in modern times, and that buried trees are occasionally found in strata containing shells of recent species. The formation of low islands of sand off the shore, breaking the force of the Atlantic, has probably allowed many of these trees near the mouths of estuaries to continue erect under water, until they were silted up and preserved. Similar low islands and sandbanks skirt nearly the whole of the eastern coast of the United States, and may assist the geologist in explaining some of the phenomena of the Carboniferous period, especially the manner in which superficial beds of vegetable matter, as well as upright trees, escaped the denuding forces.

Thirdly. It has been objected to the theory which refers the origin of seams of pure coal to plants which grew on the exact spaces where we now find coal, that the surfaces of ancient continents and islands ought to undulate like those we now inhabit. Where, they ask, are the signs of hills and valleys, and those river-channels which cut through deltas? These apparent difficulties will, I think, be removed, if we reflect that the fossilisation of successive forests presupposes both the subsidence of the ground and the deposition of sediment going on simultaneously. If so, the accumulation of mud and sand furnishes us with the levelling power required, and, had there been extensive denudation capable of producing valleys, it could readily have swept away all the coal. In regard to ancient river-courses, the late Mr. Buddle often assured me, that he had in many places met with them in the coal-fields of the North of England, and he has given a detailed account of one which intersected a seam of coal in