

flank the isolated pre-Cambrian axis of upper Languedoc the most satisfactory fossil evidence has recently been obtained, showing the existence there of both the Paradoxidian (*Paradoxides*, *Conocoryphe*) and Olenidian divisions of the Cambrian system.³⁵ Among the French Pyrenees, narrow strips and patches of strata have been detected which, lying below fossiliferous Lower Silurian rocks, are believed to be Cambrian.³⁶

In various parts of Spain, indications of the presence of Cambrian rocks are furnished by Primordial fossils. In the province of Seville the highest beds have yielded *Archæocyathus*, and in the province of Ciudad-Reale, Primordial trilobites (*Ellipsocephalus*). But it is in the Asturias that the most abundantly fossiliferous rocks of this age occur. They are grouped by Barrois into (a) Slates of Rivadeo, blue phyllades and green slates and quartzites, in all about 3000 metres, and (b) *Paradoxides* beds of La Vega (50 to 100 metres) composed of limestones, slates, iron-ores, and thick beds of green quartzite. In the upper part of (b) a rich Primordial fauna occurs, comprising a cystidean (*Trochocystites bohemicus*) and trilobites of the genera *Paradoxides*, 2 species, *Conocoryphe* (*Conocephalites*), 3 species, and *Arionellus*, 1 species.³⁷

In the Thuringer Wald certain phyllites, clay-slates, quartzites, etc., passing up into strata containing Silurian fossils are referred to the Cambrian system. The quartzites have yielded some indistinct fossils referred to *Davidia* and *Lingula*.³⁸ But it is in Bohemia that the central European type of the Cambrian system is best developed. The classic researches of Barrande have given to the oldest fossiliferous rocks of that country an extraordinary interest. At the base of the Bohemian geological formations lie the slates which Barrande placed as his Étage A (Przibram

Hébert, Bull. Soc. Geol. France, (3) xiv. 1886, p. 713. See also, Tromelin et Lebesconte, Bull. Soc. Geol. France, iv. 1876, p. 583; Tromelin, Assoc. Française, 1879, p. 493, Lebesconte, Bull. Soc. Geol. France (3) x. p. 55, xix. 1891, p. 15, Guillier, op. cit. (3) ix. p. 374; Barrois, op. cit. v. 1877, p. 266, Carte Geol. France, Redon sheet.

³⁵ J. Bergeron, Bull. Soc. Geol. France, xvi. 1888, p. 282, "Étude géologique du massif ancien au sud du Plateau central," 1889.

³⁶ J. Caralp, "Études géol. sur les hauts massifs des Pyrénées centrales," 1888, p. 452. E. Jacquot, Bull. Soc. Geol. France, 1890, p. 640.

³⁷ Barrande, Bull. Soc. Geol. France (2) xvi. p. 543. Macpherson, Neues Jahrb. 1879, p. 930. Barrois, Mem. Soc. Geol. Nord, ii. 1882, p. 168.

³⁸ H. Loretz, Jahrb. Preuss. Geol. Landesanst. 1881, p. 175. Marr, Geol. Mag. 1889, p. 411.