

## SPECIAL COMMITTEE REPORT.

to keep close in with the northern shore, as the currents out of the Hudson's and Davis' Straits meet on the south side of the entrance and carry the ice with great velocity to the southward, along the coast of Labrador."

"It is well known, however, that the direction of the ice drift is much affected by winds, and that meteorological conditions have much influence in determining the position of the floe ice. Icebergs which can be avoided by a steamer are not much affected by winds, being directed by deep-seated currents, which, in Hudson's strait, according to Sir Edward Parry, carry the bergs to and fro twice as fast as the floe ice." (Hind.)

The work of the Smithsonian Institute on winds, shows that from all the records on file of the observations made by explorers in Hudson's Strait and Fox Channel, it is found that the prevailing winds are from the north-west (1854.)

"In passing through Hudson's Strait we could perceive none of the drift ice which was plentiful in our voyage outwards; it had been carried away to the ocean by the prevalence of the southerly currents." (Chappelle.)

Outside Hudson's Strait, in the Atlantic, ships come somewhat into the region of the Newfoundland fogs, but it is too far north to expect anything like the trouble caused by the meeting of the Arctic waters with those of the Gulf Stream, and which is such a source of danger.

Findlay says:—"The Gulf Stream is completely destroyed near Newfoundland by the south-west polar current, and not to be traceable any further." (Annual Record of Science and Industry, 1872.)

This matter is fully explained in Maury's Physical Geography of the Sea, which is the standard authority on the subject. Plate 9 shows very distinctly that the cold waters from the Hudson's and Davis' Straits reach down to latitude 45, and east to longitude 40 west, before meeting with the Gulf Stream.

Maury, speaking of this, says:—"By its discovery we have clearly unmasked the very seat of that agent which produces the Newfoundland fogs."

Now no such influences are at work in the Hudson's Strait or Bay, except possibly, where the warm summer water of the Bay mingles with that of the Strait, and it is fortunate that reports show that no trouble occurs at that point from fogs, and that one of the great advantages the Bay offers to navigators is the immunity from them as well as shoals and reefs; the islands and shores showing great depths of water close up.

Captain Middleton, who had made twenty voyages into and about the