

and that he was informed by a fisherman that the tidal current on Brown bank—off Cape Sable—occasionally ran to the NE. for 15 hours continuously at the rate of 2 miles an hour (which would account for vessels from Boston being so frequently set up the Bay of Fundy), whilst at other times the set would be as strong to the SW.

No reliance, therefore, can be placed either in the rate or direction of the off-shore tides.

Currents on the SE. Coast of Nova Scotia.—The irregular currents are said to be one of the principal causes of the frequent wrecks on Sable Island. The main branch of the Labrador Current, after passing along the eastern coast of Newfoundland, turns to the westward, and is joined by another branch of the same current, which, having entered the Gulf of St. Lawrence through the Strait of Belleisle, runs out to the southeastward, between Newfoundland and Cape Breton Island. These currents are rendered inconstant and irregular both in strength and direction, by local and distant winds; but the general tendency is well known to be to the westward, for vessels find no difficulty in working to windward in that direction, anywhere to the northward of the Gulf Stream; and hence it is that many of the vessels wrecked on Sable Island were supposed to have been well to the eastward of its position when they ran on shore.

BANKS.

Great Bank of Newfoundland.—This bank extends nearly 300 miles north and south, between the parallels of 48° and 43° N., and 280 miles east and west, between the meridians of 48° and 55° W. The only dangers whose existence have been verified, are the Virgin Rocks and banks, and the Eastern Rocks.

The form of the bank is irregular, but it reaches its most eastern limit in the parallel of the Virgin Rocks. South of this it trends to the southwest, and decreases in depth, so that in the parallel of 44° N. there is only a depth of 22 fathoms, sand. In the parallel of 43° N. and meridian of 50° W. the bank falls into deep water, and its 60-fathom edge trends to the NW.

The Great Bank is separated from Ballard Bank near Cape Race by a channel about 20 miles wide, having from 80 to 100 fathoms, mud; but its northwestern limit has not yet been correctly defined.

The general depth of water on the Great Bank varies from 30 to 45 fathoms, and the bottom is usually sand, gravel, or broken shell.

Virgin Rocks.—The bank (with depth of 9 to 20 fathoms) on which these rocks are situated, occupies a space 6 miles long in a north and south direction, and one mile broad. The least depth found on the Virgin rocks was 3 fathoms, over a small pinnacle, on which the sea breaks in heavy weather; from this pinnacle, two rocks with 4 and $5\frac{1}{2}$ fathoms water over them, lie respectively north, distant nearly 200 yards, and SW. $\frac{1}{4}$ mile distant; these rocks with surrounding shoal ground of less