

the red stream widening out and becoming paler over the general surface of the water till it reaches the opposite edge, and very shortly the rapidly heightening colour of a band along the opposite wall indicates an accumulation of the coloured water where its current is arrested. If we now dip the hand into the water of the centre of the bath, a warm bracelet merely encircles the wrist; while at the end of the bath opposite the warm influx, the hot water, though considerably mixed, envelopes the whole hand.

The North Atlantic forms a basin closed to the northward. Into the corner of this basin, as into a bath,—with a north-easterly direction given to it by its initial velocity, as if the supply pipe of the bath were turned so as to give the hot water a definite impulse,—this enormous flood is poured, day and night, winter and summer. When the basin is full—and not till then—overcoming its northern impulse, the surplus water turns southwards in a southern eddy, so that there is a certain tendency for the hot water to accumulate in the northern basin, to ‘bank down’¹ along the north-eastern coasts.

It is scarcely necessary to say that for every unit of water which enters the basin of the North Atlantic, and which is not evaporated, an equivalent must return. As cold water can gravitate into the deeper parts of the ocean from all directions, it is only under peculiar circumstances that any movement having the character of a current is induced;

¹Ocean Currents. An Address delivered to the Royal United Service Institution June 15th, 1871. By J. K. Laughton, M.A., Naval Instructor at the Royal Naval College. (From the Journal of the Institution, vol. xv.)