

have been brought about. The idea that the Wealden area once formed a vast oblong bay, of which the Chalk hills were the coast cliffs, is exceedingly tempting; for, standing on the edge of the North Downs near Folkestone, and looking west towards Ashford, and south-west across the Romney Marsh, it is impossible not to compare the great flat to a sea overlooked by all the bays and headlands, which the winding outlines of the Chalk escarpment, both of the North and South Downs, are sure to suggest. And in less degree the same impression suggests itself, wherever one may chance to stand on the edge of the Chalk Downs, all the way from Folkestone to Alton and Petersfield, and from Petersfield to Eastbourne. For years, with others, I held this view; but for years, with me, it has passed into the limbo of hypotheses no longer tenable.

If the Wealden area were lowered into the sea just enough to turn the Chalk escarpments into sea-cliffs (*see* Map and fig. 72), we should have the following general results. Let the line *a b* represent the present sea level, and the lines *s s s* the level of the sea after depression; then, so far from the area presenting a wide open sea, where heavy waves could play between the opposite North and South Downs, we should have an encircling cliffy coast of chalk *c*; *the base of which cliff, if we follow the escarpment all round from the neighbourhood of Folkestone to that of Eastbourne, unlike all common coasts, would in some cases be washed by the ordinary tides, while within a mile or two, the depth of the sea close to the cliff of chalk must have been from 200 to 300 feet.* In other words the *base of the Chalk* and Upper Greensand all round the Weald from Folkestone to Eastbourne could not have formed a continuous shore line in recent times, for some