

sidered the lower of these under the name of Permian. The general facies of organic remains in that division is still decidedly Palæozoic. Its brachiopods and its plants connect it with the Carboniferous rocks below. Hence it is placed at the close of the long series of Palæozoic formations. When, however, we enter the upper division of the red rocks, though the general lithological characters remain in most of Europe very much as in the lower group, the fossils bring before us the advent of the great Mesozoic flora and fauna. This group therefore is put at the base of the Mesozoic or Secondary series, though in some regions, as in England, no very satisfactory line of demarcation can always be drawn between Permian and Triassic rocks. The term Trias was suggested by F. von Alberti in 1834, from the fact that in Swabia, and throughout most of Germany, the group consists of three well-marked subdivisions.¹ But the old name, New Red Sandstone, is familiarly retained by many geologists in England. The word Trias, like Dyas, is unfortunately chosen, for it elevates a mere local character into an importance which it does not deserve. The threefold subdivision, though so distinct in Germany, disappears elsewhere.

§ 1. General Characters

As the term Trias arose in Germany, so the development of the Triassic rocks in that and adjoining parts of Europe has been accepted as the normal type of the system. There can be little doubt, however, that though this type is best

¹ "Beitrag zu einer Monographie des Bunten Sandsteins, Muschelkalks, und Keupers und die Verbindung dieser Gebilde zu einer Formation," Stuttgart, 1834, p. 324. Thirty years later the same observer published his "Ueberblick über die Trias," 1864, and gave a synopsis of the Triassic literature of that interval.