

Leaving these details of stratification, I will now endeavour to catch a glimpse of the physical geography of our area during the time that the Cambrian, Lingula, and Tremadoc rocks were being deposited. I have already stated that the purple strata of the Cambrian series seem to me to have been deposited in inland fresh waters, subject to influxes of the sea, probably owing to occasional subsidence of the land; in the same manner, for example, that in Tertiary times the Miocene strata of Switzerland and the Rhine were deposited in great fresh-water lakes, in areas that underwent local temporary submergence. The thick strata of sandstones in the Cambrian rocks of Merionethshire, indicate the neighbourhood of land, and in Caernarvonshire the numerous beds of sandstone and coarse conglomerate interstratified with mud deposits—now slates, point not only to the proximity of land, but even give a clear idea of the kinds of rock of which that land was made. ‘In the 8,000 feet of these rocks in Merionethshire there is very little slate, and even the 700 or 1,000 feet of interstratified slaty beds in Caernarvonshire are quite subordinate to the grits and conglomerates. * * *’ ‘The structure of this land may be partly inferred from the nature of the pebbles in the conglomerate, which are water-worn, and consist of purple and black slates, quartz-rock, felspathic traps, quartz-porphyrines, and jaspers.’

The country from which these pebbles were derived must, indeed, have physically resembled North Wales of the present day, ‘but except these pebbles no trace of that land remains in or near North Wales.’¹ Fragments of this old continent, however, probably still exist in the Laurentian rocks of the Outer He-

¹ ‘The Geology of North Wales,’ p. 160. A. C. Ramsay.