

Section v. Permian (Dyas)

§ 1. General Characters

THE Carboniferous rocks are overlain, sometimes conformably, but in Europe for the most part unconformably, by a series of red sandstones, conglomerates, breccias, marls, and limestones. These used to be reckoned as the highest part of the Coal formation. In England they received the name of the "*New Red Sandstone*" in contradistinction to the "*Old Red Sandstone*" lying beneath the Carboniferous rocks. The term "*Poikilitic*" was formerly proposed for them, on account of their characteristic mottled appearance. Eventually they were divided into two systems, the lower being taken as the summit of the Palæozoic series of formations, and the upper as the basement of the Mesozoic. This arrangement, which is mainly based on the difference between the organic remains of the two divisions, is generally adopted by geologists.²⁴³

Following the usual grouping, we remark that the portion of the red strata classed as Palæozoic has received the name of "*Permian*," from its wide development in the Russian province of Perm, where it was studied by Murchison, De Verneuil, and Keyserling. In Germany, where it ex-

²⁴³ Some writers, however, still contend that the red rocks of Europe between the summit of the Carboniferous and base of the Jurassic system form really one great series, the break between them being merely local. See for example, H. B. Woodward, *Geol. Mag.* 1874, p. 385; "*Geology of England and Wales*," 2d edit. 1887, p. 207, and authorities cited by him.