

the water of the stream is ten degrees warmer than the air. The course of the Gulf-stream is so fixed and regular, that nuts and plants from the West Indies are annually drifted to the western islands of Scotland. The mast of a man-of-war, burnt at Jamaica, was driven ashore several months afterwards on the Hebrides, "after performing a voyage of more than 4000 miles under the direction of a current which, in the midst of the ocean, maintains its course as steadily as a river upon the land."\* The quantity of detritus transported by such a current must be immense, and we therefore need not wonder at frequently finding the productions of different climates associated together in a fossil state.

41. INCRUSTING SPRINGS, &c.—The phenomena hitherto considered, are referable to the mechanical action of water; and the effect has been that of disintegration, and destruction, in the first instance; and in the second, of accumulations of sediments in water-channels, and in the bed of the sea. We must now refer to an operation of a totally different character—the power possessed by streams, as clear and sparkling as poet ever feigned, or sung, of consolidating loose materials, of converting porous strata into solid stone, and of filling up their own channels by the deposition of calcareous matter.

That most fresh water holds a certain proportion

\* Playfair's Works, edition 1822; vol. i. p. 414.