
" 20.	West	22 "	Fine day.
" 21.	"	26 "	"
" 22.	North-east	27 "	Snowing.
" 23.	East	23 "	Dull day.
" 24.	South	36 "	Snowing.
" 25.	South-west	10 "	"
" 26.	North	12 below	Stormy day.
" 27.	North-east	10 "	Fine day.
" 28.	South	18 "	"
Mar. 1.	North-east	18 above	Heavy snow storm.
" 2.	North	28 "	Stormy day, snowing.
" 3.	North-east	20 "	Fine day.
" 4.	West	10 "	"
" 5.	South-west	Zero	"
" 6.	East	10 above	Snowing.
" 7.	North-east	20 "	Windy day.
" 8.	South-east	22 "	Fine day.
" 9.	South	38 "	"
" 10.	"	28 "	Dull day.
" 11.	East	15 "	Fine day.

WEATHER REPORT FOR 1900—Continued.

Date.	Wind (at 8 to 9 a.m.)	Temperature (at 8 to 9 a.m.)	Remarks.
Mar. 12..	West.....	8 above.....	Fine day.
" 13..	North-west.....	Zero.....	Dull day.
" 14..	North.....	26 above.....	"
" 15..	North-east.....	6 ".....	"
" 16..	East.....	20 ".....	Stormy day.
" 17..	South-East.....	20 ".....	Fine day.
" 18..	West.....	27 ".....	"
" 19..	South-east.....	28 ".....	Dull day.
" 20..	West.....	38 ".....	Fine day.
" 21..	North-east.....	35 ".....	"
" 22..	West.....	34 ".....	Dull day.
" 23..	".....	38 ".....	Fine day.
" 24..	".....	10 ".....	"
" 25..	North-east.....	20 ".....	"
" 26..	South.....	32 ".....	"
" 27..	West.....	38 ".....	"
" 28..	".....	40 ".....	"
" 29..	East.....	39 ".....	"
" 30..	West.....	36 ".....	"
" 31..	".....	30 ".....	"
April 1..	North-east.....	37 ".....	"
" 2..	South-west.....	40 ".....	"
" 3..	South-east.....	42 ".....	Dull day. Last crossing for teams.
" 4..	West.....	40 ".....	Dull day.
" 5..	".....	42 ".....	Fine day.
" 6..	".....	48 ".....	"
" 7..	East.....	42 ".....	"
" 8..	West.....	40 ".....	"
" 9..	North-west.....	32 ".....	"
" 10..	North-east.....	36 ".....	"
" 11..	South-east.....	42 ".....	"
" 12..	North-east.....	39 ".....	Dull day. Ice shoved in front of office at 10.30 a.m. Moved fleet 200 feet out of position.
" 13..	".....	35 ".....	Rainy day.
" 14..	South-west.....	40 ".....	Dull day.
" 15..	West.....	40 ".....	Fine day.
" 16..	".....	42 ".....	"
" 17..	South-west.....	42 ".....	"
" 18..	West.....	62 ".....	" Opening ramps.
" 19..	".....	55 ".....	Dull day.
" 20..	".....	58 ".....	Fine day.
" 21..	South-east.....	63 ".....	" <i>Hochclaga</i> and <i>Cultivateur</i> arrived from winter quarters, opening navigation.
" 22..	North-east.....	51 ".....	Cloudy day.
" 23..	North.....	56 ".....	Rainy day.
" 24..	North-east.....	46 ".....	Fine day.
" 25..	".....	48 ".....	"
" 26..	".....	52 ".....	"
" 27..	".....	42 ".....	Cloudy day.
" 28..	East.....	48 ".....	Fine day.
" 29..	West.....	60 ".....	"
" 30..	North-west.....	62 ".....	"
May 1..	North.....	44 above.....	Dull day.
" 2..	West.....	54 ".....	Fine day.
" 3..	".....	60 ".....	Overcast.
" 4..	North-east.....	45 ".....	Fine day.
" 5..	North-west.....	50 ".....	"
" 6..	East.....	43 ".....	"
" 7..	".....	41 ".....	"
" 8..	South-west.....	46 ".....	Rainy day.
" 9..	East.....	42 ".....	Dull day.
" 10..	North-east.....	36 ".....	"
" 11..	West.....	44 ".....	Fine day.
" 12..	".....	48 ".....	"
" 13..	North-east.....	52 ".....	"
" 14..	West.....	57 ".....	"
" 15..	North-west.....	70 ".....	Overcast.
" 16..	East.....	52 ".....	Fine day.
" 17..	".....	46 ".....	Rainy day.

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WEATHER REPORT FOR 1900—Continued.

Date.	Wind (at 8 to 9 a. m.)	Temperature (at 8 to 9 a. m.)	Remarks.
May 18.	North east.....	46 above.....	Rainy day.
" 19.	East.....	53 ".....	Fine day.
" 20.	North.....	53 ".....	"
" 21.	North-west.....	50 ".....	Rainy day.
" 22.	North-west.....	59 ".....	Fine day.
" 23.	South-west.....	59 ".....	"
" 24.	West.....	61 ".....	"
" 25.	South-west.....	64 ".....	"
" 26.	West.....	69 ".....	"
" 27.	".....	68 ".....	"
" 28.	East.....	58 ".....	Overcast.
" 29.	South-west.....	63 ".....	Fine day.
" 30.	West.....	70 ".....	"
" 31.	North-west.....	72 ".....	"
June 1.	East.....	69 ".....	"
" 2.	".....	59 ".....	Rainy day.
" 3.	North-east.....	64 ".....	Fine day.
" 4.	West.....	68 ".....	"
" 5.	North-east.....	70 ".....	"
" 6.	South-west.....	74 ".....	"
" 7.	".....	74 ".....	"
" 8.	West.....	70 ".....	Dull day.
" 9.	East.....	72 ".....	Overcast.
" 10.	West.....	74 ".....	Fine day.
" 11.	North.....	70 ".....	Rainy day.
" 12.	South-west.....	62 ".....	Fine day.
" 13.	South-west.....	70 ".....	"
" 14.	West.....	60 ".....	Rainy day.
" 15.	East.....	69 ".....	Fine day.
" 16.	North.....	70 ".....	"
" 17.	West.....	69 ".....	"
" 18.	North-east.....	67 ".....	"
" 19.	South-west.....	71 ".....	"
" 20.	West.....	76 ".....	"
" 21.	North-east.....	74 ".....	"
" 22.	East.....	62 ".....	Overcast.
" 23.	North-east.....	64 ".....	Fine day.
" 24.	East.....	62 ".....	"
" 25.	".....	68 ".....	"
" 26.	West.....	73 ".....	"
" 27.	North-east.....	70 ".....	"
" 28.	North-east.....	76 ".....	Overcast.
" 29.	West.....	62 ".....	Dull day.
" 30.	North.....	58 ".....	Rainy day.
July 1.	West.....	56 ".....	Windy day.
" 2.	West.....	58 ".....	Fine day.
" 3.	South.....	68 ".....	Rainy day.
" 4.	North-east.....	74 ".....	"
" 5.	South west.....	70 ".....	Dull day.
" 6.	West.....	66 ".....	Rainy day.
" 7.	North-west.....	76 ".....	Fine day.
" 8.	North.....	64 ".....	Rainy day.
" 9.	North.....	66 ".....	"
" 10.	West.....	70 ".....	Fine day.
" 11.	South-east.....	64 ".....	Rainy day.
" 12.	North.....	61 ".....	Cloudy day.
" 13.	South-west.....	70 ".....	Dull day.
" 14.	East.....	78 ".....	Fine day.
" 15.	".....	82 ".....	"
" 16.	West.....	76 ".....	Rainy day.
" 17.	North-east.....	69 ".....	"
" 18.	West.....	76 ".....	Fine day.
" 19.	North.....	76 ".....	"
" 20.	West.....	72 ".....	Cloudy day.
" 21.	North-west.....	80 ".....	Fine day.
" 22.	West.....	86 ".....	"
" 23.	North-west.....	78 ".....	"
" 24.	".....	78 ".....	Cloudy day.
" 25.	West.....	68 ".....	Rainy day.
" 26.	East.....	68 ".....	Fine day.
" 27.	North-east.....	70 ".....	"

WEATHER REPORT FOR 1900—Continued.

Date.	Wind (at 8 to 9 a. m.)	Temperature (at 8 to 9 a. m.)	Remarks.
July 28.	North-east.	75 above	Fine day.
" 29.	South.	84	"
" 30.	North-west.	74	Rainy day.
" 31.	"	76	Cloudy day.
Aug. 1.	West.	74	Fine day.
" 2.	North.	76	Dull day.
" 3.	North-east.	60	"
" 4.	North.	73	Fine day.
" 5.	North-west.	70	"
" 6.	West.	66	Overcast.
" 7.	South-west.	71	Rainy day.
" 8.	West.	70	Cloudy day.
" 9.	North-west.	68	Fine day.
" 10.	West.	72	Rainy day.
" 11.	North-east.	76	Fine day.
" 12.	North.	74	"
" 13.	South-east.	83	"
" 14.	North-east.	77	Cloudy day.
" 15.	North-west.	69	Fine day.
" 16.	South-west.	64	"
" 17.	East.	72	"
" 18.	North-west.	70	"
" 19.	East.	70	"
" 20.	"	65	"
" 21.	"	62	"
" 22.	North-east.	71	"
" 23.	South.	69	"
" 24.	South-west.	76	"
" 25.	South-east.	76	"
" 26.	South-west.	92	"
" 27.	North-east.	80	"
" 28.	"	72	"
" 29.	South-west.	76	"
" 30.	East.	70	"
" 31.	"	66	"
Sept. 1.	South-west.	74	"
" 2.	West.	82	"
" 3.	South-west.	82	"
" 4.	East.	73	"
" 5.	West.	74	"
" 6.	"	76	"
" 7.	East.	56	"
" 8.	West.	64	"
" 9.	East.	60	"
" 10.	North-west.	58	"
" 11.	South-west.	54	Rainy day.
" 12.	North-west.	68	"
" 13.	North-east.	58	Dull day.
" 14.	East.	64	Fine day.
" 15.	West.	54	"
" 16.	"	60	Rainy day.
" 17.	North-west.	64	Dull day.
" 18.	North-east.	54	Fine day.
" 19.	South-west.	52	"
" 20.	West.	56	Rainy day.
" 21.	"	66	"
" 22.	"	58	"
" 23.	"	60	Fine day.
" 24.	South-west.	64	"
" 25.	East.	58	"
" 26.	West.	66	"
" 27.	East.	65	"
" 28.	"	52	"
" 29.	West.	60	"
" 30.	South-east.	58	"
Oct. 1.	West.	56	"
" 2.	East.	60	"
" 3.	West.	64	Dull day.
" 4.	"	74	Fine day.
" 5.	"	70	"
" 6.	East.	54	Dull day.

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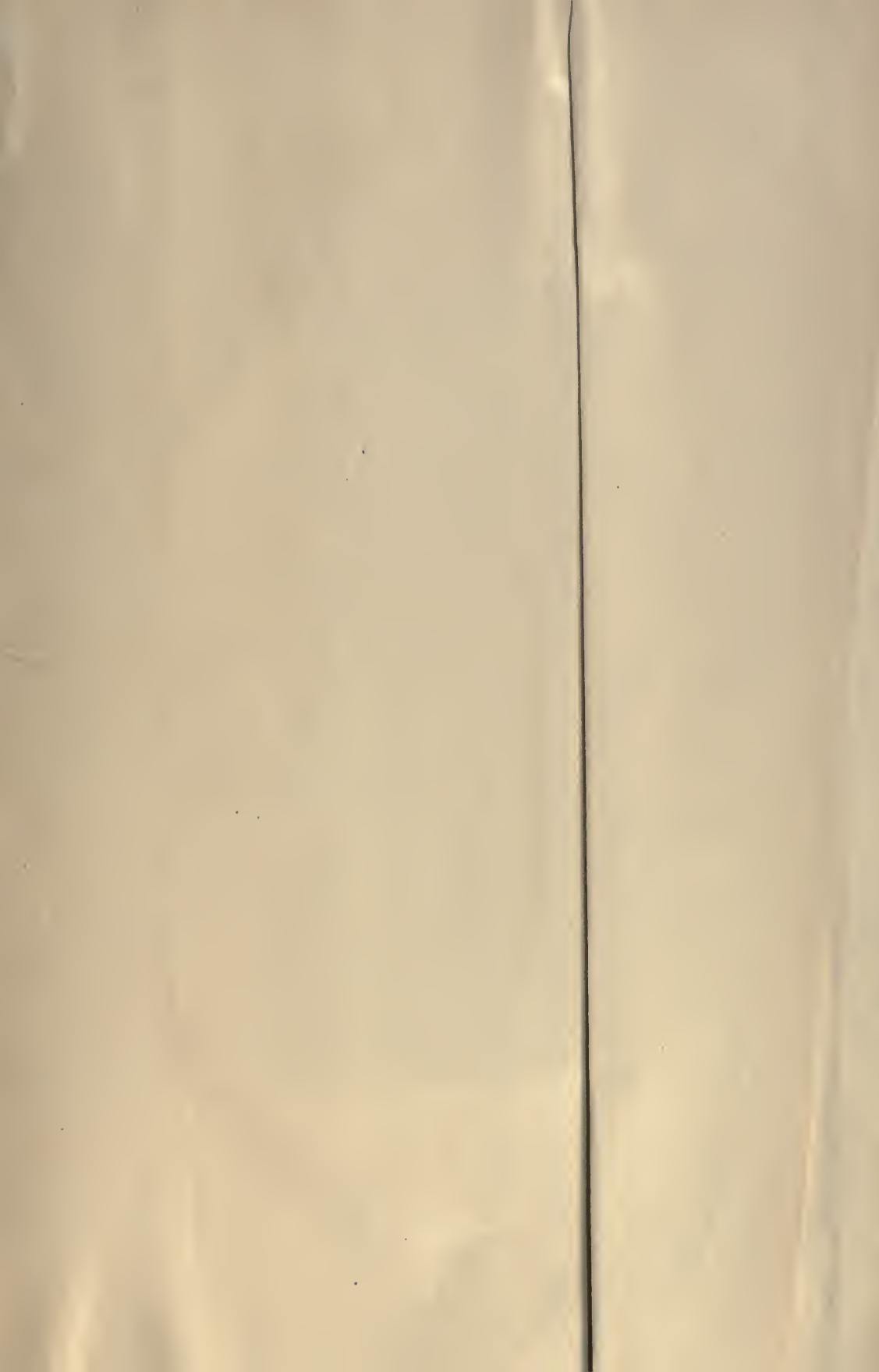
WEATHER REPORT FOR 1900—Continued.

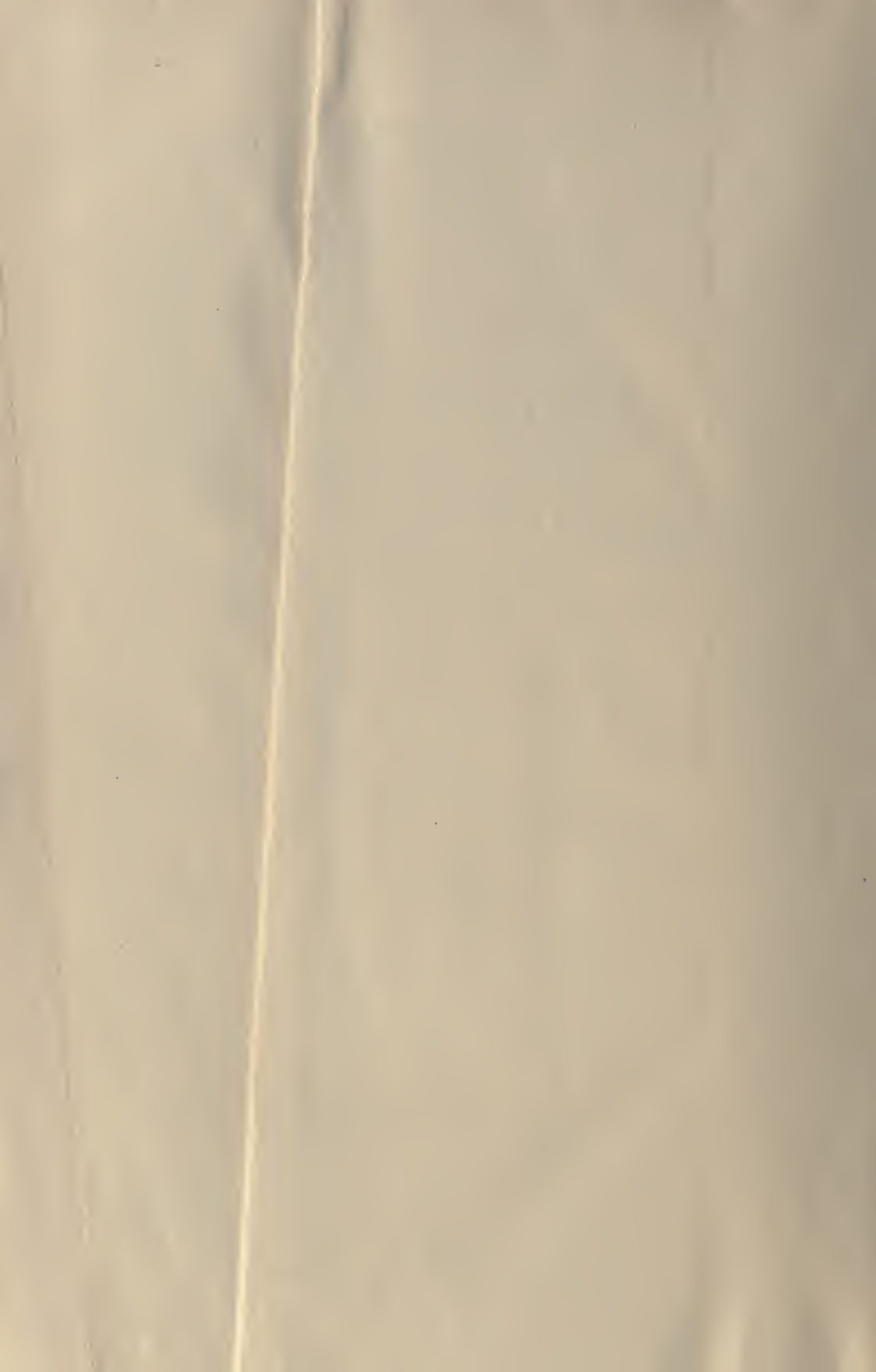
Date.	Wind (at at 8 to 9 a.m.)	Temperature (at 8 to 9 a.m.)	Remarks.
Oct. 7.	South-east.....	60 above.....	Fine day.
" 8.	North-west.....	58 ".....	Rainy day.
" 9.	East.....	48 ".....	Dull day.
" 10.	North-east.....	48 ".....	Fine day.
" 11.	East.....	58 ".....	"
" 12.	North-east.....	63 ".....	"
" 13.	West.....	60 ".....	"
" 14.	".....	59 ".....	"
" 15.	East.....	62 ".....	"
" 16.	North-west.....	62 ".....	Dull day.
" 17.	North.....	40 ".....	Fine day.
" 18.	West.....	44 ".....	"
" 19.	East.....	36 ".....	"
" 20.	South-east.....	42 ".....	"
" 21.	South.....	54 ".....	"
" 22.	North-west.....	68 ".....	"
" 23.	West.....	68 ".....	"
" 24.	North-east.....	66 ".....	"
" 25.	East.....	58 ".....	"
" 26.	South-west.....	60 ".....	"
" 27.	East.....	57 ".....	"
" 28.	".....	58 ".....	Dull day.
" 29.	South-west.....	54 ".....	"
" 30.	North-east.....	46 ".....	Fine day.
" 31.	West.....	50 ".....	"
Nov. 1.	West.....	55 ".....	"
" 2.	South-west.....	56 ".....	"
" 3.	North-east.....	44 ".....	"
" 4.	West.....	54 ".....	"
" 5.	North-east.....	46 ".....	Rainy day.
" 6.	East.....	42 ".....	Fine day.
" 7.	West.....	44 ".....	Rainy day.
" 8.	North-east.....	46 ".....	"
" 9.	East.....	42 ".....	First snow of season.
" 10.	North-east.....	36 ".....	Fine day.
" 11.	".....	30 ".....	"
" 12.	West.....	40 ".....	Dull day.
" 13.	".....	30 ".....	Fine day.
" 14.	North-east.....	22 ".....	"
" 15.	North.....	30 ".....	"
" 16.	North-east.....	22 ".....	"
" 17.	South-west.....	26 ".....	"
" 18.	".....	42 ".....	Heavy rain.
" 19.	East.....	26 ".....	Fine day.
" 20.	West.....	40 ".....	Rainy day.
" 21.	".....	54 ".....	Heavy fog.
" 22.	North-west.....	36 ".....	Fine day.
" 23.	North-east.....	38 ".....	"
" 24.	East.....	28 ".....	"
" 25.	North-east.....	29 ".....	Heavy snow storm.
" 26.	".....	31 ".....	Snowing.
" 27.	".....	35 ".....	"
" 28.	".....	18 ".....	"
" 29.	East.....	24 ".....	"
" 30.	South-west.....	30 ".....	Dull day.
Dec. 1.	West.....	36 ".....	Snowing.
" 2.	".....	40 ".....	Dull day.
" 3.	South-west.....	36 ".....	Snowing.
" 4.	East.....	35 ".....	Dull day.
" 5.	".....	24 ".....	Snowing.
" 6.	South.....	28 ".....	Fine day.
" 7.	South-west.....	22 ".....	"
" 8.	South-east.....	24 ".....	"
" 9.	West.....	20 ".....	"
" 10.	South-west.....	8 below.....	Close of navigation, <i>Longueuil</i> left for winter quarters.
" 11.	East.....	9 above.....	Snowing.
" 12.	North.....	Zero.....	Fine day.
" 13.	East.....	4 above.....	Snowing.
" 14.	North-west.....	Zero.....	Fine day.
" 15.	South.....	15 above.....	"

WEATHER REPORT FOR 1900—*Concluded.*

Date.	(Wind (at 8 to 9 a.m.))	Temperature (at 8 to 9 a.m.)	Remarks.
Dec. 16..	North-east	10 above	Fine day.
" 17..	West	10 "	Snowing.
" 18..	East	8 "	Cloudy day.
" 19..	South-west	27 "	Snowing.
" 20..	North	32 "	Cloudy day.
" 21..	West	20 "	Fine day.
" 22..	South	14 "	"
" 23..	West	37 "	"
" 24..	South-east	40 "	Dull day.
" 25..	West	32 "	Fine day.
" 26..	North-east	24 "	Snowing.
" 27..	North	11 "	Fine day.
" 28..	North-east	34 "	Snowing.
" 29..	West	30 "	"
" 30..	South	33 "	Fine day.
" 31..	South-east	37 "	Dull day.

J. McSHANE,
Harbour Master.









Handwritten text, possibly a signature or date, located on the right side of the page. The text is faint and difficult to read.

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Canada. Parliament
Sessional papers. Vol. 35⁹, 1901.

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