



ANNUAL REPORT

OF THE

Newark Aqueduct Board,

FOR THE

YEAR ENDING NOVEMBER 30TH, 1887.



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Newark Aqueduct Board,

FOR THE

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OFFICERS AND MEMBERS.

JOSEPH E. HAYNES, Mayor,

PRESIDENT.

WILLIAM E. GREATHEAD,

Secretary.

GEORGE R. GRAY,

Superintendent.

CHARLES E. A. JACOBSEN,

Civil Engineer.

ANTHONY P. SMITH,

Supervisor of Works.

HARVEY H. BURRITT,

Chief Engineer Pump Works.

COMMISSIONERS ELECTED BY THE PEOPLE.

* JAMES M. SEYMOUR,

* ABRAHAM S. STAATS,

FERDINAND H. WISMER,

CHARLES W. HAGEN, M. D.,

THOMAS HARLAN,

FREDERICK KUHN,

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Terms expire with 1887.

Terms expire with 1888.

Terms expire with 1889.

* RE-ELECTED.

OFFICE OF THE NEWARK AQUEDUCT BOARD, }
27TH ANNUAL MEETING, January 4, 1888. }

The accompanying report was this day submitted, accepted, ordered printed and sent to the Common Council as the report of the Board for the year ending November 30, 1887.

WM. E. GREATHEAD,
Secretary.

SUPERINTENDENT'S REPORT.

To the Newark Aqueduct Board:

GENTLEMEN—The following report of the condition of the works for the year ending November 30th, 1887, is respectfully submitted:

The total quantity of water pumped at the Belleville Pumping Station during the past year was 4,614,386,592 gallons, an increase over last year of 313,167,248 gallons. The highest daily average was 14,295,582 gallons in July, an increase over last year of 1,018,719 gallons. The lowest daily average was in April, 10,884,097 gallons, an increase over last year of 1,604,828 gallons.

The average daily pumping for the year was 12,642,155 gallons, an increase of 857,992 gallons.

The amount of coal consumed was 16,191,078 pounds, or $7228\frac{358}{2240}$ tons; the cost of pumping per million gallons, \$8.80 $\frac{9}{10}$.

The total quantity of water pumped at the High Service Pumping Station during the past year was 1,502,037,203 gallons, an increase of 51,897,057 gallons.

The highest daily average was in July, 4,879,571 gallons, an increase over last year of 277,192 gallons. The lowest daily average was in April, 3,403,023 gallons, an increase over last year of 20,283 gallons. The daily average for

the year was 4,247,296 gallons, an increase of 274,310 gallons. The total amount of coal consumed was 4,465,400 pounds, or $1993\frac{1080}{240}$ tons. The cost of pumping per million gallons $\$9.02\frac{9}{10}$.

The Belleville Pumping Station.

The engines at the Belleville Pumping Station are all in good working order, and no accident of any kind has occurred during the year. No. 2 Pump has been thoroughly overhauled and the lagging renewed.

New air-pump studs, valves and weights, have been placed in No. 4 engine and all the other repairs to the engines have been only those made necessary by the ordinary wear and tear.

The new 20-inch discharge-pipe, which was laid last year, has been connected with the hot-well, and at the same time the boiler-house floor was relaid with new brick and flagging.

The only repairs to the boilers which have been necessary, were caused by a leaky tube in boiler No. 7. The repairs were made in a few hours.

The repairs to the boiler-settings were simply the relining of some of the fire places and repairing of bridge-walls, and all of the boilers and settings are now in good condition.

Last year we commenced using pea coal for fuel, with good results, but this year we have had to return to broken coal. Pea coal was advertised for but only one bid was made, and the price was so high, as to make it more advantageous to use broken coal.

The dock has not been rebuilt, and is in a positively dangerous condition. A few repairs were made this summer to enable us to unload the coal, but a new dock should be built this year.

I shall in the conclusion to this report refer to the present capacity of the Pumping Works and the future

requirements to meet the demands caused by the increasing consumption, in case the present supply is to be maintained.

The High Service Pumping Station.

The reorganization of the High Service which took effect on September 1st, of last year, necessitates the works being run day and night. Pump No. 1 having been assigned to the special High Service, has consequently performed a great amount of work during the past year, having been in operation for 7,172 hours. During the remainder of the time No. 2 has been worked, supplying both High Services against the special High Service pressure.

This has been a disadvantage especially in the matter of the consumption of coal, but could not be avoided inasmuch as the service depends upon the two pumps alone.

A new valve-rod has been placed in Pump No. 1, and the only accident that has happened to the pump occurred on October 8th, when the suspending-rod in the high-pressure steam chest broke, a part of the same dropping into the steam-port, causing the crank on the rock-shaft to break. The repairs were made in three days by H. R. Worthington.

Pump No. 2 has worked fairly well during the year. The new high-pressure cylinder to replace the one which cracked in 1884 has not yet been put in place, and it will be impossible to do this work until an additional pump is ready to be operated while the work is being done, and we must therefore rely upon the temporary repairs made at the time.

The plungers in the Pump (No. 2) are badly cut; new plungers have been purchased and have been on hand since last summer, but the work of placing them has also had to be deferred. It may be possible to do this work in the spring, but it is not likely, as the placing out of service of the pump even for a short time, would not only

endanger the entire supply of the High Service, but would be sure to run the level of the Reservoir down so far as to practically empty the same.

The capacity of Pump No. 1 is 3,000,000 gallons per day, and in the past year the lowest daily consumption per month has been over 3,400,000 gallons. The excess would have to be supplied out of the Reservoir.

The erection of an additional pump at the High Service Pumping Station is an imperative necessity. The fact that we have succeeded in getting along without any interruption to the supply during the past year, may be said to be only by a mere chance, as not only does the consumption increase, but also the danger of a complete break-down of Pump No. 2, because the necessary repairs cannot be made.

Both pumps have been repainted during the year, and the stuffing-boxes on the steam-end have been repacked with metal packing, and everything has been done to place the engines in as good condition as possible under the circumstances, for the winter's work.

Boiler No. 2 has been reset and has received a general overhauling, all seams having been caulked, etc., and Boiler No. 1 will soon need resetting also.

Two Korting Steam Injectors for feeding the boilers were put in operation in October last, and in order to avoid the grease in the hot-well, the suction-pipe was placed in the cold-water well, but owing to the low temperature of the water, this arrangement increased the consumption of coal, and in consequence the suction-pipe had to be changed to the hot-well; but measures were taken to flush the same, which has been done since three or four times a week, and the boilers are now cleaner at the time of cleaning, than they have ever been before.

The Injectors work very well, lifting the water 11 feet at 160° and discharging the same into the boilers at 210° or over. The replacing of injectors for feed-pumps will effect an annual saving in general repairs, oil, etc.

Belleville Pump Mains Nos. 1 and 2.

With the single exception of a leaky joint on Pump Main No. 2, which merely needed re-caulking, no repairs to the Pump Mains have been necessary this year.

The Receiving Reservoir, Belleville.

Under this heading nothing need be said, except to reiterate what has been stated in all former reports, namely: that the Receiving Reservoir has kept up its good record, and remains in its usual good condition.

Supply Mains Nos. 1 and 2.

No repairs of any kind were required during the past year. The blow-off on Supply Main No. 2 on Second River bridge, which was boxed in last year, in order to prevent freezing, has given no further trouble.

In my last report I called the attention of the Board to the growing necessity of providing for a new Supply Main from Belleville. I shall in the conclusion again refer to this matter.

The Low Service Reservoir.

On the morning of April 11th a small leak at the Low Service Reservoir was reported. It was discovered that the water was oozing out of the ground in the gutter on the west side of the Reservoir, about ten feet west of the fence, and a few feet south of the northerly line of Seventh Avenue.

The depth of water in the Reservoir at the time was fourteen feet, at which depth the water had been kept since the last filling of the Reservoir in May 1886. When the water in the Reservoir was lowered $3\frac{1}{2}$ feet the flow ceased, but it was found necessary to empty the Reservoir, in order to locate the leak; a cavity from 5 to 12 inches deep was found behind the slope-wall, extending from the

bottom to a height of about 13 feet, and at the foot of the slope-wall a hole was found extending downward, and under the slope-wall, connecting with the cavity. The leak had started in this hole and the water had worked its way through the bank to the point of outflow. The bank was repaired without any difficulty and the water again let into the Reservoir; since then there has been no further sign of leakage.

A report of the above break in the Reservoir was recorded in the book provided for that purpose, and signed by the Civil Engineer of the Board, in accordance with the resolution passed by the Board on April 27th 1886.

The High Service Reservoir.

The Reservoir has kept in the same good condition it was last year, and there have been no signs of leakage. The weighted valve in the gate-house has worked well, giving an extra pressure of about fifteen (15) pounds to the special High Service district, which has given entire satisfaction to the consumers.

A sewer pipe has been laid in South 9th street at a depth below the level of the bottom of the Reservoir, and no signs of leakage or soakage from the same were detected while the work was in progress.

The flagging of the sidewalk in South 9th street, alongside of the Reservoir, has not yet been laid, but it ought to be during the coming year.

Distribution.

The amount of pipe laid during the year is as follows: 190 feet of 10 inch, 20,140 feet of 6 inch—1022 feet of 4 inch and 152 feet of 3 inch, a total of 21,504 feet or $4\frac{384}{5280}$ miles, making a grand total of $160\frac{4169}{5280}$ miles of pipe connected with the work.

The number of new hydrants set during the year is 39 (2 private), of which 21 are on the Low

Service and 18 on the High Service. This makes a total of 1341 Hydrants connected with the works, of which 737 are on the Low Service, 584 on the High Service, 17 in the village of Belleville, and 3 at the Belleville Pumping Station. Four of the new hydrants (6-inch) have been set at the request of the Chief of the Fire Department, 3 on New Jersey Rail Road Avenue, and 1 on Broad street, near Hahne & Co's. store and the latter is connected with the 24-inch main in Broad street. The connection was made without shutting off the water, by the use of the new tapping-machine, the invention of Supervisor Anthony P. Smith, the same being used for the first time and with perfect success. The pressure in the pipe at the time of tapping was about 31 pounds and the time taken for actual drilling 45 minutes.

It is intended to connect several additional 6 in. Hydrants with the 24-inch main at points where danger of great conflagrations exist. This work could not possibly be undertaken without the new tapping-machine, inasmuch, as the shutting off of the 24-inch main would for the time being, leave the Low Service without any supply.

The principal distributing mains or feeders supplying the Low Service (with exception of the so-called Belleville level) are:—

1st. The 24-inch main running from the Low Service Reservoir through Eighth avenue and Broad street as far as Walnut street laid in 1866 and 1868. This main is the principal feeder, all the other feeders being branches of the same.

2nd. The 10-inch main in Eighth avenue and Broad street to Green street, (from Market street to Green street, 8-inch,) laid by the old Aqueduct Co.

3rd. The 10-inch main in Plane street, and in Court street, from Plane to Broad street, laid in 1874.

4th. The 12-inch main in Market street, from Broad to Ferry streets, and 10-inch main from Broad street to Springfield avenue, laid by the old Aqueduct Co.

5th. The 20-inch main in Walnut street, from Broad to Adams streets, laid in 1869.

6th. The 12-inch main in Adam street, from Walnut to East Kinney street and from Walnut to Market street, laid in 1870 and extended to River street and in River street to Chapel (from Freeman to Chapel streets 8 in.), in 1882 and 1885. This extension was made to improve the supply of the large manufacturing establishments in Chapel street and Lister avenue.

It will be seen that, with the exception of the main in Plane street (1874), and the extension of the 12-inch main in River street (which was laid for the purpose only of improving the supply of a certain outlying locality), no feeders have been laid since 1870, although the consumption on the Low Service has increased from less than 2,000,000 gallons per day to nearly 10,000,000 gallons, and the laying of additional feeders to secure an efficient and uninterrupted supply has become necessary. I have for several years past called attention to the increasing need of this work.

That part of the Low Service, below Court and Walnut streets, is dependent entirely upon the circulation in the smaller (6 and 4-inch) street mains. In 1884 a part of this locality, in the 14th Ward, had to be annexed to the High Service (increasing the expenditure of High Service pumping), and frequent complaints of inefficient pressure have been made during the past year. The extension of the 24-inch main in Broad street from Walnut street south would obviate the trouble, and it ought to be carried out during the coming year. As before mentioned, the 24-inch main in Broad street, is the principal feeder, all the other feeders being branches of the same, and thus the supply depends entirely upon this main. An accident to the main, which would entail the shutting off of the same, would for the time being, entirely (or nearly so) interrupt the supply, and leave all that part of the city, including the most thickly populated and business sections depend-

ing upon it, without water or fire protection. Furthermore, the increasing consumption is taxing the capacity of the main to such an extent, as from year to year to considerably lower the pressure due the head from the Reservoir. The laying of a new 24-inch main from the Low Service Reservoir into the part of the city supplied by the same, would secure an uninterrupted supply, and would also make the same more efficient, inasmuch as it would considerably increase the pressure all over the low level. The main ought to be laid during the coming year.

That part of the 12th Ward lying below Adams street is being built up very rapidly, and will in a few years, require the extension of the 20-inch main in Walnut street from Adams street east.

As to the High Service it will soon be necessary to lay a main from the High Service Reservoir through Roseville and by way of Fifth avenue into that part of the 8th Ward belonging to the High Service level.

Consumption.

The usual consumption statements and statistics are appended.

The number of taps made during year has been larger than ever before. One thousand two hundred and ninety-nine new taps have been made, of which number six hundred and ten were on the Low Service, and six hundred and eighty-nine on the High Service, an excess of seventy-nine on the latter.

The increase of consumption over the last year has therefore also been very high and has only been exceeded in 1879, when the daily average over the preceding year was 1,094,694 gallons; the increase of this year over last being 857,992 gallons. The average daily consumption per tap in 1879 was 793 gallons, while in the past year it has been 687 gallons, being the lowest consumption per tap since 1875, and two gallons less than last year. But

it must be borne in mind that there was no drought at any time last year, and that the total rain-fall exceeded the average.

The highest daily average consumption per tap in the past year (in July) was 805 gallons, and the daily average consumption for that month 1,018,719 gallons over the highest daily average in 1886

I would suggest that a new house-to-house inspection be made during the coming year. Such an inspection has not been made since 1880, and it has of late frequently happened that chargeable appliances have been found in houses, that have been put in without the proper notification at this office.

I desire to call attention to the fact that the Common Council has of late granted to private individuals the privilege of laying water-pipes through the public streets to connect with the Morris canal; in one instance through a side-street and crossing two main avenues. This would hardly seem to be fair, either to those consumers who have to pay for the water they use, or to this Board whose revenues are thereby diminished.

Real Estate.

The sales of real estate reported last year, had not been consummated at the end of the fiscal year, but have been since, and the amount aggregating \$3,060.00 has been paid into this office.

The sales during the past year have been as follows:

Lots Nos. 5 and 6 in plot No. 13 on Clifton avenue (formerly Chatham street) for \$500.00 and \$450.00 respectively, and lot No. 29 in the same plot lying in the rear of Eighth avenue for the sum of \$85.00. Also plots Nos. 9 and 67 on the corner of Sheffield street and Seventh ave. for the sum of \$2,500.00, and lot No. 9 in plot No. 12 on Eighth avenue for \$600.00. A part of plot No. 14 being a narrow strip along the north side of Drift street was conveyed for \$5.00.

These sales aggregate the sum of \$7,200.00 which has been paid into this office.

Financial.

With the incoming fiscal year, the Board enters upon a new phase in its financial condition. The Newark Aqueduct Board is now self-sustaining; this Board enters upon the new year without one dollar of temporary loan indebtedness, and will be able during the year to pay all its expenditures, including the interest on the bonded debt, out of its water rents, and without having to ask the Common Council for any assistance.

It would seem proper at this time to allude to the past history of the Board, or rather to the financial condition of the past, as much as refers to its becoming self-sustaining, which it has often been asserted the Board ought to have been long ago, notwithstanding the well-known fact that the water-rents constitute the sole and only income of the Board, over the increase of which the Board has had absolutely no control (as far as the increase of taps go) and that even the water-rates charged, are often complained of as being too high, or even exorbitant.

On the other hand this Board has had to carry, since the present works now supplying the city and the system of distributing-pipes were completed (and will have to continue to carry for four or five years more), a disproportionately large interest account; that is to say, the rate of interest of the great bulk of the bonded debt is 7%, while for a number of years past the bonds could have been refunded at $4\frac{1}{2}$ or 4% if they had contained a redemption clause, the omission of which was probably forced upon the then-existing Board by the general financial condition of the country, in order to effect the sale of the bonds, a fact for which the succeeding Boards could in no wise be held responsible. The bonds will carry 7% interest until they can be redeemed at their maturity, which will be for \$2,490,000.00 in 1892, for \$500,000.00 in 1905, and for \$50,000.00 in 1906.

If the \$2,490,000.00 worth of bonds could have been refunded six or eight years ago, the Board would have been self-sustaining at a considerably earlier period. It is nevertheless a satisfaction to announce that this long-desired state of affairs has at last been reached.

Now that the city at large will no longer have to contribute to the payment of the interest on the bonded debt, the whole burden will rest upon the water-taker or consumer. This would hardly seem just, in view of the fact, that the existence of an ample water-supply in various ways benefits the community at large, and that therefore, property should carry a part of the burden. For instance, the owner of a store-house, or a lumber-yard, may not be a consumer on these premises, but he has fire-protection all the same, equal with the consumer who pays for the water he uses, and thus indirectly pays a part of the benefits the former derives from the water-supply as fire-protection.

I have alluded to this matter in a former report, and pointed out how in other cities the authorities having charge of the water-supply receive contributions from the city at large, not for the purpose of making good deficiencies, but in recognition of the fact that property derives benefits for which, it, or the city at large, ought in equity to pay.

The manner in which these contributions are paid, varies in different cities, and I will here again enumerate some of the cities in which the authorities having charge of the water-supply receive contributions as above mentioned. Buffalo contributes out of taxation \$100,000.00 per annum, and an annual frontage-tax is assessed upon improved property of 10 cents per lineal foot, and upon unimproved property (vacant lots) 5 cents per lineal foot.

Brooklyn also assesses unimproved property at from 10 cents to 15 cents per lineal foot. In New York, Brooklyn and Philadelphia, buildings are assessed regardless of whether any water is taken or not. Baltimore raises a

tax of two (2) mills per hundred dollars on all taxable property. In Cincinnati, the Common Council in 1863 assumed the payment of the interest on the bonded debt, and continued to do so until 1878 (sixteen years) and also during that time paid \$300,000.00 of the bonds. This places the Water-Department of Cincinnati in a financial condition which has probably no equal in the United States. In Boston, Milwaukee, Providence, Louisville, Detroit, Hartford, Syracuse, Indianapolis and other cities, the city pays a fixed sum, varying from twenty to fifty dollars for each fire-hydrant. In Milwaukee and Philadelphia, property is assessed when the pipes are laid, in the latter city, one dollar per lineal foot frontage.

As to our water-rates, the following list of meter-rates of a number of eastern cities, will enable our citizens to make a comparison.

METER-RATES PER 1000 GALLONS CHARGED.

	Lowest.	Highest.
Newark, N. J.....	09c.....	15c.

MAINE.

Bangor	30
Portland	20 40

NEW HAMPSHIRE.

Manchester	20
Nashua	15 30

VERMONT.

St. Albans	10 30
Burlington	12 50

MASSACHUSETTS.

Amesbury.....	30 50
Boston....	..... 20
Clinton.....	15 50
Cambridge	10 20
Fall River.....	..... 30
Haverhill.....	15 20
Hingham .	..... 25

	Lowest.	Highest.
Lawrence.....	20c	25c.
Lowell.....		15
Lynn.....	17½	20
Northampton.....	10	20
North Adams.....	10	15
Quincy.....	12½	30
Peabody.....		20
Salem.....	13½	20
Springfield.....	10	20
Taunton.....	12½	25
Waltham.....	25	30
Westboro.....		50
Worcester.....	15	25

CONNECTICUT.

Bridgeport.....	20	30
Hartford.....	7½	30
Meriden.....	10	25
New Haven.....	10	35
New London.....	20	30
Norwich.....	15	30
Stonington.....	10	20

RHODE ISLAND.

Providence.....	15	30
Woonsocket.....		30
Waterbury.....	10	30

NEW YORK.

Brooklyn.....		10½
Catskill.....	12	25
Cortland.....	20	50
Corning.....	10	30
Flushing.....	20	60
Oneida.....	20	50
Troy.....	10	20
Utica.....	15	30
New York City.....		13⅔
Saratoga.....		15

NEW JERSEY.

	Lowest.	Highest.
Hackensack.....	13c.....	23c.
Jersey City.....	21.....	27
Morristown.....		33
New Brunswick.....	12½.....	50
Trenton.....	15.....	20

PENNSYLVANIA.

Bloomsburg...	10.....	35
Easton.....	16½.....	40
Hazleton.....	10.....	15
Reading.....	10¾.....	21½

It will be seen from the fore-going list that the meter-rates charged in this city, are with only one exception, (Hartford 7½cts. for the lowest, which is offset however by the highest being *double* that charged in Newark), lower than in any of the cities named, and that this Board thereby offers inducements to manufacturers to locate in Newark.

It may also be reiterated that the regular rates charged by this Board are on the whole less onerous than those of most cities, and that there are fewer restrictions.

New Water Supply.

At the 26th annual meeting of this Board, held on January 5th, the following Preamble and Resolutions were adopted.

Whereas—The representatives of the two great political parties in the resolution adopted by their respective City Conventions last Fall, declared in favor of a new and better supply of water,

And whereas—A similar public sentiment has been made known by the action of local public meetings and the utterances of the local press,

And whereas—In consequence of the public action taken as aforesaid, and of the refusal of this Board to be influenced thereby, or to take any official action whatever,

committing itself to a new water-supply, this Board has therefore been charged with an unwillingness to listen to the publicly expressed wishes of the people of our city in favor of a new water-supply, and of an unreasonable and stubborn refusal to take the necessary official action, to give the people of Newark purer and wholesome water; but the commissioners of this Board, conscious of their willingness to perform their official duty to supply the people of Newark with pure and wholesome water and of their free use heretofore of all the means at the command of this Board to attain such result, and in order to truly ascertain and have presented to the Board the real views and wishes of the property-owners and tax-payers, and to test the sincerity of the alleged public sentiment favorable to a new water-supply, therefore,

Resolved—That in order that the commissioners of this Board may ascertain and hear the personal views and sentiments of the citizens and tax-payers of our city on the subject of an improved or a new water-supply, that a public meeting be called for Wednesday, January 19th, 1887, at 7½ o'clock, at which meeting the Aqueduct Board submit for general discussion the several propositions, offers, and plans received for the purification of the present, or the procurement of a new water supply.

Resolved—That the Common Council be requested to grant the use of the Common Council Chamber for the purpose of holding the said meeting.

In accordance with the above resolutions a citizens meeting was called and held at the appointed time, and an adjourned meeting one week later, Jan. 26th. Neither of these meetings were well attended, although there were present some warm supporters of a new water-supply. A greater part of the time was taken up by different parties explaining modes of filtration, making offers of driven-well supply, and of furnishing the city with water at a given price per million gallons. A general discussion ensued, which terminated with the adoption of a resolution offered by

Mr. David Young to the effect that his Honor the Mayor, be empowered to appoint a committee of six citizens, in conjunction with the Aqueduct Board to consider the matter of an improved or new water-supply, and to report at a future meeting. In accordance with this resolution his Honor the Mayor appointed the following committee :

DAVID YOUNG,
WM. A. RIGHTER,
GOTTFRIED KRUEGER,
JAMES SMITH, JR.,
JOHN JELLIFF,
GEO. H. PHILLIPS,
MOSES BIGELOW.

This citizen's committee in conjunction with the members of the Aqueduct Board, forming a joint committee, held numerous meetings, at which all the propositions that had previously been made for purifying the water, or supplying the city by private parties or corporations, were thoroughly discussed and considered, as to their merits as an improvement on our present supply, not only for the purpose of immediate or temporary relief, but more especially with a view to permanence, covering future needs and demands.

Mr. Bartlett, and Mr. Quimby, who had made propositions to supply the city with water, were invited to appear before the joint committee to further explain to, and inform the committee, as to their respective propositions, modes, and source of supply, &c., &c. The report of the joint committee was presented and read at a meeting called for that purpose on March 9th, and adopted. This meeting also was not well attended, the greater number of the persons present being agents for, or otherwise interested in, the different schemes.

After a lengthy discussion Mr. James Smith, Jr., offered the following resolution :

Resolved—That it is evident from the small attendance at the meetings held for the purpose of discussing the

question of a new water-supply, that no interest is taken by our citizens in the matter ; therefore, be it

Resolved—That the citizen's committee be discharged.

Mr. J. Frank Fort offered as a substitute, that the meeting adjourn subject to the call of the citizen's committee and the Newark Aqueduct Board.

This substitute was adopted, and here the matter of a new water-supply for the city of Newark rests for the present.

It seems pertinent at this point to present a synopsis of the report made by the joint committee, and in order to make this as brief as possible Mr. Jacobsen, the civil-engineer of the Board, who made all the estimates and figures used in the report, has calculated and compiled the following tables, covering a period of 22 years, from 1892 to 1913 both inclusive.

Table "A" gives the estimated consumption upon which the other tables are based.

Table "B" the annual cost of maintaining our present mode of supply (Belleville and High Service pumping).

Table "C" the annual cost to the city at \$36.50 per million gallons, the water to be delivered in the Receiving Reservoir in Belleville.

TABLE A.

ESTIMATED CONSUMPTION.

(Annual increase 300 mill. gall. or 822,000 gall. per day.)

Year.	Yearly Consumption Mill. Gall.	Average daily Consumption Gallons.	
		mill.	thous.
1892	6,075	16,644	
3	6,375	17,466	
4	6,675	18,288	
5	6,975	19,110	
6	7,275	19,932	
7	7,575	20,753	
8	7,875	21,575	
9	8,175	22,397	
1900	8,475	23,219	
1	8,775	24,041	
2	9,075	24,863	
3	9,375	25,685	
4	9,675	26,507	
5	9,975	27,329	
6	10,275	28,151	
7	10,575	28,973	
8	10,875	29,795	
9	11,175	30,616	
1910	11,475	31,438	
1	11,775	32,260	
2	12,075	33,082	
1913	12,375	33,904	

Total..202,950 millions.

TABLE B.

ANNUAL COST OF MAINTAINING BELLEVILLE SUPPLY.

(Belleville and High Service Pumping, Pollution, and all other expenses maintaining Pump- and River-works, which are not included in cost of pumping.)

Year.	Pumping, including High Service \$11.50 per mill. galls.	Pollution and other expenses.	Interest on Cost of Extensions	Total Cost.
1892	\$69,862.50	\$4,500.00	\$5,800.00	\$80,162.50
3	73,312.50	4,500.00	5,900.00	83,612.50
4	76,762.50	4,800.00	10,600.00	92,162.50
5	80,212.50	4,800.00	10,600.00	95,612.50
6	83,662.50	4,800.00	10,600.00	99,062.50
7	87,112.50	5,000.00	12,800.00	104,912.50
8	90,562.50	5,000.00	12,800.00	108,362.50
9	94,012.50	5,000.00	12,800.00	111,812.50
1900	97,462.50	5,000.00	12,800.00	115,262.50
1	100,912.50	5,300.00	12,800.00	119,012.50
2	104,362.50	5,300.00	12,800.00	122,462.50
3	107,812.50	5,300.00	12,800.00	125,912.50
4	111,262.50	5,500.00	17,600.00	134,362.50
5	114,712.50	5,500.00	17,600.00	137,812.50
6	118,162.50	5,500.00	17,600.00	141,262.50
7	121,612.50	5,500.00	17,600.00	144,712.50
8	125,062.50	5,800.00	17,600.00	148,462.50
9	128,512.50	5,800.00	17,600.00	151,912.50
1910	131,962.50	5,800.00	17,600.00	155,362.50
1	135,412.50	5,800.00	19,800.00	161,012.50
2	138,862.50	6,000.00	21,800.00	166,662.50
1913	142,312.50	6,000.00	21,800.00	170,112.50
Total	\$2,333,925.00	\$116,500.00	\$319,600.00	\$2,770,025.00

EXTENSIONS:

Previous to 1892, new pump and pump main at Belleville.....	\$145,000.00
1894, High Service pump and pump main....	120,000.00
1897, new pump at Belleville.....	55,000.00
1904, new pump and pump main, at Belleville.	120,000.00
1911, new pump, at Belleville.....	55,000.00
1912, new pump, High Service.....	50,000.00
Total.....	\$545,000.00

TABLE C.

ANNUAL COST OF PURCHASING WATER

at \$36.50 per millions gallons delivered in Belleville.

Year.	Annual Consum. Million Gallons.	Annual Cost of water at \$36.50.	High Service Pumping $\frac{1}{2}$ of Total mill.gall	Cost of Pumping \$9.00 p. Mill.	Interest on Cost of extensions High Service	Total Cost.
1892	6,075	\$221,737.50	2,025	\$18,225.00	\$———	\$239,962.50
3	6,375	232,687.50	2,125	19,125.00	———	251,812.50
4	6,675	243,637.50	2,225	20,025.00	4,800.00	268,462.50
5	6,975	254,587.50	2,325	20,925.00	4,800.00	280,312.50
6	7,275	265,537.50	2,425	21,825.00	4,800.00	292,162.50
7	7,575	276,487.50	2,525	22,725.00	4,800.00	304,012.50
8	7,875	287,437.50	2,625	23,625.00	4,800.00	315,862.50
9	8,175	298,387.50	2,725	24,525.00	4,800.00	327,712.50
1900	8,475	309,337.50	2,825	25,425.00	4,800.00	339,562.50
1	8,775	320,287.50	2,925	26,325.00	4,800.00	351,412.50
2	9,075	331,237.50	3,025	27,225.00	4,800.00	363,262.50
3	9,375	342,187.50	3,125	28,125.00	4,800.00	375,112.50
4	9,675	353,137.50	3,225	29,025.00	4,800.00	386,962.50
5	9,975	364,087.50	3,325	29,925.00	4,800.00	398,812.50
6	10,275	375,037.50	3,425	30,825.00	4,800.00	410,662.50
7	10,575	385,987.50	3,525	31,725.00	4,860.00	422,512.50
8	10,875	396,937.50	3,625	32,625.00	4,800.00	434,362.50
9	11,175	407,887.50	3,725	33,525.00	4,800.00	446,212.50
1910	11,475	418,837.50	3,825	34,425.00	4,800.00	458,062.50
1	11,775	429,787.50	3,925	35,325.00	4,800.00	469,912.50
2	12,075	440,737.50	4,025	36,225.00	6,800.00	483,762.50
1913	12,375	451,687.50	4,125	37,125.00	6,800.00	495,612.50
Totals	202,950	\$7,407,675.00	67,650	\$608,850.00	\$100,000.00	\$8,116,525.00

EXTENSIONS :

1894, new High Service pump and pump main . \$120,000.00
 1912, new High Service pump 50,000.00

Total \$170,000.00

The committee report assumes that in 1890 the new works would be in operation. Inasmuch as this now would be impossible, the year 1892 has been assumed, and the tables begin with that year.

The joint committee considered the different plans and propositions in the following order :

Plan No. 1. That of retaining the present supply and improving the same by filtration.

After a thorough discussion of this plan, the joint committee decided not to recommend the same, the reasons being :

1. The expenditures for the additions and extensions to the two pumping plants, both at Belleville and Clifton ave., which from time to time would have to be made, and of which a part would become necessary in the near future.

2. The expenditures for pumping, which are annually increasing.

3. The cost of a filtering-plant, and the additions which would become necessary from time to time, and the cost of maintenance of the same.

4. That it is questionable, whether, even the best methods of filtration and aeration will entirely remove some of the most objectionable constituents of the water.

5. That in all probability the supply from Belleville will eventually have to be abandoned for another source.

Reference to table "B" will show the annual cost of pumping, interest on cost of extensions, etc., and also the total expenditure in 22 years, and to this amount must be added :

First cost of filtering-plant, capacity 15,000,000 gallons per day.....	\$225,000.00
This would have to be more than doubled in 22 years at an expense of say	275,000.00
Interest 4% in 23 years say.....	221,000.00
Maintenance of filtering-plant at an annual average expense of \$8,000 for 22 years	176,000.00
Total.....	<hr/> \$897,000.00

Plan No. 2. That of retaining the present supply with the addition of driven wells.

It was decided not to recommend this plan for the following reasons :

1. That the supply from driven wells, at and near the Pumping Station above Belleville, cannot be relied upon, as has been demonstrated by the experiments made by the direction of the Newark Aqueduct Board in 1879, 1880 and 1881.

2. That the analyses of Professors Cook (see the Croes and Howell report, page 55) and Leeds, show the water not to be of a sufficient degree of purity to warrant the expense of a driven-well plant, and that it is liable to deteriorate still more as the surrounding country builds up.

3. That experience has shown the water to be too hard to be suitable for boilers, and various manufacturing purposes, this being particularly objectionable for a large manufacturing city like Newark.

4. The expenditures incurred for extensions and additions to the pumping-plant, as well as of pumping, would be the same as under Plan No. 1 with the addition of the cost of the driven-well plant and the maintenance of the same.

Plan No. 3. The Dual Water Supply. It was decided not to recommend the dual water-supply, the objections being :

1. That the water from the available source according to analyses made by Professors Wilbur and Austin and Professor Chandler, is not of a satisfactory quality.

2. That it would tend to diminish the revenue of the Board, by the placing of hydrants for free delivery in the streets.

3. That it would be necessary to duplicate the street-mains throughout the city.

4. That in addition to the expenditure for extensions of pumping-plants and pumping, as given under Plan No. 1 it would necessitate the maintenance of a special drinking water pumping station.

Plan No. 4. Shall the city be supplied by a private corporation?

There being two propositions before the joint committee to supply the city with water, they were taken up and discussed separately, and the parties making the propositions were invited, as before-mentioned, to appear before the joint committee to explain their plans, which they accordingly did.

The proposition of Mr. Quimby as first made by him, is, to deliver the water to the city of Newark at the price of \$26.00 per million gallons. He subsequently reduced this price to \$16.00 per million gallons. His sources are Green and Denmark Ponds in Morris county.

The output of these lakes he stated at first to be 39,000,000 gallons per day, but afterward changed this figure to 78,000,000 gallons. He further stated that he had leased the ponds for a term of fifty years.

The committee decided not to recommend the proposition of Mr. Quimby, the reasons being:

1. That there is a doubt as regards the ownership of the ponds, and that the right of the proposing party to sell the water, is but for a limited term.

2. The conflicting statements as to the output, the first proposal stating the same to be 39,000,000 gallons per day, while subsequently, Mr. Quimby stated before the committee, that the output was 78,000,000 gallons; and that the engineer of the Aqueduct Board, who had visited the ponds, reported that even now, at time of greatest flow, and after heavy rain-storms, the output could not be estimated at the quantity claimed by Mr. Quimby at the season of least flow.

3. That according to the report of Messrs. Croes and Howell, the Mount Pleasant Storage Reservoir on Green Pond Brook, $4\frac{1}{2}$ miles below the junction of the same and the outflow of Denmark Pond, with a largely increased drainage area, has a daily capacity of 18,000,000 gallons only.

4. The impossibility of laying 37 miles of 36-inch pipe from Green Pond to Belleville in 3 months, and the various conflicting statements give such a character of irresponsibility to the proposition, that it ought not to be seriously considered.

The proposition of Mr. John R. Bartlett is to furnish the city with water from the water-sheds of the tributaries of the Passaic River in the northern part of the state, from a point at, or above, Little Falls, at a price of \$36.50 per million gallons, the water to be delivered into the Receiving Reservoir at Belleville.

The contract to be made for a period of ten years (this being the term limited by law) but with a clause inserted to make the same perpetual. The statements of Mr. Bartlett were not satisfactory to the committee, and are embodied in the following reasons why the committee decided not to recommend the acceptance of Mr. Bartlett's proposition :

1. That the price of \$36.50 is excessive, and that according to Mr. Bartlett's statement there is no prospect of the price being lowered as the consumption increases in the future.

2. That Mr. Bartlett refuses to dispose of the plant for a specified sum after the expiration of a certain term, and that the plant, as proposed by him, being calculated to supply other cities besides Newark, would be larger than this city would need for years to come.

3. That, as the proposition is, to deliver the water at the Receiving Reservoir at Belleville, it would still leave the city under the necessity of providing supply-mains from Belleville, storage reservoir in the city (Branch Brook), the maintenance of the High Service Pumping Station with the additions to the same, and the cost of the High Service Pumping.

The cost to the city of the adoption of Mr. Bartlett's proposition according to table "C" would be in 22 years

(1892—1913) 202,950 million gallons @ \$36.50	\$7,407,675.00
High Service Pumping during the above period	608,850.00
Extension High Service Pumping Station....	170,000.00
Interest on the same 4%.....	100,000.00

Total.....\$8,286,525.00

A sinking fund of 3% on a principal of \$4,000,000 at the end of the 22 years would amount to \$4,170,159.43, while the total expended for interest and sinking fund (4% and 3% respectively) would amount to \$6,160,000 or deducting the surplus of the sinking fund, in round figures to \$6,000,000, added to this the maintenance of the plant at \$30,000 per annum (which is Mr. Bartlett's own figure) \$6,660,000, leaving a balance of \$1,626,525 in excess of what it would cost the city to have spend \$4,000,000 for works of their own, while the yearly expenditure for water would go on indefinitely and increasing from year to year.

A supply of 50,000,000 gallons per day would be ample to supply the city until the year 1930 but by that time (from 1892) the city would have paid Mr. Bartlett the sum of \$16,761,712.50 and still would not possess any works of its own.

Plan No. 5. A new water supply to be owned by the city.

As the plans previously considered had failed to convince the committee, that their respective merits, both from a financial point of view and otherwise would warrant their recommendation; and as this plan, being the last on the list, had been most favored at the last citizen's meeting held in the Common Council Chamber, the committee decided to recommend that the Aqueduct Board be requested to secure the necessary legislative authority to obtain a new supply by gravity from the upper watersheds of the Passaic River. They thought it inadvisable to enter upon any detailed statement of the different sources from whence a supply by gravity could be obtained, for the reason that the disclosure of such a plan might result

in its defeat, by interested parties purchasing the lands necessary for storage reservoirs, and further they consider that that work is the peculiar province of the Aqueduct Board itself.

But from the estimate made by competent engineers it is believed that a supply from 30,000,000 to 40,000,000 gallons per day can be obtained at an expenditure of about \$4,000,000, and the committee therefore recommend that legislative authority be obtained authorizing such an issue of bonds to that amount.

In addition to the above-mentioned three tables, Mr. Jacobsen has prepared the following four tables which relate to a new water-supply, with estimated expenditures and income up to the year 1913.

Table "D" gives the estimated annual income based upon the average increase for the last six years.

Table "E" gives the annual interest on the bonded debt as refunded at time of maturity (1892 to 1913 both inclusive), adding to the bonded debt \$503,000.00 for the payment of the necessary extensions to the works up to 1892, exclusive of such extensions as will be necessary to the pumping-works, which latter are included in the cost of pumping (Table "B").

Table "F" gives the annual expenditures based upon the average increase of expenditures for the last 5 years, including salaries, engineering, expense account, maintenance of works (pipe-system, supply-mains, reservoir, etc.) exclusive of pumping, maintenance of pumps and river works, and pollution, which are included in the cost of pumping (Table "B").

The total annual *expenditures also include the extension of street-mains.*

Table "G" gives the results of the fore-going tables in a condensed form, and the relations of income to the expenditures of a new water-supply, owned by the city; to the expenditures under Mr. Bartlett's proposition, and also to the expenditures if our present mode of supply is maintained.

TABLE D.

ESTIMATED WATER-RENTS INCOME

based upon the average increase of the last 6 years.

Year	Water-Rents Income.	Annual Increase.	Remarks.
1881	\$205,762.79		
2	218,635.18	\$12,872.39	
3	241,563.88	22,928.70	
4	253,435.76	11,871.88	
5	271,454.12	18,018.36	
6	290,167.37	18,713.25	
7	317,148.49	26,981.12	\$111,385.70
8	335,750.00	18,600.00	average of increase previ- ous 6 years.
9	354,350.00	18,600.00	
1890	372,950.00	18,600.00	
1	391,550.00	18,600.00	
2	410,150.00	18,600.00	
3	428,750.00	18,600.00	
4	447,350.00	18,600.00	
5	465,950.00	18,600.00	
6	484,550.00	18,600.00	
7	503,150.00	18,600.00	
8	521,750.00	18,600.00	
9	540,350.00	18,600.00	
1900	558,950.00	18,600.00	
1	577,550.00	18,600.00	
2	596,150.00	18,600.00	
3	614,750.00	18,600.00	
4	633,350.00	18,600.00	
5	651,950.00	18,600.00	
6	670,550.00	18,600.00	
7	689,150.00	18,600.00	
8	707,750.00	18,600.00	
9	726,350.00	18,600.00	
1910	744,950.00	18,600.00	
1	763,550.00	18,600.00	
2	782,150.00	18,600.00	
1913	800,750.00	18,600.00	
Total	\$13,319,900.00	(from 1892 to 1913 both incl.)	

TABLE E.

INTEREST ON PRESENT BONDED DEBT,

including cost of necessary extensions up to 1892, and refunded at time of maturity.

Year	Bonded Debt.	Interest.	Remarks.
1887	\$3,512,000.00	\$235,755.00	
1892	4,015,000.00	255,875.00	{ \$35,000 High Serv. pump. eng. 23,000 Extension street main. 105,000 Extension feeders. 340,000 supply main & Stor. R.
1893	4,015,000.00	181,175.00	\$2,490,000 refunded
4	4,015,000.00	181,175.00	7% to 4%
5	4,015,000.00	181,175.00	
6	4,015,000.00	181,175.00	
7	4,015,000.00	181,175.00	
8	4,015,000.00	179,175.00	\$100,000 ref. 6% to 4%
9	4,015,000.00	179,175.00	
1900	4,015,000.00	179,175.00	
1	4,015,000.00	179,175.00	
2	4,015,000.00	179,175.00	
3	4,015,000.00	179,175.00	
4	4,015,000.00	179,175.00	
5	4,015,000.00	179,175.00	
6	4,015,000.00	164,175.00	\$500,000 ref. 7% to 4%
7	4,015,000.00	162,675.00	50,000 ref. 7% to 4%
8	4,015,000.00	162,675.00	
9	4,015,000.00	162,675.00	
1910	4,015,000.00	161,675.00	\$100,000 ref. 5% to 4%
1	4,015,000.00	161,675.00	
2	4,015,000.00	161,675.00	
1913	4,015,000.00	161,675.00	
Total		\$3,894,050.00	

TABLE F.

ANNUAL EXPENDITURES,

including, salaries, engineering, expense account, etc., and maintenance of all the works except Pumping Stations and River-works, (based upon the average increase of the last 5 years)

Year	Expenditures.	Annual Increase.	Remarks.	
1882	\$30,208.62		<div> <div>Net total increase \$10,271.84</div> <div>Average \$2,054.37, or including unforeseen expenses say \$2,400.00</div> </div>	
3	34,367.62	\$4,159.14		
4	33,110.65	1,257.11		decrease.
5	37,433.91	4,323.26		
6	40,060.55	2,726.64		excl. commissioner's salaries.
7	40,476.46	315.91		" " "
8	46,400.00	2,400.00		includ. " "
9	48,800.00	2,400.00		
1890	51,400.00	2,400.00	Street main	Total Expenditures.
1	53,600.00	2,400.00	Extensions.	
2	56,000.00	2,400.00	\$22,000.00	\$78,000.00
3	58,600.00	2,600.00	22,000.00	80,600.00
4	61,200.00	2,600.00	22,000.00	83,200.00
5	63,800.00	2,600.00	22,000.00	85,800.00
6	66,400.00	2,600.00	22,000.00	88,400.00
7	69,000.00	2,600.00	25,000.00	94,000.00
8	71,800.00	2,800.00	25,000.00	96,800.00
9	74,600.00	2,800.00	25,000.00	99,600.00
1900	77,400.00	2,800.00	25,000.00	102,400.00
1	80,200.00	2,800.00	25,000.00	105,200.00
2	83,000.00	2,800.00	27,000.00	110,000.00
3	86,000.00	3,000.00	27,000.00	113,000.00
4	89,000.00	3,000.00	27,000.00	116,000.00
5	92,000.00	3,000.00	27,000.00	119,000.00
6	95,000.00	3,000.00	27,000.00	122,000.00
7	98,000.00	3,000.00	30,000.00	128,000.00
8	101,200.00	3,200.00	30,000.00	131,200.00
9	104,200.00	3,200.00	30,000.00	134,200.00
1910	107,400.00	3,200.00	30,000.00	137,400.00
1	110,600.00	3,200.00	30,000.00	140,600.00
2	113,800.00	3,200.00	30,000.00	143,800.00
1913	117,000.00	3,200.00	30,000.00	147,000.00
Totals	\$1,876,200.00	\$63,600.00	\$580,000.00	\$2,456,200.00

(From 1892 to 1913 both inclus.)

TABLE G.

SHOWING RELATION OF ANNUAL INCOME

to annual expenditures, in maintaining present supply, in building works owned by city, and in accepting Mr. Bartlett's proposition. (1892—1913 both incl.)

Year	Income Table D.	Inter'st, Expenses and Extensions Tables E and F.	Excess of Income.	Cost maintaining present supply Table B.	Cost of works owned by city In- terest 4 per cent. on 4 mill. dollars and maintenance.	Cost of purchasing water at \$36.50 pr. mill gallons. Table C.
1892	\$410,150 00	\$333,875 00	\$76,275 00	\$80,162 50	\$185,000 00	\$239,962 50
3	428,750 00	261,775 00	166,975 00	83,612 50	185,000 00	251,812 50
4	447,350 00	264,375 00	182,975 00	92,162 50	185,000 00	268,462 50
5	465,950 00	266,975 00	198,975 00	95,612 50	185,000 00	280,312 50
6	484,550 00	269,575 00	214,975 00	99,062 50	185,000 00	292,162 50
7	503,150 00	275,175 00	227,975 00	104,912 00	185,000 00	304,012 50
8	521,750 00	275,975 00	245,775 00	108,362 50	185,000 00	315,862 50
9	540,350 00	278,775 00	261,575 00	111,812 50	185,000 00	327,712 50
1890	558,950 00	281,575 00	277,375 00	115,262 50	185,000 00	339,562 50
1	577,550 00	284,375 00	293,175 00	119,012 50	185,000 00	351,412 50
2	596,150 00	289,175 00	306,975 00	122,462 50	190,000 00	363,262 50
3	614,750 00	292,175 00	322,575 00	125,912 50	190,000 00	375,112 50
4	633,350 00	295,175 00	338,175 00	134,362 50	190,000 00	386,962 50
5	651,950 00	298,175 00	353,775 00	137,812 50	190,000 00	398,812 50
6	670,550 00	286,175 00	384,375 00	141,262 50	190,000 00	410,662 50
7	689,150 00	290,675 00	398,475 00	144,712 50	190,000 00	422,512 50
8	707,750 00	293,875 00	413,875 00	148,462 50	190,000 00	434,362 50
9	726,350 00	296,875 00	429,475 00	151,912 50	190,000 00	446,212 50
1910	744,950 00	299,075 00	445,875 00	155,362 50	190,000 00	458,062 50
1	763,550 00	302,275 00	461,275 00	161,012 50	190,000 00	469,912 50
2	782,150 00	305,475 00	476,675 00	166,662 50	190,000 00	483,762 50
1913	800,750 00	308,675 00	492,075 00	170,112 50	190,000 00	495,612 50
Totals	\$13,319,900 00	\$6,350,250 00	\$6,969,650 00	\$2,770,025 00	\$4,130,000 00	\$8,116,525 00

The totals of table "G" show an estimated income in the 22 years of..... \$13,319,900.00

Expenses, extension of street-mains, and interest on bonded debt..... 6,350,250.00

Excess of income..... \$6,969,650.00

Expenditures under Mr. Bartlett's proposition..... \$8,116,525.00

Deficiency..... \$1,146,875.00

Which amount would have to be made good by the Common Council.

In the last year (1913) the income would yet be about \$4,000.00 short.

On the other hand :

Excess of income.....	\$6,969,650.00
Interest on \$4,000,000 of bonds for a new water-supply at 4% and maintenance.....	\$4,130,000.00

Surplus.....	\$2,839,650.00
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From 1895 the Board would be able to pay interest and maintenance of new supply, besides paying for the extension of the street-mains from \$22,000 to \$30,000 annually, a total of \$580,000 in the 22 years.

Conclusion.

In concluding this report I desire to call special attention to the extensions of the works which are absolutely necessary.

These extensions may be divided into two classes : such as will form permanent parts of the work if a new water-supply is obtained, and such as are necessary to supply the city with water by our present mode of supply, but which will have to be abandoned when a new supply is put into operation.

As to the first class, I have already under the heading of distribution referred to the extensions of the pipe-system in the city (feeders), but besides these it will be necessary :

First—To lay a new supply-main from the Belleville Reservoir. The capacity of our present supply-mains (30-inch and 24-inch) is about 18,000,000 gallons per day, and this will soon be reached by the highest monthly average, which in the coming year will probably be between 15 and 16 million gallons, leaving only a small margin in case of accident.

Second—A Storage Reservoir, the ultimate necessity of which I have pointed out in the reports of 1881 and 1886. It would be located at Branch Brook between 5th and 7th avenues, where the natural conditions are such that a reservoir can be built at a comparatively small expense,

nearly all the property belonging to the Aqueduct Board.

The water-level would be the same as that of the Morris Canal, being the same as that to which the Low Service Reservoir is at present filled.

It would cover about thirty acres, and be of an available capacity of about 155,000,000 gallons, while the available capacity of our present Low Service Reservoirs within the city limits, is only about 16,000,000 gallons, which is less than two days' consumption.

The building of this Reservoir would save about \$40,000 expense in laying the supply-main, because the distance from the Belleville Reservoir to our present Low Service Reservoir is about 3,500 feet more than the distance from the same to the new Storage Reservoir.

There would be another advantage in building the Storage Reservoir, to which I shall refer below, but the building of a reservoir at this place would certainly meet with the views of the parties who favor the location of a park in that neighborhood.

To the second class of extensions belongs the new High Service Engine, with addition to the Pumping Station to make room for the same.

I have referred to this under the heading of the "High Service Pumping Station". The conditions are such as to make the erection of this engine an imperative necessity in any case, that is to say, whether a new supply is to be obtained or not.

But the Belleville Pumping Station will also need an additional 8,000,000 gallon pump, and consequently a new pump-main and extensions to pump and boiler house.

The available pumping capacity at this station is also 18,000,000 gallons per day, and consequently but little above the highest monthly average consumption.

All of the above extensions would have to be made within 5 years, but, if a Storage Reservoir should be built as before-mentioned, and a new water-supply contemplated

(that is to say, if that question should be decided upon at an early period), then the extensions to the Belleville Pumping Station might be dispensed with, and in this manner the expenditure for work, that would ultimately have to be abandoned, saved.

The Secretary's report annexed contains statements of the receipts and expenditures, also full details of the collection and general finances are given.

Respectfully,

GEORGE R. GRAY,

Superintendent.

SECRETARY'S REPORT.

DEPARTMENT OF ACCOUNTS }
November 30, 1887. }

To the President and Members of the Newark Aqueduct Board:

GENTLEMEN—In compliance with the requirements of Section 3, Article 4, of the By-Laws, my report of the Receipts and Expenditures of this Department for the fiscal year ending November 30, 1887, is hereby submitted.

Cash balance November 30, 1886.....	\$23,860 97
Receipts from all sources for 1887.....	588,079 75

	<hr/>
	\$611,940 72
Less disbursements on all accounts.....	603,322 91

Balance cash on hand and in banks, November 30, 1887.....	<hr/> \$8617 81
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WILLIAM E. GREATHEAD,
Secretary.

Financial Statements.

OFFICE OF THE NEWARK AQUEDUCT BOARD, }
November 30, 1887. }

To certify that, at the close of business this day, the undersigned made a personal examination of the cash, cash vouchers, and securities of the Newark Aqueduct Board, and found them to correspond with the amounts called for by the books.

FERDINAND H. WISMER,
FREDERICK KUHN,
THOMAS HARLAN,

Finance Committee.

Amount brought forward . . .	\$167,170 68	\$3,512,035 00
Real Estate, No. 32	9,380 00	
“ “ 33	6,738 00	
“ “ 34	9,000 00	
“ “ 35	15,816 00	
“ “ 36	1,201 00	
“ “ 37	1 00	
“ “ 38	1,400 00	
“ “ 39	4,250 00	
“ “ 40	5,125 00	
“ “ 41	8,680 00	
“ “ 42	1,200 00	
“ “ 44	15,375 00	
“ “ 46	11,273 02	
“ “ 48	100 00	
“ “ 53	21,136 27	
“ “ 54	9,393 89	
“ “ 55	4,696 95	
“ “ 56	11,883 64	
“ “ 57	1,693 92	
“ “ 58	5,101 69	
“ “ 59	532 50	
“ “ 60	11,113 86	
“ “ 61	450 00	
“ “ 62	339 00	
“ “ 63	389 55	
“ “ 65	2,500 00	
“ “ 66	3,572 00	
“ “ 68	598 63	
Section A Supply Main No. 2	49,998 90	
Street mains	1,218,316 09	
Street mains supplies		237 30
Street mains of 1887	20,081 06	
Street mains, stock & material	4,859 27	
Belleville pump-house	56,309 39	
“ pumping engine No. 1	55,909 73	
“ “ “ No. 2	55,591 95	
“ “ “ No. 3	78,918 29	
“ “ “ No. 4	42,607 54	
New boilers, Belleville	9,793 69	
New chimney, Belleville	10,057 24	
	<hr/>	
	\$1,932,554 75	\$3,512,272 30

Amount brought forward...	\$1,932,554 75	\$3,512,272 30
Belleville engineer and firemen's dwellings.....	22,696 52	
River wall, dock and basins..	266,112 99	
Receiving reservoir, Belleville	133,645 05	
Keeper's house, receiving reservoir.....	3,192 60	
Driven wells, Belleville.....	10,568 76	
Caisson wells, Belleville.....	2,453 80	
Pump main, No. 1.....	92,552 57	
Pump main, No. 2.....	47,353 54	
Supply main, No. 1.....	152,998 38	
Supply main, No. 2.....	81,637 82	
High Service engine house...	27,847 44	
High Service pumping engine, No. 1.....	21,407 40	
High Service pumping engine, No. 2.....	21,630 22	
High Service reserve pumps..	12,609 26	
New boilers, Chatham street..	6,349 82	
High Service reservoir, South Orange avenue.....	94,585 27	
Low Service reservoir, 7th ave	304,039 20	
Branch Brook reservoir, 7th avenue.....	54,294 15	
New supply survey.....	8,549 03	
Twelfth Ward feeder.....	7,151 67	
Extra High Service.....	33,704 66	
High Service and Belleville machinery, fixtures, etc....	3,141 60	
Stable stock and fixtures.....	4,029 25	
Office furniture, fixtures, etc..	2,278 00	
Telephone lines and properties	1,200 00	
Hydrant account.....		814 23
Water-meter account.....	21,087 39	
Bond and mortgage.....	8,000 00	
High Service fuel account....	10,509 76	
High Service engine stores...	1,327 37	
High Service engineer and firemen's wages.....	6,639 08	
Belleville fuel account.....	41,524 87	
Belleville engine stores.....	2,191 65	
	\$3,439,863 87	\$3,513,086 53

Amount brought forward...	\$3,439,863 87	\$3,513,086 53
Belleville engineer and firemen wages.....	14,248 22	
Expense account.....	9,572 65	
Salaries.....	19,398 96	
Inspection.....	7,096 00	
Interest—coupons.....	180,600 00	
Interest—registered.....	54,855 00	
Interest—general.....	1,439 74	
Insurance.....	54 17	
Maintenance and repairs, telephone lines.....	345 00	
Engineering.....	2,677 88	
Joint Board on Pollution.....	2,381 71	
Maintenance general account.....	2,241 73	
Maintenance reservoirs and grounds.....	3,183 47	
Maintenance pure water.....	743 65	
Repairs, street mains.....	1,412 56	
“ stop cocks.....	39 20	
“ hydrants.....	543 90	
“ real estate, No. 1....	180 52	
Repairs, real estate, tenements and general.....	973 66	
Repairs, engineer and firemen's dwelling.....	381 01	
Repairs, keeper's house, Belleville.....	4 00	
Repairs, water-meters.....	173 34	
Repairs, Low Service reservoir.....	109 65	
Repairs, Belleville pump house.....	1,378 04	
“ river wall, dock and basins.....	72 73	
Repairs, High Service pump house.....	259 00	
Repairs, Belleville pump No. 2.....	144 52	
“ “ “ No. 3.....	3 80	
Repairs, Belleville pumps, boilers and general.....	874 63	
Repairs, High Service pump, No. 1.....	23 44	
	<hr/>	<hr/>
	\$3,745,276 05	\$3,513,086 53

Amount brought forward . . .	\$3,745,276 05	\$3,513,086 53
Repairs, High Service pump, No. 2	650 00	
Repairs, High Service pumps, boilers and general	1,648 78	
Repairs, tools	426 40	
“ supply main, No. 2	87 18	
“ pump main, No. 1	8 75	
“ “ “ No. 2	12 05	
“ services	43 83	
Setting meters	143 18	
Arrears	4,097 60	
Measured water rents	6,095 21	
Special water rents	259 34	
Cart sprinklers	33 79	
Fractional water rents	1,562 07	
Petition agreement	172 46	
Motor collection	377 09	
Loss and gain	904 45	
Water rents income		315,623 24
Penalties, fines, etc.		993 50
Collection account, Oct. 1887, Adv. W. R.	27,479 88	
Collection account services	3,694 29	
Service account		4,336 95
Plumbers drafts		314 50
Special tax account		40,655 00
Special tax arrears	34,077 17	
Tax receiver	16,000 00	
Receiver Mechanics' Nat. Bank	25,528 01	
Rents real estate	133 35	
Sundry personal accounts	6,298 79	
	<hr/>	<hr/>
	\$3,875,009 72	3,875,009 72

STATEMENT A.

CONSTRUCTION ACCOUNTS.

BELLEVILLE

Pump house	\$56,309 39
Engineer and firemen's dwellings	22,696 52
River wall, dock and basins	266,112 99
Receiving reservoir	133,645 05
Keeper's house	3,192 60
Driven wells	10,568 76
Caisson well	2,453 80
New boilers	9,793 69
New chimney	10,057 24
Pumping engine, No. 1	55,909 73
Pumping engine, No. 2	55,591 95
Pumping engine, No. 3	78,918 29
Pumping engine, No. 4	42,607 54

NEWARK :

High Service pump house	27,847 44
High Service pump, No. 1	21,407 40
High Service pump, No. 2	21,630 22
High Service reserve pumps	12,609 26
High Service reservoir	94,585 27
New boilers, Chatham street	6,349 82
Low Service reservoir	304,039 20
Branch Brook reservoir	54,294 15

MAINS :

Street mains, general	1,218,316 09
Pump main, No. 1	92,552 57
Pump main, No. 2	47,353 54
Supply main, No. 1	152,998 38
Supply main, Section B	81,637 82
Supply main, Section A	49,998 90
Twelfth Ward feeder	7,151 67
Extra High Service	33,704 66
Street mains of 1887	20,081 06

Total.....\$2,994,415 00

STATEMENT B.

GENERAL STOCK AND PROPERTY.

Real estate.....	\$321,458 79
Bond and mortgage.....	8,000 00
Belleville fuel and stores.....	17,353 74
High Service fuel and stores....	480 69
Water meters set and on hand.....	21,087 39
Street mains, stock and material.....	4,899 95
General supplies.....	187 48
Service stock.....	274 14
Office furniture and fixtures.....	2,278 00
Telephone lines and property.....	1,200 00
Stable stock and fixtures.....	4,247 75
Machinery and stock at pumping stations....	3,141 60
New supply survey.....	8,549 03
Hydrant account.....	229 50
<hr/>	
Total.....	\$393,388 06

STATEMENT C.

ACCOUNTS DUE THE BOARD.

Collection account, advance water rents.....	\$27,479 88
“ “ fractional water rents....	1,562 07
“ “ arrears water rent.....	4,097 60
“ “ measured water rents....	6,095 21
“ “ special water rents.....	259 34
“ “ cart sprinklers water rents	33 79
“ “ petition agreement water rents.....	172 46
Collection account, motors water rents.....	377 09
“ “ services.....	3,694 29
“ special tax.....	16,000 00
Special tax arrears.....	34,077 17
Receiver Mechanics' Bank.....	25,528 01
Rents, real estate.....	133 35
Sundry personal accounts.....	6,298 79
Total.....	\$125,809 05

STATEMENT D.

MAINTENANCE AND REPAIRS.

Maintenance, telephone lines.....	\$345 00
“ general.....	1,816 95
“ reservoirs and grounds.....	3,183 47
“ pure water.....	743 65
Joint Board on Pollution.....	2,381 71
Repairs, street mains.....	1,412 56
“ stop cocks.....	39 20
“ hydrants.....	543 90
“ real estate, No. 1.....	180 52
“ “ tenements, etc.....	973 66
“ engineer and firemen's dwellings.....	381 01
“ keeper's house.....	4 00
“ water meters.....	173 34
“ Low Service reservoir.....	109 65
“ Belleville pump house.....	1,378 04
“ river wall, dock and basin.....	72 73
“ High Service pump house.....	259 00
“ Belleville pump No. 2.....	144 52
“ “ “ No. 3.....	3 80
“ “ pumps, B. and G.....	874 63
“ High Service pump No. 1.....	23 44
“ “ “ No. 2.....	650 00
“ “ “ pumps, B. and G.....	1,648 78
“ tools.....	426 40
“ supply main No. 2.....	87 18
“ pump main No. 1.....	8 75
“ “ No. 2.....	12 05
“ services.....	43 83
Setting meters.....	143 18
Total.....	\$18,064 95

ASSETS AND LIABILITIES.

	ASSETS.	LIABILITIES.
Construction.....	\$2,994,415 00	
General stock and property ..	393,388 06	
Accounts due the Board	125,809 05	
Cash	8,617 81	
Coupon trust fund.....	35 00	
Coupon bond account.....		\$2,580,000 00
Registered bond account.....		932,000 00
Coupons payable.....		35 00
Plumbers drafts.....		314 50
Surplus 1887.....		9,915 42
	\$3,522,264 92	\$3,522,264 92

SINKING FUND STATEMENT.

CASH.

	DR.	CR.
Balance, November 30th, 1886	\$4,741 53	
Annual payment from city for 1886	3,500 00	
Interest on investments.....	13,175 00	
Interest on deposits	70 24	
Loan from Newark Aqueduct Board	275 00	
Purchase of Newark city water bond, No. 88.....		15,000 00
Payment of loan Newark Aqueduct Board		275 00
Balance in bank November '87		6,486 77
	\$21,761 77	\$21,761 77

TRIAL BALANCE.

Sinking fund account.....		\$256,185 77
Bond account.....	\$224,320 00	
Receiver Mechanics' Bank....	25,379 00	
Cash	6,486 77	
	<hr/>	<hr/>
	\$256,185 77	\$256,185 77

SECURITIES.

Registered Newark City water bond, No. 9.	\$50,000 00
“ “ “ “ “ No. 10.	6,000 00
“ “ “ “ “ No. 28.	50,000 00
“ “ “ “ “ No. 75.	40,000 00
Premium “ “ “ “ “ No. 75.	5,464 00
Registered City improvement bonds, 271 to 280 inclusive.....	10,000 00
Premium improvement bonds, 271 to 280 incl.	856 00
Registered Newark City water bond, No. 76.	20,000 00
“ “ “ “ “ No. 86.	15,000 00
“ “ “ “ “ No. 87.	12,000 00
“ “ “ “ “ No. 88.	15,000 00
	<hr/>
	\$224,320 00

RUNNING EXPENSES AND INCOME.

LOSS AND GAIN.			
Maintenance and repairs works.....	\$18,064 95		
Belleville pumping account	40,611 00		
High Service pumping account.....	17,995 52		
Expense	9,626 82		
Engineering	2,677 88		
Salaries	19,398 96		
Inspection.....	7,096 00		
General Interest.....	1,439 74		
<hr/>			
Total maintenance exclusive of interest on funded debt.....		\$116,910 87	
Coupon bond interest.		180,600 00	
Registered bond interest		54,855 00	
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INCOME.			
From sundry accounts, rents, etc.....			\$5,009 55
Net water rents income			315,623 24
Penalties, fines, etc...			993 50
Balance, being amount of water bond deficiency tax required for the year 1887 to meet Interest			30,739 58
<hr/>			
		\$352,365 87	\$352,365 87
Amount of special water bond tax appropriated.....	40,655 00		
Amount of tax required as above.....	30,739 58		
<hr/>			
	\$9,915 42		

DETAILED RECEIPTS AND EXPENDITURES FOR THE YEAR ENDING NOVEMBER 30, 1887.

RECEIPTS.

Balance on hand, Nov. 30, 1886.....		\$23,860 97
Advance water rent collection.....	\$232,687 07	
Fractional water rent collection.....	4,128 27	
Misellaneous water rent collection.....	74,344 55	
Hose collection.....	4,898 82	
Motor collection.....	1,089 68	
Service collection, services to curb....	19,705 16	
Sales on service account.....	38 00	
Rents of real estate.....	874 50	
Penalties and fines.....	993 50	
Sundry personal accounts.....	5,318 90	
Tax receiver, account of tax levy 1886	15,000 00	
Tax receiver, account of tax levy 1887	24,655 00	
Sales of real estate, payment account of purchase money.....	7,100 00	
Interest on sale of real estate to M. McGrath.....	115 00	
Interest on mortgages.....	655 00	
Mortgages, payment account of princ- ipal.....	1,000 00	
Temporary loans.....	180,000 00	
Sale of registered bond.....	15,000 00	
Sale of old boilers at Belleville.....	72 49	
Sale of oil barrels.....	34 80	
Sale of book, Newark Aqueduct Board Laws.....	2 25	
Sale of coal to Belleville firemen.....	91 76	
Received loan from sinking fund.....	275 00	588,079 75
Total receipts.....		\$611,940 72

EXPENDITURES—CONSTRUCTION.

STREET MAINS.		
Labor, laying street mains, 1887.....		\$6,087 39
EXTRA HIGH SERVICE.		
Plumbing.....		8 51
STREET MAIN, STOCK AND MATERIAL.		
240 feet 10-inch iron pipe.....	\$ 208 07	
20316 " 6-inch " ".....	10,259 11	
1080 " 4-inch " ".....	317 72	
576 " 3-inch " ".....	133 27	
	\$10,918 17	
59 6-inch stop cocks.....	942 35	
12 4-inch stop cocks.....	132 00	
Castings.....	1,223 64	
Lead.....	1,072 46	
Yarn.....	14 98	
	\$14,303 60	\$6,095 90

DETAILED RECEIPTS AND EXPENDITURES—CONTINUED.

Amount brought forward..	\$14,303 60	\$6,095 90	
STREET MAIN, STOCK AND MATERIAL, Continued.			
Lumber.....	\$12 90		
Hardware.....	27 23		
Paints, oils, etc.....	43		
Sundry expense.....	2 70		
		\$14,346 86	
GENERAL SUPPLIES.			
Lumber.....	76 05		
Coke.....	14 00		
Wood.....	48 00		
Paint, etc.....	6 29		
Hardware.....	25 50	169 84	\$20,612 60

MAINTENANCE OF WORK.

GENERAL MAINTENANCE.			
Lumber.....	\$71 59		
Castings.....	18 88		
Coal.....	23 25		
Mason material.....	5 50		
Stable expense.....	131 98		
Blacksmithing.....	15 50		
Repairs of vehicles.....	4 00		
Hardware.....	4 40		
Expense.....	5 75		
Labor.....	1,960 88		
		2,241 73	
MAINTENANCE OF RESERVOIRS AND GROUNDS.			
Keeper's, watchmen and gardeners pay	2,813 38		
Lumber.....	104 06		
Painting.....	111 90		
Plumbing.....	17 56		
Coal.....	9 30		
Glass, etc.....	5 16		
Hardware.....	21 00		
Pottery.....	9 00		
Ice breaker.....	10 00		
Dials.....	3 65		
Blacksmithing.....	1 45		
Sundry expense.....	77 01		
		3,183 47	
JOINT BOARD ON POLLUTION.			
River patrol.....	600 00		
Engineer.....	750 00		
Secretary of board.....	500 00		
Analysis of water.....	609 57		
Legal expense.....	682 65		
D. W. Maloney, services rendered....	100 00		
	\$3,242 22	\$5,425 20	\$20,612 60

DETAILED RECEIPTS AND EXPENDITURES—CONTINUED.

Amount brought forward..	\$3,242 22	\$5,425 20	\$20,612 60
JOINT BOARD ON POLLUTION—Con'ed.			
Advertising and printing.....	\$82 80		
Rent of telephone.....	60 00		
Hardware	87 34		
Repairs of boat.....	147 16		
Sundry expense.....	331 78		
		3,951 30	
PURITY OF WATER.			
Pipe tubes.....	24 00		
Sundry expense.....	2 40		
Labor, drawing hydrants, etc.....	717 25		
		743 65	
REPAIRS OF SUPPLY MAIN NO. 2.			
Lumber	35 18		
Labor.....	52 00		
		87 18	
REPAIRS OF PUMP MAIN NO. 1.			
Labor.....		8 75	
REPAIRS OF PUMP MAIN NO. 2.			
Labor.....		11 55	
REPAIRS OF STREET MAINS.			
Machine work.....	37 56		
Mason work.....	27 57		
Oil, etc.....	2 80		
Kerosene	1 49		
Coke.....	32 76		
Candles.....	2 00		
Hardware	1 02		
Tallow	30		
Paint.....	33 75		
General repairs.....	2 50		
Sundry expense.....	19 50		
Labor.....	1,039 12		
		1,200 37	
REPAIRS OF REAL ESTATE NO. 1.			
Lumber	34 71		
Plumbing.....	96 23		
Machine work, etc.....	11 80		
Glass, etc.....	1 35		
Hardware.....	58		
Painting.....	2 82		
Blacksmithing.....	50		
Sundry expense.....	7 65		
Labor.....	24 88		
		180 52	
REPAIRS OF TENEMENTS.			
Mason work.....	308 36		
Mason material.....	56 07		
Lumber	80 22		
Plumbing.....	38 10		
	\$482 75	\$11,608 52	\$20,612 60

DETAILED RECEIPTS AND EXPENDITURES—CONTINUED.

Amount brought forward..	\$482 75	\$11,608 52	\$20,612 60
REPAIRS OF TENEMENTS—Continued.			
Paints, glass, etc.....	10 25		
Sand.....	12 00		
Painting.....	77 83		
Hardware.....	1 06		
Sundry expense.....	9 00		
Labor.....	380 77		
		973 66	
REPAIRS ENGINEER'S AND FIREMENS'S Dwellings.			
Lumber.....	995 51		
Plumbing, etc.....	25 85		
Cleaning cesspools.....	35 00		
Hardware.....	9 04		
Paint, etc.....	5 47		
General repairs.....	74 14		
Labor.....	132 00		
		381 01	
REPAIRS KEEPER'S HOUSE AT RECEIV- ING RESERVOIR.			
General repairs.....		4 00	
REPAIRS OF METERS.			
General repairs, machine work etc....	164 88		
Hardware.....	49		
Sundry material.....	10 88		
Sundry expense.....	37 13		
Labor.....	27 99		
		241 37	
SETTING WATER METERS.			
Plumbing.....	12 58		
Casting.....	15 10		
Sundry expense.....	10 80		
Labor.....	104 70		
		143 18	
REPAIRS OF HIGH SERVICE PUMP HOUSE.			
Mason work.....	164 76		
Mason material.....	15 63		
Pottery, pipes, etc.....	17 75		
Paint, glass, etc.....	14 33		
Plumbing.....	10 44		
Hardware.....	6 34		
Labor.....	29 75		
		259 00	
PEPAIRS OF HIGH SERVICE PUMPING ENGINE, BOILERS AND GENERAL REPAIRS.			
Machine work.....	292 57		
Mason work.....	809 94		
Mason material.....	98 81		
Castings.....	17 64		
	\$1,218 96	\$13,610 74	\$20,612 60

DETAILED RECEIPTS AND EXPENDITURES—CONTINUED.

Amount brought forward..	\$1,218 96	\$13,610 74	20,612 60
REPAIRS OF HIGH SERVICE PUMPING ENGINE, BOILERS AND GENERAL REPAIRS.—CONTINUED.			
Lumber	70 68		
Boiler alarms	200 00		
Plungers and rings	25 84		
Felt	6 00		
Paints, etc	28 80		
Lamp	1 50		
Sundry expense	7 00		
Labor	90 00		
		1,648 78	
REPAIRS OF HIGH SERVICE PUMP NO. 1.			
Rock shaft, crank and key	13 17		
Hardware	10 27		
		23 44	
REPAIRS OF HIGH SERVICE PUMP NO. 2.			
Plungers and rings		650 00	
REPAIRS OF BELLEVILLE PUMP HOUSE.			
Mason work	462 60		
Mason material	238 95		
Repairs of roof	130 20		
Lumber, doors, etc	77 16		
Hardware	14 98		
Painting, etc	41 35		
Plumbing	60 00		
Lightning rods	311 00		
Labor	41 80		
		1,378 04	
REPAIRS OF BELLEVILLE PUMPING EN- GINE, BOILERS AND GENERAL REPAIRS.			
Machine work	84 70		
Mason work	185 41		
Mason material	11 83		
Lumber	191 53		
Moulding	2 94		
Hardware	12 01		
Castings	59 51		
Sundry material	29 15		
Labor	297 55		
		874 63	
REPAIRS OF BELLEVILLE PUMP NO. 2.			
Machine work	47 98		
Hardware	69		
Labor	95 85		
		144 52	
REPAIRS OF BELLEVILLE PUMP NO. 3.			
Repairs of registering apparatus		3 80	
		\$18,333 95	\$20,612 60

DETAILED RECEIPTS AND EXPENDITURES - CONTINUED.

Amount brought forward..		\$18,333 95	20,612 60
REPAIRS OF RIVER WALL DOCK AND BASIN.			
Lumber	70 43		
Hardware	2 30		
		72 73	
REPAIRS OF LOW SERVICE RESERVOIR.			
Mason material	23 90		
Mason work	77 75		
Labor	8 00		
		109 65	
REPAIRS OF TOOLS.			
Blacksmithing	219 78		
Repairing and replacing tools	73 07		
Rubber boots	35 25		
Lumber	1 24		
Plumbing	33 99		
Rope	4 48		
Sundry expense	25		
Labor	58 34		
		426 40	
REPAIRS OF HYDRANTS.			
Machine work	34 80		
Hydrant screws	9 00		
Bonnets	6 75		
Oil and paint	4 34		
Hardware	5 54		
Sundry material	4 80		
Sundry expense	3 30		
Labor	604 49		
		673 02	
REPAIRS OF STOP COCKS.			
6 stems	7 50		
Labor	14 50		
		22 00	
REPAIRS OF SERVICES.			
Plumbing	29 87		
Repairs of gas pipes	13 96		
		43 83	
REPAIRS AND MAINTENANCE TELEPHONE LINE.			
One years' rent		345 00	20,026 58
			\$40,639 18

DETAILED RECEIPTS AND EXPENDITURES—CONTINUED.

EXPENSE ACCOUNT.

Amount brought forward..			\$40,639 18
Inspection	\$7,096 00		
Wages, weekly pay roll	2,529 42		
General expense	588 55		
Coal for office building	132 20		
Gas for office building	198 36		
Stationery and books	909 87		
Advertising and printing	347 00		
Printing annual report	180 50		
Legal expense	2,828 82		
Stable supplies and expense	712 09		
Repairs of vehicles and harness	161 45		
Blacksmithing	151 20		
Phaeton	260 00		
Horse for Belleville	130 00		
Horse hire	113 50		
Harness	49 11		
Medical treatment for horses	33 00		
Ice for office	23 60		
Type writing	24 00		
Stenographer	14 56		
A. Devine, commission on real estate sale	57 50		
Testing motor	8 74		
Door mat	3 00		
Hardware	13 78		
Plumbing	3 95		
Mops	3 50		
Duster	1 00		
Sundry expense, dual supply	96 20		
		\$16,670 90	
SALARIES.			
Commissioners	3,499 44		
Officers salaries	15,899 52		
		19,398 96	
ENGINEERING.			
Engineer's services	1,800 00		
Draughtsman	750 00		
Stationary, books and printing	30 58		
Plumbing	1 50		
Repairing transit	35 00		
Tape measure	3 25		
Horse hire	3 00		
Department expenses	53 55		
Labor	1 00	2,677 88	38,747 74
			\$79,386 92

DETAILED RECEIPTS AND EXPENDITURES—CONTINUED.

PUMPING.

Amount brought forward . . .			\$79,386 92
BELLEVILLE FUEL ACCOUNT AND WAGES.			
Coal	\$31,825 74		
Wood	13 60		
Hoisting ropes	14 56		
Hardware	6 40		
Stable expense	206 24		
Blacksmithing	24 00		
Engineer's and firemen's wages at Belleville	12,568 19		
Labor, handling coal, etc.	2,945 65		
Sundry expense	69 15		
		47,673 53	
BELLEVILLE ENGINE STORES.			
General supply and stores	405 60		
Oil	1,290 60		
Kerosene	6 30		
Gasolene	225 19		
Iron	14 46		
Soap	5 70		
Machine work	7 20		
Paint, etc	4 15		
Tallow	5 06		
Boiler compound	50 00		
Lumber	4 54		
Sundry expense	6 41		
Plumbing	30		
Labor	6 76		
		2,032 27	
HIGH SERVICE FUEL ACCOUNT AND WAGES.			
Coal	9,718 06		
Wood	8 00		
High Service engineer's and firemen's wages	5,884 00		
Labor, handling coal, etc.	751 83		
Sundry expense	3 25		
		16 365 14	
HIGH SERVICE ENGINE STORES.			
General supplies and stores	168 83		
Oil	616 30		
Kerosene	4 00		
Gas at pump house	364 14		
Ice	31 06		
Machine work	12 51		
Wrenches, etc.	4 20		
Chairs	4 50		
Cleaning material	3 00		
Rye for boilers	3 00		
	\$1,211 54	\$66,070 94	\$79,386 92

DETAILED RECEIPTS AND EXPENDITURES - CONTINUED.

EXPENSE ACCOUNT.

Amount brought forward ..	\$1,211 54	\$66,070 94	\$79,386 92
HIGH SERVICE ENGINE STORES - Con'e			
Paint, etc.....	6 42		
Soap.....	9 00		
Tallow.....	1 10		
Plumbing.....	90		
Sundry expense.....	1 00	1,229 96	67,300 90

SERVICE ACCOUNT.

5/8-inch lead pipe.....	3,438 09		
1 " " ".....	192 69		
1 1/4 " " ".....	18 00		
1 1/2 " " ".....	48 15		
1200 5/8-inch curb stops.....	960 00		
42 1-inch curb stopf.....	77 70		
1200 5/8-inch corporation stops.....	780 00		
66 1-inch corporation stops.....	122 10		
Curb stop boxes.....	2,315 55		
Curb stop box covers.....	28 08		
Couplings.....	7 95		
Wrenches.....	96		
4-inch Clow connection.....	5 00		
Plumbing.....	11 85		
Machine work.....	12 23		
Hardware.....	176 66		
Repairs of vehicles.....	5 70		
Blacksmithing.....	10 40		
Sundry material.....	196 87		
Sundry expense.....	10 12		
Plumbers credits for joints.....	1,785 40		
Labor.....	6,020 29		16,223 79

INTEREST—FUNDED DEBT.

Amount coupon interest due 1887.....	180,600 00		
Amount registered interest due 1887..	54,855 00		235,455 00

MISCELLANEOUS EXPENDITURES.

WATER METER ACCOUNT.			
6 3/4-inch meters.....	112 95		
17 3/8 " ".....	224 98		
23 1 " ".....	683 34		
3 1 1/2 " ".....	117 04		
5 2 " ".....	251 90		
1 3 " ".....	88 70		
Sundry expense.....	33 33		
		1,512 24	\$398,366 61

DETAILED RECEIPTS AND EXPENDITURES—CONTINUED.

MISCELLANEOUS EXPENDITURES—Continued.

Amount brought forward..		\$1,512 24	\$398,366 61
HYDRANT ACCOUNT.			
47 new hydrants.....	\$1,135 70		
Machine work.....	2 76		
Rubber valves.....	12 00		
Hardware.....	3 07		
Paint.....	1 50		
Sundry expense.....	32 23		
Labor.....	2 26		
		1,189 52	
MISCELLANEOUS ACCOUNTS.			
Time loans paid.....	200,000 00		
Interest of same.....	1,973 37		
General interest account.....	1 37		
Loan to sinking fund.....	275 00		
Water rent refunded.....	4 80	202,254 54	204,956 30
Total expenditures.....			603,322 91
Balance on hand November 30, 1887			8,617 81
			\$611,940 72

STATEMENT OF STREET MAINS LAID DURING THE YEAR ENDING NOVEMBER 30, 1887.

DATE.	LOCATION.	NO. OF FEET.	COST.	TOTAL.
Dec'ber	<i>Seventh Avenue Main.</i>			
	13 lengths 6-inch pipe.....	166	\$79 56	
	1 length 4-inch pipe.....		3 72	
	1 6x6 single branch.....		6 86	
	1 6x4 double branch.....		6 55	
	1 6-inch sleeve.....		2 80	
	1 6-inch plug.....		1 08	
	7 feet 6-inch spigot.....		3 57	
	4 feet 6-inch hub.....		2 04	
	1 4-inch stop.....		11 00	
	1 4-inch box-frame and cover.....		2 50	
	143 pounds lead.....		7 15	
	7 " yarn.....		49	
	5 bushels coke.....		35	
				\$127 67
March	<i>Milford Avenue Main.</i>			
	21 lengths 6-inch pipe.....	261	108 36	
	1 6x6 double branch.....		8 65	
	1 6x4 single branch.....		7 14	
	3 6-inch plugs.....		3 32	
	10 feet 6 inch hub.....		4 30	
	10 feet 4-inch hub.....		2 50	
	389 pounds lead.....		19 45	
	9 pounds yarn.....		63	
	9 bushels coke.....		90	
	Labor.....		103 79	
				259 04
April	<i>Rose Street Main.</i>			
	44 length 6-inch pipe.....	519	269 28	
	1 " 4-inch pipe.....		3 72	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box-frame and cover.....		5 00	
	1 6x6 double branch.....		8 47	
	1 6x4 single branch.....		7 24	
	1 6-inch sleeve.....		2 83	
	2 6-inch plugs.....		1 08	
	540 pounds lead.....		27 00	
	17 pounds yarn.....		1 19	
	15 bushels coke.....		1 05	
	Labor.....		264 84	
				607 70
"	<i>Livingston Street Main.</i>			
	45 lengths 6-inch pipe.....	545	275 40	
	1 length 4-inch pipe.....		3 72	
	2 6-inch Galvin stops.....		32 00	
	2 6-inch boxes frames and covers...		10 00	
	1 6x4 single branch.....		7 14	
	5 feet 6-inch spigot.....		2 55	
	11 feet 6-inch hub.....		5 61	
	510 pounds lead.....		25 50	
				361 92
				\$1,356 33

STATEMENT OF STREET MAINS LAID—CONTINUED.

DATE	LOCATION.	NO. OF FEET.	COST.	TOTAL.
	Amount brought forward..		\$361 92	\$1,356 33
April	17 pounds yarn.....		1 19	
	14 bushels coke.....		98	
	Labor.....		83 59	
				85 76
"	<i>South Orange Avenue Main.</i>			
	23 lengths 6-inch pipe.....	276	140 76	
	1 length 4 inch pipe.....		3 72	
	4 feet 6-inch hub.....		2 04	
	1 6x4 single branch.....		7 17	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box-frame and cover.....		5 00	
	280 pounds lead.....		14 00	
	9 pounds yarn.....		63	
	9 bushels coke.....		63	
	Labor.....		99 42	
				289 37
"	<i>Wright Street Main.</i>			
	33 lengths 6-inch pipe.....	391	201 96	
	1 length 4-inch pipe.....		3 72	
	1 6x4 reducer.....		3 81	
	1 6x4 single branch.....		7 07	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box-frame and cover.....		5 00	
	347 pounds lead.....		17 35	
	13 pounds yarn.....		91	
	7 bushels coke.....		49	
	Labor.....		52 17	
				308 48
"	<i>Sherman Avenue Main.</i>			
	20 lengths 6-inch pipe.....	236	122 40	
	1 6x4 single branch.....		6 86	
	1 6-inch plug.....		1 12	
	235 pounds lead.....		11 75	
	7 pounds yarn.....		49	
	5 bushels coke.....		35	
	Labor.....		57 66	
				200 63
"	<i>Miller Street Main.</i>			
	16 lengths 6-inch pipe.....	190	97 92	
	1 6x4 reducer.....		2 83	
	1 6-inch sleeve.....		2 73	
	8 feet 4-inch hub.....		2 48	
	1 6-inch Galvin stop..		16 00	
	1 6-inch box-frame and cover.....		5 00	
	205 pounds lead.....		10 25	
	6 pounds yarn.....		42	
	5 bushels coke.....		35	
	Labor.....		53 93	
				191 91
				\$2,432 48

STATEMENT OF STREET MAINS LAID—CONTINUED.

DATE.	LOCATION.	NO. OF FEET.	COST.	TOTAL.
	Amount brought forward..			\$2,432 38
April	<i>Lincoln Avenue Main.</i>			
	20 lengths 6-inch pipe	343	122 40	
	1 length 4-inch pipe.....		3 72	
	1 6x4 single branch.....		6 93	
	6 feet 6-inch spigot.....		3 06	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box-frame and cover.....		5 00	
	1 6-inch plug.....		1 08	
	265 pounds lead.....		13 25	
	9 pounds yarn.....		63	
	5 bushels coke.....		35	
	Labor.....		58 67	
				231 09
"	<i>Summer Avenue Main.</i>			
	29 lengths 6-inch pipe	344	177 48	
	1 6x4 reducer.....		3 78	
	1 6x4 single branch.....		7 14	
	1 6-inch plug.....		1 08	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box-frame and cover.....		5 00	
	295 pounds lead.....		14 75	
	13 pounds yarn.....		91	
	8 bushels coke.....		56	
	Labor.....		125 09	
				351 79
"	<i>Camfield Court.</i>			
	13 lengths 3-inch pipe.....	152	37 44	
	1 3-inch sleeve.....		1 40	
	90 pounds lead		4 50	
	5 pounds yarn.....		35	
	4 bushels coke.....		31	
	Labor.....		61 91	
				105 91
May	<i>Chestnut Street Main.</i>			
	57 lengths 6-inch pipe.....	680	348 84	
	1 length 4-inch pipe.....		3 72	
	2 6-inch $\frac{1}{4}$ bends		7 87	
	3 6x4 single branches		21 59	
	1 4-inch plug.....		42	
	2 6-inch sleeves		5 49	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box-frame and cover.....		5 00	
	682 pounds lead.....		34 10	
	21 pounds yarn.....		1 47	
	13 bushels coke.....		91	
	Labor.....		154 50	
				599 91
"	<i>Sixteenth Ave. & S. 6th Street Main.</i>			
	176 lengths 6-inch pipe.....	2083	1,079 12	
	3 lengths 4-inch pipe.....		11 16	
				\$3 721 18

STATEMENT OF STREET MAINS LAID—CONTINUED.

DATE.	LOCATION.	NO. OF FEET.	COST.	TOTAL.
May	Amount brought forward..			\$3,721 18
	7 6-inch Galvin stops.....		112 00	
	8 6-inch boxes, frames and covers....		40 00	
	3 6x6 double branches.....		25 86	
	4 6x4 single branches.....		28 32	
	5 6-inch plugs.....		5 42	
	2 6-inch beveled hubs.....		6 65	
	1 4-inch plug.....		42	
	2003 pounds lead.....		100 15	
	58 pounds yarn.....		4 06	
	43 bushels coke.....		3 01	
	1 6-inch repair box.....		2 50	
	Labor.....		558 20	
	<i>Parker Street Main.</i>			1,976 87
	37 lengths 6-inch pipe.....	441	226 44	
	26 lengths 4-inch pipe.....	297	96 72	
	1 6-inch Galvin stop.....		16 00	
	1 4-inch Galvin stop.....		11 00	
	1 6-inch stop box, frame and cover....		5 00	
	1 4-inch stop box, frame and cover..		2 50	
	1 6x4 single branch.....		7 00	
	1 6x4 double branch.....		8 68	
	1 4x4 single branch.....		2 98	
	1 6x4 reducer.....		4 13	
	1 6-inch plug and 1 4-inch plug.....		1 51	
	1 4-inch sleeve.....		1 78	
	635 pounds lead.....		31 75	
	22 pounds yarn.....		1 54	
	11 bushels coke.....		77	
	Labor.....		180 46	
	<i>Lexington Street Main.</i>			598 26
June	66 lengths 6-inch pipe.....	779	403 92	
	1 length 4-inch pipe.....		3 72	
	2 6-inch $\frac{1}{4}$ bends.....		7 32	
	2 6-inch beveled hubs.....		6 93	
	2 6-inch Galvin stops.....		32 00	
	2 6-inch boxes, frames and covers....		10 00	
	655 pounds lead.....		32 75	
	18 pounds yarn.....		1 26	
	11 bushels coke.....		77	
	Labor.....		164 00	
	<i>Hunterdon Street Main.</i>			662 67
July	103 lengths 6-inch pipe.....	1217	630 36	
	1 length 4-inch pipe.....		3 72	
	4 6-inch Galvin stops.....		64 00	
	4 6-inch boxes, frames and covers....		20 00	
	1 6x6 double branch.....		8 79	
	1 6x6 single branch.....		7 10	
	3 6x4 single branches.....		21 14	
				\$6,951 98

STATEMENT OF STREET MAINS LAID—CONTINUED.

DATE.	LOCATION.	NO. OF FEET.	COST.	TOTAL.
	Amount brought forward..			\$6,951 98
July	3 6-inch plugs.....		3 29	
	2 4-inch plugs.....		84	
	1143 pounds lead.....		57 15	
	35 pounds yarn.....		2 45	
	21 bushels coke.....		1 47	
	Labor.....		523 17	
				1,343 48
"	<i>Brenner and Rose Street Main.</i>			
	56 lengths 6-inch pipe.....	668	342 72	
	1 length 4-inch pipe.....		3 72	
	2 6x6 single branches.....		14 14	
	2 6 inch sleeves.....		5 60	
	1 6-inch $\frac{1}{4}$ bend.....		4 20	
	2 6x4 single branches.....		14 35	
	2 6-inch plugs.....		2 17	
	1 4-inch plug.....		42	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box, frame and cover.....		5 00	
	621 pounds lead.....		31 05	
	15 pounds yarn.....		1 05	
	13 bushels coke.....		91	
	Labor.....		210 83	
				652 16
"	<i>Searing Street Main.</i>			
	47 lengths 6 inch pipe.....	554	287 64	
	1 6x6 single branch.....		7 03	
	1 6-inch sleeve.....		2 73	
	1 6x4 reducer.....		4 13	
	2 6-inch Galvin stops.....		32 00	
	2 6 inch boxes, frames and covers.....		10 00	
	515 pounds lead.....		25 75	
	13 pounds yarn.....		91	
	7 bushels coke.....		49	
	Labor.....		155 68	
				526 36
August	<i>West Monroe Street Main.</i>			
	36 lengths 6-inch pipe.....	435	220 32	
	1 length 4-inch pipe.....		3 72	
	1 6-inch $\frac{1}{4}$ bend.....		3 74	
	1 6x4 reducer.....		4 02	
	1 4x4 single branch.....		3 18	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box, frame and cover.....		5 00	
	365 pounds lead.....		18 25	
	14 pounds yarn.....		98	
	7 bushels coke.....		49	
	Labor.....		189 01	
				464 71
"	<i>Littleton Avenue Main.</i>			
	55 lengths 6-inch pipe.....	648	336 60	
				\$9,938 69

STATEMENT OF STREET MAINS LAID—CONTINUED.

DATE.	LOCATION.	NO. OF FEET.	COST.	TOTAL.
	Amount brought forward ..			\$9,938 68
August	1 length 4-inch pipe.....		3 72	
	2 6-inch Galvin stops.....		32 00	
	2 6-inch boxes, frames and covers...		10 00	
	1 6x4 double branch.....		8 54	
	1 6x4 single branch.....		7 07	
	2 6-inch plugs.....		2 17	
	607 pounds lead.....		30 35	
	15 pounds yarn.....		1 05	
	11 bushels coke.....		77 00	
	Labor.....		221 97	
				654 24
"	<i>Penn. R. R. Ave. & Emmet St. Main.</i>			
	3 lengths 6-inch pipe.....	47	18 36	
	1 6x6 double branch.....		9 10	
	2 6-inch beveled hubs.....		6 83	
	1 6x4 reducer.....		4 02	
	2 6-inch plugs.....		2 17	
	1 6-inch sleeve.....		2 80	
	1 4-inch Galvin stop.....		11 00	
	1 4-inch box, frame and cover.....		2 50	
	105 pounds lead.....		5 25	
	Yarn and coke.....		1 00	
	Labor.....		56 67	
				119 70
"	<i>Brown and Dock Street Main.</i>			
	49 lengths 6-inch pipe.....	583	299 88	
	1 length 4-inch pipe.....		3 72	
	1 6x6 double branch.....		8 54	
	1 6-inch sleeve.....		2 76	
	1 6x6 single branch.....		7 35	
	3 6-inch plugs.....		3 25	
	1 6 inch beveled hub.....		3 53	
	1 6x4 single branch.....		7 17	
	2 6-inch Galvin stops.....		32 00	
	2 6-inch boxes, frames and covers...		10 00	
	570 pounds lead.....		28 50	
	Yarn and coke.....		2 03	
	Labor.....		210 31	
				619 04
Sept.	<i>Mt. Prospect Place Main.</i>			
	64 lengths 6-inch pipe.....	764	391 68	
	1 length 4-inch pipe.....		3 72	
	1 6x6 double branch.....		8 82	
	1 6-inch plug.....		1 09	
	1 6-inch $\frac{1}{8}$ bend.....		4 20	
	1 6-inch beveled hub.....		3 85	
	2 6-inch $\frac{1}{4}$ bends.....		11 34	
	1 6x4 single branch.....		7 18	
	1 6-inch sleeve.....		2 84	
	2 6-inch Galvin stops.....		32 00	
				\$11,231 67

STATEMENT OF STREET MAINS LAID—CONTINUED.

DATE.	LOCATION.	NO. OF FEET.	COST.	TOTAL.
	Amount brought forward..			\$11,231 67
Sept'ber	2 6-inch boxes, frames and covers....		10 00	
	691 pounds lead.....		34 55	
	18 pounds yarn.....		1 26	
	13 bushels coke.....		91	
	Labor.....		209 56	
				723 00
"	<i>Peshine Avenue Main.</i>			
	103 lengths 6-inch pipe.....	1213	630 36	
	2 lengths 4-inch pipe.....		7 44	
	3 6-inch stops.....		48 00	
	3 6-inch boxes, frames and covers....		15 00	
	1 6x6 double branch.....		8 82	
	2 6x4 single branches.....		14 28	
	1 6x4 reducer.....		3 55	
	3 6-inch plugs.....		3 26	
	864 pounds lead.....		43 20	
	30 pounds yarn.....		2 10	
	17 bushels coke.....		1 19	
	Labor.....		317 26	
				1,094 46
"	<i>Avenue C Main.</i>			
	42 lengths 6-inch pipe.....	496	257 04	
	1 length 4-inch pipe.....		3 72	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box, frame and cover.....		5 00	
	1 6x6 double branch.....		10 01	
	1 6x4 single branch.....		7 07	
	3 6-inch plugs.....		3 26	
	408 pounds lead.....		20 40	
	Yarn and coke.....		1 40	
	Labor.....		81 65	
				405 55
"	<i>Clinton and Badger Avenue Main.</i>			
	86 lengths 6-inch pipe.....	1009	526 32	
	1 length 4-inch pipe.....		3 72	
	2 6-inch Galvin stops.....		32 00	
	2 6-inch boxes, frames and covers....		10 00	
	1 6x4 single branch.....		7 07	
	2 6x6 double branches.....		17 60	
	5 6-inch plugs.....		5 43	
	898 pounds lead.....		44 90	
	15 bushels coke.....		1 05	
	26 pounds yarn.....		1 82	
	Labor.....		212 05	
				861 96
"	<i>Ashbridge Street Main.</i>			
	33 lengths 6-inch pipe.....	388	201 96	
	1 6-inch Galvin stop.....		16 00	
	1 6-inch box, frame and cover.....		5 00	
	1 6x4 single branch.....		7 28	
				\$14,516 64

STATEMENT OF STREET MAINS LAID—CONTINUED.

DATE	LOCATION.	NO. OF FEET.	COST.	TOTAL.
	Amount brought forward..			\$14,516 64
Sept.	10 feet 6 inches of 4-inch hub.....		3 26	
	308 pounds lead.....		15 40	
	12 pounds yarn.....		84	
	5 bushels coke.....		35	
	Labor.....		77 42	
				327 51
October	<i>Belleville Avenue Main.</i>			
	28 lengths 4-inch pipe.....	335	104 16	
	1 8x6 reducer.....		4 38	
	1 6x4 reducer.....		2 70	
	1 4x4 single branch.....		3 08	
	1 4-inch plug.....		42	
	1 4-inch stop.....		11 00	
	1 4-inch box, frame and cover.....		2 50	
	232 pounds lead.....		11 60	
	Yarn and coke.....		77	
	Labor.....		82 23	
				222 84
"	<i>Drift St. and Clifton Ave. Main.</i>			
	48 lengths 6-inch pipe.....	575	293 76	
	1 length 4-inch pipe.....		3 72	
	15 lengths 10-inch pipe.....	199	156 60	
	1 6x4 single branch.....		7 14	
	1 4x4 single branch.....		3 15	
	1 4 inch sleeve.....		1 75	
	1 6x4 reducer.....		2 87	
	2 4-inch $\frac{1}{8}$ bends.....		4 69	
	1 10x6 single branch.....		11 10	
	1 10-inch sleeve.....		3 33	
	1 10-inch $\frac{1}{4}$ bend.....		6 00	
	9 feet 10-inch hub.....		8 55	
	2 6-inch Galvin stops.....		32 00	
	2 6-inch boxes, frames and covers...		10 00	
	1344 pounds lead.....		67 20	
	18 pounds yarn.....		1 26	
	10 bushels coke.....		70	
	Labor.....		185 09	
				798 91
"	<i>Third Street Main.</i>			
	82 lengths 6-inch pipe.....	968	501 84	
	2 6-inch $\frac{1}{4}$ bends.....		7 42	
	1 6x6 double branch.....		8 43	
	1 6x4 single branch.....		7 14	
	2 6-inch plugs.....		2 17	
	3 6-inch Galvin stops ..		48 00	
	3 6-inch boxes, frames and covers...		15 00	
	830 pounds lead.....		41 50	
	27 pounds yarn.....		1 89	
	9 bushels coke.....		63	
	Labor.....		281 75	
				915 77
				\$16,688 67

STATEMENT OF STREET MAINS LAID—CONTINUED.

DATE.	LOCATION.	NO. OF FEET.	COST.	TOTAL.
	Amount brought forward..			\$16,688 67
October	<i>Christie Street Main.</i>			
	42 lengths 6-inch pipe.....	499	257 04	
	1 length 4-inch pipe.....		3 72	
	1 6x4 single branch.....		7 21	
	1 6x4 reducer.....		3 88	
	1 6x6 single branch.....		7 35	
	1 6-inch sleeve.....		2 76	
	2 6-inch Galvin stops.....		32 00	
	2 6-inch boxes, frames and coves....		10 00	
	455 pounds lead.....		22 75	
	13 pounds yarn.....		91	
	7 bushels coke.....		49	
	Labor.....		129 72	
				477 83
"	<i>St. Charles Street Main.</i>			
	34 lengths 6-inch pipe.....	403	208 08	
	1 length 4-inch pipe.....		3 72	
	1 6x6 double branch.....		8 61	
	1 6x4 single branch.....		7 00	
	3 6-inch plugs.....		3 26	
	2 6-inch Galvin stops.....		32 00	
	2 6-inch boxes, frames and covers....		10 00	
	365 pounds lead.....		18 25	
	15 pounds yarn.....		1 05	
	5 bushels coke.....		35 00	
	Labor.....		74 93	
				367 25
"	<i>Summer Avenue Main.</i>			
	39 lengths 6-inch pipe.....	458	238 68	
	1 6x4 single branch.....		7 14	
	1 6-inch plug.....		1 09	
	8 feet 4-inch hub.....		2 48	
	1 6-inch stop.....		16 00	
	1 6-inch box, frame and cover....		5 00	
	358 pounds lead.....		17 90	
	13 pounds yarn.....		91	
	5 bushels coke.....		35	
	Labor.....		111 51	
				401 06
"	<i>Johnson Avenue Main.</i>			
	96 lengths 6-inch pipe.....	1235	587 52	
	2 lengths 4-inch pipe.....		7 44	
	1 6x6 double branch.....		8 61	
	1 6-inch sleeve.....		2 73	
	3 6x4 single branches.....		21 00	
	3 6-inch plugs.....		3 25	
	2 6-inch Galvin stops.....		32 00	
	2 6-inch boxes, frames and covers....		10 00	
	1080 pounds lead.....		54 00	
	42 pounds yarn.....		2 94	
				\$17,935 81

STATEMENT OF STREET MAINS LAID—CONTINUED.

DATE.	LOCATION.	NO. OF FEET.	COST.	TOTAL.
	Amount brought forward..			\$17,935 81
Nov'ber	18 bushels coke		1 26	
	Labor.....		277 71	1 008 46
	<i>Brenner Street Main.</i>			
	20 lengths 6-inch pipe.....	236	122 40	
	1 length 4-inch pipe.....		3 72	
	1 6x4 single branch.....		7 14	
	1 6-inch stop.....		16 00	
	1 6-inch box, frame and cover.....		5 00	
	204 pounds lead.....		10 20	
	7 " yarn		59	
	4 bushels coke.....		28	
	Labor.....		70 66	235 89
"	<i>Saybrook Place Main.</i>			
	35 lengths 4-inch pipe.....	390	130 20	
	1 4-inch stop.....		11 00	
	1 4-inch box, frame and cover.....		2 50	
	1 4-inch $\frac{1}{8}$ bend		2 59	
	2 4-inch single branches.....		6 30	
	1 4-inch sleeve.....		1 82	
	1 4-inch plug		42	
	208 pounds lead		10 40	
	8 pounds yarn.....		56	
	5 bushels coke.....		35	
	Labor.....		104 75	270 89
"	<i>Parker Street Main.</i>			
	47 lengths 6-inch pipe.....	551	287 64	
	1 6-inch stop.....		16 00	
	1 6-inch box, frame and cover.....		5 00	
	1 6x4 single branch.....		7 10	
	1 6-inch sleeve.....		2 84	
	1 6-inch plug.....		1 09	
	490 pounds lead.....		24 50	
	16 pounds yarn.....		1 12	
	7 bushels coke.....		49	
	Labor.....		269 23	615 01
April	South 11th Street, labor.....			7 00
Nov'ber	Aqueduct Street, labor.....			9 00
				\$20,081 06

REPAIRS OF STREET MAINS.

1886.

Dec. 24.—	Repaired break, cor. Seventh ave. and High street.		
	6 feet 4-inch hub.....	\$ 1 50	
	1 4-inch sleeve.....	1 75	
	28 pounds lead.....	1 40	
	1 pound yarn.....	07	
	Wood.....	50	
	Labor.....	24 19—	\$29 41
Dec. 29.—	Repaired break in Avenue C.		
	Labor.....		6 83

1887.

Feb. 2.—	Repaired break in Market street near Washington.		
	4 feet 3-inch hub.....	\$ 1 00	
	1 3-inch sleeve.....	1 40	
	35 pounds lead.....	1 75	
	2 pounds yarn.....	14	
	Wood.....	2 00	
	Labor.....	49 66—	55 95
Feb. 17.—	Repaired break in Clark street near Passaic street.		
	Labor.....		5 95
April 15.—	Repaired break cor Broad st. and Belleville avenue.		
	Labor.....		7 01
June 6.—	Repaired break cor. Ferguson and Market streets.		
	1 6x4 reducer.....	\$ 4 10	
	1 4-inch sleeve.....	1 89	
	30 pound lead.....	1 50	
	2 pounds yarn.....	14	
	Wood.....	50	
	Labor.....	6 95—	15 08
June 11.—	Repaired break in Front street near Rector street.		
	1 barrel Portland Cement.....	\$ 2 00	
	Labor.....	7 50—	9 50
June 16.—	Repaired Pump Main at Belleville Pump House.		
	Labor.....		8 75

\$138 48

Amount brought forward.....			\$138 48
July 10.—	Repaired break cor. Norfolk street and Thirteenth avenue.		
	Labor.....		5 38
Aug. 1.—	Repaired break cor. Halsey and West Park streets.		
	5 feet 4-inch hub.....	\$ 1 55	
	1 4-inch sleeve.....	1 82	
	30 pounds lead.....	1 50	
	2 pounds yarn.....	14	
	Wood.....	50	
	Labor.....	13 00—	18 51
Aug. 12.—	Repaired break in Essex street.		
	4 feet 4-inch spigot.....	\$ 1 24	
	1 4-inch sleeve.....	1 82	
	30 pounds lead.....	1 50	
	1 pound yarn.....	07	
	Wood.....	50	
	Labor.....	6 26—	11 39
Oct. 12.—	Repaired break under Canal Bridge, Commercial street.		
	Labor.....		4 75
Oct. 25.—	Repaired Pump Main No. 2., opposite Belleville Pump House.		
	10 pound lead.....	\$ 50	
	Labor.....	11 75—	12 25
Nov. 1.—	Repaired break under Commercial street Bridge.		
	4 feet 4-inch hub.....	\$ 1 24	
	1 4-inch sleeve.....	1 78	
	42 pounds lead.....	2 10	
	2 pounds yarn.....	14	
	Wood.....	50	
	Labor.....	12 76—	18 52
Nov. 3.—	Repaired break cor. Clinton avenue and Broad street.		
	12 feet 3-inch pipe.....	\$ 3 00	
	1 3-inch sleeve.....	1 40	
	15 pounds lead.....	75	
	2 pounds yarn.....	14	
	Wood.....	50	
	Labor.....	3 82—	9 61
			<hr/>
			\$218 89

Amount brought forward.....		\$218 89
Nov. 14.—Repaired break in Clinton avenue near Astor street.		
7 feet 4-inch pipe.....	\$ 2 17	
40 pound lead.....	2 00	
2 pounds yarn.....	14	
Wood.....	50	
Labor.....	13 88—	18 69
Nov. 18.—Repaired break cor. Orange and West Monroe streets.		
10 pounds lead.....	\$ 50	
Labor.....	4 38—	4 88
Nov. 18.—Repaired break in N. J. R. R. avenue near Green street.		
Labor.....		4 38
		<hr/>
		\$246 84

RENEWED BOXES.

December,	1 6-inch, at 90 cents.....	90
February,	4 6-inch, at 90 cents.....	3 60
“	1 4-inch, at 86 cents.....	86
April,	5 6-inch, at 90 cents.....	4 50
June,	2 6-inch, at 90 cents.....	1 80
“	1 16-inch, at \$8 00.....	8 00
July,	5 6-inch, at 90 cents.....	4 50
“	2 24-inch, at \$8 00.....	16 00
August,	7 6-inch, at 90 cents.....	6 30
“	1 4-inch, at 86 cents.....	86
“	1 10-inch, at \$6 00.....	6 00
September,	23 6-inch, at 90 cents.....	20 70
“	1 16-inch, at \$8 00.....	8 00
“	3 24-inch, at \$8 00.....	24 00
October,	31 6-inch, at 90 cents.....	27 90
November,	1 4-inch, at 86 cents.....	86
“	1 6-inch, at 90 cents.....	90
		<hr/>
		\$135 68

SERVICES FROM DECEMBER 1, 1886, TO DECEMBER 1, 1887.

MONTHS.	Size.	Number new Services	Number Services renewed.	Number Taps only.	No. Taps & Boxes only.	Number Boxes only.	Number New Water Takers.	Number Feet of Pipe.	CHARGE.
December, 1886....	$\frac{5}{8}$ inch	83	1	..	3	..	86	1,627	\$1,285 48
January, 1887....	"	21	..	..	..	..	21	409	315 00
February, "	"	32	..	..	1	..	33	635	487 00
March, "	"	96	2	..	4	2	102	2,033	1,506 88
April, "	"	121	..	..	4	1	126	2,481 $\frac{1}{2}$	1,846 64
May, "	"	123	2	..	3	3	129	2,650	1,905 12
June, "	"	111	2	..	2	4	117	2,493	1,720 16
July, "	"	67	2	..	..	1	68	1,416	1,038 00
August, "	"	148	6	2	..	..	150	3,217	2,306 56
September, "	"	119	1	2	2	..	123	2,514	1,822 00
October, "	"	131	1	2	1	..	134	2,551	2,001 64
November, "	"	142	..	4	4	..	150	2,661	2,174 00
Totals.....		1,194	17	10	24	11	1,239	24,687 $\frac{1}{2}$	\$18,408 48

SERVICES FROM DECEMBER 1, 1886, TO DECEMBER 1, 1887.

MONTHS.	Size.	Number new Services.	Number Services renewed.	Number Taps only.	No. Taps & Boxes only.	Number Boxes only.	Number New Water Takers.	Number Feet of Pipe.	CHARGE.
December, 1886...	1 inch	2	..		..		2	44 $\frac{1}{2}$	\$46 00
January, 1887....	"	3	..		..		3	46 $\frac{1}{2}$	65 92
February, "	"	4	..		1		5	70	102 00
March, "	"	3	..		1		4	54	79 00
April, "	"	2	1		2		4	54 $\frac{1}{2}$	85 92
May, "	"	9	2		..		9	183 $\frac{1}{2}$	242 92
June, "	"	2	1		1		3	96 $\frac{1}{2}$	75 92
July, "	"	1	..		..		1	74 $\frac{1}{2}$	23 00
August, "	"	3	1		..		3	89	92 00
September, "	"	2	..		..		2	46	46 00
October, "	"	3	1		..		3	82 $\frac{1}{2}$	88 92
November, "	"	3	..		..		1	86	69 00
Totals.....		37	6		5		40	927 $\frac{1}{2}$	\$1,016 60

RECAPITULATION.

Total No. Services.	$\frac{5}{8}$ inch	1194	17	10	24	11	1239	24,687 $\frac{1}{2}$	\$18,408 48
" " "	1 "	37	6	..	5	..	40	927 $\frac{1}{2}$	1,016 60
Total....		1231	23	10	29	11	1279	25,615	\$19,425 08

CONNECTION AND METERS. DECEMBER 1, 1886, TO DECEMBER 1, 1887.

SIZES.

MONTHS.	1 $\frac{1}{4}$ INCH.	1 $\frac{1}{2}$ INCH.	2 INCH.	2 $\frac{1}{2}$ INCH.	3 INCH.	4 INCH.	6 INCH.	TOTAL.
December, 1886.....	..	..	1	..	..	..	..	1
January, 1887.....	..	..	..	..	..	..	..	..
February, ".....	..	..	..	..	..	1	..	1
March, ".....	1	1	..	..	..	..	..	2
April, ".....	..	..	1	..	..	..	..	1
May, ".....	1	..	4	..	..	..	..	5
June, ".....	1	..	2	2	2	..	..	7
July, ".....	..	3	2	1	3	..	..	9
August, ".....	2	1	..	..	3	1	1	8
September, ".....	..	..	..	..	2	..	..	2
October, ".....	..	..	1	..	..	..	..	1
November, ".....	..	..	1	..	1	..	..	2
	5	5	12	3	11	2	1	39

METERS. DECEMBER 1, 1886, TO DECEMBER 1, 1887.

SIZES.

MONTHS.	$\frac{5}{8}$ INCH.	$\frac{3}{4}$ INCH.	1 INCH.	$1\frac{1}{2}$ INCH.	2 INCH.	3 INCH.	TOTAL.
December, 1886.....	1	..	2	..	1	..	4
January, 1887.....	3	1	3	..	1	..	8
February, ".....	..	..	3	1	..	..	4
March, ".....	1	..	2	2	..	..	5
April, ".....	1	..	3	..	1	..	5
May, ".....	2	3	..	..	..	..	5
June, ".....	4	..	..	1	..	..	5
July, ".....	1	..	2	..	..	..	3
August, ".....	1	..	5	..	1	1	8
September, ".....	..	1	1	..	..	..	2
October, ".....	..	2	6	..	..	..	8
November, ".....	1	..	2	..	1	..	4
	15	7	29	4	5	1	61

INVENTORY No- 1.

STREET MAINS STOCK AND MATERIALS.

IRON PIPE.

Two inch, 18 feet, at 13 cents	\$2 34	
Three inch, 12 feet, at 22 cents	2 64	
Four inch, 24 feet, at 31 cents	7 44	
Six inch, 1332 feet, at 51 cents	679 32	
Eight inch, 36 feet, at 67 cents	24 12	
Ten inch, 144 feet, at 87 cents	125 28	
Twelve inch, 408 feet, at \$1.15	469 20	
Sixteen inch, 168 feet, at \$1 87	314 16	
Twenty inch, 96 feet, at \$2.27	217 92	
Twenty-four inch, 36 feet, at \$3.17	114 12	
Thirty inch, 180 at \$4.42	795 60	—\$2,752 14

SLEEVES.

Two inch, 2, at 42 cents	84	
Three inch, 6, at \$1.40	8 40	
Four inch, 6, at \$1.85	11 10	
Six inch, 3, at \$2.80	8 40	
Eight inch, 5, at \$3.64	18 20	
Ten inch, 5, at \$4.72	23 60	
Twelve inch, 5, at \$5.81	29 05	
Sixteen inch, 1, at \$9.45	9 45	
Twenty inch, 2, at \$15.47	30 94	
Twenty-four inch, 3, at \$17.50	52 50	
Thirty inch, 2, at \$30.72	61 44	— 253 92

BENDS 90'.

Three inch, 2; at \$1.09	2 18	
Four inch, 1, at \$2.40	2 40	
Six inch, 2, at \$3.71	7 42	
Ten inch, 3, at \$6.00	18 00	
Sixteen inch, 1, at \$10.00	10 00	— 40 00

BENDS 45'.

Three inch, 2, at \$1.09	2 18	
Four inch, 1, at \$2 40	2 40	
Six inch, 2, at \$3.71	7 42	
Twenty inch, 2, at \$20.64	41 28	
Twenty-four inch, 1, at \$36.08	36 08	— 89 36

BEVELED HUBS.

Three inch, 1, at \$1.61	1 61	
Four inch, 5, at \$1.92	9 60	
Twenty-four inch, 1, at \$17.50	17 50	— 28 71

\$3,164 13

Amount brought forward.....\$3,164 13

DOUBLE BRANCHES.

Three by three, 4, at \$3.15.....	12 60	
Four by four, 3, at \$3.92.....	11 76	
Six by four, 2, at \$7.00.....	14 00	
Eight by six, 1, at \$10.30.....	10 30	
Ten by six, 2, at \$11.30.....	22 60	
Ten by ten, 1, at \$11.50.....	11 50	
Sixteen by six, 3, at \$23.20.....	69 60—	152 36

SINGLE BRANCHES.

Two by two, 2, at \$1.50.....	3 00	
Three by three, 1, at \$2.43.....	2 43	
Four by two, 1, at \$2.35.....	2 35	
Four by three, 3, at \$2.80.....	8 40	
Six by three, 1, at \$6.37.....	6 37	
Six by four, 1, at \$6.65.....	6 65	
Six by six, 3, at \$6.93.....	20 79	
Eight by six, 1, at \$8.58.....	8 58	
Ten by two, 1, at \$8.58.....	8 58	
Ten by four, 1, at \$12.95.....	12 95	
Ten by six, 1, at \$9.00.....	9 00	
Ten by ten, 4, at \$11.00.....	44 00	
Twelve by four, 1, at \$15.00.....	15 00	
Twelve by eight, 1, at \$21.00.....	21 00	
Sixteen by four, 1, at \$23.00.....	23 00	
Sixteen by six, 4, at \$23.25.....	93 00	
Twenty by four, 1, at \$24.25.....	24 25	
Twenty by twelve, 1, at \$26.93.....	26 93	
Twenty-four by ten, 1, at \$45.00.....	45 00—	381 28

REDUCERS.

Three to two, 4, at 95 cents.....	3 80	
Six to four, 8, at \$3.15.....	25 20	
Ten to six, 1, at \$9.45.....	9 45	
Ten to eight, 1, at \$10.00.....	10 00	
Twenty to ten, 2, at \$12.00.....	24 00	
Twenty to sixteen, 1, at \$14.40.....	14 40—	86 85

PLUGS.

Two inch, 2, at 20 cents.....	40	
Three inch, 40, at 25 cents.....	10 00	
Four inch, 96, at 42 cents.....	40 32	
Ten inch, 2, at \$1.43.....	2 86	
Twelve inch, 3, at \$1.74.....	5 22	
Fourteen inch, 4, at \$2.50.....	10 00	
Twenty inch, 2, at \$5.00.....	10 00	
Twenty four inch, 1, at \$8.03.....	8 03	
Thirty inch, 1, at \$10.80.....	10 80—	97 63

\$3,882 25

Amount brought forward.....\$3,882 25

CAPS.

Three inch, 6, at 31 cents.....	1 86	
Four inch, 2, at 42 cents.....	84	
Six inch, 6, at \$1.12.....	6 72	
Fourteen inch, 1, at \$2.50.....	2 50	
Twenty four inch, 2, at \$8.03.....	16 06	
Thirty inch, 2, at \$10.80.....	21 60—	49 58

STOP COCKS.

Three inch, 5, at \$10.00.....	\$ 50 00	
Four inch, 6, at \$11 00.....	66 00	
Six inch, 5, at \$16.00.....	80 00	
Ten inch, 5, at \$22.50.....	112 50	
Twenty inch, 1, at \$127.00.....	127 00	
Twenty inch, (Galvin.), 1, \$127.00.....	127 00—	562 50

MISCELLANEOUS.

Lead, 1642 pounds, at 5 cents.....	\$ 82 10	
Yarn, 31 pounds, at 7½ cents....	2 33	
One 16x10 Y branch, 720 pounds.....	23 40	
One 16x24 flanged branch, 1100 pounds ..	35 75	
One 16x3 angle branch.....	20 00	
Two 20 inch Y branches, at \$61.02.....	122 04	
Two lengths 24 inch curved pipe.....	48 00	
Two lengths 30 inch curved pipe.....	60 00	
Three feet six inches, 30 inch curved hub..	12 00—	405 62

Total.....\$4,899 95

INVENTORY No. 2.

GENERAL SUPPLIES.

6 meter box frames, at \$3.95.....	\$	23	70	
6 " " covers, at \$3.95.....		23	70	
5 meter boxes, at \$8.00.....		40	00	
22 6 inch stop boxes, at 95 cents.....		20	90	
2 12 inch stop boxes, at \$1.25.....		2	50	
4 Morgan valve boxes, No. 6, at \$4.75.....		19	00	
2 " " " " 4, at \$4.40.....		8	80	
1 valve box, No. 8, at \$7.75.....		7	75—	146 35

LUMBER.

260 feet 1½ inch, at 2 cents.....		5	20	
304 " oak lumber, at 4 cents.....		12	16	
252 " spruce plank, at 2 cents.....		5	04	
384 " pine lumber, at 2 cents.....		7	68—	30 08

PAINT.

15 pounds white lead, at 6 cents.....		90		
15 " venetian red, at 5 cents.....		75		
4 gallons raw oil, at 65 cents.....		2	60—	4 25

HARDWARE.

75 pounds 10-penny nails, at 4 cents.....		3	00	
75 " 20-penny nails, at 4 cents.....		3	00	
2 gross screws, at 40 cents.....		80—		6 80

Total.....\$187 48

INVENTORY No. 3.

BELLEVILLE AND HIGH SERVICE INVENTORIES.

One portable forge.....	\$ 30 00
One anvil.....	10 00
Rope, blocks and falls.....	5 00
Two platform scales.....	120 00
Four coal buckets.....	320 00
Five iron barrows.....	100 00
One 3-horse engine.....	200 00
One drill press.....	150 00
One shaper.....	400 00
One lathe and appurtenances, including shafting and countershafting.....	600 00
Two chain blocks and falls.....	25 00
One bench vise.....	16 00
One carpenter bench.....	5 00
One table.....	3 00
Three forty gallon cans.....	15 00
One desk.....	20 00
One clock.....	15 00
Two pair step-ladders.....	5 00
One lawn mower.....	8 00
Coal hoisting engine.....	300 00
Apparatus, shed etc.....	139 62
Nine chairs.....	16 75
One stool.....	2 00
One feather duster.....	1 75
One pipe vise.....	15 00
Iron barrows.....	26 00
Stove and fittings, weighmaster's box.....	16 66
One wardrobe.....	5 00
Table.....	3 00
One eight-day clock.....	20 00
One platform scale.....	200 00
One wheelbarrow scale.....	60 00
Two ladders.....	8 00
One pair steps.....	1 00
Four tool closets.....	12 00
One bench and vise.....	10 00
One pipe vise.....	15 00
Stoves and fixtures at gate house.....	18 00
Oil can, Belleville.....	12 00
Andrew's pump, No. 3.....	100 00
Pulley for pump.....	35 00
Oil cabinets.....	45 00
Weather instruments.....	32 82

Total.....\$3,141 60

INVENTORY No. 4.

OFFICE INVENTORY—FURNITURE AND FIXTURES ON HAND
NOVEMBER, 30, 1887.

One cash safe.....	\$400 00
One book safe.....	150 00
One double stationary desk.....	100 00
One portable desk.....	75 00
Desk fixtures and fittings, vault.....	500 00
Calendar clock.....	50 00
Book Cabinet.....	25 00
Five chairs.....	20 00
Nine stools.....	18 00
Copying press.....	15 00
Numbering and canceling stamp.....	50 00
Water cooler and stand.....	10 00
Umbrella stands.....	15 00
Cuspidores, mats and sundries.....	7 00
Iron railing.....	25 00

SUPERINTENDENT'S ROOM.

Six Eastlake chairs.....	24 00
One chair.....	5 00
One table.....	10 00
One wardrobe.....	10 00

BOARD ROOM.

Desks, furniture and fixtures.....	300 00
Sixteen Eastlake chairs.....	64 00
Six chairs.....	30 00
Four chairs.....	12 00
Map, rack and fixtures.....	15 00
Cuspidors, mats, etc.....	24 00

ENGINEER'S ROOM AND ANTE-ROOM.

One desk, portable.....	25 00
One desk, portable.....	10 00
One map case.....	10 00
One table.....	15 00
Three chairs.....	15 00
Three stools.....	9 00
Draughting instruments.....	50 00
Level.....	75 00
Transit.....	100 00
Chain and rods.....	15 00

Total.....\$2,278 00

TELEPHONE LINE AND CALLS.

Balance on hand November 30, 1887.....\$1,200 00

INVENTORY No. 5.

STABLE INVENTORY—STOCK AND PROPERTY ON HAND

NOVEMBER 30, 1887.

One road horse.....	\$300 00
“ “ “	300 00
“ “ “	150 00
“ draught horse.....	150 00
Two draught horses.....	550 00
One draught horse (Belleville).....	130 00
One phaeton.....	325 00
“ “	260 00
“ “	175 00
“ depot wagon.....	200 00
“ business wagon.....	100 00
“ tool wagon	50 00
“ truck wagon.....	150 00
“ pipe truck.....	250 00
“ heavy team harness.....	40 00
“ light team harness.....	50 00
Two sets single harness.....	45 00
Three sets buggy harness.....	100 00
Blankets and robes.....	35 00
One box sleigh.....	25 00
Two light sleighs.....	40 00
Two wagon jacks.....	2 00
Two forks and brooms.....	2 00
Three pails.....	1 50
Two brushes.....	1 00
Fifty feet rubber hose with nozzle.....	7 50
Two cots.....	1 75
One large feed bin.....	8 00
Two $\frac{5}{8}$ -inch tapping machines.....	200 00
One 1-inch tapping machine.....	150 00
Three derricks.....	75 00
Two set blocks and ropes.....	30 00
Seven jack screws.....	31 00
Two worm blocks (4000 pounds).....	100 00
Nine pumps.....	40 00
Five pipe tongs.....	10 00
Seventeen stop keys.....	34 00
One grindstone and frame.....	10 00
One vise.....	5 00
Ten lanterns.....	8 00
Three sledges.....	3 00

\$4,144 75

Amount brought forward,.....	\$4,144 75
Ten hammers.....	7 00
Six wrenches.....	12 00
One chain sling.....	35 00
One 2½-inch pulsometer.....	25 00
Four hose butts.....	24 00
Total.....	<u>\$4,247 75</u>

INVENTORY No. 6.

HYDRANT ACCOUNT.

1 Hewes & Phillips hydrant, at \$30.00.....	\$30 00
2 Galvin hydrants, at \$25.00.....	50 00
1 octagon hydrant, at \$10.00.....	10 00
24 square hydrant cases, at \$2.00.....	48 00
11 hydrant soles, at \$4.00.....	44 00
19 hydrant heads, at \$2.50.....	47 50
Total.....	<u>\$229 50</u>

INVENTORY No. 7.

SERVICE STOCK.

25 ⅝-inch corporation stops, at 65 cents.....	\$16 25
8 1-inch corporation stops, at \$1.85.....	14 80
94 ⅝-inch curb stops, at 85 cents.....	79 90
6 1-inch curb stops, at \$1.85.....	11 10
41 wooden curb boxes, at 50 cents.....	20 50
30 ⅝-inch curb boxes, iron, at \$1.45.....	43 50
50 iron covers for wooden stop boxes, at 50 cents.....	25 00
814 pounds ⅝-inch lead pipe, at 5½ cents.....	44 77
333 pounds 1-inch lead pipe, at 5½ cents.....	18 32
Total.....	<u>\$274 14</u>

INVENTORY No. 8.

BELLEVILLE FUEL AND STORES ON HAND, NOVEMBER 30, 1887.

FUEL.

42731 ⁵ / ₈ tons broken coal, at \$3.97.....	\$16,966 60
5211 ² / ₈ tons stove coal, at \$4.57.....	239 93
Total.....	\$17,206 53

STORES.

7 pounds $\frac{1}{8}$ -inch sheet rubber packing, at 50 cents...	\$ 3 50
20 " $\frac{1}{8}$ -inch " " " at 50 "	10 00
3 " $\frac{3}{8}$ -inch " round " at 85 "	2 55
6 " $\frac{3}{4}$ -inch " " " at 85 "	5 10
10 " $1\frac{1}{8}$ -inch " " " at 85 "	8 50
3 " $\frac{5}{8}$ -inch " " " at 85 "	2 55
12 " hemp packing, at 20 cents.....	2 40
37 sheets emery cloth, at 5 cents...	1 85
28 boxes potash, at 14 cents.....	3 92
60 pounds waste, at $9\frac{1}{2}$ cents.....	5 70
18 bars soap, at 10 cents.....	1 80
10 brooms, at 25 cents.....	2 50
21 gallons lard oil, at 75 cents.....	15 75
33 " cylinder oil, at 80 cents.....	26 40
6 pounds Albany grease, at 25 cents.....	1 50
49 gallons kerosene, at 10 cents.....	4 90
2 pounds Babitt's Metal, at 15 cents.....	30
60 pounds manhole gaskets, at 60 cents.....	36 00
14 pounds handhole gaskets, at 60 cents.....	8 40
8 lampwicks, at 8 cents.....	64
11 guage glasses, at 25 cents.....	2 75
4 lamp chimneys, at 5 cents...	20
Total.....	\$147 21

INVENTORY No. 9.

HIGH SERVICE FUEL AND STORES ON HAND, NOVEMBER 30, 1887.

FUEL.

50 tons broken coal, at \$5.00.....	\$250 00
$\frac{3}{4}$ cord wood, at \$8.00.....	6 00
Total.....	<u>\$256 00</u>

STORES.

13 pounds $\frac{1}{16}$ -inch rubber packing, at 50 cents.....	\$ 6 50
30 " $\frac{1}{8}$ -inch " " at 50 cents.....	15 00
6 " Usudurian packing, at 80 cents.....	4 80
40 " Tuck's packing, at 85 cents.....	34 00
10 " combination packing, at \$1.00.....	10 00
20 " hemp packing, at 20 cents.....	4 00
3 boxes universal metal polish, at 25 cents.....	75
60 sheets emery cloth, at 5 cents.....	3 00
16 sheets crocus cloth, at 5 cents.....	80
24 boxes concentrated lye, at 14 cents.....	3 36
36 packages Pearline.....	3 00
125 pounds waste, at 9 $\frac{1}{2}$ cents.....	11 88
13 bars soap, at 10 cents.....	1 30
3 scrubbers, at 25 cents.....	75
45 gallons lard oil, at 75 cents.....	33 75
54 gallons cylinder oil, at 80 cents.....	43 20
61 pounds manhole gaskets, at 60 cents.....	36 60
5 pounds handhole gaskets, at 60 cents.....	3 00
30 guage glasses, at 25 cents....	7 50
5 pound ball wicking, at 20 cents.....	1 00
2 boxes wax tapers, at 25 cents.....	50
Total.....	<u>\$224 69</u>

INVENTORY No. 10.

GENERAL INVENTORY OF SUPPLIES AND OTHER STOCK AND
PROPERTY NOT INCLUDED IN FOREGOING
INVENTORIES.

		PIPE.	
Picks.....	47		
Pick handles.....	42	3-inch spigots.....	72 feet.
Crowbars.....	16	4 " ".....	10 "
Shovels.....	32	6 " ".....	106 "
Setts.....	25	8 " ".....	4 "
Yarning irons.....	5	10 " ".....	8 "
Chisels—hand.....	18	12 " ".....	14 "
" hatchet.....	9	14 " ".....	10 "
Hammers.....	10	16 " ".....	34 "
Wrenches.....	12	20 " ".....	33 "
Ladles.....	6	24 " ".....	24 "
Hydrant keys.....	7	30 " ".....	12 "
Pipe ropes.....	3	4 " hub.....	24 "
Lead pots.....	3	6 " ".....	45 "
Wheelbarrows.....	2	8 " ".....	16 "
Pipe tongs.....	5	10 " ".....	3 "
Scrapers.....	2	12 " ".....	7 "
Hose butts.....	2	20 " ".....	26 "
Hand saws.....	3	24 " ".....	20 "
Oil cans.....	3	30 " ".....	22 "
Screw drivers.....	3		
Rubber boots (pairs).....	5	WATER METERS.	
Steel wedges.....	4	Worthington, $\frac{5}{8}$ -inch.....	2
Steel drills.....	3	" 3 ".....	1
Paving hammers.....	2	Gem $\frac{3}{4}$ ".....	1
Water pails.....	3	" 1 ".....	4
Furnaces.....	2	" 2 ".....	1
Hydrants, wood, Phila. and		" 3 ".....	1
octagon, out of order....	36	Crown $\frac{1}{2}$ ".....	1
Axes.....	3	" 1 ".....	2

[illegible]

INVENTORY No. 12.

BELLEVILLE PUMPING STATION.

Engine lathe.....	1	Wheelbarrows.....	5
Shaper.....	1	Coal buckets, 3 cwt.....	4
Drill press.....	1	Wheelbarrow scales.....	2
Machine vise.....	1	Clamps.....	4
Pipe vise.....	1	Pipe tongs.....	20
Hammers.....	3	Fire hooks.....	4
1 ton differential block.....	1	Slice bars.....	1
$\frac{1}{2}$ ton differential block.....	1	Fire hoes.....	2
Ratchets.....	2	Gas machine.....	1
Screw wrenches.....	3	Gas plyers.....	1
Pipe stocks, taps and dies..	2		
Pipe cutters.....	2	ELLS.	
Indicators.....	1	$\frac{1}{4}$ -inch.....	5
$2\frac{1}{2}$ -inch hose, feet.....	350	$\frac{3}{8}$ -inch.....	12
$\frac{3}{4}$ -inch hose, feet.....	50	$\frac{1}{2}$ -inch.....	9
Shovels, No. 3.....	3	$\frac{3}{4}$ -inch.....	10
" No. 6.....	4	1-inch.....	12
Tube scrapers.....	2	$1\frac{1}{4}$ -inch.....	12
Taps and dies.....	22	$1\frac{1}{2}$ -inch.....	12
Machine taps.....	8	2-inch.....	9
Screw Plates.....	3		
Twist drills.....	20	TEES.	
Breast drills.....	1	$\frac{1}{4}$ -inch.....	8
Sets cans and trays.....	2	$\frac{3}{8}$ -inch.....	12
Oil pot.....	1	$1\frac{1}{4}$ -inch.....	12
Hammers.....	2	$1\frac{1}{2}$ -inch.....	12
No. 2 forge.....	1	2-inch.....	3
Anvil.....	1		
Sledges.....	1	UNIONS.	
Tongs.....	4	$\frac{1}{4}$ -inch.....	3
Hardy.....	2	$\frac{3}{8}$ -inch.....	12
Suages.....	2	$\frac{3}{4}$ -inch.....	12
Flatter.....	1	$1\frac{1}{4}$ -inch.....	12
Shears.....	1	$1\frac{1}{2}$ -inch.....	12
Surface plate.....	1		
Augers.....	2	ANGLE VALVES.	
Hack saw frame.....	2	$1\frac{1}{4}$ -inch.....	1
Calipers.....	2		
Compass Saw.....	1	PIPE.	
Plyers.....	1	$\frac{1}{4}$ -inch.....	48 feet
Sets block and fall ropes..	1	$\frac{3}{8}$ -inch.....	10 "
Grindestone.....	1	$\frac{1}{2}$ -inch.....	39 "
Hand lamps.....	4	$\frac{3}{4}$ -inch.....	42 "
Kerosene lamps.....	6	1-inch.....	24 "
		$1\frac{1}{4}$ -inch.....	25 "
		$1\frac{1}{2}$ -inch.....	38 "
		2-inch.....	22 "

PLUGS.		STEEL.	
2-inch.....	4	$\frac{7}{8}$ -inch.....	16 pounds
NIPPLES.		MISCELLANEOUS.	
$\frac{3}{4}$ -inch.....	2	Z springs.....	26
1-inch.....	4	Valves.....	4
2-inch.....	8	Extra piston rods.....	3
IRON.		Valve seats.....	6
$\frac{5}{8}$ -inch.....	8 pounds	Flange unions.....	4
$\frac{1}{6}$ -inch.....	15	Nails.....	18 pounds
$\frac{1}{2}$ -inch.....	134	Lead.....	62 pounds
$\frac{7}{8}$ -inch.....	240	Barrow bearings.....	16
1-inch.....	220	Steam dampers.....	2
$1\frac{1}{8}$ -inch.....	107	Springs.....	199
$\frac{3}{8}$ x4-inch.....	50	Pinch bars.....	2

STATISTICS ON CONSUMPTION
FOR THE YEAR 1887.

STATEMENT OF WORK OF THE PUMPING ENGINES AT BELLEVILLE, FOR THE YEAR ENDING NOVEMBER 30, 1887.

MONTH.	NUMBER OF HOURS IN OPERATION.				STROKES.				GALLONS.				TOTAL GALLONS.	COAL NO. 1 & 2.		COAL NO. 3.		COAL NO. 4.		T'L COAL.	ASHES.
	NO. 1.	NO. 2.	NO. 3.	NO. 4.	NO. 1.	NO. 2.	NO. 3.	NO. 4.	NO. 1.	NO. 2.	NO. 3.	NO. 4.		FIRING.	BANK'G.	FIRING.	BANK'G.	FIRING.	BANK'G.		
Dec., 1886	116.30	263.40	725.10	8.30	355,584	831,064	2,364,136	27,544	27,024,384	63,160,864	302,609,408	3,525,632	396,320,288	347,215	37,261	1,218,345	6,575	13,472	.....	1,622,868	293,501
Jan., 1887	166.45	300.30	742.25	.....	551,296	964,800	2,433,544	.....	41,898,496	73,324,800	311,493,632	.....	426,716,928	443,652	28,494	1,190,940	6,027	.....	.....	1,669,113	311,322
Feb., "	47.45	212.10	541.50	129.55	154,628	675,084	1,758,052	415,448	11,751,728	51,506,384	225,030,656	53,177,344	341,266,112	235,241	31,507	828,170	4,384	201,572	1,096	1,301,970	252,280
March, "	219.50	.....	640.00	104.00	709,328	.....	2,063,420	333,280	53,908,928	.....	264,117,760	42,659,840	360,686,528	203,543	33,699	696,117	6,849	162,041	1,096	1,403,345	269,266
April, "	142.35	.....	714.50	.....	455,364	.....	2,280,588	.....	34,607,664	.....	291,915,264	.....	326,522,928	126,278	25,754	1,067,702	6,575	.....	.....	1,226,309	238,408
May, "	295.20	.....	79.50	663.00	959,472	.....	257,320	2,174,448	72,919,872	.....	32,936,960	278,329,344	384,186,176	253,211	30,960	117,418	1,096	962,479	6,575	1,371,739	275,310
June, "	382.55	.....	24.00	696.00	1,223,388	.....	79,220	2,275,252	92,977,488	.....	10,140,160	291,232,256	394,349,904	321,498	25,480	35,519	.....	1,012,206	5,479	1,400,182	277,435
July, "	293.00	232.35	26.25	716.40	961,796	754,292	85,488	2,357,796	73,096,496	57,326,192	10,942,464	301,797,888	443,163,040	390,743	24,384	33,010	.....	904,969	4,383	1,357,489	239,774
August, "	353.10	132.70	230.30	512.40	1,163,912	435,448	766,920	1,693,316	88,457,312	33,094,048	98,165,760	216,744,448	436,461,568	360,106	26,302	214,516	1,096	715,753	4,932	1,322,705	251,752
Sept., "	28.00	296.00	427.15	341.50	89,568	1,135,844	1,246,764	1,130,976	6,807,168	86,324,144	159,585,792	144,764,928	397,482,032	277,769	30,137	474,420	3,288	431,337	3,014	1,219,965	234,500
Oct., "	209.00	25.00	8.00	735.30	684,888	81,732	25,808	2,439,716	52,051,488	6,211,632	3,303,424	312,283,648	373,850,192	177,845	33,973	9,928	.....	958,384	4,383	1,184,513	235,900
Nov., "	132.50	.....	.....	621.20	444,568	.....	.....	2,340,576	33,787,168	.....	.....	299,593,728	333,380,896	108,173	28,220	.....	.....	967,364	7,123	1,110,880	212,140
Totals	2387.40	1463.05	4160.15	4529.25	7,753,792	4,878,264	13,361,260	15,188,352	589,288,192	370,748,064	1,710,241,280	1,944,109,056	4,614,386,592	3,245,274	356,171	6,186,085	35,890	6,329,577	38,081	16,191,078	3,091,588

Highest daily average in July.....14,295,582 gallons.

Lowest daily average in April.....10,884,097 "

Daily average for the year.....12,642,155 "

Increase of highest daily over last year.....1,018,719 gallons.

Increase of lowest daily over last year.....1,604,828 " (Consumpt.: 998,317 gallons).

Increase of daily average for the year..... 857,992 "

STATEMENT OF WORK OF HIGH SERVICE PUMPING ENGINES FOR YEAR ENDING NOVEMBER 30, 1887.

MONTH.	NO. OF HOURS IN OPERATION.		STROKES.		GALLONS.		TOTAL GALLONS.	COAL.		TOTAL COAL.	ASHES.
	No. 1.	No. 2.	No. 1.	No. 2.	No. 1.	No. 2.		Firing.	Banking		
Dec., 1886	691.30	207.30	2,284,992	640,856	85,915.699	37,490,076	123,405,775	368,000	20 100	388,100	66,774
Jan., 1887	718.00	289.30	2,334,152	986,492	87,764,115	57,709,782	145,473,897	411,800	20,100	431,900	73,056
Febr., 1887	337.30	392.30	1,112,016	1,221,544	41,811,802	71,460,324	113,272,126	315,300	10,800	326,100	63,861
March, 1887	207.30	537.00	745,964	1,535,616	28,048,246	89,833,536	117,881,782	327,000	4,500	331,500	69,600
April, 1887	553.30	166.30	1 997,980	460,968	75,124,048	26,966,628	102 090,676	291,600	11,100	312,700	54,919
May, 1887	712.00	173.30	2,370,580	537,724	89,133,808	31,456,854	120,590,662	342,600	18,000	360,600	60,406
June, 1887	561.30	296.30	2,011,928	830,092	75,648,493	48,560,382	124,208,875	360 000	18,600	378 600	63,356
July, 1887	728 00	287.30	2,473,896	995,696	93,018,490	58,248,216	151,266,706	380,800	19,800	400 600	73,903
August, 1887	677.00	319.00	2,252,956	988,396	84,711,146	57,821,166	142,532,312	386,900	20,400	407,300	67,803
Sept., 1887	720.00	225.00	2 414,580	678,408	90,788,208	39,686,868	130,475,076	363,300	21,000	384,300	63,027
October, 1887	553.60	353.30	1,570,688	1,060,008	59,057,869	62 010,468	121,068,337	377,600	16,800	384,400	68,990
Nov., 1887	712.00	153.00	2,263,992	421,280	85,126,099	24 644,880	109,770,979	340,100	19,200	359,300	65,397
Total. . . .	7172.00	3401.00	23,833,724	10,357,080	896 148 023	605,889,180	1,502,037,203	4 265,000	200,400	4,465,400	791,092

Highest daily average in August. . . . 4,879,571 gallons.

Lowest daily average in April. 3,403,023 “

Daily average for the year. 4,247,296 “

Increase of highest daily over last year. 277,192 gallons.

Increase of lowest daily over last year. 20,283 “

Increase of daily average for the year 274,310 “

CONSUMPTION STATEMENT FOR THE YEAR ENDING NOVEMBER 30, 1887.

MONTHS.		Average daily consumption—gal's.	Number of taps, at beginning of each month.	Average consumption per tap—gal's.	Average consumption per tap, previous years—gal's.	Highest consumption per tap, previous years—gal's.	Lowest consumption per tap, previous years—gal's.	Average monthly temperature.	Rainfall—inches.	Average rainfall, previous years—inches.	REMARKS.
Dec.,	1885	12,784,525	17,111	747	738	853	593	29.35	4.250	3.779	Rain and snow on 8 days. On the 18th 1.260 inch. and on the night of the 30th and morning 31st 1.300 rain fell.
Jan.,	1887	13,765,054	17,199	800	764	884	655	28.84	3.630	3.623	Rain and snow on 9 days. On the night of the 13th and morning 14th 1.040 inches of rain fell.
Feb.,	"	12,188,075	17,223	708	780	947	689	33.50	5.430	3.467	Rain and snow on 10 days. On the 18th 1.750 & 26th 1.830 inches of rain fell.
March,	"	11,635,049	17,261	674	734	825	676	34.24	3.620	3.780	Rain and snow on 8 days. On the night of the 21st and 22d 1.460 inches and night of 27th and the 28th 1.250 inches of rain fell.
April,	"	10,884,097	17,369	627	706	828	644	48.18	3.120	3.661	Rain and snow on 7 days. On the 18th 1.120 inches of rain fell. Max. temp. during the month 80° & min. temp 30°.
May,	"	12,393,102	17,499	708	724	962	617	65.80	0.580	4.000	Rain on 4 days. The dews were very heavy during the month.
June,	"	13,144,997	17,639	745	801	971	728	69.70	7.000	3.507	Rain on 10 days. On the 1st 2.020, on the 22d 1.110 and 23d 2.630 inches of rain fell. Rainfall only exceeded twice.
July,	"	14,295,582	17,764	805	819	940	733	79.61	7.050	4.262	Rain on 15 days. On the 17th 1.480 and the 23d 2.940 inches of rain fell.
August,	"	14,079,405	17,840	789	798	965	674	73.14	3.230	5.112	Highest previous July's 8.950, and lowest 1.120.
Sept.,	"	13,249,401	17,996	736	806	931	728	63.31	2.300	3.680	Rain on 6 days. On the 26th 1.900 inches of rain fell.
October,	"	12,059,683	18,121	665	758	924	661	54.51	2.530	3.606	Rain on 8 days. On the 12th 1.220 inches of rain fell.
Nov.,	"	11,112,696	18,259	609	708	898	609	43.36	2.080	3.640	Rain on 10 days. On the 20th 1.850 inches of rain fell.

Total rainfall for the year.....44,820 inches.

Average daily consumption for the year.....12,642,155 gallons.

Total of averages of previous years.....46,117 "

Average daily consumption per tap..... 687 "

Total number of taps at the end of the year.....18,410.

WINTER MONTHS.—Total rainfall during winter-months 13.310 inches. Average previous winters 10.839 inch. Mean temperature 30.56°.

SPRING MONTHS.—The rainfall 7.320. Average rainfall previous springs 11.50. Mean temperature 49.24. Average previous springs 48.55.

SUMMER MONTHS.—Total rainfall 17.280 Average previous years less than 13,000. Mean temp. 74.15° only exceeded once in 1877, when it was 75.33.

AUTUMN MONTHS.—Total rainfall 6.910, average previous autumn's 10.928. Mean temperature 53.72°. Average temp. previous autumn's 53.50°.

COMPARATIVE STATEMENT OF CONSUMPTION ON THE HIGH AND LOW SERVICE LEVELS

FOR THE YEAR ENDING NOVEMBER 30, 1881.

SERVICES.	AVERAGE FOR THE YEAR.			HIGHEST AVERAGE IN JULY.			LOWEST AVERAGE IN APRIL.		
	Daily consumption, gallons.	Number of taps.	Consumption p. tap-gallons	Daily consumption, p. tap-gallons	Number of taps.	Consumption p. tap-gallons	Daily consumption, p. tap-gallons	Number of taps.	Consumption p. tap-gallons
Both Levels.....	12,642 155	18 410	687	14,295 582	17 764	805	10,884 097	17 369	625
Low Level.....	8,394 859	11 738	715	9,416 011	11 449	823	7,481 074	11 254	665
High Level.....	4,247 296	6 672	636	4,879 571	6 315	773	3,403 023	6 115	557

METERS IN USE, NOVEMBER 30, 1887.

STYLE OF METER.	½ inch	⅝ inch	¾ inch	1 inch	1½ inch	2 inch	3 inch	4 inch	6 inch	Total
Crown.....	18	..	6	54	..	3	..	..	1	82
Gem.....	..	..	1	7	1	19	1	3	..	32
Undine.....	..	..	..	7	..	..	..	..	1	8
Worthington.....	..	85	12	125	6	33	17	7	..	285
Rotary.....	..	..	..	22	..	..	2	..	..	24
Duplex.....	1	..	..	..	..	..	..	..	..	1
Total.....	19	85	19	215	7	55	20	10	2	432

STATEMENT OF DAY AND NIGHT CONSUMPTION, AVERAGED BY WEEK DAYS.

LOW SERVICE.

MONTH.	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.
Dec., 1886	4,176,172	3,841,701	5,123,462	3,883,656	5,154,538	3,886,803	4,880,445	3,772,028	5,070,424	4,082,277	4,991,367	3,859,666	4,656,753	3,775,743
Jan., 1887	4,091,618	3,696,053	4,960,013	4,281,976	5,290,951	4,447,372	5,283,588	4,354,636	4,941,778	4,213,523	4,864,887	4,145,109	4,857,349	3,891,689
Feb., "	4,074,450	3,187,103	4,692,753	3,732,241	4,695,112	3,720,722	4,628,421	3,701,947	4,713,642	3,669,709	4,653,141	3,509,967	4,723,178	3,270,345
March, "	4,075,675	3,085,212	4,504,556	3,446,144	4,592,404	3,329,655	4,751,741	3,355,095	4,650,798	3,239,231	4,659,775	3,306,012	4,634,704	3,091,161
April, "	3,776,968	3,056,521	4,432,239	3,295,903	4,731,308	3,235,586	4,701,335	3,415,522	4,800,603	3,338,851	4,755,933	3,146,205	4,768,335	3,187,465
May, "	3,884,521	3,382,864	5,016,149	3,222,498	4,942,417	3,142,142	5,003,944	3,252,690	5,104,058	3,338,381	4,832,879	3,128,156	5,030,668	3,045,953
June, "	3,927,238	3,418,132	5,644,754	3,663,426	5,548,769	3,769,082	5,266,047	3,508,681	5,464,680	3,793,222	5,144,559	4,200,186	5,159,443	3,788,424
July, "	4,591,552	3,807,155	5,479,054	3,865,649	5,711,086	3,852,386	5,640,971	4,096,504	5,731,476	4,188,448	5,560,401	4,314,057	5,812,270	3,907,843
Aug., "	4,468,858	3,978,398	5,566,694	4,067,478	5,754,021	4,075,069	5,712,607	3,976,497	5,780,246	4,162,642	5,502,391	4,149,635	5,597,668	3,941,149
Sept., "	4,226,313	3,373,748	5,335,633	3,794,047	5,586,339	3,609,338	5,450,680	3,652,740	5,412,875	3,820,692	5,164,892	3,642,409	5,218,369	3,849,464
Oct., "	3,745,687	3,229,513	4,654,921	3,666,065	4,610,594	3,347,804	4,692,332	3,560,790	4,806,711	3,142,616	5,657,378	3,278,821	4,667,118	3,393,616
Nov., "	3,418,361	2,972,626	4,333,807	3,124,721	4,644,515	3,134,774	4,620,300	3,390,982	4,281,734	3,092,618	4,602,429	3,062,355	4,715,007	3,143,185
Totals..	48,457,413	41,029,026	59,744,035	44,043,804	61,262,054	43,550,733	60,632,411	44,038,112	60,759,025	44,082,210	59,390,032	43,742,578	59,840,862	42,286,037

STATEMENT OF DAY AND NIGHT CONSUMPTION, AVERAGED BY WEEK DAYS. HIGH SERVICE.

MONTH.	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.	Day. 7 a. m. to 7 p. m. Gallons.	Night. 7 p. m. to 7 a. m. Gallons.
Dec., 1886	2,232,094	1,683,654	2,382,359	1,812,119	2,264,537	1,793,684	2,327,013	1,765,080	2,500,290	1,843,670	2,473,699	1,765,256	2,181,053	1,509,293
Jan., 1887	2,706,674	1,804,764	2,706,674	1,804,769	2,902,339	2,190,651	2,789,041	2,124,509	2,745,261	2,154,674	2,668,591	1,715,308	2,518,992	1,830,693
Feb., "	2,350,090	1,695,984	2,529,906	1,792,728	2,284,372	1,681,270	2,164,126	1,569,631	2,343,386	1,791,952	2,314,914	1,616,107	2,288,869	1,743,622
March, "	1,895,045	1,644,924	2,119,696	1,610,144	2,228,678	1,654,032	2,127,928	1,667,678	2,137,874	1,583,254	2,185,574	1,692,797	2,268,554	1,572,093
April, "	1,740,419	1,421,877	2,058,569	1,426,179	2,054,079	1,379,240	2,098,881	1,388,495	2,024,566	1,336,003	2,038,118	1,369,288	2,012,566	1,312,760
May, "	1,983,478	1,389,767	2,412,185	1,397,421	2,485,893	1,424,762	2,520,455	1,494,260	2,475,596	1,448,889	2,725,169	1,527,005	2,511,047	1,450,492
June, "	2,569,234	1,546,789	2,888,139	1,617,435	2,685,079	1,655,794	2,743,126	1,744,931	2,750,242	1,640,091	2,829,444	1,476,546	2,388,174	1,662,701
July, "	2,542,665	1,710,004	2,828,239	1,826,019	2,780,368	1,815,463	2,912,419	1,743,183	2,940,906	1,785,152	3,046,829	1,758,346	3,124,012	1,740,728
August, "	2,443,607	1,651,219	2,653,850	1,765,936	2,938,110	1,690,141	2,917,595	1,678,530	2,915,306	1,601,301	3,029,443	1,551,381	3,097,940	1,705,283
Sept., "	2,408,002	1,699,691	2,634,642	1,737,388	2,641,574	1,759,716	2,630,386	1,855,988	2,785,641	1,650,011	2,799,873	1,694,936	2,845,864	1,520,301
Oct., "	2,217,769	1,596,315	2,548,518	1,611,861	2,780,563	1,667,862	2,396,120	1,660,848	2,621,527	1,668,847	2,605,604	1,646,094	2,450,922	1,662,627
Nov., "	2,385,524	1,367,575	2,437,627	1,428,322	2,386,343	1,444,420	2,207,962	1,527,549	2,094,631	1,520,410	2,402,096	1,468,983	2,176,861	1,376,247
Totals..	27,474,601	19,212,563	30,200,404	19,830,321	30,431,935	20,157,035	29,835,052	20,220,682	30,335,226	20,024,253	31,119,754	19,282,047	29,864,854	19,086,840

Daily Consumption

FOR THE

YEAR ENDING NOVEMBER 30, 1887.

CONSUMPTION STATEMENT—DECEMBER 1886.

	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date.....	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.
Low Service....	.....	.....	.....	.....	.....	.....	4,333,843	2,813,713	5,037,324	3,883,599	4,430,660	4,130,500	4,660,751	4,144,058
High Service...	.....	.....	.....	.....	.....	.....	2,511,539	1,878,561	2,413,937	1,577,600	2,680,848	1,860,851	2,040,456	1,657,925
T'l Consumption	.....	.....	.....	.....	.....	.....	6,845,382	4,692,274	7,451,261	5,461,199	7,111,508	5,991,351	6,701,207	5,801,983
Date.....	5		6		7		8		9		10		11	
Low Service....	4,878,394	4,126,960	5,345,926	4,514,955	5,303,310	4,013,260	5,032,915	4,031,369	5,077,693	3,707,237	5,098,488	3,719,519	4,855,907	3,640,404
High Service....	2,268,351	2,051,673	2,422,764	2,091,677	2,385,846	2,149,056	2,589,399	1,426,909	2,760,764	2,036,913	2,442,093	1,712,025	2,439,724	1,491,535
T'l Consumption.	7,146,745	6,178,633	7,768,690	6,606,632	7,689,156	6,162,316	7,622,314	5,596,319	7,838,457	5,744,150	7,540,581	5,431,544	7,285,631	5,131,939
Date.....	12		13		14		15		16		17		18	
Low Service....	3,589,438	3,561,748	4,913,912	3,288,356	4,874,716	3,615,079	5,015,316	4,159,410	5,379,635	4,404,108	5,172,485	4,231,788	5,056,921	3,421,794
High Service....	2,584,968	1,528,505	2,308,827	1,815,040	2,365,620	1,429,986	2,223,452	2,048,559	2,603,454	1,870,675	2,626,426	1,864,404	2,355,143	1,555,136
T'l Consumption.	6,174,406	5,090,253	7,222,739	5,103,396	7,240,336	5,036,065	7,238,768	6,079,928	7,983,089	6,274,783	7,798,911	6,096,192	7,412,064	4,976,930
Date.....	19		20		21		22		23		24		25	
Low Service....	4,242,820	3,912,686	5,292,808	4,022,935	5,227,324	3,967,149	5,079,775	3,759,565	5,268,634	3,728,105	4,955,326	3,475,165	4,053,435	3,896,717
High Service...	2,046,743	1,582,186	2,339,044	1,764,094	2,222,205	1,740,224	2,047,788	1,531,215	2,263,219	1,535,434	2,057,461	1,453,092	1,888,889	1,332,576
T'l Consumption.	6,289,563	5,494,872	7,631,852	5,787,029	7,449,529	5,707,373	7,127,563	5,290,780	7,531,853	5,263,539	7,012,787	4,928,257	5,942,324	5,229,293
Date.....	26		27		28		29		30		31			
Low Service....	3,994,038	3,765,408	4,941,201	3,708,378	5,212,796	3,951,723	4,940,375	4,096,084	4,588,835	4,688,339	5,299,878	3,741,361		
High Service....	2,028,313	1,572,252	2,458,802	1,577,667	2,084,478	1,864,470	2,262,890	1,940,164	2,460,079	2,197,728	2,562,069	1,935,910		
T'l Consumption	6,022,351	5,337,660	7,400,003	5,286,045	7,297,274	5,816,193	7,203,265	6,036,248	7,048,914	6,886,067	7,861,947	5,677,271		

CONSUMPTION STATEMENT—JANUARY 1887.

	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date.....	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.
Low Service.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,244,697	4,008,939
High Service.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,254,206	1,764,997
T'l Consumption..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,498,903	5,773,936
Date... ..	2		3		4		5		6		7		8	
Low Service.....	4,593,547	4,148,522	5,300,485	4,703,306	5,569,216	4,502,649	5,630,705	4,023,753	4,856,953	4,432,191	4,773,679	4,615,937	5,089,135	4,370,122
High Service....	2,909,115	1,720,549	2,841,939	2,390,505	2,888,861	2,383,767	2,516,191	2,258,829	2,882,902	1,903,288	2,641,520	2,176,186	2,800,402	2,605,356
T'l Consumption..	7,502,662	5,869,071	8,142,424	7,093,811	8,458,077	6,886,416	8,146,896	6,282,582	7,739,855	6,335,479	7,415,199	6,792,123	7,889,537	6,975,478
Date.....	9		10		11		12		13		14		15	
Low Service.....	4,218,583	3,731,796	5,510,188	4,710,467	5,614,954	4,925,070	5,227,714	4,545,617	5,251,828	4,102,344	4,895,292	4,193,113	4,650,975	4,288,171
High Service....	3,074,102	2,102,619	3,246,611	2,265,257	3,378,480	2,158,576	3,126,400	2,097,575	2,737,727	1,948,641	2,972,227	1,593,943	2,572,874	1,585,519
T'l Consumption..	7,292,685	5,834,415	8,756,799	6,975,724	8,993,434	7,083,646	8,354,114	6,643,192	7,989,555	6,050,985	7,867,519	5,787,056	7,223,849	5,873,690
Date.....	16		17		18		19		20		21		22	
Low Service.....	4,292,884	3,955,233	5,292,239	4,166,198	4,965,448	4,695,755	5,317,138	4,780,098	4,821,719	4,167,834	4,794,939	3,900,763	4,888,801	3,665,604
High Service....	2,369,384	1,710,233	2,304,592	2,029,401	2,998,122	2,344,597	3,042,973	2,283,594	3,050,977	2,442,277	2,263,180	1,737,041	2,785,570	1,613,931
T'l Consumption..	6,662,268	5,665,466	7,596,831	6,195,599	7,963,570	7,040,352	8,360,111	7,063,692	7,872,696	6,610,111	7,058,119	5,637,804	7,674,371	5,279,535
Date.....	23		24		25		26		27		28		29	
Low Service.....	3,828,583	3,645,926	4,770,192	4,143,928	5,014,186	3,666,014	4,958,793	4,069,075	4,836,615	4,151,724	4,995,638	3,870,625	5,413,140	4,125,613
High Service....	2,565,088	1,472,559	2,488,619	1,990,838	2,343,892	1,875,664	2,470,600	2,058,036	2,309,437	2,324,490	2,877,439	1,354,063	2,161,909	1,583,663
T'l Consumption..	6,393,671	5,118,485	7,258,811	6,134,766	7,358,078	5,541,678	7,429,393	6,127,111	7,146,052	6,476,214	7,873,077	5,224,688	7,575,049	4,709,276
Date.....	30		31											
Low Service	3,524,495	2,998,791	3,926,961	3,635,980	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
High Service.....	2,615,680	2,017,860	2,850,512	1,817,158	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
T'l Consumption..	6,140,175	5,016,651	6,777,473	5,453,138	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CONSUMPTION STATEMENT—FEBRUARY 1887.

[illegible]

CONSUMPTION STATEMENT—MARCH 1887.

	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date.....	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.
Low Service.....	.....	.....	.....	.....	4,735,606	3,187,904	4,571,950	3,351,952	4,314,357	3,378,643	4,511,417	3,267,961	4,785,339	3,223,977
High Service.....	.....	.....	.....	.....	2,193,048	1,821,692	2,070,119	1,688,704	2,160,745	1,507,159	1,963,592	1,602,091	2,143,132	1,632,139
T'l Consumption.....	.....	.....	.....	.....	6,928,654	5,009,596	6,642,069	5,040,656	6,475,102	4,885,802	6,475,009	4,870,052	6,928,471	4,856,116
Date.....	6		7		8		9		10		11		12	
Low Service.....	4,119,656	3,272,028	4,940,011	3,176,023	4,523,970	3,037,086	4,311,974	3,337,806	4,509,058	3,075,118	4,660,624	3,252,330	4,746,280	3,101,453
High Service....	1,850,149	1,615,566	2,209,965	1,706,700	2,258,802	1,739,004	2,341,479	1,638,619	2,177,370	1,811,564	2,429,201	1,877,814	2,418,426	1,561,127
T'l Consumption.	5,969,805	4,887,594	7,149,976	4,882,728	6,782,772	4,776,090	6,653,453	4,976,425	6,686,428	4,886,682	7,029,825	5,130,144	7,164,706	4,662,580
Date.....	13		14		15		16		17		18		19	
Low Service.....	3,721,574	2,944,239	4,880,680	3,324,910	4,734,336	3,423,226	4,757,590	3,220,260	4,582,125	3,319,478	4,691,239	3,430,422	4,704,401	2,880,527
High Service....	1,874,719	1,695,842	2,249,019	1,824,775	2,306,706	1,917,815	2,336,438	1,710,514	2,241,564	1,680,446	2,230,361	1,747,639	2,296,072	1,563,992
T'l Consumption.	5,596,293	4,640,081	7,129,699	5,149,685	7,041,042	5,341,041	7,094,028	4,930,774	6,823,689	4,999,924	6,921,600	5,178,061	7,000,473	4,444,519
Date.....	20		21		22		23		24		25		26	
Low Service.....	3,820,229	3,477,901	4,043,112	3,513,982	4,025,693	3,412,427	4,836,909	3,233,394	5,001,647	3,026,540	4,775,822	3,273,344	4,602,798	3,148,690
High Service....	2,004,225	1,603,988	2,035,319	1,524,547	2,443,235	1,672,437	2,140,171	1,779,557	1,953,004	1,580,149	2,119,144	1,543,645	2,216,586	1,531,116
T'l Consumption.	5,824,454	5,081,829	6,078,431	5,038,520	6,468,928	5,084,864	6,983,080	5,012,951	6,954,651	4,606,689	6,894,966	4,816,989	6,819,384	4,679,806
Date.....	27		28		29		30		31					
Low Service.....	4,641,242	2,646,679	4,154,420	3,769,658	4,942,417	3,587,633	5,280,285	3,632,067	4,846,804	3,396,376	.....	.....	.....	.....
High Service....	1,851,086	1,664,362	1,984,483	1,384,555	1,941,588	1,719,212	1,745,435	1,520,995	2,156,687	1,336,947	.....	.....	.....	.....
T'l Consumption.	6,492,328	4,311,041	6,138,903	5,154,213	6,884,005	5,306,845	7,025,720	5,153,062	7,003,491	4,733,323	.....	.....	.....	.....

CONSUMPTION STATEMENT—APRIL 1887.

	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.
Low Service.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,727,533	3,161,779	4,847,253	3,143,029
High Service....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,983,582	1,407,746	1,927,698	1,432,741
T'l Consumption	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,711,115	4,569,525	6,774,951	4,575,770
Date	3		4		5		6		7		8		9	
Low Service.....	3,996,348	3,515,449	4,600,256	3,418,871	4,783,107	3,371,484	5,098,056	3,308,820	4,751,652	3,233,617	4,662,075	3,170,334	4,760,927	3,064,849
High Service....	1,746,756	1,383,997	2,020,411	1,420,646	2,047,675	1,458,901	2,019,099	1,297,929	2,108,372	1,466,192	1,884,366	1,497,736	2,190,485	1,394,940
T'l Consumption	5,743,104	4,904,446	6,620,667	4,839,517	6,830,782	4,830,385	7,117,155	4,606,749	6,860,024	4,699,809	6,546,441	4,668,070	6,951,412	4,459,789
Date	10		11		12		13		14		15		16	
Low Service.....	3,469,342	2,765,064	4,916,430	3,293,476	4,855,136	3,665,603	4,735,576	3,027,089	4,035,151	3,169,805	4,765,442	2,918,610	5,242,458	3,168,282
High Service....	1,923,354	1,554,079	2,340,429	1,576,731	2,382,971	1,475,689	2,257,827	1,578,837	2,240,043	1,154,336	2,243,759	1,292,856	1,957,996	1,254,409
T'l Consumption	5,392,696	4,319,143	7,256,859	4,870,207	7,248,107	5,141,292	6,993,403	4,605,918	6,275,194	4,324,141	7,009,201	4,211,466	7,200,454	4,422,691
Date	17		18		19		20		21		22		23	
Low Service.....	3,360,340	3,163,523	4,253,655	3,134,880	4,609,801	3,262,265	4,402,269	3,151,849	5,749,345	3,458,663	4,861,531	2,918,851	4,410,364	3,193,489
High Service....	1,724,631	1,258,010	1,807,124	1,478,050	1,968,501	1,409,483	1,953,388	1,322,082	1,809,779	1,429,035	2,272,036	1,470,165	2,038,017	1,262,522
T'l Consumption	5,084,973	4,421,533	6,060,779	4,612,970	6,578,302	4,671,748	6,365,657	4,473,931	7,559,124	4,887,698	7,133,566	4,389,016	6,448,381	4,456,011
Date	24		25		26		27		28		29		30	
Low Service.....	4,281,841	2,782,047	3,958,613	3,336,385	4,547,296	3,362,736	4,689,329	3,454,588	4,666,262	3,493,319	4,763,086	3,561,454	4,580,684	3,367,675
High Service....	1,566,934	1,486,422	2,066,314	1,229,251	1,996,378	1,209,909	1,976,002	1,318,113	1,940,068	1,294,449	1,806,848	1,177,937	1,948,636	1,319,190
T'l Consumption	5,848,775	4,268,469	6,024,927	4,565,636	6,543,674	4,572,645	6,665,331	4,772,701	6,606,330	4,787,768	6,569,734	4,739,391	6,529,320	4,686,865

CONSUMPTION STATEMENT—MAY 1887.

[illegible]

CONSUMPTION STATEMENT—JUNE 1887.

	SUNDAY. .		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date.....	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.
Low Service....	.....	.....	.....	.....	.....	.....	4,683,262	3,359,129	5,087,009	3,520,952	4,412,224	4,253,602	5,352,838	3,550,762
High Service....	.....	.....	.....	.....	.....	.....	2,048,345	1,556,260	2,241,852	1,534,808	2,776,970	1,291,829	2,552,416	1,709,992
T'l Consumption	.....	.....	.....	.....	.....	.....	6,731,607	4,915,389	7,328,861	5,055,760	7,189,194	5,545,431	7,905,254	5,260,754
Date.....	5		6		7		8		9		10		11	
Low Service....	4,684,547	3,857,814	5,114,753	3,718,012	4,732,598	3,121,337	5,076,635	3,005,330	5,310,463	3,588,762	4,838,056	4,378,289	4,819,182	4,358,640
High Service....	2,365,065	1,495,304	2,630,922	1,440,738	2,428,432	1,792,761	2,662,599	1,852,799	3,065,914	1,541,582	2,939,453	1,387,209	2,054,544	1,857,128
T'l Consumption.	7,049,612	4,553,118	7,745,675	5,158,750	7,161,030	4,914,098	7,739,234	4,858,129	8,376,377	5,130,344	7,777,509	5,765,498	6,873,726	6,215,768
Date.....	12		13		14		15		16		17		18	
Low Service....	3,600,905	3,434,930	5,020,479	3,485,380	5,910,348	3,953,115	5,437,319	3,983,570	5,752,306	4,268,598	5,926,684	4,363,654	4,843,621	3,696,497
High Service....	2,542,675	1,601,398	3,056,819	1,758,447	2,503,645	1,577,099	3,252,922	1,591,683	3,024,099	1,603,315	2,907,939	1,618,505	2,660,016	1,466,883
T'l Consumption.	6,143,580	5,036,328	8,077,298	5,243,827	8,413,993	5,530,214	8,690,241	5,575,253	8,776,405	5,871,913	8,834,623	5,982,159	7,503,637	5,163,380
Date.....	19		20		21		22		23		24		25	
Low Service....	3,883,764	3,560,098	5,757,969	3,803,690	6,009,385	3,807,728	5,613,956	3,558,786	5,367,463	3,692,685	5,401,274	3,805,201	5,622,133	3,547,999
High Service ..	2,488,198	1,495,062	2,814,413	1,595,703	2,891,289	1,708,242	2,559,165	1,488,743	2,188,579	1,402,869	2,695,013	1,608,646	2,285,720	1,616,802
T'l Consumption.	6,371,962	5,055,160	8,572,382	5,399,393	8,900,674	5,515,970	8,173,121	5,047,529	7,556,042	5,095,554	8,096,287	5,412,847	7,907,853	5,164,801
Date.....	26		27		28		29		30					
Low Service....	3,539,725	3,619,686	5,685,816	4,646,624	5,542,748	4,194,148	5,519,064	3,636,606	5,806,070	3,895,114	.....	.....	.....	.....
High Service....	2,880,997	1,595,392	3,050,403	1,673,854	2,916,949	1,545,075	3,192,598	2,235,168	3,230,768	2,117,879	.....	.....	.....	.....
T'l Consumption	6,420,722	5,215,078	8,736,229	5,321,478	8,459,697	5,739,223	8,711,662	5,871,774	9,036,838	6,012,993	.....	.....	.....	.....

CONSUMPTION STATEMENT—JULY 1887.

	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date	Gal's.	Gal's	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's	Gal's.	Gal's.
Low Service.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,928,820	3,971,812	6,184,460	3,348,765
High Service.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,169,060	1,935,693	3,496,956	2,267,955
T'l Consumption	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,097,880	5,907,505	9,681,416	5,616,720
Date	3		4		5		6		7		8		9	
Low Service.....	5,233,735	3,618,133	5,155,785	3,484,637	5,323,790	3,854,666	5,370,044	3,893,071	5,613,969	3,998,722	5,965,595	4,189,453	5,825,323	2,587,833
High Service....	2,664,426	1,857,648	2,605,731	1,828,027	2,673,765	1,621,312	2,790,767	1,691,875	2,943,312	1,915,658	3,087,128	1,994,988	2,949,720	1,603,689
T'l Consumption	7,898,161	5,475,781	7,761,516	5,312,664	7,997,555	5,475,948	8,160,811	5,592,946	8,557,281	5,914,380	9,052,723	6,184,441	8,775,043	5,196,522
Date	10		11		12		13		14		15		16	
Low Service.....	4,535,722	3,762,408	5,894,241	4,077,480	5,886,944	4,105,498	6,026,448	4,156,194	5,935,681	4,468,935	5,225,716	4,411,758	6,392,433	4,062,310
High Service....	2,477,733	1,547,997	2,844,804	1,884,161	2,900,990	2,035,329	3,364,066	1,834,401	3,279,286	1,901,152	3,145,709	1,821,309	3,394,022	1,760,451
T'l Consumption	7,013,455	5,310,405	8,739,045	5,961,641	8,787,934	6,140,827	9,390,534	5,990,655	9,234,967	6,370,037	8,371,425	6,233,037	9,786,545	5,822,762
Date	17		18		19		20		21		22		23	
Low Service.....	4,222,196	3,881,523	5,840,831	4,293,755	5,304,146	3,213,184	5,529,952	4,114,714	5,344,077	3,847,911	5,509,911	4,387,081	5,150,746	4,199,599
High Service.....	2,518,371	1,479,623	2,909,128	1,729,279	2,546,204	1,822,471	2,674,934	1,670,639	2,633,240	1,510,016	2,897,137	1,402,047	2,706,672	1,322,855
T'l Consumption	6,740,567	5,361,146	8,749,959	6,023,034	7,850,350	5,035,655	8,204,886	5,785,353	8,037,317	5,357,927	8,407,048	5,789,128	7,857,418	5,522,454
Date	24		25		26		27		28		29		30	
Low Service.....	4,343,202	3,821,680	5,025,358	3,606,723	6,329,465	4,236,347	5,637,441	4,222,037	6,012,176	4,438,225	5,171,967	4,610,183	5,498,332	4,340,709
High Service....	2,677,973	1,912,532	2,953,508	1,862,608	3,000,511	1,732,712	2,819,891	1,767,759	2,847,788	1,813,785	2,935,110	1,637,694	3,072,660	1,743,689
T'l Consumption	7,021,175	5,734,212	7,978,866	5,369,331	9,329,976	5,969,059	8,457,332	5,989,796	8,859,954	6,252,010	8,107,077	6,247,877	8,570,992	6,084,398
Date	31													
Low Service.....	4,622,907	3,951,633	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
High Service....	2,374,822	1,752,220	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
T'l Consumption	6,997,729	5,703,853	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CONSUMPTION STATEMENT—AUGUST 1887.

	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY..		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date.....	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.
Low Service.....	.....	.....	5,384,491	4,867,788	5,835,381	4,514,862	5,627,337	4,499,886	6,077,815	5,187,274	5,259,286	5,196,878	5,651,102	4,806,556
High Service....	.....	.....	3,040,268	1,821,319	3,083,471	1,553,413	2,841,151	1,782,333	2,907,770	1,386,057	3,359,334	1,306,109	3,285,543	1,714,715
T'l Consumption	.....	.....	8,424,759	6,689,107	8,918,852	6,068,275	8,468,488	6,282,219	8,985,585	6,573,331	8,618,620	6,502,987	8,936,645	6,521,271
Date.....	7		8		9		10		11		12		13	
Low Service.....	5,403,262	4,605,482	5,961,203	4,038,578	5,467,643	4,017,073	5,652,664	3,930,412	6,077,065	3,816,678	5,537,356	3,955,265	5,720,189	3,799,287
High Service....	2,412,818	1,942,668	1,958,450	1,670,463	3,005,334	1,738,161	2,995,329	1,712,391	3,034,587	1,590,999	2,872,525	1,676,237	3,056,568	1,738,921
T'l Consumption	7,816,080	6,549,150	7,919,653	5,709,041	8,472,977	5,755,234	8,648,993	5,642,803	9,111,652	5,407,677	8,409,881	5,631,502	8,776,757	5,538,208
Date.....	14		15		16		17		18		19		20	
Low Service.....	4,316,998	3,562,447	5,469,003	3,836,103	5,669,424	4,018,213	5,866,519	3,752,038	5,496,753	3,742,611	5,724,533	3,896,353	5,693,668	3,518,934
High Service....	2,669,258	1,391,304	2,777,932	1,644,342	2,972,620	1,667,115	3,215,271	1,599,996	2,788,466	1,787,360	2,909,812	1,682,425	2,976,072	1,744,024
T'l Consumption	6,986,256	4,953,751	8,246,935	5,480,445	8,642,044	5,685,328	9,081,790	5,352,034	8,285,219	5,529,971	8,634,345	5,578,778	8,669,740	5,263,558
Date.....	21		22		23		24		25		26		27	
Low Service.....	4,341,254	3,824,087	5,088,379	3,482,682	5,962,823	3,854,411	5,323,339	3,726,866	5,469,350	3,904,004	5,488,390	3,550,044	5,325,713	3,639,821
High Service....	2,301,564	1,773,310	2,587,280	1,949,450	2,669,123	1,748,341	2,715,306	1,658,573	2,930,404	1,640,787	2,975,701	1,540,752	3,073,577	1,622,872
T'l Consumption	6,642,818	5,597,397	7,675,659	5,432,132	8,631,946	5,602,752	8,038,645	5,385,439	8,399,754	5,544,791	8,464,091	5,090,796	8,399,290	5,262,693
Date.....	28		29		30		31							
Low Service.....	3,813,920	3,920,498	5,930,395	4,112,238	5,834,834	3,970,785	6,093,576	3,973,283	.....	.....	.....	.....	.....	.....
High Service....	2,391,788	1,497,594	2,905,321	1,744,105	2,960,022	1,743,676	2,819,916	1,639,360	.....	.....	.....	.....	.....	.....
T'l Consumption	6,205,708	5,418,092	8,835,716	5,856,343	8,794,856	5,714,461	8,913,492	5,612,643	.....	.....	.....	.....	.....	.....

CONSUMPTION STATEMENT—SEPTEMBER 1887.

	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date	Gal's.	Gal's	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's	Gal's.	Gal's.
Low Service.....	.....	.....	.....	.....	.....	.....	.....	.....	5,737,352	4,001,543	5,361,284	4,068,722	5,832,055	3,899,928
High Service.....	.....	.....	.....	.....	.....	.....	.....	.....	2,946,603	1,731,316	2,855,789	1,917,728	2,744,295	1,450,632
T'l Consumption	.....	.....	.....	.....	.....	.....	.....	.....	8,683,955	5,732,859	8,217,073	5,986,450	8,576,350	5,350,560
Date	4		5		6		7		8		9		10	
Low Service.....	4,971,951	3,415,706	5,490,046	3,475,961	6,464,088	3,669,314	6,062,753	3,735,757	5,718,896	4,089,285	5,754,794	3,947,016	5,560,755	4,382,408
High Service.....	2,540,664	1,744,264	2,655,908	1,885,823	2,543,529	2,166,784	2,452,236	2,389,592	2,948,105	1,582,081	3,005,292	1,627,078	2,931,641	1,585,216
T'l Consumption	7,512,615	5,159,970	8,145,954	5,361,784	9,007,617	5,836,098	8,514,989	6,125,349	8,667,001	5,671,366	8,850,086	5,574,094	8,492,396	5,967,624
Date	11		12		13		14		15		16		17	
Low Service.....	4,373,879	4,071,581	5,233,704	4,516,668	5,885,094	3,860,193	5,749,927	3,948,769	5,976,052	4,038,452	5,191,364	3,641,021	4,926,012	3,342,303
High Service.....	2,489,609	1,623,418	2,386,982	1,688,448	2,194,588	1,706,127	2,620,085	1,748,689	2,928,585	1,678,506	2,614,729	1,662,572	2,872,181	1,478,541
T'l Consumption	6,863,488	5,694,999	7,620,686	6,205,116	8,079,682	5,566,320	8,370,012	5,697,458	8,904,637	5,716,958	7,806,094	5,303,593	7,798,193	4,820,844
Date	18		19		20		21		22		23		24	
Low Service.....	3,531,791	2,805,264	5,423,122	3,696,944	5,204,306	3,354,897	5,181,955	3,436,556	4,898,099	3,345,788	4,772,139	3,365,832	4,560,657	3,973,218
High Service.....	2,437,709	1,564,823	2,900,477	1,821,704	2,841,729	1,716,701	2,769,725	1,674,500	2,793,084	1,661,361	2,833,992	1,610,669	2,835,339	1,566,814
T'l Consumption	5,969,500	4,370,087	8,323,599	5,518,648	8,046,035	5,071,598	7,951,680	5,111,056	7,691,183	5,007,149	7,606,131	4,976,501	7,395,996	4,540,032
Date	25		26		27		28		29		30			
Low Service.....	4,027,633	3,202,442	5,195,660	3,486,615	4,791,867	3,554,149	4,808,087	3,489,878	4,733,976	3,628,396	4,744,881	3,189,458	.....	.....
High Service.....	2,164,026	1,865,251	2,595,201	1,541,578	2,985,451	1,449,254	2,679,501	1,611,211	2,311,827	1,596,789	2,599,564	1,656,632	.....	.....
T'l Consumption	6,191,659	5,068,703	7,790,861	5,028,193	7,778,318	6,003,403	7,487,588	5,101,089	7,045,803	5,225,185	7,344,445	4,846,090	.....	.....

CONSUMPTION STATEMENT—OCTOBER 1887.

	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.
Low Service.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,027,633	3,202,442
High Service.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,164,026	1,866,261
T'l Consumption	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,191,659	5,068,703
Date	2		3		4		5		6		7		8	
Low Service.....	3,713,496	3,539,341	4,301,157	4,162,875	4,352,525	3,517,255	4,703,756	3,331,922	4,784,808	3,473,585	4,587,051	2,884,529	4,766,338	3,106,049
High Service.....	2,304,028	1,609,895	2,261,412	1,658,693	2,680,369	1,520,176	2,773,629	1,496,592	2,627,489	2,049,041	2,611,882	1,625,732	2,876,629	1,784,711
T'l Consumption	6,017,524	5,149,236	6,562,569	5,821,568	7,032,894	5,037,431	7,477,385	4,828,514	7,412,297	5,522,626	7,198,933	4,510,260	7,642,967	4,890,760
Date	9		10		11		12		13		14		15	
Low Service.....	3,657,507	3,076,062	5,240,148	3,774,050	5,254,138	2,937,940	4,720,926	3,456,050	5,204,393	2,795,448	5,133,312	3,115,734	4,852,447	3,561,412
High Service.....	2,354,877	1,744,743	2,703,445	1,634,915	2,735,642	1,391,274	2,608,133	1,986,706	2,823,199	1,560,799	2,969,979	1,759,403	2,353,264	1,759,905
T'l Consumption	6,012,384	4,820,805	7,943,593	5,408,965	7,989,780	4,329,214	7,329,059	5,442,756	8,027,592	4,356,247	8,103,291	4,875,137	7,205,711	5,321,327
Date	16		17		18		19		20		21		22	
Low Service.....	4,089,216	3,620,924	4,084,244	3,995,468	4,707,186	3,303,247	4,497,783	3,624,743	4,601,243	2,928,402	4,325,426	3,880,532	4,257,434	3,473,732
High Service.....	2,345,979	1,605,833	2,633,760	1,556,332	2,502,003	1,650,833	2,384,024	1,650,921	2,501,365	1,603,662	2,396,267	1,745,479	2,432,303	1,509,165
T'l Consumption	6,435,195	5,226,757	6,718,004	5,551,800	7,209,189	4,954,080	6,881,807	5,275,664	7,102,608	4,532,064	6,721,693	5,626,011	6,689,737	4,982,897
Date	23		24		25		26		27		28		29	
Low Service.....	3,445,487	2,807,851	4,556,140	3,138,592	4,128,529	3,632,773	4,846,864	3,830,445	4,636,401	3,373,030	4,583,724	3,234,489	3,431,739	3,624,744
High Service.....	2,213,220	1,603,734	2,677,729	1,603,720	3,204,238	1,509,165	1,818,666	1,509,175	2,534,057	1,461,888	2,417,310	1,453,766	2,428,488	1,393,094
T'l Consumption	5,658,707	4,411,585	7,233,869	4,742,312	7,332,767	5,141,938	6,665,560	5,339,620	7,170,458	4,834,918	7,001,034	4,688,255	6,860,227	5,017,838
Date	30		31											
Low Service.....	3,822,730	3,103,388	5,092,919	3,259,339	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
High Service.....	1,870,745	1,417,370	2,466,246	1,605,648	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
T'l Consumption	5,693,475	4,520,758	7,559,165	4,864,987	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CONSUMPTION STATEMENT--NOVEMBER 1887.

	SUNDAY.		MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.	7 a.m. to 7 p.m.	7 p.m. to 7 a.m.
Date.....	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.	Gal's.
Low Service....	.....	.....	.....	.....	5,151,404	2,790,773	4,786,658	3,759,055	4,185,016	3,166,726	4,789,145	3,331,126	4,903,749	3,465,242
High Service....	.....	.....	.....	.....	2,349,344	1,529,037	2,068,185	1,626,125	2,223,971	1,672,491	2,396,123	1,493,044	2,107,807	1,341,029
T'l Consumption.	.....	.....	.....	.....	7,500,748	4,319,810	6,854,843	5,385,180	6,408,987	4,839,217	7,185,268	4,824,170	7,011,556	4,806,271
Date.....	6		7		8		9		10		11		12	
Low Service....	3,494,609	3,125,933	3,992,918	3,161,966	4,100,672	3,557,396	4,135,869	3,798,985	4,165,019	3,220,302	4,583,513	3,113,587	4,477,003	3,207,187
High Service....	2,516,828	1,414,013	2,708,387	1,343,456	2,552,503	1,448,977	2,278,226	1,460,415	2,256,748	1,457,249	2,269,330	1,481,440	3,335,456	1,317,605
T'l Consumption.	6,011,437	4,539,946	6,701,305	4,505,422	6,653,175	5,006,373	6,414,095	5,259,400	6,421,767	4,677,551	6,852,843	4,595,027	6,812,459	4,524,792
Date.....	13		14		15		16		17		18		19	
Low Service....	3,627,670	2,907,617	4,540,123	3,262,060	4,561,171	3,254,194	5,051,905	3,122,973	4,900,012	3,039,609	4,757,189	2,892,094	4,709,725	2,959,988
High Service....	2,096,725	1,439,243	2,313,174	1,440,743	2,448,386	1,340,180	2,147,399	1,409,479	2,020,778	1,503,248	2,074,219	1,481,563	1,917,955	1,425,876
T'l Consumption.	5,724,395	4,346,860	6,853,297	4,702,803	7,009,557	4,594,374	7,199,304	4,532,452	6,920,790	4,542,857	6,831,408	4,373,657	6,627,680	4,385,864
Date.....	20		21		22		23		24		25		26	
Low Service....	3,163,539	2,819,059	4,377,167	3,226,199	4,836,597	3,036,530	4,418,026	3,328,949	3,876,891	2,943,835	4,280,121	2,912,615	4,769,507	2,940,324
High Service....	2,442,965	1,323,535	2,485,216	1,466,899	2,435,891	1,415,742	2,205,826	1,490,982	1,877,029	1,448,653	2,328,715	1,419,926	2,346,227	1,420,490
T'l Consumption.	5,606,504	4,142,594	6,862,383	4,693,098	7,272,488	4,452,272	6,623,852	4,819,931	5,753,920	4,392,488	6,608,836	4,332,541	7,115,734	4,360,814
Date.....	27		28		29		30							
Low Service....	3,387,624	3,037,898	4,425,021	2,848,660	4,572,734	3,094,978	4,709,042	2,944,950	.....	.....	.....	.....	.....	.....
High Service....	2,485,578	1,293,508	2,243,733	1,462,189	2,145,591	1,488,164	2,340,174	1,650,644	.....	.....	.....	.....	.....	.....
T'l Consumption.	5,873,202	4,331,406	6,668,754	4,310,849	6,718,325	4,583,142	7,049,216	4,595,694	.....	.....	.....	.....	.....	.....

NEW LIST

—OF—

HYDRANTS SET

FOR THE

YEAR ENDING NOVEMBER 30, 1887.

HYDRANT STATEMENT.

FOR THE YEAR ENDING NOVEMBER 30, 1887.

(As a continuation to the list of Hydrants in the reports of 1883, 1884, 1885 and 1886.)

NEW HYDRANTS SET.

LOW SERVICE.

No.		Pressure Pounds
46.	N.W. corner Summer and 8th aves. (Galvin)	39
135.	S.W. cor. Lincoln ave. and Winthrop st. (Galvin) - - - - -	40
136	Parker st., w. s. at Greenwood Lake R. R. (octogan) - - - - -	28
137	Parker st., w. s., betw. Verona and Montclair aves. (Galvin) - - - - -	16
138	Summer ave., w. s., opp. May st. (Galvin) - -	33
249	Saybrook pl., w. s., betw. Park pl. and Front st. (Galvin) - - - - -	24
296	Broad st., w. s., betw. New and Park st's. (Galvin, 6-inch) - - - - -	28
446	Green st., n. s., betw. Broad and Mulberry sts. (Galvin) - - - - -	23
497	N.W. corner Sherman ave. and Earl st. (Galvin)	34
595	S.E. corner N. J. R. R. ave. and Hamilton st. (Galvin) - - - - -	33
596	N. J. R. R. ave., e. s., betw. Lafayette and Green st's. (Galvin) - - - - -	33
597	S.E. cor. N. J. R. R. ave. and Green st. (Galvin)	33
735	Lexington st., w. s., betw. River and Bowery sts. (Galvin) - - - - -	31
736	Ashbridge st., e. s., betw. Ferry and Darcy sts. (Galvin) - - - - -	35
737	St. Charles st., w. s., between Komorn and Kossuth sts. (Galvin) - - - - -	38
738	St. Francis st., w. s., betw. George and Komorn sts. (Galvin) - - - - -	35
787	Dock st., s. s., betw. Brown and Poplar sts. (Galvin) - - - - -	33
788	S.W. cor. Christie and Bowery sts. (Galvin) -	30
825	N.W. cor. Chestnut and Jefferson sts. (Galvin)	38
826	Bay ave. (Galvin, private) - - - - -	38
867	N.W. corner Wright st. and N. J. R. R. ave. (Galvin) - - - - -	33
868	N.W. corner Avenue C and Wright st. (Galvin)	37

HIGH SERVICE.

No.		Pressure Pounds
1139	Milford ave., w. s., betw. Vanderpool and Alpine sts. (Galvin) - - - - -	68
1140	S.W. corner Badger ave. and Vanderpool st. (Galvin) - - - - -	67
1141	N.W. corner Johnson ave. & Bigelow street (Galvin) - - - - -	69
1142	N.W. corner Johnson ave. and Runyon street (Galvin) - - - - -	78
1248	N.E. corner Drift st. and Clifton ave. (Galvin)	65
1398	N.W. cor. Hunterdon st. and 14th ave. (Galvin)	38
1436	N.E. corner 7th ave. and 3d st. (Galvin) - - -	52
1489	Mt. Prospect pl., e. s., betw. 2d and Mt. Prospect aves. (Galvin) - - - - -	55
1581	N.E. corner 16th ave. and S. 7th st. (Galvin) -	35
1582	Rose st., e. s., betw. Brenner and Kipp sts. (Galvin) - - - - -	37
1583	N.W. corner Littleton and 15th aves. (Galvin)	34
1584	Brenner st., n. s., betw. Kent and Rose sts. (Galvin) - - - - -	32
1624	N.E. corner 16th ave. and S. 11th st. (Galvin)	32
1721	N.E. corner Rose st. and Badger ave. (Galvin)	65
1722	N.W. corner Livingston street and Avon avenue (Galvin) - - - - -	65
1723	N.W. corner Peshine ave. and Rose st. (Galvin)	55
1724	N.W. corner Peshine and Avon aves. (Galvin)	63

HYDRANTS REMOVED.

701	S.E. corner of Ashbridge and Ferry sts. to N.W. cor. Fillmore and Ferry sts. (Galvin) - - -	34
1572	S. 6th st., w. s., betw. 16th and Springfield avenues to s. w. corner of S. 6th st. and 16th ave. (Hewes and Phillips) - - - - -	35

SUMMARY OF HYDRANTS.

Low Service	- - - - -	738
High Service	- - - - -	583
Belleville Village	- - - - -	17
Belleville Pumping Station	- - - - -	3

Total.....1341

