

A CENTURY AND A HALF
OF
PITTSBURG AND
HER PEOPLE

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CHAPTER XXVI.

Early Water Works—Fire Companies.

Pittsburg, in common with all great cities, has had to cope with the difficult problem of providing a supply of water for the use of its inhabitants. Notwithstanding that the city is located at the confluence of two great streams, the water question has been one of no little perplexity, and has only been partly overcome by decades of experience and the most thorough and scientific means, all of which have been a source of great expense to the tax payer.

The water supply was gained, up to 1802, from wells and springs which flowed from out the hillsides, these being sufficient for a small town. An ordinance passed August 9, of that year, called for the making of four wells, not less than forty-seven feet in depth. Three of these were to be located on Market street, and were to be walled with stone. To meet the expense of digging these wells, as well as remunerating persons whose private wells were pressed into use for the general public, a tax on the properties mostly benefited by them was levied amounting to \$497.96 but of which only \$170 had been collected at the end of the year. Wells, with the springs at Grant's Hill, furnished the supply of water for public use until 1826. The file of the *Mercury*, of December, 1813, contained a notice that George Evans had offered to "raise water to supply any part of the city at three cents a barrel." In January, 1818, William B. Foster petitioned the city to furnish it with water. In February, 1826, the mayor of the city negotiated a loan of twenty thousand dollars for the purpose of establishing a system of water works, and in June negotiations were pending for the purchase of land on which to erect reservoir and engine house. In September, that year, the council purchased land for an engine house on the bank of the Allegheny river, fifty by one hundred feet on Cecil avenue, and four lots on Grant's Hill for reservoir purposes. The last named lots were bounded by Fifth and Grant streets and by Cherry and Diamond alleys. The cost was about \$3,800. In 1827 bonds to the amount of \$200,000 were issued to pay off the water indebtedness. In the autumn of 1826 an engine and double-force pump were ordered: also 12,800 feet of cast pipe. A reservoir was constructed on the summit of Grant's Hill, and the adjoining grounds were beautified by trees and made a

handsome resort. The basin which held the water supply was located where afterward stood St. Peter's Church. The water was taken from the Allegheny river, by the pumping station at Cecil alley, and forced to the reservoir. George Evans was the first water superintendent elected. In May, 1829, the system was doing good service and \$2,000 was collected for water rents. At first the engine was only worked twenty-one hours a week. Up to April, 1834, the water works had cost the city \$120,000. In July, 1838, the engine was working twenty out of the twenty-four hours a day, and pumped an average of a million and a half gallons a day. The reservoir at that date was considered unsafe, and in August, that year, the city council ordered the purchase of the O'Hara tract, on Elm and Prospect streets, for \$25,000; land in the Fifth ward for \$2,500; the Laughlin tract at \$12,500, all of which was secured by issuing "certificates of loan." In November, 1838, Robert Moore, superintendent of water works, called for bids for grading the reservoir on Prospect Hill. In the summer of 1838, the old works supplied water to 2,679 buildings. The city was growing so rapidly that it became necessary to increase the water system, and \$200,000 was borrowed for that purpose. Fourteen thousand dollars were expended in excavating the new basin, which was begun in 1843 and completed the next year. By this system water was taken from the Allegheny and by the pumps was forced to the new basin, on the top of "Stone Quarry Hill," then Bedford street, overlooking the present Union Railway Station. Reports of that day show that in 1847, 5,438 dwellings, 157 hotels, taverns and boarding houses consumed daily almost two million gallons of water. In September, 1848, the old pumping plant on Cecil alley was sold for \$24,000. This system of water works obtained until the construction of the more modern plant, which was constructed between 1871 and 1878, and formed the basis of the system now used. This water works system is situated at Brilliant Station on the Allegheny river, from which water is forced to the great Highland reservoirs and to the Herron Hill reservoirs, then direct to consumers. The Highland reservoir stands three hundred and seventy-two feet above the pumping station, and is connected by four thousand feet of fifty inch pipe. The capacity of the reservoir is two hundred and eighteen million gallons, while the capacity of the engine and pumps is fifty-five million gallons daily.

In 1879 the new plant was in excellent working condition. The four great engines, costing \$850,000 a pair, were placed in position July, 1878, and under Water Superintendent James Lowrie, the works began operating May, 1879.

The last named plant was rebuilt and remodeled in 1894. Highland reservoir covers an area of thirteen acres, and has a capacity of one hundred and thirty-eight million gallons. There are four lesser reservoirs or tanks, with a capacity sufficient to make a grand total of two hundred and fifty-two million gallons. The four pumping stations are: Brilliant Station, with ten pumps; Herron Hill, with three pumps; Garfield, with two pumps,

and Lincoln, with one pump. In 1907 the total number miles of piping was three hundred and eighty, to which are attached 3,550 hydrants. The recently installed filtering plant—one of the best in the country—cost the city six and a half million dollars. It is known as the "Slow Sand" system, and has a daily average capacity of one hundred million gallons. The total cost of the Pittsburg water works has been ten million, three hundred and twenty-six thousand dollars, a sum standing out in remarkable contrast to the humble beginning in 1802, when less than five hundred dollars were invested in the pioneer water works.

In Allegheny City, the earliest attempt at providing water works was in 1848, and went into operation in the spring of 1849. Prior to that date water had been pumped from wells for drinking purposes, and from the Allegheny river for other uses. For many years, from forty to sixty hand water-carts might be seen trundling along the streets of Allegheny City, delivering water from house to house. This became a business so great that, when water works were agitated, these men and their numerous friends protested against such an innovation in domestic economy. The present water works plant of Allegheny, located at Montrose, was first installed in 1897, and cost about two million dollars, and has a pumping capacity of thirty-six million gallons daily.

The early houses of Pittsburg were almost invariably built from thirty to sixty feet apart. All original lots, it will be remembered, were 60 by 240 feet, and this gave an abundance of room between the houses. Some times semi-detached houses may have been built, where two lot owners adjoining agreed to build their houses with but one wall separating them, but this was very rarely done, if at all. The houses stood separate from each other, and not connected with any other buildings. As a result when a fire occurred in one building even though it was destroyed, the surrounding buildings could easily be saved. As may be supposed there were but few fires in the early history of the town. Many of the houses were made of logs, some were frame with here and there a brick or stone structure. The log houses came first, for logs were cheap and plentiful, and when well built, were enduring, warm and not by any means liable to take fire. The first houses of the town were, of course, log, and the others came only in the latter period. Frame houses were in greater danger from fire, but log houses and brick or stone houses were very nearly on an equal basis as far as danger from fire was concerned. Log houses were much cheaper than either brick or stone, and much easier built, and they accordingly came first. Resultant from this natural safety, because of the distance between the houses, the town took almost no precaution to guard against fires, and this neglect ran on until the town became more compactly built and until the danger was correspondingly increased. It was more than forty years after the town was laid out in lots before a full supply of water for protection against fire was demanded. In the meantime the supply of water for all purposes was drawn mostly from wells and from