

St. Thomas Waterworks

THE NUCLEUS of our present waterworks system was constructed in 1874 when Mr. Daniel Drake was mayor. A special construction committee was appointed, of which Mr. John Farley, K. C., was chairman. Mayor Drake was opposed to the waterworks and would not sign the by-law. On motion of M. A. Gilbert and T. Arkell, he was voted out of the chair and the late Mr. Henry Brown appointed chairman. Mayor Drake refused to vacate the chair, and on the advice of Mr. Farley the duties of chairman were performed by Mr. Brown from where he sat. All the monies for the construction of the works passed through the hands of Mr. Farley. The then system was for fire protection only. The pumping station was at the McLean flats at the west end of the city, the source of supply being Kettle Creek. The pipes extended along Talbot street to the present City Hall; on Elgin and Metcalfe streets to Wellington street and west to the old Town Hall and out on Pearl street. The city grew eastward and there was a demand for a new waterworks system, not only for fire protection but for domestic purposes, which resulted in the establishment of the present system in 1889, a result which The Journal was largely instrumental in bringing about. The system adopted, the strong and mechanical filtration of Kettle Creek, was on the recommendation of Engineer Allan who by the way has been engineer since the water works was established. When it was decided to extend the system, a source of water supply was looked for and wells were sunk on the McLean flats in close proximity to the old pumping station, which it was the plan to enlarge, but all that was secured was a well of excellent mineral water, good for bathing purposes. City Engineer Bell then set to work to develop Locke Springs, and very largely increased the flow therefrom. He submitted two schemes to the consideration of the city council, one to pipe the water from Locke Springs down the creek and the other to allow the water from the springs to enter the creek and to use the creek water, construct a reservoir for storage purposes, purify the water by mechanical filtration and erect the pumping station where it now is. The late Mr. Haskins, city engineer of Hamilton, was called in consultation and he recommended the adoption of the second of Mr. Bell's plans, that of taking the water from the creek, and this plan was adopted. Before deciding on the system of mechanical filtration, Messrs. Bell, McCully and Isardt spent a couple of weeks inspecting similar plants in other places. When the pumping station was first erected, two Worthington engines of two million capacity each, and two filters were installed. A third filter was installed in 1893. In 1904, three new filters and a five million gallon pump were put in, thus doubling the capacity of the pumping station. The filtering capacity before was one and one half million gallons per day, and when the new work was completed the filtering capacity was three million gallons per day. In 1894 the dam was increased very largely by excavating. Since

then it has been replaced by a concrete structure and built eighteen inches higher and four-foot blast boards can be put on if desired.

As it stands today, the St. Thomas waterworks system is one of the most efficient and complete in the province. Within the past year or so in excess of \$80,000 has been expended in the erection of a new standpipe on Amelia street in the centre of the city and in the construction of miles of new steel water mains, most of them of the eighteen inch variety. New boilers of the most improved pattern have been installed at the pumping station and that building has also been completely remodelled and put into excellent shape.

The new standpipe, which is one of the largest in the province, cost in the neighborhood of \$25,000. Its value lies in the greatly increased fire pressure it affords for the downtown business district, thus tending toward a substantial reduction in insurance rates.

The source of St. Thomas' water supply is from Kettle Creek and artesian wells. Kettle Creek has origin from springs, a few miles north of St. Thomas, and flows around the city down to Lake Erie at Port Stanley. In 1905 the city purchased a fifty acre farm to the north of the works and the following year commenced to sink artesian wells on the waterworks premises, the result being exceedingly gratifying. Altogether in 1907, twenty-five wells were put down, in depths from 76 to 184 feet, with few exceptions all the wells flowing. Tons of underground water available, some of them showing a flow of over 100,000 gallons per day. In 1908 the board again increased the supply by the sinking of more artesian wells. Arrangements were made by the board with Mr. Charles Locke to put down such number of wells as they thought desirable on Lot No. 5, South Edgeware road. Altogether, there are thirteen wells sunk. Ten only were used. All those wells, including those put down in 1907, have been piped to the reservoir, so that now there is probably 1,500,000 gallons from this source. The analyst's report during the years since the drilling of these wells has shown a marked improvement in the quality. The reservoir capacity is now about 26,000,000 gallons. The total area of the property at the pumping station is 139½ acres exclusive of the park. The private services number in the neighborhood of 4,000. The system is very solid, financially. In 1892 it turned over its first surplus to the city and since then has shown steady increases in these surpluses. The works are under the direct management of three commissioners, two of whom are elected by the people, and the mayor is the third. The present commissioners are: George K. Crocker, chairman, who has held office for some thirteen years, being chairman of the board for the most of that time, George Geddes and Mayor M. B. Johnson. The works are under the direct supervision of City Engineer Mellis Ferguson, while S. O. Perry is the secretary-treasurer.

SOME ST. THOMAS WATERWORKS STATISTICS

Year	Gallons Pumped	Earnings	Expenditures	Gross Surplus	Debitures and Int. Paid by City	Net Surplus
1904	380,665,010	\$34,018.18	\$23,737.81	\$10,280.37	\$ 6,793.10	\$3,487.27
1905	449,758,750	41,216.60	29,064.24	12,151.36	6,793.10	5,358.26
1906	428,327,395	40,342.30	27,302.03	13,040.27	6,793.10	6,247.17
1907	443,521,605	41,391.24	23,574.61	17,726.63	10,021.55	7,705.08
1908	507,193,436	44,957.75	29,457.75	15,500.00	10,021.55	5,448.45
1909	511,793,365	45,565.45	27,836.07	17,729.38	11,593.49	6,135.89
1910	504,322,705	46,991.84	28,596.30	18,227.79	12,265.13	6,562.66
1911	512,766,605	46,548.57	25,040.76	21,507.81	14,074.16	7,433.65
1912	561,859,089	47,852.75	27,545.81	20,306.94	14,075.30	6,231.64
1913	579,803,273	45,176.10	26,763.82	18,412.28	14,108.93	4,303.33