to run through this region towards Cabot Strait. It had also been ascertained that the current at the other extreme angle of this region, namely, in the Mingan channel, was likewise tidal in its character, with a flow which was practically equal in the two directions. (See Report of Progress on this survey, 13th April, 1896; page 17.) On the Admiralty charts two currents were indicated locally, in the channel north of Anticosti; one setting to the south-east round Natashquan Point; and the other near the eastern end of Anticosti from Table Head to East Cape, setting to the southward. Such currents, if they proved to be constant in their character, might furnish a valuable indication; as they might be the shore edges of a general outward set in that channel; or on the other hand they might imply a return flow inwards up the middle of the channel. A set in either of these directions would be directly across the steamship route from the offing of Cape Whittle to Heath Point. It was, therefore, important to obtain continuous observations at the points where these currents were shown; to ascertain whether they were really constant, and for comparison with the currents as found in the open channel. For this purpose two pairs of flag-buoys were made and provided with suitable moorings; the larger buoy carried a white flag and was fastened directly to the moorings; and the other was attached to it by a line 200 feet in length and carried a red flag. As these buoys swung round on their moorings, the direction of the current could be readily observed from shore at a distance of two or three miles. Arrangements were made with two men to take these observations, and they were brought from North Sydney on the steamer. One of them was landed at East Cape, and provided with a tent and camp outfit. A pair of buoys was placed off the cape, where they were also in view of the lighthouse at Heath Point. As this observer left his post after a short time, the observations were continued from the lighthouse itself, until the buoys went adrift during a gale. The other observer was landed at Natashquan Point, and took up his quarters in a shed, the only building remaining at the abandoned Hudson Bay post. He was also provided with a boat, which could be anchored out to ascertain the direction of the current. This was very useful, especially during fog when the flags could not be seen. The time of change in the current was taken on a watch, which was regulated during the season by a table giving time of sunset. The positions of the two pairs of buoys are shown on the chart, Plate I. The results obtained will be referred to when the nature of the currents in the various localities is described.

In addition to the direct observations above referred to, information was requested from the leading steamship companies traversing this region, in reply to circulars prepared for the purpose and supplied to their captains, on which the character of the current met with on each voyage could be entered. Much useful information, especially as to the character of the currents at other seasons of the year, was obtained from fishermen and others acquainted with these waters.

GENERAL METHODS EMPLOYED.

The general method used to ascertain the nature of the currents, was to anchor the steamer at various points or stations carefully chosen. The steamer itself was thus a fixed point from which to determine the direction and velocity of the currents. As these currents are all influenced by wind and tide, it is important to have good meteorological and tidal data for comparison with the observations obtained at the various stations themselves. The only permanent meteorological stations at which continuous observations of wind and barometer could be obtained for comparison, are at the extreme ends of the region in question; namely at South-west Point, Anticosti, and on the island of Belle Isle; distant 360 miles from each other. The local wind record obtained on board, was not always satisfactory; as sometimes during the heaviest winds, the steamer lay close to the coast, or was anchored in some bay for shelter. The tidal data required are better given: as two of the principal tidal stations established by this Survey, are at South-west Point, Anticosti, and at Forteau Bay in the Strait of Belle Isle. These tide stations are within about 100