

H. G.

REPORT

OF THE

WATERING COMMITTEE

TO THE

SELECT AND COMMON COUNCILS.

READ JANUARY 8, 1824.

PUBLISHED BY ORDER OF THE COUNCILS.

PHILADELPHIA :

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1824.

REPORT

WATERING COMMITTEE

OF THE

WATERING COMMITTEE

TO THE

COMMISSIONERS OF THE GENERAL LAND OFFICE

HELD JANUARY 6 1881

PRINTED BY ORDER OF THE COMMISSIONERS

WATERING COMMITTEE

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1881

ANNUAL REPORT

OF THE

WATERING COMMITTEE.

THE WATERING COMMITTEE, in obedience to the established regulation of Councils, present their Annual Report, with the accounts necessary to elucidate their expenditures and proceedings for the past year, and an estimate of the sums which will be required to carry on the works for the present year.

The amount expended in 1823, per account No. 1, was	\$ 69268 54
Of which there was expended, for iron pipes,	\$ 25672 60
Damages,	19007 08
	44679 68
Leaving, for other objects,	24588 86
For which there was estimated,	17500 00
	7088 86
Exhibiting an excess of expenditure, of	7088 86
From which should be deducted the sum received from the administrators of Ariel Cooley, deceased, for work left unfinished by him, the cost of which constitutes part of this excess, amounting to	2000 00
Leaving the final excess to be	5088 86

This excess may readily be accounted for, when it is considered how difficult it is to estimate the sums necessary to liquidate large concerns drawing to a close; to which is to be added the expense of a new roof for the old engine house, the repairs of that building, and putting it in a decent state, after the injuries it had sustained by time, and by the effects of the severe blasting of the rocks for the new works; and furthermore, the alteration of the new pumps, at the commencement of their operation, which was not estimated for. The debts of the works are now all settled, and the future estimates can be accurately stated.

To meet the deficiency of	\$ 5088 86
And to provide for the expenses of 1824, for the new works, hydrant pumps, repairs of wooden pipes, salaries, &c., amounting, by the estimate herewith,	
No. 5, to	12000 00
Being together	17088 86
There is in the Treasury the water rents received in 1823, amounting, by account No. 6, to	23779 62
Sundry sums paid into the Treasury by the Superintendent, (exclusive of \$2000 received from the estate of A. Cooley,) per account	^{2255 47} 26,013.09
No. 2,	2778 95
Sundry sums paid into the Treasury by the Register, for water rents received in advance, and for permits, as appears by account No. 7,	2233 47
Making together	28792 04
And leaving a surplus now in the Treasury, of	11703 18

From which it appears, that, throwing out of view the sum applied to permanent improvements, on the one hand, and the receipts for wood, and other objects not permanent in their nature, on the other, the surplus of the income beyond the expenditure is upwards of fourteen thousand five hundred dollars.

The sum remaining unexpended of the appropriation for iron pipes, as appears by last year's report, was	\$ 16712 92
Besides the authority to raise on loan, agreeably to the Ordinance of Jan. 17, 1822, the sum of	25000 00
And a further sum, agreeably to the Ordinance of Nov. 27, 1823, of	26000 00
Amounting together to	<u>67712 92</u>
There was expended in 1823, for laying iron pipes, the sum of	25672 60
Leaving for the operations of 1824, the sum of	<u>42040 32</u>

And here the Committee have the pleasure to state, that the contract for iron pipes for the present year has been made on the most advantageous terms; the difference in favour of the city, between the prices paid last year, and the present contract, being equal to 3957 dollars, 3 cents.

The balance unexpended of the sums appropriated for damages, was, on the 6th of Jan. 1823,	\$ 3643 17
And agreeably to an Ordinance passed Feb. 4, 1823, \$ 20500 has been raised on loan for this object; and there remains to be raised, under the authority of the same Ordinance, a further sum of 4500 dollars, which together amount to	25000 00
Making the whole sum of	<u>28643 17</u>
Of which there was expended last year	19007 08
Leaving in reserve for this object	<u>9636 09</u>

The Committee would hope, that as the damages have been generally settled with those who have in their opinion really suffered injury by the erection of the dam, that the sum to be paid hereafter will be small. Where lands or mills have been overflowed or backed upon, the Committee have promptly proceeded to do justice to the parties, either by a reference or by compromise, and sometimes by both; but where claims have been made which in the opinion of counsel were not supported in law, they have been resisted, and will in all cases be decided by the proper tribunal. None of them have yet come to a hearing, though the Committee have thrown no difficulty in the way, but on the contrary, have facilitated their progress as much as was in their power.

In the last Annual Report, the Committee communicated the lamented decease of Mr. Cooley, who had not entirely completed his contract: but, as his affairs were left in the hands of administrators residing at a considerable distance, it was thought best to receive from them a sum of money, in lieu of the labour to be performed; and two thousand dollars was finally agreed upon, which has been paid into the Treasury.

The two large estates of Mr. Cooley, mortgaged as a guarantee for the safety of the dam and works for five years from February last, are still held for the purpose for which they were granted.

The further accounts herewith submitted, and which the Committee request may be considered as part of their report, are,

No. 3, being a statement of the wooden pipes used in repairs.

No. 4, showing the quantity of iron pipes, lead, &c. on hand.

No. 8 is a list of the manufactories, dwellings, &c. furnished with Schuylkill water.

No. 9 exhibits an account of the water rents for the present year, amounting to 26191 dolls. 5 cts.

The Committee have great satisfaction in communicating the pleasing circumstance of the rapid advance of the income from the water rents, and at the same time to state the beneficial result of the new system for their collection, which has placed them in the Treasury many months sooner than heretofore, and at a very reduced price in the cost of collection and allowances. Three-fourths of the rents were in the Treasury by the 1st of June last, and the whole amount by the 1st of August; when formerly, very little more than one-third was collected by the 1st of November, and the whole not before the 1st of February in the following year: making a difference, in interest alone, equal to the whole expense of collection. Another advantage arises from the accounts being closed in the year to which they belong, thus enabling the duplicates to be made out for the collectors as soon as they are appointed by the mayor, on the first Monday of January.

The experience of another year has furnished results that will probably be interesting to Councils; and the Committee therefore trespass a little in detailing the beneficial effects produced by the new Water Works at Fair Mount, which have exceeded the warmest anticipations of their most sanguine friends. The calculations formed were of the most cautious kind, for there was little experience to guide in the construction of water works calculated to raise water, and hence it was stated, that forty gallons upon the wheel would be required to raise one to the reservoir, but experience has shown that thirty are more than ample, thus at once increasing the calculation of the water power of the river one-third. The quantity raised was also underrated at one million of gallons in 24 hours, for each wheel and pump; it may now be safely stated at 1,250000, supposing the wheel to work during the whole time: but this is not always the case, as the tide occasionally makes it prudent to stop them, to prevent straining the works.

An experiment was made in July last for 18 days, during which time four fire-plugs were constantly in use, during the day time, in washing the gutters, when two wheels and pumps were found adequate to supply the demand, and working only 14 hours in 24; and the consumption of water was 1,616160 gallons in the same period of 24 hours. In October last, the three wheels were found sufficient to supply the city in 8 hours, equal to one wheel for 24 hours, and supplying 1,250000 gallons.

In the last month, the wheels were stopped three days on account of the water being disturbed by a freshet, during which time the reservoir fell 52 inches; after the water had settled, the three wheels were put in operation, and besides supplying the city with about 1,250000 gallons, they filled the reservoir in 24 hours, equal in all to 3,750000 gallons. The demand of the city for water, in very cold weather, may be stated at about a million of gallons.

The advantage of the large reservoirs is particularly observable during a freshet in the river, as the city can be supplied for several days with clear water from them, whilst the muddy water is running off, during which time the wheels are of course stopped.

Two men are found sufficient to attend the works 12 hours at a time alternately, night and day; and the calculation made last year of 4 dollars per day for wages, fuel, light, tallow, &c. is, upon experience, found to be ample. The plan of warming the house has completely answered the object proposed, and no ice has formed in the coldest weather, on the wheels or in the pumps.

The whole cost of the new works, including the damages, the new reservoir, and the preparation for a third one, is 432512 dollars, the interest on which, at the rates the money was borrowed, amounts to 24230 dollars, a sum not much exceeding that formerly appropriated every year out of the city taxes for the support of the steam engines, besides consuming the whole of the water rents; the contrast is most pleasing, when it is seen that the water rents are so much disengaged, as to place in the Treasury from their avails, upwards of 14500 dollars, whilst the sums heretofore appropriated of the taxes for the steam engines, go to meet the interest on the debt for the erection of the works.

But this is not the whole advantage: it was not possible, with the steam engines, that a million and a quarter of gallons could be raised; now, three times that quantity can be had without any increase of expense; but if the same quantity were required to be raised by additional steam engines, the annual expense would be at least 75000 dollars; or, in other words, the expense, (exclusive of the first cost of the steam engines and of the water works,) would be two hundred and six dollars per day, to raise three millions and three quarters of gallons by steam, which is now done for four dollars per day by water, with this further advantage, that with the expenditure of not more than fifty thousand dollars for five new wheels and pumps, the quantity can be increased to ten millions of gallons in 24 hours, the water power being sufficient to raise even more if required.

An additional quantity of 6,750000 gallons, raised by steam engines, would cost three hundred and forty-four dollars per day, making the whole expense to raise ten millions of gallons by steam, 550 dollars per day, whilst the same quantity can be raised by water for ten dollars per day, which includes the present expense, (before mentioned,) of four dollars per day, and an allowance of six dollars for additional hands, fuel, tallow, &c. without estimating the interest on the first cost of either species of engines and pumps.

A further trial of the dam took place last month, from a severe freshet which rose only five feet on the dam, whilst three miles above, the water rose 14 feet, bringing with it all the ice of the river. Not the slightest injury was sustained; no accident whatever has occurred to any part of the works during the last year, during which they performed in the most satisfactory manner. The same observation may be made as to the iron pipes in the streets, of which there are about nine miles laid, without the occurrence of a leak.

The Committee, upon the happy state of affairs above detailed, renew their congratulations to Councils.

By order of the Watering Committee.

JOSEPH S. LEWIS,

Chairman.

Jan. 3, 1824.

No. 1.

LIST OF CERTIFICATES FOR MONEYS

DRAWN BY THE

WATERING COMMITTEE

FOR

FAIR MOUNT WATER WORKS,

From Dec'r. 31, 1822, to Dec'r. 31, 1823.

No.	1823.									Dolls.	C.
371	Jan'y.	4	In favour of Frederick Graff, Clerk of the Water Works,	-	-	-	-	-	-	2281	70
372		24	Ditto,	-	-	-	-	-	-	1657	59
373	Feb'y.	1	Ditto,	-	-	-	-	-	-	1416	03
374		19	Ditto,	-	-	-	-	-	-	5079	34
375		22	Ditto,	-	-	-	-	-	-	10500	00
376	March	1	Ditto,	-	-	-	-	-	-	1355	12
377		31	Ditto,	-	-	-	-	-	-	1742	18
378	April	3	Ditto,	-	-	-	-	-	-	2835	30
379	May	1	Ditto,	-	-	-	-	-	-	2875	77
380	June	2	Ditto,	-	-	-	-	-	-	3131	67
381		12	Ditto,	-	-	-	-	-	-	3297	05
382	July	1	Ditto,	-	-	-	-	-	-	5951	57
383		10	Ditto,	-	-	-	-	-	-	2233	33
384		18	Ditto,	-	-	-	-	-	-	4765	73
385	August	1	Ditto,	-	-	-	-	-	-	1760	84
386	Sept'r.	1	Ditto,	-	-	-	-	-	-	5191	46
387		18	Ditto,	-	-	-	-	-	-	3004	73
388	Oct'r.	1	Ditto,	-	-	-	-	-	-	2592	59
389		28	Ditto,	-	-	-	-	-	-	2167	89
390	Nov'r.	1	Ditto,	-	-	-	-	-	-	1316	86
391		10	Ditto,	-	-	-	-	-	-	807	08
392	Dec'r.	1	Ditto,	-	-	-	-	-	-	1232	02
393		24	Ditto,	-	-	-	-	-	-	770	33
394			Ditto,	-	-	-	-	-	-	1302	36
										69268	54

No. 1.

ABSTRACT OF PAYMENTS

MADE UNDER THE
FOREGOING CERTIFICATES.

Distribution.

No.	1823.		Dolls.	C.
373	Feb'y.	1 Ann Smith, for hauling sand, logs, &c. in Dec'r. 1822, and Jan. 1823,	14	46
		Wages of workmen for January, - - - - -	375	26
374		19 Arabella Jones, for 6 months' ground rent, due Feb. 1, - - -	13	33
		Dixey & Manderfield, for 20 hydrant pumps, boxes, nossels, &c.	159	12
376	March	1 Wages of workmen for February, - - - - -	290	53
377		31 Stephen Simmons, for lumber, - - - - -	55	57
		Michael Williamson, for wrought iron, - - - - -	90	00
		Wages of workmen for March, - - - - -	375	53
379	May	1 George & Jacob Peterman, for horse feed, - - - - -	23	91
		Rush & Muhlenberg, for iron castings, - - - - -	18	50
		Ann Smith, for sundry hauling, in February, March, and April,	33	00
		Wages of workmen for April, - - - - -	261	12
380	June	2 Dixey & Manderfield, for 12 hydrant pumps, - - - - -	66	00
		Ann Smith, for hauling sand, boring logs, &c. in May, - - -	31	50
		Wages of workmen for May, - - - - -	313	60
382	July	1 John Warnock, for nails, spikes, &c. had in 1822 and 1823, -	23	59
		Frederick Graff, for sundry bills paid by him, - - - - -	28	48
		Wages of workmen for June, - - - - -	278	35
383		10 J. Dela Meter, for 1 year's int. on lot in Callowhill St. due May 20,	33	33
385	August	1 Joseph Pierson, for straw, and 2 loads of hay, - - - - -	35	98
		George & Jacob Peterman, for horse feed, - - - - -	28	15
		Michael Williamson, for wrought iron, - - - - -	80	00
		Jonah Thompson & Co. for nails, spikes, &c. - - - - -	28	00
		Ann Smith, for hauling wood, pipes, gravel, &c. - - - - -	16	87
		Wages of workmen for July, - - - - -	420	60
386	Sept'r.	1 Lane Schofield, for repairs to cart and wagon, - - - - -	10	20
		Arabella Jones, for 6 months' ground rent, due Aug. 1, - - -	13	33
		Alexander Purvis, for 46 1-2 yards forest cloth, - - - - -	23	25
		Joseph Caskey, for part of 7 barrels of whiskey, - - - - -	27	00
		Wages of workmen for August, - - - - -	327	57
387		18 Ann Smith, for hauling gravel, &c. in August, - - - - -	15	25
388	Oct'r.	1 George & Jacob Peterman, for horse feed, - - - - -	12	52
		Michael Fox, for 7900 paving bricks, - - - - -	55	30
		John Warnock, for nails, spikes, &c. - - - - -	31	28
		Sprogal Dear, for repairs to log wagon, - - - - -	5	50
		Henry Bell, for lumber, - - - - -	48	55
		Wages of workmen for September, - - - - -	438	44
389		28 W. & C. Dilworth, for spades, shovels, and ironmongery, -	45	00
		Samuel P. Wetherill & Co. for paints, oil, &c. - - - - -	20	00
		Stephen Simmons, for lumber, - - - - -	65	62
		Frederick Erringer, taxes on Cherry street estate for 1823, -	10	50
		Rowley & Alberger, for plumber's work to pumps, &c. - - -	56	00
		Israel Roberts, for copper pump balls, &c. - - - - -	51	00
390	Nov'r.	1 Ann Smith, for sundry hauling in September and October, -	29	12
		Wages of workmen for October, - - - - -	354	96
392	Dec'r.	1 John Turner & Co. for 3000 feet 1 1-4 inch heart boards, - -	66	00
		Alexander Purvis, for 35 yards forest cloth, - - - - -	17	50
		Ann Smith, for hauling boards, sand, and logs, in November, -	16	87
Amount carried forward,			4835	54

No.	1823.	Amount brought forward,	Dolls.	C.	Dolls.	C.
392	Dec'r.	1 Dixey & Manderfield, for 20 pumps, nossels, and boxes,	4835	54		
		Wages of workmen for November, - - -	123	50		
393		24 Joseph Pierson, for 250 bundles straw and 2 loads hay,	297	13		
		Israel Roberts, for 12 copper pump balls and cock rod,	46	54		
		Michael Williamson, for wrought iron, - - -	31	50		
		William Riehle, for soal leather for pump boxes, -	22	24		
		David Fisher, for glazing 38 lights of glass in workshops,	123	69		
		John Warnock, for nails, pump tacks, &c. - - -	4	97		
		Cartnell & English, for shoeing cart horse, - - -	4	18		
394		W. & C. Dilworth, for ironmongery, - - -	17	43		
		William Davis, for chandlery, - - -	21	69		
		Samuel P. Wetherill & Co. for paints, oil, &c. -	5	60		
		Ann Smith, for 17 loads canal sand, - - -	14	07		
		Wages of workmen for December, - - -	10	62		
			323	01		
					5881	71

Engines.

379	May	1 Henry J. Williams, for 6 months' rent of wood wharf, to April 15, - - -	175	00		
380	June	2 John Marley, for cording and selling 288 3-4 cords wood, at 6 cents, - - -	17	32		
386	Sept'r.	1 John Binns, for advertising sale of wood, - - -	1	07		
		William Fry, for ditto, - - -	1	07		
388	Oct'r.	1 Frederick Erdman, on account, for carpenters' work,	158	15		
		Joseph Morris, for measuring carpenters' work, -	9	75		
		Wages of workmen at general repairs to the building,	43	31		
389		28 Frederick Erdman, for taking off old roof, repairs to rafters, &c. - - -	48	12		
		Jacob Mayland & Co. for 11900 shingles, lumber, &c.	303	53		
		Rhoads & Jeans, for lumber, - - -	25	00		
		David Fisher, for painting and glazing, - - -	181	14		
		Israel Roberts, for copper gutters, spouts, and repairs,	121	71		
392	Dec'r.	1 Tennant & Highland, for marble copeing, - - -	3	50		
393		Jonah Thompson & Co. for 2 casks of nails, - - -	14	00		
					1102	67

Buildings.

371	Jan'y.	4 W. Jones & Son, balance for rough casting and plaistering,	211	79		
		Jonathan Coffee, on account, for iron work to mills, -	500	00		
372		24 Ezekiel Norman, on account, for mill gate screws,	40	00		
		Struthers & Wilson, for soap stones for coal grate,	10	00		
		John Moore, for measuring, rough casting, and plaistering,	11	00		
		Thomas Carter, for hack hire in 1822, - - -	61	00		
		Joseph S. Walter, for putting up coal grates, - - -	9	50		
		John Markland, for 8 1-4 bushels plaster of Paris, -	8	25		
		N. & D. Sellers, for sand screen and 12 fire buckets,	45	62		
		Drury Bromly, for wages of self and workmen to Jan. 20,	377	89		
373	Feb'y.	1 Jonathan Coffee, on account, for smith work to mills,	500	00		
		Frederick Erdman, on account, for carpenter's work,	100	00		
		J. & T. Carter, for hack hire, - - -	35	00		
Amounts carried forward,			1910	05	6984	38

No.	1823.		Dolls.	C.	Dolls.	C.
		Amounts brought forward,	1910	05	6984	38
373	Feb'y.	1 Wages of workmen for January,	135	02		
374		19 Ezekiel Norman, balance for cutting mill screws,	88	00		
		John Naglee, for 416 feet bucket stuff,	14	56		
376	March	1 Jonathan Coffee, balance for iron work to mills,	555	90		
		James Greenham, for liquor for millwrights, &c.	19	61		
		Wages of workmen for February,	63	45		
377		31 Frederick Erdman, on account, for carpenter's work,	50	00		
		David Fisher, on account, for painting and glazing,	100	00		
		Stephen Simmons, for sundry lumber,	114	51		
		Samuel R. Wood, for 70 bushels of hair,	16	00		
		Michael Williamson, for wrought iron,	50	63		
		Frederick Erdman, on account, for carpenters' work	150	00		
		Wages of workmen for March,	46	00		
379	May	1 John Newsham, for fire-plug pattern for the pumps,	6	00		
		Henry J. Williams, for 6 months' rent of store-house, to April 15,	75	00		
		Daniel Rubicam, for sundries,	39	50		
		Frederick Erdman, on account, for carpenters' work,	100	00		
		Wages of workmen for April,	107	79		
380	June	2 Frederick Erdman, balance for measured carpenters' w'k	259	64		
		J. S. Lewis & J. Bacon, for 2 casks Roman cement,	18	00		
		T. & J. Carter, for hack hire,	37	50		
		Wages of workmen for May,	59	40		
382	July	1 William Byrne, for cutting holes in stone for iron railing,	18	70		
		William Jones & Son, for plaistering kitchen, &c.	18	00		
		Thomas Bonsall, for lime,	20	37		
		James Greenham, for sundries,	8	51		
		Cobb & Johnson, for 2357 3-4 lbs. of iron railing, and materials,	424	38		
		Frederick Graff, for bills paid by him	38	78		
383		10 David Fisher, balance for painting 3725 1-3 yards, and glazing 393 lights,	275	71		
385	August	1 Daniel Rubicam, for sundries,	22	50		
		Jonah Thompson & Co. for nails and spikes,	50	30		
		Frederick Erdman, on account, for carpenters' day work,	100	00		
386	Sept'r.	1 Francis Mitchell, poor tax on F. Mount estate for 1823,	105	00		
388	Oct'r.	1 Sellers & Pennock, for 200 ft. hose, brasses, &c.	160	50		
		J. S. Lewis, for payment of services of Thomas Oakes,	100	00		
		Thomas Carter & Co. for hack hire,	27	00		
		Joseph Morris, for measuring carpenters' work,	16	00		
389		28 Frederick Erdman, balance for carpenters' day work,	113	13		
		W. & C. Dilworth, for ironmongery,	57	89		
		Joseph Howell, for 19 loads Red Bank sand (omitted in 1822)	14	25		
		Gorgas, Keyser, & Son, for lumber,	202	07		
		Rhoads & Jeans, for ditto,	124	33		
		Samuel P. Wetherill & Co. for paints, oil, &c.	36	00		
		Stephen Simmons, for lumber,	84	74		
390	Nov'r.	1 Daniel Rubicam, for sundries,	21	43		
393	Dec'r.	1 Jacob Gardner, county, road, and health tax, on Fair Mount estate, for 1823,	138	00		
		Rush & Muhlenberg, for sundry castings,	23	90		
394		Joseph S. Lewis & J. Bacon, for 2 casks Roman cement,	18	00		
		Amount carried forward,			6236	05
					13220	43

No.	1823.		Dolls.	C.	Dolls.	C.
		Amount brought forward,			13220	43
Reservoir. n^o. 2-						
379	May	1 Ann Smith, for hauling paving stone, gravel, &c.	41	25		
380	June	2 John Turner & Co. for 90 red cedar posts,	67	50		
		Hudson Carlisle, for paving 1546 yds. and ramming ditto,	124	22		
		Ann Smith, for hauling 88 loads stone and 92 loads gravel	112	00		
		Wages of workmen for May,	54	87		
386	Sept'r.	1 Levis Passmore, for lumber for fence,	107	00		
		Wages of workmen, for dressing banks, filling, &c.	37	80		
387		18 Frederick Erdman, on account, for carpenters' work to				
		fence, &c.	100	00		
388	Oct'r.	1 Ditto, ditto,	80	00		
		Ditto, balance for measured work,	55	15		
389		28 Ditto, ditto, day work at curb, &c.	22	00		
		Jacob Mayland & Co. for lumber	18	04		
		David Fisher, painting fence, three coats,	155	10		
					974	93
Pumps.						
371	Jan'y.	4 Rush & Muhlenburg, balance as per contract,	1222	22		
374	Feb'y.	19 Ditto, for 2 new pump openings, valves, &c.	744	33		
379	May	1 Ditto, for additional valves, seats, and work,	613	48		
					2580	03
Damages.						
372	Jan'y.	24 J. S. Lewis, for the payment of damages,	1000	00		
374	Feb'y.	19 Ditto, do.	4000	00		
375		22 Ditto, do.	10500	00		
383	July	10 Ditto, do.	2200	00		
390	Nov'r.	1 Ditto, do.	500	00		
391		8 Ditto, do.	800	00		
		Frederick Graff, paid expenses of referees in 1822,	7	08		
					19007	08
Iron Pipes.						
371	Jan'y.	4 J. S. Lewis & J. Bacon, balance for iron pipes,	347	69		
372		24 Edward Carr, for 134 lbs. screws and brasses for cocks,	50	25		
373	Feb'y.	1 Wages of workmen for January,	88	29		
376	March	1 Ditto, for February,	128	58		
377		31 Michael Williamson, for wrought iron,	45	00		
		Joseph Edwards, for 554 1-4 lbs. of brass work,	169	19		
		Wages of workmen fitting up work,	109	82		
Amounts carried forward,			938	82	35782	47

No	1823.		Dolls.	C.	Dolls.	C.
		Amounts brought forward,	938	82	35782	47
378	April	3 J. S. Lewis & J. Bacon, for 100 six-inch iron pipes, at 1 doll. 15 cts. per foot,	1035	00		
379	May	1 Rush & Muhlenberg, for iron castings,	65	40		
		Alexander Purvis, for 44 1-2 yards forest cloth,	22	25		
		Ann Smith, for sundry hauling, in Feb. Mar. and Apr.	14	90		
		Wages of workmen for April,	486	16		
380	June	2 J. S. Lewis & J. Bacon, for 46 ten-inch pipes, portorage, &c.	1047	90		
		Ann Smith, for hauling pipes,	15	80		
		Wages of workmen, fitting up and laying pipes,	330	89		
381		12 Samuel Richards, for 150 ten-inch pipes,	3213	00		
382	July	1 Thomas Cope & Son, for 1 six-inch pipe,	10	25		
		J. S. Lewis & J. Bacon, for 157 six and ten-inch pipes,	1335	33		
		Samuel Richards, on account, for ten-inch iron pipes, &c.	2142	00		
		John C. Stocker, for 90 feet of three-inch pipes,	38	07		
		Wages of workmen for June,	726	77		
		Ann Smith, for hauling pipes in June,	35	87		
384		18 S. Richards, balance for 414 ten-inch pipes, branches, &c.	4340	02		
		Samuel Haydock, for 500 feet 3-4 lead pipes, at 30 cts.	150	00		
385	August	1 Michael Williamson, for wrought iron,	60	25		
		Ann Smith, for hauling pipes in July,	24	00		
		Wages of workmen for July,	646	10		
386	Sept'r.	1 Samuel Hains, for levelling Pine and Front streets, Nathaniel Burt, for 6 T. 0 Cwt. 1qr. 10lb. of pig lead, and hauling,	724	30		
		Joseph Caskey, for part of 7 barrels of whiskey,	54	50		
		S. Richards, on account, for iron pipes, branches, &c.	3000	00		
		Wages of workmen for August,	550	67		
387		18 Ann Smith, for hauling pipes in August,	20	50		
		Samuel Richards, balance for pipes and castings,	1931	51		
		Richard E. Smith, for 10 days' wharfage of iron pipes,	10	00		
		J. S. Lewis & J. Bacon, for 8 and 1 1-2 inch iron pipes,	927	47		
388	Oct'r.	1 Henry Bell, for lumber,	38	01		
		Joseph Edwards, for 247 1-4 lbs. brass work,	74	17		
		Wages of workmen for September,	297	76		
389		28 W. & C. Dilworth, for spades, shovels, &c.	40	00		
		William Davis, for spun yarn, rope, &c.	100	99		
		Rowley & Alberger, for plumber's work, solder, &c.	206	14		
		Timothy Caldwell, for 1 ton fire clay, delivered,	7	50		
390	Nov'r.	1 Wages of workmen for October,	171	10		
392	Dec'r.	1 Joseph Edwards, for 123 3-4 lbs. of brass work,	37	12		
		S. Richards, for 4 T. 3 Cwt. 2qr. 22lb. sundry castings,	313	85		
		Wages of workmen for November,	139	33		
393		24 Lehman & Roberts, for 1 carboy of vitriol,	5	36		
		Michael Williamson, for wrought iron,	20	00		
		William Riehle, for soal leather for press, &c.	43	40		
		John Newsham, for making cock patterns, and materials,	50	00		
		Rush & Muhlenberg, for castings,	24	93		
394		William Davis, for spun yarn, &c.	60	16		
		Elijah & T. Dallett, for tallow,	23	31		
		J. S. Lewis & J. Bacon, portorage of iron pipes, &c.	8	49		
		Wages of workmen for December	110	25		
		Amount carried forward,			25672	60
					61455	07

No.	1823.	Amount brought forward,	Dolls.	C.	Dolls.	C.
					61455	07
Dam, Locks, &c.						
376	March	1 Joshua & Samuel Emlen, for stone, &c. charged to A. Cooley's account,	179	94		
378	April	3 A. Cooley's estate, balance for building dam, locks, &c. Harvey Lewis, for a vase presented to F. Graff, by the Committee,	1505	30		
379	May	1 Daniel Rubicam, for sundries,	245	00		
380	June	2 Thomas Carter & Co. for hack hire,	30	00		
382	July	1 Wages of workmen in June, backing the dam, &c.	25	00		
385	August	1 Daniel Rubicam, for sundries,	61	25		
		Wages of workmen in July, backing the dam, and of gate-keeper	26	80		
386	Sept'r.	1 Ditto, in August, do.	122	29		
388	Oct'r.	1 Thomas Carter & Co. for hack hire,	95	50		
		Wages of workmen for September,	27	00		
390	Nov'r.	1 Daniel Rubicam, for sundries,	125	00		
		Wages of workmen for October,	22	00		
392	Dec'r.	1 J. Greenham, for whiskey for men backing the dam, &c.	115	25		
		Wages of workmen for November,	23	42		
393		24 Daniel Rubicam, for sundries,	103	80		
		Samuel Rush, for recording deed, &c.	8	25		
394		Wages of workmen for December	2	20		
			54	75		
					2772	75
Water Power.						
373	Feb'y.	1 Wages of workmen, working machinery, for January,	93	00		
376	March	1 Caleb Hathaway, for 31 gallons lamp oil,	25	11		
		Wages of workmen for February,	84	00		
377		31 Ditto, for March,	93	00		
379	May	1 Ditto, for April,	90	00		
380	June	2 James Greenham, for 5 tons Schuylkill coal,	49	00		
		Henry Pratt, for 33 gallons olive oil,	41	25		
		Wages of workmen for May,	93	00		
381		12 R. M. & L. Lewis, for 8 1-2 tons Schuylkill coal,	84	05		
382	July	1 Wages of workmen for June,	90	00		
385	August	1 Ditto, for July,	93	00		
386	Sept'r.	1 Caleb Hathaway, for 28 1-2 gallons lamp oil,	12	20		
		Wages of workmen for August,	93	00		
388	Oct'r.	1 Lehigh Coal and Navigation Company, for 8 tons coals, and extra hauling,	70	20		
		Wages of workmen for September,	90	00		
389		28 William Davis, for chandlery,	42	00		
		Samuel P. Wetherill & Co. for oil, emory, whiting, &c.	16	09		
390	Nov'r.	1 Wages of workmen for October,	93	00		
392	Dec'r.	1 Ditto, for November,	90	00		
393		24 Caleb Hathaway, for 31 gallons lamp oil,	17	98		
394		Elijah & Thomas Dallett, for tallow,	19	80		
		Wages of workmen for December,	93	00		
					1472	68
		Amount carried forward,	65700	50		

No.	1823.		Amount brought forward,	Dolls.	C.	Dolls.	C.
						65700	50
North-East Reservoir. n. 3							
372	Jan'y.	24	Thomas M'Guire, on account, for digging,	30	00		
373	Feb'y.	1	Ditto, do.	75	00		
374		19	Ditto, do.	60	00		
377	March	31	Ditto, do.	75	00		
			Ditto, do.	70	00		
378	April	3	Ditto, do.	50	00		
379	May	1	Ann Smith, for hauling stone and gravel	15	93		
			Thomas M'Guire, on account, for digging,	75	00		
			Wages of workmen for April, building circular wall, &c.	40	25		
380	June	2	Thomas M'Guire, balance for digging 7059 yds. &c.	355	28		
386	Sept'r.	1	Samuel Hains, for measuring dirt removed	5	00		
						851	46
Incidentals.							
372	Jan'y.	24	J. S. Walter, for building coal grates in Register's office, and materials	9	08		
			S. Kennedy, for a gilt frame for ditto,	5	00		
376	March	1	Marcus Young, for making fires, &c. in ditto,	8	00		
377		29	Samuel W. Rush, for sundries for ditto,	6	93		
379	May	1	Robert Desilver, for stationary for ditto,	41	33		
380	June	2	Marcus Young, services in ditto,	12	00		
382	July	1	Samuel W. Rush, for sundries for ditto,	2	87		
385	August	1	Marcus Young, services in ditto, in June and July,	6	00		
390	Nov'r.	1	Ditto, do. in Aug. Sept'r. and Oct'r.	10	00		
393	Dec'r.	1	Robert Desilver, stationary for Register's office,	29	76		
			Lydia R. Bailey, for printing notices, &c.	17	00		
394			W. & G. Hyde, for stationary for the Superintendent,	14	61		
						162	58
Salaries.							
377	March	31	Samuel W. Rush, for 1 quarter's salary, due March 14,	125	00		
379	May	1	Frederick Graff, for ditto, due April 1,	500	00		
382	July	1	Samuel W. Rush, ditto, - - -	125	00		
			James Young, 6 months' ditto, due July 1,	25	00		
			Frederick Graff, 1 quarters' ditto, - - -	500	00		
388	Oct'r.	1	Samuel W. Rush, ditto, Sept'r. 14, &c.	129	00		
			Frederick Graff, ditto, due Oct'r. 1,	500	00		
393	Dec'r.	24	Samuel W. Rush, ditto, due Dec'r. 14,	125	00		
394			James Young, 6 months' ditto, due Dec'r. 31,	25	00		
			Frederick Graff, 1 quarters' ditto, do.	500	00		
						2554	00
Amount carried forward,						69268	54

ABSTRACT OF PAYMENTS

MADE BY THE

WATERING COMMITTEE,

From Dec'r. 31, 1822, to Dec'r. 31, 1823.

	Dolls.	C.
Distribution, - - - - -	5881	71
Engines, - - - - -	1102	67
Buildings, - - - - -	6236	05
Reservoir, - - - - -	974	93
Pumps, - - - - -	2580	03
Damages, - - - - -	19007	08
Iron Pipes, - - - - -	25672	60
Dam, Locks, &c. - - - - -	2772	75
Water Power, - - - - -	1472	68
North-East Reservoir, - - - - -	851	46
Incidentals, - - - - -	162	58
Salaries, - - - - -	2554	00
	<u>69268</u>	<u>54</u>

No. 2.

SUMS PAID INTO THE TREASURY

BY THE SUPERINTENDENT,

From Dec'r. 31, 1822, to Dec'r. 31, 1823.

1823.		Dolls.	C.
Feb'y. 17	To John Bacon, Treasurer, 1 quarter's rent of lower engine house, wood, &c. sold,	131	75
March 3	To ditto, for wood, logs, old pipes, ferules, &c.	456	28
20	To ditto, for wood,	371	62
April 4	To ditto, second payment for engine, \$ 333 33; for wood sold, \$ 260 31; old brass, do. \$ 54 00; \$ 1505 30, drawn from the Treasury to close the account of Ariel Cooley; and \$ 494 70, remitted by administrators to A. Cooley's estate, for the completion of his contract for building dam, locks, &c. together,	2647	64
May 2	To ditto, for wood sold	103	12
12	To ditto, for wood, old pipes, &c.	232	95
June 7	To ditto, do. &c. and 1 quarter's rent of lower eng. h.	120	75
July 1	To ditto, do. old pipes, &c.	74	40
August 20	To ditto, do.	47	00
Sept'r. 29	To ditto, do. &c. and 1 quarter's rent of lower eng. h.	118	00
Nov'r. 4	To ditto, do. old pipes, and of M'Ewen's estate,	356	77
Dec'r. 15	To ditto, for 1 q'r. rent of l. eng. h. old pipes, ferules, &c.	118	67
		<u>4778</u>	<u>95</u>

N. B. In the above account, \$ 1796 55 is included for 419 cords of wood, sold after the new works were put in operation.

No. 3.

STATEMENT OF PIPE, USED IN REPAIRS, AND LAID,

From Dec'r. 31, 1822, to Dec'r. 31, 1823.

	<i>Fect.</i>	<i>Fect.</i>
<p>The Report for 1822 accounted for 3440 feet of wooden pipes on hand for repairs; in 1823, the repairs exceeded that amount, being 3754 feet. This excess has been supplied with old pipes removed where iron has been laid; and there is a surplus sufficient for the repairs of 1824.</p>		
<p>Since the commencement of laying iron pipes, the following have been laid down:—</p>		
In 1819 and 1820, there were laid, pipes of 20 and 22 inches diameter, - - - - -	feet 9570	
In 1821 and 1822, of various diameters, - - - - -	24510	
In 1823 ditto, - - - - -	14993	
	49073	
Pipes laid in 1823, as follows:—		
10 inch pipes, from Front to Broad street, on the north side of Chesnut,		6176
Ditto, ditto, branches, &c. attached to ditto, and pipes of 3, 4, and 6 inches, - - - - -		300
8 inch pipes. Front street, from Union to Cedar, - - - - -	940	
Ditto, Front street, from Chesnut to High, - - - - -	481	
Ditto, ditto, branches, and pipes of 3, 4, and 6 inches, - - - - -		1421
6 inch pipes, north side of High street, from Eleventh to Juniper, - - - - -	1142	
Ditto, Pine street, from Front to the west side of Second, - - - - -	606	
Ditto, Second street, from Chesnut to Vine, - - - - -	2635	
Ditto, Fourth street, from High to the north side of Mulberry, - - - - -	694	
Ditto, across High street, at Ninth and Tenth, - - - - -	234	
		5311
4 inch pipes, leading into the N. E. public square, for a fire-plug, - - - - -		275
3 inch pipes, Church alley, westward from Second street, - - - - -	140	
Ditto, Marble street, from Tenth to Eleventh, - - - - -	422	
Ditto, Bingham's court, - - - - -	268	
		830
1 1-2 inch pipes, Dean's alley, westward of Eighth street, - - - - -	170	
Ditto, George street, westward of Thirteenth, - - - - -	108	
Ditto, Miller's alley, eastward of Sixth street, - - - - -	138	
		416
		14993

No. 4.

Account of Iron Pipes on hand.

						Dolls.	C.
3 inch pipes,	25	9 feet each,	225 feet,	at 45 cents,	-	101	25
4 inch ditto,	88	ditto,	792 do.	64	-	506	88
6 inch ditto,	8	ditto,	72 do.	\$ 1 15	-	82	80
8 inch ditto,	3	ditto,	27 do.	1 67	-	45	09
10 inch ditto,	7	ditto,	63 do.	2 38	-	149	94
Together,			1179 feet.				
Add branches, stop-cocks, &c. on hand,						500	00
Do. 2 tons of lead, at \$ 6 25 per Cwt.						125	00
						1510	96

No. 5.

ESTIMATE FOR THE YEAR 1824.

		Dolls.	C.	Dolls.	C.
For working machinery of water power, 2 men at \$ 1 50 each, per day,		1095	00		
Oil, tallow, coal, chandlery, &c.		405	00		
				1500	00
Fair Mount Works, for sundry jobbing and attendance at the works,				456	00
for workmen backing in the dam, &c.				900	00
for keeping lock-gates,				144	00
				3000	00
Distribution.—For boring 1200 feet of pipe timber on hand,		120	00		
sundry castings of iron and brass,		800	00		
hydrant pumps and fixtures,		400	00		
repairs of conduits, pumps, fire-plugs, &c.		4000	00		
10,000 feet of lumber,		400	00		
salaries of Superintendent, Register, and messenger,		2550	00		
incidentals,		730	00		
				9000	00
				12000	00

FREDERICK GRAFF,

Superintendent of the Water Works.

No. 6.

STATEMENT

OF

THE ACCOUNT OF WATER RENTS FOR 1823.

	Dolls.	C.
Amount of Water Rents, as received from the Collectors	25377	50
Less, for allowances and commissions,	1597	88
	25779	62

No. 7.

**Amount of Water Rents, and for Repaving, received
by the Register, from December 1, 1822, to De-
cember 31, 1823, and paid into the Treasury.**

	Dolls.	C.
Total amount received,	2233	47
For repaving,	\$ 448	65
Water rents, in advance, and also by delinquents,	\$ 1726	32
234 permits, at 25 cents,	58	50
	1784	82
	2233	47

No. 8.

Dwellings, Manufactories, and Institutions,

Supplied with the Schuylkill Water, to the 31st December, 1823.

	Dolls.	C.	Dolls.	C.
192 Horses, - - - - -	at	1 00	192 00	
65 Houses in courts, - - - - -		2 00	130 00	
7 Ditto do. - - - - -		2 15	15 05	
16 Ditto do. - - - - -		2 50	40 00	
401 Baths in the city, - - - - -		3 00	1203 00	
19 Ditto in the county, - - - - -		4 50	85 50	
3758 Dwellings, schools, churches, &c. - - - - -		5 00	18790 00	
5 Dwellings, - - - - -		6 00	30 00	
3 Bake-houses, - - - - -		7 00	21 00	
103 Dwellings in the county, - - - - -		7 50	772 50	
24 Hatters, &c. - - - - -		8 00	192 00	
5 Hydrant pumps, vinegar yard, &c. - - - - -		9 00	45 00	
81 Inns, stables, banks, &c. - - - - -		10 00	810 00	
8 Soap factories, dyers, &c. - - - - -		12 00	96 00	
12 Dyers, &c. - - - - -		13 00	156 00	
54 Distillers, soap boilers, &c. - - - - -		15 00	810 00	
32 Sugar-houses, distilleries, &c. - - - - -		20 00	640 00	
1 Hatter, - - - - -		17 00	17 00	
1 Hydrant in Shields's court, - - - - -		22 00	22 00	
1 Ditto in Branner's court, - - - - -		20 00	20 00	
2 Livery stables, - - - - -		24 00	48 00	
16 Sugar-houses, hatters, inns, &c. - - - - -		25 00	400 00	
11 Soap factories, dyers, and prisons, - - - - -		30 00	330 00	
2 Breweries, - - - - -		34 00	68 00	
6 Tan-yards, stables, and manufactories, - - - - -		35 00	210 00	
7 Breweries, stables, dyers, &c. - - - - -		40 00	280 00	
6 Breweries, hospitals, dyers, &c. - - - - -		50 00	300 00	
2 Breweries, - - - - -		59 00	118 00	
1 Ditto, - - - - -		70 00	70 00	
1 Ditto, - - - - -		100 00	100 00	
1 Bath-house, - - - - -		80 00	80 00	
1 Alms-house, - - - - -		100 00	100 00	
			<hr/>	
			26191	05

4844
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SAMUEL W. RUSH

SAMUEL W. RUSH,
Register.

No. 9.

AMOUNT
OF
DUPLICATES OF WATER RENTS,
FOR THE YEAR 1824.

						Dolls.	C.	Dolls.	C.
North Mulberry Ward,						1856	00		
Upper Delaware do.	-	-	-	-	-	1589	50		
								3445	50
South Mulberry do.	-	-	-	-	-	1906	00		
Lower Delaware do.	-	-	-	-	-	1551	50		
								3457	50
North do.	-	-	-	-	-	3265	55		
High Street do.	-	-	-	-	-	1435	00		
								4700	55
Middle do.	-	-	-	-	-	1933	50		
Chesnut do.	-	-	-	-	-	1462	50		
								3396	00
South do.	-	-	-	-	-	2095	00		
Walnut do.	-	-	-	-	-	1114	50		
								3209	50
Locust do.	-	-	-	-	-	2710	00		
Dock do.	-	-	-	-	-	1229	50		
								3939	50
Cedar do.	-	-	-	-	-	2084	50		
New Market do.	-	-	-	-	-	1749	00		
								3833	50
Register received from delinquents, water rents for 1824,						136	50		
Superintendent ditto, do.						72	50		
								209	00
								26191	05

SAMUEL W. RUSH,

Register.