

So great indeed is the contrast between these types, that it is only by a comparison of organic remains that the whole has been grouped together as the deposits of one geological period. In the original Shropshire region described by Murchison, and from which his type of the system was taken, the strata are comparatively flat, soft, and unaltered, consisting mainly of somewhat incoherent sandy mudstone and shale, with occasional bands of limestone. But as these rocks are followed into North Wales, they are found to swell out into a vast series of grits and shales, so like portions of the hard altered Lower Silurian rocks that, save for the evidence of fossils, they would naturally be grouped as part of that more ancient series. In Westmoreland and Cumberland, and still further north in the border counties of Scotland, also in the southwest of Ireland, it is the North Welsh type which prevails. This type, therefore, is really the prevalent one in Britain, extending over many hundreds of square miles, while the original Shropshire type hardly spreads beyond the border district between England and Wales.

Taking first the original tract of Siluria (W. England and E. and S.E. Wales), we find a decided unconformability separating the Lower from the Upper Silurian deposits. In some places the latter steal across the edges of the former, group after group, till they lie directly upon the Cambrian rocks. Indeed, in one district, between the Longmynd and Wenlock Edge, the base of the Upper Silurian rocks is found within a few miles to pass from the Caradoc group across to the Longmyndian rocks. It is evident, therefore, that in the Welsh region very great disturbance and extensive denudation preceded the commencement of the deposition of the Upper Silurian rocks. As Sir A. C. Ramsay has pointed out, the area of Wales, previously covered by a wide though shallow sea, was ridged up into a series of islands, round the margin of which the conglomerates at the base of the Upper Silurian series began to be laid down. This took place during a time of submergence, for these conglomeratic and sandy strata are found creeping up the slopes and even capping some of the hills, as at Bogmine, where they reach a height of 1150 feet above the sea. The subsidence probably continued during the whole of the interval occupied by the deposition of the Upper Silurian strata, which were thus piled to a depth of from 3000 to 5000 feet over the disturbed and denuded platform of Lower Silurian rocks.