Millstone Grit and Carboniferous Limestone forming the Derbyshire hills, 4'. These strata dip first to the west, underneath the New Red Sandstone, and then roll over to the east, forming an anticlinal curve, the Limestone being in the centre, and the Millstone Grit on both sides dipping west and east; and above the Millstone Grit come the Coal-measures, also dipping west and east. Together they form the southern part of the Pennine chain. Upon the Coal-measures in Nottinghamshire, Derbyshire, and Yorkshire, dipping easterly at low angles, we have, first, a low escarpment of Magnesian Limestone 5, then the New Red Sandstone and Lias plains 6 and 7, which are covered to the east by the Oolite 9, forming a low escarpment, the latter being overlaid by that of the Chalk 11. In this district, except in North Yorkshire, the Oolitic strata, being thinner, do not form the same bold scarped tableland that they do in Gloucestershire and the more southern parts of England. As shown in the diagram the Cretaceous rocks also rise in a tolerably marked escarpment.

Further north the grand general features are as follows:—If a section were drawn across England from the Cumberland mountains south-easterly to Bridlington Bay, the following diagram, fig. 68, will explain the general arrangement of the strata, and the effect of this on the physical geography of the district.

On the west there are the Green Slates and porphyries, No. 1, consisting of lavas and volcanic ashes, hard but of unequal hardness, and some of them, therefore, by help of denudation giving specialities of form to some of the loftiest mountains of Cumberland. Then comes 2, the Coniston Limestone, overlaid by Upper Silurian rocks, 3, forming a hilly country, between which