

the Leadhills and in Loch Ryan. Wherever a large enough mass of any of the later Palæozoic deposits occurs, it shows itself by a difference in the character of the ground overlying it. In the case of the Permian strata, the areas which they occupy have their soil stained a deep red, which is a conspicuous feature in Annandale and the lower part of Nithsdale.

In comparing the geological structure with the external form of the ground, we at once see that though the character of the underlying rocks undoubtedly influences the aspect of the surface, the heights and hollows of the Southern Uplands are certainly not directly due to corresponding uplifts and subsidences. The rocks have been intensely folded and puckered. But the arches into which they have been thrown do not form hills, nor do the troughs coincide with valleys. Indeed, along the crest of the sea-cliffs, we see the rocks cut sharply off by the surface of the country, whether they consist of hard greywacke or crumbling shale, whether they are on end or gently inclined, and whether they have been thrown into anticlinal or synclinal folds. It is plain that to whatever origin the present irregularities of the ground are to be assigned, they are not due to the upward and downward curvatures of the rocks. It will be seen in the sequel, that these uplands, like the Highlands, are a stupendous monument of denudation; that a vast thickness of rock has been ground away from their present surface, and that their hollows and hills have been determined by the same powers of waste that have played a like part in the history of the northern half of the kingdom.

The scenery of the Southern Uplands is distinct from that of any other part of Scotland. It maintains, indeed, a great uniformity, and even monotony, throughout its whole extent. No one can journey, however, through