

at least as Cape Hatteras. It is consequently of that character which is generally known as *polar*.

One of the strongest facts in support of the extension of this stream to the farthest northern point we have named, lies in the transportation southward of vast masses of ice along the coast of Labrador, which are met annually in May, June, and July, off the banks of Newfoundland. This is a cause which affects in a most remarkable manner the climates of Newfoundland and Nova Scotia, and causes the harbours even of the latter country to remain ice-bound to a late period in the year. Nor is its influence believed to be of small amount in the climate of our Eastern, or that of the sea-coast of our Northern States.

The phenomena of the icebergs develop another fact in relation to this current, namely, that where the influence of the current ceases to be felt upon the surface, the body of its waters still continues its course southwards beneath the flow of the Gulf Stream, which floats upon it precisely as the fresh water of the large rivers of the New World are to be seen for leagues from the shore flowing on the salt and denser water beneath. The phenomenon to which we have reference is, that icebergs near the Grand Banks have frequently been observed moving rapidly to the southward and westward, in places where ships experience a current to the northward and eastward. The icebergs, floating by the laws of specific gravity, with no more than one-tenth of their mass above the surface, evidently are carried onward by a stream flowing in the former direction, against whose force the action of the superficial current on a part of their surface is of no avail, while ships are wholly immersed in the latter, and obey its influence.

Here then we have an instance of two currents flowing one above the other, in directions almost opposite to each other.

The Labrador Stream, besides being overspread by the waters of the Gulf, the surface part of it is doubtless deflected from its flow to the southward, and forced along the eastern coast till it is obstructed very materially in the vicinity of George's Bank.

The position and supposed dangers of these banks, and the narrowness of the Labrador Stream in passing them, has prevented navigators from taking the full advantage they might have derived from their knowledge of its existence. Of the loss of time frequently growing out of this difficulty, I had myself an instance in a voyage from Europe in the winter of 1836-37. Captain Hebbard, who commanded the vessel in which I was passenger, feared that he might approach too near to the shoals of George's Bank and Nantucket, and therefore, when opposed by a westerly wind, made tacks that carried him within