

least had their area very considerably reduced. The submergence likewise affected the north-west of Britain; the western highlands of Scotland lay more than 1000 feet below their present level.

When we turn to the succeeding geological period, that of the Eocene, the proofs of widespread submergence are still more striking. A large part of the Old World seems to have sunk down; for we find that one wide sea extended across the whole of Central Europe and Asia. It was at the close of this period of extreme depression that those subterranean movements began to which the present configuration of Europe is mainly due. The Pyrenees, Alps, Apennines, Carpathians, the Caucasus, and the heights of Asia Minor mark, as it were, the crests of the vast earth-waves into which the solid framework of Europe was then thrown. So enormous was the contortion that, as may be seen along the northern Alps, the rocks for thousands of feet were completely inverted, this inversion being accompanied by the most colossal folding and twisting. The massive sedimentary formations were crumpled up, and doubled over each other, as we might fold a pile of cloth. In the midst of these commotions the west of Europe remained undisturbed. It is strange to reflect that the soft clays and sands under London are as old as some of the hardened rocks which have been upheaved into such picturesque peaks along the northern flanks of the Alps.

After the completion of these vast terrestrial disturbances, the outlines of Europe began distinctly to shape themselves into their present form. The Alps rose as a great mountain range, flanked on the north by a vast lake which covered all the present lowlands of Switzerland, and stretched northward across a part of the Jura Mountains, and eastward into Germany. The size of this fresh-water