

The Quader Sandstone and Greensand in North Germany were united with the White Chalk by Hoffmann in 1830, and recognised as the equivalents of the Cretaceous system. He compared the *Quader Sandstone* with the upper and lower greensand deposits; the *marly, calcareous, or siliceous rocks* between Quader Sandstone and Chalk in North Germany with the Chalk Marl of the North-Western basin; *the grey, earthy marls and white chalk* with the Lower and Upper Chalk of England.

The discovery of older Cretaceous deposits in the Swiss Jura mountains was an important step in advance. As far back as 1803, Leopold von Buch had drawn up a very detailed catalogue of the rocks in the neighbourhood of Neuchâtel, but his manuscript was not published until sixty-four years later, after the death of the author. A copy of the manuscript had been, however, presented by Ami Boué to the library of the French Geological Society, and geologists had tried in vain to find equivalents for the series of strata described in it.

In 1836 Auguste de Montmollin demonstrated that the youngest Jurassic rocks were succeeded by a diversified complex of strata comprising yellowish limestone and blue marls, whose fossils resembled those of the English greensand; Montmollin called the complex "Terrain crétacé du Jura," and Thirria, who almost simultaneously found similar strata in the neighbourhood of Besançon, applied the name of "Terrain Jura-Crétacé."

But before the actual publication of Montmollin's treatise, Thurmann had made the proposal at a Congress of the French Geological Society in Besançon (1835) to introduce the designation of *Neocomien* for the newly-discovered complex of strata, and this name was immediately adopted by Dufrenoy and Élie de Beaumont, and received the authority of their geological map and text. These two authors sub-divided the Cretaceous formation into a *Lower Group*, comprising (a) Wealden, Neocomian, and ferruginous sand; (b) Greensand; (c) Chalk Marl; and an *Upper Group* represented by the White Chalk. The chief divisions of the Cretaceous deposits having been thus definitely fixed in France, the following years between 1835 and 1860 were signalised by the publication of an extraordinary number of special papers devoted to the geology and palæontology of the Cretaceous system in French localities.

Two valuable memoirs were published in 1841 and 1842 on