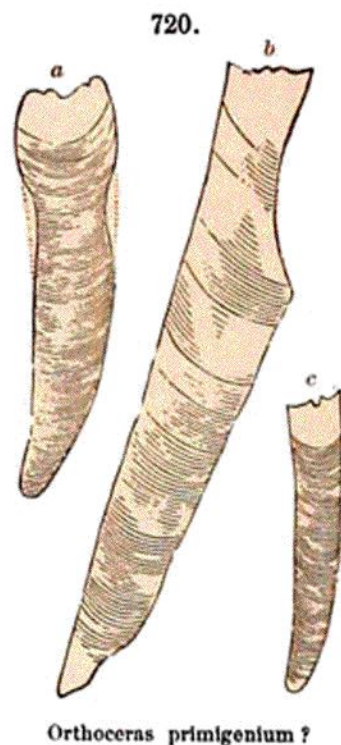


The fossils discovered by A. Wing in the Taconic formation in the limestone of central Vermont were from many localities, and were more or less perfectly determined by Billings of Canada (*Am. Jour. Sc.*, xiii., 1877). Some of them are *Pleurotomaria staminea*, *Pleurocystites tenuiradiatus*, Crinoidal disks, and large specimens of *Maclurea* from West Rutland; *Trinucleus concentricus* from Hubbardton; from East Cornwall, *Stenopora fibrosa*, *S. Petropolitana*, with species of *Orthis*, *Strophomena*, *Rhynchonella*, and *Orthoceras*, pronounced Trenton by Billings; north and south of East Cornwall, *Rhynchonella* beds containing pygidia of *Trilobites*, a large *Maclurea*, *Bathyrus Saffordi*; at Bascom's Ledge, 3 miles west of south of West Cornwall, *Asaphus canalis*, *Bathyrus conicus*, *Maclurea matutina*, made Calcareous by Billings; east of Shoreham, *Bathyrus extans*, *Columnaria alveolata*, *Trinucleus concentricus*; in southern Bridport, *Asaphus canalis*, *Bathyuri*, *Maclurea matutina*; in Orwell, *Petraia profunda* (?), *Stenopora fibrosa*, and *S. Petropolitana*, *Receptaculites Neptuni*; at Ellsworth Ledge, 2 to 3 miles west of Middlebury, a large *Orthoceras*, *Bathyrus Saffordi*, and from higher beds *B. Angelini*, *Asaphus canalis*, *Maclurea*, *Orthis*, *Leperditia*, Crinoidal stems; 2 miles north of Middlebury, the slightly curved *Orthoceras*, here figured, natural size, having 40 to 52 septa to an inch (1877); and half a mile to the northwest a large *Maclurea*. For an account of the discoveries of Dwight and others, see the references already given, page 495. The discoveries of Walcott were among the latest, and as they were made in the typical quartzite of Vermont almost down to the Massachusetts line, also in the Eolian limestone just west, in Bennington, Vt., Williamstown, Mass., and in eastern New York, and in other localities in western Vermont and eastern New York, and thus covered all the Taconic formations, the demonstration became complete that the Taconic series is simply a combination of the Cambrian and Lower Silurian.



*Orthoceras primigenium?*

### EUROPEAN.

The Lower Silurian series of Great Britain comprises, commencing below, the following groups:—

1. **The Arenig group** (Sedgwick, 1852): slates and flaggy sandstones which rest conformably on the Tremadoc slates of the Upper Cambrian. The beds occur in North and South Wales, and have a thickness of 2500 feet in the latter. The stiper stone beds of Shropshire are here included, and the upper part of the Skiddaw slates. In Merionethshire, North Wales, the volcanic rocks of this period include a lower series of ashes and conglomerates, in some places 3300 feet thick; a middle group of felstones and porphyries 1500 feet thick; and an upper series of fragmental deposits 800 feet.

2. **The Llandeilo flags**: sandstones and shales of Llandeilo in Caermarthenshire, Wales, where first described by Murchison (1834).—In Westmoreland and Cumberland, or the Lake District, the volcanic deposits of this period, but beginning in the Arenig and continuing through the Bala,