

therefore suggested the name of *Dyassic* as a more suitable general term than Murchison's name derived from the Permian province. He further proposed to associate the Dyas and Trias as members of one great period in the geological succession, equal in rank with the next older Silurian and Devonian or greywacke period, and with the next younger Jurassic and Cretaceous period. H. B. Geinitz (1861-62) adopted Marcou's term of Dyas for the Permian system, and at the present day both names are usually given in the text-books.

The Dyassic deposits in the Saar and Rhenish district were investigated in detail by E. Weiss (1869-72), who proved the palæontological identity of the Fish, Amphibian, and Plant remains in the Lebach strata of the Saar basin with the Red Underlyer series in Lower Silesia and Bohemia, and transferred the Cuseler strata below the plant-bearing series from the Carboniferous system with which they had been erroneously included to the Dyassic system. Weiss also pointed out as important features of distinction that the lowest beds of the Red Underlyer or Lower Dyas occasionally contained workable coal-seams, and that the upper beds of the Lower Dyas were interbedded with thick flows of eruptive rocks (porphyry, porphyrite, melaphyre, etc.). Similar features were determined by the geologists of the Prussian Survey Department in the Harz, in Thuringia, and in Silesia, and by Credner and Sterzel in Saxony.

The structure and composition of the Copper Slate and Zechstein group, or Upper Dyas, had been so exhaustively treated by Lehmann, Füchsel, and Freiesleben that little remained to be added by recent research. From the predominance of fossil fishes and plant remains in the copper slates, and the frequent intercalation of thick deposits of salt between more calcareous fossiliferous portions of the Zechstein, the Upper Dyas of Central Europe is assumed to have taken origin in large inland seas, occasionally subject to periods of desiccation.

In the Central French plateau, the development of the Permian rocks is very similar to that in the Saar basin. The English deposits correspond more to the Thuringian development, and consist of the Red Underlyer group (locally called "Lower New Red Sandstones"), bituminous shales, Magnesian limestone, dolomite, marls, and gypsum. An