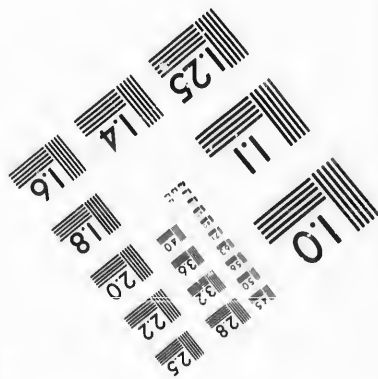


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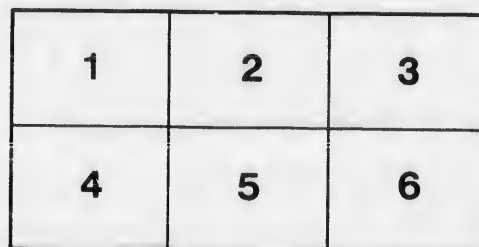
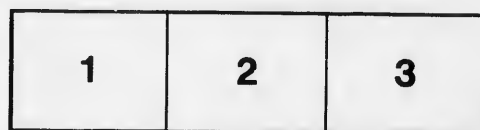
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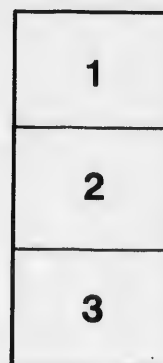
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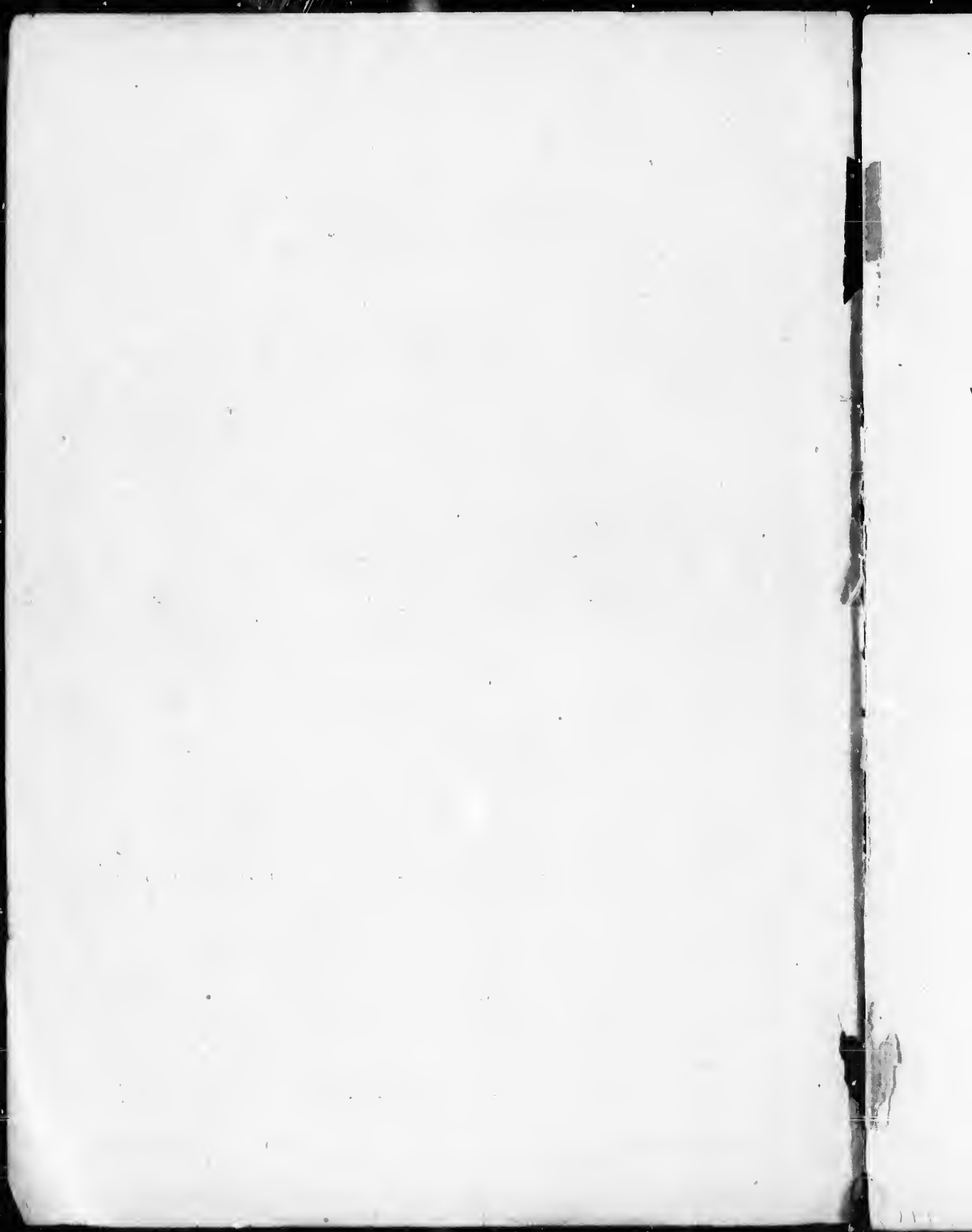


REPORT
OF COMMITTEE OF THE
St. John Board of Trade
ON
PILOTAGE AT ST. JOHN, N. B.,
WITH
APPENDICES, INCLUDING EXTRACTS
FROM REPORT ON
THE BAY OF FUNDY AND THE HARBOR OF ST. JOHN, N. B.

ST. JOHN, N. B., CANADA.

1894.

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REPORT OF
COMMITTEE OF THE
St. John Board of Trade,

CONSISTING OF

Messrs. W. M. JARVIS, R. CRUIKSHANK, T. H. HALL,
G. F. BAIRD, M. P., and S. SCHOFIELD,

ON

THE LOSS OF THE BARQUE "CURLER"

AND

PILOTAGE AT ST. JOHN, N. B.,

WITH APPENDICES,
including extracts from Report of Special Com-
mittee on the Bay of Fundy and Harbor of
St. John, N. B., presented February 1887.

ST. JOHN, N. B.
PROGRESS ELECTRIC PRINT.

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REPORT
OF A
SPECIAL COMMITTEE OF THE ST. JOHN BOARD OF TRADE
ON THE
LOSS OF THE BARQUE "CURLER,"
AND
PILOTAGE AT ST. JOHN, N. B.

PRESENTED AT A MEETING HELD 12TH SEPTEMBER, 1894.

To the Council of the St. John Board of Trade.

The committee appointed to attend the investigation as to the loss of the barque "Curler" and to report upon matters connected with pilotage at St. John, beg to submit the following report.

1. The public investigation held by Capt. W. H. Smith, R. N. R., under instructions from the department of marine and fisheries, at the request of the board of trade, was attended throughout by members of the committee. Copies of Capt. Smith's decision (A) and of his remarks at the termination of the investigation, (B), are submitted herewith.

2. It will be seen that stress was laid by Captain Smith upon the duties and responsibilities of the captain and ship's officers; and he states very clearly that, although the captain might engage the services of a pilot, he could not surren-

der his command, and was not relieved from all responsibility on that account.

3. The word "pilot" has been defined to mean "any person not belonging to a ship who has the conduct thereof." The general rule of law with regard to the engagement of a pilot seems to be that when a captain is bound, by act of parliament, under a penalty, to place his ship in the charge of a pilot and does so accordingly, the ship is not to be considered as under the management of the owners or their servants; but when it is in the option of the captain to take a pilot or not, as he may think fit, and he does take a pilot, the pilot so taken is to be considered as the servant of the owners, and, as such, they are responsible for his misconduct. And, even though there be a pilot on board, the captain is bound, in a case of obvious danger, to interfere in the management of the vessel.

4. In the case of the "Curler," the pilotage was not compulsory. There is indeed no compulsory pilotage in the strict sense at St. John. It is open to any vessel to refuse the services of a pilot, although those services, if proffered within certain limits, must be paid for by all vessels not specially exempt, whether accepted or not. And, therefore, although it appeared that the captain and the mate of the "Curler" had retained their presence of mind and acted for the best, both when the disaster became imminent and after it occurred, they were held responsible for their previous submission to the pilot's control. The captain, for going below without leaving orders with the officer on deck to acquaint him with any circumstances of importance that might occur; and the mate for not communicating with the master when the pilot persisted in sailing towards a narrow channel instead of following the wider thoroughfare; which, had it been taken, though some inconvenience to the pilot himself might have ensued, would, so far as appeared, and as was the case with the two other vessels which sailed the same afternoon with fine weather and a fair northeasterly wind, (and without pilots), have carried the barque in safety towards the open sea.

5 Under the City Charter of St. John the Mayor, Aldermen and Commonalty were made the conservators of the water of the river, harbour and bay of the city, and in 1840 they were authorized by the legislature of New Brunswick to make laws and ordinances for the regulation of the Branch Pilots of the port, in respect to rates of pilotage to be taken by them as distance money; extending to such parts of the Bay of Fundy in connection with the harbor as

they might deem expedient. In 1861 an act was passed to provide that pilots carried to sea, and beyond the limits of their engagement, should receive \$2 per day, in addition to the pilotage, for every day of their enforced absence from home. In 1873 the Pilotage Act, passed by the Dominion parliament, made provision for fixing the limits of pilotage districts and for the appointment of seven pilot commissioners to be the pilotage authority of the district of St. John. Two of these commissioners are to be chosen by the City Council, two by the council of the board of trade, and three by the governor general in council. This act was amended at subsequent sessions of the legislature, and finally in 1886 the provisions respecting pilotage were revised and embodied in Chapter 80 of the revised statutes of Canada which is now in force.

6. Under this act the pilotage authority has power by by-law,

1. To determine the qualification of persons applying to be licensed as pilots.
2. To make regulations as to pilot boats and respecting the distribution of the earnings of pilots and pilot boats.
3. To provide for aiding in the establishment of companies for the support of pilot boats.
4. To license pilots and apprentices.
5. To fix the terms and conditions of granting licenses.
6. To make regulations for the government of licensed pilots.
7. To make rules for punishing any breach of regulations, either by the withdrawal or suspension of the license, or by the infliction of a penalty not exceeding \$40.
8. To fix and alter the mode of remunerating licensed pilots.

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9. To provide for the compulsory retirement of licensed pilots having attained the age of 65 years, unless thereafter licensed from year to year.

10. To provide for the compulsory retirement of licensed pilots proved to be incapacitated before attaining such age.

11. To provide for the adjustment and decision of disputes respecting pilotage ; and

12. To establish funds for the relief of superannuated or infirm licensed pilots, or of their wives, widows or children.

All such by-laws must however, be confirmed by the governor in council before they can take effect.

7. The pilotage authority is required by the act to make yearly returns of the names and ages of licensed pilots, the pilotage dues in force, the amount of dues received and the receipt and expenditure of moneys received in respect of pilots or pilotage.

The act also contains provisions for the licensing of pilots and for their guidance and protection, and for the recovery of pilotage dues.

8. Under section 57 of the Act no owner or master of any ship can be compelled to employ a pilot, but under other sections the payment of pilotage dues is, subject to certain exemptions, made compulsory within limits or pilotage districts established by order in council, even though the pilot offering his services may not be employed. When therefore the term compulsory pilotage is used, it must be understood to mean, not that the vessel is compelled to take a pilot, but that such services, when proffered, must be paid for, whether the pilot may be taken or not.

9. In the pilotage district of St. John, ships of war or in the public service,

steamships coasting or trading with New York or U. S. ports to its north, vessels registered in Canada of not more than 120 tons (see 56 V, cap. 20, A. D. 1892), vessels of which the master or mate has a certificate authorizing him to pilot his ship within the pilotage limits, and such vessels not exceeding 250 tons as the pilotage authority with the approval of the governor in council may determine, are exempt from compulsory pilotage. At present all vessels registered in Canada of 125 tons and under are entirely exempted by the pilotage authority, and also all vessels outward bound of whatever tonnage from outside of Partridge Island.

10. All sums received for pilotage dues by the pilotage authority are to be applied,

(1) In paying all expenses incurred in obtaining payment of the same ;

(2) In payment for the pilots' services such amount as is required by by-law ; and

(3) The residue is to be carried to the pilot fund of the district.

11. The pilot fund is to be applied,

(1) In payment of such necessary expenses as are duly incurred in the administration of such fund, and

(2) In the payment of superannuation allowances or other relief, for the benefit of licensed pilots incapacitated by age, infirmity or accident, and of the widows and children of licensed or incapacitated pilots.

12 All sums of money belonging to the pilot fund not employed in such payments are to be invested in Government securities. The Committee notice in the last report of the St. John Pilotage Authority that the reserve so invested, —now deposited in the Dominion Sav-

ings Bank—amounts to \$8,111.86, while there was also on the 31st December last a credit balance of \$2075.65 at the Bank of New Brunswick on current account.

13. It will be seen from what has been stated that while in other avocations of life, the relations of the employer and the employed are left generally to be determined by the ordinary laws of supply and demand, except so far as such relations may be affected by organizations on the one side or the other, either for the lessening of charges thought to be exorbitant, or for the securing a higher rate of pay, in the case of pilotage an amount larger than the customary rate of wages is collected from the vessel. And this amount may be collected irrespective of services rendered, and whether such services are really needed or are not. From the fund thus formed the pilots are paid at the rate fixed for their services by the commissioners, and the residue forms a superannuation and benefit fund to meet cases calling for relief.

14. The pilots thus form a protected class in the community. Each pilot may receive as wages for services rendered or proffered more or less according to his activity or good fortune in securing some incoming vessel; but he can always feel assured that there is a fund in reserve from which he or his family will be assisted should need arise.

15. Such a system calls for the most careful supervision in its administration or very great evils may result. Men who feel that their employment, or at least their wages, whether they are employed or not, are so far assured, and that a reserve fund is being accumulated for future support, are not only rendered to a very great extent inde-

pendent of any desire to satisfy those they serve, but are also deprived in a degree of the incentive to labor and thrift which the feeling of entire responsibility for the well being of the family tends to create.

16. The object of the system is to secure, as far as possible, protection to life and property, by providing a class of men better qualified than ordinary mariners to take charge of ships in places where, from local causes, navigation is attended with more than common difficulty.

17. Failing some such object the perpetuation of a system which assures wages and pension to a certain class of men, necessarily in some degree at the cost of the rest of the community, could not, in the opinion of the committee, be justified. And they regret to have to add that there seems to be a very general opinion that this object is not attained by the present pilotage system, that that system is fraught with many evils, and that it has been handed down from a past generation almost unaltered without regard for the changed circumstances which now exist.

18. In former days, no doubt, when the assistance of lighthouses, fog whistles, buoys, charts, printed sailing directions, and of steam tugboats was not available, and when masters and mates of vessels were not required to submit to a strict examination before they were allowed to serve, the office of the pilot was one of very general importance to shipping, his services were eagerly sought after and he was usually employed; but while the standard among ship's officers has advanced, and important aids to navigation have been provided, the compulsory system of pilotage, as applied at St. John, appears to a great ex-

tent to ignore such advances and helps; and repeated cases have been furnished to the committee, in which vessels are compelled to pay for pilots' services, where their employment is a farce, or worse, since the officers of the ship are as well acquainted with local surroundings and as fully qualified to navigate the vessel as the most efficient pilot on the list; while it is broadly stated that all pilots on the list at St. John are not so efficient, and that men have been retained among the number to whose employment shipowners seriously object.

19. Further the question of discriminating for or against some particular class of vessels seem to have been brought in. Thus the committee have been informed that the coal barges towed from Parrsboro by powerful tugboats in connection with the recently developed traffic from that place to St. John, have been called on to pay pilotage dues; and this has been defended on the ground that this method of carriage has interfered with the owners of the small vessels which formerly carried on the trade. The committee are strongly of opinion that the matter of pilotage should be dealt with on its merits, and that the system should not without the gravest necessity be strained to protect any class in the community, whether it be the pilots themselves or those interested in any particular branch of shipping or trade.

20. There are at present 27 licensed pilots resident at St. John, of whom one has been suspended in connection with the "Curler" disaster; and one pilot in addition is specially licensed for Musquash only.

21. According to the return made to Ottawa by the St. John Pilotage Authority to the 31st December last, the ages of the

licensed pilots vary from 36 to 68, but the committee regret to have to report that it has been stated to them by more than one person, whom they believe to be reliable, that the ages given in the official return are not in all cases correct, and that several of the men are from three to five years older than is there stated. This is a matter of some importance when it is remembered that under section 32 of the pilotage act every pilot upon reaching the age of 65 years must deliver up his license, and can thereafter be granted a new license only from year to year. It is a matter of even more importance in its bearing upon the pilot commissioners themselves. The committee feel loth to suppose that the commissioners would knowingly permit the sending forward of false returns; but on the other hand, if the statements made to the committee are correct, the actual ages of the men are very generally known, and such a want of accuracy in the returns would seem to show a lack of care in securing the information which under the Act the commissioners are bound to furnish to the marine department at Ottawa from year to year.

22. It appears from the returns that the amount received for pilotage dues during 1893 was \$25,893.83. From this sum in the case of one pilot whose services are regularly engaged by the Furness line of steamships, an amount of \$1,030.15 is taken, of which \$825.75 is divided share and share alike among the pilots on the list, regardless of their doing any work or not. The difference of \$204.40 with a further sum of \$1955.36 or in all \$2200.36 is carried to the pilot fund, leaving \$23,693.47 for the wages of the men. It is stated, however, that the individual earnings vary greatly in different

cases, some pilots earning as much as \$1600 in a year and others a bare living. This depends of course on the energy and activity of the men in seeking for vessels to which their services can be proffered from time to time.

23. The residue of \$2200.36 carried last year to the pilot fund was further increased by \$200 charged for licenses to thirty pilots at \$5.00 and five pilot boats at \$10.00 each, and by \$274.25 for interest on the Savings Bank deposit, making a total of \$2674.61. The payments were for pensions \$1710, funeral expenses of two pilots \$40, auditor \$25, stationery \$19.70, office rent \$100, and salary of secretary treasurer \$800, in all \$2694.70. The payments therefore exceeded the receipts by about \$20.00.

24. Five districts are established for pilotage inwards, ranging from Partridge Island to the extreme limits of the Bay of Fundy. Outwards no vessel is required to take or pay for the services of the pilot, beyond outside of Partridge Island. Inwards all vessels not exempt are required to pay for a pilot's services if proffered any where within the district limits, whether accepted or not.

25. At present the pilotage dues inwards and outwards on vessels not exempt are regulated by the draught of water, and the dues for transporting vessels within the harbour according to the tonnage in each particular case.

26. A different system prevails at Halifax, N. S., where the pilotage dues are regulated altogether by tonnage; and the committee are informed that the charges are very much less there than at St. John.

27. The committee understand that representations have been made to the marine department that an undue por-

tion of the pilotage dues now collected at the port of St. John is levied upon vessels of from 125 to 300 tons, engaged in the coasting or the West India trade, which on account of their relatively larger draught of water in proportion to tonnage, and their more frequently coming to and leaving St. John, are forced to pay largely in excess of the dues charged to larger vessels. It is claimed also that the class of vessels referred to has no need whatever of the services of pilots, as the masters are, from their frequent visits, thoroughly conversant with the Bay of Fundy and the harbor of St. John.

28. They understand also that it has been further represented that the shipment of lumber (including piling) from the port of St. John is seriously prejudiced by the pilotage charges, as this business is carried on in competition with vessels from Calais, Bangor, and Portland, Me., and also from other ports in the Bay of Fundy, where no regulations for the compulsory payment of pilotage dues are in force.

29. The committee are informed that in May last a scheme was submitted by the commissioners to the Department of Marine for reducing the charges to smaller vessels, and increasing them in the case of vessels of upwards of 400 tons by a sliding scale, more than doubling the dues in the case of the larger ships. This scheme has not yet however been approved. The present scale (C) and that so proposed (D) are submitted herewith. The committee fear that the additional burthens thus proposed on the larger vessels will prove seriously detrimental to the traffic of the port. It was stated in the evidence of Pilot Rogers before the Deputy Minister in 1891 that this would be the case. No doubt some

relief to the smaller vessels and some increase of revenue would result, but the committee cannot see that this increase is required, and they are strongly of opinion that, so far from the smaller vessels being relieved only at the cost of additional burthens placed on the larger sailing vessels or steamships coming to St. John, everything should be done to lessen or remove all such restrictions not absolutely necessary as may already exist, and that every property owner and resident in the City has a vital interest in the lessening or removal of all such needless charges, and the development of the traffic of the port.

30. The committee think that no increase in the present charges should be allowed, unless the most serious necessity for such increase is shown to exist. They are of opinion that there is no such necessity for the changes proposed; and they recommend that the Board of Trade address a petition to the Governor in Council asking that the proposed advance in the charges for pilotage be not approved.

31. It cannot be supposed that the increase of pilotage dues in the case of the larger vessels thus proposed was intended so much to add to the earnings of the men, who have so far as the committee are aware, made no claim for higher pay, as to swell the pilot fund, which, under the Act, is intended for pilots incapacitated by age, infirmity or accident, or the widows and children of pilots. The reserve held in connection with this fund is already of considerable amount. It is held not for the purpose of making permanent grants, but for providing terminable annuities, which will cease from time to time as the beneficiaries may be removed by death, or, in the case of children,

when they become of sufficient age to care for themselves. The fund is likely to increase rather than diminish under the present system, as the number of pilots lessens or the claimants upon the fund are removed by death or otherwise. The committee were at a loss to understand what ground existed for the proposed advance, until circumstances came to their knowledge, which they feel it their duty to bring at once to the attention of the council and the board.

32. There can be no doubt, looking at the terms of the Pilotage Act, that it was contemplated that the commissioners should receive no pay or remuneration for their services. Provision is expressly made for the salary or remuneration of the Secretary and Treasurer, but beyond this the funds are carefully guarded. Under the 62nd. section of the Act "All sums received" for pilotage dues shall be applied, first in paying all expenses incurred, "in obtaining payment," next in payment of the pilot engaged, and, lastly, any residue must be carried to the pilot fund. Under the 91st. section the pilot fund must be applied first in payment of "such necessary expenses as are duly incurred in the administration of such fund" and then in the payment of superannuation allowances or other relief to pilots incapacitated, or to the widows and children of pilots. The 14th section of the Act directs that the pilotage authority may, with the sanction of the Governor in Council, appoint a Secretary and Treasurer, and pay him such salary or remuneration, out of pilotage dues or fees for licenses received by them, as they may see fit, and may with such sanction, and out of such funds, pay any other "necessary expenses" of conducting the pilotage business of the district.

No provision whatever for the payment of the commissioners is contained in the Act. Were the matter at all uncertain the provision authorizing a salary for the Secretary forbids by implication any other and unauthorized payment of the kind.

33. There are not wanting in the community instances as, in the case of the Hospital Commissioners, and the School Trustees, of laborious public duties performed without thought of fee or reward; and it is evident that the framers of the Pilotage Act supposed that commissioners would be found possessed of sufficient public spirit to supervise the system without charge, the more laborious duties being performed by the paid secretary treasurer appointed for the purpose.

34. The committee are informed, however, that it was recently proposed that each commissioner should have an allowance from the funds received, and the chairman double the amount paid to any other commissioner, that one of the commissioners protested, and the matter was referred to the then deputy minister of justice at Saint John, who expressed an opinion that such allowances were unauthorized by the act; but that nevertheless the taking of such allowances by the commissioners has been pressed.

35. The committee might have hoped that this charge was exaggerated or groundless, were it not that the statements made to them are confirmed by the official correspondence, copies of which (E) are submitted herewith.

36. It would appear that after the commissioners had been told that their taking an allowance for their services from the pilot fund was illegal, a by-

law was passed by them on the 1st March last as follows:—

"By-law to provide for the payment of the St. John pilot commissioners."

"Each commissioner shall be entitled to be repaid any expenses necessarily incurred by him in the discharge of his duty, as such commissioner; provided however that no commissioner shall receive more than one hundred dollars, or the chairman more than two hundred dollars, for their expenses, in any one year."

37. This so-called by-law was then submitted to Mr. Newcombe, the deputy minister of justice, who was reminded of some similar action at Halifax in October, 1891, and who gravely reported that there was no legal objection to its being approved. Under such circumstances no doubt the by-law seemed harmless enough to the minister of marine and fisheries, and on March 28th an order in council issued, sanctioning the repayment to the commissioners, of expenses necessarily incurred in the discharge of their duties.

38. In connection with the reference to Halifax, the committee notice in the printed accounts of the Halifax authority, published at page 209 of the supplement of the annual report of the department of marine for the year ending 30th June, 1892, that, while the amount carried out for "necessary expenses attending meetings and investigations two years" is but \$11.25, the sum of \$1125.00 is really required, instead of \$11.25, to balance their account; and this larger amount appears to have been taken from the fund. It is perhaps fortunate for the St. John commissioners that the matter has come to light before there had been time sufficient for any such allowances to be taken here.

39. It has been stated that it was in contemplation that this "repayment" should take the form of an allowance of \$4.00 to each commissioner for every meeting attended throughout the year.

40. The committee do not enter upon the question whether services of the kind supposed to be rendered by the commissioners should be paid for or should not. But they certainly think that no such services should be paid for unless the payment is distinctly provided for by law, and that no public servant, who considers himself insufficiently paid, should be permitted to remunerate himself from the funds under his charge.

41. It will be noticed that the power to pass by-laws to be confirmed by the governor in council is limited by the 15th section of the Pilotage Act to certain specified cases among which the payment or repayment of expenses is not included. Under the 14th section the pilotage authority may, with the sanction of the governor in council, and from the pilotage dues or fees for licenses, pay the "necessary expenses" of conducting the pilotage business of the district. This does not, however, contemplate a by-law, nor is one required. Without a by-law the pilotage authority can pay "necessary expenses" with the proper sanction. No by-law could possibly justify them, under the guise of the "payment" or "repayment" of necessary expenses; in appropriating the funds, in part or in whole, to themselves. In the latter section it is not a by-law that is to be sanctioned, but an act. It is surely indeed a perversion of language to claim that where a statute provides that expenditures may be made with a certain sanction, the sanctioning power can part with its control by a sweeping confirmation or concession in advance.

42. The saddest feature of the case is that these payments were proposed to be made at the cost of the superannuated pilots, the widow and the orphan, unless indeed they could be met by increasing the pilotage dues, as was immediately afterwards proposed, and thus further burthening the traffic of the port.

43. From the statements made to the committee it is plain that there is a strong feeling of dissatisfaction with the present commission, and that the St. John pilotage authority has not been able to retain the confidence of the business community generally.

44. As far back as January 1883 an editorial appeared in a leading St. John newspaper calling for attention to the pilotage regulations of the port in the interests of trade and of justice, and mentioning a gross case of injustice which was said to have occurred. This drew out a reply from the chairman of the commission characterizing the complaint as "bosh"; and letters from the late Mr. Thomas S. Adams and others, protesting vigorously against the injustice of the pilotage regulations in force.

45. Again, in January 1887, the question of pilotage was very fully discussed before the Board of Trade, and it was openly claimed that the present compulsory system was unnecessary so far as the protection of life and property was concerned, and that it is unfair to ship owners to compel them to pay for services which they may not require. It was stated also that, as it was not compulsory on the pilots to cruise in search of vessels, as is the case at Boston and Quebec, their services were not available when most required, and that during the winter season, and no doubt often during stormy and foggy weather

at other times of the year, there were no pilot boats to be found at the main entrance of the bay, or until the vessel had found her way nearly up to Partridge Island. It was urged that as no bond was taken from the St. John pilots, as was the case at Halifax and elsewhere, there was practically no pecuniary responsibility, and it was charged that the Commissioners ignored the reasonable wishes of the shipowners, and refused to give reasons for the course they pursued.

46. And in January 1891 an official enquiry into the pilotage question was held by the Deputy Minister of Marine, Mr. William Smith, at the rooms of the St. John Board of trade. The enquiry was conducted with much ability, and the information given was very full and important.

47. It was stated by several of the witnesses that the present system of compulsory payment for pilotage tended to the building of badly shaped or inferior vessels, so constructed in order to come within the exemption of the rules.

48. It was alleged that vessels endeavoured to get clear of pilots by hauling out in the bay so as to make it appear that they were going up the bay, instead of making for St. John. Instances were given of bargains made with the pilots to escape pilotage in whole or in part; and it even appeared that in one case, in order that a steamer might be cleared at the Custom House, the secretary to the St. John Pilotage authority had certified that the vessel had paid her pilotage dues when in point of fact she was allowed to go free.

49. Evidence was given that the captains of coasting vessels generally were capable of navigating vessels without the employment of pilots at all, that a years

experience would suffice to enable a master to pilot a vessel up the Bay of Fundy, and into the harbor of St. John, that the pilot boats were not out in heavy storms or thick weather, and that if the system of compulsory payment was abolished the men would be on the ground when wanted, and the active and capable pilots would still be employed.

50. It was asserted also that the pilotage business was not skilfully or even fairly managed by the commissioners and that the representations of the leading shipowners of the port were ignored.

51. It has been already pointed out that the commissioners do not appear to have exercised sufficient care in reporting the ages of the pilots to the Marine Department. Further, in connection with the loss of the "Curler," the chairman of the pilot commissioners stated publicly, before the official investigation was held, that the Pilot concerned was a competent man, and in his sixty years this was the first time anything had happened while he was in charge of a vessel. Yet it was proved at the investigation, by the evidence of the Secretary to the commissioners, that the same Pilot had been censured by the commissioners in connection with the loss of the "Apollo," and had afterwards been suspended for three months in the case of the stranding of the schooner "Lahaina." This statement of the chairman though made publicly, was allowed by the other commissioners to remain uncontradicted; and in preference to supposing that there has been any wilful mis-statement or suppression of facts, the committee are forced to the conclusion either that the members of the commission have not kept themselves fully informed as to what has occurred in the past; or that they do

not feel sufficient interest in their duties to bear in mind circumstances of such vital importance in forming a right conclusion as to the efficiency of any particular pilot on the list.

52. The evidence given before the Deputy Minister tended strongly to the conclusion that the compulsory payment of pilotage dues should be abolished, and that, were those dues abolished, no more serious danger to life or property than now exists would ensue. It cannot be supposed that the twenty-seven licensed pilots at St. John include within themselves all the knowledge and information as to navigation towards or within the harbor that exists. A system of free pilotage would send the better men to the front, more responsibility would be felt by the ships officers, and the public would probably be spared a repetition of such disasters as that of the barque "Curier," which has led to this report.

53. This would probably involve the abolition of the present pilotage commission, but the committee think that it could well be spared. Some legislation would be required for the disposition of the present pilotage fund. The younger men among the pilots, not now among the most active, might meet with success in some other avocation of life. And with regard to the more helpless, where worthy of the care, it would be far better that they should be assisted to a reasonable extent from the public funds, than that the port should be unnecessarily burthened for their support, coupled with that of others less deserving of the aid.

54. In this connection it may be mentioned that there is no compulsory pilotage at Portland, Me., the chief competitor with St. John for the Canadian winter export trade; and that the compul-

sory payment of pilotage dues at Summerside, P. E. I., has recently been abolished.

55. But should it be found impossible to carry the abolition of compulsory pilotage into immediate effect the committee are of opinion that the whole pilotage system should be reconsidered, the St. John Rules compared with those of other ports where pilotage is still retained, and several important changes made both in the commission and in the regulations under which the pilots serve.

56. The committee are informed that at New York there are but five commissioners of pilots; while the Act relating to Pilotage at Boston, Mass., provides for only two, and it is further required that the persons appointed shall "have experience in maritime and nautical affairs." This qualification the committee look on as a very valuable one. In the case of the St. John commission neither the chairman nor the majority of the commissioners have had such experience. The committee are informed in fact that but one of the present commissioners is a practical seaman, and therefore within the qualification called for by the Boston Act.

57. The committee are of opinion that if the system is to be tolerated for a while longer the number of the commissioners should be reduced to three, one to be appointed by the governor-in-council, one by the city and one by the board of trade, and that the Boston provisions as to experience and a limited term of office should be adopted. Although at the expiration of the three years the same commissioner might be reappointed, he would always carry with him a sense of his responsibility to the public, and the three year term seems a fair mean between the present

system of permanent appointment and the possible difficulties which might attach to a single year term.

58. The committee find also that there is a conflict of interest between ship-owners interested in the larger vessels, and those more directly connected with the smaller craft. And they believe that it is advisable generally that ship-owners should not be members of the commission, but that it should consist as far as possible of men who could not be subject to any suspicion, however undeserved, of having personal interests to serve. In fact they believe that the appointment of laymen who would really interest themselves in pilotage questions would be preferable to having those concerned in the shipping in connection with which the pilots are engaged. An exception might possibly be made in the case of some practical seaman, whose services it was important to secure; but, apart from this, the ownership of shipping, while it does not necessarily give any practical experience of seamanship, or of the pilots work and duties, must render it very difficult for the commissioner to form an unbiassed opinion in cases where the interests of his own vessels may come in conflict with those of some other size or class.

59. A still stronger objection applies to the appointment as commissioners of those in any way engaged in the business of ships supplies. On the course towards St. John the pilot must have many opportunities, should he see fit to use them, of directing foreign captains to some particular dealer for their supplies. If the dealer thus favored should happen to be one of the Pilot commissioners, how could he be expected, however conscientiously he might desire to act, to give an unbiassed judgment in

a case where the conduct or qualification of the friendly pilot might be the question before the board.

60. With regard to the pilots themselves, the extent to which they form a privileged class in the community is very remarkable. It was broadly claimed before the deputy minister in 1891 that in return for their six years of apprenticeship the city council had promised the pilots their charges on vessels from 6 feet of water upwards to make a living. Such a claim, if it had any foundation in fact, would seem to imply a charge upon the citizens generally, for it cannot be supposed that the city council could mortgage any particular class of private property for the support of certain individuals; and therefore the pledge, if given with any shew of legal right, would entitle the pilots to maintenance through an assessment at the public charge. But it may be sufficient to say, with the most kindly feeling towards the pilots themselves, that the committee believe that, neither in the case of the pilots nor in that of any other class of men who may have served an apprenticeship within the city limits, does any such promise, express or implied, exist. While through the decadence of wooden shipping, many masters of vessels have been thrown out of employment, it has never been proposed that shipping generally should be taxed for their support, or the relief of their wives or children. Thirty years ago the shipyards round St. John were crowded with the best class of mechanics. With the cessation of ship-building their employment is gone. Patiently, uncomplainingly, they submitted, and took up other avocations in life. It was never suggested that the city should enter upon shipbuilding or tax itself in

any way to give them employment or relief. But the pilots, numbering 43 in 1873, and now as has been stated 28, have been provided for with the utmost care, and are now maintained at a yearly cost of nearly \$26,000 to the community, while it is evident to the committee from the statements made to them that the actual work of pilotage is done chiefly by a portion only of the men, and that even of the present number several could be spared without their being in any degree missed.

61. It must be remembered that though pilotage dues are primarily a charge upon shipping, yet, if collected without due cause, they become a tax upon the city very nearly to the same extent as if levied upon the citizens by direct assessment. Even where the owners of shipping are not resident they act as a restriction upon the commerce of the port and indeed if unjustly levied may operate in this direction to an extent far exceeding even the \$25,000 or \$26,000 collected in each year.

62. In reply to enquiries made by the committee on this head it has been asserted generally that pilots and pilot boats are necessary for the port, and that but for the maintenance of some system like the present they could not be kept up.

63. But even if it be granted that pilots in some cases are necessary, though the fact that pilotage is not compulsory, beyond that the vessel, if spoken, must pay for the pilot's services, whether engaged or not, would seem to show that the legislature is willing in some degree to leave this to the owner or officers of the vessel to determine, it need not, therefore, be assumed that it is necessary that there should be the

full number now maintained. In fact the presumption is rather to the contrary, since the number has fallen from 43 to 28, and it is understood that very few appointments are being made. It is provided at Halifax that the number of pilots for the port shall not exceed twenty-five. But, were the compulsory payment of pilotage dues abolished, it does not at all follow that a limited but sufficient number of the better men would not continue to find remunerative employment; and be able either to maintain pilot boats quite as serviceable as at present, or to reach vessels requiring their help at some outside point, even if, in some very special case, the services of a steam tug boat had to be engaged.

64. In this connection the committee desire to draw attention to the pilotage rules in force at Boston and Quebec which make it incumbent on the pilot boats to cruise for vessels, thus to a certain extent at least securing that pilots shall always be available if required. Under the present system at St. John they fear that all the pilots at least do not realize the duty incumbent on them of being always to the front, and engaged rather in assisting vessels, which may really require such aid, to port, than in seeking for prizes upon which they may levy their charges whether for services performed or not.

65. The committee wish to point out also that at Halifax and at Pictou the pilot is required to give a bond with two sureties to the commissioners for the faithful performance of his duty, such bond to be renewed every second year. They think that a similar regulation should have always been enforced at St. John. Reliable men would have no difficulty in providing suitable

sureties. If there were any whose credit had fallen so low that they could not do this, it would have the effect of removing them, and very properly, from the list.

66. Under the present system a pilot may be taken by some foreign captain inwards bound, who thinks that he may as well have the services he has to pay for. The pilot may not be thoroughly efficient, or he may have his own reasons for taking some other than the more open course. He may get caught in the fog when a different route would have kept him in clear weather. He may mistake signals and run the vessel straight on shore, and yet, if proceedings were taken against him, it is quite possible that nothing could be recovered. Loss of life or valuable property may ensue. The pilot is suspended for three months or more, and then left free to seek another vessel, possibly with the same result. It would be different if there were responsible sureties for the performance of the pilot's duties, who were liable in some fixed amount for his defaults.

67. As has been already stated there are now in existence helps to navigation which once were entirely wanting. Captains and mates must pass strict examinations before they are allowed to serve. Printed sailing directions are issued by the Admiralty, charts giving the fullest information as to harbours and their approaches are everywhere to be had. Lighthouses, buoys, and fog whistles so situated that only the most careless or obtuse can be misled, have been provided by the care of the Government at the most important points. Numerous steam tugboats are maintained in the harbour, officered by men possessing the fullest local knowledge and exper-

ience; and, in most cases of the larger sailing vessels, are employed to bring them in or take them out of port.

68. Navigation has its difficulties in all cases, but it may be a serious question whether it is not wiser to cast on the ship's officers the full responsibility for those difficulties, rather than to put them in a position where they are but too apt to think that they can rely entirely upon the pilot, and that their own responsibility is at an end.

69. The statements of Pilot Richard Cline and the late Pilot Samuel Rutherford, two of the most reliable men ever connected with the port, made to the Board of Trade in 1887, and printed in the appendix to the report of the special committee on the Bay of Fundy and the harbour of St. John, show clearly that there are no difficulties in connection with the navigation of these waters that cannot readily be overcome; and that, with reasonable care and prudence, they are perfectly safe. From Briar Island up, Pilot Cline says, the tides are very regular. In the winter, especially, the weather is said by Pilot Rutherford to be clear as a rule. Of course, if compasses are neglected, if distances are not taken, if in thick weather the lead is not used, if the captain is below, if the mate leaves all to the pilot and the vessel is pointed to the shore, there can be but one result; but it is submitted that for that result the port of St. John is not responsible; and that ships officers in the mercantile marine, if men of ordinary prudence and skill, can in most cases guide their vessels to and from St. John with perfect safety; while, should circumstances arise calling for special local help, it would still be available, even though the system of compulsory

payment of pilotage dues was abolished, as is now the case at Portland, Me., and other points, where no such system exists.

70. The approach to St. John from the entrance of the Bay of Fundy by the southern channel is wide and open. That channel is nearly 30 miles wide from shore to shore, and offers eighteen miles of clear navigation between the old Proprietor Shoals and Gannet Rock on the one side and the north west ledges on the other. Even the narrower channel forming the approach to the north of the Island of Grand Manan is some 4 or 5 miles in width. There are currents and tides undoubtedly to be dealt with, and in the summer season fogs as well, but these are by no means peculiar to the Bay of Fundy. The mariner must indeed be prepared to deal with fogs along the whole North American coast from Newfoundland and southerly beyond New York.

71. The summer climate of St. John itself is tempered by these mists and made cooler perhaps than that of Halifax, or Portland, Maine, because the city is so situated that a fog at the entrance of the harbor in most cases drifts in over the city itself, while Halifax particularly, situated some miles inland, escapes to a considerable extent, as does Rothesay, about the same distance inland from St. John. But in approaching a harbour fogs have to be dealt with all along the North American coast, north of Cape Hatteras; and it is somewhat curious that of late the most marked cases have occurred off the sister city Halifax rather than St. John. Last April fogs, accompanied by field ice, from which St. John is entirely free, delayed steamships for hours and even

days off Halifax harbour. In June H. M. S. Blake narrowly escaped collision with another steamer in a fog off the Nova Scotia coast. For nearly two weeks at the end of that month fogs extended along the coast as far south as Boston and beyond. And in August the Blake with the Governor General and the Vice Regal party on board left Halifax at midnight on Wednesday the 8th, for Charlottetown, P. E. I., was compelled on account of fog to remain off the Atlantic coast of Nova Scotia until well into Thursday, and did not pass Cape Canso until Thursday evening about half past five. Further than this, Admiral Sir John Hopkins is said to have referred recently at Montreal to the fact that on two occasions the Blake had entered Halifax harbour without seeing land on either side. Nothing worse could have occurred in the approaches to St. John, and moreover, in the winter months fogs in the Bay of Fundy are rare, not more common perhaps indeed from November to April than in any other quarter of the world.

72. The harbor of St. John has undoubtedly both its advantages and its difficulties, as have all others, and these difficulties are intensified at the freshest season of the year, when the St. John river, extending some 500 miles into the interior, with its many tributaries, pours its volume of water through the main channel of the harbour into the open sea. Still, within the harbour, numerous steam tugboats are available, and whatever need for pilots may exist beyond, it cannot surely be doubted that the very need itself would create the supply, and that capable men, finding the employment before them, would always be on hand and available to do the work.

73. But it appears to the committee that the legislature has definitely pronounced upon the question of the absolute necessity of the pilot for the preservation of life and property by enacting that pilotage shall not be compulsory in any case, except as to the liability to pay pilotage dues. If the services of pilots are absolutely necessary for the safety of human life and the preservation of property, then surely every shipowner and master should be bound, under heavy penalties, not merely to pay for but to engage them. If they are not required by law to engage such services why should they be compelled to pay for what they may not need.

74. It must be remembered, too, that, although the payment of pilotage dues is compulsory in the case of vessels approaching or leaving St. John, the same rule does not apply to all Bay of Fundy ports. At St. Andrews there are pilots. But there the masters or mates of vessels receive certificates which under the 59th section of the Pilotage Act, render them exempt from compulsory charge, thus furnishing another proof that others besides licensed pilots are fully qualified to take vessels into and out of port. And vessels making for Grindstone Island at the mouth of the Petitcodiac and other points are entirely free. If it be safe for vessels so bound to discard the pilot's services with impunity, on what possible principle should it be compulsory to engage or pay for them in approaching or leaving St. John. The system seems almost an insult to the port. It cannot be necessary for the preservation of life or property, or pilotage would be made absolutely compulsory on every vessel entering or leaving the Bay.

75. After the fullest consideration the committee are forced to the opinion that not merely has compulsory pilotage been rightfully done away with, as is now the case, but that the compulsory payment of pilotage dues should also be abolished, and the business of pilotage, like any other, left to care for itself. The very considerable fund which now exists would probably be sufficient to provide for the aged and infirm among the present pilots, and the widows and children of those deceased. The active men could either pursue their present avocation unaided, or if they preferred other work could take it up. It is very evident to the committee that of the \$25,000 or \$26,000 yearly paid in pilotage dues but a limited portion is really earned by the giving of necessary services in return. And it would, they believe, be wiser to leave the matter to regulate itself rather than to permit the continuance of a system under which the many are forced to pay for the possible requirements of the few; under which in the name of pilotage a favored class in the community is protected at the expense of all other citizens; under which the commissioners having the matter in charge, seeing the pilots thus protected, are seeking by bylaw to "pay or "repay" themselves; and under which, if the matter is not dealt with thoroughly and at once, still greater mischiefs may ensue, checking the development of the traffic of the port, and injuring all classes in the community alike.

All of which is respectfully submitted.

On behalf of the committee.

W. M. JARVIS, Chairman.

St. John, N. B., Sept. 12, 1894.

APPENDIX.

APPENDIX A.

(COPY.)
(CANADA.)

BARQUE "CURLER."

The Wrecks And Salvage Act.

In the matter of a formal investigation, held at St. John N. B. at the office of the Chairman of the Board of Examiners of Masters and Mates, on the 20th, 21st, and 28th July, 1894, before W. H. Smith, R. N. R., Commissioner, into the circumstances attending the stranding of the Barque "Curier" of St. John N. B. at Herring Bay, Campobello Island, on the 29th June last.

Report and Decision.

The court, having carefully enquired into all the circumstances in connection with the above mentioned shipping casualty, is of opinion that the stranding of the vessel was caused by the careless navigation of the pilot, who was undoubtedly navigating the said vessel at the time she went on shore.

Although he states that his responsibility ceased when he passed Partridge Island, and hauled his flag down, and that thereafter he took no interest in the ship, there is strong evidence to show

that he gave several orders on board proving thereby that he did undertake to navigate the vessel down the bay.

The court has also come to the conclusion that the negligence and indifference of the master contributed to the cause of the stranding.

That the mate is also to blame for not communicating with the master, when the pilot persisted in sailing towards a narrow channel after a dense fog had set in, and when no distance could be seen, and when the vessel was in proximity to the land.

The master, Angus McDonald, is therefore adjudged to be in default, and his certificate is hereby suspended for three calendar months from the date of the stranding of the vessel.

The master certificate of the mate, Timothy Brooks, is also suspended for three months from the date of his surrendering the same to the Minister of Marine and Fisheries; the court, however, recommends the issuing of a mate's certificate to him during the suspension.

The commissioner also recommends that the pilot's license be suspended for six months from the date of the stranding of the vessel.

(Sgd) W. H. SMITH,
Commissioner,

APPENDIX B.

REMARKS

at the termination of the investigation into the cause of the stranding of the Barque "Curler," furnished by Captain W. H. Smith, R. N. R.

An erroneous impression seems to prevail with regard to a Master's duty when he has a pilot on board.

It has however been held by the courts, that the captain is never really divested of the control of his vessel, and although in this case he was forced by the law of compulsory pilotage of the port of St. John, to take and employ a pilot as far as the limit outside of Partridge Island, it was a matter entirely of arrangement and agreement between the Master and the pilot if the said Master wished him to proceed any further beyond that limit, for the purpose of assisting in the navigation of the vessel down the Bay of Fundy.

The evidence goes to prove that the Master did so arrange with the pilot, but notwithstanding he engaged the services of the pilot, he could not surrender his command on that account, and was not relieved from all responsibility.

No doubt the local knowledge of a pilot is a very good and sufficient reason why his presence on board a ship is valuable.

Although when a pilot is engaged to navigate a ship it is considered the Master is not properly liable for the want of skill or any default or careless navigation on the part of that pilot, is not always possible, or even creditable for the Master, whose vessel has been stranded, when a pilot was on board, to shelter himself under such a plea. It is necessary for him to have impressed

on his mind that no vigilance or care which he could bestow on the navigation of the vessel, should be wanting either on his part or that of his officers.

He must also be able to show that he did take every known and needful precaution to avoid the disaster, and did exercise all that watchfulness which is required by a master of a vessel having a valuable cargo on board.

Therefore, in order to avoid risk as much as possible to the vessel, if he goes below at any time for the purpose of taking a rest, he should leave proper orders with his officers on deck to call and acquaint him with any change which might take place in the wind or weather, during his absence.

It is his duty to be on deck when fog comes on and the vessel is in proximity to the land, so that he can see that soundings are taken by the deep sea lead, with sufficient frequency and care for the protection of the vessel; and he should use any other known precautions for the safe navigation of the vessel, which may be found necessary.

It is also the duty of the Mate or any certificated officer in charge of the deck, to know as well as the Captain or pilot, where the ship is, where she is making for and why she is being steered upon a certain course, and he should at all times be able to consult the chart and if in any doubt, immediately communicate with the Captain.

APPENDIX C.

Office of Pilotage Authority,
Dominion of Canada, District
of St. John, N. B., 31 Dec. 1893.

Rates of pilotage in force 31st Dec., 1893, for the pilotage district of St. John, N. B.

ON ALL SAILING VESSELS,

Inward,

1st District, \$1.50 per foot draught of water.

2nd District, \$1.75 per foot draught of water.

3rd District, \$2.25 per foot draught of water.

Outward,

To Partridge Island, \$1.25 per foot draught of water.

Down the Bay of Fundy, (not compulsory), \$2.00 per foot draught of water.

TRANSPORTING.

	100 tons and under.....	\$1.50
Over	" " " " 200 tons.....	2.00
"	200 " " " 300 ".....	3.00
"	300 " " " 400 ".....	4.00

And 25cts. additional for every fifty tons such vessel shall measure over 400 tons.

ON ALL STEAMERS,

Inward,

1st District, \$2.00 per foot draught of water.

2nd District, \$2.50 per foot draught of water.

3rd District, \$3.00 per foot draught of water.

Outward,

To Partridge Island, \$1.75 per foot draught of water.

Down the Bay of Fundy, (not compulsory), \$2.75 per foot draught of water.

TRANSPORTING

	100 tons and under.....	\$2.50
Over	100 " " " 200 tons.....	2.50
"	200 " " " 300 ".....	3.75
"	300 " " " 400 ".....	5.00

And 30cts. additional for every fifty tons such steamer shall measure over 400 tons.

(Signed) J. U. THOMAS,
Secretary.

APPENDIX D.

Office of Pilotage Authority, }
 District of St. John, N. B., }
 May 22nd 1894.

Rates of Pilotage for all vessels (not otherwise exempt) entering and leaving the port of St. John, N. B.

On all Sailing Vessels (not otherwise exempt) of	INWARD			OUTWARD	
	Per foot draught of water.				
	First District.	Second District.	Third District.	First District.	Down the Bay.
80 tons and under 200 tons ..	1.00	1.25	1.50	1.00	2.00
200 " " 300 " ..	1.25	1.50	1.75	1.00	2.00
300 " " 400 " ..	1.50	1.75	2.00	1.25	2.00
400 " " 600 " ..	1.75	2.00	2.25	1.25	2.00
600 " " 800 " ..	2.00	2.25	2.50	1.25	2.00
800 " " 1000 " ..	2.25	2.50	2.75	1.50	2.00
1000 " " 1200 " ..	2.50	2.75	3.00	1.50	2.00
1200 " " 1400 " ..	2.75	3.00	3.25	1.75	2.00
1400 " " 1600 " ..	3.00	3.25	3.50	2.00	2.00
1600 " " 1800 " ..	3.25	3.50	3.75	2.25	2.00
1800 " " 2000 " ..	3.50	3.75	4.00	2.50	2.00

And 25 cents per foot, per district, for each 100 tons such Ships shall measure over 2,000 tons.

All Steamers (not otherwise exempt) of	INWARD.			OUTWARD.	
	First District.	Second District.	Third District.	First District.	Down the Bay.
80 tons and under 200 tons ..	1.25	1.50	2.00	1.25	2.00
200 " " 300 " ..	1.50	1.75	2.25	1.25	2.00
300 " " 400 " ..	1.75	2.00	2.50	1.50	2.00
400 " " 600 " ..	2.25	2.50	2.75	1.50	2.00
600 " " 800 " ..	2.50	2.75	3.00	1.75	2.00
800 " " 1000 " ..	2.75	3.00	3.50	2.00	2.00
1000 " " 1200 tons ..	3.00	3.25	3.75	2.25	2.00
1200 " " 1400 " ..	3.25	3.50	4.00	2.50	2.00
1400 " " 1600 " ..	3.50	3.75	4.50	2.50	2.00
1600 " " 1800 " ..	3.75	4.00	4.75	2.75	2.00
1800 " " 2000 " ..	4.00	4.50	5.00	3.00	2.00

And 25 cents per foot, per district, for each 100 tons such Steamers shall measure over 2000 tons.

NOTE:—The above rate on Steamers not to apply to Steamers trading regularly to St. John; they to pay the same rate as sailing vessels.

(sgd.)

J. U. THOMAS, Secretary.

APPENDIX E.

No. 1.

Department of Marine and Fisheries. }
OTTAWA, 21st August, 1894. }
Refer to No. 5566.

SIR:—I have to acknowledge receipt of your letter of the 16th instant in reference to the matter of payment to the Pilotage Commissioners of St. John for attendance on meetings and requesting copies of correspondence and also of any order or authority given for any such payment, and in reply I enclose herewith for the information of the Board of Trade copy of order in council of the 20th March last, providing for the payment to the commissioners of expenses incurred by the commissioners in the discharge of their duty, and also of correspondence in the matter.

I am sir, your obedient servant,

(Signed) WM. SMITH,

Deputy Minister of Marine and Fisheries.

IRA CORNWALL, Esq.,
Secretary Board of Trade, St. John, N. B.

No. 2.

(Copy) Office of Pilotage Authority,
Dominion of Canada, District
of St. John, N. B.,
1st March, 1894.

SIR:—I have been instructed to forward to you the enclosed by-law, passed by a meeting of the Board held this day, for the approval of his Excellency the Governor General in Council.

Trusting the matter will receive your early attention.

I have the honor to be, Sir,

Your obedient Servant.

J. U. THOMAS,

Secretary St. John Pilot Commissioners.

WM. SMITH, Esq.

Deputy Minister of Marine & Fisheries.

No. 3.

(Copy.)

Department of Marine and Fisheries. }
OTTAWA, 6th March, 1894. }

SIR:—I have the honor to enclose herewith a by-law passed by the Pilotage authority of the District of St. John N. B., providing for payment of expenses of Commissioners, and I have to request that you will be good enough to inform me whether there is any legal objection to the By-law. I beg in this connection to refer you to your letter of the 26th October 1891, No. 504 of 1891, relating to the Halifax authority. I am, etc.,

WM. SMITH.

Deputy Minister of Marine and Fisheries.

E. L. NEWCOMBE, Esq.

Deputy Minister of Justice.

No. 4.

(Copy.)

Department of Justice. }
OTTAWA, 12th March 1894. }

Sir :

In reply to your letter of the 6th instant No. 5566, enclosing copy of a by-law passed by the Pilotage Authority of the District of St. John N. B., I have the honour to state that, in my opinion, there is no legal objection to the proposed by-law being approved.

I have to thank you for your reference to my predecessor's letter of October 1891 relating to a by-law passed by the Halifax Pilotage Authority.

Papers returned herewith,

I am &c.

E. L. NEWCOMBE.

Deputy Minister of Justice.

The Deputy Minister of Marine and Fisheries, Ottawa.

No. 5.

(Copy)

Certified copy of a report of a committee of the Honourable the Privy Council, approved by His Excellency the Governor General in Council, on the 28th March, 1894.

The Minister of Marine and Fisheries submits herewith for approval a by-law passed by the Pilotage Authority of the District of St. John N. B., on the 1st March 1894, providing for repayment to the Commissioners of expenses necessarily incurred in the discharge of their duties.

The Minister states that the by-law has been submitted to the Department of Justice, and the Deputy Minister has reported that in his opinion there is no legal objection to it.

The committee submit the same for Your Excellency's approval.

JOSEPH POPE,
Assistant clerk of the
Privy Council.

To the Honourable
The Minister of Marine and Fisheries.

No. 6.

(Copy)

Office of Pilotage Authority, }
Dominion of Canada, District }
of St. John, N. B., 1st March 1894 }

By-law to provide for the payment of
the St. John Pilot Commissioners.

Each Commissioner shall be entitled to be repaid any expenses necessarily incurred by him in the discharge of his duty as such Commissioner; provided however that no Commissioner shall receive more than one hundred dollars, or the chairman more than two hundred dollars, for their expenses in any one year.

J. U. THOMAS,
Secretary.

No. 7.

(Copy)

Department of Marine and Fisheries.
OTTAWA, April 13th, 1894.

Sir.—Referring to my letter of the 16th ultimo with reference to by-law passed by the pilotage authority of the district of St. John, N. B., I beg to inform you that an order in council issued on the 28th ultimo sanctioning the repayment to the commissioners of expenses necessarily incurred in the discharge of their duties.

I will forward you a copy of the Canada Gazette containing the order in council when issued. I am &c.,

WM. SMITH.

J. U. THOMAS, Esq.,
Secretary Pilotage Commissioners,
St. John, N. B.

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APPENDIX F.

Pilotage at Portland, Me.

Portland, Me., August 9th, 1894.

Messrs. Scammell Bros.,

St. John, N. B.

Dear Sirs: —

Your favor of the 8th inst. at hand and contents noted. The pilotage here is not compulsory, and there are no branch pilots. Most of the piloting is done by fishermen, who pick the vessels up while engaged at their business. In the absence of any specified trade made with the captain they can collect \$2.00 per foot on sailing vessels.

Frequently captains make a trade at much less rate.

During the winter season, while the regular lines of steamers are running here, each line has their pilots, and they then have regular pilot boats, and go out cruising for the steamers. They get \$3.00 per foot for piloting them inwards, and \$1.25 per foot outwards.

We have no pilotage law.

Any further information we can give you on the subject we will gladly furnish.

Yours very truly,

(Signed) CHASE LEAVITT & Co.

APPENDIX G.

Extracts from Report of the Special Committee of the St. John Board¹ of Trade on the Bay of Fundy and Port of St. John, N. B. January, 1887.

On the 27th January, 1887, the report of a Special Committee on the Bay of Fundy and Port of St. John, N. B., consisting of Messrs. R. Cruikshank, Andre Cushing and W. E. Vroom, was read at a meeting of the St. John Board of Trade. It has been proposed to reprint this valuable report; but, even during the short period which has elapsed since its preparation, important changes have taken place in connection with the harbour of Saint John. The map published with the report could not show the Interecolonial Railway extension northwesterly from the I. C. R. R. wharf to the wharves extending from Water Street, and the warehouses built by the City at the termination of the line; for that extension, furnishing facilities for the ready transhipment of the cargoes of two more large steamers, had not then been carried out. Nor could it give the City wharves and the Canadian Pacific railway wharves, freight sheds, and grain elevator, completed on the opposite side of the harbour during the last four or five years.

It has been finally decided to reprint at present some extracts from this report, bearing more particularly upon the navigation of the Bay of Fundy and the harbour of St. John, in connection with the Report on Pilotage, presented to the Board in September 1894. These extracts seem to confirm the views of the Pilotage Committee that there are no difficulties in connection with the ordinary navigation of these waters, that cannot be overcome by the exercise of prudence and skill on the part of ships' officers in the mercantile marine; while the visits of H. M. S. "Blake," the flagship of the North American squadron, in August 1893 and June 1894, coupled with the statements in the extracts, show very clearly that the largest vessels can be brought in safety to the harbour of Saint John, even at those periods of the year when fogs are most prevalent along the North American coast.

EXTRACTS FROM REPORT AND APPENDICES.

"That a stretch of water such as the Bay of Fundy, and a harbor such as that of St. John, which have been frequented for the last hundred years by such a vast number of both sailing vessels and steamers, of the largest class, should be so little understood, is very unaccountable."

"One of the reasons for so many erroneous ideas prevailing, is attributable to the very incorrect and biased information given in recently published charts, which magnify and misrepresent the difficulties attending the navigation of the Bay of Fundy.

We would instance one of these Charts which has come under our notice, entitled "A Chart of the Coast of North America from the Strait of Belleisle to Boston", published by one Charles Wilson, in London, in the year 1877. In a memorandum on that chart, opposite to the entrance to the Bay of Fundy, occurs the following remark, to which your committee would call particular attention.

"Ships navigating the Bay of Fundy have to encounter an atmosphere almost constantly enveloped in dense fogs; the tides setting with great rapidity over the rocks and shoals, with which it abounds, and a difficulty of obtaining anchorage on account of the depth, so that under these circumstances the most unremitting attention is requisite to prevent disastrous consequences, which must necessarily attend a want of knowledge and caution."

From the tenor of the above statement, and many others of a similarly unfair and untruthful kind which have been met with, it is no wonder that strangers should feel inclined to give a wide berth to a place represented as being so dangerous. In giving rebutting evidence against such statements as the above, your committee have applied only to sources known to be of the most reliable kind, on whose truth and accuracy the utmost dependence can be placed.

First, then: As to the statement that "the atmosphere of the Bay of Fundy is constantly enveloped in dense fogs," your committee would ask reference to a statement made up from the account regularly kept by the keeper of the fog whistle situated at

PARTRIDGE ISLAND

at the entrance to the harbor of St. John, for the winter months for 17 years from 1870 to 1886, both inclusive. (See No. 1 of Appendix.) The fog average was:

Months.	H.	M.
November	11	55
December.....	8	9
January.....	21	21
February.....	16	46
March.....	17	56
April.....	40	4

A total of 116 11

or an average per month of 19 hours and 22 minutes, or 38 minutes per day.

And from a comprehensive return by the same party (No. 2 of Appendix,*) made up for the whole year during a period of 21 years from 1865 to 1885, your committee gather the information that the whistle was sounded from all causes on an average each month during the months of

January 5½ days.	May 3½ days.	September 4 days.
February 3 do	June 6 do	October 2½ do
March 3 do	July 7½ do	November 1½ do
April 2½ do	August 7½ do	December 3 do

or an average of 3 hours and 22 minutes per day during the 21 years.

*This Appendix has not been reprinted.

Your committee would remark that much of the time put down in this return as requiring the whistle to be sounded in the summer months, is not from fog alone, but from smoke from the burning of the forest in proximity to the shores of the Bay of Fundy, and in winter from vapor arising from the water of the Bay caused by the extreme cold prevalent in the months of January and February.

There is also to be found in No. 3 of the Appendix* a statement made up from the returns by the keepers of the fog whistles situated at Machias Seal Island, Head Harbor, Point Lepreaux, and Partridge Island, showing the state of the atmosphere in the Bay of Fundy during the winter months of 1883-84 and 1884-85, from which it will be seen that during the six winter months of those two years, at the four stations named, there was, on an average, only 35 minutes of fog per day."

"As an evidence of the opinion entertained by underwriters of the safety of the navigation of the Bay of Fundy, we are authorized in saying that the agents in St. John for marine insurance companies are taking risks from St. John direct to Europe at the same rate of premium as from Halifax, Nova Scotia, and from Boston and Portland, thus minimizing the dangers of the Bay, which have been made such a handle of by parties who are interested in disparaging the character of our port."

"The coast all along from the entrance of the Bay of Fundy to the harbor of St. John is so thoroughly protected by fog whistles, automatic whistling buoys, and lighthouses, that it must proceed from the greatest carelessness or unseaworthiness, (unless in very exceptional cases) that a vessel should go ashore or even touch bottom. From the entrance to the Bay of Fundy at Machias Seal Island by way of the north or west channel, and at Briar Island, on the south channel, to the harbor of St. John, vessels do not lose the sound of one fog whistle or automatic buoy until they catch the sound of another, and the soundings by the lead are so regular and the anchorage so good, especially at the entrance of St. John harbor, that danger is reduced to a minimum, even in the thickest weather. Pilots state that they dread more to enter Boston or Portland or Halifax harbors during a fog than they do St. John, and vessels bound to New York, Boston and Portland have sometimes to lie longer outside those harbors for tide than at St. John: and when foggy weather prevails, it is generally as dense (if not more so) at Portland and along the coast of the State of Maine as it is in the Bay of Fundy. In winter, fogs are very rare. They are more frequent in the months of June, July and August, but seldom continue so thick for days in succession as to preclude seeing land in the Bay, and neither fog nor snow prove a bar to delay to steam vessels, the navigation of the Bay being so simple—there being no treacherous shoals or rocks in the way from the mouth of the Bay to the Port of St. John. We may instance the steamers of the International Steamship Company, which have plied between St. John and the port of Boston for a period extending over a quarter of a century, making three and four trips per week, each way, for part of the year, and two trips each way, per week, in winter, carrying an immense number of passengers and very large quantities of freight, and never lost a single life in all that time on that route. During the past thirty years passenger

*Not reprinted.

steamers have been running between St. John and the western part of Nova Scotia, and during all that time not one was lost, thus proving that neither fog nor snow interfere with steam vessels in their passage to or from the harbor of St. John, where proper care is taken.

IN THE MATTER OF ICE

in winter, your committee may confidently assert that there is not a port north of Cape Hatteras so entirely free from ice as St. John is. The ice which forms on the St. John river and its tributaries terminates at the Narrows, some three miles above the falls, which are situated about a mile above St. John harbor, and is completely debarred from escaping into the harbor by these narrows, so that there is no shell or anchor ice in the harbor in fall or winter, and in spring the thick heavy ice of the river is thoroughly rotted before breaking up and coming through the falls, and any remnants of any considerable size are thoroughly pulverized in coming over the falls; and as to the formation of ice within the harbor, it is impossible, owing to the great rise and fall of the tide. Again, there is never any field ice in the Bay below this port. This can hardly be said of any other port on the coast north of Baltimore; in fact there is no port north of Baltimore, including Philadelphia, New York, Boston, Portland and Halifax, that have not been frozen over, and had vessels cut out of the ice in them, except St. John. Shipmasters and owners of vessels, therefore, may be fully assured that no damage can be sustained from river, harbor or bay ice, in navigating the Bay of Fundy, or in the harbor of St. John. Under the accumulation of evidence which your committee have been enabled to place before the Board, they feel that they

MAY SAFELY ASSUME

1st. That the navigation of the Bay of Fundy, from its mouth to St. John, is remarkably simple and free, whether by the south or west channels; so much so, that pilots prefer making the port of St. John in bad weather to any other port on the coast.

2nd. That the fog or cold vapor never occasions delay of steam vessels in summer or winter, and that there is never the slightest obstruction from ice.

3rd. That Atlantic steamships need make but one straight course from their regular track to Portland and Boston up the Bay of Fundy to St. John.

4th. That the south channel, opening into the Bay, is 18 miles in width at the narrowest part, expanding rapidly to 35 or 40 miles of unobstructed deep water navigation, which holds good all the way up the Bay to the mouth of St John harbor, where superior holding ground can be found; or giving clear sea room, of say 35 by 50 miles, to a stranger who might not feel confidence to enter our port in a storm.

5th. That both the largest war and merchant ships have visited our harbor, excepting the "Great Eastern," and that she could easily be accommodated.

6th. That the port of St. John, in so far as navigation is concerned, is not only "one of the safest" but actually THE SAFEST PORT, summer and winter, all the year round, north of Cape Hatteras."

APPENDIX No. 1.

Showing Quantity of Sea Fog at entrance of Saint John Harbor, from November, 1870, to April, 1886, inclusive.

	NOVEMBER.	DECEMBER.	JANUARY.	FEBRUARY.	MARCH.	APRIL.
1870	*2 hrs. 30 min.	1 hr. 45 min.	30 hrs. 40 min.	19 hrs. 25 min.	47 hrs. 15 min.	16 hrs. 10 min.
1871		1 " 00 "	6 " 10 "	3 " 15 "	2 " 30 "	62 " 20 "
1872	5 hrs. 35 min.	2 hrs. 30 "	6 " 10 "	3 " 15 "	2 " 30 "	62 " 20 "
1873	7 " 45 "	43 " 35 "	42 " 20 "	23 " 25 "	12 " 45 "	33 " 40 "
1874	4 " 30 "	4 " 00 "	69 " 40 "	4 " 5 "	61 " 45 "	26 " 15 "
1875	4 " 10 "	13 " 05 "		37 " 10 "	1 hr. 00 "	44 " 10 "
1876	21 " 00 "	1 hr. 40 "	38 hrs. 20 min.		17 hrs. 15 "	40 " 10 "
1877	24 " 45 "	7 hrs. 15 "	20 " 20 "	8 hrs. 45 min.	38 " 45 "	41 " 40 "
1878	1 " 50 "	6 " 00 "	23 " 5 "	9 " 50 "	22 " 35 "	74 " 40 "
1879	30 " 55 "	11 " 40 "		12 " 20 "	39 " 00 "	36 " 00 "
1880	11 " 55 "	7 " 30 "	51 hrs. 45 min.	38 " 35 "		86 " 15 "
1881	16 " 35 "	7 " 30 "	7 " 45 "	25 " 20 "	7 hrs. 35 min.	8 " 20 "
1882	13 " 15 "		4 " 15 "	11 " 5 "	16 " 30 "	39 " 15 "
1883	26 " 00 "		14 " 35 "	12 " 25 "	2 " 50 "	49 " 30 "
1884	2 " 40 "	22 hrs. 00 min.	36 " 20 "	65 " 35 "	16 " 30 "	22 " 40 "
1885	20 " 50 "	9 " 00 "	8 " 15 "		1 hr. 15 "	6 " 10 "
1886	8 " 15 "		9 " 30 "	13 hrs. 55 min.	17 hrs. 20 "	99 " 50 "

Or an average of 38 minutes per day.

* The 2 hours and 30 minutes in November, 1870, is for Land Fog, or thickness of the land, or from the land. No Fog up to the 8th of December, or in this present month, 1886, no Fog up to the 8th.

Appendices Nos. 2 and 3 are not reprinted.

APPENDIX NO. 4.

Compiled Statement of Fog, Snow, Vapour, Rain and Smoke in the Bay of Fundy, for the months of November, December, January, February, March and April, from 1880 to 1886.

NOVEMBER.

	FOG.	SNOW.	VAPOUR.	RAIN.	SMOKE.
	H. M.	H. M.		H. M.	H. M.
1880	11.55	18.55		5.55	18.20
1881	16.35	2.40		32.55	
1882	13.15	21.30			6.50
1883	26.00	11.50		2.05	6.00
1884	2.40	14.30		18.10	5.10
1885	20.50	2.00		43.15	8.10
1886					
Total,	91.15	71.25		102.20	44.30

DECEMBER.

1880		53.30	7.50	7.40	
1881	7.30	11.55		.40	9.30
1882		35.50	2.40	2.30	5.05
1883		66.30	21.50	10.40	9.50
1884	52.00	42.30	78.50	22.25	33.40
1885	9.00	58.15	12.15	12.45	3.10
1886					
Total,	38.30	268.30	123.25	56.40	61.15

JANUARY.

1880					
1881	7.45	49.15	21.00	2.45	
1882	4.15	90.10	44.20	2.00	7.15
1883	14.35	53.55	57.05		1.00
1884	5.20	52.05	45.25		
1885					
1886	9.30	57.35	67.20	43.30	8.00
Total,	72.25	303.00	235.10	48.15	16.15

APPENDIX No. 4.—*Continued.**Compiled Statement of Fog, Snow, Rain, etc., (Continued.)*

FEBRUARY.

	FOG.	SNOW.	VAPOUR.	RAIN.	SMOKE.
	H. M.	H. M.	H. M.	H. M.	H. M.
1880					
1881	25.20	77.45		13.35	4 10
1882	11.05	95.25	6.20	3.20	3.00
1883	12.25	43.15		24.00	
1884	65 35	75.40		7.15	3 25
1885					
1886	13.55	57.05	98.25	42.40	3.30
Total,	128 20	349.10	104.45	90.50	14.05

MARCH.

1880					
1881	7 35	25.15		9.45	
1882	16.30	76.00	2.00	17.35	2.30
1883	2.50	68 35		26.20	
1884	16.30	83.40		10.15	10.10
1885					
1886	17.20	119.05	4.00	17.50	
Total,	60.45	372.35	6.00	81.45	12.40

APRIL.

1880					
1881	8 20	20.55		7.30	
1882	39.15	71.15		13.30	
1883	49.30	21.55		7.25	
1884	22.40	10.10		9.00	18.40
1885					
1886	99.50	9.30	.50	5.15	2.30
Total,	219.35	133.45	.50	42.40	21.10

APPENDIX No. 4.—Continued.

AVERAGES.

Of Compiled Statement of Fog, etc., at all the Fog Whistle Stations in the Bay of Fundy for the months of November, December, January, February, March and April, from 1880 to 1885, both inclusive.

	Fog.	SNOW.	VAPOUR	RAIN.	SMOKE.
	H. M.	H. M.	H. M.	H. M.	H. M.
November	15.12	11.52		17.03	7.15
December.....	6.25	44.45	20.40	9.27	10.13
January	12.04	50.30	39.10	8.02	2.43
February	21.23	58.02	17.28	15.08	3.11
March.....	10.08	62.11	1.00	13.38	2.07
April.....	36 36	22 18	.10	7.07	3.31
Sums.....	101.48	249.38	78.28	70.25	29.00
Means.....	16.58	41.36	13.04	11.44	4.50
Or per day.....	34.	1.23	.26	.23	.10

APPENDIX NO. 5.

(Letter from Capt. W. A. Robinson.)

ST. JOHN, December 4th, 1886.

The St. John Board of Trade,

GENTLEMEN,—Having read various reports in the papers concerning the Bay of Fundy, I, as a seaman and mate employed in the coasting and foreign trade of the Bay of Fundy, from 1819 to 1824; and from that time until 1862, as master of St. John and other ships, in foreign trade; beg leave to make some statements concerning the navigation of the Bay of Fundy.

In my many years' experience, I have not met with any trouble from fogs, tides, shoals or shores. On one occasion (while mate) I returned to St. John in an English vessel, the master of which had never been in the Bay of Fundy. He consulted me on the dangers of navigating the Bay. I recommended him to make Cape Sable bank and from that point, with attention to the soundings, he could avoid all the impediments that lay in his way, and with my assistance he brought his vessel to anchorage near Masquash. On nearing the Bay we obtained a St. John pilot.

My many years' experience warrants me in affirming that the Bay of Fundy can be navigated with as much ease and safety in summer fogs and winter snows as any other port in North America, notwithstanding all the unfavorable reports of ignorant or prejudiced persons.

In respect of the great rise and fall of tides, they are a great convenience and no obstruction to navigation. I have never met those various and uncertain currents so much spoken of, and, consequently, dreaded by strangers. As to charts, I prefer to use the British Admiralty publications.

The rocks and shoals in the Bay of Fundy are all within the line of soundings, and with proper attention with a lead, may be avoided, there being a clear channel of 182 miles on a direct course from Cape Sable bank to St. John harbor. I ask my brother shipmasters to pardon my recommending to them to be more attentive in the use of the lead, and they would avoid many of the rocks and shoals on which they may have been wrecked.

I am, yours truly,

W. A. ROBINSON.

Appendix No. 6 is not reprinted.

APPENDIX NO. 7.

(Letter from Capt. B. B. Bustin.)

ST. JOHN, December 9th, 1886.

The St. John Board of Trade,

GENTLEMEN,—Having followed the sea for over half a century, and during that time having sailed out of St. John regularly from four to five times a year for ten years, and often afterwards, I can give an opinion of the Bay of Fundy from long experience. During the period from 1835 to 1845 I sailed between here and the

West Indies as master of a vessel, and never met with the slightest accident in the Bay of Fundy. At that time we had longer spells of and thicker fog than now, and there were only five or six lights in the Bay; yet by keeping a man on the look out and lead going, I found no trouble in coming up the Bay. I have time and again entered the Bay of Fundy in a dense fog, and have never seen land till I made the port of St. John. Several times I have come up the harbor on a cold winter night in a heavy gale, when it was impossible to get a pilot, and that, too, without any great difficulty, although there were no buoys in the harbor. With our numerous lighthouses, fog horns, and buoys now in use, it is an easy matter to make our port. I would far rather take my chances in the Bay of Fundy, making for St. John in fog, snow or storm, than to enter the ports of Boston or Portland under the same conditions. The Bay of Fundy is a safe bay, for one can always have plenty of drift and can readily tell where he is by the soundings. I consider St. John to be easier of access than any port on the Atlantic coast.

CAPT. B. B. BUSTIN.

APPENDIX NO. 8.

(Letter from Capt. Joseph Prichard.)

St. John, N. B., December 13th, 1886.

The St. John Board of Trade,

GENTLEMEN,—I have frequently come to the Bay of Fundy for twenty-eight years, and sometimes about five days before arriving in port, could not get a meridian altitude, and consequently, had to trust entirely to the lead and distance. I have always found soundings on Sable Island bank transparent sand, and the deep water soundings between the banks and the coast of Nova Scotia always mud bottom.

La Have bank the lead strikes hard on a very fine sand at from forty to fifty fathoms, and on the east of Cape Sable the bottom is rocky, and, when on the bank, coarse sand; and as we approached the west side of Cape Sable bank the soundings are black gravel and shells, then the Bay is open to the north, but it is best to keep on to the westward until the water deepens to seventy, eighty, or ninety fathoms, and after that to get on the edge of the bank and sail parallel to the edge in about fifty fathoms till abreast of the Lurcher, when the water will shoal to about thirty-five fathoms, and by keeping on the same course the water will get deeper, and not to get into less than fifty fathoms till you get abreast of Briar Island. The shoal water at the Lurcher will indicate the distance up the Bay, and, consequently, the distance to run till abreast of Briar Island, and in about eighty to ninety fathoms, when we can shape our course N. E. by north for Partridge Island. By keeping a good lookout we often see the land from the masthead, over the fog, when you cannot see much more than the length of the ship from the deck, and in very cold weather, in the winter, the vapors seldom rise higher than the ship's lower masthead. In the sailing directions the method of taking the passage is up west of Grand Manan, but I always preferred the east of Grand Manan, as it is much the shorter, and I have never had

an accident. In beating along the south coast of Nova Scotia, in a fog or vapor, with the wind S. W., I would not stand inshore nearer than forty fathoms of water.

As far as the vapor or fog is concerned, going to Boston or Portland you have the same to contend with.

J. PRICHARD.

Appendices Nos. 9, 10, 11 and 12 are not reprinted.

APPENDIX NO. 13.

(Statement from Capt. Chas. S. Taylor, Harbor Master of St. John.)
The St. John Board of Trade.

GENTLEMEN;—I was about twenty years a pilot in the Bay of Fundy. I have brought many steamships up the Bay of Fundy in the summer time; not many in the winter, as during the time I was pilot steamships did not come regularly from seaward in the winter, with the exception of the Allan Line. I would have no hesitation, as a pilot, in bringing any of the largest mail steamers to the port of St. John all through the year, summer or winter, but would prefer the winter, the atmosphere, as a rule, being more clear then. With a steamer drawing twenty-seven feet of water, the harbor of St. John can be entered about half flood. I consider a large ship safe at the railway wharf in any weather. I consider the corporation pier, however, a safer wharf; the depth of water at that wharf is thirty feet at the south end and twenty-five feet at the north end, twelve feet from the pier. I consider the anchorage at Partridge Island, at the mouth of the harbor, excellent. The channel could be dredged to a sufficient depth for ships of any draught of water at low tide. I consider the John Robertson wharves well suited for permanent wharves for steamers of large size, and a very suitable wharf could be built at Sand Point, Carleton, by adding to the present, there being twenty-seven feet at low water springs.* I consider the holding ground in the harbor to be very good. The steamer "Kansas" loaded at the railway pier, about three years ago, and she drew twenty-seven feet. At this time there were nine steamers in the harbor at one time, two of them respectively of 5,276 tons and 5,146 tons, and the other seven from 1,500 to 3,000 tons each. I consider the navigation of the Bay of Fundy as easy and safe as any place I know of; the running courses are few and simple, and the very few obstructions are hardly worth mentioning.

CHARLES S. TAYLOR,

Harbor Master.

APPENDIX NO. 14.

(Statement from Richard Cline, one of the St. John Branch Pilots.)

ST. JOHN, 7th January, 1887.

The St. John Board of Trade,

GENTLEMEN,—I have been about thirty-nine years a St. John pilot, and have been in the habit of taking charge of steam and sailing vessels outside of Briar Island, at

*This has since been done.

the mouth of the Bay of Fundy. I have brought many steamers of the Anchor Line and others from Halifax, and some from New York, and I have brought many ships of war, both British and United States, into the harbor of St. John. I was pilot on board H. M. S. "Northampton," drawing twenty-six feet, from Halifax here in August, 1878. We harbored at Liverpool, N. S., Flagg's Cove, Grand Manan, Bliss Harbor, and Digby, and from thence to St. John, and then back to Halifax. The weather was thick most of the time. I had no difficulty. At the time of the Trent affair I brought several troop ships in here, boarding them in Halifax. I had the "Jura," the "Calcutta," the "Australasian," the "Adriatic," 5,555 tons, and many others were here that winter, brought in by other pilots. Thirty years ago last summer I piloted the U. S. steamer "Mississippi" from Eastport here; she drew twenty-two feet; the weather was thick; there were no fog alarms in the Bay then, and we got along well enough, although the weather was thick. I also piloted the American ship "Great Republic," the largest merchant sailing ship ever built. We sailed up the Bay and into this port, and came to anchor in the harbor without a tug. About three hours flood would be the time to enter the harbor with a ship drawing twenty-seven feet, and the same applies to Boston and Portland, Me. The navigation of the Bay of Fundy compares most favorably with other ports and places where I have been. If a ship of deep draught of water arrives off the harbor and has to wait for the tide, she can either anchor outside Partridge Island with safety (the anchorage being excellent) or she can lay off and on, there being plenty of sea room. I would rather approach St. John in bad weather than any other port along the coast. During the time I have been pilot, I have myself brought in two hundred steamships and have never had an accident with one of them. The aid of a tug is not necessary either in entering or leaving the port with steamships. The land of the Bay Shore is high, and one can always see it over the vapor occasioned by extreme cold weather. It can generally be seen also in foggy weather by going aloft. The soundings are good from Cape Sable into St. John, and one could come in during the densest fog by using the lead. The whistles are good and numerous, but when they cannot be heard, a pilot or captain can come up by soundings, which are very regular. From the usual track of Atlantic steamers bound to Portland and Boston, the navigation of the Bay by the south channel is plain and simple. It is a straight course from Briar Island to Partridge Island, say sixty miles. In fact, those steamers, by keeping on their regular course towards Portland and Boston a few extra miles west of Cape Sable more than is necessary to enter the Bay can then turn and make one straight course to Partridge Island, at the mouth of St. John harbor, and this without any obstructions within twenty miles of the line sailed after entering the Bay. The south channel is broad, being eighteen miles wide at its narrowest part, which is at the entrance of the Bay, between Briar Island and the "Old Proprietor," so called. From this point inward it immediately widens to thirty-five or forty miles, which width it holds good all the way to St. John without obstruction of any kind. When piloting sailing ships out of the harbor I never anchored at the Island to await a chance on account of fog. I always went on, thick or clear, and

would work my ship out south channel, even beating out all the way if wind was ahead. I do not consider the tides dangerous by any means, but one must, of course, have some knowledge of them when entering the Bay. From Briar Island up the tides are very regular. There is never any ice in the harbor to interfere with or injure ships. There is never any field ice to contend with in the Bay, even in the severest weather. There is about eighteen feet of water in the main channel eastward of Partridge Island at low water spring tides. This could be easily dredged if desired. It would be cut clear by the tide if the breakwater was extended to the Island; that would make one of the most comfortable harbors this side of Europe.

RICHARD CLINE.

APPENDIX NO. 14.

(Letter from Samuel Rutherford, Pilot for the Bay of Fundy and Harbor of St. John.)
The Committee of the Board of Trade.

GENTLEMEN,—I have been thirty-four years a pilot in the Bay of Fundy. I have been to sea altogether forty-two years, and have brought large steamers of heavy draught of water into the harbor of St. John. Vessels of this class can enter about half flood. I consider the navigation of the Bay of Fundy quite safe in the winter time—the weather being then clear, as a rule. I do not consider that vapor renders navigation unsafe, as it is very seldom so high as to obstruct the view of the land—it only prevails during northerly winds, and is of short duration. When coming here from Halifax I have often taken charge from that port. I have often brought ships through the channel between the north-west Ledge and the “Old Proprietor,” by the lead, and have not seen the land. I consider the holding ground off Partridge Island to be as good as any known. The bottom in the main channel on entering this port is gravel and mud, and could be dredged for large ships. The average depth of water off the Custom House, at low water springs, is ten fathoms. I consider the harbor of St. John easy of access in any weather, as the courses from Cape Sable to St. John are few and very simple, and can be run with ease, ordinary care being observed in thick weather to keep the lead going. The soundings being very regular and pronounced, and the Bay of Fundy being admirably provided with light houses, fog whistles and automatic buoys, makes the chance of loss or damage very small indeed. I consider that the harbor of St. John and its approaches compare very favorably with any other harbor on this coast, as they never freeze over in winter, which cannot be said of any other harbor north of Hatteras.

SAMUEL RUTHERFORD.

Appendices Nos. 15—20 are not reprinted.

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