

mountains, and on the banks, and perhaps as occasional islands, volcanic cones disgorged streams of lava and discharged showers of ashes and stones, to be interstratified with the ordinary sediments, in a manner analogous to that which accompanied the deposition of the Miocene strata in Auvergne and other areas in what is now central France. At the same time, from the lofty mountains that now form the Highlands, but higher then, glaciers descended into the water, and fleets of icebergs floated hither and thither, and, melting, dropped their moraine matter to intermingle with other sediments, while further south, in Cumbria, similar glaciers descended from the ancient mountains, higher and different in form from those of modern date in the same area.

In a region still further south, we come to the lake in which the Old Red Sandstone of South Wales and the adjoining counties was deposited. These strata certainly spread further north and west than the edge of the main mass does now, a fact shown by the large outliers by Presteign, Clun, and Bettws Crwyn in Montgomeryshire. Making an allowance for this extension, the lake must have been not less than about 100 miles in length, by a breadth varying from 70 to 100 miles, for traces of Old Red Sandstone have been proved in deep borings through the coal-measures at the south end of the South Staffordshire coal-field. Away in the distant west, rose the lofty mountains formed in part of the far more ancient Lower Silurian rocks of North Wales, but no contemporaneous volcanic rocks are anywhere found among the Old Red Sandstone strata that were deposited in the adjacent lake, the eastern shores of which were, I think, low and unimposing.