

particles near the shore, while the finer and lighter matter will often be carried out by the current and deposited further off. Then another layer of sediment may be deposited on the top, and another, and another, until, in the course of time, a vast accumulation of strata may be produced.

In this manner deltas are formed, and wide bays and arms of the sea have been thus filled up. As they fill, the marshes spread further and further, and, by overflows of the river bearing sediment, the alluvial flats rise higher and higher, till, as in cases like those of the Ganges and the Nile, kingdoms have been founded on mere loose detritus. A little reflection, too, will show that all lakes, be they ever so large, may, with sufficient time, get filled by this process with *débris* and become plains. Some of the old rocks of Britain are formed of sediments originally deposited in estuaries by rivers as large as the Mississippi or the Ganges, others were formed in lakes fresh or salt, bearing witness to ancient extinct physical geographies; and many a modern flat surface in Britain and in Switzerland, often covered by peat and traversed by a brook or a river, is only a lake-hollow filled with river-borne gravel, sand, and mud, overgrown by a marshy or peaty vegetation.

Again, if we examine sea-cliffs that rise direct from the shore, we find that the disintegrating effect of the weather produces frequent *débâcles* great or small on the faces of the cliffs, thus supplying material for the formation of shingle, which in gales the strong breakers driving against the cliff forms a 'powerful artillery with which the ocean assails the bulwarks of the land,' and aids in the work of destruction. On the east and south of England, where the strata largely consist of boulder-clay, Eocene clays, chalk, and oolitic sands,