duce a truly formidable sum to be expended in the acquisition of land, and the satisfac ion of verdicts; this consideration induced an abandonment of the plan at that time.

Recently it occurred to me that we might economically lower the 67th level 3 feet, and thus reduce the height of the dam to 18 feet above its base. and it was hoped that with this reduction and a long overfall to the dam, levels of no very expensive character would enable us to shield the farms from floods, but a recent instrumental survey resulting most unfavorably, has convinced my mind that a permanent feeder from the main Potomac at this point is impracticable at any reasonable cost.

3d plan proposed for the intermediate feeder viz: by a high dam across the valley of Town Creek, not far above the Mill, and at a very favorable site, to form a Reservoir of about 50 feet available depth, and 350 acres surface, and thence conduct a very short feeder to enter the 67th level, by a small Tunnel 225 feet long. This Reservoir, would receive the drainage of about 50 superficial miles of country, and a supply of running water in the very driest seasons, of 186 cubic feet per minute, the assumed surface drained has been ascertained by approximation from information gathered in the country, and the surface (350 acres) which 50 feet available depth would overflow, by a proximate survey made in 1835.

By careful experiments upon the Chenango Canal, John B. Jervis, Esq., Civil Engineer, established the fact that the Madison and Eaton Brook Reservoirs, collected near 2-5 of the water falling in rain and snow upon their vallies.

The fall of rain per annum used by the United States Engineers in their calculations concerning the summit of this canal was that of the year 1822, being 29 2-10 inches, the quantity given in the meteorological tables of Lewis Brantz, Esq., as the down fall in that year near Baltimore, it having been an unusually dry one.

* Sutcliff and Andreossi concur upon the loss from reservoirs being about $\frac{1}{2}$ an inch per day, or say 15 1-6 feet perpendicular per annum.

Applying these data to such information as we possess concerning the valley of Town creek, we may, form an estimate, a very rough one, of its probable capability to fill a reservoir of such dimensions as to feed 30$\frac{1}{2}$ miles of canal.

* See report of Col. J. J. Abert, U. S. Topographical Engineer, on the Maryland line.