

CHAPTER XXVIII.

WATER SUPPLY.

BENEATH the plain on which New Haven is built, is a plentiful supply of good water. In some places wells are twenty and even twenty-five feet deep; but elsewhere the water rises quite near to the surface. At the corner of the Green, where the town pump assuages the thirst of the multitude, the water level is about four feet lower than the sidewalk. Tradition reports that in the seventeenth century a stream flowed constantly from the Green to the Cutler corner, and thence diagonally, across the Lamberton Quarter, to East Creek. At the same time, copious springs gushed from the bank between George street and West Creek.

The level of the water is, of course, in consequence of the removal of forests, somewhat lower at the present day than it was two centuries ago. The reduction of inequalities in the surface of the ground has also tended to deprive us of the sparkling springs at which our forefathers quenched their thirst.

Wells were the main dependence of the inhabitants of our town for drinking water during more than two centuries. It was not till New Haven had become a manufacturing city, and felt the need of water for the production of steam in her workshops, that reservoirs were constructed and pipes laid for the introduction of a more plentiful supply than could be drawn from wells.

The increasing compactness of the city, and the substitution of a railroad for the Farmington Canal, forced upon thoughtful citizens thoughts of fire, and of the means of putting it in check.

The New Haven Water Company was incorporated in 1849. It made little progress, however, toward the creation of water-works for several years, during which the public mind was agitated with debate whether it was better that the city, in its corporate capacity, should provide water, or leave it to be provided by the company, which, having procured a charter for that purpose, had not yet

begun the construction of its works. At a city meeting, held June 1, 1852, a resolution was passed appointing a committee to inquire and report the most feasible method of supplying the city with water for the extinguishment of fires and other purposes. A careful investigation was made of the various sources of supply around the city, and trustworthy information was furnished to the committee in regard to the amount of water required, the capacity of the streams, and many other facts indispensable to a proper conception of the magnitude and great importance of the project.

The report of the committee was printed and ready for circulation in February, 1853, and its merits were thoroughly discussed by the friends and the opponents of the measure. The committee recommended,

First.—To procure a supply of water for the city, to be brought at the expense of the city from the Quinnipiac or the Mill River.

Second.—To instruct the committee to make application to the Legislature for such addition to the charter of the city as to provide for the transfer of the rights and privileges of the New Haven Water Company to the city, and any other matters proper to carry into effect the objects expressed in the first proposition.

A city meeting was held March 21, 1853, to take action on the report, at which Mayor Skinner, chairman of the committee, made a full statement of the objects of the meeting, and of the course taken by the committee. A resolution was then passed that an adjourned meeting be held on the 26th day of the same month, to vote by ballot on the propositions presented by the committee. Accordingly on the 26th of March the ballot was taken, and the city voted, by a large majority, in favor of both propositions.

In accordance with this vote, a Board of Water Commissioners was appointed and organized which, after an examination occupying five months, aided by celebrated engineers, adopted a plan and consummated a contract for water power, lands, etc., with Mr. Eli Whitney.

Meanwhile opposition to the construction of water-works by the city increased, till, on a petition to the General Assembly that another ballot should be taken, a bill passed that body ordering a new ballot and requiring a three-fifths vote in its favor to make it binding. On the 17th of July, 1854, this ballot was taken, and the proposition that the city should build the water-works was defeated by a large majority.

Of course nothing more was done by the city, except to satisfy Mr. Whitney for the failure of the Water Commissioners to fulfill their contract.

The introduction of water into the city being thus left to private enterprise, the New Haven Water Company, which from the first had maintained its organization, again came to the front. The original corporators assigned the charter, in 1856, to Eli Whitney, who petitioned the General Assembly in the name of the Company for suitable amendments, and having obtained them reorganized the Company. It was principally due to his energy and

assumption of pecuniary responsibility, in behalf of what was then considered a doubtful enterprise, that the works were finally constructed, Mr. Whitney advancing to the Company more than \$75,000.

The plan of the works was greatly enlarged beyond that which had been proposed by the city's engineer. The dam at Whitneyville creating the lake is thirty-five feet high and thirty-two feet thick at its base. In anticipation of its construction and the flowage it would cause, twenty buildings and three bridges were removed. The covered bridge of one hundred feet span was taken up whole and placed on abutments about forty feet high, a quarter of a mile up the stream from where it originally stood. Long lines of highway were also changed to avoid flowage.

The contractors for the construction of the works were Eli Whitney and Charles McClellan & Son. The sum paid them was \$350,000, of which \$150,000 was in cash, \$100,000 in bonds, and \$100,000 in stock.

The Company and contractors had unusual trials and difficulties, owing to the persistent efforts of opponents, who tried to obtain a rival charter with intent to supply the city from the Orange Hills.

The construction was commenced in the spring of 1860, under the charge of Mr. J. W. Adams as chief engineer and Mr. Thomas N. Doughty as his assistant. Water was introduced into the distributing mains on the 1st of January, 1862. The length of mains laid down at that date was $17\frac{9.3}{10}$ miles. The Company has now more than one hundred miles of pipe.

Mill River is the source from which the supply was at first obtained. It has a watershed of fifty-six square miles, and affords a daily amount throughout the year of 120,000,000 gallons. Since then two additions have been made to the supply. First, the franchises of a rival company owning the lakes in Maltby Park, west of the city, were purchased, and afterward, in view of the increase of population, the waters of Saltonstall Lake were acquired and added to the bountiful sources already at command. The additions were made in view of prospective, and not of present need. Mill River would of itself, with sufficient reservoirs, supply a city of 100,000 inhabitants.

Soon after the introduction of water into its pipes, the Company made a contract to supply water for all the occasions of the city, including those of the Fire Department, for the period of twenty years. This contract provided that the city at any time during the continuance of the contract, after ten years from the date thereof, might purchase the water-works, by paying an amount equal to the capital stock paid in and invested, together with interest of ten per cent. per annum on the same, less all dividends declared by the Company, and the city thereupon assuming the payment of all the bonds and other liabilities of the Company. This contract being made in 1862, the public mind was greatly agitated as the period of twenty years during which the city had the option of purchase drew toward an end. The same difference of opinion

existed as twenty years before in regard to the comparative desirableness of water-works owned by the city and water-works owned by a chartered corporation. The question was submitted to a popular vote, and the majority decided that the water-works should not be purchased by the city. This decision of the city not to buy, released the water company from all obligation to sell; and the two parties now make such terms as they can with one another, the water rent of the city increasing from time to time with the increase of population. At present the annual payment is \$16,000.

The different sources from which the Company derives its supply, all afford pure, agreeable and salubrious water. In the summer of 1865 there was a disagreeable taste and odor. Upon investigation it was discovered to be due to the use of water which had stood too long in the reservoir. The impartation of motion soon corrected the evil, and there has never been any serious complaint since then of the quality of the water. On the contrary, those who have observed the effects of the city water upon the human system, generally concur in the opinion that it is more favorable to health than that which our fathers drew from

The old oaken bucket, the iron-bound bucket,
The moss-covered bucket which hung in the well.

The effect of the water, by reason of its purity and softness, on steam boilers, is such as to prevent the formation of scale and keep the interior perfectly clean, thus greatly economizing the use of fuel.

The quality of the water, which the friends of the Company were delighted to find so excellent when only Mill River was drawn from, has not deteriorated since the lakes have been added to the supply. Citizens of New Haven may well congratulate themselves, not only on the abundance of water with which the city is blessed, but on its excellent quality, whether compared with that which quenched the thirst of their predecessors, or with that which is offered them when visiting in other cities.

The Hon. Erastus C. Scranton was the first President of the Water Company, but was obliged by the pressure of other duties to resign the office before the works were built. He was succeeded by Mr. David Cook, by whom the first printed report of the Board of Directors is signed. When the second annual report was issued, in 1864, the Hon. William W. Boardman was President, and he continued in the office till 1868, when he was succeeded by Mr. Henry S. Dawson, who has been President of the Company from that time to the present.