DEVONIC

The division line between the great Siluric and Devonic systems is well marked here on account of the entire absence of Helderbergian limestones, which in the eastern part of the State represent the earlier stages of Devonic deposition.

Its peculiarities in this area have been fully noted by Clarke,[1] Grabau,[2] and Hartnagel[3] and are briefly stated below.

Oriskany sandstone horizon

The Cobleskill waterlime is the highest Siluric formation represented on the Buffalo quadrangle. The Paleodevonic strata rest unconformably on it, the Rondout waterlime and the Manlius limestone not extending into the western part of the State. The surface of the Cobleskill gives unmistakable evidence of having suffered considerable erosion in the long period during which those formations were being deposited. The most important facts indicating this interval of erosion are the following:

In the Buffalo Cement Co.'s quarries well defined channels and irregular depressions make the surface of the stratum exceedingly rough and hummocky and its line of contact with the superjacent formation as seen in the quarry walls very uneven.

In the bottom of some of these depressions there appear thin masses of dark shale and a conglomerate composed principally of small waterworn fragments of waterlime in a matrix of indurated quartz sand. Because of the extremely slender representation of this formation it is not introduced on the map.

In the quarry wall there are two fissures that extend from the top of the Cobleskill to the bottom of the cement layer. They have been filled with this quartz sand and are covered by a few inches of the conglomerate. This filling of the fissures has been considered as Oriskany sediment by Clarke[1], and the erosion interval as comprising the Helderbergian and part of Oriskanian ages.

At Falkirk, Erie co., and Indian Falls, Genesee co., the character of the deposits in the horizon of this erosion interval is still similar to those on this quadrangle, but farther east the broad lentils of characteristic Oriskany sandstone appear in it.

At Morganville the sandstone is 4 feet thick; in the salt shaft at Livonia, 4 feet, 6 inches; at Honeoye Falls, 1 foot, 2 inches; at North Leroy and Victor only the conglomerate is present; at

[1]N. Y. State Mus. Mem. 3. 1900. p.96–98.
[2]Geol. Soc. Am. Bul. 1900. v.ii. p.357–61.
[3]State Paleontol. An. Rep't 1902: N. Y. State Mus. Bul. 69. 1903. p.1138.