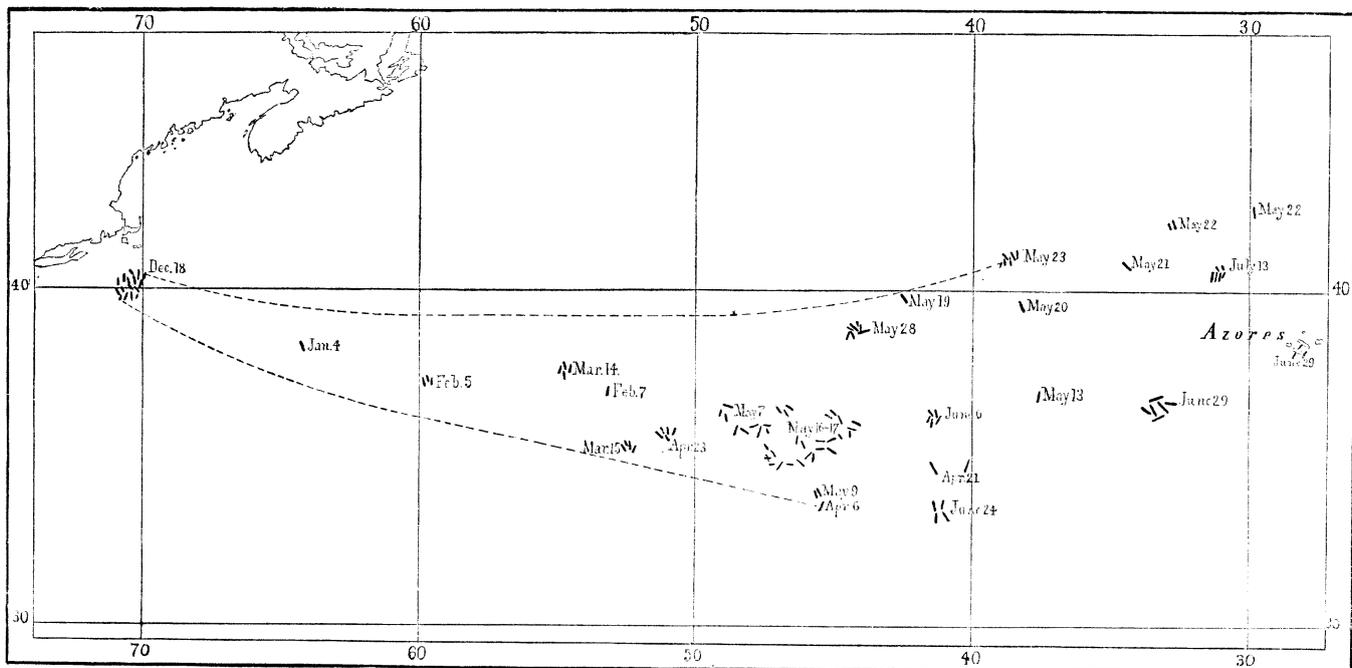


SCIENCE

FRIDAY, AUGUST 17, 1888.

THE PILOT CHART of the North Atlantic Ocean for August, issued by the Hydrographic Office under direction of Commodore John G. Walker, chief of Bureau of Navigation, is accompanied by a supplement containing a large amount of useful and interesting information concerning derelicts and wreckage on the high seas, with a graphic and complete record of the tracks followed by some of the most notable derelicts reported on back numbers of the chart. Most noticeable of all, and of especial interest at the present time, is the complete history, up to date, of the great log raft abandoned off Nantucket last December, with a tabular statement of every report received from masters of vessels since that time, of logs

the tracks which the scattered logs from this great raft have followed, drifting, as they do, under the combined and varying influence of wind, tide, and current, and every log offering some slight difference of resistance to each, according to its size, weight, and depth of flotation. To the practical navigator, however, it will be of still greater interest to have logs shipped in the usual way, or at least more securely than was done in this case, in order that dangerous obstructions may not be added in this wholesale manner to those which, in the ordinary course of things, he has to guard against." The tracks of derelict vessels are also of great interest, and clearly illustrate how long these dangerous obstructions often remain afloat. For instance, one of them drifted 2,800 miles, and another the enormous distance of 3,500 miles (from off the capes of Chesapeake Bay to the Bay of Biscay, by a circuitous route).



from the great raft. This table contains 134 reports, and although a few of them relate to timber from vessels' deck loads, yet the great majority are undoubtedly reports of fragments of the log raft. The graphic representation of the manner in which these obstructions to navigation have spread over the Atlantic is very impressive: their general drift was at first about south-east, under the influence of the prevailing north-westerly winds, and then almost due east in the Gulf Stream, the plotted tracks reaching well over to the Azores, where, indeed, one of the logs was towed into port on June 14, according to the United States consul at Fayal. Some of them are now to the northward of the Azores, drifting north-easterly, and others to the southward, drifting south-easterly, and of the former some may yet reach the shores of Europe. A considerable amount of driftwood was observed farther north, but, from the descriptions, it appears that it did not belong to the raft. That portion of the map referring to the gradual dispersion of this mass of timber has been reproduced above.

The almost world-wide notoriety achieved by this great log raft lends emphasis to the following remarks, quoted from the chart itself: "To the student of ocean currents, it is interesting to watch

The Hydrographic Office, of which Lieut. G. L. Dyer, U.S.N., is now in charge, is enabled to collect and publish data of this kind in complete and reliable form by means of the facilities of the branch hydrographic offices established in our principal seaports, the establishment of which has been of the greatest assistance to our mercantile marine, and has greatly strengthened the navy in their estimation. The Pilot Chart itself for August shows a new feature, which will make it of still greater value. It contains the tracks of all the notable August hurricanes on record, thus indicating at a glance both the regions where they are liable to be encountered and the general direction of the paths which they follow. A descriptive article on the chart calls attention to the fact that August is the great hurricane month, and describes the tracks followed by the two memorable hurricanes of August of last year, one of which is perhaps the most notable on record, beginning near the Cape Verde Islands, off the coast of Africa, and thence traversing the entire ocean to the westward, curving to the northward past Cape Hatteras, and thence about east-north-east across the Grand Banks, and re-crossing the Atlantic towards the British Isles and northern Norway. In this way the good work of the office is kept up.