

agency, and of running water, the coasts, and shores, are exposed to destruction from the action of the waves, and the encroachments of the sea. When the land presents a high and rocky coast, the waves, by their incessant action, undermine the cliffs, which at length fall down, and cover the shore with their ruins. The softer parts of the strata, as the chalk, marl, clay, &c. are rapidly disintegrated and washed away; while the more solid materials are broken, and rounded, by the continual agitation of the water, and give rise to those accumulations of beach and sand which skirt our sea-cliffs, and serve, in some situations, to protect the land from further encroachments. But when the cliffs are entirely composed of soft substances, their destruction is very rapid, unless artificial means be employed for their protection; which, however, in many instances are wholly ineffectual.

The encroachments of the ocean upon the land effected by this operation, often give rise to sudden and extensive inundations, and the destruction of whole tracts of country. Along the Sussex coast the inroads of the sea have been noticed in the earliest historical records; and the site of the ancient town of Brighton has been entirely swept away, the sands, and the waves, now occupying the spot where the first settlers on these shores fixed their habitations.* On low and sandy coasts, the waves drive the loose and lighter materials towards the land; and the

* See Geology of the South-East of England, p. 23.