

*B. ceratophaga*, *Mytilus squamosus*, and *Arca striata* are characteristic. The univalves are represented by 10 genera and 26 species, including *Pleurotomaria* and *Turbo* as common genera. Nine genera of fishes have been obtained chiefly in the Marl Slate, of which *Palæoniscus* and *Platysomus* are the chief. These small ganoids are closely related to some which haunted the lagoons of the Carboniferous period. Some reptilian remains have been obtained from the Marl Slate, particularly *Proterosaurus Speneri* and *P. Huxleyi*, while *Lepidotosaurus Duffi* has been found in the Magnesian Limestone.

Fine sections are exposed on the south coast of Devonshire of coarse breccias and red sandstones, which have been assigned by some writers to the Trias, by others to the Permian series. They rest unconformably on Devonian strata, and have been derived from the degradation of these rocks. At many places in the interior to the west of Exeter bands of basic amygdaloidal lavas are intercalated in them, like the volcanic sheets in the Permian sandstones of Scotland. Owing to the apparent passage of these red strata upward into others which graduate into the base of the Lias, and are undoubtedly Triassic, the whole series of red sediments has not unnaturally been regarded as referable to the Trias. The resemblance of the lower parts of the series to Permian rocks, coupled with the occurrence of volcanic bands in them, has more recently been held to justify the separation of these lower breccias and sandstones from the rest as representatives of the Permian series of the Midlands.<sup>254</sup>

Germany, etc.<sup>255</sup>—The "Dyas" type of the system attains a great development along the flank of the Harz Mountains, also in the Rhine province,<sup>256</sup> Thuringia, Saxony, Bavaria,

<sup>254</sup> Hull, *Quart. Journ. Geol. Soc.* xlviii. 1892, p. 60; A. Irving, *op. cit.* xlv. 1888 and xlviii. p. 68.

<sup>255</sup> H. B. Geinitz, "Die animalischen Ueberreste der Dyas," 1861–62, *Suppl.* 1880–82; "Zur Dyas in Hessen," *Festsch. Ver. f. Naturk. Cassel*, 1886; Geinitz and Gutbier, "Die Versteinerungen des Zechsteinsgebirge," etc. 1848–49; C. E. Weiss, "Fossile Flora der jüngst. Steinkohlenf. und des Rohliegend." etc. 1869–72. Much recent information will be found in the publications of the Geological Surveys of Prussia, Saxony and Alsace-Lorraine. See, for example, E. W. Benecke and L. van Wervecke, *Mitth. Geol. Landesanst. Elsass-Lothr.* iii. part i. 1890.

<sup>256</sup> For an account of the Permian development in this region, see especially H. von Dechen, "Geolog. und Palæont. Uebersicht der Rheinprovinz und der Provinz Westfalen," Bonn, 1884, p. 291.