

Level of Bottom of Canal emptying into the Basin or Reservoir

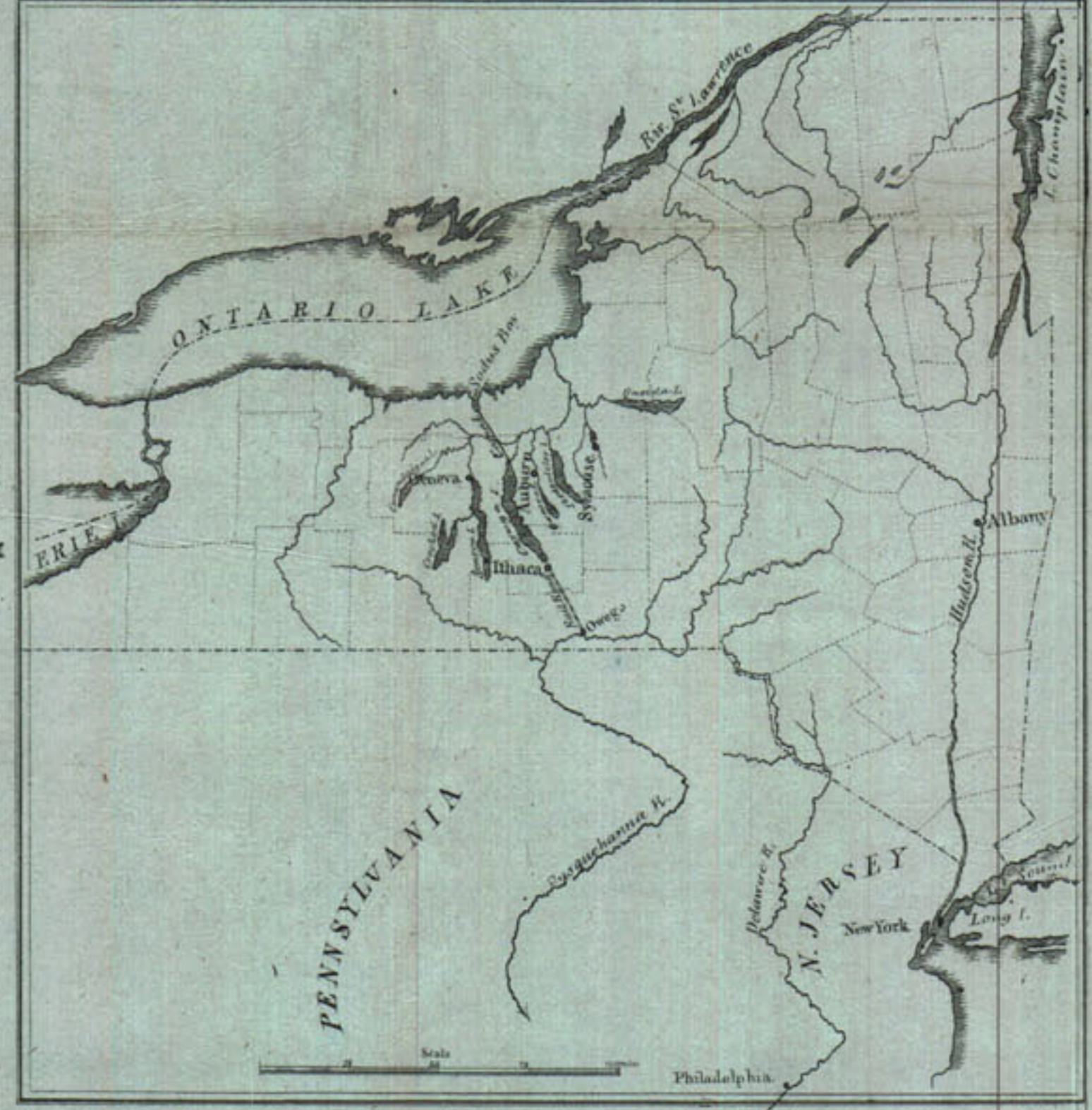
Surface of land on the Road

Top of Pond 10 1/2 feet above Bottom of Canal

Bottom of the Creek on the West location line

In the annexed Profile the Water is taken from the Pond at the Gun Factory, conveyed 212 feet by a Canal to the Basin, thence led on and by the several falls, and the surplus water in the Creek, is connected by the Canal from the Damwell at Water privilege No 12 by raising Dam 14 feet from the flat Rock at the turn of the Creek by the old Gun Factory as per Plan the Reservoir will flow 14 acres, average 5 feet deep, equal to 70 Acres, 1 foot deep an Area of land 1 foot deep, is considered equal to 1 1/2 Horse Power, under 24 foot fall of the Water 2 Hours. The Profile exhibits a Dam 14 feet high, and the Pond to be drawn down 14 feet if needed. The water from the Basin falls 372 feet to the West line of location reducing from all the falls now used at the Paper Mill 2 1/2 feet leads 342 1/2 feet exclusively to the Proprietors, which say only 346 feet, as the Notion. The Pond or Reservoir contains 1500000 Gallons when full, a capacity in the power of the stream over the 546 feet fall, equal to 1600 Horse Power 12 Hours pr day, to which add the natural stream as it runs in the driest part of the Season is with this present Month, equal to 42 1/2 Horse Power, over 24 feet fall of the water, would be equal on the 346 feet fall to 722 Horse Power. The Stream in the driest Season of the Year, with the addition of the proposed Reservoir, may safely be computed, at 1600 Horse Power, for its Minimum, or to operate 121,000 Cotton Spindles, say 7 1/2 Spindles to each 24 feet fall, with the necessary preparation for making Cloth, from Yarn No 12, and ordinarily the Stream is sufficient for doing nearly double that amount.

Note: By allowing the Pond to be drawn down 10 feet and average of the Water 5 feet deep, it will discharge 309200 Cubic feet of Water, equal by the rules of Mathematical Calculation, to 1600 Horse Power, 12 Hours pr day on 346 feet fall below the Dam



MAP
OF
ITHACA.
NEW YORK.

J. Carrers Lithography - Cor of Nassau & Spruce Streets N.Y.

Scale 480 Feet to an Inch

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