

was referred by Bishop to the "Onondaga limestone" (in distinction from the Corniferous limestone, which in this paper is termed Onondaga limestone) and to the Manlius limestone by Clarke¹ and Grabau.²

The Cobleskill waterlime immediately overlies the cement layer, the transition being gradual through 2 or 3 feet of strata, above which the rock is a dark subcrystalline dolomitic limestone in uneven layers, usually but a few inches thick, separated by thin seams of carbonaceous matter. It sometimes has a brecciated appearance and after exposure is usually more or less porous, owing to the dissolving out of calcite crystals and of a small coral *Cyathophyllum hydraulicum*, which is very common throughout and specially so in the upper part. Though very dark colored when fresh, the rock becomes buff or light brown when exposed and it is locally known to quarrymen as "bullhead" or "pumpkin head."

The formation is 7 to 9 feet in thickness on this quadrangle, the variation being due to erosion of the upper surface and not to irregularity of deposition which the evenness of the bedding planes shows to have taken place in quiet waters.

At Falkirk, Erie co. this formation attains a thickness of 14 feet, but it becomes thinner again toward the east as far as Livingston county; then it increases slowly to 10 feet in Herkimer county, again diminishing to 6 to 8 feet in the Hudson valley. The rock is fairly fossiliferous, the most abundant form being the small coral *Cyathophyllum hydraulicum* Simpson.

Besides this are found in Erie county:

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| <i>Nematophytum crassum</i> Penhallow | <i>W. nucleolata</i> Hall var. |
| <i>Favosites</i> sp. | <i>W. cf. laevis</i> Whitfield |
| <i>Orthothetes interstriatus</i> Hall (=O. hydraulicus Whitfield) | <i>Rhynchonella</i> sp. |
| <i>Spirifer eriensis</i> Grabau | <i>Loxonema</i> ? |
| <i>Whitfieldella sulcata</i> Vanuxem | <i>Pleurotomaria</i> ? |
| | <i>Trochoceras gebhardi</i> Hall |

There are good exposures of this formation on Scajaquada creek in Forest Lawn cemetery; in the Buffalo Cement Co.'s quarries; in Miller's quarry and at Williamsville on this quadrangle, and at Akron, Falkirk, Indian Falls, Morganville, North Leroy, East Victor, Union Springs, DeWitt, Cobleskill, Rondout and many other places in the central and eastern parts of the State.

¹N. Y. State Mus. Mem. 3. 1900.

²Geol. Soc. Am. Bul. 1900. v. 11.