

an obstacle to and interrupt the common motion of the sea, producing at the same time other motions, which are generally called currents. Between two neighbouring heights at the bottom of the sea a current will necessarily be formed, which will follow their common direction, and, like a river, form a channel, whose angles will be alternately opposite during the whole extent of its course. These heights will be continually increasing, being subject only to the motion of the flux, for the waters during the flow will leave the common sediment upon their ridges; and those waters which are impelled by the current will force along with them, to great distances, those matters which would be deposited between both, at the same time hollowing out a valley with corresponding angles at their foundation. By the effects of these motions and sediments, the bottom of the sea, although originally smooth, must become unequal, and abounding with hills and chains of mountains, as we find it at present. The soft materials of which the eminences are originally composed will harden by degrees with their own weight; some forming parts, purely argillaceous, produce hills of clay; others, consisting of sandy and crystalline particles,