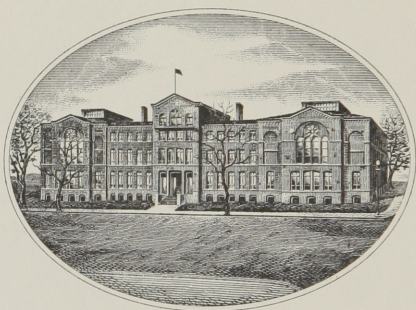




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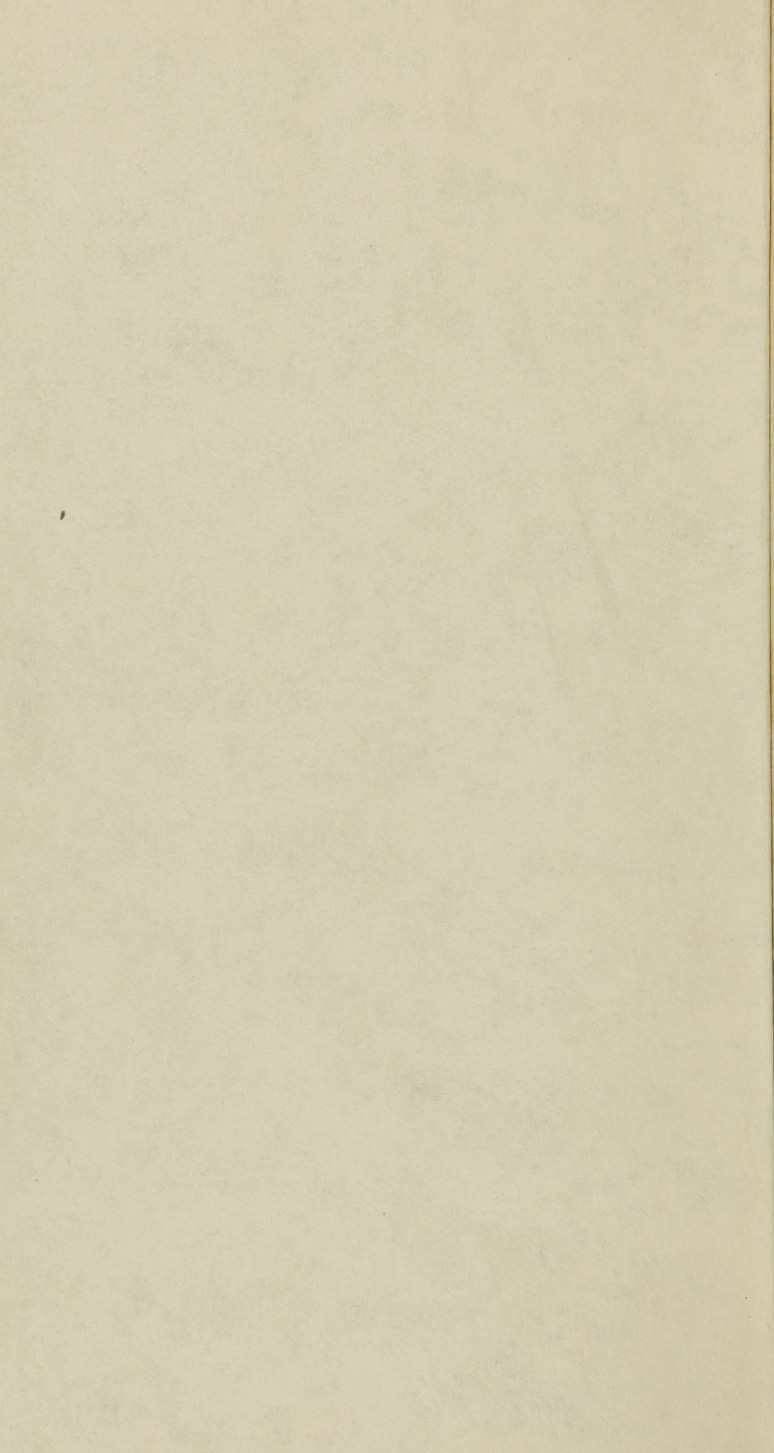


**Founded 1836**

**U. S. Department of Health, Education, and Welfare**  
**Public Health Service**









✓ 1799.  
R E P O R T

TO THE

Select and Common Councils,

ON THE

PROGRESS AND STATE

OF THE

W A T E R W O R K S,

*On the 24th. of November, 1799.*

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Printed by order of the *Corporation of Philadelphia.*

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—*Philadelphia:*—

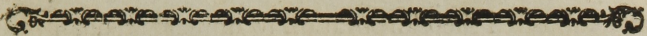
PRINTED BY ZACHARIAH POULSON, JUNIOR,

*No. 106, Chesnut-street.*

1799.







# R E P O R T

O F T H E

M A Y O R A N D C O M M I T T E E

O F T H E

S e l e c t a n d C o m m o n C o u n c i l s .

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*The Mayor and Joint Committee, appointed to superintend and manage the plan adopted by the Select and Common Councils, for the introduction of wholesome water into the city, having, though sensible of their duty in this respect, from a variety of successive causes, been prevented from making a full report, before the late election, now enter on this undertaking, which, from being so long delayed, has, of course, become lengthy and laborious.*

*In framing this report, the Committee feel a pleasure in acknowledging the voluntary aid of a Member of the late Committee, whose zealous attention to the business, from its origin, gave him an opportunity of acquiring extensive and correct information on the subject.*

**A**S many new Members have now taken their seats in the Councils and must be supposed less well informed on this subject than older members, it may be peculiarly useful to them to give a retrospective view of past proceedings and to dwell on some points that otherwise might remain too little understood, and which on that account have excited discontent  
and

and subjected the Corporation to unmerited censure. If, in giving this retrospect, too much minuteness shall appear to those already acquainted with the subject, the motive above stated, it is presumed, will operate as a sufficient apology.

However various opinion may be on the political character of the late Dr. Benjamin Franklin, his great merit as a natural philosopher, and his penetrating discernment between cause and effect, are universally admitted. It is well known to the public that in his judgment, several years ago, there was a growing necessity for some other supply of water, than that yielded from the pumps and wells sunk in the streets of this city. Time, reflection and more particular observation, have produced a general agreement in his position, and repeated affliction from the ravage of epidemic or contagious disease, rendered a copious supply of more wholesome water, in the estimation of many, indispenfible to the health and preservation of the city.

Incited by this general prevalence of sentiment, and by the petitions of very numerous and respectable citizens, the Select and Common Councils for the two last years past, have had their attention most powerfully drawn to this important object. Information as to sources of supply—modes of execution, and economy of expence, has been sedulously and repeatedly sought for, both individually, and by the appointment of committees.

A variety of schemes, and inventions of mechanic power, for the raising and introduction of water, in consequence of this attention and enquiry, have been brought forward, many of them possessing considerable merit, though ineligible, for the adoption of the Councils.

The general sentiment in favor of navigable canals, for some time turned the view of the Councils to the one commenced, for connecting the  
rivers



rivers Delaware and Schuylkill, the proprietors of which, were authorized (if they found it their interest so to do) to supply such citizens with water, as they might find disposed to use and purchase it.

Impelled by a strong desire to promote, by a combined effort, the accomplishment of two such great objects as the watering of the city, and the completion of this inland navigation, the Corporation advanced to conferences and negotiations on the subject, with the President and Managers, and with committees of the Stockholders of the Delaware and Schuylkill Canal. But on the result of long and mature reflection, it did not appear to the Councils, consistent with the duty they owed to the city, to commit its interests so far, as to embark in an undertaking of such apparent magnitude and expence. This impression was strengthened by a consideration of the difficulty in ascertaining, with any tolerable degree of precision:

I. The amount of expence, necessary for its completion:

II. The length of time it would require to perfect it:

III. Whether, if compleated, the double purposes of navigation, and the watering of the city, could be effectually answered at the same time, without injury to either; and

IV. If utility and emolument were objects to be contemplated, would either be of much value, without the completion of the Susquehanna and Schuylkill Canal, to introduce the carriage of Western produce.

Hence, as well as from other causes of no unimportant weight, the Councils deemed it adviseable to decline the following advanced propositions:

I. For the city to purchase all the unforfeited shares, (called 700) and to complete the Canal; or

II,

II. To become shareholders in the Canal Stock, with a proportionate representation in the direction; or

III. To give the sum of 200,000 dollars, for the privilege of taking a certain quantity of water from the Canal, *when completed*, conducting it from thence into the city, at the expence of the Corporation, and to pay a proportion of the charges for keeping the Canal in repair,

In July 1798, the springs of Spring Mill were visited by three Members of the Councils, who, from their view, conceiving and reporting favourably, both of the situation and of the quality and quantity of water issuing from them, induced the visitation of several other Members, and made on them similar impressions. In November following, a joint committee of the Councils, were appointed to receive, and authorized to employ agents for acquiring, information, on the watering of the city, and more particularly, on the practicability of a track, for conducting into it the water of Mill Springs, with an estimate of the probable expence.

On the 27th. of December, B. H. Latrobe, examined these springs, and, at the request of John Miller, junior, Chairman of the joint committee, addressed to him his considerations on the watering of the city, in two plans or projects, and his estimate of their expence, *viz.*

I. To introduce the waters of the Schuylkill, by means of Reservoirs, Tunnels and two Steam Engines.

II. The conducting of the waters of the Mill Springs.

These plans being fully expanded in a small pamphlet, entitled, "A view of the practicability and means of supplying the city of Philadelphia with wholesome water," published by order of the Corporation,



poration, it is not necessary here to give them in detail. The style in which they were treated by Latrobe, evinced his clear conception of the subject, and excited a degree of confidence in his ability to carry them successfully into effect. They were therefore on the 3d. of January 1799, reported by the committee to the Councils for consideration. By his estimate, the expence of the first plan was 69,000 dollars for the works from the Schuylkill to the Center-square, but to make it a full estimate, he allowed the sum of

	75,000
The distribution from the Center-square	
into the city, in 104,000 feet of pipes	
of conduit, assuming the rate of 50	
cents a foot, he stated at . . .	52,000
	127,000

And that of the second, for bringing	
the waters of Mill-spring, he cal-	
culated would not exceed, -	275,000
Expence of distribution as before, -	52,000
	327,000

In the first Plan—lightness of comparative expence and the prospect of speedy execution, were circumstances in its favour; two Steam Engines however would be necessary, and the annual expence of fuel and maintenance of course increased—this, and an apprehension of the water being too frequently turbid, and not sufficiently cool for culinary purposes, were objections.

In favour of the second—One Steam Engine only would be required—the Water excellent—and in purity and coolness not to be exceeded—against it appeared the expence and the length of time to construct the necessary works of conduit.

Satisfied

Satisfied in the practicability of obtaining a supply of water and in the prospect of its early introduction, if Steam Engines of sufficient power and perfect construction could be obtained in time, B. H. Latrobe was employed by the Committee to make the necessary enquiry on this point, and for that purpose went to New-York. In the mean time a memorial from the Councils, addressed to the Legislature, requesting a liberal aid to the City, was pending; some hopes were entertained that this aid would be granted, but a little time shewed the fallacy of such hopes, and Councils being encouraged by the success of Latrobe's mission, as reported by the Committee, concluded to adopt the first Plan, confiding that it would be patronized by their Fellow Citizens and sufficiently supported by their voluntary subscriptions on loan.

Though the estimated expence of this plan was stated at 127,000 dollars, yet general experience having proved that estimates mostly fall short of actual expence, it was judged prudent to allow nearly one fifth more for possible short calculations and contingencies, and on this ground the Councils assumed the sum of 150,000 dols. as that which would most probably be necessary for completely perfecting all the works. To effectually answer every useful purpose contemplated by watering the city, combined with the greatest practicable expedition (which from the general sense of the Citizens seemed desirable) this plan of all others appeared the most promising and likely to be the least expensive, even after the allowances and provisions for contingencies and short calculation, being, with the engines, buildings, and works of induction and distribution, 50,000 dollars less than the sum demanded by the canal proprietors for the privilege of taking water from the canal at some more distant day when all difficulties might be surmounted and the canal completed. Take away the expence of distribution, which will be the same what-

ever



ever is <sup>the</sup> source of supply, and by the execution of this plan the citizens would have the water of Schuylkill brought to the center square for 75,000 dollars, or, allowing 20 per cent for excess of expenditure beyond the estimate, then for 90,000 dollars; which is 110,000 dollars less than for the water of the same river, if taken from the canal at the price of the proprietors. The interest on this difference is 6,600 dollars per annum, being, without taking into account the repairs of the canal, a greater annual expence than will be required for the maintenance and fuel of both Steam Engines, as ascertained and fixed under a contract hereafter to be mentioned. There will appear to you, no doubt, an obvious propriety in this exposition, and digression from direct narrative: for by paying due attention to the expence of receiving water by plan No. I, compared with that of receiving it from the canal on the terms of its proprietors, those Citizens, who became opposed to the measures of the Corporation, from a belief that the canal was the most eligible means of supply may be convinced, that, under all circumstances, the City Councils, without in the least deserving the imputation of hostility to the canal, judged best for the interest of the City, in giving a decided preference to plan No. I.

More than 600 shares having, towards the latter end of February, been subscribed in the books of the Commissioners, under the ordinance passed the seventh day of that month, the Councils were encouraged to expect the remaining number of shares would also be fully or nearly subscribed, and therefore proceeded on the second of March, by concurrent resolutions, to authorize a joint committee of their bodies, with the Mayor of the city, to enter into and form contracts, to appoint and employ agents of execution, purchase materials for the commencement and progress of the work,  
and

and also to authorize the Mayor to pass orders on the city Treasurer, for payment, out of the water fund of such sums as might be certified by the joint committee to be due in pursuance of their proceedings.

A contract was entered into with Nicholas I. Roosevelt, of Soho on the river Passaick in New-Jersey, for two Steam engines of a power to raise and deliver at the height of 50 feet each, 3 millions of gallons of water in each and every 24 hours throughout the year, for the sum of 30,000 dollars, of which he was to receive, in advance, by monthly instalments, 18,000 dollars, and the remaining 12,000 dollars, after the engines were erected, put in operation, and due proof made of their sufficiency according to contract. By this contract he is bound, under good approved security, for the full performance of his engagements, not only for the making and delivery of engines to possess the above power, but to keep them in maintenance and repair for 5 years, delivering and supplying water from them in the following quantities, as they may be required, at the following compensation, (it being mutually and expressly understood that the price of coal should not exceed 8 dollars per 36 bushells delivered at the engine Houses) to say,

	<i>Dollors per eng.</i>		
1st. for 1 million of gallons delivered in every 24 hours throughout the year	}	3000 ditto	
2d. for $1\frac{1}{2}$ millions do. do.			
	}	4000 ditto	
for the time of supply at the rate per annum of			
3d. for 2 millions do. do.		5000 ditto	
4th. for $2\frac{1}{2}$ millions do. do.		5500 ditto	
5th. for 3 millions do. do.		6000 ditto	

and for any intermediate supply, at a compensation to be ascertained by the rate of the next rising specified quantity on the foregoing scale: subject how-



ever to a stipulation on his part, and admitted, that if at any time a less quantity than one million should be required of him, his compensation, on that account, should not be diminished under the first named sum of 3000 dollars per each Engine annually.

By a misunderstanding and collision of interest no agreement was made, to mutual satisfaction, for any extra power of the Schuylkill Engine. It therefore became excluded from the above contract, and the stipulation for the 5 years' maintenance and repair was in lieu thereof agreed to.

This important point has been however revived by N. I. Roosevelt, who finally acquiesced in the terms offered by the Mayor and Committee, on the basis of which an indenture of Lease and Covenant is drawn; but the negociation being much protracted by a variety of unlooked for circumstances, and the interruption of correspondence during the late dispersion of our Citizens, this instrument remains yet unexecuted; but as all the leading points have been mutually adjusted, it is apprehended that no material impediment exists to its speedy ratification. Until this takes place it may be thought premature to go into the whole detail of the lease; but sufficient at present to say, that as the committee were informed by Roosevelt that the works contemplated by him were expensive, requiring a large advance of capital, and he could not therefore engage in them without loss unless he had a lease to ensure him the possession and use of the engine, engine-house, and necessary land for a sufficient length of time, they have agreed to his having a term of forty-two years tenure, renewable on certain conditions, then to be mutually agreed on for twenty-one years more; and he has in turn expressed his agreement to the following stipulations:

That

That he will pay, by deduction from the annual sums provided in the existing contract for the maintenance and repair of the Engines, for

The first 7 years of the 42 years lease	Dollars, 500	<i>per ann.</i>
The second 7 years of do.	800	
The third 7 years of do.	1000	
And for the remaining 21 years	1800	

That all claims of allowance, for any variation from the price of 8 dollars per 36 bushells of coal, should be relinquished and cancelled.

And, that on the event of the City's determining to discontinue the use of any water to be raised and delivered from the Schuylkill engine, the corporation should cease to be bound for any payment on account of its maintenance and repair.

In February last B. H. Latrobe was authorized to invite proposals of contract for the delivery of white oak logs and bricks preparatory to the operations then in prospect, it having been determined, on the result of enquiry and investigation, that under every consideration that species of wood was most to be preferred for the pipes of conduit; and after the Mayor and Committee had been fully authorized by the resolutions of the 2d. of March, to pursue all measures proper for the advancement of the plan, they proceeded to the forming of a special agreement with B. H. Latrobe (who had been previously considered as a consulting Engineer) on the basis of two letters written on the subject by him. This agreement is settled in an indented contract, duly executed, wherein is contained, in outline, a description of the whole plan for watering the city. For a specific and fixed sum (which will appear by inspection of the instrument) not liable to variation by the expence of the work; and, for the allowance of all travelling and other expences incurred by him in the service of the city, under the direction, or by and with the advice and consent of the duly authorized



thorized agents of the corporation, <sup>he</sup> ~~He~~ has engaged to make himself completely responsible for the ultimate success of the works, unless prevented by the act, omission, or neglect of the corporation, from which he stands guarded by specific provisions; and also, that the construction of all the works shall be of permanent stability and good and perfect in kind, stipulating only for the liberty of appointing a Clerk or superintendant of the works, being in every respect responsible for his conduct, and appointing no one to whom there should be any reasonable objection. The contract contains a provision, that variations, in the projected plan, having for their object any useful improvement, calculated for better promoting the advantage of the City, being first proposed and submitted to the Corporation and considered and approved, shall be allowed without prejudice to the agreement.

B. H. Latrobe with the advice and consent of the Mayor and Committee, made divers purchases of white oak logs, brought down the river Delaware in the course of the Spring, mostly from 12½ cents to 8 cents per foot running measure: these logs were in rafts, composed of a proportion of white Pine and other light timber, necessary for floating the rafts, and called floating timber. The purchase of these pieces from the raftmen, it was stated to the committee, was almost unavoidable, but as they were generally good building timber, and many of them could be used to great advantage in the engine houses and other works, and the price low, the interest of the city so far from being lessened, would be considerably promoted by the purchase. Several persons, in consequence of public advertisement, had previously entered into agreements to supply, at stated periods, large numbers of white oak logs at fixed prices, but very few complied with their agreements, and most of the logs procured were in rafts and on better terms.

With the approbation of the committee agreements were made with the two following named persons, viz. John Houston to dig a tunnell trench along Chesnut-street, from the Schuylkill front to Broad-street, at the price of 9 pence for the first yard in depth, 1s. for the second;  $\frac{1}{3}$  for the third;  $\frac{1}{6}$  for the fourth; and for all deeper digging  $\frac{1}{10}$  per yard: with John Lewis to construct a tunnell, at the level of three feet below low water in Schuylkill, from a place in the flat ground upon its banks, to the bottom of a well to be sunk in the engine-house, including every expence, excepting materials, blowing rock, and pumping water, at 23 dollars per yard, running measure. This drift is 4 feet 6 inches wide and 7 feet high.

Robert Malseed, to dig a canal westward from the aforefaid tunnell to the river Schuylkill, and Timothy Caldwell to dig the engine well, at the corner of Chesnut and Schuylkill Front-street to meet the east end of the tunnell to be formed by John Lewis, were severally employed by the Engineer in those divisions of the work.

The construction of the circular brick tunnell in Chesnut-street it was contemplated should be performed under contract, but it being represented by the Engineer that great accuracy was required in this work, and that skill and experience were necessary in forming a good water cement as an indispensable requisite for the tunnell, it was finally determined to employ, on trial, Thomas Vickers, who was reported to have given good satisfaction in his services under William Weston, in the lock-works of the Schuylkill and Susquehanna canal, and of other canals in the State of New York, under the superintendence of the same Engineer. His compensation, as operative Superintendent of this division of the work, was fixed at 3 dollars per diem, and after due trial it appearing that the work was well



well done and that the whole cost in labour, by a statement of B. H. Latrobe, did not exceed 3 dollars and 27 cents per thousand; it was thought the interest of the city would probably not be better promoted by any special contract, and Thomas Vickers was continued.

Agreeably to his stipulation, B. H. Latrobe appointed John Davis clerk of the works. His duties are, under the Engineer, a general Superintendance and care of all the works from the Schuylkill to the Center-square, paying attention to the receipt and application of materials, overseeing and directing, under the Engineer's instructions, the several workmen, and keeping and checking the time accounts of the workmen and labourers employed. From the experience of his services, the committee have been well satisfied with his integrity, abilities, and diligence. His compensation is fixed at 3 dollars per diem.

Agreements were formed with seven Brickmakers, of good repute, for the due and seasonable delivery of 1,200,000 good merchantable bricks, at 6 dollars and 50 cents per thousand, at stipulated instalment payments, the last of which, for 200 thousand bricks, value 1300 dollars, will fall due on the 1st. of April 1800: and agreements were also formed, with divers persons, for ensuring the due and seasonable delivery of lime at the fixed price of  $2\frac{1}{2}$  per bushell.

Proposals were severally made by Samuel Briggs, Samuel Jones and Thomas Dixey, to bore, counter bore, tap, and hoop the logs delivered at their respective mills, for eight cents per foot, which being the lowest terms that could be obtained for the work, by horse power, were accepted; the hauling of logs to the boring mills, and the pipes from thence into different parts of the city, was contracted to be performed at two cents per foot, and for logs and  
building.

building timber to the Center-square, at three cents per foot.

Under these arrangements, operations commenced partly in March, but more generally in April, and progressed with considerable spirit and activity.

The subscriptions to the loan did not advance in proportion to the expectations which had been entertained. They were damped by the great attraction of monied citizens, to the United States eight per cent loan: by the influence and apprehensions of the stockholders of the Delaware and Schuylkill Canal, who were opposed to the plan, as not co-incident with their views and interests, and, as many unfortunately supposed, as an infringement of the chartered rights and privileges of that company: \* and by doubts on the efficiency or practicability of the plan, which many valuable and public spirited citizens entertained, who had become much indisposed to undertakings of the kind, from the yet unsuccessful efforts for completing the projected Canals in this state.

Under a hope that these unpropitious causes would be removed by time, and by a more clear development of the plan, as expanded to view by its execution, and that adequate subscriptions would consequently be made, the Corporation, impressed with the immense benefits to arise to the city, deemed it their duty to advance the works, with the aid of the existing subscriptions: the deposit monies and instalment payments were soon found, the first wholly inadequate, and the second of so tardy receipt, for the rapid advances of the works, that embarrassments were frequently experienced; but relief was extended by the timely advances of individual members of the committee, and by this aid the credit  
of

\* This collision occasioned an unpleasant discussion before the Senate of Pennsylvania, and no doubt, contributed to a denial of that aid, which was requested by petitions of the citizens, and the application of the Select and Common Councils.



of the city, with the different persons depending on it for payment, was preserved at all times, unimpaired and entire. But on the 8th. of July, in considering the exhausted state of the monies due on the subscriptions, and that on the last instalment little could be expected before September ensuing, when only of right it could be required of the subscribers,—it clearly appeared to the committee, that unless further exertions were made and relief obtained, all proceedings must necessarily be suspended, and the interest, as well as the credit, of the city, be very materially injured. The committee, therefore, determined,—

*First*, To request the Engineer would prepare a detailed statement of the probable expence of completing the works, progressing under his direction, founded on existing contracts and actual expenditures, to the first of the then month of July; and,

*Secondly*, To request a conference on the 11th. of the same month with the commissioners for inviting and receiving subscriptions, in order to communicate to them satisfactory information as to the state of the works, and to impress on them the necessity of prompt exertions, in circulating the books of subscription.

The Mayor and committee met the commissioners on the day appointed, and laid before them a statement produced by the Engineer, conformably to the request of the committee, and an account of the exhausted state of the fund arising from the subscribed loans, and the necessity of a more active circulation of the subscription books. To encourage this circulation, the committee agreed to class themselves and other members of the Corporation, with the respective commissioners, in soliciting subscriptions in the different divisions of the city.

In consequence of this meeting, the Engineer's statement with some observations were published by the commissioners for the impressive information of the citizens generally, and hopes were indulged of an augmentation of more operative means from this revival of the public attention; but on the 29th. of July, no probability of aid appearing, from this quarter, and the existing means being very nearly exhausted, it became a subject of very important and serious consideration, whether to discontinue and abandon, for the present, the execution of the plan, or, by the immediate laying of a tax to raise the sums likely to be wanted for the present year.

Against an abandonment, appeared—the great injury to the interest of the city, by breaking up a well connected chain of operations,—the dispersion, and, perhaps, irretrievable loss of able and well approved subordinate agents of execution, and the difficulty, and perhaps impracticability of re-commencing the work at a future day; in which last case all the expence, already incurred, would prove a dead loss to the city; and, in addition to the hazard of these evils, a disgraceful impair of the city's credit, would be incurred, by neglecting to provide means for the faithful fulfilment of existing engagements. Against laying a tax, on the other hand, was presented in strong colours,—

*First*, That it would create great dissatisfaction, in subscribers to the loan, to subject them to the payment of a tax in common with other citizens.

*Secondly*, That by the existing taxes the city was already sufficiently burthened, and this measure, therefore, ought not to be resorted to, until every other expedient had been tried and failed; and

*Thirdly*, Even, if no other means remained but taxation, the measure still was objectionable, because



cause the collection, it was well known, would in the ordinary course of the business, be too tardy to meet in due time the engagements and expences of the works.

In this critical and extremely disagreeable situation, the reluctance to resort to a tax could only be surmounted by a strong sense of duty to save the city from disgrace and from the hazard of a heavy dead loss in the abandonment of a work of such acknowledged utility. Some members expressed their disposition to raise part of the money, on their own individual credit, and trust to future subscriptions, and to a provision otherwise to be made by the Corporation for their indemnity and relief: this, though honorable to the zeal and patriotism of those gentlemen, could however only afford a very partial, temporary and incompetent relief; and it was observed, in answer to objections against the tax, that the expence must be defrayed ultimately by taxation either in the usual way, or by a water rent, which amounted in fact to a tax on consumption; that the raising of money on loan at the interest of 6 per cent. to be repaid in 10, 15 or 20 years hence, encreased very materially the expence of the work, and consequently would in proportion increase the amount of eventual taxation; but under all circumstances, the obtaining a loan on interest had been thought an eligible measure; because, although the aggregate of expence and burthen on the city would be much heavier, yet, by dividing it between the present and many succeeding years, the annual expence; under this division, would be light, and the growing wealth and population, of those succeeding years, justly made to pay, in some proportion, for the benefit they would receive. The facility of operation by loan, on interest, and the lightness of an annual expence, continued for a series of years,

years, were the chief merits of the loan proposition: in all other respects raising the sum required, by tax, in one or two years, and avoiding the continual payment of interest (which in 16 $\frac{2}{3}$  years would double the expence) would be most economical and promotive of the city interest. If however in the origin of the business this mode of raising supplies had been contemplated, the present works would, in all probability, not have been attempted. In the progress of the undertaking, the city had become placed between these two modes. For by obtaining nearly one half of the capital wanted, on loan, the facility of the one mode was nearly half accomplished, and of course the burthen of the other, to wit, an immediate tax, in the same ratio lessened, and the future annual expence, of paying the interest and redeeming the principal of the loan, proportionably diminished. In the existing state of the works, no one would venture to assert that they ought to remain suspended, at the hazard of a total abandonment, even if no other means than an immediate tax could be devised for their continuance.

To the other objection,—the dissatisfaction it would give subscribers to the loan,—it was observed, that no just cause of discontent could be given to them, for the whole expence must eventually be discharged by taxation; and the Corporation had at no time proposed, nor had any of the subscribers stipulated for an exemption from taxes in common with their other fellow citizens, as a condition for their loans. Any thing of the kind was in effect impracticable, and indeed would be unreasonable while they or their assigns received, interest on their loans and were for three years exempt from any water rent. On the contrary, as the subscribers were generally of respectable consideration, they would surely properly appreciate the fair intentions



tentions of the corporation for promoting the welfare of the City, make allowance for the difficulties occasioned by the failure of efficient subscriptions, and the consequent necessity of resorting to the only remaining means of providing for the deficiency, and have the good sense to perceive that the cause productive of this disagreeable alternative would, at the same time, have the effect of facilitating their reimbursement of principal as well as payment of interest.

The tardy collection of a tax was an objection to be surmounted only by an anticipation of its receipts, and, if all other difficulties were removed, it would remain to be ascertained whether such anticipation could be obtained by Bank accomodation.

On the result of full consideration, no means appearing likely to prove efficient, other than the raising of monies by tax, and, the idea of abandonment being rejected, a bill was prepared for raising the same, containing due provision for pledging its amount for the security and re-imbusement of any persons, or bodies politic and corporate, who would make adequate advances on its credit in anticipation. A sub-committee was appointed to wait on the President and Directors of the United States Bank with a copy of the said bill, and to request information whether they would advance a loan, in anticipation of the proposed tax, on the event of the bill being passed into an ordinance and the monies regularly, as collected, lodged in their Bank, for the sole and exclusive purpose of re-imbursing such advances. Two members of the same committee were required to report the said bill to the Select and Common Councils, if the application to the U. S. Bank proved successful, and to accompany the report with a statement on the situation of the water-works and the embarrassment to further progress for want of sufficient funds.

The result of these measures was an offer from the United States Bank to loan 20,000 dollars, and the passing, on the 5th. of August, an ordinance for raising the sum of 50,000 dollars.

The application to the President and Directors of the Bank, and their consequent resolution, appear at large in an appendix to this report.

The alarm of contagious sickness, which about this time occasioned another dispersion of the Citizens, suspended the collection of all taxes, and stopped the payment of the monies due on subscriptions— but by the aid of this loan, and a few scattering payments from subscribers, the works have been prevented from stopping, and kept in a state of continual though far less rapid progress than more ample resources would have allowed.

It will now be proper to show the amount of the means with which the plan has been supported:

*Shares.*

The loans subscribed on the books of the Commissioners, from the 13th. of February to the 7th of March, were, at the last date, six hundred and fifty nine shares,	- - - - -	659
And from the 13th. of July to the 1st. of August,	- - - - -	46
James Todd, who was appointed to collect the instalments as they became due, obtained, in the course of his business,	- - - - -	47
		<hr/>
* Total Shares subscribed	- - - - -	752
752 Shares, at 100 dollars each, are	- Dollars	75,200
On these remained due and unpaid on the 18th. of November,	- - - - - Dollars	13,130
And growing due, but not then subject to demand for payment,	- - - - -	2,860
		<hr/>
Total amount received on the 18th. of November,	- - - - - Dollars	15,990
		<hr/>
		59,210

The

\* In addition to the foregoing, ten shares were subscribed by a gentleman in the employment of the Corporation, which being considered as part of the compensation coming due for his services, and of course no part of the active fund, are left out of the account.



The arrearages work a forfeiture of all the previous payments of the delinquent subscribers, but as penalties and forfeitures have not been the object, nor can they be desirable to the corporation, it is to be presumed they will not be exacted unless payments continue to be excessively and unreasonably protracted.

By information before the committee, it appears that

From the arrearages, there may be depended on, - - - - - Dollars 6730

Add to which those not yet due but likely to be paid, - - - - - 2860

May be considered as a fund still receivable. - - - - - dollars. 9590

Of the remaining arrearages, it is expected no payment will be received for, - - - - - 1360  
And that there is no certain reliance to be placed on the receipt of, - - - - - 5040

Which may be considered as an uncertain resource on which it will not be prudent to depend, } 6400  
-----  
15,990  
-----

The loan obtained from the Bank of the United States produced on a note of five Members of the corporation on the 9th. of August for 10,000 dollars—the sum of 9,893 33  
and on another note of five other Members, on the 27th. of the same month, for 10,000 dollars—the sum of - - - 9,898 33  
----- 19,791 66

Add to this the total amount of monies received on subscriptions - - - - - 59,210 00  
-----

*And it*  
~~which~~ shews the total amount of all the monies received for defraying the expences of the works. *to be* } Dollars 79,001 66

On

On which is chargeable a commission of one per cent for collecting instalment payments on 53,450 dollars

534 50

And the Treasurer's commission of 1/2 per cent on receipts and payments, on 59,210 dollars, is

296 05

830 55

Leaving applicable for defraying }  
the expences of the works

- 78,171 11

By the register book of certificates, granted in payment of contracts, services and materials, the disbursements to the 23d. of November, have amounted to

75,782 62

Of which has been paid—

dollars.

For the Steam-Engines, pursuant to contract . . . . . 18,000

For logs, butting, hauling, boring, hooping, trench digging, pipe laying, &c. about . . . . . 7,000

A N D

For the works from the }  
Center Square to the River } 50,782,62  
Schuykill

75,782,62

Leaving a balance on hand, on the 23d. of November, of . . . . .

2,388 49

78,171 11

It will now be proper to proceed to an exhibition of the present state of the works, that, by comparing it with the disbursements, you may be enabled to judge how far the sum of 150,000 dollars, contemplated by the Corporation as sufficient for the entire completion of the plan, is likely to cover all expences.

## Engines.

I. Three-fifths of the cost of the *Steam Engines* are paid.

By different persons who have visited the works where these Engines are constructing, the committee have been informed that the business was conducted with an intelligence, ability and skill which left little

room



to apprehend their failure, and the Engineer after his return from Newark, where he went about the middle of October to examine into their state, reported, “ that the Engine for the Center-square building was then nearly ready to be put up, all its parts being made, and requiring only to be fitted together. The Schuylkill Engine was not in such a state of forwardness, but yet so far advanced as to require not more than one month’s labour to complete it; and as to the merit of the work itself, he did not recollect ever to have seen it surpassed,,

### Bafon.

II. So much of the *Exterior Canal or Bafon*, has been effected, that to state its entire completion at the expence of two months additional labour, may perhaps be too great an allowance.

This bafon extends from the high water mark westward beyond the extreme verge of the muddy bank at the low water mark, and touches the main current of the river in deep water; tho’ yet unfinished, the Engineer reports it to be in such a state of forwardness, that by means of a trunk and valve already fixed, it can now be filled with water to supply the Engines. The banks of this bafon, it is stated to the committee, have resisted the highest tides in the present year, rising, without any injury to them, near 9 feet above the dry bed of the bafon; their tenacity and firmness appear such, as to warrant the expectation of their remaining permanent during the winter.

### Interior Canal.

III. Of the *Interior Canal* nothing remains to be done but to remove a few loose stones at the bottom, and to finish a sluice-gate at its western end:

this last is so far advanced, that the little time, exertion and expence that may be further required need scarcely be mentioned.

This canal extends from the high water mark, where by means of the sluice-gate it will communicate with the bason, eastward to the mouth of the subterranean tunnel, next mentioned; its extreme breadth at top is 40 feet, it has been sunk for the greatest part of its depth, which is  $2\frac{1}{2}$  feet below the low water line of the river, through solid, and very difficult rock. Through the sluice-gate, water can be received or driven out at pleasure, as often as the turbid state of the Schuylkill, or the foulness of the canal or the tunnels hereafter named, may require.

## Western Tunnel.

IV. Of the *Subterranean Tunnel*, for conveying water from the east end of the interior canal into the lower part of the Engine well, the excavation was completed sometime in September to the level of the canal bottom and into the Engine well. The arching of the open cut is nearly finished.

This Tunnel is in form a broad oval, and the height of six feet its greatest diameter; from the last named canal to the rising of the hill it was sunk from the surface of the ground (called open cutting) to the level of the canal, for the whole length (a little below the surface) through rock, and continued through the rock under the hill to the Engine well; where the arched work (of the open cutting) ends, at the rising of the hill, a circular brick well is constructed, rising to the surface of the ground, by which occasional access into the tunnel is provided for.

Engine



## Engine Well.

V. The *Engine Well*, sunk from the top of the hill near the corner of Chesnut and Schuylkill Front-streets, to the eastern termination of the western tunnel between 48 and 49 feet in depth, remains to be walled; its situation protects it from the frost, so that its entire completion need not be delayed on that account; this well for 20 feet is also through solid and difficult rock, it is expected the expence of walling it will not exceed 180 dollars.

VI. Except some openings left for the placing and fixing of large timbers, the external walls of the

## Schuylkill Engine House

are carried up to an height ready for raising the roof; an interior middle wall is less advanced: for want of masons, many of whom left this building, and from other causes during the late sickness it has been much retarded; the Engineer, however, reports it to be in readiness to receive the roof, the joists are nearly prepared for raising, and shingles are purchased for covering in. As this is intended to be a plain strong solid building, of 60 by 50 feet in area, nothing will be expended in internal or external ornament; the Engineer commends it as remarkable for its soundness, and says it reflects great credit on the superintendant John Lewis; who has also at present the superintendance of all the works west of this house.

## East Tunnel.

VII. The *Subterranean eastward brick circular Tunnel* of 1408 yards in length and 6 feet diameter, its exterior summit 3 feet under ground along Chesnut and Broad-streets, communicating at each extremity

extremity with the Schuylkill Engine House and the Engine House in the center square, of excellent construction, united by a cement that acquires hardness and solidity by water immersion—is finished—there remains however to be constructed a pump chamber at each end in the Engine Houses, which being under cover need not be delayed on account of the weather.

### Center-square Engine House.

VIII. The circular wall of the *Center-square Engine House* is carried up about three-fifths of its extreme height, of which the last eight feet are cased with marble: the quadrangular part is carried up only to the first floor with two courses of marble set, the remaining square part of this house is prepared so as to be in readiness for continuation next Spring, and the work sheltered by temporary sheds. Much marble is already cut for setting.

By the design of the Engineer, the lower part of this building will be a square of sixty feet on each side, to the height of twenty-five feet, having porticoes on the east and west sides, lobbies on the north and south, and offices at the four angles: out of the center of its roofing, will rise the interior circular wall of forty feet, to the height of sixty feet, from the basement line of the whole building, terminating at top in a dome.

This edifice, on account of its conspicuous situation, is designed to be ornamental, as well as useful to the city; for placed as it is, a fair mark for the critic eye of taste, it is not probable the Corporation would have been easily pardoned by the present age, or by posterity, had they determined to place a homely mass of building, in the best situated square belonging to the citizens of Philadelphia; and as



as this house is intended to combine ornament with utility, it will necessarily be more expensive in construction, than if it had been placed in any other scite, where ornament might have been spared: and yet will not perhaps cost more than a common building, if to the cost of such building were added the price which must have been paid for any eligible lot.

### Distribution.

IX. In the purchase of white oak logs, boring into pipe and laying them in the streets, no great progress is yet made. Could the difficulties and embarrassments which arose from the deficiency of prompt resources have been foreseen, it might have been more prudent and judicious to have deferred what is termed the Distribution part of the plan, until the next year. As this however was not the case, the purchase of white oak logs, as previously stated, was one of the first measures pursued; the Engineer could not be acquainted with all the persons with whom he contracted for logs, for though he was diligent and careful in providing by special agreements for an ample supply, most of those persons disappointed him, by the failure of their contracts, and the greater part obtained was by the purchase of rafts, no doubt brought to market in consequence of public advertisement; from the evidences laid before the committee not more than thirty thousand feet appear to have been supplied, forming, with allowance for butting, a quantity not exceeding materially twenty thousand feet of pipe; of these were laid in Chesnut and Mulberry-streets between eight and nine thousand feet; the intention of continuing these into the Center-square this season was frustrated; for as pipes of the greatest bore were required in these streets, there was not in the whole quantity a sufficiency of logs of suitable diameter

diameter for such pipes. Exertions were made for obtaining a larger supply, but the alarm of disease about that time, prevented further progress in this part of the business. From the experience acquired of what can be done in this city, there is reason to expect that the expence of this part of the system, by pursuing proper measures, will be made less than the estimate of fifty cents per foot.

Having thus stated to you, from the best evidences in the immediate possession of the committee, the amount of disbursements on the whole of the works, as they are now advanced, and a representation of their situation, which can be tested for the greater part by your own personal observation, you will be enabled to form as accurate a judgment, without special estimates made, which are seldom perfectly correspondent to the eventual expence, as perhaps may be possible, whether if the amount of the work done has not exceeded,

-	80,000
the remaining parts will cost more or	
less than	70,000
	<hr/>
making together the sum of	Dollars 150,000
	<hr/>

assumed by the Councils as sufficient to compleat the whole.

Proceeding now on the data of the original estimate, with the allowance, for excess of expenditure, made by the Councils, and on this ground, therefore, retaining the sum of

Dollars 150,000 0
as sufficient to perfect the whole system, after deducting
75,782 62
the sum which appears to have been actually expended, it remains to be enquired, first, what means exist, and second, what further provision
<hr/>
is to be made, to meet the expence of,
74217 38
the remaining sum required.



*The existing means appear to be—*

I. The balance of monies on hand, on the 23d. of November instant, which should be,	Dols.	2,398	49
II. The instalment of subscription due and growing due, and likely to be paid,	- - -	9,590	0
III. The surplus of 12,000 dollars appropriated to pay the interest, and redeem the principal of subscribed loans say, appropriated, 12,000, of the loans not more than 68,000 dollars are paid and likely to be paid, allowing 18 months interest thereon, at 6 per cent, is	- - - - -	6,392	
Remains the surplus of	- - - - -	5,608	0
IV. The nett surplus of the income arising from tolls of the corporate bridge, which is somewhat irregular and uncertain, but may be pretty safely taken for this year at	- - - - -	1,800	0
		<hr/>	
		19,396	49
V. The tax collecting for the water works, by ordinance of 5th. of August 1799, viz. 50,000 which is pledged for the payment of the principal and the interest in the first instance, <del>and</del> <sup>for the sum</sup> obtained by a loan on its credit in anticipation of 20,000 allow nine months interest on ditto,	- - - - -	20,000	0
		20,900	
		900	
		<hr/>	
May remain of this tax	- - - - -	29,100	0
		<hr/>	
Total existing means	- - - - -	48,496	49
Admitting the above to be efficient, there will be to be provided for	- - - - -	25,720	89
		<hr/>	
		74,217	38

But it must be remembered, that the 29,100 dollars of the 50,000 dollars tax will probably not be collected so as to be commanded in time for the exigency of the prompt payments which will be required, and in pretty much the same situation will be

be any further tax for the preceeding deficiency of 25,720 89.

To obtain the command of necessary means for avoiding embarassments, and making those prompt payments, it is necessary anticipations should be obtained, or the completion of the works will be inevitably much retarded, and carried on to great disadvantage in other respects. If good faith, as no doubt will be the case, shall be with the strictest attention and inviolability observed by the Corporation with those who have entered into personal responsibility for the service of the city, and the Banks shall be made sensible, by frequent and effectual payments, that adequate provision is not only made, but undeviatingly applied to the single object of repaying the monies advanced in anticipation, there is room to believe all the requisite facility of operation can be obtained by judicious, moderate and yet effectual anticipations. This very essential facility will unavoidably be accompanied with additional expence, and should be provided for, or there will be in the end a deficiency. Perhaps the allowance of twelve months interest on 20,000 dollars will be sufficient, this will be

<i>Dollars,</i>	1,200 0
to which add the foregoing deficit of	25,720 89

---

26,920 89

And for the contingencies of any damages which may possibly happen to the canal basin, or other of the works, in the winter, before the season of work in the spring comes round,

-	3,079 11
---	----------

Will require a tax of

-	30,000 0
---	----------

In



In closing this report, the Mayor and Committee think it not improper to remark, that though the Engineer might have been too sanguine in his prospect of going completely through all his works in the present year, yet from the expedition and precision of just movement in the early stages of the work, there is reason to believe by far the greater part, if not the whole, (setting the Engines aside) would have been accomplished before this time, had there been no disappointment in the supply of logs and had there been a command of adequate resources.

*Signed by order, and on behalf, of the Committee,*  
 ROBERT WHARTON, Mayor.  
 JOHN MILLER, jun<sup>r</sup>. Chairman.

*November 24th. 1799.*

The Mayor and Committee are happy in announcing to the Councils, that, whilst this report was printing, a considerable portion of the two Steam Engines arrived from New-York; and preparations are now making for the erection of the one in the Center-square. And that, in consequence of the personal attendance of N. I. Roosevelt in the city, they have been enabled finally to adjust the terms of the lease for the extra power of the Schuylkill Engine. The contract has been mutually executed, and one copy thereof lodged with the Recorder. Another copy is presented with this report to each of the Councils to be filed among their papers.

## APPENDIX.

## A P P E N D I X.

On the 30th. of July, the Committee appointed to wait on the President and Directors of the United States Bank, addressed them on the occasion by the following letter:

“ President and Directors of the Bank of  
“ the United States,

“ Gentlemen,

“ The Corporation of this City anxious to promote by every means within the compass of their constitutional powers any measures which promise improvement to the health, convenience, and benefit of their Fellow Citizens, and at the same time, cautious of pressing with too heavy a hand burthens on the city, while recovering from the shocks of repeated distress which in the last and preceding years must have so much exhausted and parralized the means and resources of many of its inhabitants, have, among other measures, adopted a plan for the introduction of more wholesome water. For the means to carry this plan into execution they counted, principally, on voluntary loans from their fellow citizens, on the terms of ample provision to ensure a punctual payment of interest and good security for the ultimate reimbursement of the principal advanced. The Corporation were encouraged to hope these means would be fully sufficient on a view of the population of the city and the apparent small inconvenience to be sustained by those citizens who could afford it in placing out at interest, on unexceptionable security, a very small portion of their respective capitals.

“ The making provision for a punctual payment  
“ of the interest and gradual discharge of the principal  
“ principal



“ ciproal by a small annual tax, and the increasing  
 “ income of a light water rent, where contemplated  
 “ as likely to render the weight of the undertaking  
 “ scarcely perceptible. The sum deemed necessary  
 “ to insure the accomplishment of the plan is  
 “ 150,000 dollars.

“ Books of subscription it is well known have  
 “ been opened by Commissioners appointed by ordinance.  
 “ They were opened at a time and under circumstances  
 “ uncommonly unfavourable. The loan to the United  
 “ States attracted a preference from most of our  
 “ monied Citizens. The plan not being co-incident  
 “ with the views and interests of the Delaware and  
 “ Schuylkill canal company met with the weight and  
 “ influence of their opposition. Misrepresentations  
 “ not only of the plan itself, but of its expence were  
 “ industriously circulated; and, independent of these,  
 “ the failure of success in completing the two canals,  
 “ after the expenditure of large sums of money, disposed  
 “ many of our valuable citizens to consider the  
 “ watering of the city as a project likely to have a  
 “ similar termination, and threw a damp on their  
 “ public spirit.

“ Under such unpropitious circumstances the  
 “ subscription nevertheless progressed in about six  
 “ weeks to nearly one half of the capital required,  
 “ and the Corporation were encouraged to commence  
 “ the work under a persuasion that the causes which  
 “ had obstructed more efficient subscriptions would  
 “ be removed by time, and the development of the  
 “ plan in its execution, and an increase of subscriptions,  
 “ would be experienced sufficient, with good management,  
 “ to defray the expences of great part of the work.

“ Experience now has proved the vain hope of  
 “ too much depending on the efficiency of subscriptions.

“ tions. Embarrassments begin to be felt in meet-  
 “ ing the weekly demands of numerous laborers  
 “ who must be paid; the instalment payments of  
 “ subscribers, even if punctually made, are scarcely  
 “ sufficient to relieve from this embarrassment; in  
 “ a short time they must be exhausted, and unless  
 “ other provision is promptly made, the works  
 “ will be at a stand, and after so much has been  
 “ done, the city sustain, in the suspension, an injury  
 “ of no trifling magnitude.

“ The capital estimated as necessary for complete-  
 “ ly finishing the water works, by some is thought  
 “ incompetent for the object; to be accomplished for  
 “ that sum it is generally allowed to be a great be-  
 “ nefit acquired at a cheap purchase; actual disburse-  
 “ ments on very considerable parts of the work  
 “ give ample room for believing the original sum  
 “ will not be exceeded, but rather some reason to  
 “ expect a still more favourable issue.

	<i>Dollars.</i>
“ This capital, as before mentioned, is -	150,000
“ Of which has been subscribed on loan, agreea- “ bly to the terms of the ordinance, 700 shares at “ 100 dollars each, is when paid up -	70,000
	80,000
Remains deficient	<i>Dollars.</i>

“ Of the 150,000 dollars the distribu- “ tion of water throughout the city in “ 104,000 feet of pipe, estimated at 50 “ cents per foot, forms a part, being -	52,000
“ Logs have been purchased and bored “ into pipe, and to prevent their spoiling “ ought to be laid under ground without “ loss of time, the quantity somewhere “ near 30,000 feet, at 50 cents, is -	15,000
	37,000

“ Though it would be desirable to have the  
 “ whole quantity of pipe laid this year, it is not ab-  
 “ solutely necessary, and the remaining 74,000 feet

can



“ can be deferred until the ensuing year before  
 “ the month of July, and may be provided for in  
 “ that year, then say as not immediately necessary,  
 “ Deduct 74,000 feet, at 50 cents, is - - - 37,000

“ Still remains to be provided for - - - 43,000

“ By the ordinance for raising supplies and mak-  
 “ ing appropriations for the current year, 12,000  
 “ dollars was appropriated for paying the interest  
 “ of 150,000 dollars. As the loan subscribed does  
 “ not exceed 70,000 dollars, the whole of this ap-  
 “ propriation will not be necessary in the present  
 “ year, a part may with the strictest propriety be ap-  
 “ plied to defraying the expence of carrying on the  
 “ work. Allowing twelve months interest on 70,000  
 “ dollars is 4200 dollars and there will remain  
 “ a surplus of 7,800, which call a resource that may  
 “ be commanded of - - - - - 7,000

“ Eventual Deficiency - - - - - 36,000

“ To supply this, the interest and the credit of  
 “ the city require the imposition of a tax; there ap-  
 “ pears no other resource to be depended on; but  
 “ with the most vigilant attention to its collection, a  
 “ tax cannot be operative in sufficient time to meet  
 “ current demands unless an anticipating accommoda-  
 “ tion can be obtained on its credit.

“ By the Mayor and a joint committee of the  
 “ Select and Common Councils unto whom is de-  
 “ legated the management of the plan for watering  
 “ the city, we are Gentlemen, appointed to ascer-  
 “ tain whether any such anticipating accommoda-  
 “ tion can be obtained. On the benefits and con-  
 “ veniencies to arise from a successfull execution of  
 “ the present works, and on the importance of a  
 “ trial as to the effect which may be produced on  
 “ the temperature of our atmosphere in the hot  
 “ summer months, it will be unnecessary for us to ex-  
 “ piate with gentlemen of your observation and  
 “ intelligence. We will therefore only say, that en-  
 “ couraged by the evidence of public spirit exhibi-  
 “ ted

“ ted in your offer to loan 5000 dollars for 5 years  
 “ to the city, we are induced to ask, whether you  
 “ cannot, with as little inconvenience, *effectually pro-*  
 “ *mote* the exertions of the corporation for comple-  
 “ ting the present important undertaking, by allow-  
 “ ing them an advance, from time to time, of such  
 “ fums of money as they may find necessary, on  
 “ the credit and in anticipation of a tax to be levi-  
 “ ed for the purpose, *in lieu of that loan.*

“ We lay before you the copy of a bill proposed  
 “ to be enacted into an ordinance, by which you  
 “ will perceive that the monies which may arise in  
 “ virtue thereof are *not to mix* with any other mo-  
 “ nies of the city, but as they are received to be  
 “ deposited *under your view*, and to be applied to  
 “ no purpose whatever other than returning to you,  
 “ from time to time, at such periods as your arrange-  
 “ ments may require, the whole amount then on  
 “ hand, in re-imbursment for any anticipations.  
 “ The Mayor it is intended shall be authorized to  
 “ conform to arrangements you may find proper to  
 “ make, and under any form you may require.

Dollars

“ The tax proposed to be raised cannot well be	
“ less than - - - - -	50,000
“ Commissions, abatements and losses are on the	
“ face of the duplicates usually estimated at 12½	
“ per cent. though they do not often rise to that	
“ amount, at this rate of estimate the deduction will	
“ be - - - - -	6,250

43,750

“ It is a duty we owe to ourselves to be candid in  
 “ stating to you, that although only nine months  
 “ are allowed to collectors to pay in and settle the  
 “ amount of their duplicates, yet long accustom-  
 “ ed habits and circumstances, too strong to be  
 “ yet controuled by existing laws, will not allow us  
 “ to depend on the *entire collection* of any tax in a  
 less



“ less time than 15 or 18 months from the issuing of  
 “ the duplicate tax lists; under some circumstances  
 “ two years may elapse before duplicates are entire-  
 “ ly closed; but while we are thus cautious that no-  
 “ thing from us may lead into error or deception,  
 “ we think, from our knowledge and experience,  
 “ we can safely state, that generally two-third parts  
 “ of a tax may be pretty certainly counted on within  
 “ nine months, and three-fourths of the whole in  
 “ twelve months, but, to make larger allowance,  
 “ say fifteen months.

*Dollars*

“ On these premises then it may be reasonably	
“ inferred, that of 43,750 dollars, there will, in all	
“ probability, on or before the expiration of 15	
“ months, be collected at least - - -	32,712
“ And of 36,000 (if within that time loans to	
“ that amount are obtained in anticipation) there	
“ will consequently remain to be re-imbursed a sum	
“ to the amount of - - - - -	3,288
	<hr/>
	36,000
	<hr/>

“ And to make good the payment of this small  
 “ balance of 3,288 dollars there will remain, of the  
 “ outstanding tax, the full nett value of 11,038  
 “ dollars.

“ It will fully answer every good purpose of the  
 “ corporation, and be more for their convenience  
 “ and interest to be accommodated with an antici-  
 “ pating loan at 4 periods.

*Dollars*

“ Say, for example, in August with	9000
in September or October	9000
in October or November	9000
in November or December	9000
	<hr/>
	36,000
	<hr/>

“ During and before the expiration of those pe-  
 “ riods, receipts of the tax would, from time to  
 “ time, be deposited and in readiness to make pay-  
 “ ments

“ ments in the order which shall be adjusted as most  
“ convenient to the arrangements of Bank business  
“ and calculation.

“ We wait any communication you shall be plea-  
“ fed to make us on this subject, and are, Gentle-  
“ men,

“ Very respectfully, your Friends.

(Signed)

“ ROBERT WHARTON,  
“ JOHN MILLER, junr.  
“ HENRY DRINKER, junr.  
“ THOMAS P. COPE.”

In answer to which application, the committee re-  
ceived the following resolution.

“ *At a meeting of the President and Directors of the*  
“ *Bank of the United States, on the 1st. August*  
“ *1799.*

“ Resolved,

“ That this board will discount the note of five  
“ or more members of the corporation (to be ap-  
“ proved of by this board) for the sum of twenty-  
“ thousand dollars, payable in sixty days, in the  
“ usual manner.

“ THOMAS WILLING, *President.*

“ Attest.

“ G. SIMPSON, *Cashier.*”



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## A D D E N D A.

**I**N 1797 an address and petition was presented to the Select and Common Councils, signed by an unprecedented number of the most respectable Citizens of Philadelphia, soliciting the Councils to introduce water into the city.

It is thought unnecessary, at this time, to publish the address at length. It remains on the files of Councils, and may be examined by any person disposed to take that trouble. The following extracts are deemed sufficient to show the views and sentiments of the petitioners.

“ *To the Select and Common Councils of the city of Philadelphia.*

“ *The Address and Petition of the Subscribers, freeholders and inhabitants of the said City.*

“ *Fellow Citizens of the Corporation,*

“ WHILE the sufferings and distress of our city,  
“ occasioned by the late contagious sickness, continues fresh in our memory—while in the short period of four years we cannot have wholly forgotten a former affliction of the like kind—nor the numbers of our friends, relatives and neighbours, whom we have to lament, as the mournful victims of both visitations—and finally, while we are devoutly to acknowledge that kind PROVIDENCE, which spared our own lives from the shafts of  
F “ mortality

“ mortality which flew thick around us, and hath  
 “ restored our city to its usual state of health and  
 “ prosperity, we ought not to be unmindful of the  
 “ means which, under the favour of Heaven, may  
 “ appear the most effectual to prevent or mitigate  
 “ the return of the like calamities.

“ In this great work we hope the Corporation  
 “ will consider it as their *duty* to take the lead, not  
 “ only as particularly interested—but as having the  
 “ means in their power.—For it seems demonstra-  
 “ ble, that the loss to the city in a single visitation  
 “ of this contagious disease (if it could be prevent-  
 “ ed or greatly allayed by cleanliness and a copious  
 “ supply of *water*, not to mention the use of *water*  
 “ for preventing or subduing the devastation of fire)  
 “ is more perhaps than the capital necessary to in-  
 “ sure such a supply in perpetuity, even if no in-  
 “ terest were to accrue (on the capital to be expen-  
 “ ded) for the use of the water in families.

“ It appears from the statement in the Governor’s  
 “ address, that even in the late sickness the inci-  
 “ dental or extra expence of the health-office, the  
 “ legislative grant, and other contributions for the  
 “ poor, amounted to forty-two thousand dollars,  
 “ and the loss arising from two or three months  
 “ suspension of our commerce, of mechanical and  
 “ manufacturing business, the expence of the mul-  
 “ titude of families by which near half of the city  
 “ was evacuated, not to speak of the inestimable  
 “ loss of at least one thousand valuable citizens,  
 “ who fell victims to the disease, may more easily  
 “ be imagined than accurately calculated.—Add to  
 “ this the immense loss often experienced from fire  
 “ when but only a few houses are consumed, and  
 “ what might be the loss from a more extended  
 “ conflagration, for want of a ready supply of *water*,  
 “ need hardly be mentioned.—

“ Your



“ Your petitioners, therefore, *earnestly request,*  
 “ That the Corporation, as *Fathers of the City,*  
 “ *as Guardians of the Poor, and the health and pro-*  
 “ *sperity of their Fellow Citizens in general,* will take  
 “ the premises into their immediate, wise and effec-  
 “ tual consideration—in doing which your petition-  
 “ ers wish to *strengthen your resolutions,* by declar-  
 “ ing, That, as far as they can collect the sentiments  
 “ of their fellow-citizens in general, there is *no ob-*  
 “ *ject of use or ornament* to which a *liberal* propor-  
 “ tion of the city *Funds* can be more acceptably  
 “ applied than to the present, even if no return of  
 “ interest on the capital were to be expected.—  
 “ We, therefore, have a full confidence in the  
 “ patriotism of those whom we address, that speedy  
 “ and effectual means to accomplish the object of  
 “ our wishes will be devised and pursued.”

It would be well if some Gentlemen, who are liberal in censuring their representatives in Councils for laying a tax to introduce water into the city, would compare their *present conduct* with their former *representations and professions.* It might tend to reconcile them to measures which they themselves urged by the most powerful arguments and pledges of support.

Let the candid Reader peruse this document, and declare, whether Councils would have justified the expectations of their Fellow Citizens—discharged their duty to themselves—or the trust reposed in them by others—had they not undertaken this important work. They have undertaken it—and, as individuals, must contribute their share of the expence; but, as a considerable portion of the time and attention of many of the members are necessarily engaged in this service, without any pecuniary re-  
 compence,

competence, or the most distant idea of private emolument—have they not the most cogent and reasonable claims—the most undoubted and legitimate right, to expect the countenance and support of every man who has any just regard to the welfare and prosperity of our city?

Called on in the most persuasive language, by an appeal to their feelings—their justice—and their patriotism—to devise and pursue means for obtaining an interesting object—is it generous—is it just—can it be believed—that, after having complied with the wishes of their constituents, by embarking in a plan maturely digested, and economically and perseveringly pursued, they should at last be left to struggle with embarrassments for want of efficient aid, and a cheerful and ready co-operation on the part of their Fellow Citizens?





