

From a glance at the map (Pl. VIII.), and remembering that nearly the same arrangement exists in regard to the newer rocks of North America, it would seem that the sum of these minor elevations and subsidences has produced a general elevation of the edges, and a general contraction,—of a basin the long axis of which coincides roughly with the long axis of the Atlantic. The Jurassic beds crop out along the outer edge of the basin, the cretaceous beds form a middle band, while the tertiaries occupy the troughs and valleys. All of these, however, maintain a certain parallelism determined by the contour of the earlier land and the direction of the older mountain ridges, to one another, and to the shores of the present sea.

From the parallel of 55° north latitude, at all events to the equator, we have on either side of the Atlantic a depression 600 or 700 miles in width, averaging 15,000 feet in depth. These two valleys are separated by the modern volcanic plateau of the Açores. It does not seem to us to be at all probable that any general oscillations have taken place in the northern hemisphere sufficient either to form these immense abysses, or, once formed, to convert them into dry land.

Reasoning partly upon physical and partly upon palæontological grounds, Mr. Prestwich thinks it probable that the ancient chalk ocean which formed a great transverse belt entirely across southern and eastern Europe and central Asia on the one hand, and across the Isthmus of Panama and southern North America on the other, was cut off by a land barrier from the Arctic Sea, and on that account possessed a