

HISTORICAL COLLECTIONS
OF THE
ESSEX INSTITUTE.

Vol. II.]

June, 1860.

[No. 3.

HISTORY OF THE SALEM AND DANVERS AQUEDUCT.

BY C. M. ENDICOTT.

"Where water, clear as diamond-spark,
In a stone bason fell.

Above, some half-worn letters say,

'Drink, weary pilgrim, drink, and pray.

For the kind soul of Spill. Prag.

Who built this cross, and well.' "

[Scott's Marmion.]

It is conceded by all medical men, that pure water, equally with pure air, is among the first requisites to the health of a city; and it is also generally acknowledged that analysis has demonstrated our city to be supplied with as pure, if not the purest water of any place in the Union—that it is no figure of speech to say it is as "clear as diamond-spark," and so free from vegetable decomposition and acids, that it exerts no action upon lead, or any other deleterious substance, with which it comes in contact.* All visitors, as well as our own citizens who have left for a residence elsewhere, are usually impressed with the conviction, that a glass of cold water from the springs which supply Salem, or in other words, *Salem Aqueduct water*, is as exhilarating, and to them more refreshing

than a draft of England's ale. And those far seeing men who contributed to confer this inestimable blessing upon our city are worthy, like our motto, of perpetual remembrance as the benefactors of our race. The late Dr. Holyoke expressed the opinion that the health of our city was much improved by the introduction of such pure water; and that several agonizing complaints, such as stone in the bladder, troubles in the kidneys, and bowel complaints generally, were much lessened, and in some instances almost wholly eradicated since that period.—Our Puritan fathers were not insensible to its excellence, which is thus spoken of by a recent pleasant writer: "Even the *common spring water* in the country was averred to be superior by those zealous historians whose pens were dipped in rose water. Wood says "it is farre different from the water of England, being not so sharp, but of a fatter substance, and of a more jettie color; it is thought there can be no better water in the world." It was probably from the consideration of the benefits thus con-

* A piece of lead through which the water had coursed upwards of twenty-five years in Barton Square was found as fresh and free from any corrosion as when first laid down; and this has been found the case throughout the city.

ferred that the town of Salem did not, until within a few years, tax the real estate of the Company.

Several small individual enterprises had been simultaneously undertaken for supplying a small portion of the inhabitants bordering on Danvers by means of an aqueduct; for instance, a fountain was built and logs laid down in 1796 to supply Frye's Tavern and the inhabitants in the immediate neighborhood. It was incorporated under the name of the "*Proprietors of Frye's Aqueduct*" in 1807, but was operated several years before by private individuals.—The fountain was situated in the Horse Pasture. Also another, under the name of the "*Union Aqueduct*," which had its fountain in the Pickman land, and was incorporated in 1801; the first consisting of only five individuals, viz: Daniel Frye, Elcazer Pope, Jacob B. Winchester, John Stimpson, James Brown; and the last of only six, viz: Caleb Low, Rob't Shillaber, Sam'l Purinton, Step. Larrabee, Amos Purinton, Lydia Trask.

But the first concerted plan, however, of laying down an Aqueduct on a grand scale and supplying the inhabitants *generally* of Salem and Danvers with pure spring water from the grounds in the neighborhood of Spring Pond was first conceived in the year 1796. Salem in particular had suffered much inconvenience from a want of a sufficient supply of good, wholesome water for drinking, culinary and laundry purposes. Their works were then and have ever since continued to be situated upon the southerly side of the old Boston road, just this side of Brown's Pond and about half a mile in a North-Easterly direction from Spring Pond—the ground here being very spongy and most of the year full of water. No water within a circuit of six miles from Salem was found so pure as in these grounds. Their operations were at first very primitive and simple, consisting of a large size fish hoghead for a fountain, sank into the earth, and *saplings of three inches* bore for the main pipe. As might be expected these did not long continue. In fact, all their precautions indicated a want of

confidence in the undertaking from the beginning, which probably arose from doubts as to the quantity of water the grounds would supply.

The first meeting held was on the 30th December, 1796, at the Sun Tavern, when Jacob Ashton was chosen Chairman and John Jenks clerk; which meeting resulted in the choice of a committee, consisting of Edward Southwick, Wm. Gray, Jr., and Joshua Ward, to procure an ACT OF INCORPORATION, and to purchase the necessary logs, contract for boring the same and also to contract with the owners of land through which the Aqueduct is to pass for that privilege, and also to do whatever they may think proper to forward the business as the season and circumstances may require. It may be interesting at this time to recount the names of such public spirited citizens of Salem and Danvers as attended that preliminary meeting, all of whom have passed "to that undiscovered country from whose bourne no traveller returns," viz: Abel Lawrence, Wm. Gray, Jr., Sam. Gray, Joshua Ward, Icha. Nichols, Wm. Orne, Jerath. Peirce, Wm. Lang, Nath. West, Jacob Ashton, Squiers Shove, John Jenks, Edw. Southwick, Jona. Dean, Jos. Fenno, Benj. Carpenter, Abner Chase, Philip Chase, Aaron Wait, Jacob Crowninshield, Jos. Aborn, James Bott, Edw. Pulling, Folger Pope, John Gardner, Jr., Sam. Derby, John Norris, John Daland. Besides these were the following persons interested in the undertaking who did not attend this preliminary meeting, viz: Elias Hasket Derby, Wm. Prescott, Benj. Pickman, Benj. Pickman, Jr., Benj. Goodhue, George Dodge, E. A. Holyoke, John Gardner, David Nichols, Sylvester Osborne, Wm. Stearns, Benj. Watkins, Eben. Putnam and Zadock Buffinton.

The memorial subsequently submitted by this committee to the Legislature was as follows:

To the honourable Senate and the honourable House of Representatives of the Commonwealth of Massachusetts, in General Court assembled:

The memorial of William Gray, Jr., of Salem, in

the county of Essex, Merchant, Edward Southwick of Danvers, in said county of Essex, Merchant, and Joshua Ward of said Salem, Merchant, for and on behalf of themselves and others, their associates, respectfully show:

That the Inhabitants of the said Town of Salem are in general but poorly supplied with water, and at no time with water that will wash, and that at this time there are many wells in that town which are dry—that there are within a few miles of that Town many ponds and springs, from which the Inhabitants of said Town may be abundantly supplied with good water by means of an Aqueduct. And that many persons of that and the neighboring towns have associated themselves together for the purpose of Petitioning this honourable Court for a charter of incorporation, and for this intention have appointed your memorialists a committee to obtain such charter of incorporation,

Wherefore your memorialists pray this honourable Court that they and their associates in said business may be incorporated with such powers and under such restrictions as your honours may judge proper, for the purpose of bringing fresh water from said ponds and springs into the said town of Salem. And as in duty bound will ever pray.

Signed, WILLIAM GRAY, JR., }
 EDW'D SOUTHWICK, } Committee.
 JOSHUA WARD, }

January, 1797.

A charter was accordingly obtained, dated 9th March, 1797, under the style of the "PROPRIETORS OF THE SALEM AND DANVERS AQUEDUCT, for the purpose of conveying fresh water by subterranean pipes into the towns of Salem and Danvers," but designated no particular place from which they should bring it. It authorized the proprietors to hold real estate not exceeding thirty thousand dollars, and gave them liberty to enter upon and open any part of the streets, highways or townways in Salem and Danvers for the purpose of placing such pipes as may be necessary for the building and completing or repairing such Aqueduct. It was also provided that the towns of Salem and Danvers severally shall have the privilege of placing conductors into the pipes for the purpose of drawing such water therefrom as may be necessary when any Mansion House or Barn or other building shall be on fire without pay-

ing therefor. It further provided for a protection of the logs so laid, "that if any person shall maliciously or wantonly injure said aqueduct, he or she upon indictment and conviction thereof shall be punished by a fine not exceeding three hundred dollars, one-half to go to the proprietors and the other half to the use of the town; and shall be liable to pay treble damages to said Proprietors, to be recovered by action of the case."

The proprietors organized under this charter on the 7th April, 1797, by the choice of Wm. Gray, Jr., President, Jacob Ashton Vice President, John Jenks Treasurer, and Joshua Ward, Edward Southwick and John Norris, Directors, and on the 19th Oct. of the same year Thomas Nichols was chosen Agent. The number of shares were ordered to be one hundred of one hundred dollars each, making a capital of TEN THOUSAND DOLLARS. On the 14th day of Nov. they "established rules and regulations for the direction of those persons who take water." The next year (1798) the company built a reservoir of 10 feet deep and about 24 feet square on Gallows Hill, and agreed with the Proprietors to pay them six dollars per year for the term of seven years. They completed their works and began to supply water to the inhabitants in the spring of 1799, and paid the first dividend of profits in Nov. of that year. On the 14th March, 1799, Wm. Gray, Jr., bought, in his own right, of Wm. Shillaber 11½ acres of land in the Horse Pasture, contiguous to the Aqueduct Fountain; and 21st Feb'y, 1800, the President and Directors were authorized to purchase the land where the fountain was situated—which had been already anticipated by Mr. Gray. Mr. Gray conveyed to Jona. Shillaber, March 30, 1800, all but one acre, which he reserved probably for the use of the Aqueduct. They continued to make dividends until Feb'y, 1804, and divided in all forty-one dollars per share in seven years, being a fraction less than six per ct. on their capital. On the 21st Feb'y, 1800, the income was found inadequate to the necessary repairs and expenses attending the

Aqueduct, and the price for consumers was increased from five dollars per family to 60 cents per month. In August, 1802, the old fish hoghead fountain gave out and it was found necessary to build a new fountain, when the Company bought of Caleb Low 5 acres of land, belonging to the estate of William Shillaber, and erected a new fountain under the supervision of Wm. Gray President, Joshua Ward and John Norris Directors, to the Southward and Westward of the old one, and voted "to cover it with a roof to keep out the filth that had injured the water." In June, 1803, the agent was directed to open the pipe that led to Wm. Gray's wharf and dispose of water at twelve and a half cents per hoghead. In Feb'y, 1804, it was discovered the saplings which constituted the main logs were also giving out, which discouraged many of the undertakers, and the project appeared likely, at this time, to be abandoned—the stockholders were perfectly aghast when it was proposed to lay down a new log of five inch bore, and the question was asked, "who could be expected to find sufficient funds for that purpose?" Our highly respected townsman, the late Jos. Peabody, who had but recently become a stockholder, enquired how much would be required for the purpose, was answered at least \$20,000, replied, "*I will be answerable for it.*" This gave new impulse to the drooping energies of the company and it was immediately "Voted That a new log be laid down for the Aqueduct of a bore not less than five inches, and that the President and Directors be and they are hereby authorized to assess such sum and sums of money to carry the business of laying down the new log into execution." In June, 1803, Eben'r Moulton was appointed to oversee and take care of the Aqueduct. He is to attend to the Fountain, Cistern, principal pipes and the branches, to see that they are in order and to keep them in repair and that no person wastes the water. If he can obtain fifteen branches in Norman Street he is to carry the Aqueduct into that street, beginning at Capt. Wm. Orne's house n Summer Street and Mr. Eveleth's in Nor-

man Street and continue both ways until he meets at or near the common sewer in Norman Street. Between the years 1804 and 1807 the company assessed two hundred and sixty-five dollars a share, as authorized by the vote of February, 1804, making altogether 26,500 dollars. In 1804 the Directors thought best to employ some person to contract for the logs and engaged Capt. Asa Towne, who was immediately despatched for that purpose.

In July, 1805, the Proprietors "Voted That the logs of 5 inch bore be continued down Essex Street as far as Richard Ward's, if there be logs enough for that purpose, and that two logs of 3 inch bore be carried on each side of the pavement as far as John Gardner's corner leading to the common." In this month the Directors reported to the Proprietors "that they had endeavored to obtain what information they could respecting the rent proposed for the use of the water from the Aqueduct, and among others they had procured the rates that the Boston Proprietors had for the water they supplied," which after being read they

Voted to adopt the Boston prices as the rate for the Salem and Danvers Aqueduct, and that for the use of the water from the Aqueduct the following sums shall be paid annually:

- | | |
|---|--------------------------|
| 1st For a family of five persons. | Eight dollars. |
| 2d For a family of six persons and less than twelve..... | Ten dollars. |
| 3d For a family of twelve persons or upwards..... | Twelve dollars. |
| 4th For a Public or Boarding house | Twelve dollars. |
| 5th For a West India Goods Store from | Eight to Twelve dollars. |
| 6th For a Mansion house and West India Goods Store under the same roof to be supplied from one tube only, not to exceed | Sixteen dollars. |

On the 26th Nov., 1805, the Proprietors met at the Sun Tavern, to determine into what streets and how far the main tube of the Aqueduct shall be further laid, when they "Voted that Mr. James Bott, the Superintendent, be and hereby is authorized to procure such a quantity of logs and of such sizes as he shall think necessary for the Aqueduct for the next season, for carrying it further into the lower part of the town and for branches."

Between Feb'y, 1804, and November, 1807, the Company made no dividend of profits, their earnings being wholly absorbed in the outlay of laying a new log and extending their works, besides the \$26,500 assessed upon the Proprietors. The Company had now expended on their works \$44,100, including lost dividends, making the shares stand at 441 dollars each.

In Jan'y, 1810, Wm. Gray, Jr., resigned his office as President of the Corporation, having removed to Boston during the past year, and Jacob Ashton, Esq., was chosen in his place. In 1813 the Company bought from the heirs of Lydia Proctor, who was the daughter of Wm. Shillaber, 4 acres of land, and on the 6th September, 1813, they bought of Wm. Gray, Jr., the one acre of land reserved by him in the sale to Jona. Shillaber in 1801. In Feb'y, 1811, a suit was settled with Wm. Gray, Jr., one of the Company's earliest patrons, for money he represented as having paid Capt. Asa Towne, his agent, for James Gridley, on account of machinery for boring logs for the Company, which cost the corporation some 1230 dollars. Of the merit of this demand the records make no mention, but we have the guarantee of the officers, Jacob Ashton, Joseph Peabody and Joshua Ward, with their counsel, William Prescott, that it was not considered a fair claim and therefore was resisted.

On the 14th June, 1814, a meeting was called of the Proprietors in consequence of the frequent complaints of the failure of water, when it was voted "that a committee of three persons be chosen to superintend the business of the Aqueduct Fountain and to devise means for the increase in the supply of water," which committee consisted of Jerath. Peirce, Ichabod Nichols and John Derby. At the same time it was voted "inexpedient to sell any of the land owned by the proprietors and that the President and Directors be authorized to lease such part of the land as they may think best for a term not exceeding ten years." In Sept., 1814, the Company paid for building and repairing the Fountain *seven hundred and sixty-one* dollars, also suspended the collection of rents, and

hired of John Jenks *twelve hundred dollars* which was to be paid by vote "out of the first money which may be collected for rents on account of the Corporation." In 1814 the Proprietors bought two rights in the Sheep Pasture of Eben'r Jacobs, and in December of the same year they petitioned the C. C. C. Pleas for a partition of the said Sheep Pasture, "*as they hold it in common with others unknown,*" and they are desirous of holding the same in severalty. This petition was not granted until the year 1840.

In 1816, in consequence of great complaints having been made by persons who have branches of the Aqueduct that they have not been supplied with water sufficient for the use of their families, the proprietors were instructed at their meeting in January to order that from and after the 1st day of May next all branches leading to manufactories, such as distilleries, tan-yards, tallow-chandlers, soap-boilers, brewers, curriers, bathing-houses and stables, be discontinued, and further "Voted, That every man who has a branch of the Aqueduct, and shall refuse or neglect strictly to comply with the rules established by the company, shall be deprived of the use of it; and the agent of the corporation is hereby required to give notice to every individual who takes the water, that the branch of any one, who shall waste or give away the water, or allow the drawing place to be left so exposed as that his neighbors may come and take it, shall immediately be cut off; and that every person, whose drawing place is not in his dwelling-house or out-house, shall, within fifteen days, inclose it in a box, the door of which shall be locked, so that no person shall draw water but for the use of the families that pay for it; and any person who shall refuse or neglect to comply with this regulation shall, at the expiration of the fifteen days from and after this seventh day of May, 1816, be deprived of the use of the water."

In 1816 the Corporation paid B. C. Gilman eight hundred dollars for instruments and machinery to discover leaks in the Aqueduct—this

proved an unnecessary and dissatisfactory expenditure.

In 1817 the Proprietors bought of Arch. Rca, Ezra Northey and Sam'l Holman, Jr., Executors of the estate of Jonathan Mason, a lot of land on Sewall street, where they subsequently built a reservoir of 22,000 gallons capacity and erected some small buildings for their own use. In Sept., 1817, John Jenks being through indisposition incapable of attending to the duties of Treasurer and Clerk, the books of the Corporation were surrendered to the President, Mr. Ashton. In Nov., 1817, Benj. Blanchard was chosen Agent of the Proprietors, and was also chosen Clerk of the Corporation at a subsequent meeting.

The company went on smoothly from 1807 until 1818, making regular semi-annual dividends, passing during that period only three, amounting to about *four thousand dollars*, which were absorbed in the outlay on the works. At this time (1818) a want of water began again to be experienced, and a committee was chosen, consisting of Jacob Ashton, E. H. Derby, Jos. Peabody, Joshua Ward and John Osgood, "to take the subject respecting the Aqueduct *generally* into consideration, and to make a report of the state of the same at an adjournment." The supply to manufacturers had been stopped two years previous, and yet the supply for families was not sufficient. Also, voted—in anticipation of a large outlay, "that the Treasurer be authorized to hire three thousand dollars for the use of the Aqueduct." On the 10th Nov., 1818, a meeting of the Proprietors was called, "to receive of the Directors and Agent of the Corporation such information respecting the present state of the Aqueduct as they may be able to give, and to adopt such measures for procuring a greater and more regular supply of water as the Proprietors may think expedient." This Committee did not report at this meeting, but the Proprietors, never tiring in their endeavors to satisfy the public, "Voted *unanimously*, that the Directors be authorized to lay a range of logs from the Fountain to the Town Bridge, or

further if necessary, and that the expense thereof be defrayed, as far as practicable, from the income of the Aqueduct, and that they also be authorized to hire money or raise it by assessment on the Proprietors, if they should find it necessary." In 1819 the Proprietors made an arrangement with the Salem Iron Factory Corpo. to erect a boring mill at such place and on such terms as the directors and agents of the parties shall agree. The first logs were bored by hand, in various places, and proved very imperfect, and were not bored by machinery until this time. The officers of the Corporation were now Jacob Ashton President, Jos. Peabody Vice President, E. H. Derby, Joshua Ward and John Stone, Directors. Nov. 11, 1818, "The Directors requested the Agent, Benj. Blanchard, to proceed to Manchester in New Hampshire and elsewhere, to ascertain on what terms he could procure 15,000 feet of *yellow pine for logs*, to be 11 inches heart at the small end." The cistern or reservoir being situated in the horse pasture, [known as the Gallows Hill reservoir] and in case they have occasion to place another there, in December, 1818, the Proprietors bought of the estate of Curtis Searl one right and a half in that division of common lands in Salem formerly known by the name of the *horse pasture*, afterwards a part of *Gallows Hill Pasture*. Feb'y 8, 1819, the Directors authorised the President to procure at the Salem Bank a loan of one thousand dollars and give his note for the same on account of the Proprietors of the Aqueduct. On the 19th April, 1819, "the Proprietors of the Gallows Hill Pasture agreed that the Proprietors of the Salem and Danvers Aqueduct may occupy the cistern or reservoir they now have in the pasture, with liberty to pass to and from, repair, rebuild, or enlarge the same, on condition of their relinquishing to the Proprietors of this pasture the use of a right and a half, or cow lease, being the land bought of the estate of Curtis Searl, to this Proprietary, so long as the said parties are satisfied therewith." On the 12th Oct., 1819, the Proprietors bought the right of 26 persons, resident

in Salem and Danvers, "to enter into their lands and there dig up the earth to a sufficient depth and of sufficient width, for the purpose of laying and sinking one or more pipes or logs for an Aqueduct from the Fountain of said proprietors at Spring Pond, so called, in Salem, or elsewhere, into the settled parts of said towns, so as to supply the inhabitants of those towns with fresh water. This was preparatory to laying down what was afterwards known as the *Pond Log*—for which the Company bought the 15,000 feet of yellow pine.

On the 28th July, 1820, "John Osgood, Esq., with the Agent, Benj. Blanchard, was requested to visit the Fountain to ascertain whether it is necessary to make any alterations and repairs, and if it should be found necessary the said Agent be authorized to agree with any person or persons to make such repairs and alterations." The Company did not make any dividends of profits from Nov., 1818 to May, 1821, all their earnings being expended in laying down the new log. On 22d March, 1822, Benjamin Blanchard was sent to Boston to ascertain what he could obtain iron castings for, to unite the aqueduct logs. In Oct., 1829, the Company bought of Eben'r and Sam'l J. Shillaber a lot of land back of Federal street, from the middle of Carpenter street to the channel of the North River, for a convenient place to store logs, and built there a building to protect them from the weather. They also bought a lot of land situated near their fountain, of Jacob Gallucia, containing about one acre. The office of President became vacant by the death of Mr. Ashton in the winter of 1829-30 and on the 14th Jan'y, 1830, Jos. Peabody, Esq., was chosen to supply his place. Mr. Peabody was an efficient officer, took great interest in the Company, and continued its President until his death in 1844, having been some 40 years associated in the direction of the Corporation. The Company from 1821 made regular dividends semi-annually and went on smoothly for several years. No complaints were made of a deficiency of water; but the greatest obstacle they had to encounter during that period

was in 1834, when a project was in contemplation for laying down a *new* aqueduct, which originated in the *common misapprehension* of the immense profit of the present one, and a misunderstanding with one of the water-takers, who violated with impunity and insult the Rules and Regulations established by the Proprietors. Thus does the private spleen of an individual often work its way prejudicially on the public mind. An Act of Incorporation was obtained and most of the stock subscribed for, when they opened a negotiation with this corporation; and on the 10th of October, 1834, a meeting was held in consequence by this company, who always have been the servants of the public and willing on all occasions to hear any complaints, whether reasonable or otherwise. They chose at this meeting a committee of nine stockholders, "to examine into the state of the affairs of the corporation and the expediency of altering any of the by-laws, or establishing new ones, and making any regulations as to the price at which the water is furnished, and of adopting any measures which the present circumstances may require, with instructions to report at a future meeting of the Corporation." This Committee reported on the 23d of October, and the result was a considerable deduction in the tariff of prices, but with such modifications that the income of the Company was not materially diminished and they were still able to hold their heads *above water*. The officers of the Company at this time were Jos. Peabody President, E. H. Derby Vice President, John G. King, David Perkins, Wm. F. Gardner, Nathan Robinson, Directors. The consequence of this alteration in the tariff of prices was the abandonment of the new aqueduct and all proceedings on the part of the new company. Thus ended this unjust and cruel warfare upon a company to whom the city, in its beginning, was under the heaviest obligations—which came to it with healing on its wings, and the opposition to which it was subjected had its origin in such an unworthy and mercenary motive.

During this year (1834) the Company laid

down the first iron pipe of six inches bore, from North street down Essex street as far as Newbury street, or what *was* formerly called John Gardner's corner, and which still continues in a very fair state of preservation.— This outlay of five thousand dollars was also paid for out of the earnings of the Company. The want of water was now apparent, and it had now become necessary for water takers generally to affix pumps to their branches to enable them to get any water, and in the year 1839 the Corporation applied to the Legislature "for such additional powers as will enable them so far to extend and improve the works of the Corporation as to provide a full and constant supply of water for the use of the inhabitants of Salem and Danvers, and for power to increase the number of shares of said Corporation if the same shall be necessary." They obtained such power from the Legislature, dated April 6, 1839, which was accepted by the stockholders at their annual meeting on 2d of May, at which time a committee of nine stockholders was appointed "to consider whether any additional measures ought to be taken by the Corporation to furnish a more adequate and constant supply of water, and whether it is practicable and expedient to enlarge the number of shares for that purpose, and to consider of and recommend any improvements in the management of the affairs of the Corporation which they may deem for the interest of the Proprietors." This committee subsequently reported, "That from representations made and from their own investigations, they are fully satisfied that the quantity of water brought into the city by the present main pipes is inadequate to furnish the inhabitants who depend upon the Corporation for their supply of water, and this deficiency is probably owing to the following causes—*first*, extensive leaks and serious obstructions which it is impossible to discover before the season is far spent. *Secondly*, that the number of new branches added since the main was laid down in 1819 reduces the head of water so fast, that with the pipes in good repair they would but imperfectly furnish the amount

of water required. Your committee therefore recommend that the corporation cause a new wooden pipe without branches, for the supply of customers, and connected with iron joints, to be laid down from the fountain to the reservoir on Gallows Hill; they also advise that a committee be authorized to procure on loan the funds requisite to pay for said pipes, and to apply one-half of the water rents (after providing for the annual disbursements) to the liquidation of the principal and interest of said loan, until the same shall be fully paid." At a subsequent meeting the report was accepted, and that the Directors with Gideon Tucker and Ephraim Emmerton constitute the finance committee. Nine thousand dollars were subsequently hired of the Savings Bank for the purpose of laying down this pipe, which was paid for out of the earnings of the Aqueduct. On the 5th Nov., 1839, it was voted "expedient to connect the logs lately laid down from the *new* Fountain to the reservoir on Gallows Hill to the main iron pipe near Summer street, and that the same be immediately carried into effect." In Nov., 1840, in consequence of the want of water experienced at this time, a log was "laid from the Pool to the lower fountain, so that a portion of the water may be drawn from the pool to the fountain." A deficiency of water was still experienced, and the Directors had at one time in contemplation to conduct the waters from Brown's Pond to the present fountains on the land of the Corporation, and for this purpose appointed a committee of three persons to consider the expediency of it. This was, however, never adopted. In September, 1843, that old and faithful officer of the Corporation, Benj. Blanchard, died, much lamented by his associates, the President and Directors of this Corporation. Mr. Blanchard was thought not always to have sufficiently combined the *fortiter in re* with the *suaviter in modo*; but his duties were perplexing and onerous, while keeping a watchful eye for the interests of the Corporation. The Company continued to reserve one-half the rents arising from the use of the water to liquidate

the loan of 1839, but in Nov., 1844, omitted one dividend altogether. At this time the expenses of the Corporation were uncommonly large, by removing and repairing the Boring Mill and putting up a steam engine for boring logs. It was estimated up to this time the Company had expended one hundred thousand dollars on their works, or \$1000 per share. The Company from this time until 1849 were evidently failing in the quantity of water, with the pleasant prospect of its soon giving out altogether; and were groaning under the constant new applications for water, feeling the supply was not *then* adequate to the demand; when, fortunately for the Company as well as for the town, the Steam Cotton Mill was suffering for the want of pure water for its boiler and turned its attention to the Aqueduct, the Proprietors of which commenced to buy up the shares, evidently with a view to get the control of the Corporation. This, while it alarmed many timid stockholders, was the most fortunate circumstance which could have befallen the Company—for while the energies and confidence of the old stockholders were evidently drooping, and they were doubtful what course was best for them to pursue, believing all they had left was their franchise, and while they were considering by a committee the power of the Corporation for procuring an adequate supply of water for the purposes contemplated by the charter, and the expediency and feasibility of increasing those means by laying down other and larger pipes, also of increasing the capital stock of the Corporation, they were relieved from further anxiety by the action of the new stockholders, who addressed a letter to the Directors, requesting them to call a special meeting for the following purposes, viz: “to determine if the stockholders will vote to bring a larger supply of water into the city, and to ascertain if they will extend their pipes and water into South Salem, and to determine if they will increase the number of Directors to nine, and to consider if they will issue four new shares of \$100 each for each old share, and to ascertain if they will make four hun-

dred new shares in addition, of \$100 each, to enable them to lay down an iron pipe of 12 inch bore from the present fountains to near the head of Federal street.” This meeting was called on the 28th Nov., 1849, and the stockholders voted to adopt all the above suggestions and the Corporation was thrown completely into new hands. Nearly the whole old Board of Directors having resigned, a new organization of the company then took place, consisting of Wm. D. Waters Pres’t, Eben’r Sutton Vice President, Joseph S. Leavitt, John Lovejoy, Wm. Lummus and C. M. Endicott Directors. One of the first acts of the new organization was to authorize the Treasurer to hire, from time to time, an amount of money not exceeding fifteen thousand dollars, and to give his note or notes in behalf of the Company for the same. They immediately laid down an iron pipe leading through Union street to the Steam Cotton Mills in South Salem, and the Company gave permission to the Factory to draw water therefrom during the night time. Under the impression of some informality at the meeting of Nov., 1849, on the 9th of March, 1850, at a special meeting, the Corporation “voted to choose five Directors to fill vacancies,” when David Pingree, Philip Chase, Wm. D. Waters, Sam’l B. Walcott and Rob’t Peele were chosen. At this meeting the Proprietors so far altered the By-laws as to make the whole number of shares in the corporation one thousand, and that the par value shall be one hundred dollars. The new stock was eventually all taken up, but it dragged heavily for some time, under the impression that the whole undertaking was likely to prove a failure; that the grounds would not furnish a sufficient supply for the increased demand, and for which the engineers would give no encouragement; and the Company at this time applied to the Legislature for liberty to lay a log to the waters of Spring Pond, and for increasing their capital to \$200,000, which was granted May 2, 1850 and which the stockholders accepted at their annual meeting in May, 1851. The new organization now made strenuous efforts in laying down an iron pipe of 12 inch bore from the

fountain to the head of Federal street, and revised the tariff of prices, making, however, no alteration in the price at which families had been formerly supplied. The main pipe of 12 inches, measuring 16,165 feet, was all completed in the most perfect manner in the summer of 1850, under the charge of George W. Drury of Groton, Mass., with the able superintendence of the President, Wm. D. Waters, Esq.; and when it was ascertained there was sufficient water to fill the pipes, the Proprietors began once more to breathe easy. They also built a new reservoir or cistern, on their own grounds, capable of holding some 652,000 gallons of water.

But the President's work was not completed as to laying down the branches until the autumn of 1851, when, on the 3d of November of that year, the following preamble and vote was passed by the board of Directors, viz: "The important work of laying down a 12 inch iron pipe from the fountain to the entrance of the city, and also substituting and laying down pipes of the same material in most of the streets in place of the old wooden logs, thereby furnishing an abundant supply of water—the same having been completed under the able superintendence of our President, Wm. D. Waters, Esq., to the entire satisfaction of the Directors—therefore voted—That in addition to such compensation as may be satisfactory, that a piece or pieces of silver plate, not exceeding in value the sum of five hundred dollars, be presented to Mr. Waters by the Directors of the Salem and Danvers Aqueduct Corporation, as a token of their respect for the acceptable manner in which he has executed the undertaking." In addition to this the Directors voted, Nov. 1, 1852, "That a compensation of twenty-five hundred dollars be allowed the President for his services during the progress of the works, embracing a period of three years."

The Company went on harmoniously and satisfactorily to the public and to themselves from this time, making a fair dividend of profits, extending their works into North and South Salem, where they had not been before, and re-

laying the streets with iron pipes, as the old wooden logs decayed. They had an abundant supply of water for all purposes, and no complaints of a deficiency reached the Directors until 1859, when the business of Tanning and Currying had so much increased that these manufacturers demanded a larger supply of water than they had heretofore received. They laid their complaints before the city government, and a committee was chosen to confer with the Aqueduct Company. The impositions heretofore experienced, it was thought, from this class of consumers as to the quantity of water used had always caused them to be looked upon with suspicious eyes; but whether unjustly or not is not the province of the narrator to comment upon, but merely to state the fact, that as far back as 1813 it was considered "the price of the Aqueduct water to the Tanners was too low for the quantity they used, therefore Mr. James Bott, the Agent, was directed to make a new agreement with them." In proof of this supposition, it was found the quantity was abundantly sufficient for all domestic purposes on such days as these manufacturers did not make use of it, as Sundays and holidays. Always desirous, however, of serving all classes of customers, and particularly such a useful class to the prosperity of the city as the Tanners and Curriers, the Directors laid down, under the able superintendence of their President, Wm. D. Waters, Esq., an additional 6 inch iron pipe, from the main pipe at the head of Federal street, in Boston street, down Essex street to the head of Summer street; and also at the same time extended the main pipe of 12 inches into Spring Pond, as authorized by the Legislature in 1850. They however first built a most substantial filterer of two boxes, the outer one 16 feet square and the inner one of ten feet square, and had the space filled with some forty tons of rotten rock for the water to pass through before entering the pipe; also affixed a gate of 12 inches diameter to graduate the quantity of water taken from the pond, and have never as yet had occasion to raise it beyond *one inch*. The cost of lay-

ing down these pipes, together with the amount expended beyond the sum raised by creating new stock in 1850, induced the Directors to look into the whole cost of the Aqueduct, or *the construction account* since its first formation, which, after a careful analysis of expenditures, was ascertained to be 246,200 dollars, or 246 $\frac{20}{100}$ per share, and the Company thereupon doubled their stock in November, 1859, and it now consists of two thousand shares at one hundred dollars each, equal to two hundred thousand dollars, on which their dividends will be hereafter predicated. The Corporation have now some forty miles of pipes, including all the branches; and the number of water takers has swelled from 500 to 3600.

The duties of the Agent and Collector are comparatively onerous and perplexing, and can be appreciated only by those who are conversant with them. The shifts and turns at deception in the use of water are manifold, and prove how sadly we have departed from the standard of truth as demonstrated by Jennie Deans in the Heart of Mid-Lothian—but

“When *self* the wavering balance shakes
Tis rarely right adjusted.”

As the Agent has principally to rely upon the water takers in one case to render a true and accurate account of the number in a family, and in the other the quantity of water used, he has all sorts of people and all sorts of consciences to deal with, from the strictly honest and reliable, to those who appear preposterously to acknowledge no property in water, which is a gift in the providence of God, forgetting that the providence of God does not lay down pipes or convey water through them to their doors, and therefore believe it a venial offence to deceive in the use of it.

The height of the fountains is 57.3 feet above medium high water, and Spring Pond 63.6 feet. The quantity of water is now equal to supply an indefinite population. The reservoirs and fountains are capable of holding some 1,100,000 gallons, besides the great and inexhaustible reservoir of Spring Pond, containing

59 acres, which at present is scarcely used, but is merely a *corps de reserve* in case of need.—Ten thousand pounds of this water contains only $\frac{1}{100}$ th of one pound of solid foreign matter—this consists of silicious earth, sulphate of soda and common salt, the proportion of salts being about one-half; the evaporation of 20,000 pounds of this water will leave only *one pound* of these.

The perplexing lawsuits and various impositions this Company have experienced throughout its whole existence, we have forborne to recount or comment upon, as they would show up the worst phase in human nature. Suffice it to say, it has evidently been believed, that while they will not accord to corporations, *souls*, they at least believe they have purses to fileh and fatten upon.

The present officers of the Corporation are, Wm. D. Waters President; Jos. S. Leavitt Vice President; David Pingree, John G. Waters, Robert Peele, Aaron Perkins, Henry Cook, Eben'r Sutton, C. M. Endicott, Directors; Wm. Jelly Agent and Collector; C. M. Endicott Treasurer and Clerk. Annual Meeting first Thursday in May.

THE HOPKINS FAMILY IN RHODE ISLAND, TO WHICH STEPHEN HOPKINS, ONE OF THE SIGNERS OF THE DECLARATION OF INDEPENDENCE, JULY 4, 1776, BELONGED.

BY C. C. BEAMAN.

Read at a Meeting of the Essex Institute,
Thursday, March 8, 1860.

On a high ridge of land, twelve miles west of Providence, on the turnpike road to Hartford, may be seen a little cluster of graves. They lie in the Northwest part of Scituate, (Chopmist Hills,) a farming and manufacturing town of some four or five thousand inhabitants.

These resting places of the dead are in close proximity to the road, at the west end and outside of the wall of a kitchen garden, cultivated for many generations, and lying on the opposite