

teeth might be deposited without injury, although surrounded by the water-worn detritus (see p. 54.).

2dly. The whole line of coast, with the ancient shingle, must have subsided to such a depth, as to have allowed of the deposition of the calcareous strata, forming the Elephant-bed. And from the absence of gravel and beach, and the circumstance of the chalk-rubble, of which they are largely composed, often presenting angular fragments, it would appear that this deposition took place in some tranquil bay or inland sea.

Lastly. The land was elevated to its present level; and at this period the formation of the existing sea-beach and line of cliffs commenced.

The reader must not conclude, from our remarks being restricted to the cliffs before us, that the phenomena here contemplated were limited to this district; on the contrary, if our space would permit, it might be shown that they are referable to extensive geological changes, which took place in the period immediately antecedent to the present. In all the valleys of the South-east and East of England that open into the sea, traces, more or less extensive and important, of similar deposits exist. The level plain called the *Steyne*, at Brighton, is entirely formed of the Elephant-bed, which extends up the valley to Preston and Patcham; in the latter place, bones and teeth of Elephants have been found. At Southbourn, the plain at the foot of the Chalk hills, called "*The Wish*," containing remains of the Elephant,