

Ferdinand Roemer in 1870 gave an accurate description of the coalfields in Upper Silesia, and in 1882 Schütze published an account of the Lower Silesian and Bohemian Coal deposits. The Saxony district was examined by H. B. Geinitz (1856), who tried to determine two palæontologically distinct zones in the Productive formation, a lower zone exhibiting chiefly Sigillarian remains, and an upper with Calamites and ferns in greater profusion. A similar sub-division was attempted by E. Weiss for the Coal Measures of the Saar basin, and Schütze and Stur also recognised sub-divisions of the Coal Measures in Hungarian districts. But these sub-divisions can at the most have a local value; geologists agree that the fossil flora of the Coal Measures cannot admit of any general palæontological sub-division, as it presents a remarkably uniform character throughout all parts of the world.

*E. Permian System.*—The youngest system of the Palæozoic epoch has played a noteworthy part in the history of Stratigraphy. The industrial importance of the copper slate and the metalliferous "Zechstein" group in Germany secured it the attention of mineralogists for many centuries. The copper-bearing deposits and the Coal Measures formed the chief kernel of Werner's Flötz formations (*ante*, p. 58), and were selected by the earliest German stratigraphers, Lehmann and Füchsel, for extended field examination. The recognition by these stratigraphers of a definite series of lithological sub-divisions, together with their representation of the field-outcrop of these sub-divisions upon good maps may be regarded as the starting-point in Germany of the present methods in stratigraphical research. Füchsel and Lehmann tabulated the complete succession of the rocks now known as Permian, from the Red Underlyer or basal series of coarse conglomerates, shales, and sandstones, to the uppermost beds of limestone, dolomite, and marls in the "Zechstein" or mine-stone series. At that time the Zechstein series of Central Germany was not unnaturally confused with the stupendous masses of limestone, dolomite, and interbedded marls in the Alps and Jura mountains, and the apparent lithological resemblance of the series was the source of the mistaken conception held by early Alpine geologists regarding the age of the so-called "Alpine limestone" and "Jura limestone."

In England, Conybeare and Phillips identified quite