

✓

THE TOWN OF ST JOHNSBURY VT

A REVIEW OF
ONE HUNDRED TWENTY-FIVE YEARS
to the Anniversary Pageant 1912

BY
EDWARD T. FAIRBANKS

"I writ it also out of great good-will
Unto my countrymen * * *
* * and for the sake of those that may
Not yet be born; but in some after day
May make good use of it"

T. Mace

* * *

ST. JOHNSBURY
THE COWLES PRESS
MCMXIV

their village only but also of the state." "The Torrent Company is marked by fine appointments and discipline, vigorous personal appearance and a general air of sobriety and good breeding."

VILLAGE WATER SUPPLIES

For about seventy years each family had to provide its own independent supply of water; partly by directing roof-water in to tubs or cisterns, partly by digging wells, partly by going with pitcher or pail to the nearest spring for drinking water. Here and there a few small springs were found by the early settlers. One, known as the Cold Spring, was in the edge of the woods below the first school house, which faced what is now the head of Summer street. This is reported to have been a great convenience to the school children with their tin cups; years afterward when a little pond had been constructed it was equally interesting to boys and girls with their steel skates. On or near Judge Paddock's premises was a small spring; another one bubbled up at the Lawrence tannery, now Pinehurst, which supplied many family pitchers of that neighborhood; water was brought up in pails from a spring below Dr. Lord's at the south end of the street. Dr. Stevens' well, now covered by the concrete south of the brick block, was for many years a source of water supply to families near the Bend; it was surmounted by a clumsy structure popularly known as the village pump. Introductory to a paper on Aqueducts, ancient and modern, written about 1859, is found a reference to local conditions from which the following is taken:—

ERASTUS FAIRBANKS' REMINISCENCES

"My early recollection of the village of St. Johnsbury which included at that time only the houses on the Plain, vividly brings to mind the great inconvenience occasioned by the want of water, especially for culinary purposes. To meet this need various projects were put forward. Captain James Ramsey and Willard Carleton at one time undertook to bring water in clay pipes from the hill northwest of the Plain. The pipes were in sections about two feet long, made by a patent machine and designed to be inserted into each other and cemented. These pipes were great absorbents of water and easily broken; and being incapable of sustaining any considerable pressure the plan proved abortive and within two years was abandoned. Specimens

of those clay pipes may be found at the present day; they were extensively used for landmarks, and in the town records of deeds reference is frequently made to corners of lots indicated by a clay pipe buried vertically in the ground."

It occasionally happens in the miscellaneous excavations of more recent date that scattered remnants of those old red clay pipes are thrown up like poor Yorick's bones by the spade; the writer has a good one planted pointed-end up, in his garden—"an archaeological relic of man and his industries," long prior to the period of water-mains, hydrants and garden sprinklers; others that were set to mark boundary lines are presumably still standing faithfully at the post of duty, defending land rights against unlawful invasion.

The manuscript from which the foregoing quotation has been taken, describes a novel process of trying to reach underground water near the south end. On the spot where the Academy Fountain now plays Dr. Luther Jewett who lived directly across the street sank a well about 1829, from which he afterward remarked

THE BOTTOM DROPPED OUT

"He commenced with a brick curb at the surface which he settled into the earth by throwing out the sand within, so that the brick tube settled gradually down while additional bricks were laid upon the top. In this way he proceeded through the sandy formation to the depth of nearly forty feet, when he reached a small supply of water upon a substratum of clay. Deeming the quantity of water insufficient, he continued to dig in the clay until, as he used to say, the bottom of his well dropped out! For, after going through a thin layer of clay, he came into dry white sand of an unknown depth, and the effort to find water was abandoned.

Several years ago, a boy, while running across the spot, broke through the soil over this well, but fortunately threw himself forward so as to escape falling in. The well had been filled mostly with wood, a cheaper article than at the present time, which in the process of years had decayed, leaving a dangerous cavern."

A REFRACTORY RAM

The water that was running to waste from the old Dr. Lord spring south of the Plain was of fairly good quality, and in 1851 J. P. Fairbanks installed a hydraulic ram which pumped a small

stream of it up to the level of his buildings. This machine was a novelty in the village, and boys were attracted to it, particularly after nightfall when its wierd and measured thumping sounded more strangely than the hooting of the owls. The ram was apt to get out of gear and David Kinsman was the man always sent for to fix it. One time his patience with its refractory behaviour was so exhausted that he inflicted on it a smart rap with his tool, accompanied with expletives of the sort not desired on those premises. Turning suddenly, there to his surprise, stood the owner of the ram, who had overheard the vocal explosion. He said nothing, but to the surprise of both men the machine resumed operations and began to pump. The next time it stopped Mr. Fairbanks went into the shop and told David that he had better go up and say a few words to the old ram.

THE ST. JOHNSBURY AQUEDUCT

In 1854 the St. Johnsbury Aqueduct Company was incorporated for the purpose of supplying the village with water; the corporators organized in March 1857, with Dr. Bancroft, President; Ephraim Jewett, Clerk. At a citizens' meeting held at the St. Johnsbury House they reported thro a committee, a plan to pump Passumpsic River to a reservoir on Bingham Hill, the present site of Brightlook, 190 feet above the river level. This reservoir was planned to take in 4000 gallons an hour, with capacity for 126,876 gallons. Subscriptions were started for 300 shares at \$50 each; nothing further was accomplished; the suggestion of a reservoir however was carried out by the Aqueduct Company in 1866, and until the erection of Brightlook Hospital the low circular structure on Reservoir Hill was a familiar object west of Summer street.

On the ninth of January 1860 the new St. Johnsbury Aqueduct Company was organized under the Act of Legislature of November 21, 1859; with a capital of \$100,000 which was doubled 37 years later; the corporators were the E. and T. Fairbanks and Co. who purchased the property of the former Company, most of which was already owned by them. The necessity of a more adequate fire protection at the Scale Works, led to the construction in 1861, of a six-inch pump-log line to the Hale Springs in

Waterford, which ultimately tapped the Stiles Pond and finally developed into the extensive Aqueduct system now depended on for the entire domestic water supply of the village.

In the summer of 1877 new iron cement-lined pipes were laid to Stiles Pond, which the Company had recently purchased. It was found that the Pond which then covered sixty acres was 176 feet higher than Main street and that by doubling its capacity by damming, a town of 40,000 population could be amply supplied for all needed purposes. A year later the Pond was giving seventy pounds pressure to the square inch on Main street and 110 on Railroad street. A new filter of 2101 feet surface and 30 inches depth of gravel and fine sand was built in 1882; since that date the four large filters now in use, with standpipe, have been erected and all the water brought to the village comes down thro 42 inches of approved filtration. In 1894, ten miles of new piping were laid, mostly ten-inch; during that and the preceding year, nearly \$75,000 was expended on construction, including \$4250 for filter, and \$600 for a venture meter. In addition to the ten-inch main laid in 1894, a fourteen-inch line, following a different route, was laid in 1912 from Stiles Pond to Summerville about three and a half miles length, making two separate mains of 24 inch total capacity. The amount of water used or drawn in the village is registered each ten minutes by the meters, showing on the average a million gallons per day. The aqueduct is capable of supplying three and a half million gallons daily. Since 1906 all water for domestic uses has been taken from this system; there are also 61 hydrants for use by the fire department, 34 of which were paid for by the village. The Pond is fed principally by subaqueous springs of copious volume; to secure perpetual purity of inflowing waters, the Aqueduct Company has purchased the Stiles farm, and taken other measures to protect the water shed.

THE VILLAGE WATER WORKS

During the summer of 1876 the Village Water Works were established at the mill dam in Paddock Village, the original Arnold water privilege. The main purpose in view was to secure fire protection; water for all other uses was however included in

the plan. The small island was secured, on which was placed the pump house, a brick building about thirty feet square; and six-fortieths of the water power was purchased, for \$600. In May the Trustees contracted for a number-one Flanders Pump, capacity 500,000 gallons per twenty-four hours; also for a number-three Pump, capacity 2,000,000 gallons, guaranteed to throw six one-inch fire streams 100 feet each; also 1940 rods of iron pipe, two to twelve inch sizes; also 66 two-way and 4 three-way hydrants—total piping reaching six miles and twenty rods. This contract called for \$56,940.93 and did not include the work of trenching and laying the pipe lines. This was undertaken by Joseph Trudell at \$2.74 per rod for the entire six miles. The water wheel at the pump house was Buzzell's giant wheel, made in Paddock Village. To meet the expense of this river system, Village Water bonds to the amount of \$75,000 were issued, payable after five and within twenty years, at the rate of \$5000 a year.

The hydrants did good work in playing on burning buildings, but serious difficulty was encountered by reason of inadequate water power; and the annual expense for repairs and up-keep of the machinery was heavy. During the month of January 1881 there was no power to move the pumps. In 1892 a new boiler and steam pump was put in at an expense of \$3124; this was 185 horse power, intended to discharge 1500 gallons a minute on a fire and to deliver a million and a half gallons each 24 hours. In October that year the power was in requisition, pouring 1000 gallons a minute for four hours on the fire that swept the east side of Railroad street. Three years later at the burning of the Pythian Block a pressure of 110 pounds was readily sustained. In 1893 the village paid \$4000 for four additional shares of water power; of the forty shares of that water privilege the Village of St. Johnsbury now owns eight.

In August 1910 the use of Passumpsic River water for drinking and household purposes was discontinued by order of the State Board of Health. It is now delivered for fire protection, sprinkling, water troughs and fountains, stables, garages and manufacturing purposes, only.

In seeking a right solution of the water supply problem, surveys at various times were made and reported to the Village Trustees. It was estimated that water connection with Joe's Pond would cost \$188,378; with Goss Hollow Brook, \$100,273; with Hall's Pond, Waterford, \$140,624; with Willoughby Lake an undesirable sum; an Artesian well would call for \$40,000; an adequate Filter on Passumpsic River would cost \$30,000. These various propositions were considered at Village meetings; the filtration scheme was put up urgently in 1905, on a \$20,000 estimate; this came within 31 votes of adoption; a second special meeting was called, at which time it was rejected by a majority of 165 votes.