

the new channel recommended by Captain Orlebar, when buoyed out, will give the Pilots the option of two deep-water channels, either of them sufficient for any vessel now frequenting the Port. On Tuesday afternoon, we ran the "Gulnare" four times over the Bar with an easterly wind, without any difficulty in either direction, carrying 18 feet water at half tide, trying both the old and new channel out and in. The delay which has hitherto been experienced by large vessels has occurred principally during the prevalence of easterly winds, when the narrowness of the channel has prevented them tacking or beating to windward. The remedy for this would be the employment of a Tug Steamer, for which there appears great necessity in this River, and which would enable vessels to get out with the wind in any quarter; and without this, it scarcely appears that any amount of dredging or blasting would enable vessels in the Fall of the year to proceed to sea so quickly as they might wish.

It is further observable, that with a west wind over the Bar there is of course much less water than with the wind from the sea, and that therefore a tug steamer, taking a vessel out to sea against the wind, might have probably 23 feet of water in the channel, which a wind favorable for the vessels sailing out might reduce to a little over 20 feet. From all the evidence we could collect, no accident has yet occurred on this shoal, that the employment of a suitable tug might not have prevented, and the service of such a vessel would facilitate the trade of the Harbour very much more than the cutting of any additional channel at the point indicated.

All the above is respectfully submitted by your obedient humble servant,

T. T. VERNON SMITH, C. E.

To the Hon. Charles Macpherson, Chief Commissioner, &c.

No. 3.

Letter from Captain Orlebar to the Provincial Secretary.

Gulnare, S.E. Coast Nova Scotia, 27th June 1857.

SIR,—Having completed the Plan of Miramichi Bay on the scale of two inches to the nautic mile, I have the honor to inclose, for the information of His Excellency the Lieutenant Governor, a trace from that plan, of the soundings upon the Horse Shoe and outer Bar; and also the proposed position of the two buoys on each side of the new channel, as referred to in my report of the 2nd of June. I wish to direct the attention of His Excellency, and those interested in the navigation of that noble River, to the fact, that the channel, sounded by us upon the Horse Shoe Bar, affords a depth equal to that which we found upon the outer Bar, and therefore, if notwithstanding my report, it is thought desirable to deepen the channel on the Horse Shoe, the same deepening would be necessary upon the outer Bar. I have however great hopes, that if the direct channel, now explored, be buoyed and used, there will be found little comparative difficulty in getting the largest vessels through; the advantage of sailing in shallow water in the direction of the stream being so great.

In conclusion, I have to beg to be informed as early as possible, whether the authorities will act upon my recommendation as to the placing of the buoys, so that I may have them inserted upon the plan I am about sending to the Admiralty; the Hydrographer having stated his intention to engrave the same immediately for the information of the public.

I have the honor to be, Sir, your most obedient servant,

JOHN ORLEBAR,

To the Hon. S. L. Tilley, Provincial Secretary, &c.

Commander in charge Admiralty Survey, &c.

No. 4.

Letter from the Provincial Secretary to Captain Orlebar.

Secretary's Office, Fredericton, 11th July 1857.

SIR,—I am directed by His Excellency the Lieutenant Governor to acknowledge and thank you for your letter of the 27th of June last, forwarding a Plan of Miramichi Bay, and to inform you that the Channel recently discovered by you will be buoyed immediately, according to your suggestions. You will therefore be pleased to insert the Buoys in the Plan you are about sending to the Admiralty.

I have, &c.

S. L. TILLEY.

To Capt. Orlebar, North Sydney, Cape Breton.