

VIEWS OF THE WATER QUESTION

AS PRESENTED BY THE BUFFALO WATER WORKS COMPANY, DEC.
19, 1867.

Comparative statement of amount of small sizes of pipe laid in the cities of Cleveland, Detroit, Chicago and Cincinnati, (as per reports of these cities,) with the city of Buffalo.

CLEVELAND, 1865.

Total amount of pipe, 27 miles, 3884 feet.
Of 4 inch pipe, 93,096 feet, }
Of 3 " " 5,543 " } 18 miles, 4393 feet.
Of 2 " " 794 " }

A small fraction less than 68 per cent. of the whole amount being 4 inch and under.

DETROIT, 1865.

Total amount of iron pipe, 40 miles, 1018 feet.
Of 4 inch pipe, 120,127 feet, }
Of 3 " " 17,138 " } 25 miles, 5265 feet.

About 65 per cent. of the whole amount of iron pipe being 4 inch and under. Beside the above amount of iron pipe, the report gives 37 miles,

CHICAGO, for year ending March 31, 1866.

Total amount of pipe, 145 miles, 2963 feet.
Of 4 inch, 63 miles, 3,676 feet, }
Of 3 " " 5 " 3,988 " } 69 miles, 2384 feet.

Nearly 48 per cent. of the whole amount being 4 inches and under.

CINCINNATI, 1865.

Total amount of pipe, 92 miles, 2170 feet.
Of 4 inch, 315,403 feet, }
Of 3 " " 52,188 " } 60 miles, 3271 feet.

Over 75 per cent. of the whole being 4 inches and under.

BUFFALO, 1866.

Total amount of pipe, 33 miles, 2947 feet.
Of 4 inch, 56,013 feet, }
Of 3 " " 408 " } 10 miles, 3621 feet.

A small fraction less than 32 per cent. of the whole being 4 inches and under.



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The Surveyor's estimate for 29 miles of pipe, to be added	
to the distribution of the present works, is	\$ 725,000.00
Average cost per mile,	25,000.00
His estimate for 63 miles for new works, is	1,310,000.00
Average cost per mile,	20,793.65
Difference in favor new works, per mile of pipe, \$	4,206.35
Difference against the present works on 29 miles,	121,984.15

Taking into consideration the fact, that the present works have but 32 per cent. of the whole amount of pipe laid, of the size of 4 inches and under, while the city of Detroit has 65 per cent., Cleveland, 68 per cent., Chicago 48 per cent., and Cincinnati 75 per cent., there would seem to be no necessity for this discrimination against the present works, and no good reason why the contemplated addition of 29 miles of pipe to the present works should be of larger size, or cost more per mile than the 63 miles for new works.

Surveyor's estimate of improvements to present works,	\$1,055,000.00
29 miles of pipe, (as per estimate for 63 miles,)	\$603,015.85
New Tunnel, as per Surveyor,	120,000.00
Repairs of Engines,	10,000.00
New Reservoir,	200,000.00
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	\$933,015.85
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Less than Surveyor's estimate,	\$ 121,984.15-



Surveyor's amended estimate for new works,	\$1,800,000.00
The Company's price for present works,	\$760,000.00
Add 29 miles of pipe,	603,015.85
New Tunnel,	120,000.00
Repairs of Engines,	10,000.00
New Reservoir,	200,000.00

Cost of present works and improvements,	\$1,693,015.85	1,693,015.85
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Less than Surveyor's estimate of new works,	\$106,984.15
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If 16 miles of new pipe is laid, making the aggregate 50 miles, which would probably meet all requirements for many years to come, it would reduce the cost by 13 miles of pipe, or \$272,657.45, making present works, with 50 miles of pipe, and the Surveyor's estimates for repairs and tunnel cost \$1,420,358.40.

Again. During the three years to be employed in building new works, the City will expect to pay the Water Works Company, certainly not less than the present rates: which would be

	\$108,000.00
If the City own the works, they will receive during the three years from other sources,	102,000.00
Add to this, Surveyor's estimate for new works,	\$1,800,000.00

It will make cost of new works,	\$2,010,000.00
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The Company value their works at	\$760,000.00
The City save during three years,	\$108,000.00
Receive from consumers, net,	102,000.00
	<u>\$210,000.00</u>
	210,000.00

Making the cost of the works to the City,	\$550,000.00
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The Surveyor's estimate of additions to the present works, is	\$1,055,000.00
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Deduct from this amount, the difference in his estimates for pipe to be added to present works, and his estimate for new works	106,000.00
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Making cost of improvements	\$948,945.00	948,985.00
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Cost of present works and improvements,	\$1,498,985.00
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Deduct this amount from cost of new works, as per Surveyor's estimate with the addition of the amount saved to the city for city supply during three years, and the net revenue in excess of such supply, making in the aggregate, as has been shown, \$2,010,000, and it will be seen that the city will save by a purchase of the present works, the sum of \$511,015.



The works, as offered by the Company to the city for \$760,000, embraces their entire property, including engines and pumps, with about one hundred and twenty-five per cent. of pumping power, in excess of the present requirements of the city. If the value of the Water Company's pipes be estimated at \$16,000 a mile (which is \$9,000 a mile less than Mr. Ditto's estimate for the 29 miles of new pipe, proposed to be laid,) it will be seen that this item alone amounts to \$539,360, leaving to be paid by the city for tunnel, reservoir, lands, pumping and other houses, and engines, etc., etc., only \$220,640, a sum believed to be very little over one-half its actual value. In relation to the efficiency of the works, it is shown by another statement that we have a far less percentage of small distribution pipe, than either of the four cities, with which comparison is made (these cities owning the works); and it may be further said, as a proof of the faithfulness of the construction of the works in all their parts, that for the sixteen years during which the works have been in operation, the city has not been without a supply even for a single day.

A. R. KETCHAM, Sup't.

BUFFALO, Dec. 19, 1867.

