

Steamboat Inspection.

OUTWARD CURRENT ON THE WEST SIDE OF CABOT STRAIT.

DIRECTION and Velocity of the Current off Cape North, and near St. Paul Island; from the best observations obtained in 1894 and 1895; to illustrate the constant character of the current. The velocity is measured at the standard depth of 18 feet, when obtained at anchor. The other observations, (marked "On course run" in the time column,) are deduced from definite courses run between points fixed by sextant angles.

LOCALITY.	Date.	Length of Time. — (When at anchor.)	Range of Direction. — (Magnetic.)	Range of Velocity. — Knots per hour.
<i>Between Cape North and St. Paul Island.</i>				
At 10 miles S.E. by E. from Cape North...	24 Aug., 1894.	46 hours.....	N.W. to N.....	1'43 to 2'11.
At 8 miles S.E. by S. from Cape North....	10 " 1895.	12 "	N.N.W. to N.E.	0'56 to 1'32.
Between Cape North and St. Paul Island..	16 " 1895.	On course run.	From N.W.....
Off St. Paul Island	24 " 1895.	"	" "	1'00 knot.
Between Cape North and St. Paul Island..	24 " 1895.	"	" "	1'60 knots.
Within 5 miles of Cape North	27 " 1895.	"	" N.E. by N.	2'00 "
From 5 to 13 miles from Cape North.....	27 " 1895.	"	" "	0'75 knot.
<i>East of St. Paul Island.</i>				
At 10 miles N.E. from St. Paul Island....	13 Aug., 1894.	10 hours.....	N.N.W. to N.E.	0'60 to 1'41.
At 10 miles N.E. " "	14 " 1894.	8 "	" "	0'66 to 1'05.
At 9 miles N.E. by E. " "	15 " 1894.	32 "	N.W. to N.E....	0'74 to 1'44.
At 10 miles N.E. " "	31 " 1894.	4 "	N. to N.N.E....	0'62 to 0'96.
East of St. Paul Island	27 Sept., 1894.	On course run.	From N.N.W....	1'60 knots.

The following description of the current between the Magdalen Islands and Cape North is given by Captain Gwinn of Grandance, C.B., formerly a resident of Aspee Bay and engaged in fishing and seal hunting. He states that off Cape North the current runs continuously from a north-westerly direction, except that sometimes it may be checked or reversed for a few days by heavy south-easterly winds. The current is no stronger in the spring than at other times. From the Magdalen Islands towards Cape North, the current has a more tidal character, but it makes to the south-eastward. When sealing in the spring, vessels caught in the ice will drift south-eastward past Cape North, and sometimes as far as St. Pierre Island.

To complete all the information which has so far been obtained regarding the currents in the western portion of the Gulf of St. Lawrence, we may here give a condensed summary of the reports received in reply to the circulars sent to several of the leading steamship companies. The only replies received from transatlantic steamers were from three vessels of the Allan and Dominion Lines, with reference to eight trips on the Belle Isle route; and containing the following reports of the current in the Gaspé region:—

Between Fame Point and East Point of Anticosti; on eight trips the current was found to run *twice* from the N.W. and W. with a velocity of one-quarter to one-half knot per hour; and *six times* there was no current appreciable.

The greater number of the replies were from the steamers of the Black Diamond line, running constantly on the route from Montreal to Sydney C.B., and St. Johns, Newfoundland. The period over which the reports extend, is from June 17th to October 16th, 1895; and in the following summary they are classified according to the various regions traversed. It is to be noted with reference to the region from Cape Chatte to Cape Gaspé, that these steamships on the return trip usually keep close to the shore to take advantage of the inshore tide, and to avoid the more constant outward current in the offing. The 30-fathom line is about one mile from the shore all along this part of the coast.