

1778.

HISTORY OF
THE OHIO FALLS CITIES
AND THEIR COUNTIES,

WITH

ILLUSTRATIONS AND BIOGRAPHICAL SKETCHES.

VOL. I:

CLEVELAND, O.:

L. A. WILLIAMS & CO.

1882.

he was working up, and stepping into the water-closet he fell and died in a few moments. The cause of his death was heart disease.

The death of Aleck Gilmore was probably one of the most sad of any of the members of the force. He had gone to Cave Hill Cemetery to water the grave of a beloved daughter, and while filling the watering-pot from a small run that passes through the grounds, he, from apoplexy, fell face downward into the shallow water and was suffocated, and there his body was found. Mr. Gilmore was one of the old officers of the city, and in addition to having served on the force, had been marshal of the City Court, and was, under Mayor Tomppert, chief of police, making one of the best the force has ever had.

THE WATER-WORKS.

March 6, 1854, a charter was granted by the State Legislature to Thomas E. Wilson, Bland Ballard, John R. Hamilton, Charles J. Clarke, Andrew Graham, Curran Pope, and their associates, to form the Louisville Water Company in the city of Louisville. During the two generations, and more, of the town before that, the supply had been altogether from the old-fashioned pumps and wells, of which many still remain within the city limits, and under public care.

In September, 1856, the organization of a company for the supply of water to the city was completed. Stock subscriptions were made as follow: By the city, October 22, 1856, \$550,000, to which \$220,000 were added July 8, 1859; by private subscriptions, September 9, 1856, \$5,100; making a total of \$775,100. This, although seemingly a large sum, was deemed quite insufficient for the erection and maintenance of works for a water supply to a city so large as Louisville had become. It was nevertheless determined to make a beginning of the enterprise, and carry it so far as the means would allow. An engine-house, with chimneys and stand-pipe of ample dimensions (four feet diameter) for all supplies likely to be needed for many years, was constructed on the bank of the Ohio, about a mile and a quarter above the present city limits, where it is still in use. A reservoir of rather small capacity, only 10,000,000 gallons, was completed on higher ground a little way in the interior, and a single pump main was laid to it, with a supply main thence to the heart of the city. The minimum head given by this reservoir, when full, is eighty-one feet and a half above the highest curbstone in the city west of the Bear-grass. A second engine and duplicate of other machinery were provided against the possible

derangement and disability of the apparatus kept in use.

In October, 1860, the works were so far completed that water was turned into the mains and service-pipes, and the supply of the city began. Additional funds were secured after a time by the issue and sale of \$200,000 in bonds of \$1,000 denomination, secured by mortgage upon the company's property and by the net income of the works. The system was rapidly developed, so that, by the close of 1866 there were forty-four miles of the different sizes of pipe laid, and the aggregate consumption of the city amounted to 2,000,000 of gallons per day.

In 1868 tenement houses for the employees at the works were erected by the city. They are plain, yet comfortable and durable, and add much to the attractiveness of the grounds about the old reservoir. A flight of stone steps was also erected at the entrance to the reservoir. The city, August 1, 1867, had subscribed \$500,000 more in bonds to the capital stock, and an additional main-pipe (thirty-inch) was thus enabled to be laid in 1868-69. At the beginning of 1868 there were forty-seven miles of pipe down. The number of attachments, apart from those used by the Fire Department, was 2,414, supplying 2,783 premises and 28,000 consumers.

In November, 1869, the great work of laying the additional thirty-inch main-pipe was completed, at a cost of \$357,077.14 to the end of that year, which was nearly \$100,000 below the estimate, a remarkably unique fact in connection with public expenditures. Pipe extensions were made this year to the amount of 3.416 miles. Service attachments, 3,683; running expenses, \$26,247.79.

The receipts for 1870 showed a satisfactory increase, being \$104,279.21, besides \$10,223 due from the city for water-supply. A new three-story building for store-house, workshop, and stable, was put up on the rear of the company's premises on Third street. Extensions, 4.166 miles; discontinued, 404 feet. Running expenses, \$29,827.08; repairs, \$10,319.96.

During 1873 the company laid 12.4 miles of pipe, including the extension on Portland avenue and the distributing pipes in the Portland district of the city. It was the first water service of this kind to reach that old region, and the extension was not remunerative. The company

now had in use eighty miles of pipe. Its net receipts for the year were \$154,160.03, being 6.47 per cent. upon the cash cost of the works, including expenses of running and maintenance. The \$200,000 mortgage debt, by the aid of the sinking fund, had been reduced to three-fourths of that sum.

November 19, 1874, surveys were begun for the extension of the works, by the building of a new and much larger distributing reservoir, which had become an imperative necessity to the adequate supply of the city, especially in the upper stories of buildings, where the water often failed, through inadequate head. There were two total interruptions of the supply during the year—one of five hours June 10th and 11th, and one of three hours August 29th, caused in each case by breaks in the second supply main. Pipe was laid this year to the amount of 9.358 miles, and five hundred and twenty feet were taken up. The revenue of the year, above cost of maintenance, was \$36,719.87, and the total receipts were 7.19 per cent. upon the cost of the works and expenses for the year.

December 6, 1875, the work was completed, with slight exceptions, of making the stand-pipe an overflow instead of a single stand-pipe, in order to relieve all pipes whatever belonging to the works, from the stand-pipe out, from the impact produced by pump action, which had, in at least one case (October 29, 1870), burst the pipes. By this arrangement all water going into the mains leading to the reservoir or the city rises through the old forty-eight-inch pipe in the middle of the new group of stand-pipes to the level at which four columns of twenty-inch pipe are connected with it, and there overflows and descends through these into the annular pipe under the main floor of the tower, and thence on into the mains. A sixteen-inch distributing main was also laid this year on Jefferson street, from Preston to Eleventh street. One interruption occurred November 30th of nine hours' length, during which the reservoir became entirely empty. The extension of lines for the year amounted to 4.859 miles, and 1,139 feet were taken up. The net revenue was \$34,688.41, but the total receipts (6.57 per cent. of costs and works) were \$8,449.18 less than in 1874, mainly on account of the depression in business caused by the panic.

In 1876 the Legislature and the General Council conferred upon the company all necessary power for the issue of nine hundred \$1,000 bonds, first mortgage six per cents, to run thirty years, to take up the \$90,000 remaining bonds outstanding from the issue of February 1, 1863, to build the new reservoir at Crescent Hill, and make other improvements connected therewith. On the 2d of October, accordingly, the new issue was made, and was negotiated by President Long at ninety-six cents on the dollar, which was regarded as an exceedingly favorable rate, and more than was obtained about that time for any other first-class local securities. The bonds were then worth more than city securities, and at this writing (March, 1882) are worth 114. The contract for the construction of the reservoir was promptly awarded, and the work begun the next year. The old reservoir was cleared of its accumulated deposits of sediment, aggregating about 11,000 cubic yards, for the first time since its construction sixteen years before. To do this required the labor of forty-one men one hundred and thirty-nine consecutive hours, in the northerly basin, and of fifty-two men one hundred hours in the southerly compartment. The extensions of the year amounted to 2.01 miles; net revenue, \$16,087.78; total receipts, \$165,659.54, or 5.87 per cent. upon cost and expenses.

The new reservoir had been located upon the north side of the Louisville and Shelbyville turnpike, in the locality known as Crescent Hill, two and one-fourth miles from the pumping station of the works, and a little more than three miles from the city limits, and four and eighty-seven hundredths miles from the City Hall. One hundred and ten acres of land were purchased for it, of Z. M. Sherley and W. C. and C. Atterburn. On the 3d of November, 1876, the contract for constructing it was made with Mr. R. C. Kerr, of Louisville. Its high-water level was to be one hundred and seventy-five feet above low water in the Ohio, and one hundred and eleven and a half above the highest curbstone west of Beargrass, giving thirty feet more head than the old reservoir. It was to be in two compartments of fifty million gallons each, making a total capacity of one hundred million gallons, or just ten times that of the old reservoir. The work of construction was begun April 11, 1877, and \$137,-

260.12 were expended upon it during that year. The work went on steadily in 1878, and by the close of that year \$731,638.33 had been expended. Under the contract, the work was to be completed by the 11th of April, 1879, two years from the beginning; but the enormous job dragged somewhat, and the water was not pumped into it until December 15, 1879. There had been expended, by the close of that year, upon the reservoir, pipe mains, right of way, and real estate needed by the improvement, the sum of \$971,270.66. The new reservoir has since been the source of supply for the city, although the old one is kept full, and held as a reserve.

The principal statistics of 1877 were: Total revenue, \$185,203.76 (5.86 per cent. upon cost and expenses); total expense of conducting works, \$41,562.70; extensions, 5.04 miles; taken up, 718 feet. The inlet pipe was cleaned August 22d, 23d, and 24th, by fourteen men, with labor equal to one man working 478 hours.

Statistics of 1878: Receipts, \$171,047.88, or 4.77 per cent. upon cost and expenses (same in the three following years); running expenses, \$42,485; extensions, 4.05 miles; taken up, 359 feet. The company retired \$12,000 of its last issue of bonds, leaving its entire bonded debt \$888,000.

For 1879: Revenue from all sources, \$176,097.45; net expenses, \$40,056.61, nearly \$2,500 less than the year before; increase of service connections, 294; total connections, 7,225; extensions, 1.4 miles; reduction of bonded indebtedness, \$12,000. In July two Blake duplex steam-pumps were put in at the pumping-station, capable jointly of pumping 6,000,000 gallons in twenty-four hours.

For 1880: Revenue, \$189,621.13, being an increase against 1879 of \$13,523.68; net expenses, \$48,901.28; service connections, 7,458; increase for the year, 234; extensions, 2,455 miles; pipe taken up, 39 feet. The total amount paid on the new reservoir and allied improvements to the end of this year was \$1,058,220.10.

The south basin was disabled for several months by slides in the side walls, which were repaired at a cost of \$6,956.72. The total number of gallons pumped this year was 2,364,171,073, or 6,567,141 gallons per day, a trifle more than ten times the pumpage of 1861, the first full year of the works.

The net revenue for 1881 was \$214,360.09; number of service attachments, 7,907.

The questions with which the company is grappling, as we close this account, is that of filtration of the water supply and the early introduction of additional pumping machinery. Careful experiments upon the former are proceeding, and it is hoped a solution of the problem will soon and satisfactorily be reached.

THE FIRE DEPARTMENT.

The following statistics of the Department, from the time it was reorganized as a paid service June 1, 1858, to the first year for which we have been able to get full reports, have been preserved:

Year.	Fires.	Other Alarms.	Total.	Loss.	Insurance.	Loss over Insurance.
1858	47	15	62	\$ 55,605	\$ 29,275	\$ 25,330
1859	49	2	51	175,035.50	149,095	25,940
1860	63	5	68	94,852	62,938	31,914
1861	30	6	36	16,885	11,260	5,625
1862	47	10	57	59,985	27,710	31,275
1863	42	1	43	17,172	9,972	7,200
1864	51	1	52	1,226,800	143,725	1,083,075
1865	71	4	75	823,985	467,460	356,525

In May, 1865, the Fire Alarm Telegraph was put in operation, and the next report of the Department represented it as "a complete success, its working having convinced the most skeptical of the great benefits it affords." There were at the close of 1866 in the Department six steam engines, each manned by eight men, and one hook and ladder truck and equipments, with ten men, making a total force of fifty-eight men and thirty-two horses. One of the engines and the truck, with four thousand feet of leather hose, were bought during 1866. The Department was called out one hundred and twenty-nine times during the year, which was twice as often as in 1865. There were one hundred and sixteen fires, with losses aggregating \$345,045, and insurance to the amount of \$290,230. More fires were caused by incendiarism than in all the years together during which the Department had been organized.

In 1867 the fires and losses noticeably fell off. The former were twenty-seven less than in 1866, and the losses aggregated only \$150,415, or considerably less than one-half those of the year before, which was considered a great testimonial of the efficiency of the Department. Insurance covered \$121,315 of the losses. Twenty-seven new boxes were erected for the fire alarm tele-