

caution as a basis of establishing a parallel between rocks in distant areas.

Although Dumont's classification was based wholly upon the characters displayed by the succession in Belgium, it is nevertheless excellently arranged both stratigraphically and lithologically. De Koninck and Murchison afterwards tried to bring his classification into harmony with that of Great Britain and the neighbouring districts of Germany. They relegated the whole of the Terrain Ardennais as well as the Gedinnien group into the Silurian system, and the Coblentzien, Ahrien, Eifelien, and the lower part of the Condrusien, into the Devonian system. Subsequently, Gosselet has carried out a series of studies extending over thirty years on the Palæozoic deposits of Belgium and the Ardennes, and has elucidated the palæontological and stratigraphical relations of the area with admirable care and accuracy.

The Devonian deposits in Brittany and the lower Loire district have been examined by Barrois and Oehlert, while the richly fossiliferous neighbourhood of Cabrières, near Montpellier, has been the subject of several able palæontological monographs by Fournet, Koenen, Frech, De Rouville, and others. The Spanish Devonian deposits have been described by Verneuil, Casiano da Prado, Schulz, and Barrois; while the Devonian occurrences in the eastern Alps have been elucidated by Hoernes, Benecke, and Frech.

*D. Carboniferous System.*—Less difficulty is offered in the classification of the Carboniferous system than in that of the three oldest Palæozoic systems of which Frech has given an exhaustive account in the *Lethæa Palæozoica* (1897). As far back as 1808, D'Omalius d'Halloy comprised the Belgian Carboniferous limestone as a lower group, and the sandstones, shales, and seams as an upper group under the name of *Terrain bituminifère* or *Houiller*. In 1822 Conybeare and Phillips included Carboniferous limestones, the millstone grit and coal measures in the Carboniferous system, but they also placed in it the Old Red Sandstone as a lower sub-division. Murchison and Sedgwick in 1839 transferred the Old Red Sandstone into the Devonian, and recognised in the so-called Culm shales of Devonshire, and in the shales with *Posidonomya Becheri* in Germany, an arenaceous and argillaceous littoral equivalent of the Carboniferous limestone. The sub-division