

## REPORT AND EVIDENCE ON THE CHANNELS OF THE ST. LAWRENCE, &amp;c.

sands which dry at low water, and would be perfectly safe if it were buoyed as the Traverse of the South Channel now is ; The Tide in this old Traverse is not very strong, the ground is good, and consequently a vessel might anchor, if becalmed in the Channel itself, which is impossible in the Traverse of the South Channel, both on Account of the nature of the bottom and the strength of the Tide. This Traverse would be unquestionably less dangerous in every respect, than the Traverse of the South Channel, if it were buoyed in the same manner. The principal disadvantage in the North Channel is the great depth of Water in the Channel immediately between *L'Île aux Coudres*, and the main land, and the great rapidity of the Tides in the same part. The former circumstance would render it extremely difficult for a vessel to be held by her anchors if suddenly becalmed, and if she were becalmed in a certain position just about *Saint Paul's Bay*, with the Ebb Tide running, she would run great risk of being set ashore, but an experienced Pilot would be aware of this circumstance, and would never attempt to run through between *L'Île aux Coudres*, and the main land with the Ebb Tide running, when there appeared any chance of its falling calm ; I may here just as well remark that there is the same danger of being becalmed near the Traverse of the South Channel, as in the part just before mentioned ; so that the Channels are not far from equal in this respect. Having thus stated the advantages and disadvantages of each Channel, I shall give it as my opinion that these two Channels are equally good ; the one will be preferred by a navigator equally acquainted with both under some circumstances, and the other under contrary circumstances of winds, weather, season of the year &c. ; consequently there must be a great advantage in having two Channels instead of one, and therefore there cannot be a doubt that it would tend to improve the navigation of the River, if the Pilots were by Law bound to make themselves equally acquainted with both Channels, and indeed with every part of the River, as is the case in other Countries.

Q. Have you not in the course of your researches discovered an eligible Channel between the *Isle aux Coudres*, and *la Batture aux Loup-Marins*, (Seal Shoal) of which former Hydrographers had made no mention, and would it be essential that all Pilots should be acquainted with the said Channel ?

A. In the course of our researches last Summer, we discovered a third Channel which has never before been noticed. It is not so good as either of the others, but ought to be well known. The western entrances of this Channel are between the Islands to the Westward of *Crane Island* ; the principal entrance being between *Isle aux Raux* and *Grosse Isle*, the whole of which have been represented as impassable from Shoal Water in the most recently published Chart of the River ; passing to the northward of *Crane* and *Goose Islands* &c. this Channel is divided into two Branches by *Batture aux Loup-Marins*, the one branch passing to the Southward of those Shoals and between them and the *Pillars*, joins the South Channel passing like it, through and out between the Buoys of the Traverse—This Channel between the *Pillars* and *la Batture aux Loup-Marins* is narrow and dangerous, but the other Branch which passes to the Northward of the *Batture aux Loups Marins*, and between them and *L'Île aux Coudres* is a wide Channel, and has the advantage of avoiding the Traverse entirely ; but on the other hand, I do not think that it has more than three fathoms of water at low water during Spring Tides, in one part and for a short distance between the *Seal Reefs* (*la Batture aux Loups Marins*) and *L'Île aux Coudres*, the bottom in this Channel is good for anchoring and the Tides not so strong as in the other Channels, but it possesses no good Roadstead, and there are many Shoals. As the North and South Channels are superior to this middle Channel, I do not recommend it for general use, but as vessels have in North-easterly gales, and thick weather been frequently driven up between the *Seal Reefs* and the *Pillars*, and also between the *Seal Reefs* and *Coudres*, and in all probability will frequently be so again, I am decidedly of opinion that the Pilots should become acquainted with this Channel, also in order that they may be able to extricate a vessel so situated.

Q. Do you know whether the North Channel would not be for many reasons less dangerous than that on the South side, on account of the height of the shore, and the excellent anchoring places there found, and will you favor the Committee with your opinion of the comparative advantages and merits of the two Channels ?

A. I think the dangers of the North and South Channels about equal. The anchorage at *L'Île aux Coudres*, is a great advantage to the North Channel—The short distance to which the Shoal Water extends off the North coast, is also an advantage, and so may be also the height of that coast in some respects, but on the other hand its mountainous character causes heavy squalls, in North-west winds, which however occur very seldom during the months of September and October, in which we were there and in which also that wind is most frequent ; The wind in nine days out of ten is neither directly up or down the River.

The remainder of this Question has been noticed in the answer to question 4.

Q. Are you not of opinion that the Harbour of *Île aux Coudres* (where nature has already formed a beautiful Basin) might with advantage serve as a dépôt, for all the materials necessary for caulking and repairing vessels particularly in the Autumn when the dangers and difficulties to be apprehended by vessels starting from *Quebec*, could not be dreaded by those sailing from the *Île aux Coudres* ?

A. In the Channel between *L'Île aux Coudres*, and the North coast the water is too deep and the tide too rapid for vessels conveniently to anchor, but there is a small bay at *Laprairie*, on the North side of *L'Île aux Coudres*, where vessels may safely anchor in all winds, out of the strength of the tide, and in a moderate depth of water. They must anchor near the shore, but the ground is excellent, and there is seldom or never any Sea, which can affect a vessel ; I am of opinion that if a Pier were constructed here, that this place would form an excellent situation as a dépôt for caulking, repairing and loading vessels, particularly late in the Autumn, and that vessels might sail with greater safety, and later in the season from this place than from *Quebec*, as they would by so doing have fifty miles less of the most dangerous part of the River, to pass through than those from the later place ; For instance all those vessels which

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