

NEWFOUNDLAND, &c.

*. * THROUGHOUT THIS WORK, THE GIVEN LONGITUDE IS THE LONGITUDE FROM GREENWICH. THE BEARINGS AND COURSES ARE THOSE BY COMPASS, UNLESS WHERE OTHERWISE EXPRESSED: BUT THOSE GIVEN THUS [E.N.E.], SIGNIFY THE TRUE; AND THE GIVEN DIRECTION OF WIND, TIDE, AND CURRENT, IS ALWAYS TO BE CONSIDERED AS THE TRUE.

VARIATIONS OF THE COMPASS.—The Variation of the Needle in the Environs of St. John's is from 26 to 27 degrees West: in Bonavista Bay, from 28 to 29 degrees: at Cape Ray, 24 degrees: at the Mouth of the River of St. Lawrence, 20 degrees: at Quebec, 13 degrees: at Montreal, 8 degrees: at Breton Island, 21 degrees: at Halifax, 17 degrees: off Mahone Bay, 16 degrees: near Liverpool Bay, and in the Entrance of the Bay of Fundy, 15 degrees: at St. John's, New Brunswick, 16 degrees: near Cape Elizabeth, 8 degrees: at Portsmouth, New Hampshire, 7½ degrees; at Boston and Cape Cod, 6½ and 6 degrees.

I. GENERAL REMARKS AND DIRECTIONS.

CURRENTS, &c.—It has been shown, in our volume on the Navigation of the Atlantic Ocean,* how the Currents generally set, from Hudson's Strait, &c., to the Eastern coast of Newfoundland, and through the Strait of Belle-Isle into the Gulf of St. Lawrence. Hence it may be seen, that they also affect the western navigation of the island; and, with the vast ebb of the River of St. Lawrence, which constantly sets down, with great strength, into the Gulf, they produce an accumulation of water, which can escape by the southward only. In the early part of the year, when the snows and ices are in a melting state, the outset must be considerably increased; it may, therefore, be presumed, that there is, in this season, a considerable efflux or stream of water from the Gulf, setting to the south, S.W., and south-castward.

Captain Pornton, a commander, who has long sailed in the Newfoundland trade, states that the branch of current, which appears to come from Hudson's Bay, always sets to the south-westward, off the eastern coast of Newfoundland: sometimes with a velocity of two miles an hour. Its strength, however, varies, with the direction and force of the wind. Passing down the eastern coast of Newfoundland, it turns round Cape Race, and sets thence, along the south side of the island, until it meets with the current from the St. Lawrence, a little to the westward of St. Peter's and Miquelon Islands. The combined action of these two currents, with that of the Stream to the southward, may, perhaps, produce that counter current which has been found along the inner edge of the Gulf-Stream: But, be this as it may, it is very probable that it is owing to the influence of the Hudson's Bay current that so many shipwrecks happen on the south coast of Newfoundland, about Cape Pine, &c. For ships coming from the St. Lawrence and thence along the coast of Newfoundland, meet this current; and, if it happen that they have calms, or light or head winds, it sets them imperceptibly to the westward of their reckoning: and when, supposing that they are to the eastward of Cape Race, they alter their course more to the northward, should the weather, as it often is, be foggy, they get on shore at a time when they consider themselves clear of the land.†

At times, it seems, the westerly current may extend farther than the limit above described. In a letter from a captain of the Royal Navy, dated *Breton Island*, 13th May,

* "Memoir, Descriptive and Explanatory," which accompanies the large Chart of the Atlantic Ocean; fifth edition, lately published.

† Substance of a communication to and from Mr. Wm. Heron, of Greenock.