

mixed water enters like a wedge between the other water-masses at a depth of about 1000 metres, as clearly shown in the two sections. In this part of the Atlantic Ocean the salinity and temperature first decrease for some hundred metres below the surface; then both increase a little through the influence of the outflow from the Mediterranean, below which they again decrease. The admixture of water from the Mediterranean can be widely traced over the eastern part of the North Atlantic, as already pointed out by Buchanan and Buchan. It is also

Outflow of Mediterranean water into the North Atlantic.

evident from our observations at a number of stations, for instance at Station 17, off the coast of Portugal, as shown in Fig. 201. In the map showing the physical conditions at the depth of 500 fathoms (given in Fig. 202), we can trace it by the comparatively high salinities and temperatures reaching north towards Ireland and west towards the Azores. This admixture is far more in evidence along the coasts of Europe than along those of Africa; this signifies a drift towards the north, which might be expected as an effect of the earth's rotation and the consequent deflection to the right. It appears, however, that some of this mixed water is carried far to the south-west by the great currents running between Madeira and the Azores.

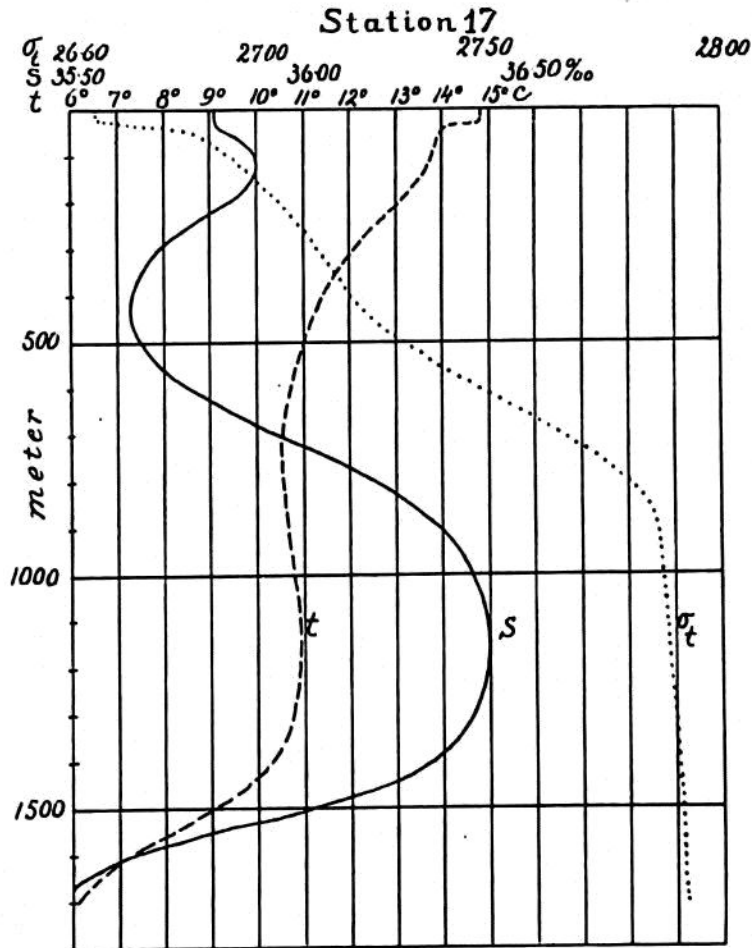


FIG. 201.— SALINITY, TEMPERATURE, AND DENSITY AT STATION 17, WEST OF PORTUGAL (23rd April 1910).

This wedge of mixed water from the Mediterranean is not met with near the surface nor in the greater depths. Thus it is not seen in the map (Fig. 203) showing the physical conditions at a depth of 200 fathoms (366 metres). At this level the saltiest water (with a salinity above 36 per thousand) is found in the south-western part of the North Atlantic (excluding the fresher

water masses). This wedge of mixed water from the Mediterranean is not met with near the surface nor in the greater depths. Thus it is not seen in the map (Fig. 203) showing the physical conditions at a depth of 200 fathoms (366 metres). At this level the saltiest water (with a salinity above 36 per thousand) is found in the south-western part of the North Atlantic (excluding the fresher