was drawn down about 7 inches below the top of the 4-foot wooden pipe, which brought a considerable length of it, some 2,500 feet, to the surface. This was occasioned by the contractor's neglect to cover it with sand to the depth specified. The test, however, demonstrated that about 4½ million gallons per diem could be obtained, or about 1 million gallons more than the consumption per 24 hours. In order to increase this quantity, in 1877 two cuts were made out into the lake a distance of about 300 feet, in one of which was placed a 4-foot wooden pipe, bored with 2-inch augur holes spaced about a foot apart, and covered with gravel. The other cut was filled with small boulders and flat stones topped with gravel. With these additions it was found that 10 million gallons could be obtained.

These two cuts worked admirably for about a year, till 1878, when they failed. On examination they were found to be completely choked with sand, the department eventually being forced to abandon the basin and obtain the supply at Hanlan's Crib, until such time as a pipe could be laid out into the lake.

It was not till the year 1881 that work was commenced on what is known as the Lake Extension, the whole work being completed the following year. This extension consisted of some 2,300 feet of 6-foot wooden conduit, built up in lengths of 100 feet, and constructed entirely of oak staves, banded together with wrought-iron hoops 3" x ¾", spaced 2 feet apart, the pipe terminating in an inlet crib 40 feet square, 11 feet high, in 30 feet of water, with a centre well 10 feet square, covered with a grating into which the conduit opens. The portions of the pipe not protected by sand covering were anchored in position by cribs 22 feet square, filled with stone and spaced 100 feet apart.

In 1884 the manager reported the daily consumption to be about 12 million gallons and the capacity of the conduit system under the maximum head available during periods of low water about 13½ million gallons per day, to increase which he recommended the laying of a 4-foot cast iron pipe from the engine house well to the shore crib, a distance of 10,500 feet. It was not, however, till the year 1889 that any action was taken, the work then decided on consisting of the laying of a 5-foot steel pipe from the shore crib to Hanlan's crib, a distance of a little over 6,000 feet and a 4-foot steel pipe with flexible joints, from Hanlan's crib to the engine house well, some 4,400 feet more. It was also decided to extend the 6-foot intake pipe some 365 feet farther into the lake, where the water was 75 feet deep, the new intake being constructed with the opening some 25 feet above the bottom or 50 feet below the surface of the lake. This work was completed about August, 1891.