

Wernerian school already recognised most of the questions which are at present treated in text-books.

Considerations of the earth's physiography, dynamical geology, petrography, geogeny, and architecture or tectonic structure were fairly familiar ground at the time; the great difference is in the teaching of the chronological succession of the rock formations. Modern geology gives pre-eminence to the accurate determination of the age of the rocks, stratum by stratum, according to the contained fossils; Werner's disciples were satisfied with an approximate conception of the relative age of whole formations, and scarcely associated the study of historical succession of organised creatures with any geological interest or value.

In France, three distinguished pupils of Werner wrote text-books upon the basis of his teaching—Brochant de Villiers (1800), De Bonnard (1819), and De Voisins (1819). The *Treatise of Geognosy*, published by D'Aubisson de Voisins, won wide popularity on account of its clearness and the elegance in its mode of treatment. Like Reuss, D'Aubisson held closely to the methodical arrangement of the subject introduced by Werner in his lectures, so that the general arrangement of these two text-books is very similar; but the French author took his illustrative examples chiefly from French geology, Reuss from German districts. In common with most of Werner's disciples, D'Aubisson de Voisins made many blunders in respect of the Secondary formations. He united Alpine limestones (Tri.-Jur.-Cret.), the limestones of the Jura chain, the Magnesian limestones (Permian) and Liassic limestones of England and the German *Zechstein* (Permian) in one group—that of the Older Secondary limestones; and treated as Younger Secondary limestones, contemporaneous with German Muschelkalk, the Jurassic calcareous strata of France, the Forest Marble and Cornbrash, and Portland stone of England (Middle and Upper Jurassic), the Solenhofen lithographic stone (Upper Jurassic), and the fish-shales of Monte Bolca (Mid-Eocene).

An important deviation from Werner's teaching was made by D'Aubisson in his insertion of Tertiary formations between the Secondary deposits and diluvial clays and gravels. According to D'Aubisson, the Tertiary series included the deposits of the Paris basin (now grouped as Eocene and Oligocene), so clearly elucidated by Brongniart and Cuvier;