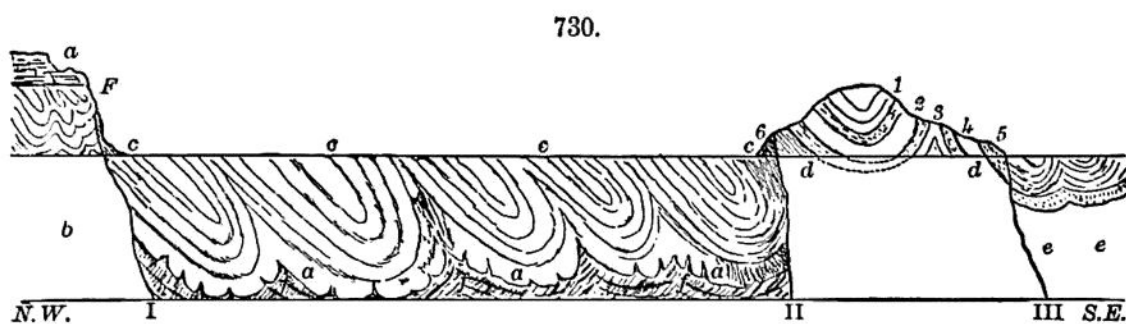


deposition from the beginning of the Cambrian to the close of the Lower Silurian; and it was a very long era, possibly as long as all time that has since elapsed. Mountain-making finally ensued, producing, among its effects, the Taconic Mountain Range along western and northwestern New England, and also the Cincinnati geanticline, besides uplifts in Nova Scotia and New Brunswick. Moreover, there is probable evidence that the Taconic Range at the north was but one of a series along the Atlantic border.

The Taconic Range and system. — Some account of the Taconic Range has been given on pages 386, 387. There were great flexures, great faults, and general metamorphism. Fig. 730 represents a section, by Selwyn, extending, near Quebec, from Montmorenci Falls on the northwest and crossing the north channel of the St. Lawrence to Orleans Island.



Faulted and plicated rocks from Montmorenci Falls to the island of Orleans and beyond. Vertical scale, 500 feet = 1 inch; horizontal scale, $1\frac{1}{4}$ miles = 1 inch. Selwyn.

The falls are to the left at F, and I marks the line of one fault. To the left of this fault-line are Archæan rocks overlaid horizontally by 50 feet of Trenton limestone. To the right of it there are Lower Silurian rocks, in a plicated condition, from the Calciferous and Chazy (Quebec group, *f, f, f*) at the bottom, through the Trenton limestone (*a, a, a*) to the Utica and Hudson shales (*c, c, c*), the upper of these rocks making the bottom of the north channel of the river. To the right, at II, there is a second fault, the main fracture; and at III, a third fault. Between the two is Orleans Island, the beds numbered 6 containing Utica Graptolites; and 1 to 5, those of the so-called Levis formations of the Quebec group of the age of the Calciferous and Chazy.

From this region faults continue in a south-by-west direction, through Vermont and eastern New York. They are conspicuous in Vermont, at Snake Mountain, in Addison County, and also south of Shoreham, where the red sandrock rests on Hudson shales (Wing); and in New York at Bald Mountain, and elsewhere in Washington County, near Rhinebeck on the Hudson, and in Dutchess County; and also in New Jersey, a mile west of Otisville, and at the Lehigh Water Gap (G. H. Cook).

Fig. 731 represents the fault at Snake Mountain, as given by A. Wing (1877). To the right of F is the south end of the ridge of Cambrian red sandrock, called Snake Mountain; to the left are Lower Silurian formations