

to renewed search among the fossiliferous members of that ancient series. A large number of organic remains had been collected from Devonshire, Wales, the Lake District, Rhineland, the Eifel, France, Sweden, Norway, Russia, as well as from New York and Canada. These fossils were distinct from those of the Secondary formations, and they were obviously distributed, not at random, but in groups which reappeared at widely separated localities.¹ As yet, however, no clue had been found to their stratigraphical sequence. Specimens from what are now known as Cambrian, Silurian, Devonian, and even Lower Carboniferous strata were all thrown together as coming from the undefined region of the Greywacke or Transition rocks. A task worthy of the best energy of the most accomplished geologist lay open to any man bold enough to undertake to introduce among these rocks the same stratigraphical method which had reduced the Secondary and Tertiary formations to such admirable order, and had furnished the means of comparing and correlating these formations from one region to another. This

¹ The amount and nature of the information in existence regarding the Transition rocks or Greywacke, at the time when Murchison entered upon their investigation, may be gathered from the summaries contained in the contemporary general treatises on Geology. Even as late as the spring of 1833, Lyell, after devoting about 300 pages to the Tertiary formations, dismissed the Palæozoic series in twelve lines (*Principles of Geology*, vol. iii. (1833), p. 326). One of the fullest of the early descriptions of the older fossiliferous rocks, with copious lists of fossils, will be found in the first edition of De la Beche's *Geological Manual* (1831), p. 433, under the head of "Grauwacke Group." But no attempt is there made to arrange the rocks stratigraphically, and the fossil lists comprise organisms from all the older Palæozoic formations without discrimination of their horizons.