great, and also that it diminishes somewhat westwardly, so that it has but little over half the thickness about Utica that it has in eastern Montgomery county.

North and west from Little Falls, it will be remembered that the Trenton thickens, rapidly and suddenly, and it is of interest to note the coincident thinning of the Utica. Commencing at the north, Walcott's measured section along Sandy creek, in Jefferson county, shows the Utica to be 180 feet thick, with an additional 100 feet of passage beds to the Lorraine shales above.[1] In Oswego county Orton reports, at Central Square 729 feet of shales (Pulaski and Utica) between the Oswego sandstone and the Trenton, of which 150 feet are ascribed to the Utica; at Oswego 597 feet of shales in the same interval; at Stillwater 643 feet, of which 113 are thought to belong to the Utica; about Pulaski 300 feet to 500 feet of shales, of which 100 feet to 250 feet represent the Utica thickness; and at Sandy Creek (Oswego, not Jefferson county), 250 feet to 300 feet of Utica.[2] These are vastly thinner than the Mohawk sections and overlie in general from 450 feet to 650 feet of Trenton, usually in a definite inverse ratio, a strong indication of the contemporaneity of the upper Trenton and lower Utica in the contrasted districts. Moreover, Prosser shows 1020 feet of shales in the Vernon well, of which 300 feet are Utica, overlying 350 feet of Trenton; 873 feet in the Chittenango well, of which 233 feet are Utica, overlying 60 feet of passage beds and some 600 feet of Trenton; 505 feet at Baldwinsville, north of Syracuse, the amount to be attributed to the Utica not being stated; and at Auburn 557 feet of shales, the drill resting in the Trenton 240 feet below its summit.[3] These show definite Trenton thickening, and Utica thinning westward, though the change is more gradual than it is to the north.

Lorraine formation. While no paleozoic rocks younger than the Utica shale are found in sufficient proximity to the Adirondack region to justify any detailed discussion of them in a consideration of Adirondack rocks, yet some of them are sufficiently involved with its past history, as will appear beyond, to deserve some notice.

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[1] *Op. cit.* p.348.
[2] N. Y. State Mus. Bul. 30, p.456, 449, 442, 437.
[3] Am. Geol. 25:152, 161.