

59 Victoria.

Sessional Papers (No. 11B.)

A. 1896

REPORT

OF

AN INVESTIGATION INTO THE PILOTAGE SYSTEM

AT

ST. JOHN, N.B.

BY

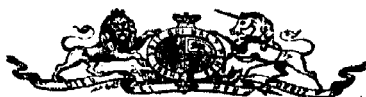
Captain W. H. SMITH, R.N.R.

Chairman of the Board of Examiners of Masters and Mates

MARINE AND FISHERIES DEPARTMENT

1895

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

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

1895

[No. 11b—1896.] [Price, 25 cents]

St. John, N. B., Pilotage Investigation.

CONTENTS

	PAGE.
Report of Commissioners.....	1-27
Addenda.....	28
<i>Witnesses examined:—</i>	
Beck, James.....	219
Bisset, G. W. J.....	42
Black, W. A.....	86
Carmichael, Donald.....	224
Cline, Richard.....	137
Cook, Clinton.....	47
Cruikshank, Robert.....	127
Dernier, Cecil L.....	110
Dodge, Frank E.....	205
Doyle, James.....	149
Edwards, M. Boyd.....	203
Elkin, R. C.....	206
Fleming, Robert H.....	124
Forbes, Martin L.....	129
Gale, Robert.....	36
do recalled.....	38
Hamlyn, Wm.....	216
Harding, Wm. H.....	98
Humphreys, William.....	147
Hutchison, Daniel L.....	123
Knox, James.....	222
Laechler, Chas. E.....	113
Likely, Joseph A.....	127
Mathews, John.....	173
Merritt, Joseph F.....	152
McIntyre, Peter.....	199
McKellar, Neil.....	192
McLaughlan, Charles.....	167
McLean, W. B.....	212
McLeod, George.....	171
McNamara, J. W.....	132
Olive, H. J.....	135
Patterson, A. L.....	79
Patterson, Harris B.....	95
Pike, Samuel F.....	64
Pratt, J. H.....	44
Purdy, Daniel J.....	185

	PAGE.
<i>Witnesses examined :—</i>	
Robinson, George.....	225
Robinson, T. B.....	193
Rodgers, Bartholomew.....	83
do resumed.....	88
do continued.....	201
Schofield, Samuel.....	50
do resumed.....	69
do makes statement.....	197
Smith, J. Williard.....	100
Spears, Henry.....	115
do resumed.....	123
Steele, Henry H.....	187
Summervill., R. B.....	176
Sutherland, James B.....	196
Taylor, Chas. S.....	129
Thomas, J. U.....	35
do recalled.....	39
do continued.....	223
Thomas, William.....	105
Thompson, John.....	164
Traynor, Thos.....	29
Troop, H. D.....	33
do continued.....	226
Whittaker, Fredericks.....	191
Final Meeting—summing up of evidence.....	229-249
Appendices, reports, documents, &c., referred to in report and minutes of evidence.....	250-360

REPORT

Of an Investigation into the Pilotage Business of St. John, N. B., held at the Office of the Chairman of the Board of Examiners of Masters and Mates, Custom-house Building, St. John, N. B., February, 1895, before W. H. Smith, R. N. R., of the Marine and Fisheries Department, assisted by Bloomfield Douglas, R. N. R.

Proceedings commenced at 10 o'clock on Wednesday the 7th February.

The Board of Trade and the Shipowners Committee were represented by counsel. For the Board of Trade, Messrs. Palmer and Gilbert, Q.C., and for the Shipowners' Committee, Mr. Baird, Q.C.

The counsel for the pilots were Messrs. Skinner and McLean, Q.C's. The proceedings opened by Capt. W. H. Smith reading over his authority, contained in the Order in Council appointing him a commissioner to hold the inquiry.

At the commencement of the investigation, a pamphlet containing a report of the Committee of the St. John Board of Trade, and one with remarks on the pilotage system of St. John, prepared by the Shipowners' Committee, were handed in to the commission.

The counsel for the pilots agreed that these reports should, to such an extent as might be regulated from time to time during the inquiry, form a basis on which the investigation should be conducted.

These, with all other papers and returns referred to in the evidence, which were afterwards put in by counsel or accepted by the commission as official records and recognized statistical information on the subject of the pilotage business of the port of St. John, will be found in the appendix hereunto annexed.

The evidence taken from the 7th to the 14th February, was written down by Mr. Gilpin of my office and afterwards type-written by him. That from the 14th to the termination of the inquiry, was taken down in shorthand by Mr. DeVine, stenographer, who was duly sworn upon the occasion.

The contentions raised by the Board of Trade and Shipowners' Committee may be briefly stated as follows:—

1. That either all compulsory pilotage should be absolutely abolished,
2. Or that vessels under certain conditions should be exempt, or the masters be allowed to pass an examination as to pilotage and pay for a license, after which they should be free to navigate their own vessels.
3. That barges carrying coal and lumber from Bay of Fundy ports and towed by steam tugs, especially those carrying coal from Parrsborough, should be exempt.

4. That under a free and open system, a staff of duly qualified pilots, say to the number of about 20, should be retained after passing an examination.

5. That the present rates of pilotage fees are excessive, compared with Halifax and other ports in the maritime provinces.

6. That the present system of exempting vessels under 125 tons, tends to force upon the builders and owners the construction of badly modelled and of an inferior class of vessels, purposely so built with a view of obtaining exemption.

7. That the navigation of the Bay of Fundy is not of so dangerous a character as stated in the Admiralty Sailing Directions, the coast and headlands being now well lighted and the number of fog signals placed in prominent positions to aid navigation being of great service.

8. That the pilotage should be paid upon registered tonnage and not upon the draught of water.

9. That the imposition of a higher rate of pilotage fees upon steamships, compared with those collected from sailing vessels, is unfair, and also opposed to the general custom in many other parts of the world. (It is alleged that in other ports pilotage dues are less upon steamers than upon sailing vessels, and that sailing vessels, even when in tow of a steam tug, pay reduced rates of pilotage and in some cases none at all.)

10. That fixed stations called "Boarding Stations," for pilots, should be established at convenient and safe places in the Bay of Fundy, where vessels approaching could signal and obtain pilots without delay. (It is stated that no pilot station exists at present, where vessels coming into the bay can be sure of finding a pilot, and that strange vessels have no means of ascertaining where to pick up a pilot at any time, while proceeding into the bay from sea).

11. That the constitution of the present pilotage authority, consisting of seven commissioners, is objectionable and that their number should be reduced to three.

12. That the administration of the pilot service by the present commission is unsatisfactory.

The arguments of the pilots against the recommendations and views of the Board of Trade and the Shipowners' Committee appear to be as follows:—

1. That the total abolition of compulsory pilotage or the extension of exemption from pilotage dues of vessels above 124 tons, would destroy the present pilotage service.

2. That many of the pilots would leave the service and endeavour to seek other employment elsewhere.

3. That all coal barges from Parrsborough should be compelled to pay pilotage fees, as they take larger cargoes than the vessels which formerly carried coal and were exempt by law.

4. It is conceded that a smaller staff than twenty pilots would probably be able to do the work, if paragraphs 1, 2 and 3, of the Board of Trade and Shipowners contentions were adopted—thus a number of pilots would be thrown out of employment.

St. John, N.B., Pilotage Investigation.

5. That the present rates of pilotage are not excessive, considering the small earnings realized by the pilots.

6. That shipowners take advantage of the present exemption of vessels under 125 tons, unfairly, to the detriment of pilots, by constructing vessels to carry a large amount of cargo in proportion to their registered tonnage.

7. That the navigation of the Bay of Fundy and the approaches to St. John are dangerous especially in foggy weather.

(The pilots do not appear to object to substituting a draught for a tonnage rate for pilotage on shipping.)

8. That as a large steamer does the work of many sailing vessels, the owner should pay more pilotage.

9. That difficulties exist, owing to bad weather in the fall of the year, for the establishment of boarding stations in the Bay of Fundy; and besides, the competitive system now in force amongst the pilots in boarding ships, would operate against such stations.

The commission desires to state for the information of the Minister of Marine and Fisheries that the pilotage system in operation at the present time and which has been in force for many years at the port of St. John and for certain defined districts in the Bay of Fundy, is regulated by the Pilotage Act, chapter 80 of the Revised Statutes of the Dominion of Canada, and dates from the year 1886.

At that time the Government at Ottawa took control of the pilotage affairs of every port in the Dominion and enacted laws for the safe conduct of vessels at various places.

Under this Act certain principles in connection with pilotage matters were laid down for the guidance of the controlling authorities at the ports where pilots were established.

At St. John seven commissioners were appointed, who framed by-laws to be observed by a certain number of qualified pilots.

Most of these pilots had previously passed an examination, when the service was under the control of the city authorities, as to their fitness to take charge of and navigate vessels in and out of the harbour and districts approaching. No other examination was required of them after being taken over under the present regime.

Previous to the above date, different systems of pilotage had prevailed at St. John, based on those which were in existence in many other countries, and a larger number of pilots were engaged, but they were under the administration of the mayor and corporation of the city, who entirely controlled the affairs, and the working of the system had from time to time been greatly changed to meet the growing and increased traffic of the port.

The bay and approaches to St. John is at present divided into three districts—formerly there were five.

The districts are as follows:—

1. From Partridge Island to Musquash Head, bearing N. W.
2. From Musquash Head to Point Lepreaux, N. W.

3. From the outside limit of the second district to a bound ranging from the North Head of Grand Manan to Liberty Point, bearing N. W. by W.—North Channel; and from Machias Seal Island to Cape Sable Seal Island, bearing S. S. E.—South Channel.

The rates of pilotage now charged are as follows:—

Inwards—On sailing vessels, per foot draught of water:—1st district, \$1.50; 2nd district, \$1.75; 3rd district, \$2.25.

Outwards—From the harbour of the port of St. John, N.B., to outside of Partridge Island, \$1.25; down the bay, when required, shall be two dollars per foot draught of water over and above the one dollar and twenty-five cents harbour pilotage outwards.

Inwards—On steamers (not otherwise exempt by the Pilotage Acts) per foot draught of water:—1st district, \$2.00; 2nd district, \$2.50; 3rd district, \$3.00.

Outwards—From the harbour of the port of St. John, N. B., to the outside of Partridge Island, \$1.75; down the Bay of Fundy, when required, shall be two dollars and seventy-five cents per foot draught of water over and above the one dollar and seventy-five cents harbour pilotage outwards.

On the 3rd May, 1894, at a meeting of the pilot commissioners, it was resolved to adopt a new tariff of rates, and forward a copy of the same to the Governor in Council, asking for his sanction to the proposed change. (Copy of this schedule in appendix).

It must be noticed that the rates for piloting steamers in each of the districts, is disproportionately high as compared with the tariff charged for assisting sailing vessels.

The system of pilotage at St. John is compulsory for all the districts inwards and into the harbour, but outwards only as far as the southerly point of Partridge Island.

More correctly speaking, the arrangement is one of compulsory payment of pilotage, as no legal obligation compels masters of ships actually to employ pilots, and no penalties are enforced, except the payment of fees, if they do not avail themselves of their services.

A vessel may pass inwards, through all the districts and approaches, as well as into the harbour of St. John, if not spoken by a pilot in any one of the districts named, without any fees being charged, but if hailed or spoken by a pilot on the passage up the Bay of Fundy, the master, owner or agent is compelled to pay the full amount of pilotage on her arrival, whether he engages a pilot to assist him in the navigation or not.

The outward or sea district at present is, as above described, in a line between Seal Island, Cape Sable and Machias Seal Island.

If a vessel is spoken by the hoisting of a flag or otherwise, after crossing this district limit, dues are collected.

No pilot is allowed to receive the fees from the master or others, but for every vessel he pilots, it is his duty to fill up a card with the name and description of the vessel, draught of water, etc.

St. John, N.B., Pilotage Investigation.

On arrival in port, this card is handed to the secretary of the pilot commission, who calculates the legal amount of fees the vessel is entitled to pay, and receives it sometimes direct from the master, but in many cases the shipowner, agent or consignee pays the bills according to arrangement, by the month or in any other manner that may be agreed upon.

For the fiscal year ending 31st December, 1894, the amount of fees collected was \$21,415.80.

Any master may refuse to engage the services of a pilot outwards from the port of St. John, even as far as Partridge Island.

Under such circumstances, however, when a pilot is not employed, the secretary makes a calculation of the fees to be charged, and, if the vessel is of such a tonnage as to come under the compulsory law, the master cannot obtain a clearance from the custom-house without paying the full amount of the pilotage fee and receiving a transire document previous to sailing.

No master of a vessel is under obligation to take a pilot on the outward voyage down the bay, or is payment exacted beyond Partridge Island; but a captain of a ship may voluntarily do so if he considers it would be to his advantage to employ one to assist him. In all such cases, he is required to make application to the secretary, who will then select and authorize one of the pilots to perform that service. This appears to be the general rule.

Under these circumstances the card is filled up as usual and signed by the captain. The amount is afterwards collected from the owner or agent, unless in the case of a vessel putting into the port for a short time only or perhaps a foreigner—the captain may desire to settle the bill himself before leaving.

The payment of pilotage down the bay outwards is occasionally a matter of agreement between the master and the pilot, but, strictly speaking, a regular tariff should be collected as far as the pilot proceeds with the vessel. The amount received goes into the general pilotage account. The pilot can be landed at any point which may be convenient on either side of the bay, or put on board of a pilot vessel while on her cruising ground, or he may be transferred to an inward bound vessel requiring his services.

Many shipowners do not allow their captains the privilege of taking a pilot beyond Partridge Island down the bay, considering the vessel may probably meet with delay in landing him, perhaps while a fair wind was blowing, when the vessel could have made good progress to seaward.

In some cases fog has suddenly set in, and, although the master might have been able to feel his way out of the bay with the aid of the lead and his knowledge of the tides, he has not considered himself justified in approaching any point of land when it was hidden from view by a fog for the purpose of landing a pilot. Under such circumstances vessels have been occasionally detained, and in some cases the pilot has been taken to sea.

Notwithstanding the objection to this practice by some owners of ships, captains have been known to take their pilots down the bay without their knowledge, and have paid the fees out of their own pockets.

It has sometimes happened that vessels with pilots on board have been stranded on the shores of the Bay of Fundy upon the outward bound voyage, and the fault has been attributed to the pilots, whose licenses have subsequently been suspended by the commissioners after an investigation.

From time to time a feeling of dissatisfaction at the state of affairs in connection with the present pilotage system at St. John, has shown itself in various forms, and frequently found expression in the public press in connection with the general subject of compulsory pilotage in force at this port, and also, to what some ship-owners and others have regarded as an unsatisfactory working of the system.

Complaints have been made as to the methods of its management, and it has been considered by some that the rules for regulating pilotage matters have not been carried out according to the right interpretation of the Dominion Act or the intention of the legislature.

The feeling has been increased considerably in consequence of certain shipping casualties which have occurred on the shores of the bay at different times, although the disasters appear to be few in number in proportion to the trade of the port.

Pilots have also been blamed for alleged want of attention to their duties in not cruising about regularly and not always being upon the alert to look out for inward bound vessels in the districts in which they should have been found, and it is stated that there is no fixed station in any part of the bay where vessels entering can be certain of finding a pilot at all times.

The Board of Trade have held meetings to take into consideration what, in their opinion, are the changes necessary to be made.

Shipowners have met and found fault with the present arrangement, which they describe as complicated and unfair, and the consensus of opinion amongst these public bodies appears to indicate a desire that a change of some kind is required, and that compulsory pilotage should in the near future be abolished.

Recently the subject has been brought more prominently forward by the Board of Trade at St. John, and at a meeting held at their rooms in September, 1894, a special committee of the board presented a long report containing seventy-five clauses, in which the whole subject of pilotage was discussed and dealt with. (The report referred to will be found in the appendix.)

The committee, under the signature of their chairman, state that after the fullest consideration, the said committee are forced to the opinion that compulsory payment of pilotage dues ought to be abolished.

It must however be clearly understood that none of the parties who entertain such views have expressed a wish to do away with the pilotage of the port of St. John or a proper system of pilotage, but they desire to have that system open and free with a limited number of licensed pilots appointed and duly qualified after passing an examination, and that regular fees should be paid for their services where required, and regulated from time to time to meet the necessities of the port.

Similar systems of compulsory payment of pilotage to that of St. John are in operation in other parts of the Dominion, at Halifax, Sydney, etc., but in many of the minor ports a voluntary system prevails, and masters of vessels may engage the

St. John, N.B., Pilotage Investigation.

services of a pilot or not, as they desire; nevertheless, it appears that an ample supply of pilots is to be obtained in those places, and when a pilot is engaged a regular fee is charged for bringing a vessel into port.

There are several ports in the Dominion where masters obtain licenses to pilot their own vessels.

When pilotage was first introduced into St. John, no doubt it was necessary for officers in charge of vessels to obtain assistance in navigating them up the Bay of Fundy, as very few lighthouses were erected and scarcely any buoys marked the outlying shoals and other approaches to St. John harbour where dangers exist.

Of late years, the successive Ministers of Marine have given great attention to the lighting, buoying and beaconing, and of placing fog signals upon various well marked headlands upon the coast line of the Dominion.

These aids to navigation have been increased from year to year in number, so that many of our prominent points are as well marked as those in any part of the world.

Careful study of the excellent charts of the Bay of Fundy, compiled from surveys made under the auspices of the British Admiralty, their admitted correctness and also the reliable guide shown by the delineation of the shoals and soundings, combined with the very admirable system for the maintenance of the aforesaid lighthouses and fog signal stations, where the very latest scientific improvements have been introduced, the commission is of opinion that the navigation of the Bay of Fundy, except in very foggy weather, is as free from danger as the approaches to most other ports under similar conditions of weather.

Soundings, if taken in time and carefully continued, are an indication of an approach to danger, and if a line of soundings is laid down consecutively, the depth and character of the bottom being so well marked on the chart, it may be considered that any duly qualified and careful captain of a ship can navigate his vessel up the bay from the entrance to Partridge Island, outside the port of St. John, without the assistance of a pilot, and this is actually shown by a number of vessels, some of large size, which have already done so, and of those masters of ships who go past St. John and proceed to ports in the upper part of the bay, such as Windsor, Parrsborough, etc., without the necessity of employing the bay pilots at any time, and also to those vessels which go down the bay outwards to sea solely in charge of their own captains.

A large proportion of shipping casualties by stranding occur by neglect to heave the lead, and, notwithstanding repeated warnings, masters of ships will persist in following such a system of careless navigation.

In most all the cases which have been investigated by our marine courts in Canada for a number of years, the evidence has shown that a few casts of the lead, taken in time, would probably have saved the vessel from disaster.

A single sounding, when a vessel is proceeding up or down the Bay of Fundy in a fog, is of little practical service, as a similar depth may be found in various positions on either side of the bay.

For the purpose of navigating a ship with anything like accuracy, it is very necessary that a line of soundings, as aforesaid, should be taken and plotted upon the chart, and safety cannot possibly be insured without this practice is carried out.

On board of most of our ocean steamers the master is now supplied with Sir William Thompson's (Lord Kelvin's) deep-sea sounding machine. It is somewhat costly at first, but repays the shipowner in the long run.

With this lead in use, the captain of a vessel has no excuse for not constantly taking soundings during thick or hazy weather, as it is a very simple process and requires only two men to perform the operation, and the speed of the steamer can be easily reduced to keep her in position without being very much influenced by the wind or tide in a direction, which may not be easily estimated by the officers of the ship.

It is very different in a sailing vessel, as there is much more labour in ascertaining the depth of water. The vessel has to be brought to the wind and her way through the water stopped as nearly as possible to insure an up and down or vertical cast. It is a troublesome duty and requires the services of quite a number of men to carry it out. It is also a most disagreeable work upon a wet night or during a snow storm, and many masters of vessels with a limited number of seamen on board frequently run on until they consider it absolutely necessary to take soundings; it then becomes often too late to render service to the ship.

From the previous remarks it can be seen that the condition of things as regards the navigation of the bay, from the improvement in the aids to navigation, is entirely changed, and it would appear that the need of assistance from pilots is not so much required now as in former years, especially for service to vessels which are registered in St. John or some other port in the Dominion, whose masters are in the habit of making several voyages during the year in and out of the port. At the same time, it must be fairly admitted that the services of a licensed pilot having a certain amount of local knowledge and experience of the currents and set of tides when approaching St. John, especially if the tide is affected by the annual freshet which is known to come down the St. John River and its tributaries in the spring of the year, will often give confidence and to some extent relief to the commander of a ship who requires rest and assistance after having made the land in bad or foggy weather.

No doubt there are many occasions when the masters of sea-going vessels nearing the entrance to the Bay of Fundy will have great anxiety in approaching the coast when the land is obscured. They may have spent many watchful hours on deck night and day, superintending the taking of soundings along the Nova Scotia coast or when crossing over the Sable Island banks or any other of the outlying banks upon the coast.

It is therefore impossible for men under these circumstances to deny themselves that physical rest which nature demands.

It is not on the open sea where danger from fog is most to be apprehended, but when sailing or steaming along the coast in the vicinity of shoals and reefs.

The employment of a pilot must, without doubt, be of some benefit to the master in command of a large ocean steam or sailing vessel, who is unacquainted with the bay or one who has never sailed in it before, especially when bad weather is approaching, but under these circumstances, as there is no recognized pilot station, it is difficult to understand, how there can be any certainty of the services of a pilot being obtained.

St. John, N.B., Pilotage Investigation.

Men in command of ships differ widely. One man prefers and has a pride in taking the responsibility upon himself to bring his ship into port without the aid of a pilot, as is frequently observed at Halifax, St. John and other ports; whilst another master, although he may be equally competent, seeks to relieve himself from responsibility as much as possible. These two classes of men are often met with on board of vessels leaving the harbour of St. John.

Most masters will only take a pilot as far as the outside of Partridge Island—the compulsory limit—whilst occasionally a captain will obtain the services of one to assist in navigating his vessel down the bay.

During the prevalence of fine, clear weather, when a vessel is sailing towards St. John, having come in from sea, the captain may consider it proper for a pilot to take charge of the navigation and relieve him from the duty for a time, while the different headlands are in sight and the distance they are passing off can be correctly estimated; but immediately mist or fog sets in and envelops the vessel and there is a probability that she is approaching any danger, no right thinking commander would delegate to another that responsibility which, rightly speaking, should rest upon his own shoulders.

However reliable the officer of a ship might be, who holds a certificate and who was on watch with the pilot during the master's absence from deck, he will, notwithstanding, if a prudent man, take care to be at the post of danger whenever necessity occurs, to see that every needful precaution and safeguard is taken in the interests of his owners, the welfare of the passengers, if any are on board, and the care of the crew, so as not to risk the life and property under his care.

On board of iron or steel built steam or sailing vessels in pilotage waters, it is requisite for the master or some competent officer to be near the pilot whenever the course is required to be altered, to instruct him as to what allowance is to be made for error in the steering compass, caused by any attraction in the iron of the ship or cargo, that is if the pilot has not sufficient knowledge to apply that error himself and make the proper calculations.

It must here be stated that no two iron vessels can be steered upon the same compass course from one point to another, unless the deviation is alike upon the respective courses of each of the ships, as the magnetism in iron ships is distributed according to the direction of the ship's head when being built.

No doubt there are some irregular tides and currents in the Bay of Fundy and the approaches to St. John and the various ports.

It can scarcely be expected that the tides will run with an absolute degree of uniformity in a large open bay, when the tidal waters must be so much influenced by the wind.

Abnormal currents occur at different times of the year, and not taking into consideration the freshets before mentioned, they are most commonly caused by circumstances which can scarcely be anticipated by either pilots or masters of vessels.

The surface waters of the Bay of Fundy are seldom in a quiescent state for any considerable time.

Such irregularities, however, are not specially confined to the Bay of Fundy, but occur upon the whole coast of Nova Scotia and Cape Breton Island, and also in the Gulf of St. Lawrence, but more particularly in the Straits of Belle Isle.

Upon the coast of Nova Scotia the polar current runs to the westward at a speed of one to one and a half knots per hour. It is sometimes augmented by an easterly wind and has occasionally been found to have a velocity of two and a half to three knots per hour, inasmuch as some ocean steamships bound to the port of Halifax, have, during the prevalence of foggy weather, been actually carried past the entrance to that port a distance of ten and even as much as fifteen miles beyond, which has only been found out when the vapour in the atmosphere cleared away and the course of the vessel was directed towards the land for the purpose of sighting it.

On the other hand, during the long continuance of a westerly wind, the polar current has been retarded and occasionally neutralized by a surface drift of water flowing in an opposite direction, and some commanders of steamships have occasionally found themselves an equal number of miles astern of their reckoning, but this has mostly occurred when the vessel was outside the line of soundings.

Similar conditions of uncertain currents have been reported by officers of ships when vessels have been entering and sailing up the Bay of Fundy towards the various ports, and very strong currents have been observed frequently before the coming of a cyclone.

Cyclonic disturbances approach the Nova Scotia coast from the westward and generally advance in an E.N.E. direction, in our latitudes, and if the right hand semicircle should happen to cross the mouth of the Bay of Fundy and move along the coast towards Cape Breton Island, the winds would probably be first from S.E., then S. and S.W., consequently a large body of water would be heaped up in front of the storm and, this being pressed into the entrance of the open-mouthed bay, would produce an abnormal current, and after the cause was taken away a return action would probably occur.

Seamen generally know the signs of an approaching movement of a cyclone, as it is almost always preceded by a long, heavy swell with a confused sea.

Pilots on board their vessels cannot possibly have any more knowledge of these circumstances than officers in charge of ships, unless they obtain it from the weather predictions of the meteorological office before leaving port.

As pilots do not carry such good barometers and other nautical instruments on board their boats, as a general rule, as masters of large sea-going vessels are supplied with, it is possible they may have much less means of anticipating the movements of these storms.

Men in command of ships are also continually watching for any signs of approach of bad weather, being in the habit of taking and recording daily observations at regular intervals.

The pressure of the atmosphere, as indicated by a barometer, has also a considerable influence upon the movement of the tide with respect both to velocity and height.

When the mercury in the barometer is above thirty degrees, the pressure is very great upon the surface water, and if that pressure is taken of another distant area, and a low barometer prevails, the water must have a tendency to flow towards that area.

St. John, N.B., Pilotage Investigation.

These facts are well understood by observation taken in Liverpool Bay (G.B.) and the Mersey River, as well as in Morecambo Bay.

Although there is a rise of tide of 26 feet in springs at Liverpool at full and change of the moon, which occurs at 11.23—the same time it does at St. John—the tides do not rise sometimes within 18 inches of the mark, in consequence of the great difference in height between the barometer outside and in the bay, and large vessels are frequently neaped and unable to get into dock.

Managers of steamships have a full knowledge of such facts and provide themselves accordingly; and if it is important for their vessels to be docked, which is almost always the case, as soon after their arrival as possible, it becomes frequently necessary for the seamen to discharge some portion of the cargo into lighters, while the vessel is at anchor in the river, to enable the master to take her over the dock sill, which of course entails a large expenditure of money, which would have been saved had the water risen to its normal height; and circumstances of this description must also occur at various times in St. John Harbour, when the water rises to a greater height than is shown by the tables; or a contrary effect may take place.

Vessels entering the Bay of Fundy do not follow a fixed track or make towards any particular point of land. They approach certain headlands, according to the circumstances in connection with the wind and weather, and very much depends upon whether they are sea-going or coasting.

When all things are considered, it is nearly impossible for the master of a ship to be quite certain of his position near the land, if he has not been able to obtain observations of the sun or stars, but has had entirely to rely upon dead reckoning.

There being no regular fixed station for pilots in the Bay of Fundy, commanders of vessels cannot possibly know where to pick them up, particularly in foggy weather.

The cruising ground for pilots takes in a very large area, comprised in the various districts, but there does not appear to be any absolute certainty that the master of a vessel may sight a pilot boat in any part of these districts, unless when he is near Partridge Island.

It appears, therefore, to be more chance work than otherwise, that vessels can rely upon obtaining the assistance of a pilot until they are well in sight of Partridge Island, unless the weather is clear and objects are seen a considerable distance off.

The absence of a good system of cruising in the bay, which would be of actual service to shipping, has been considered detrimental to the port.

The master of a vessel sailing up the Bay of Fundy in a fog, or a snow storm so thick that one end of the ship could not be seen from the other, with or without a pilot on board, has to proceed with the utmost caution and use every means at his disposal to insure the safety of the vessel and must be conscious of his own helplessness under the circumstances.

It is impossible to rely implicitly upon the course steered by the compass.

Very few seamen can steer a course accurately, even at sea; and there is generally a discrepancy in 24 hours run, between the position of the ship found by dead reckoning and that by observation.

No instrument has ever yet been invented to show the amount of deviation of a vessel from a straight course, which might be the result of defective steering.

Speed must also be carefully noted, and if in a sailing ship, due and proper allowance made for lee-way, which is an important factor, especially when wind and tide are acting in opposite ways.

Sometimes it may become necessary to heave the vessel to, when the tack she may be put upon must enter carefully into consideration, as the drift of a vessel would be very much influenced by the wind and tide, especially when the latter was acting upon the broadside and the ship was making very little way through the water.

It is, however, well known to seamen frequenting the Bay of Fundy ports that foggy winds, and more particularly those which produce the densest fogs all over the bay and in most of the harbours, are very frequently fair winds blowing up the bay.

In these days of quick despatch, masters of ships are compelled to run great risks and frequently drive their vessels at a higher rate of speed than is consistent with safety. For this alone they are responsible.

It must here be observed that the compulsory system of pilotage at present in force at St. John, is modified by certain exemptions, which from time to time have been introduced, and it is difficult to account for and explain some of the anomalies which now exist, namely, British registered vessels under one hundred and twenty-five tons and foreigners under eighty tons are exempt from pilotage dues.

Steamers of the International American Line pay no pilotage, although they make several weekly voyages from ports in the United States to St. John, more particularly during the summer season.

Passenger steamers plying from one port to another in the Bay of Fundy are also free, and all tug boats and small freight steamers are exempt.

Steamers towing barges, laden with lumber or coal, between one port and another in any part of the bay, particularly those towing coal barges between Parrsborough and St. John, pay no pilotage; but the barges being towed come under the law and are compelled to pay the regular fees, if spoken by a pilot, whether they take him or not.

Vessels passing up the bay from seawards to any of the ports beyond St. John at the head of the bay, do not take pilots until they come within the limits of the respective ports they are bound to, such as West Bay, Parrsborough, Windsor, etc., when a local pilot may be engaged.

Vessels proceeding from the harbour to sea are not compelled to take pilots down the bay beyond Partridge Island, as before stated.

All vessels in ballast or calling off Partridge Island for orders, are exempt from the payment of pilotage, if they do not enter the harbour.

No doubt compulsory pilotage was first introduced at St. John, partly to provide for the safe navigation of ships and also to procure employment and remuneration for pilots; but it may be necessary to state that the employment of a pilot at St. John or in any of the districts, does not exempt the owner or master from liability

St. John, N.B., Pilotage Investigation.

or the responsibility of the wrong-doing of the pilot in case of an accident to a vessel caused by him.

In fact according to section 57 of the Pilotage Act, "No owner or master of a ship shall in any case be compelled to employ or give his ship in charge of a pilot, either on the ground of his being compelled to pay pilotage dues or otherwise." Therefore, as aforesaid, the actual employment of the services of a pilot at St. John is not compulsory, and there is no immunity from blame for the owner with respect to loss or damage while the vessel is in the charge of a licensed pilot. The pilot may, however, suffer from having his certificate suspended for a time, which no doubt would be serious to him and his family; but no pilot is required to provide sureties or give any bonds at St. John, as appears to be the case in many parts of the world, although it may have been proved that he was guilty of great negligence in the navigation of the vessel.

Under these circumstances, if the captain of a ship employs a pilot when he is spoken by one, being fully aware that he would have to pay the fee, the relation between the master and the pilot is difficult to understand.

The responsibility of the navigation of the ship is not removed from the master, and yet in some cases he would not like to interfere with the management of the ship by the pilot, for fear of getting into trouble.

There are occasions when the captain would be justified in taking the charge out of the pilot's hands, but if an accident occurs afterwards, he must be prepared to show that the pilot was incapable of performing his duties.

In carefully reviewing the evidence, it will be observed that there is great diversity of opinion expressed upon the subject of pilotage by the witnesses who have been examined, and the views brought forward at this inquiry have been of an extremely contradictory character.

Some masters of vessels state they are quite competent to navigate them in the Bay of Fundy and do not require the assistance of a pilot, but they generally take one on board if hailed or spoken, simply for the reason that they have to pay pilotage fees, and knowing this, they consider it is just as well to take him on board and have his services. Others are of opinion that the present compulsory system should be kept up for the preservation of life and property on board the vessels when sailing through the various districts.

It is, however, difficult to reconcile the views of these witnesses with the fact that masters of ships are not compelled to employ pilots, even when spoken.

A few of the witnesses are in favour of extending the exemption to vessels of 300 tons, and of issuing licenses to masters of ships after they have passed a regular examination with respect to their knowledge of the positions of the lighthouses, rocks and shoals, and the soundings in the bay, and the general idea of conducting ships in and out of port; and there are some who consider a proper pilotage staff should exist and be maintained for St. John and the Bay of Fundy, but under a free and voluntary system.

The majority of those who are absolutely in favour of the present arrangement being continued without any change whatever, are the pilots themselves and some of the pilot commissioners. There are, however, some captains of ships who hold the same views.

One witness stated he would take a pilot, not on account of his own ignorance, but so that the pilot could assist him as he could not be on deck all the time himself.

It must be inferred that he considered himself capable of navigating his ship, but wished to be relieved from responsibility for the purpose of obtaining rest.

This officer does not appear to have taken any particular notice as to whether the soundings which he had been in the habit of finding in the Bay of Fundy, with the lead, agreed with those marked on the chart.

It can scarcely be understood what object he had in ascertaining the depth of water, as he made very little use of it and did not compare the soundings with those marked on the chart.

To such men, the improvements in the means of practical navigation are of small value.

There is considerable evidence to show that many witnesses are of opinion that vessels of all classes and every description, either under steam or sail, coasting or foreign, should be subject to the payment of pilot dues; and if the present system should still be maintained, there seems to be some fairness in the representation of these views.

Either compulsory pilotage for all vessels, to keep up the system, or non-compulsory entirely so that masters requiring the aid of pilots would have to bear the burden of employing them.

An argument of the pilots who desire to keep up the present arrangements is that a number of captains are capable of bringing in their own vessels during fine weather, which they will admit, but they require the assistance of men who have a knowledge of the currents and tides in thick weather, and are then eager to employ them.

Regarding these views from a public point of view, instead of from a class standpoint, it must be observed by the evidence that some masters try to evade the pilots and quite a number of vessels pass in during fog as they have then no opportunity of obtaining a pilot. It is also stated that even some foreign steamers would pass the pilot boats if possible and proceed up the bay.

It is also stated that if captains of ships will not engage their services in fine weather, as a result, under a voluntary system there would probably be an insufficient supply of pilots for service in bad weather, and the remuneration they might obtain would not be sufficient to make it valuable enough for any number of men to continue the business and gain a living.

In many ports of the world, however, where the pilotage is non-compulsory, there appears to be a fair amount of occupation for the pilots and generally a good supply of those who are attentive to their business and seek for employment.

Another subject brought forward in evidence at this inquiry requires some special notice, as it apparently affects the seaworthiness of a small class of vessels and renders them useless for off shore purposes during the winter months.

Many witnesses have shown that the exemption of vessels under 125 tons has been the means of shipowners building an undesirable class of craft. This is much to be regretted, as the traffic of a particular number of vessels is altogether stopped

St. John, N.B., Pilotage Investigation.

after the months of October or November, and consequently the money that the owners of such would put in circulation, is tied up with the vessels for a considerable number of months.

According to the evidence, some shipowners instruct their captains not to take pilots. The inference to be drawn from this must be that they consider the men in command of their vessels are capable to navigate them, and they are willing to take the risk upon themselves.

The appointment of the master rests entirely with the owner. For his own protection, he will endeavour to select men with ability and skill, who have been known to him probably for years and may have been brought up and trained in his own service.

It is therefore quite reasonable to expect that he would place a due amount of confidence in him.

A pilot is placed on board frequently without being known to the master and he has no opportunity of ascertaining his qualifications, but he has to produce his license if called upon to do so, and this is at all times his authority for acting in the capacity of a pilot.

No doubt it is the owner's interest to bring his ship and cargo safe into port, but it must be left to him to find the means of doing so.

According to the best of his knowledge, he employs a competent man who has passed an examination and holds a certificate.

In his turn the master selects the officers who will best serve him and obtains them, efficient or otherwise, according to the supply offering at the time and the amount of salary he gives them.

Regarding the provisions of the Pilotage Act, clause 67, which grants permission to a master or mate of a ship registered in Canada to pass an examination as to his knowledge to pilot the ship of which he is master or mate, it does not appear that the St. John pilot commissioners have the privilege of doing this; and up to the present time no master or mate has been licensed for St. John pilotage district.

The principal object for granting such certificates must have been to induce officers of ships to qualify themselves for pilots of any of the outports; and, although some coasting masters and masters of steamers have taken advantage of these privileges, it does not appear that any number of masters of foreign-going vessels have passed the examination required.

It would be of advantage to the pilot commissioners to have the right of granting coast and channel licenses, the holders of which might pilot vessels from sea through any of the districts of the Bay of Fundy.

Distance money could be charged for this service, according to a fixed scale arranged and regulated by the commissioners. This would be similar to the practice in the English Channel and other places, but must be entirely voluntary.

The pilots would of course have to pass a proper examination to show that they were duly qualified for the duty; and no unlicensed pilots should be employed.

There would probably be a good amount of work for such a class of pilots, as many masters of vessels would no doubt be glad of their services when coming in from sea.

The master of a ship should be allowed to navigate his own ship in the Bay of Fundy, if he can and chooses to do so.

He alone is responsible for the safety of the ship and cargo. If he finds himself incompetent to conduct the vessel in these waters and voluntarily calls upon a pilot to assist him, it is but fair and right that the pilot so employed should be a duly licensed and competent man to undertake the duty; and under such circumstances, if the master of a vessel neglected to employ a properly qualified pilot, where one could be obtained, and without having knowledge of the place himself, risk the safety of the vessel, he should be held responsible for such negligent conduct.

With regard to the capabilities of masters of a certain class of vessels to navigate them in and out of the Bay of Fundy and the different harbours about the coast, it may be observed that at the present time, any man who is in possession of a coasting master's certificate, either of competency or service, no matter whether he has sailed in the Bay of Fundy or not, is allowed to take charge of and pilot a vessel under 125 tons to any part of the bay and also into the harbour of St. John itself; and men who have had actually very little experience in these waters are doing so in charge of such vessels.

A man who is competent to navigate a vessel of 125 tons with proper care upon the coasts of the United States and Canada, does not require much more knowledge to take charge of one of 300 tons.

With regard to the issue of special licenses for men to act as pilots beyond the limits of the pilotage authority, it would, as before said, probably be of service to shipping, but when such applicants were examined they should be able to give the names and character of the coast and harbour lights and fog signal stations, with a description of the fog alarm in use at each place—names and positions, as well as a description of all the shoals and reefs in the bay and approaches to the entrances to the various harbours—names and characters of all the outside buoys and those in the channels near the harbours; bearings and distances between the principal headlands in all parts of the bay and a general knowledge of the coast.

Depth of water to which headlands and shoals may be safely approached with vessels of different draughts of water and tonnage.

Time of high water at full and change of the moon, with rise and fall of tide off the different headlands and at the mouths of harbours.

To have a knowledge of the means of applying the correction to the depth of water found, to compare with that marked upon the chart at different times of the rise and fall of the tide during twenty-four hours.

Set of tide in all parts of the bay and time of change of stream of tide in centre of channel and near the shores on the coast.

The applicant's practical knowledge of seamanship to enable him to navigate either sailing or steam vessels and his acquaintance with the rule for preventing collisions, commonly called the rule of the road, and any other questions the examiner may deem necessary to put to him.

Some of the pilots have brought forward claims that they are entitled to chartered rights by law, which have been handed down and safeguarded for them since pilotage was first introduced at St. John.

St. John, N.B., Pilotage Investigation.

The commission is of opinion that the arguments they have produced to substantiate these claims to an exclusive monopoly, cannot possibly have any weight.

From the extracts of certain Acts of Assembly of New Brunswick handed in to the commission (copies in Appendix) it is seen that the city charter of St. John was confirmed by the legislature in 1786, and by the XXVI. George III., cap. XLVI., an Act for confirming unto the city of St. John its rights and privileges was passed, after which an Act for regulating pilots came into force, XXVI. George III., cap. LII. This appears to have been the first Pilotage Act which was passed at St. John.

From the year 1786 to 1840, the authorities did not exact payment of dues for pilotage beyond Partridge Island.

In cap. LII. of the above Act, it states:—"If the master of such ship or vessel does not employ a pilot, yet if he can prove that he offered his services at a proper time and place, he shall be entitled to receive from the master of such ship or vessel, his full rate of pilotage, unless such ship or vessel belonged to said port."

It will thus be seen that at this time vessels registered at St. John were exempt from the payment of pilotage.

This Act was subsequently repealed, and in 1821 an Act to make more effectual regulations relating to pilots within the province of New Brunswick, was passed.

By this Act, commonly called the New Brunswick Pilotage Act, a pilot who offered his services which were refused by the master of a ship, was entitled to half rates.

The St. John by-laws as to pilotage, of 1850, also provided that if a pilot's services were refused and the vessel owned at St. John, half rates of pilotage only could be collected.

In 1821, it would seem that the pilotage of the whole of the New Brunswick ports was taken into consideration, but with regard to the port of St. John, no rights were given extending beyond Partridge Island.

Outside of this boundary, the authorities did not consider they had any control of the waters of the bay, as it was not within the limits of their jurisdiction.

By perusing the various Acts, it will be seen that no mention is made of charter rights being granted to any organization of pilots; neither can it be understood that they could have been given the absolute right to a monopoly to be handed down from generation to generation to their successors, and nothing seems to indicate that those who framed the law ever had the intention to make their Acts binding upon the authorities in the future, and constitute the pilots a privileged class.

The contention of the shipowners that the pilotage authorities have no legal right to parcel the Bay of Fundy into districts and exact compulsory pilotage dues from vessels which may be spoken in any one of them, as these waters are not strictly within the limits of Canadian jurisdiction, can scarcely be taken into consideration by the commission, and must be referred to the Minister of Justice.

It may, however, at some future time, involve a question of international rights that is, if the vessels concerned are under a foreign flag; and it has already been stated in evidence that Spanish steamers sometimes try to avoid pilots, when sailing up the bay.

It is a problem of considerable intricacy to show what control may rightly be exercised by a State over the open sea which adjoins its coast, as it is generally accepted that the high sea is the common highway for ships of all nationalities.

By common consent of the governments of all the powerful nations, it has been agreed that the limit of the distance over which any one of them may have control is taken to be one marine league of open sea, measured seaward from a low water mark. The distance of a marine league having been, until recent times, considered to be the extreme range of a cannon shot.

But the small bays and sea chambers are held to be under the control of the country whose territory joins upon them. It is, however, generally considered that these are the small indentations of land, which are not so extensive as the Bay of Fundy, where, if a line be drawn from Seal Island, the S. W. point of Nova Scotia, direct across the mouth of the bay, it would reach the territory of another nation, the United States. Therefore, it would appear that these waters should be allowed to be a thoroughfare for vessels of all nations.

A great difficulty which has always existed between the British and Spanish governments, since the acquisition of Gibraltar by the former, is the dispute involved in connection with Spanish cruisers boarding English merchant vessels, which they overhaul when found sailing more than a marine league of distance off the Spanish coast; and the government of that country has endeavoured to justify itself in this practice on the ground that it is necessary to protect her revenue from smugglers, as an illicit traffic has been carried on by vessels apparently under the British flag, with improper clearance papers on board.

In some countries, tolls have been levied upon shipping for the purpose of defraying the expenses necessary for securing the safety of navigation, such as those incurred in the erection of lighthouses and the maintenance of buoys to mark the hidden rocks and shoals.

The keeping up of the lighthouses, buoys and fog signal system of the Bay of Fundy and those upon all our coasts, is entirely at the expense of the Dominion Government, and it takes upon itself the burden and charge of such aids to navigation.

In England all vessels benefited by such sea marks have to aid in their support; and it is the practice in that country to collect light dues from vessels of all classes and nations which pass by them, bound to their ports.

Until recently, light dues were collected from all British registered vessels bound to any port in Canada or to New York and other northern ports in the United States for the maintenance of the lighthouse on Cape Race, which was erected by the British Government.

Now the Cape Race lighthouse, although on the S. E. coast of Newfoundland, has been transferred to the Dominion Government, and is maintained by the Marine and Fisheries Department, and no light dues are exacted from vessels passing it.

The light dues were formerly charged against all our ocean mail steamers when bound to the Gulf of St. Lawrence by the southern passage, and also to those making to Halifax, Portland or Boston; and these charges were collected at the respective custom-houses in Great Britain, no matter what distance the vessels passed off Cape Race, or whether they sighted the lighthouse or not.

St. John, N.B., Pilotage Investigation.

With reference to the abolition of compulsory pilotage, so strongly advocated by the Board of Trade and the Shipowners' Committee, as well as by a number of persons who have been examined upon the subject, the commission desires to remark that these gentlemen are only following the principles being now so frequently adopted in many parts of the world, except in such ports which from their nature and the great dangers to navigation, as well as the importance of the trade and the safety of life and property, demand a large staff of pilots, pilot vessels and other accessories, secured and maintained under special legislation.

In Great Britain, quite a number of ports have adopted a free and voluntary system, and it appears that whenever a new pilotage district is created, it is made non-compulsory as a general rule, and there certainly are signs that a more extensive reform in the law of pilotage will sooner or later take place.

In the compulsory ports of that country, captains are compelled to take the pilots on board, otherwise a fine is imposed.

In the United States, however, the law is different, and most of the great ports retain the compulsory system, very much similar to that in force at St. John.

Taking into consideration the circumstances in connection with the exemptions and other anomalies before mentioned, it may be admitted that an alteration in the pilotage law of St. John has become necessary, and the agitation which has been for some time and is still affecting the public mind, and the feeling which appears to be spreading in that direction amongst the shipping community, indicates that the change is one that cannot much longer be deferred; and if some satisfactory solution of the question is not provided for, the matter will no doubt be opened up again at an early date and the present system probably attacked in a more vigorous manner.

It may be inferred that the difficulties in the working of the pilotage law, to which the commission desires to direct the attention of the minister, can only disappear with the compulsory payment system now in force, as it is almost impossible to reconcile the claims of natural justice with the law which exempts some vessels and not others, for certain reasons, from the payment of pilotage dues; and the principles involved in such a system cannot be defended, as no doubt the working of such a law has been the cause of unfairness to some and the means of so much dissatisfaction being expressed.

Although this commission has, after careful consideration, come to the conclusion to recommend to the Minister of Marine and Fisheries that the compulsory system of pilotage, now in operation at St. John, should be abolished and a new system of voluntary service be substituted, and the staff of licensed pilots reduced from 28—the number now on the roll—to at least 20, which would probably meet all the requirements, it is of opinion that this cannot be done without a due and proper recognition of the claims of the pilots.

These men have been appointed under certain legislative enactments, and should be given fair and equitable consideration.

The present pensions ought to be paid to retired pilots, widows and children

The claims of the aged and worn out, and of those now upon the staff should be fairly dealt with, and those pilots whose services may be dispensed with ought to receive some compensation.

The pilots are a respectable body of men, and have no doubt rendered service to the port and specially given their lives to this particular profession and most of them are not acquainted with any other means of obtaining a living, except probably as fishermen; and although, in the opinion of some persons, they have endeavoured to put their case before the public with less prudence than might have been necessary, they are entitled to the privilege of bringing forward their reasons why the present system should be retained, and show their claims to be considered, if any alteration is about to take place.

The pilots were right to take concerted action to protect their own interest when proposals for the abolition of the system which has given them a living has been so powerfully advocated by an important class of the community; and no one can deny that it was proper for the whole staff to organize themselves for the purpose.

The commission, however, does not consider the arguments they have brought forward are substantial enough to impress the public mind with their views, and to persuade any considerable number to support the principles they have enunciated and which they so firmly adhere to, for the purpose of keeping the pilot system as it now exists.

When it is also known that the advocates against the compulsory payment system do not wish to abolish the pilots or do away with the employment of duly qualified men, or even with a properly organized system, but only desire to introduce a little competition into such service, it will go greatly in favour of strengthening their views and further in making pilotage voluntary in the Bay of Fundy and at St. John. It is probable that good pilots would not suffer from the change, as a large number of captains of ships would no doubt avail themselves of their services, as they do in many other ports, and the grievance which has been so long standing would be done away with.

The commission is of opinion, however, that it would be manifestly unfair to sweep away by an arbitrary act, a system which has been for such a long time in existence, and by so doing entirely ignore the interests of the men involved.

The commission having decided to recommend to the Minister of Marine and Fisheries that the system of compulsory payment of pilotage as it now exists at the port of St. John, N.B., should be abolished, beg to submit the following schemes:—

(1). *For establishing a new pilot board and a proper and efficient staff of licensed pilots.*

The pilot commission, as now constituted, shall cease to be maintained after the expiration of five years, which are to be granted for preparation for the final abolition of the present system—(the date to be fixed by the Minister of Marine and Fisheries)—and in lieu thereof a new pilot board be established, consisting of five members.

One member to be appointed by the Dominion Government, who shall be chairman of the pilot commission.

One member by the mayor and corporation of the city of St. John.

One member by the shipowners of St. John.

One member by the Board of Trade.

One member by the pilots.

St. John, N. B., Pilotage Investigation.

The term of office to be three years.

The present secretary, Mr. J. U. Thomas, to be offered the position of secretary to the new board.

That the pilot board, as above constituted, shall have the same powers as the present board to grant licenses after an examination of applicants, to hold investigations into casualties and suspend or cancel licenses, etc., subject to the approval of the Minister of Marine and Fisheries.

That the number of pilots shall be reduced from 28 to 20, whose business it shall be to keep in commission three pilot boats of not less than 30 tons register, from the 1st May to 30th November of each year, and two during the other months.

Any pilot now upon the present staff, who does not desire to remain in the new service, shall send in his name to the Marine and Fisheries Department at Ottawa, within three months from a date fixed by the minister.

No unlicensed pilot shall be permitted to take charge of and navigate any sailing or steam vessel into the port of St. John, or in any part of the Bay of Fundy, under the jurisdiction of the province of New Brunswick, unless a licensed pilot is not to be obtained.

The qualifications for future candidates for pilotage licenses shall be as follows:

(a.) Five years as an apprentice or seaman on board a pilot vessel cruising in the Bay of Fundy, during which time he shall have made three voyages as a seaman or junior officer on board a square-rigged vessel bound to Europe, or one year's actual sea service on board a square-rigged vessel of not less than 300 tons register, on a voyage to the south of latitude 30°.

All apprentices who have served for any time or are now serving on board any pilot vessel belonging to the port of St. John, shall, to the full extent of that time, be admitted as candidates for examination under the new regulations.

(b.) Masters of British registered ships, having actually been in command for the space of twelve months of a square-rigged sailing vessel of not less than 300 tons register, and holding a certificate of competency, shall be eligible for vacancies, provided they have made five voyages out of the port of St. John, at any time and in any capacity.

(c.) That all candidates for vacancies shall pass an examination before two duly qualified examiners, who shall be nautical men, to be appointed by the pilot commissioners and approved by the Minister of Marine and Fisheries, touching their qualifications and knowledge of the Bay of Fundy and the Harbour of St. John.

(d.) That these examinations shall be competitive, and the candidate possessing the highest qualifications and knowledge shall be appointed to the vacancy.

(e.) Two examinations shall be held at St. John, in each year, namely, in March and September, provided there are candidates for examination.

(f.) An apprentice, who is desirous of obtaining a license as a branch pilot, must make an application in writing one month before the date fixed for his examination and pay the regulation fee. If the applicant fails, he may not present himself for re-examination until the expiration of six months from the date of failure.

Half the original fee must be paid for re-examination. Candidates for vacancies, being masters of ships, shall pay double the fee that is charged to apprentices, before they can be examined.

The amount of all fees in connection with the examination, shall be determined by the Pilot Board and entered in the by-laws, and collected and disposed of as shall hereafter be arranged.

(g.) All candidates shall pass an examination as to their ability to distinguish colors.

(h.) It is recommended that licensed pilots who take charge of and pilot iron or steel built vessels in the Bay of Fundy, shall have some knowledge of the cause of the deviation of the compass and be capable of applying the deviation upon a ship's compass course, by using the deviation card supplied to him on board of a ship.

(i.) Previous to licenses being granted to a pilot, he shall be required to enter into recognizance or bond, with two sureties approved by the majority of the commissioners, that he will faithfully perform his duty and observe the rules, regulations and decisions of the board.

The amount of these bonds shall be determined by the new pilot board.

For continuing the present pensions to pilots, widows and children.

The amount of pensions paid in 1894 to pilots, widows and children, was as under:—

Six pilots.....	\$ 966 67
Seven widows.....	584 00
Three children	50 00
	<hr/>
	\$1,600 67

The sum available for this pension fund, and the current expenses of the office, have generally been paid by deducting 25 cents per foot from the pilotage levied upon outward bound vessels and the collection of other fees for licenses of pilots and pilot boats and fines imposed upon individual pilots, etc.

The annual amount expended for the office and funeral expenses of deceased pilots, salary of secretary, auditing of accounts, etc., was \$988.55 for the past year.

On the 31st December, 1894, the sum of \$8,887.70 was lying at the bank on deposit, to the credit of the pilotage authorities and invested at 3½ per cent.

The amount to make up this sum has been accumulating from year to year, and the interest may occasionally be used for paying the pensions to pilots, widows and children.

This fund, however, is only operated upon in event of the deduction from the outward pilotage not being sufficient to meet the liabilities.

The above amount actually belongs to the pilots and the widows and children of deceased pilots, and may possibly have to be divided amongst them, if a change in the system takes place, and they desire it. If this is done, they will receive their shares in proportion to the time they have served, but a scheme might be submitted to those pilots, who remain on the staff under the new order of things, whereby their

St. John, N. B., Pilotage Investigation.

share could form the nucleus of a new pension fund to be taken charge of by the pilot commissioners as formerly, and kept up by deducting a certain percentage of their annual earnings, as may be arranged and agreed upon by themselves.

It is proposed to levy a small tax upon the tonnage of all vessels entering the port of St. John, to be paid once a year by each vessel, sufficient to keep up at the existing rate the pensions of those pilots, widows and children, who may be on the list at the expiration of the five years.

This tax to cease when those depending on the pension fund shall have been removed by death, or provided for in other ways.

The question of provision of some kind being made for the aged and worn out pilots, widows and children, is of course of great interest to those individually concerned.

Reverting to the fund which may be derived from imposing a tonnage tax upon shipping and a further small amount collected from other sources, a considerable annual amount could be fairly counted upon, out of which the men, who may retire, will have to be compensated.

Probably the sum collected and available for the purposes mentioned, would be sufficient to meet all the necessities arising from the change.

Should it not be so, the sum required might be made up by obtaining a loan from the banks to supply the deficiency, and the security for such could be a lien upon the tonnage tax, which would be fair and equitable.

After this loan was paid and all interest satisfied, the tonnage rate need no longer be collected; or probably the necessary amount could be borrowed temporarily from the fund available for the payment of the present pensions.

At the expiration of the five years, the commission considers that the compulsory payment of pilotage might be abolished, due and sufficient notice having been previously given to the pilots.

(2.) *For meeting the claims of those pilots whose services may be dispensed with in the event of a change.*

Should the law be altered, a question for consideration would be the retirement of a certain number of pilots, but the difficulty which presents itself is how the selection can be made.

Doubtless there are some upon the present staff who do not pursue their occupation regularly, who would be willing to accept a small gratuity and retire from the service.

Three of the pilots—R. Cline, 70 years of age; E. J. Fletcher, 68; and W. Leahy, 66—could be forced to surrender their licenses under the existing law, but according to section 32 of the Pilotage Act, the authorities may grant them new licenses from year to year.

There are seven other pilots—C. Davy, 59 years of age; J. McPartland, 61; J. Spraupe, 59; J. Doyle, 58; J. L. Sherrard, 61; P. G. Doody, 55, and R. Thomas, 54.

From the above ~~names~~ names eight have to be selected, or more properly five must be chosen for retirement, as the services of three of the pilots can be immediately dispensed with under the present law.

It is quite probable that some of the men will retire before the expiration of five years and no further trouble will be caused as to the selection.

It is also possible that one or two of the pilots will seek for employment elsewhere.

Those who retire on account of age would be entitled to their pensions according to the existing rates. Some of them are strong and vigorous yet, and are quite competent to perform their duties.

The commission recommends that a modification in the carrying out of the present system should at once take place, and a small tonnage tax of two cents per ton register be imposed upon all vessels under a foreign flag and one cent a ton upon all British registered vessels, excepting only the small wood boats up to fifty tons, to be increased if found necessary.

The tax to be collected from each vessel once a year by the collector of customs and the amount to go towards augmenting the pilot fund.

This annual tonnage tax would be very light upon shipowners.

All vessels employing the services of pilots to pay the full amount of fees as at present, and be exempt from tonnage tax.

Vessels spoken or hailed by pilots and not accepting their services, to pay half pilotage rates on arrival at St. John.

Masters of St. John registered ships shall be permitted to pass an examination for pilotage in the Bay of Fundy, and if found competent shall be granted a license for piloting their own vessels.

That they shall pay an annual fee for such license and be exempt from the payment of pilotage dues, whether spoken or not. The amount of the fee to be arranged by the pilot board.

That the International Steamship Company, whose vessels are registered and owned in the United States, must contribute \$1,000 a year for five years toward the abolition of compulsory pilotage, according to a statement made by their agent, Mr. Lackler, to the commission during the inquiry.

That in consideration of this sum being paid in quarterly instalments to the secretary of the pilot board, the vessels of that company shall be exempt from payment of the tonnage tax and from the payment of any pilotage fees whatever to the pilot board.

That all sailing vessels registered at St. John, up to 300 tons, shall be exempt from paying pilotage, but will be required to pay the tonnage tax, unless the master holds a pilot's license.

That all coal barges laden with coal or lumber, being in tow of steam tugs, shall be exempt from pilotage, but must pay the tonnage tax, and that all steamers plying in the Bay of Fundy, from any one port to another, with passengers or freight, will also be required to pay the tonnage tax.

St. John, N.B., Pilotage Investigation.

1894—Gross amount of pilotage received from all classes of vessels in 1894	\$21,415 80
Less 25 cents per foot deducted from the outward pilotage on account of pensions.....	1,581 26
	<hr/> \$19,834 54 <hr/>

Taking this as the actual amount to be divided amongst the whole number of pilots, it would yield an average sum of \$783.00 for each individual, but it will be noticed in the annual return made by the secretary, that there is a great difference in the earnings of each pilot, ranging from \$1,432 to \$189, which latter sum is the smallest received by any pilot during the year.

There are five pilots who earn over \$1,000 each, and five whose earnings are less than \$400.

Estimated cost to the pilots of their boats and maintenance of same.—

Prime cost of six vessels \$22,400.

Ten per cent depreciation..... \$2,240 00

Annual expenses for maintenance, board and wages... 6,720 00

\$8,960 00

This sum of \$8,960.00 for wear and tear being deducted from the above \$19,834.54, will leave \$10,874.54 as the net amount to be divided among the twenty-eight pilots, giving an average of only \$388 per annum for each man for their earnings.

As the Board of Trade and the Committee of Shipowners have recommended that pilotage dues should be levied upon the registered tonnage of shipping in lieu of the draught of water, and some of the pilots also appear to be in favour of it, the commission considers that the change might be advantageously made as early as it can be arranged.

The fees levied upon the draught of water of each ship during the year 1894 yielded the sum of \$21,415.80.

The total amount of tonnage of these ships was 288,206 tons, which would give an average rate on the tonnage scale of 13.45 per ton register, but it would probably be necessary to adopt a sliding scale of rates for this purpose in fairness to the larger class of vessels.

The average earnings of the whole of the pilots annually for ten years ending 31st December, 1885, was \$24,093.50, and from the 1st January, 1886, to 1st January, 1894, was \$22,625.54, which represents a falling off of \$1,467.96 in the last number of years.

Three hundred British vessels paid \$15,800.83, and 172 foreign vessels paid \$5,614.97.

The whole were composed of 235 schooners, 16 brigs and brigantines, 34 ships, 74 barques and barquentines, and 69 steamers—of the latter 61 were British.

The extension of the exemption system to vessels registered in Canada, from 125 to 300 tons, has been strongly recommended.

There were 84 round trips made by vessels of that tonnage in 1893; the total tonnage of which was 16,318 tons, and the pilotage upon these vessels at 13.45 cents would amount to \$2,194. This being deducted from the former amount of \$19,834.54 would leave only \$17,640.54 to be distributed amongst the pilots, which would yield \$630 for each individual pilot.

Taking into consideration the reduction in the amount of fees collected, by the proposed extension of the exemption to Canadian vessels of 300 tons, at once, the amount received by retaining 25 cents per foot on the outward pilotage, for pensions, etc., would be considerably less than formerly, and it would probably be found necessary to add to it the interest derived from the money on deposit in the savings bank.

In consideration of the staff of pilots being reduced from 28 to 20, which could take place gradually and further supporting the establishment of two stations outside in the bay, one in the South Channel and another at some point in the North, with an inner station on Partridge Island for the harbour, the number of pilot vessels might be reduced to three, thus lessening the expenditure upon the boats to one-half the amount which it is at present.

In endeavouring to show the usefulness to shipping of fixed boarding stations, where pilots could be always found, as is customary in many countries, the commission has not overlooked the fact that the pilotage authorities of St. John have established and fostered a competitive system among the pilots for the purpose of boarding vessels, according to the statements of some of the witnesses.

Although this arrangement may to a certain extent have stimulated the activity of the pilots in cruising about for the purpose of overtaking ships, it certainly appears to have set aside the establishment of fixed stations where masters of vessels, unless in very exceptional cases, could always find pilots on the lookout for them.

And further, in connection with the amount of pilotage earned by the pilot annually and the large expense they have been put to in building and purchasing the unusually large number of six vessels, as compared with the actual number of pilots engaged and the fees received, the commission considers the establishment of such stations as proposed would be of great advantage to shipping and relieve the pilots themselves from considerable unnecessary expenditure.

In conducting this investigation, the commission has endeavoured to make it thorough and impartial, and to obtain such facts as were relevant to the subject from all attainable sources of evidence.

In addition to the testimony of a large number of witnesses, a considerable amount of documentary evidence and other papers relating to the subject-matter of the inquiry have been carefully examined.

Thirty-eight sessions were held in the prosecution of the investigation.

No evidence has been produced at the inquiry to show that the manner in which the business of the pilot commissioners has been conducted in connection with the office was not done in accordance with the Act. The returns have been regularly made to the Marine Department and other matters attended to.

St. John, N.B., Pilotage Investigation.

Probably it would have been better for the commissioners to have made a more strict investigation into the ages of the pilots, but it is quite possible that many of them could not produce proper certificates of their ages, which were registered at their birth places, and the statement of the pilots were taken without any inquiry.

It may, however, be acknowledged that the oldest pilot is perhaps the most efficient of the whole body and has gained a deservedly honourable name among all classes of seafaring and mercantile men.

The commission is of opinion that it would have been more satisfactory if at some of the investigations into matters the public were so much interested in, members of the press had not been excluded, as the results of certain inquiries are especially important to a large number of people.

It may be correct for the ordinary meetings to be held in private, as there is no particular matter with which the public require to be informed.

It is no doubt a great safeguard to admit the press upon important occasions so that the views of all parties may be fairly criticized.

This is, however, a subject with which the commissioners have to deal with themselves and they are responsible for their actions.

The commission, before concluding this report, desires to recommend that the necessary steps should be taken to effect the following changes at as early a date as possible:—

1. That steamers should not be charged a higher rate than sailing vessels.
2. That barges, coal or lumber laden, in tow of steam tugs from ports in the Bay of Fundy, should not be compelled to pay pilotage fees going into St. John Harbour, but must contribute to the tonnage rate as long as it is found necessary for them to do so.
3. That all steamers registered in St. John, or plying in any part of the Bay of Fundy, either carrying freight or passengers, should be required to pay the tonnage tax, except the steamers of the International Line, they having to pay \$1,000 per annum in quarterly payments, as before stated.
4. That three pilot stations should be established in the Bay of Fundy: One at Bryer Island, another at a convenient point in the North Channel and one on Partridge Island, details of which should be arranged by the pilotage authorities.
5. The commission also suggests that a small steam launch might be most suitable for Partridge Island.

In conclusion the commission is also desirous of expressing its recognition of the fairness observed by the Board of Trade and Shipowners Committee, and the fair and pleasant manner in which the respective learned counsel have endeavoured to elicit the views of the witnesses and the general satisfactory course adopted by all parties in connection with this inquiry.

W. H. SMITH, *R. N. R.*,
Commissioner.

I fully and entirely concur }
in this report,

BLOOMFIELD DOUGLAS, *R. N. R.*

ADDENDA TO REPORT.

INSURANCE.

In making this important inquiry, the commission has not overlooked the question of the insurance on shipping at the port of St. John being possibly affected by the abolition of compulsory pilotage or the extension of the principle of exemption, and it will be seen by the evidence of several agents of insurance companies that the policies, forms of which are in the annex, contain no special conditions as regards the employment or non employment of pilots.

It appears sufficient for the underwriters to leave this matter entirely at the option of owners or masters of ships.

The commission is therefore of opinion that the partial or entire abolition of compulsory pilotage will not affect the question of rates of insurance upon shipping, especially when it is known that a supply of duly qualified pilots will be kept up to assist masters of vessels if their services are required.

FOGS.

A comparative return of fog on the coast of Nova Scotia and Bay of Fundy will be given by Captain Douglas, who is now employed in the re-examination of the Bay of Fundy and its tides and currents, with a view of preparing new sailing directions for the use of mariners.

The return will be given with his report to the Hon. Minister of Marine and Fisheries.

MINUTES OF EVIDENCE

THOMAS TRAYNOR, sworn, states :—

I am a licensed pilot for the port of St. John, N. B. and have held that position since October, 1874.

I served a five years' apprenticeship and was bound in 1868.

I made no trips to sea during my apprenticeship, but did so before and after—as a boy—in barques and sailing ships from St. John. The ship belonged to Philadelphia and the barque to Pictou.

I was born in St. John and was 42 years old last birthday.

I served my apprenticeship in St. John. I was in pilot boats with my master.

Part of the five years I was allowed by my master to go in boats in the coasting trade—that is during my apprenticeship.

I had a regular indenture at that time and was bound by the common council.

My master allowed me to go in the coasting trade as he had no boat part of the time.

During this period I acted as seaman and a little while as mate. I was regularly on the articles. The vessel was the schooner "Ernest."

My pay on board this craft ranged from \$15 to \$20 per month—current wages.

I did not pay the money received by me to my master as he would not take it, but he could have done so. He did not pay me at that time.

I served about 12 months of my apprenticeship in the coasting trade.

I did not pass any examination as mate, as none was required at that time.

After serving my apprenticeship, I made several voyages to sea as seaman in a ship, and in two different barques.

I passed my examination as pilot, in the city of St. John, before A. C. Smith (then mayor), two aldermen (H. Duffel and John Carr), two port wardens (Augustus Quick and R. J. Leonard), the harbour master (C. S. Taylor) and two branch pilots.

Mr. Quick was the principal examiner and was an old sea captain.

It was both a written and *viva voce* examination and was conducted in the usual way.

About the time I passed my examination, there was a change in the government of the pilots. It was taken from the hands of the Common Council of St. John, and handed over to a board of commissioners. I think it was on account of the Confederation Act bringing all the pilots under one government.

When the examination was passed I received my certificate and took out a license.

I considered the examination thorough and sufficient for the Bay of Fundy and the Harbour of St. John.

Seven commissioners and a secretary were appointed under the new regulations and the commissioners then appointed examiners.

There were no nautical men on the commission when it was first organized.

They chose the harbour master to be one of the examiners on account of his being a nautical man.

As far as I know all the apprentices received licenses.

The pilots, when first obtaining their branches, were not considered capable of taking charge of large vessels, but were limited to vessels drawing 12 feet of water and not exceeding 500 tons register.

I always consulted the master before making a change in the course.

In the summer season the pilot boats are generally found between Brier Island and Cape Sable, Seal Island, that is two or three of them and others over in what we

call the North Channel; and in the winter season, the boats which formerly cruised in the South Channel come up as far as Point Lepreau, Musquash and Partridge Island.

A vessel is not certain of obtaining a pilot as far down as Brier Island, but the pilots keep out as far as possible on account of the competition.

I do not know that I ever saw a book of sailing directions for the Bay of Fundy.

A master of a foreign vessel would look for a pilot near Brier Island.

I have boarded a vessel near Cape Sable.

There is no boarding station fixed for the pilots, neither is there any place given by the authorities in which vessels may expect to find the pilots.

I do not think that a master or mate engaged in the coasting trade could acquire sufficient knowledge to enable him to become as good a pilot as he would if he had served his apprenticeship.

It is a fact that the masters of coasting vessels do pilot their craft in and out of the harbour and have not had many accidents.

There have been two or three casualties to ships of the International Line which were piloted by their captains.

We have twenty-eight pilots at present and I think we could do with less, but this depends upon the trade.

There is only one pilot on the list who does not take his turn, all the others go to sea regularly.

The boats start out with three or four pilots on board, and when these have got vessels the boats return.

No vessel could clear the custom-house unless the proper arrangements were made with the secretary of the commission.

We put off to the vessel we intend to pilot in a small boat which is towed astern or triced up as the case may be.

I have gone out with vessels as far as Seal Island, Cape Sable, and on these occasions I went on board a fisherman cruising near.

I do not have to consult the secretary, but make my arrangements with the captain about going to the outer district.

I would ask him how he intended to pay my pilotage and if he gave me an order on his owner and I thought it good, I would go down the bay with him, if not, I would go ashore in my boat.

I have known pilots to be taken by a captain contrary to the owner's wishes.

According to the regulations I could not make an agreement to take less than the regular fee.

I consider I have the same responsibility when piloting a vessel down the bay in the outer district as in the first or any other district.

I have never had to give a bond and none of the other pilots have done so. It is not required by our regulations.

If forced by circumstances, etc., we sometimes go as far as Seal Island and Cape Sable, but none of us go there of our own accord unless we are paid extra fees.

I have never gone down the bay in an outward-bound vessel to seek for an incoming vessel, to be put on board of her when we met one.

I have not been required to pass another examination since 1874, when we came under the other Pilotage Act.

I have never passed any colour test of any description. Neither have I been examined on the deviation of the compass, but I think I know how to apply the deviation.

I am not aware if Captain Quick who examined me was a certificated master or not. He may have had a service certificate.

I think I put a brig on the bar once when coming into St. John Harbour, but that was the only time during my piloting that I have had an accident.

I believe the schooners engaged in the coasting trade would if they kept going regularly, make eight or nine trips between New York or other American ports.

Vessels of two hundred tons draw about eleven feet of water.

The masters in charge of these coasting vessels are pretty good pilots.

St. John, N.B., Pilotage Investigation.

There has not to my knowledge been any arrangement made by which masters of coasting vessels could pay a fee to the pilot and be allowed to pass on without taking one.

I am not aware if this was the custom seven or eight years ago.

There is no regulation to compel me or any other pilot to sail in a pilot boat, or to cruise with her in any part of the bay. We cruise about wherever we consider we might be most likely to be able to pick up a vessel; and when it is foggy there is a better chance of catching a vessel nearer port than further down the bay and we go up there for that purpose.

I always understood that the eastern boundary of the first district extended as far as the boundary line of New Brunswick and goes up as far as Quaco.

In the "Tanjore" investigation, the master's certificate was suspended by the court for six months and the mate, who held a master's certificate, had it suspended for six months also, but upon the recommendation of the court, the Minister of Marine granted him a mate's certificate during the interval.

I do not think a pilot could stay on shore from any one of the boats for any length of time and go into other business, without giving notice and handing in his branch. There is a regulation in the by-law to this effect, to prevent it.

The pilots do not have to report or put their names down in the pilotage book at any stated period.

It is a fact that one of the pilots stopped sailing in his boat for two or three years and boarded vessels from a row boat, but he had to pay his share towards the necessary expenses of wear and tear of his large boat, which he held shares in.

There is no regulation which insists on one or more boats keeping out on any particular cruising ground at any time or to keep out all the time, neither is there any regulation which compels the pilot boat to go cruising in heavy weather.

A great many strangers or foreign vessels going to ports higher up the bay, sometimes take a St. John pilot until they meet the regular pilot of that port on his own station.

I think a vessel being towed would have to pay pilotage. Barges have to pay.

I have seen some of the barges with sail set, but do not know if they could be navigated by sails alone. They could probably get along with a fair wind. At one time I knew a tug left two of them right off the mouth of the harbour and they kept going by themselves.

As a rule, steam vessels coming into our port, pay more in proportion than sailing vessels.

This is because they carry so much more cargo. A large steamer will carry double the amount of cargo that a sailing vessel will and take away the trade.

I understood that the merchants of St. John applied to the pilot commissioners to have the pilotage of steamers higher than that of a sailing vessel.

The competitive system amongst the pilot boats has been brought forward to induce them to keep as far out as possible and cruise to the outside limit.

On account of this system, the pilots are always on the lookout for vessels more than the masters of the inward bound vessels look out for the pilots.

In fine weather the pilot boats frequently have to chase vessels to get up to and board them.

Under the common council, all vessels going to or coming from a foreign port, if registered in New Brunswick and drawing over six feet of water, were liable to half pilotage if they took no pilot, but paid full rates if taking one.

All vessels belonging to other provinces, trading out of the bay, or foreign vessels, paid full pilotage.

The International Line of steamships never paid pilotage when coming to this port. They were the only foreign vessels exempted. Her Majesty's vessels were exempted also.

All vessels trading in the bay and small schooners were exempt.

All square rigged vessels paid pilotage, even if in ballast.

Cross-examined by Mr. Skinner.

A barge would, I think, take eight schooner loads, more or less, and would be run by about four men.

The employment of the barges does not affect the earnings of the pilots very much, as the schooners engaged in the trade before the barges came into use were generally exempt from pilotage dues.

A barge would carry about 900 tons of coal.

If I was out on the station and it came on heavy weather, I would stay there as long as I thought it would be possible to board a vessel and then run for shelter somewhere.

There is no regulation to compel me to remain out any longer.

When we are cruising in the lower district we sometimes fall in with vessels anxious to obtain a pilot and some St. John vessels anxious to avoid one.

As a matter of fact, vessels coming into the bay do not display their jacks according to rule. There is no penalty in force for this as far as I know.

Vessels that endeavour to avoid pilots are generally those registered in St. John, but sometimes a steamer tries to evade one district so as to save pilotage. Some of these are Spanish vessels, but the majority are registered here.

The pilots cruise in all weathers. More vessels try to avoid the pilots when it is fine than in stormy weather.

I know of no regulation that would enable the pilots to be on their stations in stormy weather only.

I am not aware of any pilot having a separate business on shore.

The distance from the harbour to the outside limit is over 120 miles.

I do not know the reason why the man referred to as going out to vessels in his row boat did so, but suppose he preferred that way. He is the only one I know of as having done this as a regular thing. Any pilot has the privilege of so doing, and would not have to notify the commission of his actions.

In the case of the "Tanjore," a barque of about 900 tons, I left the harbour to take the ship down the bay clear of Grand Manan.

It was about eleven o'clock, and by midnight I had the ship far enough down the bay to leave her.

The arrangement was for me to take the vessel down the bay and land at Little River.

It was blowing so strong that I could not land at Little River. The wind was N. N. W. as far as I remember.

The mate was on deck when I left, and the ship was in a good position for sea.

I pulled for the shore, but it was too rough to land, and also very cold, so I rowed about to keep myself warm.

I think I told the captain to keep the vessel S. W. by S.

I was accustomed to leave vessels at that place, and the water was smooth, the wind being off shore.

The light bore W. $\frac{1}{2}$ N. when I left the vessel and her head was W.

The foresail and fore-topsail was filled and the ship was hove to.

Sometimes we cruise for three or four weeks after leaving port, and we hunt for vessels to the utmost of our ability.

Accidents do occur at times to masters piloting their own craft.

There have been about three casualties to steamers of the International Line. The "State of Maine" ran ashore near Point Lepreau, but was got off by a wrecking company. She went on shore in a fog.

The present system of pilotage could not be kept up if the exemption of vessels under 150 tons was not made good by greater charges on larger vessels.

An ordinary iron steamer has about twice the carrying capacity of an average sailing vessel. It is as a fact about 25 per cent more.

There is no difference between the summer and winter rates of pilotage at this port.

For the port of Quebec the rates are higher in winter.

St. John, N.B., Pilotage Investigation.

If a captain of a schooner cruised in his own craft for some time on the coast he would become a very fair pilot after a while for schooners and small crafts, but would not make so good a show in piloting larger vessels and steamers.

I consider St. John a very difficult port to approach from sea.

I think if it was left to ships to choose a pilot or not, I would not stay in the business. The master, I think, would get orders from his owners to dispense with the services of a pilot as much as possible.

The average length of time required for a pilot boat to make the trip to Cape Sable would be about three days.

I consider the navigation from Cape Sable to Partridge Island is difficult.

Sometimes the tides are irregular, which is caused by the winds. The shoals are not too bad. The fog from May to November is considerable.

During the months of May, June, July and August, fog is the rule and not the exception. After that it begins to disperse.

Fog was very prevalent for seventeen consecutive days in last June and July at the mouth of the bay.

A pilot might be a week or more after he got to the outer station before he got a vessel, or he might get one at once.

It would take a steamer about twelve hours to come up from the outer limit and a sailing vessel perhaps a week or more.

A pilot seeking a vessel in the outer station would average about twelve trips in a year.

I have no idea of the number of vessels seeking this port last year, but a pilot would average about ten vessels inwards and about the same outwards.

I did not have so many this year, as I was not in my boat all the time.

I have passed all the regular examinations, and as far as I know this is the case with all the other pilots.

I do not know of any of them having any trouble in passing the colour test or the examination in deviation of the compass.

When a pilot goes on board a vessel, the master gives him the course he wishes to steer with the correction made for deviation.

Cross-examined by Mr. Palmer :

If the compulsory system were abolished about 90 per cent of the smaller vessels of 150 to 300 tons would not take a pilot. The masters of vessels of 300 tons and upwards would take them.

I think if pilotage fees were not required from vessels under 250 tons, the 28 pilots would not make a living, neither would it keep up a staff of pilots suitable for the other vessels requiring their services.

I think there may be three or four apprentices at present, but the secretary could tell this.

About six per cent of the smaller class of vessels are spoken and refuse pilots, but they have to pay the fees all the same.

I think if the exception were extended as aforesaid, 18 pilots might suffice.

Cross-examined by Mr. Gilbert :

I have known coal barges from Parrsborough to take a pilot.

I went on board one by request myself. This was off Cape Spencer. She was inward bound. No flag was hoisted.

H. D. TROOP, sworn, states :—

I am a shipowner of St. John, N.B., and a member of the firm of Troop & Son. I cannot say how many vessels we have belonging to the firm.

I am also chairman of the pilot commission, and as such have to attend and preside at all meetings, which are held on the second Tuesday in every month.

The public are not admitted unless so desired.

There are seven commissioners, all appointed according to the Act.

There is one nautical man on the commission, namely, Captain Thomas.

The committee arrange everything in regard to carrying out the rules of the pilotage commission.

The system of pilotage in St. John is compulsory, that is, every vessel over 150 tons is compelled to take a pilot or pay the fee.

Coasting vessels are exempt from pilotage and also steamers in the bay.

American-owned steamers coming from New York would likewise be exempt.

There is no penalty for not taking a pilot, except the payment of a fee usually charged for taking one.

There are no half-pilotage rates for a vessel being spoken by a pilot and not taking one.

There are six pilot boats, all owned by the pilots themselves or the widows of pilots.

There are on the roll of this port 28 pilots. When the commissioners took charge there were 44 on the roll and five or six apprentices.

The number was reduced by not appointing new ones when others died or retired.

There are now three apprentices. They have to serve three years before they can be examined. We have them in case of vacancies occurring.

There has been no complaint so far as to their number being larger than required.

I think that according to the present traffic we could not do with less than 25.

So far as we know, all the pilots are able to take their turn and all have licenses.

I cannot say if all have passed their examinations.

We only made three new pilots. All the others were taken over from the old system.

The three made by us passed an examination before the examining committee.

The first committee was composed of Captain Crookshank, the harbour master and myself. The second of Captain Pritchard, the harbour master and myself.

The applicants have no knowledge of the examination to be given them, which is *viva voce*.

I consider it necessary for the pilots to pass the colour test, and in future all will have to do so when applying for examination.

The last examination was about thirteen years ago. At that time, there being very few iron steamships coming to this port, we did not examine the pilots on the deviation of the compass.

If it was deemed a necessity, I would not object to its being introduced into the examination of candidates.

There is no regular pilot station.

There are at present three districts and a pilot boat can cruise in any part of them or outside, and could go beyond Cape Sable if the pilots thought fit to do so.

A vessel is not bound to take a pilot or pay the fees for one unless spoken.

I think there is too much fog to make the establishment of a boarding station successful.

There is no rule or regulation which compels a pilot boat to go on any particular station, but the pilots go according to their views.

We find that 63 per cent of the ships taking pilots last year, were boarded in the outer district. The records in the office show this.

We have no record of the number of vessels spoken in the outer district and not taking a pilot.

All outward bound vessels are required to take a pilot as far as Partridge Island or pay the fee.

We have the card system and all moneys are supposed to go through the office with the exception of the down the bay pilotage.

The outward pilotage is supposed to be paid beforehand or guaranteed, and the vessel cannot get a clearance without it.

An arrangement might be made afterwards to take the vessel further down the bay.

St. John, N.B., Pilotage Investigation.

There is a fixed tariff for vessels taking a pilot down the bay.

We have very few complaints on record with regard to the pilots.

Quite a number of pilots have been up before the commission to have their conduct investigated and on several occasions have received punishment, which in some cases was suspension of their certificates for a certain period.

The pilots of this port are not required to give any bonds.

When any accident occurs, the pilot is suspended and the shipowners have to bear all expenses.

The annual returns are submitted to the board.

If the exemption of pilotage was extended to vessels of 250 tons, I think we would still require 25 pilots, but I have not given the matter consideration.

The system of pilotage, as carried on here, has been satisfactory to the commission and there have been, as far as I know, no written complaints against it.

Cross-examined by Mr. Palmer :

It is not a fact that the meetings of the commission have always been private.

I have been ten years chairman and during that time no invitation has been extended to the press or the public invited to attend the meetings.

Application for admission to attend them has been made and was refused by me without consulting the commission.

I am not interested in the coasting steamers. I am interested in the steamers plying between Digby and this port.

I decline to state if I was interested in a line of steamers plying between here and New York, either in the capacity of owner, manager, stockholder or agent.

I decline to answer if the firm of Troop & Son acted as managers or agents for a line of steamers plying between here and New York.

There was a line of steamers running between this port and New York, and carrying passengers, two or three years ago, for which Troop & Son were agents, these being American vessels were not registered here.

They did pay some pilotage to the office in St. John and the records will show how much. The secretary can furnish this information.

Originally there were five districts and some of the American territory was included in them. This being a cause of dispute with the shipowners of that country, obliged us to confine the districts to our own waters. They were then reduced to three.

I cannot say if we changed the bounds of the first district, as I do not remember, and I am unable to state the original rate in that district. If it was changed, I cannot recall the reason.

J. U. THOMAS, sworn, states:—

I am the secretary of the St. John Pilot Commission, and was appointed in May, 1885.

It is my duty to keep the records in connection with the pilotage business of this port.

There are six pilot boats of various tonnages, the largest being about 65 tons, but they must be all over 30 tons to enable them to be licensed. They are owned by the pilots themselves.

The last boat built cost between \$6,000 and \$7,000. To find out the cost of the various other boats, I will have to ask the pilots.

Each pilot must be the owner of not less than four tons of a licensed pilot boat before obtaining his license.

We have twenty-eight pilots on the roll and one Musquash pilot. There is no reason why a pilot should not have a share in more than one pilot boat, but at present, as far as I know, they have not.

There are three pilotage districts.

The boats have no particular stations, but are generally found near Bryer Island, in the South Channel, and down as far as Seal Island, Cape Sable.

They run for shelter in stormy weather to the different harbours on the coast. All six boats cruise in different parts of the bay, but the arrangements for cruising are left entirely in the hands of the pilots. There is no regular boarding station for them.

After the boats have put their complement of pilots on board various vessels, they return to port.

When piloting vessels outward, the pilots land in small boats, or return in the tugs if the vessels have been towed out. They often land at Little River.

The competitive system compels the pilots to cruise. That is, the six pilot boats compete with one another, and as they are owned by separate individuals, they try to get all the pilotage possible. Each man keeps what he earns and takes his turn in piloting vessels.

ROBERT GALE, sworn, states :

I was born in Queen's County, N.B. I have been to sea for 25 or 30 years engaged in the coasting trade.

I hold a certificate of service as master, obtained 10 or 12 years ago.

I have been mostly in fore and aft rigged vessels.

I am at present in command of the three-masted schooner "Carlotta," of 210 tons register. Formerly she was 243 tons.

Her tonnage was reduced to make the expenses less. This was since I have been in her.

By expenses I mean tonnage dues in the United States, which are a national tax and paid in the custom-house at each port for five times in the year.

This is the maximum number of times, and it is three-cents per ton for each voyage.

There was no other object in reducing the tonnage of the vessel.

I went to the custom-house and showed Mr. Barber what the gross tonnage was and he reduced it.

I make about eight or nine trips to the United States in the year.

Recently my vessel has been laid up during the winter on account of the weather being so severe and the freights too low.

I have generally been accustomed to carry lumber and bring back hard coal, for which I get from 50 cents to \$1.00 per ton as freight.

I can take about 400 tons of this coal on board.

I have to pay pilotage dues when going into ports in the United States.

The arrangements are different in the various places. In Portland there are no charges.

I am able to go in and out of Portland Harbour day or night.

I pay pilotage if spoken when going into Boston, but I have never taken one.

If spoken I pay half pilotage fees; if not, I pay nothing.

If spoken when going into New York I pay full pilotage, even if not taking a pilot.

I am capable of going into either Portland, Boston or New York without a pilot and have done so.

If, when spoken, we have to pay pilotage fees, I generally take a pilot.

When going into New York Harbour we get 50 cents per foot reduction if towed.

There are two districts. Outside of Execution Rock it is \$1.50 per foot and inside \$1.00. There is a reduction of 50 cents if towed from the outside district.

We pay pilotage fees if spoken when coming into St. John Harbour. In and out it costs me \$42.

St. John, N.B., Pilotage Investigation.

The average draught of water of my vessel is 12 feet.

If we meet a pilot in the first district we pay \$1.50 per foot.

We always have to pay outward pilotage fees whether we make use of the pilot or not.

If he is ready we take him, and if a tow boat is there he returns in her.

I have never made application to the secretary of the pilot commissioners for a pilot.

The pilots have to find out when I intend to sail as I never look out for them.

I never object to a pilot leaving my vessel where he wishes, and he would not go without my permission, but it is purely for his own convenience that I let him go when he likes.

He generally has a small boat towing behind, and sometimes brings a man with him when there is no tug, and he has to row back to shore.

I have never insisted on a pilot going out to his limit beyond Partridge Island. When a tug is employed he generally goes to the outside limit and returns in her.

They often say, "I suppose you do not want me any longer."

I think I am well acquainted with the navigation of the Bay of Fundy.

I know all the leading lights and fog signals on the coast, and feel quite confident that I can navigate my vessel properly.

I have to use my judgment and make due allowance for the winds affecting the tides near the shore and in the offing.

In the time of flood tides with the wind S. E. or easterly, the tides are stronger and higher. I know this from experience.

In full and change we always have stronger currents.

The S. E. winds augment the tides in the Bay of Fundy, and with winds from S. E. and E., there is an indraught into all the bays, and I make an allowance for it.

I have never met with an accident, or run ashore in the Bay of Fundy or elsewhere.

I do not consider the navigation of the Bay of Fundy is attended with more difficulties or dangers than any other part of the coast when approaching Boston Portland or New York.

I would rather run for this bay than for Halifax. I have never missed the Bay of Fundy, but I have Halifax.

Cross-examined by Mr. Palmer :

I said that the reduction in tonnage was made by Mr. Barber.

This to a certain extent affected the harbour dues and all charges which are paid upon the ton, such as wharfage, dockage, sick mariners' fund, etc.

I have stated that we pay half pilotage when spoken at Boston, and we do not pay outward pilotage unless taking a pilot. I know that this is the custom for that port.

I have never actually paid outward pilotage, never having asked for a pilot.

It is a fact that before clearing at St. John I have to go to the secretary of the commission for a card to clear my vessel, consequently the pilots have a chance to know when the ship is about to leave.

I never requested a pilot to go out with me when leaving here, and I have been sailing out of this port for twenty-five or thirty years.

I consider I am competent to take my vessel in and out.

The majority of the masters and mates of vessels engaged in the coasting trade here have served their time in vessels belonging to this vicinity and are local men.

I would not employ a pilot to take me out if the system of pilotage was not compulsory.

We pay \$42 in and out when spoken in the outer district, which amounts to 20 cents per ton.

I have been in Halifax in the "Carlotta."

The pilotage fees in that port were \$11 in and \$7 out.

In coming to St. John in thick weather, I have only once found pilots near Machias Seal Island. One came on board at Moosepec.

I have not found any difficulty in the navigation from the north end of Grand Manan to St. John. The most difficulty that I have had was to get there.

Coasting vessels from the United States ports when coming to St. John, use the North Channel always in winter and generally in summer, so as to keep in smooth water and on account of being handy to so many harbours.

In my opinion the employment of pilots in vessels engaged in the coasting trade, irrespective of tonnage and officered and manned by local men, is necessary, because in case of a storm coming on we have to make a harbour without a pilot.

Once, when entering Halifax in a storm, I was requested to pay pilotage, but I did not do so.

The soundings in the Bay of Fundy are a guide to the navigation and so far as I know are correct and well defined.

I consider the principal difficulties in the navigation of the Bay of Fundy are in the third district.

Most of the difficulties are between Grand Manan and the North Shore, and after getting north of Grand Manan, the bay is wide and no difficulties are encountered.

It is easier to run for St. John than it is to run up the bay from places named.

I have been up the bay as far as Hillsboro', Moncton, Parrsboro' and Windsor.

I do not know of any bay pilotage up the bay. In coming in the Bay of Fundy, bound to any other port than St. John, the pilotage is free.

I never took a pilot into Boston, so do not know if there is any reduction when taking a tug.

I have never been advised by my owners not to take a pilot, but have been requested to take one because, as they were paid, I might as well have one.

G. F. Baird is the managing owner for whom I am sailing, and is the man referred to as requesting me to take a pilot.

Cross-examined by Mr. Gilbert :

I am not well acquainted with the navigation beyond St. John, but have once been to Parrsboro'.

When coming to St. John, there are no dangers between Quaco Ledge and that port to render a pilot necessary.

There is no necessity, as far as I know, for a barge coming down the bay, when in that district, and under competent authority, to engage a pilot.

There is a light on Cape Spencer, and I do not know of any difficulty in the navigation between there and St. John, as the coast is all bold, and if a man was acquainted with it or had a good chart there would be no necessity for a pilot being taken.

Cross-examined by Mr. Skinner :

I have been master about 25 years and for 10 or 12 years have been going to sea continuously.

I was owner of a vessel and went to sea in her as master, employing a competent man until I should become acquainted with the coast, and after that I took charge myself.

I employed a sailing master on account of his having a good knowledge of the coast.

I bought some charts and learned how to use them myself.

It was about five or six years before I was competent to sail the vessel.

Capt. GALE recalled :

Cross-examined by Mr. Skinner :

It takes about four or five years for a man to make himself acquainted with the navigation of the bay so as to be able to do without a pilot.

Strangers who come here only occasionally ought to have a pilot.

St. John, N.B., Pilotage Investigation.

In large vessels—barques and ships—it is necessary to take a pilot, also in large steamers.

I have refused a pilot more than once. One man said he would make a reduction of one district if I took him.

This was off Grand Manan in the North Channel.

I think it is necessary to license pilots for large ships, but not for small vessels.

I think all vessels under 300 tons should be exempt.

I have formed this opinion because I am anxious to have the charges reduced.

I do not consider that a pilot requires more knowledge than a coaster.

The knowledge of a coasting skipper is sufficient for a pilot.

If I were the master of a large sailing ship or steamer, I consider I have sufficient knowledge to pilot her.

I have carried a pilot for his own convenience beyond the first district. I only paid him for the first district.

I do not take a pilot beyond the first district because I have myself sufficient knowledge.

If the captain of a sailing ship or steamer had a chart he could navigate his ship from the north end of Grand Manan to Partridge Island.

I refer in this case to fine weather.

This would apply to all vessels in clear weather. A sailing vessel would have to take a tug from Partridge Island.

The weather is about half the time clear and half foggy.

Some men would take pilots and others would not. I have but a slight knowledge of scientific navigation.

I have a sufficient knowledge to navigate my vessel coastwise.

Cross-examined by Mr. Palmer :

I was never master of a large steamer.

Examined by Commissioner :

Foreigners should take pilots in either clear or foggy weather.

The use of the lead off Cape Sable is of some avail.

The charts appear correct as to soundings, allowance being made for the tide.

I have come in by the South Channel in thick weather and have taken a pilot off Musquash Island.

I have passed through the south channel in foggy weather without taking soundings.

We heard the horn at Bryer Island and took that as my guide for a departure.

We always make an allowance for the tides.

There are no extraordinary tides in the South Channel.

Easterly winds affect the tides, augmenting them at flood.

I consider it would be better to have the light on the Old Proprietor Rock than on the Gannet Rock.

Cross-examined by Mr. Skinner :

I do not know the set of the tides from Partridge Island to the harbour.

The set of the tides for the American ports is directly in and out.

At Seal Island the flood is as strong as the ebb.

I do not know whether the soundings on the chart are at neaps or springs.

Vessels make lee-way according to wind and weather.

Mr. J. U. THOMAS, recalled, states :

I am prepared to produce certain documents asked for by the commissioners. The following documents were then handed into the court, viz. :—A printed copy of the Dominion Pilotage Act of 1873, with all amendments and additions thereto.

List of the names of the present St. John pilotage commissioners, showing the dates of their appointment and also what body appointed them.

Copy of the St. John pilotage regulations and by-laws made in the year 1874, with all amendments and additions thereto.

Copies of all accounts and statements rendered by the St. John commissioners to the government for the year 1894.

List of pilots taken over and licensed by the commissioners at the commencement in the year 1874, stating their ages at that time.

List of shipping casualties reported by the St. John pilots during the last ten years, and memorandum of pilot suspensions or reprimands in consequence thereof, giving the names of the pilots.

Statement of the separate individual net earnings of the St. John pilots during each of the last five years.

Statement of the total payments during each of the last ten years to retired pilots and widows and orphans of pilots, showing the three items separately.

Statement of the balance on hand 31st December, 1894, available for the support of retired pilots and widows and orphans of pilots.

Copy of the existing agreement or understanding with agents of the Furness Line regarding the pilotage of the steamers of that line.

Statement of the total amounts kept back from Pilot Richard Cline each year since the Furness Line pilotage agreement commenced, showing also how same was disposed of each year.

Statement showing how many vessels were spoken on their inward passages in each of the three pilotage districts during the year 1894; showing also the number of vessels which altogether escaped the pilots on their inward passages during the same period.

Cross-examined by Mr. Palmer :

I did not bring the minutes showing the time of change of districts and the time of change in the rate per foot from \$1.50 to \$1.75 in the first district, and the reason for it.

The meeting was in 1886 as far as I remember.

There was no change in the navigation in the first and second district to cause the alteration.

I am not aware that any representations were made to the board, but it was discussed among the members and as far as I remember the whole of the board discussed the matter.

The fact of trouble having arisen over the pilotage of American vessels in the outer district led to the change.

The alteration in the rates was made on account of the changes in the districts.

The effect of the change would be to increase the rates 50 per cent in the first and 37½ per cent in the second district upon all vessels, including steamers.

The commission changed the rate per foot on steamers as well as on sailing vessels.

The rates on steamers were made higher in 1883. I was not the secretary then.

I could get the minutes from the office and will have on file there any representations that may have been made to the commission.

Examined by Commissioner :

The pilots petitioned to have an increased rate on some of the larger steamers and were supported by the merchants in their appeal, and this is on record.

Cross-examined by Mr. Palmer :

The arrangement with Mr. Schofield in reference to Cline being a pilot for the Furness Line was made by his applying to the commission for a pilot and getting Cline in answer to his request.

The company simply pays Cline the ordinary fees and the sum of \$10 for return passage. This plan has been in existence since 1891.

St. John, N.B., Pilotage Investigation.

The terms made with Mr. Cline, before this arrangement was come to, was that Mr. Schofield was to have the services of Cline for the pilotage of the Furness Line and during the first year he was to receive a sum not in excess of the largest amount received by any pilot in 1892-3 and 4.

He was to get for the round trip \$70 and \$10 expenses in travelling. He was satisfied with the arrangement.

The average full pilotage on the Furness Line would be from \$108 to \$130, and from this Cline received \$70 and the balance was divided amongst the other pilots. I do not think Cline received more than any of the others, but averaged about as much; but some years it might be more.

Outward pilotage was enforced from 45 vessels coming in clear of the pilots.

There is no data in the office to show in what kind of weather these vessels came in, but I think as many came in during fine weather as in foggy.

The surplus earnings of Cline were always paid in the succeeding year to the other pilots, and the statement (No. 7) of the earnings of each individual pilot includes the surplus earnings of Cline.

There was no particular reason why this surplus should not go to the widows' and orphans' fund, but the commissioners thought it properly belonged to the active pilots, as they had earned it by their services.

Cross-examined by Mr. Gilbert :

The first district is from Partridge Island to Musquash Head and is only intended to cover the harbour pilotage.

Cross-examined by Mr. Skinner :

There is no eastern line laid down in the first district.

We exact pilotage from the coal barges coming from Parrsboro, under No. 1 District rates, both inwards and outwards.

The first district does not come inside of Partridge Island.

A vessel is not within the first district when Partridge Island bears west.

The pilotage exacted from the barges last year amounted to \$1,200.

A pilot could speak in succession each of three barges being towed by a tug, and, being refused by them all, claim pilotage for the whole number.

If the first barge accepted him the others would not have to pay him pilotage, but might be spoken by others and then have to pay.

In the case of Mr. Traynor, he spoke a tug having two barges in tow, went on board the tug and claimed pilotage fees for two vessels.

There has been no correspondence between the owners of the barges and the commissioners.

These barges are owned by the Cumberland Railway and Coal Company, the managing owner of which resides at Spring Hill.

The tonnage of these craft runs up to about 400 tons and they carry from 800 to 1,000 tons.

The first district extends up to the eastward but has never been defined.

The above method of collecting pilotage has been protested, but nothing further has occurred.

The 45 vessels, which are shown in the return No. 13 as having arrived in port without being spoken by the pilots, were substantially all coasters.

I think there is an effort being made by the coasters to escape the pilotage fees.

Cross-examined by Mr. Gilbert :

I cannot say if we invariably charge pilotage from vessels built at Quaco and towed to St. John. If they were not registered it would be one reason for not exacting pilotage.

Cross-examined by Mr. Palmer :

I never have heard of any pilotage being exacted from vessels down the bay, below a line drawn from Partridge Island to Digby Gut.

I know of no pilotage regulations for this district except those of St. John.

G. W. J. BISSET, sworn, states:—

I am master of the Dominion Government steamship "Lansdowne," and have held that position for about 18 months.

I have been in command of several vessels sailing out of St. John, viz.:—Schr. "Parole," 195 tons; Schr. "Bellatta," 150 tons; Schr. "Annie Martha," 130 tons.

These vessels traded to the United States and West Indies. I hold a certificate of competency as master.

I have had nearly all my experience sailing in and out of the Bay of Fundy to foreign ports.

I have not always been accustomed to take a pilot either when entering or leaving the bay.

Some of the vessels were exempt, and I took pilots for those that required them, but never for those that were not compelled to take pilots.

The pilots were always to be found cruising at the mouth of the bay, near Machias Seal Island and Bryer Island.

I consider that they perform their duties fairly.

I do not take a pilot on the "Lansdowne" as she is a Government vessel.

I have no difficulty in going down the bay in clear weather, but have had to lay to in foggy weather.

I have never had to use any more precautions on this coast than elsewhere.

I am not very well acquainted with the tides and currents. They are very irregular both in direction and force and I think the winds might cause this.

When I have been steaming about the bay, I have seen the pilots cruising about. Sometimes they had their flags up.

I think there is more difficulty in the navigation of the Bay of Fundy than in that of the coast of Nova Scotia, on account of the tides and fog.

I consider that an ordinary certificated master in charge of a ship, could bring her into the bay without a knowledge of the tides, but I would recommend him to employ a pilot.

He might be able to come up if he saw the points of land.

His intelligence ought to enable him to feel his way up by the lead.

I think that pilots are required for all parts of the bay, especially in thick weather.

I think the navigation of Halifax is easier by far than that of St. John. I have often been in Halifax.

I think it would be an improvement if a pilotage station were established and marked on the chart.

In my opinion all vessels above 125 tons should take a pilot.

Cross-examined by Mr. Palmer:

About 480 is the net tonnage of the "Lansdowne." I do not take a pilot.

I cruise to the north and east of St. John and at the mouth of the Bay of Fundy.

I consider that a vessel of 450 tons owned by Mr. Jarvis would require a pilot, and I would like to have one myself as I am not always on deck.

I have been going to sea for about 30 years, and I never took a pilot unless compelled to do so.

I do not very well understand the tides of the Bay of Fundy.

I have never met Captain Pike.

I know the harbour master of this port. I do not know Captain S. Rutherford, of St. John.

I think all vessels, of whatever tonnage, should have a pilot when bound to any port in the Bay of Fundy.

St. John, N. B., Pilotage Investigation.

My idea is that pilotage should be compulsory for all vessels coming into the bay. I do not know whether the soundings taken by me in the bay agreed with the position I gave the ship; I do not remember.

I never reported any such discrepancy, and do not recollect if I ever found any.

I only cruise in fair weather, but would like to have a pilot.

Practically all the deals from the Bay of Fundy ports twenty years ago were shipped from St. John.

I see a great many ships of all sizes loading lumber up the bay, and I do not know whether they escape pilotage or not.

I do not think there is any pilotage for places in the bay above a line drawn from Partridge Island to Digby Gut.

I do not know whether a large amount of trade has been driven from St. John on account of the excessive port charges.

Cross-examined by Mr. Palmer :

It is a fact that the lumber shipped at Grindstone and West Bay is brought off to the ships by schooners.

I could not say where the deals came from except in the case of Parrsboro.'

Cross-examined by Mr. Gilbert :

The reason why I would like to have a pilot is on account of the rocks and shoals, as I cannot be on deck all the time myself.

I cannot say whether a pilot who has served his apprenticeship would be a better pilot than myself.

I would take a pilot, not because of my ignorance, but so he could assist me.

Cross-examined by Mr. Skinner :

The schooners would have to go about six or seven miles to the vessels from Parrsboro.'

It has not come to my knowledge that deals from other bay ports were thought less of than those from St. John.

The tides are not regular in their irregularity. I consider that the bay is pretty well lighted.

I do not think you could put a light on the Old Proprietor, as it only bares at low water.

I do not cruise in foggy weather. We have no need to as we cannot get any bearings to place the buoys by, and it would not be prudent to go so close to the shore in thick weather, as we have sometimes to go.

I heave the lead in foggy weather when I have no points of land to guide me.

I think that the larger a vessel is the greater the risk and the more need of a pilot.

Cross-examined by Mr. Palmer :

I have travelled on the vessels of the International Line between here and the United States.

I think all these steamers should pay pilotage.

I think the "Monticello" and the "Alpa" ought to pay pilotage.

I consider the taking of a pilot should be made compulsory for the safe navigation of vessels.

Cross-examined by Mr. Skinner :

The steamers of the International Line have coast pilots.

Cross-examined by Mr. Palmer :

I do not know that the training of the masters of these steamers is equal to that of the coasting pilots.

Capt. J. H. PRATT, sworn, states :

I am master of the government cruiser "Curlew," and Inspector of Fisheries for District No. 1 of New Brunswick. There are three districts.

I hold a master's certificate of competency obtained in St. John in 1886.

I was previously in command of the "St. Nicholas" and "Dream."

The "St. Nicholas" was about 90 tons gross and the "Dream" about 60 tons.

Both of these vessels were in the Fisheries Protection Service on the coast of Nova Scotia and in the Bay of Fundy.

I was first appointed to the "Dream" about six years ago.

I have served in the capacity of an officer in a sailing ship in the merchant service, the "John E. Sayre," 1,650 tons, trading to Liverpool with deals from St. John.

I made one voyage in her and returned to New York.

Previous to being in the government service I had very little experience in the Bay of Fundy, but since that have been cruising about on both shores and have had fog frequently.

I have cruised over towards Bryer Island and the Nova Scotia coast very often and during fog have occasionally had to take soundings and have found them a fair guide to the position of the ship.

They have been of just as much service to me as on the coast of Maine and other places.

I have frequently met with the pilots when cruising about and have often seen them near Bryer Island and between Little River and Machias Seal Island in the North Channel.

I think they were attending to their duties properly.

My vessel draws ten feet six inches.

I am not allowed to employ a pilot on board my steamer, as she is a Government vessel.

I presume the Government think I have sufficient knowledge of the bay not to require a pilot.

If I were promoted, and the officer taking my place not having sufficient knowledge of the bay, were to apply for a pilot, I think the Government would allow him one for a while. I do not know of a case like this occurring.

I do not think that cruising in my vessel would give a man as much knowledge as local men possess.

A man serving under me would obtain sufficient knowledge to enable him to pilot his vessel about the Bay of Fundy, but would not give him the knowledge possessed by local pilots.

The approaches to all the harbours are attended with dangers more or less.

If the weather was clear an ordinary master could navigate his vessel fairly well by the aid of the buoys, lights, etc.

If the weather came on foggy, the fog signals together with the lead, would be sufficient to guide him, but I think some improvements might be made in the aids to navigation, such as a fog whistle in place of a gun on Gannet Rock, or else on the Yellow Ledge.

If it were possible to put a light and whistle on the Old Proprietor it would be a great improvement.

If I was bound to this port in a vessel of 1,500 tons I would, with my present knowledge and experience, take a pilot, in consideration of the large amount of property and the number of lives under my care as a measure of safety and as an extra precaution and also to help me bring my vessel up the bay.

I would have a feeling that I did not possess the knowledge the pilot had of the port, and being fatigued would like to have the assistance of a pilot.

There is not much more difficulty in navigating a vessel drawing 15 feet than one drawing 10 feet 6 inches.

St. John, N.B., Pilotage Investigation.

I think that vessels of all kinds entering the port of St. John, whether steam or sailing, coasting or foreign, should pay pilotage fees, and I do not see why any of them should be exempt.

It is absolutely necessary for the safety of the navigation of the port to have compulsory pilotage, and I do not see where the line can be drawn.

I have had several opportunities of testing the Admiralty charts and have found them pretty correct.

I think it would be a good thing to have a recognized pilot station off Bryer Island—about five miles.

I generally find the pilots there and when they see a vessel they put off to her. This is only in bad weather.

There is a high hill from which they can look seaward.

Cross-examined by Mr. Palmer :

I am at present in command of the Government steamer "Curlew."

I should think she was worth about \$45,000. She carries 18 hands all told.

I have been in the Government service for 10 years, and prior to that had little experience in the Bay of Fundy, except in large vessels in the capacity of mate, second mate and seaman.

The men engaged as masters and mates in the coasting trade would have as good experience of the navigation of the Bay of Fundy as I had when I entered the Government service, and even better.

From the time I entered the present service up till now I have cruised without a pilot.

I have met with two accidents.

The difficulties of the approach to St. Andrews are not greater than those at St. John.

If I was in my vessel ten miles west of Seal Island, my course to Bryer Island would be N. $\frac{1}{2}$ E. This course would take me four miles from the Lurcher Shoal and three and a-half from the Trinity Rocks. This is not the actual course that I would steer.

From this position off Bryer Island, the course to Partridge Island would, I think, be about N.E.

If I steered this course with an ebb tide, I think it would take me clear of the N.W. breakers.

From a point five miles west of Bryer Island light a direct course would not take me to St. John clear of everything.

From a position 10 miles west of Bryer Island it would be possible to steer a clear course to Partridge Island and under certain conditions it would be safe.

There is nothing in the way on that course to St. John.

The great advantage of a fixed pilot station would be in foggy weather.

The winds that bring in the fog would be fair for vessels entering the Bay of Fundy.

The soundings from Cape Sable, Seal Island, up the bay, as far as I know, are correct.

The soundings that I have obtained have always agreed with those marked on the chart.

If a vessel bound to St. John requires a pilot, I think one bound to Windsor should have one also.

I am aware that there are a number of vessels trading to Windsor carrying plaster.

I have never met any bay pilots below St. John, except those belonging to St. John.

I have never met a Windsor pilot boat, and do not know if there are any.

I have been in the port of Cardiff when I was mate and second mate, and I do not know whether the system is compulsory or not.

I have been to Troon and do not recollect having any difficulty in getting a pilot.

I have been to Fleetwood and think we were pretty close in before taking a pilot.

The navigation of the Bristol Channel is not particularly easy, and if I was going there I would require a pilot.

I do not think the Bristol Channel is more difficult than the Bay of Fundy.

I have never gone to New York from St. John as master or mate, and have never narrowly observed the dangers of the Nantucket shoals.

I am acquainted with Captain Pyke, and I believe he was for a number of years continually navigating the Bay of Fundy.

His experience in the navigation of the North Channel would not be as good as that of the St. John pilots, but he knows the error of his compass and the time required to pass the different points of land, and is quite competent to navigate his own vessel.

These remarks would apply to all masters navigating their own vessels under similar circumstances. If they had to navigate their vessels by sail, they would not be as competent as the St. John pilots, but as long as their vessels run under the usual circumstances they are just as competent.

The only obstruction between the north end of Grand Manan and St. John is the Wolves.

From Point Lepreau to St. John there are no outlying dangers.

I think I stated that unless pilotage was compulsory at St. John there would not be a sufficient body of pilots.

I have no knowledge as to the number of ports in Great Britain that are non-compulsory as to pilotage, and although there may be eighty-six ports in which pilotage is non-compulsory, I would not alter my opinion in reference to the system at St. John.

There is considerable amount of trade at Newcastle, Swansea, Leith, etc., and to my knowledge pilots are taken at these ports although it is not compulsory.

I would take a pilot at St. John whether it was compulsory or not and if going into any port in the United Kingdom.

My reason for making pilotage compulsory is in order to keep up a good staff and that pilots are required for ships approaching the coast.

In my opinion, ships coming to St. John would take pilots whether they were compelled to or not, and I do not think a satisfactory staff could be maintained without making pilotage compulsory, because the large class of ships seeking the port of St. John has fallen off to such an extent that it could not be maintained without.

Cross-examined by Mr. Palmer :

I think the smaller class of vessels would try to avoid incurring any expense, at the risk of life and property.

As a rule the masters and mates of vessels trading on the coast between St. John and the United States ports have as good a knowledge of the coast as I have.

The number of lives and value of property committed to my care, as master of the "Curlew," is as great as that committed to masters of coasting vessels.

I have never inquired into the reason why the department does not allow me to carry a pilot.

I think that H. M. ships take a pilot. I have seen a pilot on the bridge of one. I do not know if they take a pilot down the bay.

I have seen other vessels going down the bay with a pilot on board.

There is no more difficulty in going down the bay than from coming up.

Cross-examined by Mr. Skinner :

As far as I remember the distance from Bryer Island to St. John is about the same as from the mouth of the Bristol Channel to Cardiff. I was acting as mate when going into that port.

I give the preference to fine weather when coasting in my vessel and there is not the same necessity for me to employ a pilot as when cruising in all weathers.

St. John, N.B., Pilotage Investigation.

The requisites for a first-class body of pilots would be an apprenticeship as is now in force and an examination before obtaining a branch.

Among the subjects to be examined on would be a complete knowledge of the rocks, tides and shoals in the Bay of Fundy, and of the lights, fog signals, etc.

The pilots should be well supplied with boats able to keep the sea in all weathers.

A man could get along the coast in his own vessel without much knowledge of navigation, but some knowledge of it would be of great assistance to him.

I think a pilot would be the better for having a knowledge of navigation.

By the Commissioner :

I consider the pilots ought to have sufficient knowledge to enable them to apply the deviation of the compass, as at present they have to consult with the captain.

Cross-examined by Mr. Skinner :

It would not follow that because the master of a schooner running between here and New York gained sufficient knowledge to pilot his own vessel he would be able to pilot any vessel to St. John. He would not be competent to act as a St. John pilot.

I am not able to state what portion of the commerce of this port would be represented by vessels of 300 tons.

I think if pilotage was non-compulsory in the coasting trade, the tendency would be for the owners to get their masters to obtain sufficient knowledge to do without pilots.

I think there should be an examination for masters wishing to pilot their own vessels.

CLINTON COOK, sworn, states :

Examined by Mr. Gilbert :

I am captain of the tug-boat "Spring Hill," employed solely in towing barges.

I hold a master's certificate of competency.

I am fairly well acquainted with the bay and have been sailing on it since 1864.

I first became master in 1879. Have had charge of both coasting and sea-going vessels.

I am well acquainted with the upper part of the bay as far as Parrsboro.'

There is a light at Parrsboro,' a fog whistle at Cape d'Or, a light on Isle Haute, Cape Spencer, Quaco, Cape Sharp and Cape Split, there is also a fog whistle at Quaco.

I took charge of the "Spring Hill" in 1893, immediately after she was built. She is 96 tons net and her horse power about 600.

In addition to towing barges to St. John, we tow to ports in the United States and Nova Scotia.

I have towed more than one barge to Boston. I have taken one barge to Calais and several to St. John, St. Andrews, Portland, Bath and Gardiner.

We do not have any pilots in the Bay of Fundy when going to any other port than St. John.

With the exception of Boston we do not take a pilot to any port.

I have not found it necessary to take a pilot.

The barges range from 430 to 440 tons and were built for the purpose of carrying coal.

They have two masts and a jib and two leg-o'-mutton sails.

We generally bring two barges to St. John. I have towed three barges to St. John, anchored two off the harbour and then brought the other one in and afterwards took the other two to another port.

The pilots speak one barge and then another.

They sometimes come off in a small row boat and sometimes in the large pilot boat.

They have never met me more than about five miles above Cape Spencer.

If a pilot speaks the first barge and is refused, he then speaks the second or third if there is one and claims pilotage from them all.

I always pay for each barge outwards.

When I have come in without being spoken it is generally during a cold night.

It is about ten hours' sail from St. John.

The captains of the barges have regular certificates and there is a mate and two men.

I do not pay pilotage at St. Andrews. The captains have pilotage certificates.

The barges have two masts but I do not know their height.

The sails are three cornered ones, sometimes with a boom and sometimes without.

I do not think it would be possible for the barges to navigate by the sails alone.

They might drift down with the tide and anchor.

There are no serious dangers between here and Quaco Ledges.

There is no particular danger in going down the bay.

I never took a pilot when coming back from the United States. I have seen the pilots cruising about the bay.

I always took the north channel when returning from the States and never went outside with the barges.

I do not know of any outlying dangers from the north end of Grand Manan to St. John.

Small vessels of 125 tons, which are exempt by law from pilotage, if the wind is light and they have to beat in the harbour, take a tug.

The principal dangers are from Partridge Island in.

Examined by Commissioner :

I do not know any reason why a barge in tow of a vessel should pay pilotage when a vessel under 125 tons is exempt.

Examined by Mr. Gilbert :

I think my average running here was about two trips a week in winter with one barge and in summer the same with two barges.

The barges would draw about six feet of water when going out. The rate of pilotage is about three cents per ton of coal.

Examined by Mr. Palmer :

The barges are controlled by the steamer.

I was master coasting and foreign-going previous to going in the "Spring Hill."

I have sounded in the Bay of Fundy with the deep-sea lead.

Pilotage is not compulsory in the bay except for St. John.

I do not think the Parrsboro' pilotage extends as far as Quaco.

I never paid any pilotage either in or out of Calais, Portland or Bath.

The barges pay no pilotage at Parrsboro' and St. Andrews on account of the masters having pilot certificates.

In coming from Portland I keep the North Channel. I keep the land aboard through this channel and sometimes steer a course from the North Head of Grand Manan to give the Wolves a wide berth.

I do not think it requires any more knowledge of the bay to come to St. John than to Parrsboro'.

In coming up the North Channel the greatest dangers are between Machias Seal Island and the North Head of Grand Manan, on account of the narrow waters.

I have been engaged in the coasting trade from ports in the Bay of Fundy to New York.

There are more dangers on the coast of Maine than in the Bay of Fundy.

St. John, N.B., Pilotage Investigation.

I would sooner navigate the Bay of Fundy than the Nantucket Shoals.

About half my time has been spent on the coast. I think I am competent to navigate a sailing vessel between St. John and New York and vice versa, without a pilot.

I have considerable acquaintance with masters of vessels engaged in the trade between here and New York.

They are men who have frequent opportunities to learn the dangers of the coast.

Coasting vessels generally go through the Sound. There is nothing in the navigation of the Bay of Fundy to compare with dangers of the Nantucket Shoals.

The manager told me that three barges with coal and the tug represented about \$100,000.

If I ever took a pilot into Boston it was because I had to pay pilotage.

The tug was insured, but I do not know about the barges.

I have taken a pilot when spoken and have also come in without one. I usually take a pilot when I have to pay one, unless I have orders to the contrary.

There are no greater dangers from Cape Sable, Seal Island, to St. John than the shoals of Nantucket.

I have taken a vessel up the bay all the way from Seal Island to the head, by the use of the lead.

I have found the soundings agreed with the position of the ship.

I never trust to my memory in bad weather, but use the chart.

I was told not to take a pilot at St. John, on the ground that the company was protesting the pilotage.

It is compulsory pilotage at St. Andrews.

Cross-examined by Mr. Skinner :

The reason we did not have to pay pilotage at Parrsboro' was because the captain of the barges had pilot's certificates.

I never towed three barges at one time from Parrsboro' to St. John. Twice I have brought two and both paid pilotage.

I remember at one occasion bringing in a barge to St. John for safety, when the weather was bad outside, but I did not pay pilotage.

I do not consider it necessary to have pilots for the bay, as it is open water.

Any certificated master of any nationality ought to be able to navigate the bay by his chart.

I have never been in Europe since I became master, but have been in South America—32° south latitude—and have been into different ports. Sometimes I have gone in without a pilot and sometimes with a tug, but do not know if there was a pilot on the tug.

I think a pilot ought to be used in Chesapeake Bay. In open bays pilots are not needed.

In coming from New York to St. John I am guided by charts, and by experience.

I was well acquainted with the coast when I went as master, but the training I had previously as A. B. and mate was of service to me, but I cannot say to what extent.

I have anchored in the Bay of Fundy, but speaking generally you cannot anchor. I can anchor on the Nantucket Shoals. There are lightships there. They never in my experience had sectors on those lightships. They are put there for the protection of shipping and to indicate the position of the shoals.

I still adhere to my statement that the Nantucket Shoals are more dangerous than the Bay of Fundy.

Examined by Commissioner :

I consider that our system is as good as that of the shoals.

There is a sector on a light not far off, but one has to be well over the shoals before it becomes of any use.

Cross-examined by Mr. Palmer :

I have never sailed up the British Channel. I have sailed up the St. George's Channel, but not as master.

I think a certificated master ought to be able to bring his vessel up the Bay of Fundy without a pilot, but I do not think he could do so over the Nantucket Shoals.

The aids to navigation in the Bay of Fundy are comparatively just as good as those on the Nantucket Shoals.

SAMUEL SCHOFIELD examined :

By Mr. Palmer :

Q. What is your business or occupation at present?—A. Principally agent for steamers at this port.

Q. Were you in any years concerned in or engaged in the deal shipping business?—A. I was.

Q. For about how many years?—A. About 22 years.

Q. From what period to what period?—A. From about 1865 to 1887.

Q. In the earlier part of that period, 1865, were you at that time engaged in the deal shipping business upon your own account or acting for any other person or persons?—A. In the employment of a gentleman who was in the business.

Q. In the earlier part of it, 1865, you were in the employ of other persons in the business?—A. Yes.

Q. Part of the time with the late Mr. Wilson and part of the time for Gilbert & Co.?—A. Yes, and subsequent to that in business for myself.

Q. Were you at any time interested as owner, manager or agent for sailing vessels?—A. Yes.

Q. For about what number of years?—A. I think about the same period, perhaps a couple of years less.

Q. You would have a considerable knowledge of the deal and timber shipping business from this port from 1865 to 1887?—A. Thoroughly acquainted with it.

Q. Starting in the early period of 1865, at that time from what period or periods were the deals manufactured in the bay to the north and east of St. John shipped?—A. They were brought here and shipped from here, I think I might say almost entirely.

Q. Were brought to St. John and shipped from here?—A. Yes.

Q. About how long and what date did that continue?—A. I can hardly remember that.

Q. How long did Wilson continue in business—do you remember when he retired or died?—A. He died in 1876, the year before the great fire.

Q. By your memory, were there any considerable shipments of deals direct from up the bay ports to the United Kingdom prior to 1876?—A. No, there were not.

Q. Then the development of that trade from whatever cause has been since 1876?—A. Almost entirely.

Q. During your connection with the deal trade prior to 1876 were there deals manufactured at Apple River, Shulaa, Amherst and Dorchester?—A. Yes, we used to buy them.

Q. Were those deals prior to 1876 or 1877 shipped by schooner to St. John?—A. Yes.

Q. At the present time are the bulk of the deals which are manufactured at those mills and other mills at the head of the bay shipped to St. John, or are they shipped direct or from some other port?—A. They are very largely shipped from ports up the bay direct to ports in the United Kingdom or ports abroad. The system is entirely changed—the deals are laden on board the vessels at the ports—not at all the ports

St. John, N.B., Pilotage Investigation.

because some of them are very small. If they were not loaded at the larger ports where they are made, the port just close to them they were shipped into in schooners.

Q. Taking exhibit "A," the pamphlet prepared by the Shipowners Committee with reference to non-pilotage ports in the United Kingdom, page thirteen, I ask you whether you compared the list of ports used here, as here given, with any and if so what book upon the subject?—A. With the Shipping World Year Book of 1891.

Q. And also with Read's Shipowners and Ship Masters' Hand Book?—A. Yes, was issued at Sunderland, no date, and that statement there is compiled from these two books together.

Q. Looking at this as being the latest edition, tell me whether from that book the port of Middleboro is a compulsory or non-compulsory port?—A. It is a non-compulsory port according to this book. That is, as far as I know, the latest edition of the book that has yet been received in this country. The 1895 edition was to be issued by the end of December, but although I have ordered a copy it is not yet finished, the publishers wrote me that they would send one as soon as it was published.

Q. Looking at the 1891 edition, I ask you whether Middleboro on the Tease is given as a compulsory or non-compulsory port?—A. It is non-compulsory in both books, it is not marked in this book. I think the Tease is mentioned in the other book in another way, Middleboro is one of the Tease ports.

Q. Under the head of "B" on page 14, is that the usual draught of water of vessels of certain tonnage?—A. Yes.

Q. Inwards and outwards?—A. Yes.

Q. I ask you whether that was compiled by you in connection with others of the Shipowners Committee and from what information you compiled it?—A. It was made up by a committee which compiled that pamphlet or a sub-committee from actual facts, the draught of water of vessels of those sizes at this port inwards and outwards actually pay pilotage. We compared several and we took a fair average in each case, they are not all exactly alike.

Q. It is not the draught of a particular vessel?—A. No.

Q. It is the mean or average result, taking a comparison of a number of vessels?—A. Yes, it is a little under stated if any, the draught of water would for the most part be a little greater than that.

Q. Statement "D" upon page 16 with reference to the actual pilotage of vessels at St. John and at Halifax; was that arrived at in the same way, by taking the draught and tonnage?—A. Yes. The amount stated in the paragraph you speak about was compiled from the information on the preceding page, we have just spoken about and the draught of water so far as St. John was concerned. Taking the draught of water so far as St. John was concerned, of those different sample style of vessels and the rates given there worked up into money, and then the Halifax figures were compiled by taking the tonnage of the vessels and figuring up and putting down the amounts according to their table and comparing one with the other.

Q. I have heard of a letter, a statement or schedule of the pilotage charges in the year 1894 on the steamers of the London line at St. John and Halifax?—A. Yes.

Q. Was that statement prepared by yourself? And from actual payments?—A. I made that statement "E" up myself from the account of the steamers stated there at this port. The amounts and other information and as regards the Halifax rates put opposite them, they are compiled from the Halifax table of rates, which of course govern all vessels going into the port, from the Halifax pilotage commissioners' table.

Q. The Halifax pilotage is always on tonnage and there is only one district?—A. Yes, only one district in Halifax and one rate inwards and one rate outwards. The pilotage regulations say the line is from Chebucto Head to Devil's Light.

Q. Compiling this you have assumed that every one of the steamers were spoken somewhat outside of that line?—A. Yes I suppose so, but I do not think they were.

Q. In charging the St. John pilotage have you charged as pilotage the amount of money which was paid for Pilot Cline's travelling expenses?—A. No, that is not charged.

Q. That would be some \$200 in addition to what is shown?—A. \$10 for each boat or \$200 in all.

Q. Then the total, including travelling expenses, allowed Cline by the Furness Line in 1894 how much?—A. \$2,373.80, you have to add \$200. To that, that would be the total amount paid by the Furness Line for pilotage and travelling expenses to pilots in 1894. The greatest amount that could be paid at Halifax was \$744.50 for pilotage. The Furness Line boats go into Halifax twice, they go in and out and this shows only one visit in and out at Halifax, as compared with one visit in and out at St. John, but they go in and out twice at Halifax.

Q. I think you are also the agent for the West India Line that comes to St. John and Halifax?—A. Yes, our firm are.

Q. In the paper "F" is the pilotage of all the vessels of the West India Line which visited St. John in 1894 stated?—A. Yes.

Q. Is it as stated the actual amount of pilotage paid?—A. Yes.

Q. And the statement of the pilotage at Halifax, is that a statement of the actual amount paid or the greatest amount which could have been demanded?—A. It is the largest amount they could have paid, if they had been spoken by pilots on every occasion, this is with reference to the West India Line. The amount put as pilotage at St. John is the amount actually paid on those 13 steamers and the amounts at Halifax are the greatest amounts that could have been demanded. The St. John Pilotage is \$1,136.26 and the amount at Halifax \$475.70.

To Captain Smith:

Q. Is this all of the steamers making one trip or for the whole pilotage?—A. Those West India steamers only call at this port once and Halifax once, they are not like the Furness Line which call twice at Halifax.

To Mr. Palmer:

Q. This is also an exhibit "G" showing the tariff of pilotage upon the London Line of steamers from December, 1884, to August, 1886?—A. Yes.

Q. And showing a certain rebate allowed. You might state how that came about?—A. The circumstances are these: Previous to the first steamer named here, the "York City," in December, 1884, the pilots were paid the full tariff fees, previous to December, 1884. In December, 1884, I made an arrangement with Pilot Richard Cline that he was to return to the line whatever the tariff rates were here in excess of \$90.00 for his own services.

Q. Each trip?—A. Each voyage, to return whatever amount he received through the pilot office here in excess of \$90.00, and that arrangement was a private one. We paid into the pilot office here the full amount of their bills according to the tariff, and in accordance with the arrangement after pilot had received the money for each steamer from the pilot office he brought us the excess which is stated here. That agreement continued during December, 1884.

Q. What was the excess?—A. In one case \$22.80. It is all in the exhibit, December, 1884, and January, 1885. Some time during January, 1885, one of my clerks, Thomas Miller, informed me that three of the other pilots had been talking to him at Reid's Point on the subject; they were John Thomas, William Lee and Henry Spears; they offered to do it for \$75, and we made the arrangement with them, and that was raised to \$80 and continued in that way to August, 1886.

Q. The total pilotage paid, the amount returned and the rebate allowed to the line by those terms appear in that exhibit?—A. Yes.

Q. That was not a perquisite to you in any way?—A. I should think not. It went to the steamers; each steamer was credited with the money stated here in the account. It was not a perquisite to me in any way. I was merely acting as agent for the steamers.

Q. Now, I ask you whether the West India boats from St. John took pilots beyond the first district outwards?—A. Going out from here?

St. John, N.B., Pilotage Investigation.

Q. Yes?—A. Only on one or two occasions when the captain was sick going out, as a rule they did not.

Q. The London Line, under the existing arrangement, proof of which was given by Mr. Thomas the other day, did they take pilots down the bay?—A. The commissioners compelled us to do that.

Q. What do you mean?—A. It is not compulsory under the regulations, but before they would agree to allow us Pilot Cline as a special pilot, they stipulated that we should take him down the bay outwards as well. We were to take him down the bay outwards as well as coming in. They insisted on that if they gave us the privilege of having a special pilot.

Q. Can you tell me the amount of that down the bay pilotage in 1894?—A. Somewhere from \$40 to \$45 going outwards per steamer. About \$900 on twenty steamers. This item here is the claim indicating.

Q. The amount of that down the bay pilotage of 1894, under this arrangement, the commissioners compelled you to agree to, and that amounted to?—A. \$849.76.

To Captain Smith:

Q. Coming in from sea you were also obliged to pay the full pilotage?—A. Yes, under this agreement.

Q. Then you had to pay a similar rate going down the bay?—A. Yes, on every occasion.

To Mr. Palmer:

Q. In addition to that, they had to agree that they would pay it or they could not get the special pilot?—A. Yes.

Q. I will ask you whether you would have taken a pilot down the bay by this London Line outwards, except for the compulsion of this agreement?—A. No; if we were free to act in the matter we should drop the pilot at Partridge Island always going outwards.

Q. This Furness Line has been running here for about how many years?—A. About ten.

Q. At first did you have any special pilot?—A. No; not for some time.

Q. The boats came in and the pilots were picked up as any transient or chance vessel?—A. Yes; they got a pilot, sometimes picked them up.

To Captain Smith:

Q. How many years of that ten years did you pick your pilots up by chance?—A. I would not know.

Q. Would it be three, or four, or five years?—A. About half that time.

Q. Was it before the "Ulunda" investigation?—A. They were not taking them then, it was since that.

To Mr. Palmer:

Q. Was not the "Ulunda" investigation after 1884?—A. Yes.

Q. During 1885, and a part of 1886 you had that special arrangement with Cline and these three other pilots, by which they went to Halifax?—A. Oh, yes.

Q. Extending over 1885 and part of 1886?—A. Yes.

Q. From that time down to the time the arrangement was made with the pilot commissioners in 1891 you picked them up by chance?—A. Yes, then a new arrangement was made of which the proof is already in.

Q. While these different vessels had been coming to this port, had there been any accidents or disasters to them?—A. Yes.

Q. Can you state from memory or information before you the number of these accidents and whether the vessel had a pilot on board?—A. Yes.

Q. At the time of the accident?—A. Yes, the Furness Line since they have been running here have had five accidents in four of which cases in ten years. In four

of these cases there were St. John pilots on board, four of the five cases. In one case there was no pilot on board, that case was the "Ulunda," in which there was an inquiry held by Captain Smith. She went ashore on Cow Ledge, Briar Island, going outwards.

To Captain Smith :

Q. What were the name of the others?—A. The other four, one was the "York City," going from here to Halifax, she got ashore in Petite Passage, Pilot John Thomas on board. I cannot tell the order of them or date, another was the "Demara." There was not any investigation on the "York City," on this side of the water.

Q. Was she much damaged?—A. I do not think she was seriously damaged, she went right on to Halifax. I cannot say from memory what was done in Halifax, but her bottom must have been examined. The "Demara" struck on Cape Sable, Seal Island, going around from here to Halifax, and the same pilot was on board. Another accident was with the "Demara" going from this harbour, she struck somewhere above the beacon, near the terminus, below the railway wharf on this side, below the I. C. R. terminus, I think that was Pilot Trainor, that was three of the four.

Q. Have you any record of this in your office?—A. No, I have not, the pilot commissioners would know about it. The fourth one was the "Ottawa," coming from Halifax to St. John struck on Blond Rock and became a total wreck,—Pilot Richard Cline was on board, those are the five. She was a new steamer.

To Mr. Palmer :

Q. The West India Line have been running here under your firm acting as agent, for how long?—A. Several years, I think about five.

Q. During that time have there been any accidents to any of these boats with pilots on board, or without pilots?—A. Yes, with pilots on board.

To Captain Smith :

Q. Was that since I inspected these steamers?—A. Yes, they were running then, just beginning then. It is about five years.

To Mr. Palmer :

They have had two accidents, the West India Line and in both cases the pilots were on board. The "Taymouth Castle" was a collision in the fog on the bay, coming inwards, Pilot Henry Spears on board. A collision with a schooner, the schooner was outward bound and the steamer inward bound. The other accident was with the "Duart Castle" coming into harbour, grounded, the pilot I do not know his name.

Q. Have there been any accidents or damage to any steamers of the West India line without pilots on board since you have been managing them?—A. No, none; those two accidents have been with pilots.

To Captain Smith :

Q. They have had no accidents when the men who commanded them were in sole charge?—A. No, none whatever.

To Mr. Palmer :

Q. At any time within the ten years or a little more than ten years have you had any vessels which were to your consignments meet with a disaster while outward bound in the bay, in charge of a pilot?—A. Yes, on others vessels, under my agency outward bound. In October, 1884, the barque "Plevna" was here consigned to me and loaded by me with a cargo of timber and deals for Carnarvon in Wales. The captain took a pilot down the bay outwards, I do not remember his name. It was the same

St. John, N.B., Pilotage Investigation.

pilot he took out from the wharf. He decided to take him down the bay going out and did so. When we got down near—when they got down near Bliss Harbour the wind came in ahead and the pilot recommended going in or putting into Bliss Harbour, it was in the night. The captain told me that he said to the pilot he was not acquainted with the harbour and of course would not take any responsibility about taking the vessel in himself, but the pilot said he was well acquainted with it and would take the vessel in.

To Captain Smith :

Q. The pilot urged the captain to take the harbour at night, and he knew the entrance and would take the vessel in, and attempted to do so; and in taking her into Bliss Harbour she went ashore and became a total wreck.

To Mr. Palmer :

Q. With reference to ships outward bound from St. John, not having any near by port of call, from your experience as a shipowner and ship agent would you recommend or permit a captain controlled by you to take a pilot down the bay?—A. I certainly would not. I would not give the privilege to any captain under my charge to take a pilot down the bay outwards.

To Captain Smith :

Q. You would not permit the captain to take a pilot going down the bay?—A. I certainly would not.

To Mr. Palmer :

My reason would be that if a vessel takes a pilot down the bay, she has got to land him or he has to get on shore clear of the vessel. He would have to land that pilot, as the pilot has to get ashore somewhere, or else he is taken away in the vessel and would cost the vessel so much a day until he is returned. In keeping close to the land in order to enable the pilot to get on shore in safety and easily, is where I consider there is a very great risk. I believe many accidents that have occurred have just been caused by that very trouble.

To Captain Smith :

Q. In keeping close to the land, you consider it dangerous?—A. Yes.

Q. If a fog came on a man might be misled?—A. Yes. Besides that, another reason is that I would not have in my employment any captain that could not take his vessel outwards, or bring her inwards, and if the captain told me he was not capable of doing that I would discharge him at once. I would consider him incompetent to take charge of my property.

To Captain Douglass :

Q. Do you mean you would not employ a man who did not consider himself competent to navigate the ship in the Bay of Fundy?—A. Yes; I would get somebody who would consider himself competent in preference to keeping such a man in my employ.

To Mr. Palmer :

Q. In your position as shipping owner and agent and consignee have you had occasion to obtain insurance both upon ships and freights and cargoes?—A. I have.

Q. Have you found any difference in effecting these insurances, either in the willingness of the underwriters to accept the risk at the rate of premium charged, as to whether a vessel was to sail with or without a pilot down the bay, or have you ever had the question asked you?—A. Never by any insurance company. I have effected insurance on ships and cargoes and freights without pilots.

Q. You have not to do with vessels under 125 tons limit?—A. I have not now. I have had.

Q. Since the system of compulsory pilotage have you had to do with schooners exempted from pilotage?—A. Yes; I owned them.

Q. Have you found in effecting insurance upon those vessels or freights or cargoes that there was any difference made between them and vessels of another similar class, but of sufficient tonnage to make pilotage necessary?—A. Never. The question was never asked by any insurance company. There was no clause to that effect; there was no such question asked and no such stipulation ever made, and no stipulation in the policy of insurance as to that.

Q. There is in force with the St. John pilotage commission a system with reference to pilots going aboard, commonly called the turn system?—A. Yes, there is; that includes Halifax.

Q. To ports outside the pilotage district there is a system in vogue called the turn system?—A. Yes.

Q. If you apply or if any agent applies for a pilot to be sent to Gloucester or Boston, you must take the pilot whose turn it is to go?—A. The rule, as told to me by the secretary, is that the boats take turn in the first place. If there are six boats they each take turn and then you have to take the man in the boat whose turn it is again. There are two turns, it is a sort of double barrel business. You must take the particular pilot in that boat who is intended, unless you are prepared to make some charge against the pilot or some personal objection against the pilot whose turn they tell you it is, in which case the commissioners will take that into consideration.

Q. Outside of the making some complaint, if any ship agent at St. John, with a vessel entered at Boston ready to come to St. John, wishes to send a St. John pilot, he has to apply to the commission and take the particular man whose turn it is, they say, to go?—A. Yes, that is what they have always told me was the rule.

To Captain Smith:

Q. There is no power of selection given you unless by particular objection?—A. No; if I objected to that man they would tell me the next man whose turn it was to go.

Q. Might it be possible that the man whose turn it was might be down the bay?—A. Yes.

To Mr. Palmer:

Q. The consignee who wishes to send a pilot abroad has no right of selection except with the right of objection. But he has to take the man the commissioners send?—A. Yes, that is the rule.

Q. Have you any objections to state to that method? Do you see any objection to it?—A. Oh, yes.

Q. State them?—A. I consider we ought to have the right to select our own pilots when we want to send them abroad, so that we might select men whom we would know. Personally I am not acquainted with all the pilots. I know quite a number whom I would select, because I know something of their character and abilities, but there are others I would not like to take, simply because I do not know them, and when I have to select a pilot to send abroad either for a vessel of my own, or for one which I am acting as agent for, I would like to be able to send some man I had known and whom I could recommend, and not a man about whom I knew little or nothing. If you do not have the right to select a man, you may get a man who is incompetent. There have been plenty of accidents on account of that, and suspensions for various causes.

To Captain Smith:

Q. You would not consider all the pilots as supposed to be competent?—A. They had held licenses, they have not passed examinations.

St. John, N.B., Pilotage Investigation.

Q. If a man holds a license he is entitled to be trusted until you prove he is incompetent?—A. Yes, but there are plenty of captains I would not employ for just the same reason. The mere holding of a license is not sufficient for the owner of a ship.

To Captain Douglass:

Q. You said there had been a great many accidents. The impression I got was that there had not been a great many accidents, that might be attributed to the skill of the pilots or the easiness of navigation?—A. My objection is that the pilots of this port have not passed, in my opinion, a strict enough examination before competent examiners to warrant me in feeling confident that their possession of a license to pilots is as good as the competency of a captain who would pass a strict examination before a competent examiner. There is a great difference, in my opinion, but while that is the case, I still know of pilots, some of whom I do believe are thoroughly competent to navigate the Bay of Fundy. It is not because they hold a certificate that I hold that opinion at all, but it is because of my acquaintance and experience with them. If I was engaging a captain and he produced me a certificate that he obtained before the Board of Examiners of the Dominion, I would feel it was a strict examination by competent men, but those examinations of these pilots which took place before a committee of the Common Council before 1874 do not impress me favourably, and I do not feel they are therefore competent because they hold these certificates. All these that were taken over in 1874 I have no confidence in their examination, and they were not examined by competent authority since.

To Mr. Palmer:

Q. On the question as to whether the men are competent or not you say you do not know?—A. Yes, that is it. I do not mean to say that they are not competent, but I mean to say that I know some of them that are competent and have great confidence in them, but there are a number of them that I do not think the fact of them holding such certificates as they do hold does not give me that confidence as if the examination was held before the examiners of masters and mates of the Dominion of Canada, because the one is a strict examination by competent men and the other not.

Q. I ask you as to the rates of pilotage at St. John, as compared with other near by ports, taking for instance Halifax?—A. The rates here are very excessive, as compared with Halifax. Our rates are three to four times as great here as at Halifax on vessels of the same size, and I consider that that has a very serious effect, a very injurious effect upon the trade of this port. I know by positive experience that owners of vessels and steamers complain bitterly about it and it operates against business here.

Q. How do the rates in steamers compared with rates in sailing vessels compare with this port and other ports in the Dominion of Canada, such as Halifax, Montreal and Quebec?—A. In Halifax the rates on sailing vessels and steamers are the same, the pilotage rates, and in Boston and New York they are the same and Quebec and Montreal, the pilotage tables I have from there show that steamers and vessels in tow pay very much less rates than sailing vessels, both up and down and in some cases less than half. In Quebec and Montreal they pay less pilotage.

Q. These statements are vouched for by correspondents who send them to you as being correct?—A. Yes, and in some cases I had before me the official tables published by authority.

To Captain Smith:

Q. Can you give the commission a copy of these?—A. Yes. (Produced.)

To Mr. Palmer :

Q. On the other hand about what percentage on steamers in excess?—A. The rate on steamers varies from 33 to 43 per cent greater on steamers than on sailing vessels of the same draught of water.

Q. Taking Halifax, the pilotage there is upon tonnage?—A. Yes.

Q. Do you know whether that is calculated upon net or gross?—A. Net registered tonnage. Below Quebec and from Quebec to Montreal, from Quebec to the harbour of Montreal or to any place above Sorel vessels in tow or propelled by steam are \$2.00 up and \$2.00 down per foot; next is sea-going vessels propelled by steam, upwards \$2.50 and downwards \$2.50 per foot, and any vessels under sail upwards \$1.20 and downwards \$2.80. The difference in that case is more than double ours upwards, and downwards is not so much difference. In Boston there is a card showing their official rates, and there is a letter from the steamer agent there stating that there is no distinction made between steamers and sailing vessels. I know that is the way, too; it is a letter from the steamer agent there.

To Captain Smith :

Q. Do you find that the steamer rates in Great Britain for pilotage are higher or lower than they are for sailing vessels?—A. I find no case in which it is higher, but I find a number of cases in which it is less. I do not know of any port in the world myself, with my 30 years' experience, where steamers pay more than sailing vessels, except in St. John.

Q. Were you aware what the rates were in England—whether they were higher or lower?—A. I cannot find any case where they are higher; I cannot find any place where it is more on steamers than sailing vessels, but in some cases it appears to be the same, and in some cases it is less. I adhere to that statement that I do not know, after my experience of 30 years, I do not know to-day of any port in the world, excepting St. John, N. B., where steamers pay more than sailing vessels do, whatever the scale is. At Portland, Me., there is no system, no real existing board of pilots and you can make your own arrangements, and there is nothing to prevent you.

Q. No special pilots in Portland?—A. No; no pilot system. In Boston there is, and the steamers and sailing vessels are the same. There is a large sailing-vessel business at Portland.

To Mr. Palmer :

Q. It is also within your knowledge that in the South American trade from Portland there is no compulsory pilotage on anything and no wharfrage?—A. I think not; there is certainly no compulsory pilotage.

Q. From your experience, I ask you which is the more equitable method of collecting pilotage—by draught of water or by tonnage?—A. Undoubtedly by tonnage.

Q. Taking the present pilotage rates per foot at the port of St. John, have you by actual examination of the rates paid by steamers, ships, barques and brigs, ascertained the ratio per ton of pilotage paid by these different vessels?—A. I have; I can give you some statement on that point.

Q. What is the average rates per ton, in and out, paid on a schooner of 125 tons?—A. The way I made up the statement was this: I took the harbour pilotage, the first district in and out on 20 steamers and the average sizes of 20 ships and barques and 20 brigantines and 20 steamers, taking the fair average tonnage in each case. I took the first district because it is compulsory in and out. If you add to that the pilotage coming in, in a further district it will be greater. I find that, taking the bills, the pilotage in the first district in and out on the steamers comes to four and a-half cents on their net tonnage per ton. On the 20 ships and barques I took the draught of water and worked it into the tonnage afterwards. I took 20 steamers that came into this port and I have named them all here, and I took the pilotage fees on this draught of water. Then I took that money and divided it into the total tonnage of the vessels. It came to three cents on their gross tonnage and

St. John, N.B., Pilotage Investigation.

four and a-half cents on their net tonnage per ton on steamers; the 20 ships and barques, four cents on their net tonnage, and the 20 brigantines ten and a-quarter cents; and the 20 schooners, 18 cents. These statements will give you the names of all the steamers, and all the ships and barks and schooners. It is the actual pilotage paid in the first district.

To Captain Smith:

Q. You put down net tonnage in the first claim?—A. Yes, and then I bring out the draught of water upon which they paid this pilotage.

To Mr. Skinner:

Q. Does not that show steamships paid less than the sailing-vessels in tonnage?—A. No; the ships and barques paid four cents.

Q. From actual examination you have found that the average charge per ton of pilotage on schooners is 18 cents or in excess of 18 cents?—A. I know of cases where it has been 30 cents; I think 35. The owner told me he sold her because the pilotage was so excessive. The "J. L. Cotter" was 30 cents a ton and the "Aveana" 25½ cents.

To Mr. Palmer:

Q. In your opinion if pilotage outside of harbour pilotage is compulsory at the port of St. John, in your opinion do you think some reasons exist for making the bay pilotage compulsory upon vessels bound to other ports in the bay?—A. Unquestionably so.

Q. I ask, do you think some reasons exist to render necessary pilotage compulsory of the same class of vessels to other ports?—A. Yes.

Q. By the Pilotage Act certain ports in the Dominion are permitted to grant licenses or exceptions to masters of vessels, and the port of St. John under the statute has no such power. In your opinion should the same power to grant pilotage certificates or exceptions where the masters pass a satisfactory examination, be extended by law to the port of St. John?—A. I certainly think so; I do not see any reason why St. John should not have the same advantages that are granted at any other port in the Dominion.

(Commissioner reads section 67 of chap. 80 R. S. of Canada.) Witness—It was 65 in the original Act.

To Mr. Palmer:

Q. Except the law as provided by that chapter, is there in your opinion any other or greater reason in excepting from the pilotage regulations of the port of St. John, the steamers of the International Line or other lines of steamers plying to this port from ports north of New York, from excepting the steamers of any other line visiting this port?—A. Not that I know of.

Q. You think if the steamers of the West India Line should pay pilotage coming to this port, that the steamers of the International Line should also pay pilotage?—A. Much more reason, because they carry more passengers. They are American owned and American registered, and the steamers of the West India Line are British registered.

Q. The masters of these vessels are masters certified as qualified either by the Canadian authorities or by the Board of Trade?—A. Yes.

To Captain Smith:

Q. Would British ships going out any port in America where pilotage is compulsory get the same favourable conditions as the American ships?—A. There is no such favour shown, it is just the reverse, a steamer going from here to New York and Boston would have to pay pilotage there. I have given one reason and I will give another reason why I think the International Line should pay pilotage if other steamers coming in and out should pay it and that is this, that steamers of the

International Line are skirting along the coast in all kinds of weather and there is very much more danger to any vessel than if she has the open sea before her. The International Line have to skirt along the coast exposed to very great risk and it is not fair for another reason, because at Halifax the very same steamers pay pilotage under the Act.

Q. As a matter of hearsay I would ask you to tell me your source of information, I ask you what about would be the pilotage charges on the International steamers at this port per year taking 1894 as a sample and tell me from whom you derived that information?—A. They are about 1,200 tons register and they draw about ten feet of water and they make about 175 visits to this port per annum and bring thousands of passengers and their pilotage bill at the same rates they have to pay for other steamers would amount to over \$8,000 per year.

Q. Tell me who gave you that information?—A. The part of the information I did not figure up for myself was furnished me by the agent of the International Line at this port.

Q. Was there any agreement by any authority that they should not pay pilotage at that time?—A. The Act exempts this port but not Halifax. Our commissioners here have no control of it. They are absolutely exempted.

Q. Was there a reason for exempting them?—A. They sent to Ottawa and got them fixed that way.

Q. If pilotage has to be made compulsory and is to continue compulsory upon vessels of 125 or 150 tons, in your opinion should pilotage dues be exacted from the bay steamers entering the port of St. John?—A. Yes, I think so.

Q. The masters of those steamers, do they pass any different or more stringent examination than the masters of other vessels, steam or sail entering this port?—A. No, the masters of the bay steamers do not.

Q. So far as you know do they pass any more stringent examination than the masters of other steamers frequenting this port?—A. Not at all.

Q. Do you think if steam vessels from whatever port they come are to pay pilotage, that the crafts that they have in tow should also pay pilotage?—A. I certainly do not think so, I do not see the necessity of more than one pilot. I consider these steamers, the "Monticello," the "Alpha" and "Hiawatha," should pay pilotage if it is compulsory on other vessels.

Q. Then a tow-boat should also pay?—A. Yes, I think they should all pay, regardless of tonnage, if there is to be compulsory pilotage at all. I do not mean that a small vessel should pay similar to a large one.

Q. I ask whether in your opinion both steamers and their tow should pay?—A. No, I do not think that. If the steamers towing had a pilot that would be quite sufficient and I would not see any necessity for the barges towed by her paying pilotage, unless you wanted to level it all up.

Q. There should be one pilot to control both vessel and tow?—A. Yes. I would think what would be better than that still would be to have a scale to make vessels in tow pay somewhat less in proportion to vessels not in tow.

Q. Assuming an ocean tug and two vessels or barges in tow would not the assistance of a pilot on the tug and also a pilot on each of the barges be an absurdity?—A. It would. I should think the pilot in the tug-boat would be the controlling one and would be sufficient.

To Mr. McLean :

Q. Do you contend that if pilotage is made compulsory that every vessel that comes into the harbour of St. John should pay pilotage, small and large and all?—A. Yes.

Q. Then what you are fighting is that pilotage should not be compulsory at all?—A. That is what I started off with, that is what I am doing.

To Mr. Palmer :

Q. In your opinion would there be a sufficient staff of competent pilots maintained at the port of St. John if the compulsory feature of the present system was

St. John, N.B., Pilotage Investigation.

done away with?—A. I have no doubt about it at all; I believe there would be more pilots than there are to-day, double the number; the quality we would judge for ourselves. If the close corporation business was done away with and a free system adopted there would be more pilots. The pilot would have to have a certain amount of experience in the bay.

Q. He would have to be accepted after a certain number of years' labour like a captain?—A. Yes, and I believe we would have double the number of pilots in this bay.

To Captain Douglass :

Q. Would there be a sufficient staff for the trade of St. John at the present time if the compulsory pilotage was abolished?—A. I hardly like to express an opinion on that. Certain times of the year more are wanted than others. The present number has proved itself sufficient, and generally speaking I have not heard any complaint about the difficulty of getting a pilot if you wanted one in the harbour, but it may be that there are not plenty cruising in the bay to provide all vessels and a number get in without pilots. I believe the law of supply and demand would fully regulate the whole question, the matter would settle itself like any other business. We have had to support forty-three.

Q. Of recent years twenty-eight have been apparently sufficient?—A. Out of the twenty-eight suppose there were ten or fifteen in port perhaps there would not be enough outside cruising in the districts. Perhaps some of these forty-five vessels which came in in 1894 escaped because there was not enough pilots outside.

Q. I have here a table showing the number of vessels entered, both sea-going and coastwise at the various ports in the bay, and a statement of vessels entered at St. John and Musquash, and I ask you if that statement was prepared by you, and from what information?—A. I obtained the information from the Dominion official Tables of Trade and Navigation for the fiscal year ended on the 30th June, 1893, that is the last year available; I got it from Mr. Ruel, Collector of Customs at the port of St. John, and it is published at Ottawa, on pages 569, 773, 612 and 621; I compiled it from that.

Q. Briefly state the total number of vessels entered in and out at other ports in the Bay of Fundy, excluding St. John?—A. This statement includes all ports going into the custom-house returns, starting from St. John on this side and going up the New Brunswick shore, and coming down the Nova Scotia shore, including Digby. The statement shows that in the year ended 30th June, 1893, there was entered at all these ports put together, not including St. John, 1,152 sea-going vessels of tonnage 248,728, coastwise vessels 3,038, tonnage 295,718, both together, total 4,190 vessels, and tonnage 544,446 during the same period at the port of St. John including Fredericton and Musquash, which are very trifling, the total number of sea-going vessels was 1,918, tonnage 566,282, that included the International Line steamers, which amounted to 179,884, and deducting this tonnage leaves a balance of 386,398 of sea-going vessels. Coast wise there was entered at St. John, Fredericton and Musquash, 2,211 vessels, 260,044 tons, including the bay steamers, "Monticello," "Alpha" and "Hiawatha," their total was 161,274, leaving the balance 98,770, or the total of all at St. John 4,209 vessels, 826,326 tons; if you deduct these different steamers I have mentioned, 341,158 tons, it leaves a net total entered at St. John, Fredericton and Musquash of 485,168 tons.

Q. By coastwise you mean from New Brunswick to Nova Scotia?—A. Yes, all that was entered coastwise.

Q. Then there is no bay pilotage on any of these vessels bound to these outposts?—A. No, not unless she is bound to the port of St. John. The tonnage of those other ports all put together is about 60,000 tons more than it was to St. John, if you leave the steamers out.

Q. The tonnage of the vessels visiting the other ports in the bay is 60,000 more?—A. Yes, 60,000 more than at St. John, leaving out the steamers I have mentioned.

Q. Is it or not a fact that prior to the year 1873 the entering and clearing of tonnage at these ports in the bay was very much less than at the port of St. John?—A. It was very much less than this is, this has increased very largely since then.

Q. The entrances and clearances from the ports up the bay from 1873 to 1894 have very largely increased?—A. Yes, I think there is no doubt about that.

Q. And the entrances and clearances from the port of St. John have not largely increased?—A. No; it is the reverse of that, but the entrances here and clearances here have increased if you include these steamers that we have coming here now, that we did not have in other days, there is an increase in twenty years. There was entered at this port altogether of all kinds of tonnage 1,131 vessels, 377,614 tons, the year ending 30th June, 1875. During the year ended 30th June, 1893, eighteen years later, there were 1,871 vessels entered here, making 562,032 tons.

Mr. Palmer asks that the secretary of the St. John Pilotage Commissioners should furnish a statement showing the gross receipts from pilotage from 1873 down to 31st December, 1894.

Q. Recently have you had any vessel or vessels which were managed by you at the port of Cardiff?—A. Yes; there was a vessel managed by our firm, a barquentine of about 310 tons.

Q. I understand pilotage at Cardiff is optional?—A. Yes.

Q. Did this vessel of yours employ a pilot at all?—A. She did from the roads into the harbour; it was the "Curlew." These are the bills rendered by the board; it is 306 tons.

Q. What was the charge for pilotage for that vessel?—A. One guinea out and one guinea in.

Q. Have you had that vessel arrive at the port of St. John and pay pilotage in and out?—A. Yes; several times. One guinea is one pound one shilling.

Q. About what is the compulsory pilotage in and out at this port on that same vessel?—A. About \$50; about five times as much as at Cardiff.

To Captain Smith:

Q. What is the distance at Cardiff as compared with St. John?—A. I do not know; it is from the roads to the dock.

To Mr. Palmer:

Q. Is there a place off Cardiff Docks called King's Roads?—A. There is the King Road; it is from Penorth Roads to Cardiff Docks. Between any dock or harbour in the port of Cardiff it is one guinea out and one in. There is only one district there, and I suppose it is hardly fair to state \$50 as opposite to that. It would be \$33.75 as against \$10.

Q. That would be over three times the amount?—A. Yes, about three times the amount anyway.

Q. Are the rates of pilotage at St. John, to your knowledge, higher or lower than ports in the United Kingdom and all other ports in the Maritime Provinces, taking the ports in the United Kingdom first?—A. I think St. John is higher than any of the same distance, and very much higher than most of them.

Q. With reference to the other ports in the Maritime Provinces?—A. Ours are excessively greater, three or four times as great as any other port in the Maritime Provinces, including Halifax, Pictou and Sydney. The rates here are from three to four times as high as at Halifax, Sydney would be less than Halifax, and Pictou is less than Halifax.

Cross-examined by Mr. Skinner:

I am a shipowner.

Q. You are only opposed to compulsory pilotage?—A. Yes, I think it is desirable for the port of St. John to have a system of pilotage, but I am opposed to compulsory pilotage or compulsory employment.

Q. Do you express any opinion as to the number of pilots the commerce of the port would require under a non-compulsory system?—A. No; because I have nothing to guide me.

St. John, N.B., Pilotage Investigation.

Q. Will you state to me the reason the shipping of lumber is done more at the outposts than some years ago?—A. Because vessels have learned that at other ports up the bay their expenses are less than in St. John.

Q. What are the expenses?—A. Labour would be one, and pilotage one, and wharfage one, and I cannot say about towage.

Q. Would pilotage itself be sufficient to form the turning point?—A. I do not think it would.

Q. Is pilotage not compulsory at Parrsboro'?—A. I think it is from the outside of the harbour.

Q. Do you know anything about the districts in Parrsboro'?—A. I do not.

Q. At St. Andrews is it compulsory?—A. I do not know.

Q. Did you not lose a great many vessels abroad during the past twenty years?—A. I cannot say I did, I used to be interested in shipping, but I went out of business owing to the failure in business. I lost very few vessels, I can only remember three. One was lost in the Atlantic Ocean coming from Ireland, and was never heard from; it was the "Choice"; another was the barquentine "Alice M.", she was never heard from, and I think was going across to the other side; then there was the "Bell Walters," became disabled at sea and put into St. Thomas, and was condemned and sold.

To Mr. Palmer :

Q. Was not there a barquentine called the "Bittern"?—A. Yes; she got ashore on the coast of Australia, and became a total wreck; she is afloat now.

To Mr. Skinner :

No doubt there were instances where some of the vessels I represented had accidents, and there were claims upon insurance companies.

Q. Would any of these be from touching the ground somewhere?—A. Yes; I think some of them would be; one was at the Delaware breakwater, and there was one in the Bay of Fundy.

Q. Give us the description of that one that was injured in the Bay of Fundy?—A. She was the "Rapid," a barquentine coming here with coal from Philadelphia, and it was foggy, and she got up as far as Mahogany Island without seeing any pilot. She did not get a pilot until after she was ashore; she just drifted on to the island. She was not in charge of a pilot when she went on. Her bottom was damaged, and she went on the blocks and was repaired. I do not know how much it cost, or that my books would show, as we settled by compromise with the underwriters. I could tell, I think, what the underwriters paid. There was a survey held on her. The commissioners recommended the companies to pay and they paid a certain amount. I think that is the only one I remember in the Bay of Fundy.

Q. Do you remember the "Venice"?—A. I was manager of her. She was at anchor on Partridge Island, and a heavy gale set in and the chains parted and she drifted up Courtney Bay and was very seriously damaged. I do not know whether she had a pilot or not. I think she anchored on the evening of the night that she dragged.

Q. The one injured on the coast of Nova Scotia, what was her name?—A. The "Rapid," before she got these repairs.

Q. Do you know the difference between putting deals on board a ship up the bay, or getting the schooners to bring them to St. John for the purpose of having them reshipped here?—A. I have little or no experience about that. Quite a number come here with coal, but no doubt the larger part come in ballast. Those that come from Cape Breton are the ones that touch at Cape Breton on the way here, taking coal. There is a good deal of merchandise that comes here in steamers now.

Q. Nearly all that used to come in sailing ships now comes by steamers?—A. Yes.

Q. Is not there a good deal brought by rail now?—A. Very much less manufactured goods now come from the other side; two-thirds less of manufactured goods come now from Europe than used to before the national policy.

Q. But there is more manufactured goods coming into St. John from other sources?—A. Yes, of course; it comes from elsewhere.

Q. A ship coming out in ballast, if she wanted to take a load from Parrsboro', if she were coming here in freight to St. John, the Parrsboro' cargo might come down here to meet her?—A. No, I do not think it would; I do not think to-day that any material proportion of the deals shipped direct from up bay ports would change and come down here to be loaded. I think the conditions are too unfavourable for it.

Q. Have you ever known ships to come here and land their cargo and then go up the bay for their cargo of lumber?—A. I cannot remember anything of that kind. I think labour might be made less and also wharfage.

Q. Do you know of any wharfs here that pay more than six per cent to the owners under the present existing circumstances?—A. I do not know what per cent any of the wharfs pay. I have heard the mayor or Alderman Robertson at a public meeting here produce figures to show that the wharf properties owned by the corporation were the best paying properties they had, and he argued from that that they should not allow Mr. Leary to build a wharf in Carleton.

Q. Didn't you at that time say that it was not so?—A. No, I did not. The corporation took his advice and built the wharf since.

Q. It has not been any good yet?—A. It is not finished according to the plan. There is a great big hole in the middle of it.

Witness stands aside.

Captain SAMUEL F. PIKE examined:

To Captain Smith:

Q. Are you in command of a steamer in port at present?—A. Yes, the "Cumberland"; she belongs to Eastport, and is registered there, and her tonnage is 1,100.

Q. What water does she draw at her greatest depth?—A. About 11 feet; her average is about 10 or 10½ feet.

Q. Where are you plying between?—A. Between St. John, Eastport, Lubec, Portland and Boston. Sometimes we come direct from Boston here, but never direct from Portland, at least not very often.

Q. How many officers do you carry?—A. We carry a captain, two pilots, two mates, two engineers, and a crew of about fifty all told.

Q. What is the horse power of the engines?—A. I think it is 1,200.

Q. You have the same system in the United States as we have here with regard to the captains and their certificates, they pass an examination?—A. Yes.

Q. And you hold a certificate?—A. Yes.

Q. Do either of the mates hold a certificate?—A. Yes, the pilots and the first mate.

Q. What kind of certificates do the pilots hold?—A. They hold licensed pilots' certificates.

Q. Where do they obtain these?—A. Sometimes in Portland and sometimes in Boston.

Q. What authority do they go before?—A. It is United States authority, it is Randall and Burnham in Boston and Pollister and Marritt in Portland.

Q. These men are not appointed by the different states?—A. No.

Q. What kind of examination do these officers and pilots pass?—A. Similar to an officer, just the same.

Q. With regard to steamship and everything?—A. Yes.

Q. You know this as a fact?—A. Yes.

Q. Do they pass any examination in addition to that?—A. No, not that I know of.

St. John, N. B., Pilotage Investigation.

Q. They do not pass any special examination for the coast?—A. That is all they do pass, just for the coast from Boston to Portland, Eastport and St. John, all the harbours, bays, shoals, currents and tides.

Q. Do these officers steer the ship?—A. No, we have two quartermasters.

Q. You select these from the crew?—A. No, they are regular quartermasters, they perform that duty and nothing else.

Q. What are the principal duties of the two pilots?—A. They watch six hours apiece. They look out and they are pilots of the boat. They ship the courses, they keep the time of the boat, they navigate the ship.

Q. Do they consult the captain before they make any change of courses?—A. In the regular course they do not, but if it is thick weather they consult the captain.

Q. Is your vessel a wooden vessel?—A. Yes.

Q. Did you ever find any deviation of the compass?—A. No.

Q. Your courses you steer, are they the correct magnetic courses on the chart?—A.—No, she would not steer a correct chart course, they are affected a little. We know what our courses are from actual experience.

Q. You are not aware whether the compass is at all in error?—A. It is a little in error, it was when the boat was first built and it has been just the same since, we have no deviation tables. Iron has been so distributed that we know that error and how to apply it.

To Captain Douglass :

Q. You say there are two gentlemen in Portland and two at Boston who examine these pilots?—A. Yes.

Q. They are examined for the coasts in the United States?—A. Yes, and also for St. John.

Q. Are there any of your examiners at Portland and Boston acquainted with the Bay of Fundy?—A. Yes.

Q. How did they become acquainted?—A. One of them has run for years upon the boat.

Q. Then the examiners at Boston are acquainted with the navigation here and, therefore, competent to examine your pilots?—A. Yes; one of them has run here for years.

Q. In case of any accident to your steamer, who would be held responsible, you or the pilots?—A. According to how it was; probably the captain would—the captain generally gets the blame; probably I would be blamed if the accident occurred.

Q. Would the pilot who was on the deck with you at the time bear any responsibility?—A. No; I do not think he would if the captain was there with him.

Q. But if he was on deck by himself, then he would?—A. Yes.

To Captain Scott :

Q. You generally go into what is called the North Channel, between Grand Manan and Maine?—A. We always go that way.

Q. Have you met with much fog?—A. Yes, considerable fog every summer.

Q. Which do you consider the worst month?—A. I do not know; July, August and September are three bad months; July is about the worst month.

Q. During those fogs you have had occasion to use the lead?—A. Yes.

Q. Did you find the lead a good fair guide?—A. We do not use a lead very much; we run from point to point from whistle to whistle. We know how long it takes to go from one point to the other, or from one fog signal to the other.

Q. When you have been compelled to use the lead for the safety of the ship, have you found that the soundings fairly agreed with the position you were in?—A. Yes, pretty well.

Q. So far as you know, the soundings upon the chart that you use are pretty correct?—A. Yes.

Q. Have you ever met with an accident in coming around the coast?—A. Yes, I have been on the coast on the boat when we met with an accident, but I was only

second pilot then; my father-in-law was captain. I am perfectly capable of bringing the vessel up and taking her back myself.

Q. Does that apply to the quality of your certificate?—A. Yes; the captains are all pilots as well.

Q. Is that how they generally get their promotion?—A. They go as pilots first; they are promoted from pilots.

Q. In case of your getting promotion to a larger ship, then the pilot would probably obtain your position?—A. Yes.

Q. Would he get it before the chief officer?—A. Yes; the chief officer's duties are distinct. He is more of a cargo man.

Q. I think you said you had met with an accident while you were holding the position of second pilot?—A. Yes.

Q. Where was that accident?—A. In the state of Maine, on Point Lepreaux; she got off again.

Q. You have had an opportunity of seeing the pilot boats coursing about the bay?—A. Yes.

Q. Where have you seen them?—A. We met them most anywhere.

Q. Have you seen them in the same channel you have been in?—A. Yes.

Q. Did they appear to be on the alert, keeping a fair look out?—A. Yes.

Q. Supposing it had been necessary for you to take a pilot, would you consider that these men were doing their work faithfully?—A. Yes. We have met pilots off Little River.

Q. You do not know much about the pilot system of St. John?—A. No.

Q. You never have to engage the services of a pilot?—A. No.

To Mr. Palmer:

Q. What wages are paid to your pilots?—A. The principal one \$85 a month, and the second pilot \$60.

Q. Are these wages continuous through the year?—A. Yes.

Q. Can you tell me how many pilots the International Steamship Co. have in their employ for the St. John, Eastport and Boston route?—A. Four all the time, two pilots on each boat. They pay wages to four pilots the year around.

Q. Would you send the commission here, so we can see it?—A. Yes.

Q. That certificate would show the district or waters that the man is authorized to pilot?—A. Yes.

Q. Does your boat pay pilotage going into Boston?—A. No; he is also a Boston pilot.

Q. How long have you been captain of the "Cumberland"?—A. About two weeks. Captain S. H. Pike is a relative of mine. He was a long time with the International Steamship Co. as captain and pilot, and was a man of great experience in the navigation of the Bay of Fundy.

Q. The whistle on Point Lepreaux has been shifted?—A. Yes; and it is better now and we can hear it better.

Q. Can you tell me about how many years this examination of pilots has been compulsory?—A. I cannot remember; it is long before I can remember.

Q. It only applies to coastwise steamers in the passenger trade?—A. Yes.

Q. If you were merely operating a cargo boat you would not require to carry a licensed pilot?—A. No; there is first and second class license and in carrying passengers we have to have a first class license.

Q. It applies entirely to steam?—A. Yes.

Q. All coastwise steamers have to carry pilots with a license of some class?—A. I do not know about the freight steamers; passenger steamers must carry a licensed pilot.

Q. He has to have a license for the district in which his boat is running?—A. Yes.

Q. Your pilots could not run licensed for the Boston-Savannah line?—A. No; they are from Boston to the eastward. From Portland to New York you have to get a special license.

St. John, N.B., Pilotage Investigation.

Q. Your steamship company makes about how many trips a year?—A. There are two months in the year, three boats running here, and in the summer time we are running full of passengers all the time. In the winter time the passenger traffic is light.

Q. Have you ever been in the service between Boston and Halifax?—A. No.

To Captain Smith:

Q. Do your same steamers run to Halifax?—A. No.

To Mr. Palmer:

Q. At any time, while you were either captain, pilot, or in any other capacity on board the "Cumberland," did she get ashore on Grand Manan?—A. No.

Q. Then I understand you hold a license for the district from St. John to Eastport, or as far as it extends, a pilot's certificate?—A. Yes, I hold one now.

Q. In addition to the captain's certificate?—A. Yes.

Q. Do you consider that you are competent to navigate your ship from Boston to Portland, Eastport and St. John, without the assistance of the St. John pilots?—A. Yes; I have actually done so for some years.

Q. The examination these pilots go under, is it with reference to navigation as a science or rather with reference to coast knowledge?—A. Just coast knowledge.

Q. Do you know if you were trading from Boston to Halifax you would have to carry one of these licensed pilots?—A. I do not know anything about that.

Q. If you were to sail direct from Boston to St. John and not call at any American port, would you have to carry them?—A. We never run that way, and I do not know.

Q. Is the law which requires you to carry these coast pilots, is it not between ports in the United States?—A. Yes; from ports in the United States to other ports in the United States. I would not be required to carry them from Eastport to St. John unless I wished. Our license reads from Boston right through to St. John.

Q. Suppose your boats clear from Boston bound to Portland or Eastport and you have not a pilot licensed for St. John, have you infringed the law?—A. Yes, we are compelled to carry two pilots, and we carry one more pilot than we are compelled to carry.

To Captain Douglass:

Q. If you did not take a licensed pilot to St. John would your authorities give you your passenger certificate for your ship?—A. I do not think they would.

To Mr. Palmer:

Q. A steamer can leave Boston bound to Halifax without carrying a licensed pilot at all?—A. I do not know anything about that.

Q. If you sailed from Portland bound for Eastport without having your two licensed pilots you would infringe the law and there would be a certain penalty?—A. Yes.

Q. Suppose you were to sail from Eastport bound to St. John without your pilots would you have infringed the law?—A. Yes, I would just the same.

To Captain Smith:

Q. Can you obtain a license from Boston to Portland and Eastport without having St. John put in?—A. Yes, if you were only going to Eastport you could, but you could not come into St. John with that man.

Q. And you could not get your clearance out of Boston with that kind of license?—A. No, only to Eastport.

Q. In that case I suppose you would take a St. John pilot?—A. I suppose I would.

To Mr. Palmer :

Q. Do you consider yourself with the crew entirely competent to navigate your ship in and out of St. John without the assistance of the St. John pilots?—A. Yes.

Q. Is it the custom of the International Steamship Co. to carry the licensed pilots of St. John free?—A. I know nothing about that.

To Mr. Skinner :

Q. Have you ever had any benefit at all from the St. John pilots at any time?—A. Not since I have been on the boats.

Q. Would you consider it a safe operation supposing you had no pilot at all to navigate the bay between St. John and Boston?—A. Yes, I could navigate the vessel myself.

Q. Supposing all your experience had been south of New York and you were suddenly changed from Boston here would you consider yourself competent without a pilot?—A. No, I would not; I would say a stranger to the bay would want a pilot.

Q. How much experience would you think you ought to have to go in and out without a pilot?—A. I would want considerable experience in thick weather.

To Captain Douglass :

Q. How long did it take you to gain that experience before you considered yourself competent to pilot your own ship?—A. Two or three years, running here all the time.

Q. How long did you actually serve before you got your certificate as pilot?—A. Four years.

Q. About how long had you been running before you got your pilot certificate?—A. I have been 13 or 14 years on the boat. I ran nearly 10 years up and down the coast here before I received my certificate.

To Mr. Skinner :

Q. Do you know about how much experience they require before granting a pilot certificate?—A. They have to know all the harbours and they have to pass the examination.

Q. Is it common in your experience to meet a pilot who has not had at least five years' experience before he gets a certificate?—A. I do not know of any.

To Captain Smith :

Q. Would you consider the knowledge that the captain of a large ship has, which has been obtained by going in various ports of the world, that he would be capable of coming up this bay without a pilot?—A. I do not think he would in thick weather such as they generally have here.

Q. Do you apply that to the North or South Channel?—A. To both channels, to either channel. I think a man has to be acquainted with the bay. I consider it a dangerous place to navigate, and a man wants to be well acquainted with it. You get a little more sea on the coast of Maine, and the New Brunswick coast is more dangerous. There is no fixed time for our certificate, it is given on our knowledge.

To Captain Smith :

Q. You can make application and be examined and if you pass you are appointed?—A. Yes.

To Mr. McLean :

Q. But no company appoint a man without at least five or six years' experience?—A. No.

To Mr. Skinner :

Q. The experience necessary to pass the examination could not be acquired in a less time than what you have said?—A. No, I do not think it could.

St. John, N.B., Pilotage Investigation.

- Q. You have got an elaborate system of buoying?—A. Yes.
Q. Is that very much more so than the Bay of Fundy?

To Captain Smith:

- Q. Do you consider it a better system than the Bay of Fundy system?—A. Well, I do not know; we have about everything here; I do not see much difference.
Q. Could you suggest any improvement in the system we have here?—A. No; I do not know of anything.
Q. You know if you did bring it before the government we should endeavour to do so?—A. Yes.
Q. Do you happen to know whether your vessels are exempt from paying pilotage?—A. No, I do not know.
Q. If you were compelled to pay pilotage here would it make any difference in the number of pilots you now take?—A. We would still require these pilots under our own law, we do not pay pilotage in and out of Boston.

To Mr. Palmer:

Q. I hold in my hand a letter written by Captain S. H. Pike and I will read what he says and ask your opinion about it. He says: I know of no bay on the North Atlantic coast as clear of obstructions to navigation as the Bay of Fundy from Mispec so-called on the coast of Maine to Partridge Island. What do you say with reference to that?—A. I do not know what to say about it, probably it is all right in clear weather. It is all clear there from a line drawn from the North Head of Grand Manan to Liberty Point.

Q. Then there are few or no obstructions to navigation to the north or east of the line drawn from the north of Grand Manan to Liberty Point?—A. No, I was going to say it was all right in clear weather, but take it in foggy weather and it is different. A man has got to be well acquainted with it to come up through there then from Mispec and through the North Channel.

Q. Take it to the eastward of the line drawn from the North Head of Grand Manan to Liberty Point, from that to St. John there are no obstructions?—A. Nothing that I know of.

Mr. Palmer refers to section of Merchant Shipping Act, 1894, as to compulsory pilotage.

14th February, 1895.

Mr. Palmer offers second section of regulations respecting pilotage at the port of Boston, chap. 70 of Pul. Stat. Mass.

SAMUEL SCHOFIELD resumed:

Before being questioned further, I would like to explain more fully one answer I gave yesterday to Mr. Palmer, with regard to the pilotage of vessels or crafts in tow; the answer I gave hardly expresses my views. I was asked by Mr. Palmer, if I remember it, whether I thought that supposing a case of a small vessel towing a craft of any kind, whether I thought it would not be sufficient that the towing vessel herself paid pilotage and had a pilot and that it would not be necessary on the craft in tow? I answered that I thought if the towing vessel had a pilot on board that that would be sufficient, and that the craft in tow would not have to have pilots; now, on thinking it over last evening, I did not feel that answer fully expressed my views quite correctly, and now I feel that my answer to that question would be more in this nature, that supposing the case of a towing vessel and craft of any kind or size being towed, that if in the opinion of captains and those in charge of the pro-

perty, while I do not consider myself at all competent to express an opinion that the pilot had better be on the towing craft rather than on the craft towed, I would think that sufficient if they thought it the best place, and I would feel in my opinion that it ought to be sufficient, but then what I have come to think of is this, that the craft being towed, it may be a barge, small or large, or a ship, and the craft being towed is really the craft being piloted, the boat towing might be 50 tons register, and the craft towed might be 1,000 or 2,000 tons register and, whether the pilot was on board the towing vessel or the one towed, as a matter of expediency, certainly he would be giving his mind and thought to the question of the vessel that was being towed if it was the larger craft, and really the vessels towed in that case would be the consideration and the question as to whether she ought to pay pilotage or not would come in, and my view would be that if there is a system of compulsory payment, that all such craft should pay whatever is fair and right the same as any others. As a matter of fact, we know in many ports steam vessels and vessels in tow do pay less than vessels under sail, and that would be my idea that such crafts should pay less, but not that they should escape, but pay what is right and proper in proportion to other vessels.

To Captain Smith :

Q. You consider that the pilot should be on board the tow-boat?—A. No, I do not consider myself competent to answer that question.

To Captain Douglass :

Q. Supposing a steamer drawing 20 feet of water, it is unsafe to tow a vessel drawing 1 foot, because if the larger vessel touched ground the lighter one would come right into her stern?—A. Yes, I felt my answer rather led to the conclusion that vessels in tow need not pay pilotage, while that is not my view at all.

To Mr. Skinner :

Q. Having reference to your remarks with regard to the pilotage at Halifax being cheaper than at St. John, must it not be that every port must have their prices regulated according to the situation and circumstances connected with the port? You could not have a cast iron rule for all ports alike?—A. I quite agree with that opinion.

Q. If the conditions of various ports are different, the rates must be different?—A. Yes, of course, I had the pilotage districts in my mind at that time.

Q. On the basis of the pilotage business being done as a voluntary act, if piloting could only be sustained by the pilots getting reasonable remuneration for their support, that principle must come in too?—A. Yes.

Q. Free or compulsory, in order to keep it up at all, there must be enough coming from it to maintain the pilots that are engaged in it?—A. Yes, that is clearly my opinion, if they stay in the business they must live.

Q. What would you consider a fair remuneration yearly to a pilot in this port?—A. I have not any opinion. I have lived in this community all my life.

Q. Take the basis of the International steamers—the \$80 and the \$60; would either of these amounts be sufficient for the maintenance of a pilot in St. John?—A. I would not like to say; it might be too much. I see by the returns, that lots of pilots remain in the service for half the money; I see pilots remaining for about 300 odd dollars, in the service year after year. I do not know what it costs them to live or what their families are.

To Captain Douglass :

Q. What pay does a master of a coaster receive?—A. The coasters I have to do with myself, about \$35 and \$40 a month; they get their board. I pay \$40 in a schooner of 93 tons.

St. John, N.B., Pilotage Investigation.

To Captain Smith :

Q. You would consider that the pilot who gave all his time to the business should get a living out of it?—A. I do not think it is necessary that the business should be conducted in that way. In many ports, pilots follow other business—some men go fishing and keep little stores, and in various ways make out a living and attend to the pilotage business also, and I do not know why, in St. John, pilots should not in some way assist their pilotage business at certain times of the year; in that way it will prevent the full amount of their support becoming a burden upon the shipping trade.

To Mr. Skinner :

I cannot say what a fair remuneration would be.

Q. Speaking with reference to the Furness Line and pilotage charge, you have Pilot Cline, by your own request, and he is the one you approved of?—A. He is.

Q. You did want that a certain portion of his remuneration should be returned to you or to your owners, to lessen the amount the owners should pay?—A. We had an arrangement of that kind before this; no such thing is in the present arrangement.

Q. What led up to the change?—A. In this way: The time the steamers leave Halifax is known to the pilots, and they know just when to expect them in the bay, so they are able in most cases to pick the steamers up in the third district, the line of which is some 12 miles below the port, and, therefore, we had to pay the full pilotage coming in from the sea entrance. If they were spoken just outside the line, about 12 miles—a short distance—then, of course, they were compelled to pay pilotage outwards, and we felt, if we were thus compelled to pay the full pilotage service, it would be better to have the pilot, for the sake of the \$10 travelling expenses, go on to Halifax and join the vessels there, and Mr. Furness himself, who controls the vessels, was desirous that all safeguards should be taken to prevent accidents, and in that way we came to adopt the assistance of a select pilot. Besides that we were influenced by this: That steamers coming up in the bay were compelled to take whichever pilot spoke them, and we very much preferred to have a pilot whom we knew and had full confidence in, and then we thought it was an advantage, too, that one pilot should do the work and thus get acquainted with the boats and everything in connection with the navigation of them. In that way the change was brought about.

Q. Do you understand why it is that ships, although they might require a pilot from their own standpoint coming in, do not feel the same necessity going out?—A. As far as my experience goes, talking with captains, from conversations extending over years, I would say that their opinion generally is that there is more necessity for a pilot coming into the bay than going out, because sailing vessels very seldom leave their ports without what the captains consider a favourable chance, and when they leave port under these circumstances and take their departure from Partridge Island with the south channel 18 miles wide before them, they feel that it is easier to take the vessel out than it would be to come all the way up when they might have to come up with head-winds, and perhaps encounter fog before they got to port.

To Captain Smith :

Q. The captain leaving has an opportunity of judging of the weather?—A. Yes, that is one reason; and if it was quite thick fog the man would have to do something in the channel. I have in my mind's eye a captain of an old country vessel that came into the bay in a dense fog and found his way in and got a pilot when he got to Partridge Island, and when he went out the fog was so thick I could not see the buildings across the street, and I asked him if he would go and he said, "I came into the bay using my lead and I can go out just the same way," and he left the port in a dense fog and got safely to England with his cargo of deals. He was certainly 65 years of age.

Q. What was the name of that vessel?—A. I cannot remember.

To Mr. Skinner:

Q. My impression is that that same vessel lay some four days outside the island until it cleared off?—A. I cannot say the name of the vessel. He left our office intending to go out. He had great confidence in his lead, and said the soundings were good and he could find his way out.

Q. Have you not known cases where the masters have gone out intending to go to sea and after getting outside the island sent for a pilot to finish the voyage?—A. I cannot remember any such thing.

To Captain Smith:

I do not remember any such case.

Q. You spoke about the "Ulunda" going ashore at Cow Ledge?—A. Yes.

Q. Was that within or without the pilotage district?—A. Just a passage going through; it is within the bounds of the present third district, in what used to be called the fourth district.

Q. Did you say what pilot was on board of her?—A. No pilot; that was the first case in which we had no pilot, the pilot was discharged at the island. She was condemned on the rocks and sold there, and was practically a total loss. She is running now.

Q. About what was the loss?—A. I do not know what the insurance was. The value of the vessel was, I think, in the first place about \$140,000, but she was three or four or five years old.

Q. On the basis or supposition that if she had a pilot on board that she would have gone safe, the loss would have paid the Furness Line pilotage for a century?—A. Oh, but the insurance, that was on the underwriters.

Q. The amount of money saved if the vessel had gone clear would have paid the Furness Line pilotage for a century?—A. It would pay it about half a century.

Q. The "York City," she was ashore on the Petit Passage?—A. Yes; that is head of St. Mary's Bay. She was not a total loss; she was got off at high water the following tide and proceeded.

Q. Pilot John Thomas was on board of her?—A. Yes.

Q. He is here yet as a pilot?—A. Yes. There was a pilot on board her when she went ashore.

Q. What class of ship was she?—A. A freight boat or steamer.

Q. Was she one of the Furness Line?—A. Yes, one of the regular steamers running here, quiet a little about that time. She was not a chartered boat, but was owned by the company.

Q. As far as you know, how much damage did she receive?—A. I really do not know; I know very little about that. I do not think it was a serious damage, but I have no figures.

Q. Was not the effect upon her that she got a re-class?—A. I am not aware of that; we did not know anything about that. I have no information on that point.

Q. Speaking of the "Demara," what was the extent of the injury she received?—A. She struck at the mouth of the harbour; I do not know the extent of damage she received, but I do not think it was serious. I think one or more places were broken, whether the bottom was injured or not, I do not know, I do not think it was from what I have heard. I think Pilot Patrick Trainor was on her.

Q. It was not the Trainor that was examined here the other day?—A. I think not. There was an investigation, and no blame attributed to the pilots, according to the report of the commissioners.

Q. What was the extent of injury to the "Ottawa"?—A. Total loss; she is at the bottom there now. She was coming around from Halifax here with a cargo on board and struck on Blond Rock, near Seal Island, and never came off, that is within the district.

St. John, N.B., Pilotage Investigation.

To Captain Smith :

Q. The "Ottawa" does not appear in this return?—A. I think it was previous to that return.

To Mr. Skinner :

Q. Was the "Ottawa" a total loss?—A. Yes, a total loss coming this way.

Q. You would not have knowledge of the particulars of it except what you heard?—A. All I know is what the captain of the steamer and Pilot Cline told me. Pilot Cline told me that the weather was hazy, and quite unexpectedly—they were steering a course they had steered before in the same steamer—and quite unexpectedly to all of them she struck. He had no idea they were in the vicinity of danger, in fact had so little idea of it that just previous to the time she struck he had left the bridge and was sitting in the saloon at the time, and when she did strike he went up on the bridge and realized the fact that they had struck Blond Rock.

Q. Might it not be considered necessary to have a pilot or some person with the knowledge of a pilot to go below the island?—A. I do not think so.

Q. To pilot a vessel out of the harbour?—A. I believe a competent captain can take his vessel out of the harbour with the knowledge he gets from his charts in regard to the channel and the course he is to steer. I believe any intelligent man could do it with very little observation of the chart. The channel is wide and the water deep, and the buoys show which way he should not go and which way he should go, and I think any intelligent man could steer a steamer or say what way she should be steered out, any intelligent master of a ship with a certificate of competency, because the buoys are there to guide him.

Q. In your opinion, if there was no compulsory pilotage going out, it would be a rare thing for a pilot to be taken?—A. I cannot say about that. I think there are some cases when they might want them.

To Captain Smith :

Q. Providing a free system of pilotage was in existence here would the pilots know the same as they do now as to the time of arrival of vessels and have a chance of being on the lookout?—A. They would know on that point as much as they do now, there is no reason they should not, because they do not know n.

Q. Do they not obtain information as to the time of arrival?—A. They could not tell very much about that; they would have to make a calculation for themselves; they take their calculations.

Q. Would a man be likely to be just as much upon the alert under that system as under the present system?—A. Just as much. Our newspapers are very enterprising in that direction and publish the fullest and latest lists of the dates they leave, and the ports and every thing of that kind.

To Captain Douglass :

Q. You have no regular system of signal stations where the movements of ships are known from point to point as in the St. Lawrence?—A. No; the only telegraphing there is here is sometimes from Point Lepreaux; the lighthouse-keeper there sometimes telegraphs up when a vessel is passing; they do not generally give names of vessels, only a steamer or ship or barque.

To Mr. Skinner :

Q. Have you had any personal experience going in and out of the bay yourself?—A. None to speak of.

Q. You say in effecting insurance the question of pilotage does not come up, and there is nothing said about it one way or the other?—A. Yes.

Q. May not the underwriters be relying on the fact that the ordinary course of conducting the business at the port in connection with pilots would be carried on?—A. I do not know anything to the contrary of that.

Q. One of your objections to the pilotage is that you claim that the ship should have the selection, if the pilotage is to be compulsory?—A. As far as possible.

Q. What do you mean by possible?—A. If a vessel was in port and going out, that the owner ought to have the privilege of selecting whom he would consider the best man from those in port at the time; and if the vessel was coming in, the captain would have to choose from the men in the boat.

Q. It is the duty of the pilotage commission to know that proper men are employed?—A. I differ with you there. The Dominion Act rather relieved them from that. It stated that when this law came into force in 1874, that our commissioners at St. John were compelled to take over every man who at that period of time held a license, without giving the qualifications of the man or making any examination into his ability, and therefore their hands were tied.

To Captain Douglas:

Q. They were supposed to have good faith in the preceding body?—A. Yes, whatever it was; that was in 1884 that that came into force.

To Mr. Skinner:

Q. Supposing these men all to have passed away, as some time they must, and new ones come in, it was a part of the duty of the board to have only properly qualified men?—A. Yes, and it is now; it is their duty to know that they are qualified.

Q. Still, even if that was done to the fullest extent, you would still want the power of selection?—A. On general principles I would ask that the employer would have a right to select the pilot, but I would limit his right to select to the number of pilots who were examined and licensed.

Q. The term pet means one set of men who would be employed; he whose mind was so constructed as to create favour would have the best chance?—A. Not with me he would not.

Q. If he studied your idiosyncracies he would?—A. No.

Q. That would lead to a regular employment of these men, and some might be earning double?—A. I would select a dozen men to-day out of the pilots, and you might call them all pets of mine, and I would have full confidence in them; and others I do not know, and therefore I would not select them. I have more confidence in those without expressing any want of confidence in the others.

To Captain Smith:

Q. With regard to the examination of and the taking of the men over in 1874, they have not passed any examination since?—A. No.

Q. Are the conditions changed in the Bay of Fundy from what they were in 1874, or are there more lighthouses and buoys and so on?—A. The Bay of Fundy has been improved from time to time, but I cannot say how much. There has been a gradual improvement in fog-horns and buoys and whistles. I do not know how much or that has been done since 1884.

Q. Then we must presume that the pilots have kept themselves up to a necessary knowledge?—A. You would have to take that for granted. There is no periodical examination.

Q. If the conditions are changed in any way, the rule of the road at sea changed, or lighthouses or beacons changed, do you consider that the pilot should be examined again upon those subjects?—A. I do not think you can examine them too much or too frequently. I think a periodical examination would be a very good thing.

Q. Are you aware that no such a thing exists with masters and mates?—A. Yes, I know that. I do not know that it should necessarily be compulsory, but I say it should be a good thing for the masters and mates, too.

To Mr. Skinner:

Q. Would it not be practically impossible to carry the power of selection out on inward ships?—A. To a large extent.

St. John, N. B., Pilotage Investigation.

To Captain Smith :

Q. Even when the ship was about to sail from port, if one of these so-called pets were not present, you would have to take the next best man?—A. Yes, but if a ship can come in, if a ship captain comes in and was spoken by boats, and one was a man he knew and liked he could say: "I want that man, he has been in my ship before, and I would like to let him have it." I do not like to deprive the captain of the right of that selection; it is a limited selection, and I think an employer has always a right to selection as far as practicable.

To Mr. Skinner :

Q. As to the pilots of this port, have they not passed a strict enough examination before competent examiners?—A. Yes, I meant the original pilots.

Q. Look at this paper, is it not a pretty thorough examination?—A. I would not consider myself competent to judge of a question of this kind, because it is a question of an examiner.

To Captain Smith :

Q. Have any of the pilots now in connection with this system passed that examination?—A. I do not think it, as to the kind of examination they did pass at the hands of the common council; I say it did not impress me favourably or give me the confidence in regard to their ability, which a certificate of the board of examiners of masters and mates would.

To Mr. Skinner :

Q. Taking a sailing ship of 1,500 tons and a steamer of 2,500 tons, what would be the proportion that the steamer would carry more than the sailing vessel in timber?—A. The steamers carry so differently that it is hard to answer that question. Some steamers carry less than sailing vessels, and others carry a great deal more; they vary very much. Some steamers are built with a view to being engaged in the wood carrying trade and do carry large cargoes on deck, and other steamers are narrow and have more compartments, and they do not carry anything like the others. The discrepancy is enormous.

Q. Would it not be a safe statement for me to make that large steamers will carry 25 to 30 per cent more than sailing vessels of the same registered tonnage?—A. It is net tonnage, gross tonnage has nothing to do with it. The cargo on deck does not come into the registry at all; some steamers will carry three times as much on deck as others.

Q. Taking a steamer of 1,500 tons and a ship of 1,500 tons, the steamer might carry on deck a great deal more than the sailing vessel?—A. Some might and some might not.

Q. Within the lines of your experience do not the steamers that come here for lumber as a rule carry from 25 to 70 per cent more cargo than sailing ships of the same registered tonnage?—A. The only way I can answer that is to say that some do and some do not, but as to what proportion I cannot tell, but it seems to me natural that vessels that are adapted for carrying deals come here more readily on that account, because they can make more trips. We have had steamers here lately that have carried 200 standards on deck and still we have had steamers hardly carrying any deck load at all.

Q. Are not those steamers rather the exception?—A. Those steamers are getting more serviceable now. It is getting to be the case that steamers that come now are much better carriers, because they have that in view.

To Captain Smith :

Q. If you were to select a steamer to go to Liverpool or London you would not be able to tell what quantity she would carry?—A. No, because they would vary so

much. On these Furness boats there is no deck load at all; they are well decked boats and it is not considered prudent to put a deck cargo on, for in case anything goes wrong it endangers the safety of the ship.

Q. Steamers leaving Montreal, do they carry deck loads?—A. Some do and some do not. The Allan steamers carried small deck loads.

To Mr. Skinner:

Q. The steamships that come here now for lumber, do they not carry 30 or 35 per cent more than a ship of similar tonnage?—A. They carry more, but I cannot venture on the amount. A good deal carrying steamer that comes here now will carry more, including her deck load, than a good carrying sailing vessel of the same tonnage. A vessel will carry more than her registered tonnage. It would be less per ton and less per standard so long as the system is on the draught of water.

Q. The same draught of water on a steamship will take away more lumber than the same draught of water on a sailing ship?—A. Yes, in one of these good carriers; a good deal carrying steamer will take away more cargo in the same draught of water than an ordinary good sized sailing vessel. There is an enormous difference between the old ones and the new, but in the new ones, the difference between the net and gross tonnage is very slight, sometimes a hundred tons in a good sized boat.

To Captain Douglass:

Q. Would the bunker and engine space be about the same?—A. No, these vessels are broader and the boom ends affected very little; it is the depth and length that affects the registered tonnage.

Q. In ports where the pilotage is charged by tonnage, do you know how they charge, on the gross or net tonnage?—A. On the net registered tonnage as far as I know?

Q. That takes in about everything?—A. It is practically the measurement of the space that is available for cargo.

Q. Speaking of that case where you say the rates were 30 cents a ton, what was it that made that excess?—A. I do not know; I suppose the draught of water.

Q. It was from $4\frac{1}{2}$ up to 30 cents?—A. Yes.

To Captain Smith:

Q. What was it that made that particular excess on that vessel?—A. I do not know, but she must have drawn more water on account of her build.

Q. In reference to your statement about the International Steamship Line, your opinion is based upon this, that if you are going to have compulsory pilotage it should rest on all and there should be no exception?—A. That is one point, and another point is that I do not think it is right at St. John certain lines should escape pilotage, when at Halifax they are compelled to pay it. I do not like that discrepancy against our port, the same class of vessels going from Boston to Halifax or Sydney would have to pay the pilotage, the same company might run a line from Boston to Halifax and from Boston to St. John, and they could live and do much better in the Halifax trade than they could in this trade, and I think we ought to be in the same position, all pay here, but the International Line and the West India Line, and they have a nice subsidy on their pilotage, they are all bound to carry mails by their contracts, except the International Line.

To Mr. Skinner:

I think the International Line have carried mails too. I have never been at Cardiff.

Q. You have stated that the port charges, including pilotage, are injuring the business of the port and depriving us of the business we would otherwise get. I ask

St. John, N.B., Pilotage Investigation.

you what business you think we are being so deprived of, not referring to the vessels that go up the bay to get timber?—A. This is a deal shipping port, and we have lost trade partly on account of excessive charges, that is up the bay deals, but whatever lumber is manufactured here is of course shipped here, but owing to the fact that lumber is produced at a high cost now and shipped at a high cost it operates against our people being able to do business, which they would be able to do if the cost of producing and manufacturing here was less. I know that from my own knowledge.

Q. At all events we ship here all the lumber that comes down the St. John River?—A. All that comes down is shipped here.

Q. Would you say that on account of the heavy port charges, including the pilotage, that less lumber is gotten out upon the River St. John and its tributaries?

—A. Yes; I do say that more lumber would be brought down this river and shipped at this port if it were not for the fact that the cost of getting it here and manufacturing it here are so heavy, and I have that confirmed by one of the largest manufacturers in complaining about the difficulty his firm encountered in connection with the shipping of lumber to the West India market, that all the expenses in connection with the manufacturing and loading here made it a dear port to load lumber from.

Q. Is one of the principal causes on account of the pilotage?—A. It is one of the causes. Pilotage is one of the largest individual charges—is the largest individual charge in connection with the shipping business at this port. The pilot gets more for his services and for the time given to the work than any man from the agent of a line of steamers down to the smallest business transacted in connection with it.

Q. Is not that grounded on the consideration of the actual time that the pilot is engaged in the service?—A. Very largely.

Q. Must the pilot not of necessity have a large time, when he is not engaged in vessels, having to hunt for them and being in readiness for them when they do come?—A. A certain amount of his time, and there are other times, I think, he might be doing something else. Of course the statement I made, that the pilotage charges were three to four times as great in Halifax on the same sized vessels was just without making any inquiry in regard to what you asked, but just stating the facts. In regard to the service at the two ports, if you wish me to speak of that, the distance from Halifax harbour to the pilotage line is about 12 miles. A pilot must be outside that line. At this port, if a pilot is outside the beacon, which is only about a mile and a half, he can get the first district, and there are three lines outside of which he may go, and he may go further if he chooses.

Q. If he discharges his duty as pilot for the port of St. John he goes to the outside district?—A. He has no such duty. The regulations do not put such duty on him. He is not compelled to cruise.

Q. Surely it is the duty of a pilot to be ready to meet a ship at the outside district?—A. He does it for his own benefit; it is not his duty to be prepared to meet a vessel at the outside district, it is not so stated in the regulations. He may go there if he chooses, but he is not bound to go to any distance.

Q. If the pilots go to the outer limit, how much further do they go than to the outer limit at Halifax?—A. The Halifax limit is 15 miles to Devil's Island, that would be about 27 miles from the harbour or city of Halifax; that is the extent of the pilotage district. Ours goes very much further than that.

To Captain Smith:

Q. A line run between Chebucto Head and Devil's Island?—A. Fifteen miles beyond that.

Q. Have you any knowledge with reference to the masters of the Furness steamers, as to whether they prefer pilots or not?—A. They somewhat differ in opinion. I have had some captains tell me that the pilots were no good and they did not require them, and I have had others speak more in favour of having them, the principal reason being that they did not want to be up night and day, and they required somebody to assist them in that way.

Q. Whether pilotage was compulsory or not, those men who would like to have a rest would probably take pilots and the others would not?—A. That is if the owners would allow them, but I think the owners would be governed by what the captains said to them.

To Mr. Gilbert :

Q. If a steamer went up to Parrsboro' or to Yarmouth and loaded with coal where she would have to go through all the dangerous parts and come here, she would be exempt from pilotage?—A. She would be exempt between the provinces.

Q. Do you see any reason why a vessel could go free, carrying that coal in her hold, going through all the dangers with a barge in tow of a vessel should pay; both are propelled by steam?—A. I do not call a vessel towed propelled.

Q. Is there any reason why she should be compelled to pay and the other go free?—A. The only reason I would think of would be, I should imagine, that the navigation by a steamer propelling herself would be somewhat easier and safer than the towing business.

Q. Would it be safer for a vessel propelled by herself coming through all the dangers between Yarmouth and here than it would be to tow for three miles outside here?—A. The first distance is much longer than the other and more dangerous. I would think it would be far more risk attending a steamer bringing coal from Yarmouth than there would be towing a barge three miles outside the harbour.

Q. A vessel like the "Monticello" coming across the bay—is not the risk coming across the bay more than it would be outside the harbour?—A. She has the risk of coming across the bay, and making the port, and would have the increased risk of 40 miles of navigation.

Q. And the value at risk ten times as much in the "Monticello" as in one of these barges?—A. Yes, lives and everything else.

To Mr. Palmer :

Q. I think you mentioned that the "Monticello" was subsidized?—A. She gets a large subsidy from Dominion Government to carry mails, but none from the local government as far as I know.

To Captain Smith :

Q. What would be the object of giving a subsidy by the local government?—

A. To encourage the line.

To Mr. Palmer :

Q. You say the "Alpha" and "Hiawatha" also have a subsidy?—A. Yes, they have subsidies from the Dominion Government and they have pilotage exemptions, under the Act, absolutely. The Grand Manan boat gets a subsidy from the local government, and also has a pilotage exemption under the Act.

Q. Is it not a fact that a large and increasing proportion of the lumber gotten out on the St. John River and its tributaries is now manufactured at places along the river and shipped by rail to St. Stephen and Calais, and thence sent to foreign markets?—A. I have very little knowledge of that; it does not come under my observation in any way.

Q. Yesterday the question was raised as to the importance of the 85 ports that were named by the pamphlet of the shipowners. I now hold in my hand a statement of the number of vessels entered at some of these ports in different years, and ask you if you have compared it with any book giving information on the subject?—A. This is taken from the latest returns of an English book of information in regard to these ports, and it gives the year the return was given and the number of vessels entered at these different ports, and there are a few cases it is not given at all, but where it is given it is the latest return.

Mr. PALMER asks that this be put in as furnishing the latest information.

St. John, N.B., Pilotage Investigation.

Mr. SKINNER—It might be misleading.

Mr. PALMER—I am going to ask the commission for permission to furnish them at a later date with a tabulated statement from the latest Imperial Year-Books as to these 85 ports.

Captain SMITH—We would like to look over this now.

To Mr. Palmer:

Q. With reference to the matter of selection in the case of a pilot bringing a ship in, can you compel the same pilot to take that ship out, or must you take another pilot if the commission wished you?—A. There is no regulation that I remember to compel him to do it, but as a matter of fact they suit themselves about it.

Q. I think you told me that when you were insuring, the underwriters never asked any questions about the pilot?—A. I never was asked the question whether I was to take a pilot or not.

Q. Have you any knowledge to base an opinion upon as to the proportion of tonnage engaged in the coastwise trade which is insured, and the proportion that runs at the owner's risk?—A. I have not.

Q. With reference to the carrying capacities of steamers and sailers at present, it is a fact, taking ton for ton as they visit this port, that the steamers outcarry the sailers ton by ton?—A. That would perhaps be the case as compared with vessels of the same size, but not as compared with smaller vessels per ton.

Q. I mean taking the vessels from 600 tons up, sailers and steamers, the ones that have been recently engaged in the trade here, the steamers will carry more per registered ton than the sailers?—A. I think so; hardly 25 per cent. I have no calculation.

ALFRED LENNOX PATTERSON examined:

To Captain Smith:

Q. You are in command of the steamer "Madura"?—A. Yes.

Q. What line?—A. Furness Line.

Q. How long have you been in the service?—A. Seven years.

Q. Mostly in this trade?—A. All the time in this trade. I have been nearly eight years on the line, but seven years in this trade.

Q. You are in possession of a certificate of competency?—A. I am.

Q. How many officers do you carry?—A. Two.

Q. Engineers?—A. Four; 29 of a crew all told.

Q. Do you take any regular quartermasters?—A. No.

Q. How many A. B.'s?—A. Six.

Q. What is the tonnage of the vessel?—A. 1,470 registered.

Q. Gross?—A. 2,320; and she was built at Stockton-on-Tees.

Q. Where did you sail from?—A. London.

Q. Which dock?—A. Victoria dock; we always go the Victoria dock.

Q. Do you know what system of pilotage we have at St. John?—A. I have an idea; I know it is compulsory pilotage.

Q. Do you always take a pilot coming in?—A. Always.

Q. Where do you generally take him?—A. Halifax, from Halifax and return; take the pilot to Halifax.

Q. When does your pilot take charge?—A. Generally after we pass Seal Island, in the Bay of Fundy—advisory.

Q. You let him come on deck and advise you?—A. Yes. If the weather is clear and all right he takes charge, and if there are any doubts at all I am there as well. If it is any ways foggy I am there and navigate the ship with his assistance.

Q. Would you be capable of navigating the ship up the Bay of Fundy yourself?
—A. Yes.

Q. You consider the charts are sufficiently good to enable you to navigate the vessel up the bay?—A. Yes.

Q. Does the pilot come to you for the courses or state what courses he wishes to steer, and you apply the deviation to the compass?—A. I generally give the officer my course.

Q. If the pilot was coming up here and you were below and he wished to change the course, would he have to consult you?—A. If the weather was clear I would let him take his own judgment, if not I would steer myself. I give him the correct magnetic course.

Q. If the pilot came to you and told you he wished to steer upon a certain course?—A. I would correct that and give it to him; I would apply the deviation.

Q. Do you consider there are any great difficulties in coming up the Bay of Fundy?—A. Thick weather for a stranger; strong currents, for instance.

Q. Are there any more than there would be going into Halifax or any other port?—A. No; you are speaking of the Bay of Fundy.

Q. Contrasting it with the coast of Nova Scotia in foggy weather?—A. I would say one was about as bad as the other.

Q. Have you any more difficulties in fine weather coming up the Bay of Fundy than you would approaching Halifax?—A. No, not with proper care.

Q. If you were left to yourself, in coming towards Seal Island, would you take a pilot—if you were entering the Bay of Fundy?—A. No, not for the Bay of Fundy I would not—not except I had orders to do so from my owners; of my own free judgment I would not.

Q. Would you take a pilot at all in coming into St. John?—A. Yes, I would where I could take him with the understanding that I should have to pay the harbour pilotage.

Q. When you have been coming up the bay have you seen the pilot boats upon their stations?—A. Yes, once upon a time we were in the habit of picking them up in the bay in my own time.

Q. Did you know where to go to pick them up?—A. No, I did not. Sometimes we would pick them up at Brier Island, and sometimes further up. There was no fixed station that I could go to.

Q. In other ports is there a fixed station?—A. Yes, there is one in Halifax, but sometimes you do not find them there.

Q. There are two systems of pilotage in London?—A. When you go in the river you can always get a pilot.

Q. Do you think it would be a good thing to have a fixed station here?—A. Certainly.

Q. In your opinion, have you taken the matter into consideration sufficient to give us your opinion as to where that station would be?—A. No, I have not considered it.

Q. Do you think Brier Island would be a good station?—A. For a stranger I should not think Brier Island is a nice place to dodge about, as there are some shoals there. Somewhere in that vicinity would be all right. You could have a signal station there all right, but not in thick weather.

Q. Where would you prefer to have the station?—A. Speaking for myself I should prefer off Partridge Island or Cape Spencer, but not for a stranger. About Brier Island would be as good a place as you could have for a stranger.

Q. Are there any other stations further up where you could be sure of finding a pilot?—A. When we used to make here without a pilot we would make for the fog buoy at Musquash, and sometimes we would not find a pilot there, and would come along the coast to Partridge Island.

Q. Was there any point up there where you could go and be sure of finding a pilot?—A. I have not been much on that coast; I have not studied that matter.

Q. Then there was no position in coming up the bay where you could be certain?
—A. No, only at Brier Island, that would be from the eastward.

St. John, N.B., Pilotage Investigation.

Q. Are you always sure of getting a pilot off Partridge Island?—A. I have not had the necessity to look for them and never took particular notice.

Q. You are not prepared to say whether you consider the present system has worked fairly well?—A. For the last three or four years we have always had one man come around to meet us, and I have not taken any notice of the cruising of boats around, and I am not prepared to say whether I consider the system has worked fairly well.

To Captain Douglass:

Q. You say that you think you are competent to navigate the ship without a pilot. Would you require a pilot to enable you to get rest?—A. Yes, but ship-owners do not consider that.

Q. You would not want a pilot to enable you to turn in and get rest coming up the Bay of Fundy?—A. No more here than I have experienced coming into Halifax.

To Mr. Palmer:

Q. You were for some years trading here when you used to pick your pilot up by chance?—A. Yes.

Q. Would you tell me in your experience how often you got up to Partridge Island without being spoken?—A. Perhaps once or twice, but of course there has been an understanding with certain pilots when our ships were to leave, and he knows the route we take, and if it was fine weather he knows where we would be and he would meet us at Petite, but if the weather is hazy we would come out across Brier Island and he knows where to look for us.

Q. Then the chance of your getting up by Brier Island without a pilot would not be a fair average?—A. No; a chance steamer would not want to get up without one, he would look for one. We would have more chance of getting them than a stranger would.

Q. Because the time of your departure would be known, and your pilot knew about the exact route you would take?—A. Yes; he would know within an hour or so where we would be.

Q. With reference to a fixed pilot station, taking the case of a competent navigator, but one unacquainted with the Bay of Fundy?—A. Yes.

Q. How would you consider the risk at Seal Island to make direct for St. John, or to attempt to get a pilot at Brier Island, to attempt to make Brier Island in a fog?—A. If you could manage to get to Brier Island you would not have much difficulty getting the rest of the way.

Q. You being the master of a steamer that arrived off Cape Sable, and being a competent man, but unacquainted with the Bay of Fundy, it being thick weather, which would be the best course, to attempt to navigate your ship to Partridge Island without a pilot or to attempt to get one off Brier Island in a fog?—A. It would be better to come straight on and not go dodging about looking for pilots; he might dodge about for several hours. It is a straight course up nearly to Partridge Island. I am giving my evidence as captain of the "Madura," and not as a captain of a sailing vessel.

Q. In your opinion, apply the same conditions in the case of a sailing ship: Suppose she arrived off Cape Sable, Seal Island, with the wind fair south-east and south-west, and thick weather. Would you consider there was more or less risk in the master of that sailing ship trying to get to Partridge Island, or trying to make Brier Island for the purpose of getting a pilot?—A. I should think it would apply almost the same to a sailing vessel as to a steamboat.

Q. In going to London, do you take a pilot in the English Channel?—A. You may call it the English Channel, at Dungeness.

Q. Are there not a class of persons skilled in navigation in the English Channel called channel pilots, who cruise below Dungeness?—A. There used to be, and I think there are now; I never saw one nor took one.

Q. The pilotage from Dungeness up to the port of London, is it compulsory?—
A. Yes; there is no compulsory channel pilotage.

Q. The system so far as the port of London is concerned is compulsory?—A. Yes, you must take a pilot; there is a penalty if you do not take them without good cause.

Q. If you have them on board you are exempt from certain liabilities you might be liable for?—A. Yes, from certain liabilities.

Q. Do you know whether Stockton or Middleboro' are compulsory?—A. I cannot tell from memory.

Q. Have you been frequently in and out of the port of Middleboro'?—A. Never was there.

Q. Do you know any port of the United Kingdom where pilotage is optional?—
A. Yes; there are several. I have been to very few ports in the United Kingdom. I believe the Tyne is a free port.

To Captain Smith :

Q. If you take a pilot on board at Dungeness, that same pilot is not allowed to take you right up to your dock?—A. Oh, no; he goes up to Gravesend, and the river pilotage is compulsory from Gravesend for foreign-going ships. Our pilot comes on board at Gravesend; they are certified men.

To Mr. Palmer :

Q. If it was entirely optional bound out from the port of St. John would you have a pilot down the bay?—A. No, not for my own interest; I would not, as it would be an unnecessary expenditure of money. It would relieve me but from an impartial—I would not take any. It would not be necessary for me to have one.

Q. Having in view the safety of property and your owner's interest, would you take a pilot down the bay unless you were compelled to?—A. No, I would not; as a fact I do take one down the bay and land him at Halifax. I have received orders from my owners to do that; that is only within the last three years.

To Mr. Skinner :

Q. Taking it what I call by in large for the commerce of the world, do you think the system of pilotage is requisite for all the commerce of the world?—A. Certainly, I think a system of pilotage is necessary, taking it all over the world.

Q. I judge from what you say that whilst you feel that you could bring your ship in and take her out without a pilot yet you think one necessary for the port?—
A. I was not speaking of the port, but only of the Bay of Fundy.

Q. Whilst you feel or know that you could take a ship in and out of the Bay of Fundy with comparative safety when you say, that you take into consideration the experience you have got of the Bay of Fundy during the seven years, you have been going and coming?—A. To a great extent, yes.

Q. Would you say the same thing as to the first voyage you have made?—A. No.

Q. It is therefore largely a question of local knowledge combined with scientific skill?—A. Exactly.

To Captain Douglass :

Q. If you had been ordered here with your skill and knowledge and with the assistance of the charts you would be able to navigate the ship up outside the port of St. John with safety?—A. I have no doubt I could in clear weather; in moderate weather there are no difficulties in the gulf.

To Mr. Skinner :

Q. It is said that clear weather is about half the time in your experience?—
A. Hardly half the time; many a time I have experienced fog in the lower part of the bay and above Brier Island, 25 or 30 miles from St. John, it often cleared up. It is more foggy beyond Brier Island to the southward than in the upper part, and with the same conditions I came through clear weather up above.

St. John, N.B., Pilotage Investigation.

BARTHOLOMEW RODGERS examined:

To Captain Douglass:

Q. You are a licensed pilot of St. John?—A. Yes, a licensed branch pilot of the city of St. John?

Q. How long have you been a pilot?—A. I was made a pilot in 1881.

Q. Did you pass an examination?—A. Yes.

Q. A similar examination to this paper?—A. I have not examined everything in this paper, but from what I see of it, I did.

Q. Who examined you?—A. Mr. H. D. Troop, Captain Pritchard and the harbour master of St. John, Mr. Taylor, in 1881.

Q. You served as an apprentice?—A. I served five years under indentures to a branch pilot holding the license from the city of St. John, James Casselly; he was licensed by the mayor and common council.

Q. Were you examined as to the soundings and different courses and lights and marks and other matters connected with the navigation?—A. Yes, and the currents and the lead line and all that.

Q. Have you had any accident during your time of service?—A. I struck one schooner.

Q. What vessel was that?—A. She was a schooner called the "Martha A. Nutter," between two and three hundred tons. I would like to show you it was not my fault. It was on the eastern edge of what we called the Round Reef; there was no examination held into it, and no blame was attached to me.

Q. What year was that?—A. I think that would be in 1887.

Q. How many pilots were there on the staff when you joined.—A. I do not know.

Q. At the time you got this vessel ashore what was your average earnings yearly?—A. We have a system here that no man can tell exactly what he does earn.

Q. Do you mean to say you cannot say how much money you earn in a year?—A. Yes.

Q. Give us as near as you can?—A. I have earned over a thousand dollars a year, and spent it all, and I never spent any of it foolishly, either. I have earned over a thousand dollars last year.

Q. How many pilots were there last year?—A. Twenty-eight.

Q. How many pilots do you consider are absolutely necessary for the service of the port at the present time?—A. At times I should think we would find employment for the whole twenty-eight, and at other times as it is to-day there are only about two or three vessels coming in and there are a number of idle pilots. We look for a vessel next Saturday.

Q. What is the busiest time in this port?—A. In the middle part of the summer, about July.

Q. You appear to have been a very active pilot, how many vessels did you pilot last year?—A. I cannot tell you. The only way I could find that is by the card in the pilotage office. I would not like to swear to any number, but probably I have had to do with forty vessels, more or less.

Q. What class of vessels were they, steamers?—A. I do not think any of them were steamers. I did not pilot a steamer into the port of St. John last year that I can remember.

Q. What class of vessels were they?—A. Barques, brigs and schooners.

Q. How many vessels over 300 tons?—A. Two-thirds under 300 tons, there was more of them 125 tons.

Q. Do you know what amount of pilotage they amounted to from the secretary's reports?—A. I see they amounted to over \$1,200.

Q. How many of those vessels you piloted were between 125 and 300 tons?—A. Fully \$1,000 worth.

Q. You only piloted \$200 worth of vessels above the 300 tons?—A. That is right.

Q. Supposing the exemption was extended to 300 tons instead of 125 tons, how many pilots would then be requisite for the service of the port?—A. I think ten could get along very well, because the whole trade would be taken away from us then. There would be no trade for us. Ten pilots would do the work.

Q. Then I understand you that the principal part of your earnings is derived from vessels between 125 and 300 tons?—A. Yes, they do all the work.

Q. What effect would the exemption of pilotage of all barges in tow of steamers have upon your earnings per year?—A. Probably \$300.

Q. In what proportion would that affect the gross earnings of the pilots?—A. Upwards of \$2,000 a year. I think, for the reputation of the port and the safety of the vessels and them on board, it is necessary that they should have pilots, and I think if we are going to have compulsory pilotage, all vessels should pay pilotage. I have known of two small vessels, outside the island, attempting to come into the harbour of St. John and the next morning there was not a fragment of them left. I consider all vessels should be compelled to take pilots. I am well acquainted with the navigation of the Bay of Fundy. Between Brier Island and Grand Manan there is a great deal of fog and a great deal of counter tides.

Q. What do you call a counter tide?—You see a tide arrow in the chart, and it denotes that they are running to the south and west, and we find them tides marked by the arrows on the map. Instead of setting south and west, as the arrow gives it, they set to the westward. These tides are caused by different winds and changes of the moon. They run over the shoals here (indicating) and those are cross tides running across.

Q. Don't you find that the soundings in the charts are fairly correct?—A. I have found several mistakes.

Q. Have you ever reported them?—A. I have had the captain go to Mr. Smalley.

Q. Did you report it to the chairman of the commission?—A. No, I did not. The captain of the ship and I both discovered it, and he is dead now. His name was Smith, and he said he would go and make a report to Mr. Smalley. It was above Brier Island, and we found something like from twelve to fifteen fathoms more water than what the chart gave.

Q. Point out on the chart where it was?—A. It was here (indicating) it was thick fog and we got hold of this buoy and let the ship come too and sounded. It was about twelve o'clock. We kept the lead constantly overboard, the wind was south-west. We never had less than 60 fathoms of water, from 50 we went off into 60.

Q. When did you sight the land after that?—A. I came in then north-west and I made here (indicating). I only lost four hours. It was a sailing-ship.

Q. What soundings did you get?—A. We first got 45 fathoms about five miles off shore and then we got into 50 fathoms and the next cast was 60 fathoms, and I came in north-west and made this land down here and the captain says that is Split Rock and I says heave the lead overboard and they did so and got 22 fathoms, of sound and I says that is Cape Spencer.

Q. Was that the only instance you found a discrepancy between the Admiralty charts and the soundings?—A. That was the only one, I did not report that to the commissioners. The captain of the ship said he would do it, and I relied upon him.

Q. Do you or not consider that the soundings of the Admiralty charts are a fair and reasonable guide to navigation?—A. Oh, yes, by all means. It was a stronger tide than what I calculated on.

Q. Are there any of your pilots superannuated?—A. Yes.

Q. What do they get?—A. They get the trifling sum of \$200 a year.

Q. Anything to the widows or children?—A. Eighty dollars to the widows and twenty dollars to the children?

Q. How many pilots are there above sixty-five years of age now?—A. I do not know of any outside of Mr. Cline.

Q. How many above sixty?—A. I should say one-third.

Q. If the system of compulsory pilotage was done away with, would there be an adequate supply of pilots for the vessels coming into this port?—A. I swear positively I would leave this city and go and seek a living at some other business.

St. John, N.B., Pilotage Investigation.

Q. You do not think there would be an adequate supply of pilots duly qualified ?
—A. No, I do not, the way they are advised and the pressure that is fetched to bear upon the men who take us at the present day, we would not get any living at all.

Q. You think a number of vessels coming to the port would not take pilots ?
—A. I swear positively from what I know that while the captain of a ship would be willing to take us if he was left to his own free will, the pressure coming from the officers would not allow him to take us. I say this from what I have seen in regard to tug-boats.

Q. Do you mean to say that the owners and agents of ships consider that when a tug is taken, that pilotage is not required ?—A. No. I have been pilot of several foreign ships and a tug-boat would come along-side and the captain would like to hire that tug, but he had an order sent to him saying that he must not take only such and such tug-boats, and I have been obliged to lay at Partridge Island for hours waiting for that particular tug to come down from the Suspension Bridge and it would work the same way with pilots. When commissioners allow us pilots to go to the states, if we can get a job in an office and in that case the office would select two or three men and those two or three men got all the outside work while the rest of us got little or nothing for our work.

Q. Do the owners and agents of ships instruct their captains not to take pilots ?
—A. I have been told by captains that they did.

Q. Can you name any of them ?—A. Well, I could, but I do not want to take the living from those captains who told me.

To Mr. Palmer :

Q. Name the agents ?—A. It is a very easy matter then to get at the captains. Some of them were burses.

To Mr. Gilbert :

Q. I want to ask whether they were captains of large vessels or vessels under 300 tons ?—A. They were all of vessels under 300 tons; the owners and agents instruct captains of smaller ships not to take pilots.

Q. From your knowledge of captains of large vessels, do you consider that they are or are not competent to bring vessels up the bay ?—A. I think any man who is fit to sail a ship to any part of the world, by using the lead and precaution can come into the Bay of Fundy.

Q. How far ?—A. He can come up to Partridge Island, that is, a competent man who knows all the lights.

Q. Then the only pilotage he would require would be the pilotage into the harbour ?—A. Yes, you can put it like that.

Q. Then having brought his ship there, would he require a pilot to take him into the harbour ?—A. Yes.

Q. Would you consider it a prudent action on his part if he could obtain a pilot outside to take one, even if he considered himself competent ?—A. I would think that it would be very prudent for the captain to get a pilot at Brier Island.

To Mr. Palmer :

Q. For what reason ?—A. The pilot knows more about the tides between Brier Island and St. John than the chart will tell the captain, and he knows the landmarks better than the captain.

To Mr. Gilbert :

Q. Your ship must have been pretty near where that 60 fathoms is when you found the discrepancy ?—A. No, she was not; we were four hours from this point. I am sure where I was, because I had Musquash buoy.

WILLIAM A. BLACK examined :

To Mr. Palmer :

I am a member of the firm of Pickford & Black, and am one of the pilot commissioners of the port of Halifax.

Q. How many steamers of your line visit this port?—A. Two.

Q. From the bills you receive for pilotage charges at this port, will you tell me how they compare with pilotage charges at Halifax?—A. They are very much in excess.

Q. Can you give me a ratio of it?—A. Probably three times greater.

Q. Do you consider, from the information you get from your captains and others, that except for the compulsory feature, that your steamers could visit this port without pilots, except possibly harbour pilotage?—A. It would not be necessary to employ them excepting for harbour purposes either inwards or outwards.

Q. How with reference to your steamers outward bound, do they take pilots?—A. Our instructions to the captains are to take them only when necessary. If they have to pay them they take them, but beyond compulsory districts they do not take them as a rule. Occasionally they have taken them around as far as Halifax, if the captain was unwell or in some exceptional case.

Q. At Halifax you have a regulation fixing the distance outside of which a vessel must be spoken to make her liable for pilotage?—A. Yes.

Q. What distance is that from the port and harbour of Halifax?—A. I think the line is about 12 miles from Halifax.

Q. Can you tell me approximately correct about what average distance steamers are spoken from Halifax?—A. Fifteen to twenty miles.

Q. I think there is only the one fixed charge at Halifax?—A. That is all ; the winter rate is a little higher than the summer.

Q. As to whether a vessel is spoken 12 miles off or 20 miles off?—A. There is no difference in that case, the rate is the same.

Q. Have your captains ever reported to you why it was necessary for them to have pilots in the Bay of Fundy?—A. No, I think not. We have asked them if it was necessary to employ pilots in the outer districts, and we have, as a rule, found they did not require them and we would say do not employ them then.

Q. During the last year that your steamers were here the amount of pilotage fees was some 1,130 odd dollars; do you find that a considerable tax upon the operation of your line from this port to the West Indies?—A. That, with other exceptional charges here are a heavy tax. We often complain to our agent here about it, but there seems to be no relief for it.

To Captain Douglass :

Q. Would it have any effect upon the insurance of your ships if the pilotage here was not compulsory or insisted on?—A. I think it would have no effect with the underwriters.

Q. Your steamers make to the port of St. John 12 or 13 trips a year?—A. Yes.

Q. That is the number required under your contract?—A. Yes.

Q. Have you other steamers plying in the West India service?—A. Yes.

To Mr. Palmer :

Q. Do you ever send any boats here except what you are compelled to send under your contract?—A. No.

Q. Has the high pilotage charges and the other high charges that you have spoken of, of any influence on you on the question of sending them or not?—A. They all enter into the calculation and do have an influence.

Q. Have you been requested to send steamers here, where not compelled by contract and refused, and has your refusal been influenced by these facts?—A. Yes.

St. John, N.B., Pilotage Investigation.

Q. Would the abolition of a compulsory payment of pilotage dues with a lessening or deduction of the charges at the port tend to influence you to send other steamers here?—A. I think it would.

To Mr. Skinner :

Q. Have you any experience as a navigator?—A. No.

Q. Does the fact that the steamers are in a habit of coming here and consequently getting local knowledge enter into the question of your opinion that they could come here without a pilot?—A. No, I would give the same instructions to new men to all parts of the world. I think pilots are not necessary for any ports except for harbour purposes, as a rule, but there are exceptional cases.

Q. What are the other charges you spoke of?—A. Anchorage dues, labour, pilotage and wharfage.

To Captain Douglass :

Q. You pay all these rates in Halifax?—A. We pay no anchorage and no wharfage. I think the custom there is that the cargo pays the top wharfage and there is no side wharfage.

Q. It comes to the same thing.—A. Not from the shipowner's standpoint.

To Mr. Skinner :

Q. Is it not a fact that you would rather do the whole of your business as far as these West India steamers are concerned from Halifax than be compelled to come here?—A. It would be cheaper for us.

Q. Under your subsidy you are required to come here?—A. Yes.

Q. Therefore it would be saving money for you to do it all from Halifax?—A. Certainly.

Q. When you say that if there was no pilotage provisions for the Bay of Fundy at all, that it would not make any difference in insurance, you speak merely from an opinion based upon your own thoughts?—A. I speak from a general knowledge of insurance, because if I submit a risk they do not ask whether she is going to St. John or other ports or whether we have pilots or not, they take the risk. We do not insure for a particular place. They simply know there is a ship on which they are asked to take a risk. If you are insuring a ship here you know she is going to the West Indies, but if you submit your ship to Lloyd's in London they do not know what her trade is, they may or may not.

Q. Suppose she was going to Hudson Bay?—A. Certain waters are prohibited, and Hudson Bay is one of them.

To Captain Douglass :

Q. If a captain refused the pilot, would that affect the insurance if the underwriters were aware that the pilotage was compulsory?—A. I think it would not. All these risks are taken into consideration by the underwriters.

To Mr. Skinner :

Q. As a matter of fact your ships have pilots both coming up and going down the bay?—A. Yes, they have to pay for them and they might as well take them. We do not take them down the bay, but simply as far as the compulsory system extends.

Q. Do you know of any instances when they have taken them down the bay?—A. Yes, I know of one case where the captain was sick, and I think the pilot went all the way to Halifax.

Q. Have they taken them down the bay in thick weather?—A. I think not. I am not clear on that point; but it is a very exceptional thing for them to take them beyond the compulsory limit.

BARTHOLOMEW RODGERS resumed :

To Mr. Gilbert :

Q. These barges bring coal from Springhill?—A. Yes.

Q. Does the coal not pretty much all come down in vessels under 125 tons?—
A. I am not sure. We collected from all vessels that carried coal from Springhill here in the year previous to the barges, and the most of them were under 125 tons.

Q. But you collected a good deal of pilotage from those over 125 tons?—A. Yes.
Q. You yourself have spoken these barges several times?—A. Yes, in the county of St. John.

Q. Did you go beyond Cape Spencer?—A. Yes, about 9 miles. I cannot say how many. I suppose 8 or 10 east of Cape Spencer. I never spoke one as far as the Corporal Light, about six miles below Cape Spencer, where I spoke some. We know when they are coming.

Q. Do you know of any of them getting in without your catching them?—
A. I have never known any of them to come in with any kind of a chance; but I have laid for them and watched for them and they have held them back and came at times when I would not be on the look out, and that was the only time they ever got in.

Q. You do not mean to say that these barges would avoid you?—A. Oh, yes.

Q. Is it not a fact that a great many of the small vessels that do not pay compulsory pilotage are towed into the harbour by tugs?—A. Yes.

Q. Can you give any reason why they take a tug?—A. The reason is that they cannot work into the harbour.

Q. If you were on board would they have the same difficulty about working into the harbour?—A. No, I do not think it. To shift from the harbour into the wharf is the reason they take the tug.

Q. Do they frequently, with a fair wind and flood tide, sail in themselves?—
A. Yes.

Q. And the great reason they take the tug is because at certain times of the tide it is necessary for them to have a tug to come in safely?—A. You can always work into St. John harbour if you have wind.

Q. Is it not on account of the nature of the wind and tide that it becomes safer for them to take a tug than to sail in?—A. Yes.

Q. Don't you think that a tug that has hold of a barge can bring her in just as safely as she can bring in a schooner?—A. No.

Q. Then a tug can bring in a schooner safer than a barge?—A. Yes, because the schooner is a smaller vessel, and our tugboats are much handier vessels, and the captains of our tugboats are better acquainted with the harbour than the captain of the "Springhill."

Q. Then you have an intimate acquaintance with the knowledge of the captain of the "Springhill"?—A. I think I have. I saved one of them one night from going ashore by my advice. I told the captain of the tugboat if he continued on his course he would put her ashore, for his helm was hard a starboard, and he had best stop her and put his helm a port.

Q. Your view is that the captain of the "Springhill" is not a competent man?—
A. He has made out to come in and out all right. Sometimes he tows in with a short hawser, and more times he makes fast out at the island. They tow on 120 fathom line from Parrsboro' till they come to the bell buoy, and then they shorten in; sometimes they go alongside the barge and haul the hawser in.

Q. When she is lashed alongside she is in the command of the tug?—A. Certainly.

Q. You consider that a better method of bringing a craft into the harbour?—
A. No, I do not.

Q. You said you thought it was safer for these barges to have pilots?—A. Yes.

St. John, N.B., Pilotage Investigation.

Q. Do you think it is safer for the "Monticello" to have a pilot?—A. She draws no water to begin with; I mean she only draws seven feet and the tug draws about ten feet and a half, and a barge from twelve to thirteen feet.

Q. Don't you think it would be proper that the "Monticello" should have a pilot?—A. If the Government would give it to us I should say that all vessels should have a pilot.

Q. It would be necessary for a tramp steamer to have a pilot if a tug was alongside?—A. Yes.

Q. You have passed your examination?—A. Yes. I never passed an examination as a master, or as regards deviation.

Q. Would it not be an important thing to have pilots instructed in deviation and all the navigation a master requires?—A. If the Dominion thought so I suppose it would, I am not prepared to give that opinion. If I went on board a ship and it was thick fog, the deviation would not be much use to me. I would not be able then to know how much the compass was out. I have always made it a practice, any ship I ever went on board of to make inquiries of the captain in regard to his compass, and I have always told him my course and why I wanted to steer that course, and I have gone into the chartroom and saw them lay the rulers on the courses and deviation card as well, and would see where my course would fetch, and if my course and the captain's did not agree I would then explain to the captain why I wanted to steer that course, and in no case have I ever had a captain to find fault.

To Captain Smith :

Q. In iron vessels have you always had to steer the same course?—A. Twenty courses sometimes on board the one ship. We do not steer these channel courses laid down in the chart, or the magnetic course. We give the ship a departure before we leave her from some point, and we never leave a ship on a lee shore. When we leave her she is on the weather shore. We would have to steer different courses on board vessels under the same circumstances.

To Mr. Gilbert :

Q. From what you have said going down or up the bay, you take some point of departure?—A. Yes.

Q. Then from that known point of departure you sail for some other point?—A. Oh, no, we make the land if it is thick fog, and when we do, we tell the captain that is such and such land, and if he is doubtful about it, we generally put the lead overboard and we say we will follow this shore along and show you something you know yourself.

Q. Don't you take that course in such a way as to bring you into the sound of some whistle that you know of?—A. That will depend on how the wind is.

Q. What is your object in taking your departure from one point and steering to another?—A. To keep the ship clear of the rocks. The lighthouses are good, but we do not place any dependence in a whistle, because we would be in on top of the surf and not hear them. We depend on our judgment.

Q. You know the location of these lighthouses from having seen them?—A. Yes.

Q. Supposing a person had been experienced in coasting up and down the bay, for as long a period as you, would he by paying attention to these lights be thoroughly competent to bring a vessel into the bay?—A. If he was a certified captain he certainly would; with ten or fifteen years' experience he would.

To Mr. Palmer :

Q. In piloting a ship out from here and taking her down the bay, where do you usually land?—A. At Brier Island.

Q. Have you ever landed at Brier Island where you have been piloting a ship down the South Channel with the wind south-west?—A. No; the captain would never let me leave.

Q. In such a case where do you land?—A. I take the ship until she has an offing clear of Brier Island and then go on board a fisherman, or until the ship has an offing from the land, and then I would go 10 or 12 miles clear of Brier Island, and come to Brier Island again in a boat.

Q. In taking a ship off North Channel where do you like to land?—A. We generally leave a ship in the vicinity of Little River.

Q. In your experience as a pilot have you ever arrived at Little River and found the wind south-east?—A. Yes, and took the ship out into the bay and stayed on board of her till there was a change of wind.

Q. How long was it before you did get ashore in this case?—A. I think I was four days on board of your barque.

Q. Do you think it is an advantage to keep a ship for four days in the mouth of the bay?—A. We could not get clear of the shore. I was ready and willing to leave the ship at 12 o'clock at night; but the wind was blowing a gale, and the crew were all drunk, and the captain would not allow me to leave the ship.

Q. Do you know cases where ships have been lost on the Maine coast in attempting to land their pilot?—A. I do not.

Q. Are you prepared to say there are not such cases?—A. I am prepared to say there are not such cases if the captain looks out for his ship.

Q. Have there not been within the last 16 years vessels lost on the Maine coast with the pilots on board, outward bound?—A. I think there was a ship lost with Pilot Cline on board—an unmanageable ship.

Q. What do you mean by unmanageable?—A. I mean she was a wooden and iron ship together, and would not steer, and went ashore. I know of no other ships with pilots on board that got into trouble in the Bay of Fundy.

Q. I said the state of Maine coast with the pilot on board?—A. No, I know of no others.

Q. I mean about Little River?—A. I know of no other ship with a pilot on board being lost at Little River; only one, and I happened to be present at the time and know all about it. I do know of one other, she was the barque "Tanjore."

Q. Would you prefer to have a pilot land or not to land down the bay?—A. If I were captain of a ship and with the knowledge I possess of the bay, I would take a pilot to Little River or Brier Island all times of the year.

To Captain Smith :

Q. Is the "Tanjore" the vessel that was lost when Mr. Trainor was on board?—A. Yes; it was the one you held an investigation on.

Q. Supposing you were the master and had two mates, each of whom had the knowledge and experience of a St. John pilot, would you still take a pilot?—A. I certainly would.

To Mr. Palmer :

Q. If you had a crew of St. John pilots would you take another one?—A. No, I would not; that would be a different thing entirely. The mate and second mate generally look out for the work and see that nothing is going wrong, and when they leave port for the safety of life and property the captain has got his hands full to take the ship out of the bay.

Q. You say if you had three men all experienced as you are, you still would take a pilot?—A. The captain has to take the ship out of the bay, because his officers, if they pay strict attention to business, have enough to do to look out for the working of the ship.

Q. It is for that reason and not because the master or mates do not know the coast that you would take a pilot?—A. I am satisfied that the master or mates do not know as much about the currents in the Bay of Fundy as I do.

Q. Supposing you had a master and mate and second mate who knew as much as you on board and you as master, you would still take a St. John pilot, and I ask

St. John, N. B., Pilotage Investigation.

you why?—A. I would take him to relieve me as far as rest is concerned. I have been some three days between here and Brier Island.

To Captain Douglass:

Q. Supposing you were on board as a pilot and you engaged for three or four days and you could not get any rest, would you then think the captain qualified to take charge?—A. Yes, I could not lay and rest as contented with the mate or second mate in charge as though I had a pilot.

To Mr. Palmer:

Q. Supposing that Trainor was captain and you were mate and he was to lie down leaving you in charge as mate, would he lie down as contentedly with Bart Rodgers as mate as Bart Rodgers as pilot?—A. It would take me all my time to see that the sailors looked out for the securing of the deck load and the gear and all that. There is no ship equipped when she leaves this port.

Q. That being so, would it be an improvement on the law where the master and mates are not thoroughly familiar with this coast and bay and there is a chance of their being three or four days between here and Brier Island, to compel them to take two pilots?—A. I do not think that it would. You make me captain and I will answer.

Q. Taking the captain of a ship outward bound inexperienced in the bay, then you being pilot, if the ship was three days getting out to Brier Island you would be practically three days without rest?—A. Not by any means. When I would get tired I would generally get the ship's head clear off the shore, steering clear of trouble, and then I would talk it over with the captain as we generally do, and would tell him we have got so long a distance to go before we will get to such and such a place providing the wind continues, and if the wind continues I will lay down a certain length of time and you can call me, and with those instructions I would lie down.

To Captain Smith:

Q. Then you would not leave the deck unless the captain was there to take your place?—A. By no means.

Q. Did you ever read the evidence in the "Tanjore" investigation?—A. No.

Q. Would it not, in your opinion, answer fairly well if you had masters and mates who passed a qualifying examination for pilots in this bay, as far as the safety of the property is concerned?—A. Do I understand you that a captain or mate is capable to pass the same examination as I?

Q. Yes.—A. And that he would be capable of navigating the Bay of Fundy himself.

Q. Yes, without taking you?—A. Yes, if he passed the same examination I pass upon the same subject, he would be.

Q. I think you obtained your certificate in 1874?—A. In 1881. I am thirty-six years old past.

Q. You examined those questions left by Mr. Troop?—A. Yes. From what I have seen of them they are the ones I passed on.

To Mr. Palmer:

Q. Did they have any examination on the question of colours when you passed?—A. No; not with reference to colour-blindness, and I have never passed any examination on the deviation of the compass.

Q. I think you said from your experience in St. John steamers you did not interfere with the deviation of the compass?—A. I never allowed myself to think I was capable of taking care of the ship's compass. I always trusted that to the officers.

Q. I ask you whether, in your opinion, it would be an improvement on the examination of St. John pilots to have them examined and qualified on the question of deviation?—A. Yes, if the government thought so.

Q. What do you think of it?—A. It would relieve the captain from certain responsibilities.

Q. Would it be an advantage?—A. I do not know. If I knew how to work it, I would not apply it myself. I would get the captain or mate to do it.

Q. Then you consider that the captain is the man who is responsible for the ship although you are on board?—A. Oh, no. I always make a note of every course that ever I steer of my own and I generally look at the captain and mate and if the chart is handy I look at the chart and if I see any little mistake I draw their attention to it, but I allow them to navigate their ship by their charts.

Q. You consider they have charge of the ship?—A. No. I do not. I have the responsibility of the ship on myself.

Q. You mean to say you ask the captain to lay down the courses from one point to another?—A. Yes.

Q. Before whom did you pass your examination?—A. Captain Pritchard, Chas. S. Taylor and Mr. H. D. Troop.

Q. Was the examination written or oral?—A. It was from a book in the possession of Mr. Troop. I gave my answers verbally.

Q. Taking the portion of the bay known as the North Channel in what portion of that part of the bay do you think the greatest dangers and difficulties to navigation lie?—A. From the North Head of Grand Manan.

Q. Can you tell what they are?—A. They are The Wolves, Maces Bay Ledges, the Allen Gilman Ledge, Dipper Harbour Ledge, Split Rock, Mahogany Island and Shadrock: those are the principal.

Q. With the exception of The Wolves would they lie very contiguous to the shore?—A. They are all very close to the shore except The Wolves.

Q. From the North Head of Grand Manan across to Liberty Point and from that to St. John what is the shortest route from one to the other?—A. About thirty miles.

Q. How far do The Wolves lie from the New Brunswick shore?—A. About four miles.

Q. Then you have thirty-five miles of clear water between those and the Nova Scotia shore?—A. Yes, if you go that way.

Q. Is there any obstructions from the North Head of Grand Manan coming up the bay that lies more than four miles off the New Brunswick shore or Nova Scotia shore?—A. If you lay down a course on that chart that the captain of a ship is supposed to be guided by I do not think he would be able to run it.

Q. Taking any course from North Head of Grand Manan to Liberty Point is there any place that the breadth of clear water between the New Brunswick and Nova Scotia shores would be less than thirty miles?—A. No, I do not think there is.

Q. You make no difference in this pilotage district how far the vessel is from the shore in claiming a right to board her?—A. No, four or five miles or twenty-five miles off the New Brunswick or Nova Scotia shores we would claim the right to board her.

Q. You, in the course of your business, pilot sailers and steamboats both?—A. Yes.

Q. Taking the steamers in the first instance, are they mostly in the third district?—A. If it is thick as a general thing we hear their horn and we get them in the lower district.

Q. How about the sailers? Do you get those in the lower district too?—A. As many as we can.

Q. Did you get more than half the sailers in the lower districts last year?—A. I should say two-thirds. I had no steamers last year.

Q. Taking a sailing vessel that you get in the third district about what would be the average time from the time you boarded them until you got to St. John?—A. Probably twelve hours.

Q. Take the case of steamers boarded in the third district, about how many hours would they average?—A. From five to six hours.

St. John, N.B., Pilotage Investigation.

Q. Take the draught of water of the sailers you would board, about what would be the average of the sailers?—A. They would be light; they would average probably eight and a half feet in the third district.

Q. On these you get \$2.25?—A. Yes.

Q. Steamers would average how much?—A. About 12½ or 13 feet.

Q. How much would you get per foot on steamers?—A. Three dollars.

Q. Then it would be five hours on an average you would be employed on the steamer?—A. Yes, from five to six when gotten in the third district, and the pilotage would be \$39 inwards if you go to the extreme.

Q. The average on the sailing vessels would be \$18?—A. Yes.

Q. Tell me what extra labour or skill it requires that you get paid at \$4 greater rate per hour of your time?—A. I oftentimes have been obliged to lay for 20 days in the bay before I got one of those steamers, and I rarely ever pass over seven or eight days before I can get one of those other vessels. I have been 40 days outside now before I got a ship.

Q. In your opinion is not the extra rate charged upon the steamer upon the basis that she can afford to pay more, and not upon the basis that the service is worth more?—A. No.

Q. Explain in what respect the service of piloting a steamer 20 or 40 miles is worth more than piloting a ship the same distance?—A. From my point of view, when I see a steamer, I can say to myself: There are three pilots, and one will take that first ship; and if it was the other one (the steamer) there would be three captains three pilots, and about 60 more men, and she would take away three shiploads.

To Captain Smith:

Q. You mean when you see a steamer on account of her size you consider she will take the place of three ordinary sailing vessels?—A. Yes.

Q. And that those three sailing vessels would have three different masters?—A. Yes.

To Mr. Palmer:

Q. Is it not to your knowledge and opinion that you tax the steamer more, not because your services are worth that much more, but because of her taking the three loads, she could afford to pay more?—A. Certainly.

Q. Then, according to your opinion, the St. John pilotage rates are assessed upon their ability to pay and not upon the basis of the value of the service; that is, upon steamers?—A. They are better able to pay. I have to take the figures the merchants petitioned for. I do not think the steamboats pay one-quarter enough pilotage.

Q. Don't you say because the steamer is better able to pay it, as she carries a larger cargo?—A. It is my opinion that the steamboat does not pay enough.

Q. You are only five hours on board of her?—A. Yes.

Q. If you could get thirty-nine dollars for five hours work and be sure of steady employment you would have a good income?—A. Oh, yes.

Q. May you not have to look just as long in the South Channel for a ship as for a steamer?—A. When the ships are scarce we do not generally stay there.

Q. Why do you stay there forty days for a steamer?—A. Because there are so many pilot boats that two or three boats of us take the South Channel and two or three more the North Channel and then we say, if we go over there, such and such a boat is there and we will only drive one another and now we will stay here by ourselves and be contented, and sometimes we are obliged to stay twenty days, thirty days and forty days between Cape Sable and Petite.

Q. Did you tell the commission how many vessels you piloted between May and November?—A. Yes; somewhere between thirty and forty vessels.

Q. Those were all sailers?—A. Yes, I think so.

Q. The risk of cruising looking for sailers is just the same as looking for steamers, and the chance of you being twenty days without getting a vessel is just

the same?—A. If not the ships are scarce, because then I would go and look and get a schooner, but if we were all going to fight for schooners there would not be enough money in the business.

Q. Do you remember how many steamers outside the regular lines were here last year?—A. I should say, in round numbers, about sixty tramps.

Q. The pilotage on each of these was \$3 per foot?—A. Yes, and an average of thirteen feet. The average time inwards was six hours.

Q. The pilotage upon them inwards would be an average of about forty dollars?—A. Yes.

Q. The pilotage on sixty ships and barques; the time would average twelve hours?—A. Yes.

Q. And the pilotage inwards would not average over twenty-five dollars?—A. The barques and ships that come here nowadays I guess you could put on thirteen feet draught on an average.

Q. Outside of the question of pay, supposing the compensation was the same for bringing in a sailing ship and bringing in a steamer from the same position in the bay, as far as yourself was concerned, if you were there and you had the chance to speak the one or the other, which would you take?—A. I would take the steamer.

Q. Supposing the amount you got was just the same?—A. Yes, because I could do the work quicker.

Q. How about the labour? Would it be easier?—A. As far as the pilots are concerned, if I had a fair wind in a sailing ship and that wind would fetch me to St. John it would be no easier to come in a steamer than in a sailer. The beauty of the steamer is we would have a fair wind all the time.

Q. On every occasion given the choice of taking the ship or steamer at the same price you would take the steamer?—A. Yes.

Q. If you were given the option of speaking them down about Cape Sable Island and given the option of taking a steamer at forty dollars or the sailing ship at fifty dollars which would you take?—A. The sailing ship for the extra ten dollars, but at the same money I would take the steamer.

Q. Then it is resultant from that that you consider the time that would be occupied and labour are at least as light in the case of a steamer as in the case of a sailer?—A. Yes.

Q. What is the charge of pilotage on a steamer outwards?—A. I am not sure, but I think \$1.50. It is \$1.25 a foot out and \$1.50 in on the sailing vessels, and \$2 a foot in on the steamers and \$1.75 out on the steamers.

Q. Your pilotage rates outwards are from here to Brier Island on the steamer \$4.50 a foot?—A. Yes.

Q. But your pilotage rates from Brier Island inwards are only \$3.00?—A. Yes.

Q. Is not the fact that St. John is unique in that respect with reference to making the outward charges higher than the inward charges?—A. No.

Q. Tell me another port where they are higher?—A. I do not know.

Q. Is there a port in Canada where the outward pilotage is higher than the inward pilotage excepting St. John?—A. I do not know.

Q. With reference to the steamers plying to Digby, do you think that they should be exempt from pilotage?—A. If I had my will I would ask pilotage on everything if the Government would give it to me.

Q. If I and other unfortunate sailing owners should have to pay pilotage you think those steamers should too?—A. Yes, I think all vessels should contribute towards the system and I include the International Line of steamships.