Carboniferous formations; the "Augite Porphyry" is the contemporary of the Permo-Triassic and Liassic formations; the "Trachyte" is correlated with the Jurassic and Cretaceous formations; the "Basalt" with the Tertiary deposits; and the Lava with the Diluvial and Alluvial accumulations. The enumeration of the stratigraphical rock-succession undoubtedly shows a considerable advance on the text-books with almost exclusively Wernerian sub-divisions, which had hitherto held the place of authority in Germany.

Ami Boué, in his *Geognostic Sketches in Germany* (1829), describes the series of formations and their distribution in Germany. These sketches give a wonderfully comprehensive view of the stratigraphical relations in Germany itself, and draw a careful comparison between the character of the formations in Germany and their age-equivalents in other parts of Europe. A much clearer insight is given into the leading stratigraphical features of the Alps, Ami Boué's personal knowledge of the rock-succession in other countries enabling him to form broader conceptions regarding different developments or facies of formations belonging to the same geological epoch. But still more important was the new light thrown by Ami Boué upon the distribution of Tertiary deposits in Central Europe. He pointed out that these deposits occur in five well-defined basin-shaped areas: namely, the North-German, Bohemian, Rhineland, Swiss-Bavarian, and Austro-Hungarian depressions. Boué showed that in none of those areas were the deposits identical in character with the deposits of the same age in France and England. The exposition of these relationships is one of the finest contributions to the stratigraphical knowledge of the time, Boué relying almost entirely upon his own independent observations. Boué's penetration is the more remarkable since it was little aided by palæontological data, and Boué was no great believer in the stratigraphical value of fossils.

Alexandre Brongniart was one of the most active Continental pioneers of the application of palæontological methods to the problem presented by geological field-surveying. In 1829 he made the attempt to describe all the rocks composing the earth's crust in chronological order, and to introduce a new nomenclature for the successive horizons of rock, which should be quite independent of lithological features. In his system Brongniart distinguished nine classes of *Terrains*, stating that