

Des Barres' Charts.

Of the various charts of the St. Lawrence which have hitherto been in use, those of Major Holland, re-published by Des Barres in 1778, are the least inaccurate, yet the least in general use. The others appear to be taken from them, with alterations, which seem to rest on no better foundation than the fancy of the chart-makers, who, in their compilations from materials generally inaccurate, appear to have considered the latest as necessarily the best information. The effect of this has been the retention of old errors and the addition of new ones, for it so happens that the most recent charts of the St. Lawrence at present in use, are the most erroneous of any. In Des Barres' charts, although thus mentioned as the best, the errors and omissions are numerous and important. The soundings are generally incorrect, frequently so much so as to be directly contrary to the truth; for he occasionally shows a moderate depth of water, where there should be 100 fathoms or more, and in other places a great depth where there is bottom to be found with the hand lead. Commanders of ships having found that they could not trust to the soundings in these, and the other charts, have considered it of no use to sound, from which many fatal accidents have occurred within my own knowledge.

Massey's Sounding Machine.

2. In the Admiralty charts will be found accurate soundings, taken with Massey's patent sounding machine, which gives the exact perpendicular depth independent of the effect of currents or drift of the vessel. I strongly recommend the use of this excellent instrument, with which every vessel, in my opinion, ought to be furnished. It is not expensive, and will last with care for a long period of time: correct soundings may be obtained with it in 30 fathoms of water without heaving to, if the vessel be not sailing at a rate exceeding 7 knots; and no vessel ought to be permitted to run faster, in a thick fog, or dark night, when in the vicinity of land, or other danger. Furnished with this instrument, or, instead of it, with Burt's buoy and nipper, and with correct charts, a vessel may be run in safety up the St. Lawrence as high as Green Island. In short, there as elsewhere, correct soundings are the best of all guides to the navigator.*

* There is no difficulty in the use of Massey's patent sounding machine, and it is sold accompanied with directions for setting, reading its indications, &c. The common deep sea lead line is not strong enough to bear the strain of the lead and attached machine. When the vessel is going fast through

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