

dam and Hoffman, as Prosser has shown, and is in part massive, in part thin bedded and lumpy. At Tribes Hill there is a 3 foot lumpy layer between the Lowville and Trenton which he refers doubtfully to the Black River. At Canajoharie and Spraker the Black River is absent, as is the Lowville, flat Trenton beds lying directly on slightly folded Beekmantown. In the district about Little Falls it is sometimes present, but more frequently absent, varying rapidly within short distances. Thus at Ingham Mills Prosser gives two sections, which the writer has also seen, in one of which there are 5 feet of black, lumpy limestone, capped by an 18 inch stratum which is lithologically like the Lowville beneath. Near at hand, in the second section, the succession is the same, but the Black River is only 2 feet thick, though it is followed by the same recurrent Lowville layer, above which the Trenton appears. At the old kiln, $\frac{1}{4}$ mile to the north, is a still better section, showing 8 feet of fossiliferous Black River limestone, underlain by a thickness of 10 feet of Lowville beds, and capped by the Trenton [pl.4]. As in all cases hereabout, the rock is quite thin bedded and lumpy with shale partings. Northward from Little Falls the formation is seldom present and then is very thin; the same is true in the many sections about Middleville. About Newport it has reappeared, with a thickness of 5 feet to 6 feet, thin bedded and lumpy as at Ingham Mills. Followed northwest from here it thickens, and becomes persistent and massive. T. G. White reports a thickness of 20 feet at Boonville and Lyons Falls, respectively 25 miles and 35 miles northwest of Newport, in the Black river valley.¹ It is here for the most part quite massive, though somewhat shaly in its upper portion.

Farther to the northward, there is little or no accurate published information concerning the formation. Emmons gives the thickness at Watertown as from 7 feet to 8 feet, and the rock somewhat lumpy, though without shaly partings.² All along this side of the region the glacial deposits are exceedingly heavy, making rock outcrops very exceptional and meager. There seems however, no reason to doubt that the Black River

¹N. Y. State Mus. 51st Rep't, 1: 127-29.

²Geol. N. Y. 2d Dist. p.386.