

chain of hills, &c.) that in describing any extensive tract of country, they must be kept together under the view, or an inextricable confusion will result.

Secondly. The coal-fields of England will, from geographical position, naturally fall under the following arrangement. 1. *The great Northern district*; including all the coal-fields north of Trent. 2. *The Central district*; including Leicester, Warwick, Stafford, and Shropshire. 3. *The Western district*; which may be subdivided into *North-western*, including North Wales, and the *South-western*, including South Wales, Gloucester, and Somersetshire. Physical circumstances also confirm this geographical arrangement.

Pursuing these principles, first, a general account of the characters of the several subordinate formations may be given; and secondly, a particular description of each district as far as is consistent with the limits of the work; tracing through each, the position and relations of the several rock formations above described.

To the first of these objects the four remaining sections of the present chapter will be dedicated; these will treat of the above formations under the same general heads which have been adopted in the former books, excluding however that of "range and extent", which together with the local phænomena of the several districts specified, will form the subject of the ensuing chapters. Two chapters in the nature of an Appendix will close the book; the former devoted to the consideration of the Trap rocks associated in various parts of this series; the latter to a comparative view of the distribution of this series in foreign countries.

## Section II. *Of the Coal-Measures, or Great Coal-Formation.*

*Preliminary remarks on the limestone of this term, and the relations of this and other carbonaceous deposits.*

In speaking of the coal-formation, we must be understood as applying that term emphatically to the great and principal deposit of that mineral, interposed between the newer red or saliferous sandstone, and the great carboniferous limestone and older sandstone formations; or, where these are absent, resting on transition rocks. This is the deposit distinguished by the Wernerians as the *Independent* coal-formation.

It may be useful here to observe that, besides this great deposit, thin seams of carbonaceous matter may be traced in