

The first point to be considered is the necessity for improvement or increase in the water supply of the city. That there is need of improvement cannot be disputed. The question to be decided, however, is how that improvement is to be made. The object apparently would be to obtain the greatest degree of efficiency in the most economical manner. The system has never been perfect since its inception, and looking over the history of the works it is almost impossible to discover any year in which complaints were not made respecting its inefficiency.

The original works were constructed by a private company, organized in 1845, of which Jas. B. Uniacke was President. After some preliminary surveys, made by Mr. Charles F. Fairbanks, C. E., they obtained the services of John B. Jervis, a civil engineer well known in connection with the Croton Water Works in New York. He made a report on the 28th of August, 1845, which resulted in the laying of a twelve inch main from Lower Chain Lake to St. Andrew's Cross. Mr. Jervis considered a ten inch main ample for the estimated population of from 20,000 to 25,000, but in order to provide for future requirements he recommended a twelve inch pipe. He also proposed to construct a distributing reservoir at a point within the city known at that time as Windmill Hill, and described as about one thousand feet from St. Andrew's Cross. This important part of the scheme was never carried out, although subsequently advised by other engineers, including my predecessor. Water was first turned on from the Chain Lake in 1847.

In 1854 an additional main 15 inches in diameter was laid down to make the supply equal to the rapidly increasing demand. In 1855 Long Lake was drawn down 3 ft. 9 in. below the waste weir, leaving only 2 feet of water over the bottom of the conduit between Long Lake and Upper Chain Lake. This evidence of the limited storage capacity of the lakes and the necessity of a further increase in the supply roused the City