

and Shanklin-sand, successively emerge, forming the base of the shore, and abounding in their characteristic marine fossils. Passing over Pevensey Levels, the boundary of which, on the sea-side, is obscured by modern shingle, we arrive at Bexhill and Bulverhithe, and find the cliffs composed of finely laminated sandstone and clays; and those of St. Leonard, of similar strata, more extensively developed: sands and clays separated into very thin laminae, alternate with conglomerates, indurated sand-rock, and a fine sandstone, of great compactness, called *grit*. At Hastings, sand and clay, with interspersions of lignite, laminated shale, grit, and sandstone, constitute a long line of high cliffs.* The general resemblance of these strata to fluvial accumulations is most striking; the laminated structure of the clay and shales, the constant intermixture of minute portions of lignite, the absence of pebbles and shingle, and the alternations of mud and sand, are lithological characters constantly observable in river deposits. To the west of Hastings a fine mass of the strata, comprising several layers of the calciferous grit, alternating with friable sandstone, was formerly exposed on the sea shore, having at a very remote period

* See an excellent little volume on these cliffs, "*A Guide to the Geology of Hastings*," by W. H. Fitton, Esq. M.D. F.R.S. &c. "*The Geology of the South-east of England*" contains a map, sections, and full details of the geological structure of this interesting district.