

of the Silurian rocks in North Wales are of a slaty character, interbedded with masses of hard igneous rocks, which attain in some instances a thickness of thousands of feet. It is, therefore, easy to understand how it happens that with disturbed and contorted beds of such various kinds, those great denudations, which commenced as early as the close of the Lower Silurian period, and have been continued intermittently ever since, through periods of time so immense that the mind refuses to grapple with them—it is, I repeat, easily seen how the outlines of the country have assumed such varied and rugged outlines, as those which North Wales, and in a less degree parts of North Pembrokeshire, Devon, and Cornwall, now present.

I have said that the Secondary and Lower Tertiary strata have not been anywhere disturbed nearly to the same extent as the Palæozoic formations in England. Though occasionally traversed by faults, yet with rare exceptions most of the strata have been elevated above the water without much bending or contortion on a large scale. What chiefly took place was a slight up-tilting of the strata to the west, which, therefore, all through the centre of England, dip as a whole slightly but steadily to the east and south-east. This is evident from the circumstance that on the Cotswold Hills the lowest Oolitic formation (Inferior Oolite, No. 9, fig. 57) forms the western edge of the tableland, while, in spite of a few minor escarpments that rise on the surface of the upper plain, the uppermost Oolitic beds that dip below the Cretaceous strata, are sometimes at a lower level than the Inferior Oolite at the edge of the plateau.

The great result, then, of the disturbance and denudation of the Palæozoic strata, and of the lesser disturbance and denudation of the Secondary rocks, is,