

THE PROGRESS OF THE EMPIRE STATE

A WORK DEVOTED TO THE HISTORICAL, FINANCIAL,
INDUSTRIAL, AND LITERARY DEVELOPMENT
OF NEW YORK

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VOLUME II.

THE HISTORY OF BUFFALO

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PUBLISHED BY
THE PROGRESS OF THE EMPIRE STATE COMPANY
NEW YORK

1913

CHAPTER V

WATER SUPPLY, FIRE-FIGHTING, GAS AND ELECTRIC LIGHTING

UNTIL 1826-9 the villages of Buffalo and Black Rock were dependent entirely upon wells for their water supply, except as the few who lived near enough to those natural sources might draw from the Niagara River or Buffalo Creek. That dependence was lessened slightly in the years named above, by the undertaking of the Jubilee Water Works Company, organized for a distribution of water from the Jubilee Springs, which bubble to this day on the west side of Delaware Avenue.

In 1826 the company laid pump-logs from the springs to Black Rock; in 1829 they extended a second line of wooden pipes down Main Street to the canal. By 1832, when Buffalo became a chartered city, there were said to be 16 miles of these pipes, and some considerable number of people must have been drinking the water of the springs. The company's charge for it was seven dollars yearly to families and five dollars to offices and stores.

Twenty years after the laying of the Jubilee pump-logs down Main Street, a larger undertaking to supply water to the 40,000 people then inhabiting the city was taken in hand. The Buffalo City Water Works Company, incorporated in 1849, with a capital of \$200,000, and authority to increase it to \$500,000, planned to pump water from the Niagara, through a tunnel running under the Erie Canal and Black Rock Harbor, to the outer side of Bird Island Pier, storing and distributing it from a reservoir on Prospect Hill. The reservoir, covering the block bounded by Niagara, Connecticut and Vermont Streets, and Prospect Avenue, and holding eleven millions of gallons, was finished in November, 1851;

the tunnel, three hundred and thirty feet in length, was ready in the following month; pumps, at a station on the margin of the canal, were then put into operation, lifting four millions of gallons in twenty-four hours, and the public service of the works was opened formally on the 2nd of January, 1852.

In 1868, the Water Works Company raised its price to the city for public uses of water, whereupon the latter procured legislation under which it purchased the company's plant, paying \$705,000. The water supply has been under municipal management since that date. With the growth of the city the works, in every part, have undergone immense enlargement and much change.

One of the first new measures was to answer the needs of those parts of the city, on its higher ground, to which water from the reservoir was not carried with adequate force. This was remedied by the introduction of auxiliary pumping engines, of the "Holly system," so called, which was brought into operation in January, 1851.

Another early undertaking was to obtain purer water, by constructing new tunnels, to tap the river far out, under its swift middle current, where an inlet pier was built, of great solidity and sheathed with steel plates, to resist the thrust and shock of ice in the spring of the year. In 1907 contracts were let for another inlet and another tunnel to the foot of Porter Avenue, where a second pumping station would be installed. In the prosecution, during the next three years, of the work then undertaken, the cost ran so heavily beyond the original contracts and estimates that investigations were undertaken, at the instance of the Chamber of Commerce, in 1910. The two chambers of the Common Council were drawn into separate proceedings of inquiry, with results that gave no public satisfaction. The episode was one of many which have exhibited the mischiefs of divided authority and

responsibility in the city government, and the success with which the powerful department of public works can exercise its own will. According to a report to the public, by the board of directors of the Chamber of Commerce and Manufacturers Club, January 1, 1911, "the new tunnel to the Emerald Channel (which the Commissioner of Public Works estimated in his letter to the mayor, dated January 11, 1905, would cost \$300,000), has cost to October 17, 1910, \$1,455,258.20, with about \$100,000 yet to pay;" and the expenditure of \$1,167,041 "for rebuilding and re-equipping the old [pumping] station, making it an entirely new station on the old site — instead of the \$50,000 as proposed — has rendered wholly unnecessary the Porter Avenue pumping station," which is nevertheless in contemplation at a cost of \$900,000. Attempts to arrest the building of the new pumping station are now under way.

The equipment of the present pumping station is stated as follows in the report above mentioned of the Chamber of Commerce:

"Two new steam pumps each of 30,000,000 gallons daily capacity.

"Three new electric pumps each of 25,000,000 gallons daily capacity.

"Two Lake Erie pumps, installed in 1896 and 1898, respectively, of 30,000,000 gallons daily capacity.

"And there are now being installed two additional steam pumps each of 30,000,000 gallons daily capacity, construction being well under way and contract requiring completion by January and June, 1911. These new pumps are to replace two Holly steam pumps each of 20,000,000 gallons daily capacity installed in 1889 and 1892. The present daily capacity is, therefore, 235,000,000 gallons, and when the new pumps above mentioned have been installed it will be 255,000,000 gallons; all modern and efficient machinery."

The old reservoir was abandoned in 1894 (its site given for the new armory of the 74th Regiment, N. Y. S. N. G.), and a new one, holding 116,000,000 gallons, was constructed on the block that lies between Best, Jefferson, Dodge and Masten Streets. Five years — from 1889 to 1894 — were spent in the construction of this, and its cost was \$554,000, exclusive of the cost of the ground.

The pipes of the distributing system had been extended to 516 miles of length in 1907. When the city took the works in 1868 the length of water pipes in the streets was about 34 miles. In 1868 the average consumption of water was 4,000,000 gallons daily; in 1906, it was 132,000,000. In the former year the population was about 100,000, against 400,000, or possibly a little more, at the later date. Four times as many people had used about thirty-three times as much water, making an eightfold increase of consumption, which means enormous waste. The consumption, *per capita*, is far in excess of that of any other city in the country, and is due to the lack of a system of charges by which the use of meters would be enforced.

As manufacturing industries, in late years, found desirable locations outside of the corporate limits of Buffalo, but within the range of its transportation and electric connections, there arose demands among them for a water supply. The first response to this demand was made in May, 1900, when a company of Buffalo business men organized the Depew and Lake Erie Water Company. At Woodlawn Beach, the once popular summer resort on Lake Erie, the company established a pumping station, connected with an intake crib, which was built about a mile from shore, where clear water and a clean bottom of level rock were found.

The company soon found that its authorized bond issue was too limited for the field of enterprise it had opened, and a new organization, styled the Western New York Water