ERIE... A HISTORY

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THE WATER WORKS

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Erie has been fortunate in always having plenty of fresh water. Besides an inexhaustible supply from Lake Erie, the water table under the land is not far below the surface. It is usually necessary to dig or to drill not deeper than thirty feet on the average, to find a good supply of water. In the early days of the village every house had its own pump and well and frequently a second well out at the barn for the horses and cows. In the more comfortable houses the pump was right in the kitchen itself, an enviable convenience.

Nearly every house had its barn and every barn had its manure pile. Little was then known about sanitation. Many of the pumps were placed improperly and there were occasional epidemics of illness which could have been traced to this cause. As long as water did not have a bad taste, people considered it pure. They called these illnesses "malaria" and blamed them on the damp evenings.

When the Erie County Courthouse burned down in 1823 every citizen came running to the fire, each carrying his own bucket. The three or four wells nearby were put into use, but water could not be pumped fast enough. The whole building burned to ashes. It was then that the citizens began to think about a fire department. They thought about it and talked about it, at great length. It was not until three years later that Rufus S. Reed, the most energetic citizen Erie has ever had, took the initiative and formed The Active Fire Company, giving himself the title of Chief Engineer and Captain Daniel Dobbins Second Engineer. E. D. Gunnison was Treasurer. This Company was really a Service Club

and was also the leading group in the social life of the village. It gave gay parties which the members attended wearing splendiferous uniforms. Everyone had a good time. In the course of the years as the village grew in size and in population, other similar clubs were formed. The Red Jacket Fire Company in 1837; the Perry Fire Company and the Eagle Fire Company in 1839; Mechanics Fire Company No. 3 in 1844; the Vulcan Company in 1848; the Phoenix Hook and Ladder Company, 1852; the Parade Street Fire Company, 1861.

While these clubs were in social rivalry with each other, there was also another kind of rivalry, that of efficiency. When a fire occurred at a distance from the water supply, farther than the suction hose could reach, the rival pumps stationed themselves a long hose-length apart. Then the first pumped to the second company, the second to the third, and so on. Each pump was on a small wagon which held a box or reservoir for the water. When one company pumped water faster than the next company could pass it on, the box overflowed and that company suffered the disgrace of a "wash-out." Rivalry was intense. To belong to a fire company was a social honor. There were no paid firemen.

With the formation of a Fire Company, the Town Council saw the need for public pumps to be used for fire protection. In 1839, sixteen years after the Courthouse fire, there were seven of these pumps located respectively at Sixth and French Streets, at Fifth and French, Fifth and State, Second and French; one in Perry Square with a horse trough attached, one in front of the American Hotel, and one in front of the house of Captain Daniel Dobbins, Erie's most honored citizen, at Third and State Streets.

The borough was growing and obviously more fire protection was needed; this was proved in January, 1840 when the Mansion House, Erie's largest hotel, burned to the ground.

After Rufus S. Reed became Burgess, with his customary initiative he induced the Town Council to spend some money for this purpose. Several cisterns were built at strategic points and contracts were let for the construction of piped water from some excellent ever-flowing springs, known as Reed's Springs, in the hillside near what is now Eighteenth and German Streets. The pipes were of logs, usually chestnut, bored (by hand) lengthwise with a three-inch hole. The extremity of each log was tapered at one end and cone-shaped at the other so

that they fitted together fairly tight. This equipment cost the Borough \$442.28.

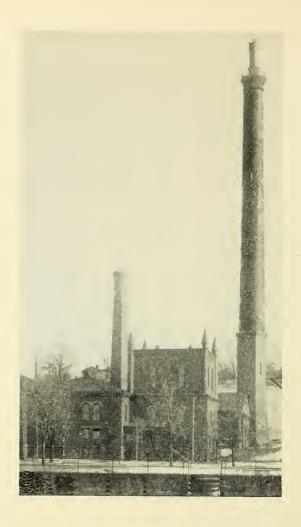
A quarter of a century later, these chestnut logs began to rot. Furthermore, the City had grown until the population was almost 19,000 and people began to ask, "Why can't we have a modern system of water supply like the one in Detroit?" Erie had had gas street lighting in a few streets for nine years, and the people wanted to be thoroughly up-to-date. William L. Scott was Mayor in 1866 and through his initiative an act was passed by the State Legislature on April 4, 1867 which created a board of three Commissioners of Water Works in the City of Erie.

For seventy years this board managed the business of providing a supply of water to the community. It was appointed by the Court of Common Pleas. It was non-partisan and non-political. To serve on it was an honor. The best business men of the City were glad to do so and never has a public service been better managed. The Commissioners accepted their responsibility and as a result the people had an adequate supply of good water, at rates lower than those paid in other Great Lakes cities. The pay or salary of a Commissioner was established by the Act of 1867 to be four dollars for each day actually spent by him in attending to the business of the department. Thirty years later it was set at seventy-five dollars a month, and finally was raised to \$150.00 a month.

The three Commissioners ultimately had the responsibility for thirteen million dollars worth of equipment and over half a million dollars in income. In seventy years of operation only thirty-two citizens served as Commissioners, and none of them served for less than four years except William L. Scott, who served for the first year only (1867) and then resigned to run for Congress on the Democratic ticket. Clark Olds, a prominent lawyer, served for fifteen years, during nine of which he was President.

George C. Gensheimer, a highly respected public servant, was with the Water Department for fifty-two years, from 1877 until his death in 1929. He was Secretary-Treasurer for 27 years.

After the passage of the 1867 Act, work was begun promptly to build a steam-powered pumping station. It was an immense undertaking for such a small city, and many people wondered if it would ever be fully paid for. It cost \$675,000. This huge plant was built at the foot of Chestnut Street. It took water from Presqu' Isle Bay and



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pumped it at the rate of 118 gallons for each stroke of the piston up a standpipe 253 feet high, from which it flowed by gravity all over the city. This standpipe was then the highest structure of its kind in the world. It was built and erected by the Erie City Iron Works, and was put up in an unusual manner. The top section was first assembled, riveted and erected. Then it was hoisted into the air and the next section was moved under it and riveted to it. Then these two were hoisted and the next section in turn was moved under and riveted, and so on until the entire standpipe was upright. Lastly a brick tower with a circular staircase was built around it, to support it. On a summer day people found it a pleasant stroll to climb the 364 steps to the top, from which there was a beautiful view of the city and the harbor. The view was worth the effort.

The first amateur wireless telegraph station was built by Kenneth Richardson in 1908. He installed his aerial on the top of the standpipe and thus was able to hear signals in Morse code from cities two hundred miles away. The standpipe was torn down in 1913.

Mr. Orange Noble, President of the Keystone National Bank, served as Mayor of Erie for the four years of 1867, 1868, 1869 and 1870 and it was under his guidance that the Water Department was properly financed by the issuance of bonds. The first President of the Board, William W. Reed, the first white child to be born in Erie, was responsible for the actual construction. He had formerly been General Superintendent of the Erie Extension Canal. Mr. Reed was Board President for twelve years.

This was an expensive investment for a small community. To help out, the City in 1870 by an Act of Council agreed to pay \$900 a year to the Water Board if they would install fifty fire plugs at strategic locations around the City. The Water Commissioners, watching their pennies, were able to install seventy-six fire plugs for this amount of money.

The city continued to grow and after only five years' operation Mr. Reed persuaded the other Commissioners that there should be a reservoir up on top of the hills which would contain an adequate supply of water for the City, more than the standpipe could hold. Accordingly in 1873 a huge reservoir, holding 32,952,000 gallons, was built near Federal Hill at Twenty-Sixth and Sigsbee Streets. This certainly seemed adequate to accommodate any possible future expansion and growth of the City. Its construction proved more expensive than they had expected and the three Commissioners personally advanced their own money to meet the final payments.

Everyone was very proud of this new installation (1873), and boasted of it to all who would listen. "Now," said Mr. J. C. Spencer, President of the First National Bank, "every house is able to have a fountain in the front yard." Probably equipped with a concrete deer, an iron bench and goldfish. General Charles M. Reed, as reported by the Erie "Gazette," erected a "noble and elegant private fountain" on his lawn.

The intake of the pumping system was a few hundred feet off shore in Presqu' Isle Bay. This body of water also received the outflow of the City's sewage and the Erie Medical Society had for many years protested that the water was unsafe. A swimming meet for high school boys was held in June of 1907 in the waters of the Bay, just off the Public Dock. One of the boys became ill the next day with typhoid fever, and died a few days later. This was the start of a small epidemic of typhoid fever in that year, which was serious enough to cause the Commissioners to decide to place the intake out in the lake. This was done in 1908. A 60-inch pipe was laid. It extended a mile beyond the Peninsula, for a total length of 17,000 feet. Again there was a difficulty in raising enough money to pay for the work, and again the three Commissioners, Mr. Clark Olds, Mr. William Hamilton and Mr. Willis B. Durlin advanced the necessary money personally.

The people now felt that the water was safe and it would no longer be necessary to boil it for 20 minutes before drinking. However, in the winter of 1910-1911 another typhoid epidemic broke out. It was a serious epidemic. The hospitals were so crowded that Hamot built a temporary addition which contained eighteen beds. There was a shortage of trained nurses which was relieved when a group of them was sent to Erie from Philadelphia. After much discussion and expert opinion, a Filtration Plant with two settling basins was installed in 1914 on the Peninsula which at last gave to the City pure water.

In 1929, under the presidency of Mr. David W. Harper, a radical change was made in the method of pumping. In that year an electric pump was installed in the plant at the foot of Chestnut Street. It was purchased from the Allis Chalmers Company, and had a rated capacity of 13,000,000 gallons. For some years the steam pump and the electric pump operated, rather distrustfully, beside each other.

As the City grew, a second pumping plant was needed. In 1932 the West Pumping Plant was built. It is now (1962) pumping 38,000,000 gallons a day. Its intake is a 72-inch pipe extending 8,800 feet out into the lake.

The growth of a city may be measured by the amount of water it consumes. In the first full year of operation, 1869, the Treasurer reported that he received in all \$4,264.47. Three years later, 1871, he received four times this amount, \$18,138.08 for pumping 361,048,680 gallons of water. This may be compared with the year 1960, when 13,418,720,000 gallons were pumped, with an income of \$1,455,447.63. The amount of water pumped increased 3700 per cent, and the income increased 8010 per cent.

When the Water Board was established in 1867, no one had any thought that at some future time it might be found desirable to

furnish water to people who lived outside the city limits. Every farmer was supposed to dig his own well. But in 1909 the General Electric Company started a small plant in Erie under the name of the General Electric Company, Erie Works. In 1912 the managers suggested to the City Council and to the Board of Trade—the predecessor of the Chamber of Commerce—that they might build a very large plant here under certain conditions. One was that it should be built outside the city limits. To arrange this, the township of Lawrence Park was created as a separate political unit. Attorney James Sherwin arranged the details for the Company. Another condition was that the City should agree to furnish water. As additional legislation was required to do this, an Act was passed by the Legislature in 1913 which authorized the Water Commissioners to extend the mains outside of the City. Accordingly a large water main was laid out East Sixth Street to the new plant.

Today (1962) the City's pumping plants are furnishing water to the entire area surrounding the City. The Bureau of Water owns almost 451 miles of water mains, of which $103\frac{1}{4}$ are outside the city limits. The income to the department from users inside the city is \$1,081,823.66; from outside, \$373,395.97. The rates for the users outside the City are slightly higher than the rates paid by those inside the City. The number of families served is 38,885 inside the city limits, and 7,300 outside.

For seventy years, from 1867 to 1937, the affairs of the Water Department were administered by the Board of three Commissioners who were appointed by the Court. They were picked from among the best citizens of the City on the sole basis of business ability and intelligence. No business concern could have been managed better, as is shown by their financial statement. On December 31, 1937 the report shows that, of \$13,828,165.18 spent in building the plants and equipment and water mains, all had been paid for except \$1,320,000. Furthermore, there was almost one-half million dollars in cash in the bank, —to be exact, \$492,814.31.

In the 1930's, the City of Erie needed money. There had been a financial depression for several years, and people were necessarily slow in paying their taxes. Mayor Barber produced a plan whereby this profitable operation could be taken over by the City for its own purposes. A bill was introduced and passed by the State Legislature under which all right and title to the Water Department (which means ownership) was transferred to the City of Erie on the date of September first,

1937. In this way the City acquired \$492,814.31.

In order to make this deal appear attractive to the citizens, the City proceeded with loud publicity to reduce the water rates for unmetered water by ten per cent, which gave a slight saving to most people. This reduction amounted to \$49,759.21.

In 1948, this ten per cent reduction was quietly cancelled. In 1953, an increase of fifteen per cent was ordered. In 1958, an increase of twenty per cent for all metered water and for users outside the city was made effective.

The Bureau of Water now considers, oddly enough, that as a part of its cost of furnishing water it must also contribute to paying the salaries of the City officials. In the report of 1950 are listed the mayor and nineteen other officials, one-half of whose salaries are paid by the Water Department. For the year 1961, the sum of \$104,505 was thus spent.

For seventy years, from 1867 until 1937, the responsibility for furnishing to this community an adequate supply of good water for domestic purposes and for fire protection, was assumed by the Board of Water Commissioners, three men who were appointed by the Court on the basis of their integrity and business ability. In that time they spent thirteen million dollars for plants and mains, and paid for almost all of it. The profits from successful operation were used to pay off the debt and to maintain water rates which were lower than those paid by other cities on the Great Lakes.

Under the control of the City officials, the rates have been increased and the profits from successful operation—it is a well-managed and efficient utility—are used not to reduce the rates which the citizens must pay, but are applied to pay the salaries of elected officials.