

ELEVENTH

SEMI-ANNUAL REPORT

OF THE

Board of Water Commissioners

TO THE

COMMON COUNCIL

OF THE

CITY OF CHICAGO.

---

JANUARY 1<sup>ST</sup>, 1857.

---

CHICAGO :

JAMESON & MORSE, PRINTERS, No. 14 LA SALLE STREET.

1857.

ELEVENTH

SEMI-ANNUAL REPORT

OF THE

Board of Water Commissioners

TO THE

COMMON COUNCIL

OF THE

CITY OF CHICAGO.

---

JANUARY 1st, 1857.

---

CHICAGO :  
JAMESON & MORSE, PRINTERS, No. 14 LA SALLE STREET.  
1857.

# BOARD OF WATER COMMISSIONERS.

---

GEO. W. DOLE,  
JOHN C. HAINES,  
ORRINGTON LUNT.

---

## OFFICERS.

SUPERINTENDENT,  
BENJ. F. WALKER.

TREASURER,  
GEO. W. DOLE.

SECRETARY,  
P. RYDER FORREST.

CLERKS,  
JOSIAH H. BROSS,  
W. R. LARRABEE.

COLLECTOR,  
CHAS. R. VANDERCOOK.

ENGINEERS AT PUMPING WORKS,  
D. C. CREGIER, Chief.  
H. M. FULLER, Assistant.

# REPORT.

---

OFFICE OF THE "CHICAGO CITY HYDRAULIC CO." }  
CHICAGO, FEBRUARY 9TH, 1857.

*To the Honorable, the Mayor and Aldermen of the City of Chicago, in Common Council assembled:*

GENTLEMEN : In conformity with the provisions of our Charter, we respectfully present our Eleventh Semi-Annual Report, for the year ending December 31st, 1856, together with the Reports of the Treasurer, Secretary, and Superintendent.

During the past season about nine miles of distribution pipe has been laid, in the several divisions, as follows :

In West Division,	.....	20,841 feet.
" North    "	.....	18,731   "
" South     "	.....	11,946   "

Costing about \$48,534.62.

Also; a 24-inch Main from the Engine House, through Chicago Avenue, and across the North Branch of the River to Union Street, on the West side, costing \$44,289.19, making in all, now laid, Fifty-Two and One-Half Miles. Owing to a delay of a small portion of the Main at Buffalo, we were not enabled to make the connection with the river pipe, which latter has been laid in a satisfactory manner. This will be attended to early in the Spring.

From Union Street a 16 inch Main is to be laid to the New Reservoir in the West Division, and also to connect at Adams Street with the present Main now leading across the river. This will give us additional security against accidents to our river pipes, and form a circle of Mains extending from the Engine House, and connecting with all the Reservoirs, thus equalizing the head of water throughout the City. Owing to the small size of our present Mains, about one-third ( $\frac{1}{3}$ ) of the water pumped by the present large engine, is wasted back into the well, which, when



the above connections are made with the Reservoirs, and large Mains, will entirely be obviated.

Whenever our large engine, now in use, is stopped for examination or repairs, the small one cannot keep a full head of water in the tank. We expect, however, the new engine which has been constructed, during the past season, by Geo. W. Quintard, Esq., of the "Morgan Iron Works," New York, to take the place of this small one. The new engine will be in operation on or about the 1st of May next, and is intended to be the finest pumping engine in the country. The supply of water has been much less interrupted than heretofore, and very little complaint has been made on this account.

In case the authority for a farther loan, which has been applied for, is granted, and we are able to negotiate our bonds, we shall, during the coming season, commence the construction of Reservoirs in the North and West Divisions, upon the lots which were purchased for this purpose during the past year, and also continue an extension of the distribution pipes where most needed.

The receipts for Water Rents have amounted to \$75,889.43, for the year 1856, being an increase of 21,894.94 over the previous one. We expect an equally large advance for the present year.

During the winters of 1855-6, and 1856-7, the frost has reached a greater depth than ever heretofore known, thus causing great annoyance to water takers, whose service pipes were not properly laid, and in some instances penetrating to the points where they connected with the distribution pipes. The latter have frozen at but two or three points where there were dead ends or but little circulation, being laid from four to four and one-half feet deep. This depth, when the works were commenced, was considered unnecessary by some of our best citizens, but the past and present winters show the wisdom of this act of our first Board, under the recommendation of the Chief Engineer, Wm. J. McAlpine, Esq.

The whole amount of Bonds issued is \$750,000. One hundred thousand dollars of which has been issued since our last annual report, netting the par value of a seven per cent. bond.

The following is a statement of the expenditures of the Board, and cost of the works to December 31st, 1856 :

Whole amount of Bonds issued by Commissioners, bearing	
six per cent. interest, .....	\$750,000 00

## EXPENDITURES.

Water Works, (or Construction and Extension accounts)	\$641,509 93
Stock account, Pipe and Materials on hand,-----	15,572 59
Office Furniture,-----	229 80
Colwell & Co., paid them on account, Freight on Pipes,	610 34
Coal account, amount on hand, cost,-----	8,204 00
Discount on Bonds,-----	67,446 74
Balance of interest and operating expenses from commence- ment of works, as per Secretary's account,-----	11,912 90
Balance in hands of Geo. W. Dole, Treasurer, after deduct- ing amount due Wood & Co.,-----	4,513 70
	<hr/>
	\$750,000 00

For a more detailed Statement of Receipts and Expenditures, also, for valuable Tables showing the number of Water-takers, and a Statement of particular amounts received from the different sources to which the water has been supplied, we refer you to our Secretary's excellent Report. Our Superintendent's Report will furnish you with the general details of the extension and operation of the works.

All of which is respectfully submitted,

GEO. W. DOLE,  
JOHN C. HAINES,  
ORRINGTON LUNT,

*Board of Water Commissioners.*

STATE OF ILLINOIS, }  
COOK COUNTY, } ss.

I, JASPER A. HOISINGTON, a Justice of the Peace of said County, do hereby certify that the above Statement was duly sworn to, before me, by the above named Commissioners, this ninth day of February, A. D. 1857.

J. A. HOISINGTON, J. P.



# SUPERINTENDENT'S REPORT.

---

WATER COMMISSIONER'S OFFICE, }  
CHICAGO, January 1st, 1857. }

*To the Board of Water Commissioners of the City of Chicago :*

GENTLEMEN : In accordance with my duty, I herewith submit my Annual Report of the Condition of the Works under your charge. Also, a detailed Statement of the Extension of Pipes, etc., during the past year, and such other suggestions as I deem appropriate.

It affords me pleasure to be enabled to state, in this connection, that we have experienced but very little trouble in the operating department, the past year, as much of the difficulty heretofore experienced has been obviated.

The basin, from which the water is taken into the pump-well, has required very little attention, and the aqueduct has been almost entirely free from sand.

It is probable that we shall find it necessary to have some dredging done in the basin early in the spring, and that the protection will require some little repairs to keep it in good condition.

Notwithstanding the severity of the winter of 1855-6 our distribution pipes were only injured by the frost in two localities, and those were dead ends, one on Twelfth street, near the lake, and the other on Sand street, between Indiana and Ontario streets. The latter was the most serious ; injuring the pipes so much that we had to take up nearly a whole block of 3 inch pipe.

RESERVOIR.—The reservoir has required no repairs of any account the past year, and through the intense cold of last winter and the present, together with the height of the tank from the surface of the earth, the water in it has never been frozen since it has been in use. The tank has always leaked a little when full, or nearly so, but not enough to be very objectionable on that account.

ENGINES.—The condensing engine has been run the past year 4,115 hours, 15 minutes, being an average of 16 hours, 44 minutes, per day, and making 2,120,727 revolutions.

The non-condensing engine has been run 3,101 hours, 35 minutes, making 1,181,072 revolutions.

The city has been without water, during the past year, 66 hours and 23 minutes, 83 minutes of which was caused by the condensing engine, 2 hours and ten minutes by the non-condensing engine, 57 hours and 20 minutes during the night, and 5½ hours during the day, while at work in the pump-well on the foundations of the new engine.

The cost of repairs on the condensing engine is \$94.59, including a new set of toes and brasses. The repairs on the boiler, \$45.45. The repairs on the duplicate engine, \$104.06.

During the hottest part of the summer months, the small engine was hardly able to keep the city supplied, and furnish water in the second story of buildings.

## PIPE EXTENSION.

Nine miles and three thousand nine hundred and ninety-eight feet of distribution pipes have been laid, the past year, as follows :

### SOUTH DIVISION.

Size of Pipe	Street.	Between what Streets.	No. of Feet.
4 inch	Griswold	Harrison to Taylor	1671 feet.
4 "	Taylor	Griswold to Wells	536 "
4 "	Sherman	Harrison to Taylor	1632 "
8 "	Van Buren	Clark to Market	1591 "
4 "	Van Buren	for Hydrants	20 "
8 "	Clark	South of Twelfth	759 "
6 "	Wabash Avenue	From Harmon Court, south	3310 "
4 "	Wabash Avenue	for Hydrants	23 "
4 "	Market	From Van Buren, south	318 "
4 "	Alley No. 1	Lake and South Water	370 "
4 "	Alley No. 2	Lake and Randolph	390 "
4 "	Harmon Court	Michigan Avenue to State	884 "
4 "	Harrison	Mich. Av. to Wabash Av.	442 "

Total, 11946



## WEST DIVISION.

Size of Pipe	Street.	Between what Streets.	No. of Feet.
8 inch	Clinton	Jackson to Harrison	1111 feet.
6 "	Polk	Clinton to Canal	386 "
4 "	Polk	East of Canal	800 "
4 "	Jackson	" "	264 "
4 "	Jefferson	Monroe to Harrison	2241 "
4 "	Harrison	Jefferson to Desplaines	394 "
4 "	Canal	Harrison to Polk	832 "
6 "	Halsted,	Kinzie to Mil. Avenue	533 "
4 "	Morgan	Randolph to Prairie	1339 "
10 "	Madison	West of Halsted	772 "
8 "	Madison	" "	2200 "
4 "	Sangamon	Adams to Madison	939 "
4 "	Sangamon	Randolph to Lake	440 "
4 "	Washington	Morgan to May	990 "
4 "	Peoria	Washington to Randolph	419 "
4 "	Peoria	Jackson to Adams	486 "
8 "	Morgan	From Adams, south	645 "
4 "	Green	Adams to Jackson	456 "
6 "	Halsted	Kinzie to Mil. Avenue	535 "
4 "	Green	Kinzie to Milwaukee Av.	1072 "
6 "	Lake	Desplaines to Morgan	2000 "
4 "	May	Washington to Randolph	462 "
4 "	Carroll	Jefferson, west	980 "
4 "	Green	Madison to Washington	450 "
4 "		for Hydrants	95 "

Total, 20841

## NORTH DIVISION.

Size of Pipe	Street.	Between what Streets.	No. of Feet.
4 inch	Green Bay	Chicago Av. to Wolcott	2068 feet.
6 "	Wolcott	Maple to Church	2489 "
4 "	Cass	Chicago Av. to White	837 "
4 "	La Salle	Erie to Division	3553 "
4 "		For Hydrants	194 "
4 "	Ohio	Franklin to Market	388 "
4 "	Market	Indiana, north	450 "
6 "	Division	Wolcott to Sedgwick	2065 "
6 "	Wells	Division to N. Avenue,	2572 "
6 "	Clark	N. of Chicago Avenue	25 "
4 "	No. Av.	Wells to Larrabee,	1706 "
4 "	Cedar	From Wolcott East	600 "
4 "	Rust	Ontario to Chicago Avenue	1170 "
4 "	Erie	Wells to Franklin	414 "
4 "	Franklin	Erie North	200 "

Total, 18731

## RECAPITULATION.

Total laid in the South Division, .....	11946 feet.
“ “ “ West Division, .....	20841 “
“ “ “ North Division, .....	18731 “

Total amount laid,      51518

## EXTENSION OF MAIN.

Size of Pipe	Street.	Between what points laid.	No. of Feet.
24 inch	Chicago Avenue	From Engine House, west to the North Branch	5030 feet.
16 “	Union Street	Chicago Avenue, south to Milwaukee Avenue, (W. D.)	2037 “
Total amount of Main,			7067 “

The amount expended in extension of distribution pipes, the past season, is \$48,534.62.

The amount expended in extension of the main is \$44,289.19.

The 24-inch main extending from the engine house on Chicago avenue, west to the North Branch, has been laid, and a 24-inch wrought iron river pipe has been made by Charles Ressig, at a cost of \$2,365.50.

The dredging, sinking in its place, and covering with sand, by Durfee & Green, cost \$1,200.

The river was dredged to a depth of 18 feet and the pipe sunk in the trench thus made, after which the trench was filled and the pipe covered with sand to a depth of three feet, leaving the water over the pipe 13 feet deep at the usual stage of water.

The connections of the 24-inch main with the river pipe have not yet been made.

There has also been expended in building a coffer dam and filling around the end of the river pipe, the sum of \$50.

It may appear strange to some that we should require so large an amount each year for extending the works, yet when we realize that the length of streets included in the area between North Avenue in the North Division, and North Street in the South Division, and East of

May Street in the West Division, to the Lake, is something over two hundred miles, and that our distribution pipes are now extended to those points on some streets, and that only  $52\frac{1}{2}$  miles are now laid, we can form some idea of the amount which will be required for extending the works for the next ten years.

## STOP COCKS.

New stop cocks have been added in the following places, viz:

### SOUTH DIVISION.

Size.	
1 4 inch.	On Sherman, corner of Polk Street.
1 4 "	Griswold, corner of Polk. "
1 6 "	Wabash Avenue, corner of Twelfth.
1 4 "	Wells, cor. of Alley leading to North's Theatre.
1 4 "	South Water, near M. C. R. R. Depot.

### NORTH DIVISION.

1 4 "	La Salle, near Division Street.
1 4 "	Wolcott, near Division Street.

### WEST DIVISION.

1 6 "	Lake, corner of Halsted Street.
1 8 "	Madison, corner of Halsted. "
1 4 "	Peoria, corner of Adams. "
1 4 "	Green, " " " "
1 8 "	Morgan, " " " "
1 4 "	Morgan, corner of Randolph. "
1 4 "	Sangamon, corner of Randolph. "

In my last Annual Report I presented a plan and estimate for a reservoir which would be capable of holding about seven million gallons. But, situated as we are, on a plain, and no method of obtaining a head except by artificial means, large reservoirs are consequently very expen-



sive, and your Honorable Board, upon further consultation with the Chief Engineer, concluded to adopt the plan of duplicating the pumping works, when it should become necessary, and erecting additional tanks, similar to the one now used on Adams street, for the purpose of equalizing the head in different parts of the city.

Since the completion of our Breakwater the water supplied by our Works has been generally very clear, excepting for a few weeks in the spring, and autumn, and I doubt whether there is a water-works of any magnitude in the United States which affords purer or more wholesome water than ours.

A contract was made with George W. Quintard, of New York, on the 29th day of May, 1856, for a condensing steam engine and pumps, for the sum of \$51,000. The engine to have a cylinder, 60 inches in diameter, and ten feet stroke, with two double acting pumps, 40 inches in diameter, and  $6\frac{1}{2}$  feet length of stroke; the whole to be made in the strongest and most perfect manner and warranted by the contractor for one year from the time of its completion.

The contractor was to have had the engine completed and ready for use by the first of December. He was not however enabled to perform his agreement by the time specified, and some portions of the machinery have not yet arrived in Chicago, but the parts are nearly all constructed and will be put together this winter, and the engine in working order by the first of May.

From the appearance of the work and the well-known character of the contractor, I have no doubt it will be, when completed, one of the most perfect pumping engines in the country.

It was not considered safe to remove the small high-pressure engine in making room for the new one in its place, until the portions of the latter were nearly all here, consequently the foundation for the new engine is not quite completed, but will be so in a few weeks.

The amount expended on the foundation for the new engine to the first of January, is \$2,081.97.

The total cost of the engine, pumps, etc., when completed, including expense of extra foundation, removing the small engine, etc., will be not far from \$60,000.

The small engine is being removed and set up in the center of the engine house, to be used as occasion may require until the completion of the new engine, when it may be policy to so alter the former as to make it a condensing engine, to pump out the well for the purpose of cleaning, and other exigencies.

Two lots have been purchased, one each in the North and West Divisions, for reservoirs, at a cost of \$16,050.

Both of the contemplated reservoirs should be built as soon as sufficient funds can be raised for that purpose. When completed, and the new main continued and connected, with the one on Adams street, in the West Division, the works can be operated as originally designed, and I think more economically than at present.

The cost of the reservoirs, if built upon the plan designed, will be about \$62,500 each.

The additional 16 and 12-inch main required, will cost not far from \$15,000.

There will also be required about ten miles of distribution pipes next season, which will cost, on an average, \$6,000 per mile, including pipes, trenching, lead, pipe laying, etc.

Therefore, the amount needed for extension during the current year, provided both reservoirs are built, will be as follows:

For Extension of 12 and 16-inch Main,-----	\$ 15,000
For Extension of Distribution Pipes,-----	60,000
For Two New Reservoirs,-----	125,000
Total,-----	<u>\$200,000</u>

I would suggest to your Honorable Board that I think it due to the character of the works that a reasonable amount should be appropriated for fencing and ornamenting the grounds belonging to the company. In my estimate for the new reservoirs, I have included an amount sufficient to grade the lots, fence them, and set out shade trees, &c. Heretofore our attention has been exclusively confined to the purpose of making the works pay, without much regard to appearance. This was well in the commencement, and should continue to be the *main* object of our solicitude. Nevertheless, I think the grounds on which our buildings are erected should be made to appear inviting, rather than repulsive to the visitor, and to those living in the vicinity of them.

We are considerably annoyed with our stop cocks, from the valves getting loose or breaking and dropping down, several of which have been taken out during the season, and new ones substituted. There are now quite a number that are either broken, or do not work well, which we have not had time to repair or to replace with new ones.

I am satisfied that the Commissioners would find it for the interest of the city to erect a small shop, in which to do their own repairs, and manufac-



ture stop cocks, hydrants, etc. Even if the manufactured articles should cost a trifle more, in the beginning, than they could be bought for, it would be more than made up in the quality; and I am satisfied that our repairs could be executed for from 30 to 50 per cent. less than we now get them, to say nothing of the expense, delay and trouble of running after the work.

Almost every other water-works in the country has found it necessary to adopt some plan of doing their own repairs, and I think we shall not find it for our interest to remain longer an exception to this almost general rule.

We have ordered 50 new hydrants made the past season, at the same shop, and from the same patterns, as those used at the commencement of the works, 35 of which have been completed, costing \$23 each. We have had but very little trouble with our fire-hydrants, excepting those which has been used by the water cartmen, street sprinklers, and for building purposes. Those being constantly in use have required to be repaired often, and have been the source of considerable annoyance. We have, however, as I think wisely, decided to have them used hereafter only for the purpose for which they were designed.

The plan of sewerage adopted by the Board of Sewerage Commissioners seems necessarily to conflict somewhat with the arrangement of our water-pipes, which were not located with reference to that plan, and consequently have to be raised or lowered to avoid obstructing them. These alterations cannot be made without frequently depriving a portion of our citizens of their supply of water, which is calculated to bring discredit upon the water-works, unless the people can be made to understand the matter and make due allowance for the same.

Whether these alterations in the lines of pipes will operate to the detriment of the works remains to be proved, but there seems to be no alternative if the plan of sewerage is carried out. Of course the Sewerage Commissioners have to pay the expense of the alterations.

In Schedule A. will be found a list of pipes, branches, sleeves, etc., in the pipe yard.

In Schedule B. a list of pipes, branches, sleeves, stock, etc., on the engine house lot.

In Schedule C. a list of tools, supplies, etc., in the engine house.

In Schedule D. a list of stock, tools, etc., in the reservoir building.

In Schedule E. a list of miscellaneous items.

In Schedule F. a list of pipe-laying tools, etc.



The whole amount of water pipes now laid in the city is as follows :

	24	inch	Main,	-----	5,030	feet.
	16	"	"	-----	5,760	"
	12	"	"	-----	9,102	"
State street,	30	"	River Pipe,	-----	280	"
Chicago ave.,	24	"	"	-----	236	"
Adams st.,	12	"	"	-----	176	"
Kinzie st.,	8	"	"	-----	175	"
	10	"	Distribution Pipe,	-----	5,978	"
	8	"	"	-----	20,375	"
	6	"	"	-----	63,106	"
	4	"	"	-----	136,582	"
	3	"	"	-----	30,301	"
Total,					-----	277,101

Or nearly 52½ miles.

From the fact of our main being so small, and having in consequence to waste a large amount of water back into the well when running the large engine, I have not deemed it advisable to submit an estimate of the amount of water pumped, but suffice to say, that we have furnished nearly the whole amount of water used in the city. Probably 80,000, at least, of our population have been supplied, either directly from the pipes or through water cartmen.

During the warm weather the street sprinklers use nearly half a million of gallons daily, and in the coldest weather about that amount is wasted to prevent service pipes and hydrants from freezing, so that the duty performed by the engines will equal from 4 to 4½ millions gallons per day.

After our new main is completed, we shall be enabled to institute a comparison with other works in regard to the duty of the engines and the amount of fuel consumed.

I would suggest to the Board, the propriety of passing an order regulating the service pipes used by the licensed plumbers, so as to have material of a uniform strength and thickness. The pipe generally in use being only medium quality, the consequences are injurious to water takers, and a great waste of water from the works. Also, that measures be taken to enforce the order passed by the Board, regulating the depth to which service pipes shall be laid.

In conclusion, it affords me pleasure to be enabled to bear testimony to the faithfulness and interest manifested by all the employees connected with the company, and especially to the untiring perseverance and industry of the Engineer in charge of the Pumping Works, D. C. Cregier, Esq., and his assistant, Mr. H. M. Fuller, whose duties have been both responsible and arduous, and to whose efficient aid in every contingency is due much of the credit for such a constant supply of water during the past year, notwithstanding the many alterations and improvements necessary on account of preparing for the new engine.

All of which is respectfully submitted,

B. F. WALKER,

Superintendent.

### SCHEDULE A.

#### LIST OF PIPES, BRANCHES, SLEEVES, &C., IN PIPE YARD.

Pieces.		Pieces.	
50	8 inch pipes.	3	12 to 8 inch Tapers.
26	4 by 4 One Way Branches.	12	8 inch Caps.
30	4 by 4 Two " "	13	6 " "
10	6 by 4 " " "	6	4 " Sleeves.
9	8 to 6 inch Tapers.	56	16 " Pipes.
24	8 inch Sleeves.	3	4 " Stop Cocks.
8	24 " "	6	6 " " "
3	4 by 6 One Way Branches.	2	Presses for testing Pipes.
30	pieces Beveled Hubs, 6 inch.	2	sets Platform Scales.
40	" " " 4 "	2	sets Beam Scales.
1	6 inch Stop Cock.	1	Press for testing Service Cock
2	8 " " "		and one Blacksmith's Vice.
1	12 " " "		

## SCHEDULE B.

LIST OF PIPES, BRANCHES, SLEEVES, &amp;C., AND STOCK ON ENGINE HOUSE LOT.

12	Wooden Stop Cock Boxes.	44	16 inch Sleeves.
13	" Hydrant "	2	10 inch Caps.
2	16 inch One Way Branches.	27	4 to 3 Two Way Branches.
60	3 inch Caps.	20	short pieces assorted pipes.
10	16 inch Pipes.	3	8 inch pipes.
24	12 inch Sleeves.	1	Old Hydrant.
10	8 to 10 One way Branches.	1400	Tons of Coal.
1	12 to 12 " " "	1	16 inch Stop Cock.

## SCHEDULE C.

LIST OF TOOLS, SUPPLIES, ETC., IN THE ENGINE HOUSE.

MAIN ROOM.			
1	Hand Oil Can.	8	Grate Bars.
3	Screw Wrenches.	15	New Grate Bars.
1	Slate.		Lot Scrap Iron.
6	Log Books.		
2	Stoves and Pipe.		STORE ROOM.
1	Dudgeon Lifting Pump.	8	Pairs Blocks and Falls.
70	Feet Rubber Hose.	$\frac{1}{2}$	Keg White Lead.
1	Writing Desk.	1	Force Pump Plunger.
1	Thermometer.	9	Hand Lamps.
1	Table.	16	lbs. Hemp Packing.
1	Iron Ladder.	1	40 Gallon Oil Can.
NORTH BOILER ROOM.		1	5 " " "
1	Grindstone.	2	Tin Tunnels.
1	Vice.	2	Key Wrenches.
1	Stop Cock Wrench.	1	Hammer.
1	Set Fire Tools.	4	Socket Wrenches.
	Part set Carpenter's Tools.	1	Lead Ladle.
10	Grate Bars.		Lot Scrap Rubber.
1	Set Platform Scales.		Eye Bolts, &c., to Engine.
1	Coal Box.	3	lengths $2\frac{1}{2}$ inch Copper Pipe.
2	Shovels, 1 Wheelbarrow.	4	Rubber Valves.
4	Old Castings.	2	Composition Valve Seats.
SOUTH BOILER ROOM.		1	Composition Guard.
2	Stop Cock Wrenches.		Lot old Bolts, Nuts and Washers.
	Part Cask new Zinc.	8	Chisels.
		5	Drills.
		1	Drilling Crab.



## SCHEDULE D.

## LIST OF STOCK, TOOLS, ETC., IN THE RESERVOIR.

21	Street Hatches.	15	Hammer Handles.
6	Street Hatch Lids.	1	roll Leather.
25	Fire Hydrants.	20	Hydrant Nozzles.
2	at Clark's Shop.	1	Auger.
1	6 x 4 One Way Branch.	30	Wooden Plugs.
$\frac{1}{2}$	bbl. Rosin.	1	Water Pail.
1	piece Rope.	2	Oil Cans.
3	Shovels.	1	Wheel Barrow.
3	Water Pots.	1	Hydrant Bend.
3	Drills.	384	Pigs Lead, 26,880 lbs.

## SCHEDULE E.

## MISCELLANEOUS ITEMS.

12	16 inch Pipes on Union street.	1	Buggy Wagon.
53	24 " " at Granger's.	1	Old " "
8	24 " " on Chicago ave.	1	Team "
1	24 to 16 inch Taper.	3	Horses.
4	24 inch Stop Cocks.	1	Sleigh.
3	sets Harnesses.		

## SCHEDULE F.

## LIST OF PIPE LAYING TOOLS, ETC.

2	Tool Houses.	10	Wooden Pounders.
2	Copper Pumps.	1	Guage.
2	Tin "	11	Eye Bolts.
7	Caulking Hammers.	11	Water Pails.
2	Saws.	22	Shovels.
2	Axes.	10	Picks.
12	Hardies.	7	Stop Cock Wrenches.
1	Kettle for heating water.	29	Caulking Irons.
2	" " " lead.	4	Gasket "
3	Ladles.	6	Tool Boxes.
2	Sledge Hammers.		

# TREASURER'S REPORT.

## BOARD OF WATER COMMISSIONERS OF THE CITY OF CHICAGO,

1856. *In account with* GEO. W. DOLE, *Treasurer.* CREDIT.

June	30	By	Balance on hand	-----	\$			108,872	31
July	9	"	Received of P. R. Forrest, Secy	--		1,105	38		
	11	"	"	"	--	540	89		
	14	"	"	"	--	441	45		
	17	"	"	"	--	523	25		
	18	"	"	"	--	408	15		
	19	"	"	"	--	389	95		
	22	"	"	"	--	413	70		
	23	"	"	"	--	375	71		
	25	"	"	"	--	759	03		
	26	"	"	"	--	240			
	28	"	"	"	--	328	79		
	29	"	"	"	--	307	40		
	31	"	"	"	--	469	95		
								6,303	65
Aug.	4	"	"	"	--	544	13		
	"	"	"	D. C. Cregier	----	100			
	5	"	"	P. R. Forrest, Secy	--	438	15		
	7	"	"	"	--	464	57		
	"	"	"	Sewerage Coms	----	138	50		
	9	"	"	P. R. Forrest, Secy	--	301	90		
	12	"	"	"	--	565	42		
	13	"	"	"	--	399	80		
	15	"	"	"	--	469	63		
	16	"	"	"	--	355	50		
	19	"	"	"	--	302	17		
	22	"	"	"	--	450	52		
	26	"	"	"	--	259	96		
	29	"	"	"	--	654	81		
	30	"	"	"	--	420	27		
								5,865	33
Sep.	4	"	"	"	--	476	58		
	12	"	"	"	--	458	60		
	22	"	"	"	--	551	45		
	30	"	"	"	--	953	56		
								2,440	19
Oct.	4	"	"	"	--	598	52		
	"	"	"	Coal sold	-----	95	06		
	10	"	"	P. R. Forrest, Secy	--	472	45		
	"	"	"	H. H. Pitts for old iron sold	-----	62	95		
	18	"	"	P. R. Forrest, Secy	--	648	38		
	25	"	"	"	--	553	15		
			Amount forward	-----	\$	2,430	51	123481	48

## ACCOUNT CONTINUED.

		Amount brought forward.....	\$	2,430	51	123,481	48
Oct.	30	By received of P. R. Forrest, Secy..		346			
	31	" " " " " "		620	28		
	"	" " J. J. Sands for old lead pipe.....		4	52		
						3401	31
Nov.	3	" " J. Warner, Scrap Iron sold on account of Jones & Co.....		20	79		
	"	" " J. Warner, do. Wood & Co.....		66	74		
	"	" " J. Warner, do. Water Works.....		100	39		
	"	" " P. R. Forrest, Secy..		1129	19		
	4	" " " " " "		829	50		
	5	" " " " " "		416	50		
	6	" " " " " "		1581	50		
	7	" " " " " "		1276	75		
	"	" " Sewerage Commiss....		461	34		
	8	" " P. R. Forrest, Secy..		571	50		
	10	" " " " " "		718	00		
	11	" " " " " "		522	50		
	12	" " " " " "		510	25		
	14	" " " " " "		987	33		
	15	" " " " " "		497	75		
	17	" " " " " "		1209	05		
	18	" " " " " "		991	98		
	19	" " " " " "		810	49		
	21	" " " " " "		541	00		
	22	" " " " " "		546	00		
	24	" " " " " "		1110	80		
	25	" " " " " "		481	42		
	26	" " " " " "		517	37		
	27	" " " " " "		1172	05		
	28	" " " " " "		1199	22		
	29	" " " " " "		1728	06		
	"	" " " " " "		1397	06		
						21389	53
Dec.	2	" " " " " "		1152	11		
	3	" " " " " "		524	04		
	"	" " D. C. Cregier,.....		75	00		
	4	" " P. R. Forrest, Secy..		544	70		
	5	" " " " " "		452	00		
	8	" " " " " "		526	00		
	"	" " M. L. Keith for old iron sold.....		39	20		
		Amount forward.....	\$	3,313	05	148,272	32



## ACCOUNT CONTINUED.

		Amount brought forward-----	\$	3,313 05	148,272 32
Dec.	10	By received of P. R. Forrest, Secy--		824 30	
	12	" " " " " " " " " " " "		814 66	
		" " " " " " " " " " " "			
		Schr Fillmore for labor			
		of W. W. men-----		10 38	
	15	" " " " " " " " " " " "		494 26	
	16	" " " " " " " " " " " "		385 83	
	18	" " " " " " " " " " " "		514 72	
	19	" " " " " " " " " " " "		681 30	
	22	" " " " " " " " " " " "		560 29	
	23	" " " " " " " " " " " "		390 17	
	24	" " " " " " " " " " " "		243 39	
	26	" " " " " " " " " " " "		436 92	
	29	" " " " " " " " " " " "		674 91	
	30	" " " " " " " " " " " "		486 00	
		" " " " " " " " " " " "			
		Sewerage Coms.-----		126 02	
	31	" " " " " " " " " " " "			
		L. J. North & Co. for			
		fire plug in Theatre.		313 38	
		" " " " " " " " " " " "			
		P. R. Forrest, Secy--		394 55	
		" " " " " " " " " " " "			
		D. C. Cregier-----		73 50	
		" " " " " " " " " " " "			
		E. I. Tinkham, Int. ac.			
		to date-----		370 23	
		" " " " " " " " " " " "			
		C. M. & F. Ins. Co. do		560 78	
		" " " " " " " " " " " "			
		Exchange on Eastern			
		and specie-----		34 08	
					11,702 72
1856		CONTRA, Dr.			
					159,975 04
Dec.	31	To amount paid on P. R. Forrest, Sec.			
		checks No. 1 to 357 inclusive----		155,404 10	
		" Balance on hand cr. in new ac. --		4,570 94	159,975 04
1856		CONTRA, Cr.			
Dec.	31	By Balance on hand with C. M. & F.			
		Ins. Co-----		4,570 94	

GEO. W. DOLE, Treasurer.

CHICAGO, January 26, 1857.

## SECRETARY'S REPORT.

---

OFFICE OF THE BOARD OF WATER COMMISSIONERS, }  
CHICAGO, January 1st, 1857. }

*To the Board of Water Commissioners of the City of Chicago:*

GENTLEMEN—Your Secretary would respectfully present the following Report of the transactions, accounts, and statistics of the department under his control and supervision, for the year past. The separate Statements will be found arranged under their proper headings.

It may be appropriate for me to call your attention to such few remarks as the occasion seems to require.

The revenue from water rents for the year just ended has been increased over that of the preceding, by the sum of \$21,894.94, which is equivalent to 40½ per cent. advance. This particular increase, and the rapid augmentation of the revenue from its commencement, should satisfy the expectations of the most sanguine: they are attributable, in the first place, to the extraordinary increase of the city in population, trade and manufactures; and in the second, to the judicious administration of the affairs of the company. It may be asserted, with confidence, that a success so great, and which has continued to increase in certainty to the present day, must derive a portion of its results from the firm, consistent, and upright administration of the affairs of the company, from the date of its organization, under the management of officers elected by the people, and invested with authority adequate to the magnitude of the trusts confided to their fidelity and prudence.

The general and minute knowledge of their respective duties which the clerks of this office have acquired, by their steady employment, has been and is highly beneficial in the conduct of its affairs, and it gives me

great satisfaction to allude to the amenity and general good feeling which exist, as they properly should, not only between those connected with, but also between the public and the officers of the works.

The result is a gratifying one, that only \$105.32 of rents, and of assessments, on non water takers, \$824.48, remain unpaid for the year ending May 1st, 1856. Of the latter a large proportion is on small buildings or shanties, belonging to a poor class of the community, and it seems hard to press such families too severely. I ask the consideration of your Honorable Board for these people.

In this connection I can safely challenge the reports of any hydraulic company in the United States, or perhaps in the world, to produce a better paying class of water takers than ours, or a *state of finances* which exhibits more favorable results, or a more prosperous condition of affairs.

The system adopted for graduating the "Water Rates," has, thus far, operated well, and any change would, perhaps, engender considerable feeling and opposition, now that the public has become familiar with our present regulations.

For the first time since the commencement of the works, I have had a table prepared, showing the number of dwellings, stores, hotels, manufacturing establishments, etc., subject to water rents and assessments; also, showing the annual rates on the same. The table has been compiled by Mr. J. H. Bross, who has so long and faithfully filled situations in the water works of this city. In comparing the footings of this statement with the actual receipts and amounts unpaid, for the year past, it should be borne in mind that the statement shows the rates for the twelve months ending May 1st, 1857, whereas these rates are, in many instances, payments received from the time water has been assessed upon or let into buildings on streets through which pipe has been laid the past season, such buildings being assessed only for a portion of the annual rate.

The receipts for revenue of 1856, are as follows :

Water Rents and Assessments,.....	\$75,889	43	
Service Cocks, Excess of Receipts over			
Expenditures, and Amount carried to			
credit of Income account.....	916	93	
Interest and Exchange,.....	3,293	19	
Shutting off and letting on Water, etc...	236	32	
Coal sold,.....	161	83	\$80,497 70



The expenditures for Interest and Operating, for the same time, are :

Interest on Bonds,.....	43,137 23		
Operating Expenses. Cash, ..	28,753 64		
“ “ Transfer of			
coal on hand, 1st Jan. 1856, ..	4,822 50	33,576 14	76,713 37

Leaving a surplus, on the year's operations, of \$3,784 33

The amount of Rents and Assessments unpaid on 1st January, 1857, for the year ending May 1st, 1857, and past due, are :

South Division.	Rents,.....	4,140 00		
“ “	Assessments,	1,391 00	5,531 00	
West	“ Rents,.....	2,286 26		
“ “	Assessments,	1,039 00	3,325 26	
North	“ Rents,.....	1,615 00		
“ “	Assessments,	870 50	2,485 50	\$11,341 76

Rents and Assessments for the year ending May 1st, 1856, unpaid :

South Division.	Rents,.....	81 67		
“ “	Assessments,	356 48	438 15	
North	“ Rents,.....	12 10		
“ “	Assessments,	283 00	295 10	
West	“ Rents,.....	11 55		
“ “	Assessments,	185 00	196 55	\$929 80
				<u>\$12,271 56</u>

Recapitulation :

Rents unpaid for year ending			
May 1st, 1856,.....	105 32		
do. do. 1857,.....	8,041 26	8,146 58	
Assessments, do. 1856,....	824 48		
do. do. 1857,.....	3,300 50	4,124 98	\$12,271 56

The following is a summary of the Total Receipts for Revenue, and expenditures for Interest and Operating, from the commencement of operations on the works to January 1st, 1857 :

Receipts to Jan. 1st, 1856, as per statement			
of that date,.....	128,107 18		
Receipts from Jan. 1st, 1856, to Dec. 31st,			
1856, inclusive,.....	80,497 70	\$208,604 88	

The Expenditures for Interest and Operating, to Jan. 1st, 1856, as per statement of that date, .....	143,804 41	
The Expenditures from Jan. 1st, 1856, to Dec. 31st, 1856, inclusive, .....	76,713 37	\$ 220,517 78

Showing a deficiency of receipts to meet operating and interest to Jan. 1st, 1857, of, .....	\$11,912 90
----------------------------------------------------------------------------------------------	-------------

The number of Taps inserted in 1856, .....	1,060
“ “ “ previous, .....	2,602
	<u>3,662</u>

The following is a statement of the number of buildings into which water has been introduced, the number entered for the year ending Dec. 31st, 1856, together with their distribution in the different divisions of the city :

South Division, in 1856, .....	597
North “ “ .....	453
West “ “ .....	590

Total in 1856, .....	1,640
Previous to Jan. 1st, 1856, .....	4,251

Total to Jan. 1st, 1857, .....	5,891
--------------------------------	-------

Distributed as follows :

South Division, .....	3,155
West “ .....	1,383
North “ .....	1,353

Total buildings having water, .....	5,891
-------------------------------------	-------

All of which is respectfully submitted,

P. R. FORREST,  
Secretary.

## STATEMENT No. 1,

OF THE AFFAIRS OF "THE CHICAGO CITY HYDRAULIC COMPANY," DEC. 31st, 1856.

---

Office Furniture.....	\$ 229 80
Discount on Bonds.....	67,446 74
Interest on Bonds.....	67,812 62
Duncan, Sherman & Co. Coupon account to pay January interest, &c.....	22,775 00
Coal account, amount on hand cost.....	8,204 00
Stock account, material, &c., on hand.....	15,572 59
Operating expenses, total expenses to Dec. 31st, 1856....	79,679 39
Water Works, total expenditures to " " ...	641,509 93
Geo. W. Dole, Treasurer, balance in his hands.....	4,570 94
Colwell & Co., paid on their account freight on pipes....	610 34
	<hr/>
	\$ 908,411 35

---

	Cr.
Bond account, Water Loan Bonds issued.....	\$ 750,000 00
Income account, Rents and Ass'ts, &c., to Dec. 31st, 1856,	158,354 11
R. D. Wood & Co., due them on account Scrap Iron sold,	57 24
	<hr/>
	\$ 908,411 35

---

## STATEMENT NO. 2.

RECEIPTS AND EXPENDITURES FROM JULY 1st, 1856, TO DEC. 31st, 1856, INCLUSIVE.

---

RECEIPTS.

Income ac. Water Rents and Assessments..	46,995 05
Service Cocks, received for Permits granted..	1,355 50
	<hr/>
Amount forward,.....	\$48,350 55



Amount forward, .....		\$48,350 55
Operating expenses, repairing services, and shutting off and letting on water,	88 32	
Do. do. received for Coal sold, .....	95 06	183 38
R. D. Wood & Co., received for Scrap Iron sold on their account, .....		66 74
Jones & Co., do. do. ....		20 79
Interest and Ex. received from C. M. & F. Ins. Co. on current account, ..	594 86	
Do. E. I. Tinkham & Co., .....	370 23	965 09
D. C. Cregier, received from him, .....		248 50
Water Pipe Extension, received from Sewer- age Commissioners, .....	599 84	
Do do. received from sundries, .....	667 84	1,267 68
		<u>51,102 73</u>
Add balance in Treasurer's hands, July 1st, 1856, ..		108,872 31
		<u>\$159,975 04</u>

### EXPENDITURES.

Operating Expenses, .....	\$12,478 15
Interest on Bonds, .....	22,937 23
Coal, (on hand January 1st, 1857,) .....	8,204 00
Service Cocks, .....	343 10
Water Works, .....	110,255 11
Colwell & Co., .....	600 09
D. C. Cregier, .....	48 50
Jones & Co., .....	237 83
Granger Bro's., .....	300 09
	<u>155,404 10</u>
Add balance in Treasurer's hands, Jan. 1, 1857, ...	4,570 94
	<u>159,975 04</u>

## STATEMENT NO. 3.

RECEIPTS AND EXPENDITURES FROM DEC. 31ST, 1855, TO DEC. 31ST, 1856, INCLUSIVE.

**RECEIPTS.**

Income account, received for Water Rents and Assessments,-----		75,889 43
Service Cocks, received for Permits granted,-----		2,681 05
Operating Expenses, received for shutting off and letting on water, repairing service,-----	236 32	
Do. do. received for Coal sold,-----	161 83	398 15
City of Chicago, received balance of account,-----		19,044 69
Interest on Bonds, Interest and Ex. received,-----		3,293 19
Bond account, Proceeds of 100 Water Loan Bonds, \$1,000 each,-----		89,735 00
Jones & Co., received for Scrap Iron sold on their account,-----		273 79
R. D. Wood & Co., do. do.,-----		66 74
B. F. Walker, received of him,-----		150 00
D. C. Cregier, do. do.,-----		248 50
Water Pipe Extension, received of Sewerage Commissioners,-----	599 84	
Do. do. sundry parties,-----	918 77	1,518 61
		<u>193,299 15</u>
. Add balance in Treasurer's hands, Jan. 1st, 1856,-----		39,948 95
		<u>\$ 233,248 10</u>

**EXPENDITURES.**

Operating Expenses,-----	\$28,753 64
Interest on Bonds,-----	43,137 23
Coal,-----	8,204 00
Service Cocks,-----	1,764 12
Water Works,-----	144,787 08
Colwell & Co.,-----	600 09
Jno. C. Haines,-----	700 50
	<u>\$227,946 66</u>
Amount forward,-----	

Amount forward, .....	\$ 227,946 66
D. C. Cregier, .....	248 50
Jones & Co., .....	312 83
R. D. Wood & Co., .....	19 17
B. F. Walker, advanced on account of expenses of Water Works, .....	150 00
	<u>228,677 16</u>
Add balance in Treasurer's hands, Jan. 1st, 1857, ....	4,570 94
	<u>\$ 233,248 10</u>

### STATEMENT NO. 4.

SHOWING THE EXPENDITURES FROM DEC. 31, 1855, TO DEC. 31, 1856, INCLUSIVE, IN DETAIL

#### OPERATING EXPENSES.

##### ENGINE HOUSE.

Engineers and Firemen .....	3,334 80	
Iron Work .....	149 19	
Painting and Glazing .....	76 96	
Gas Co., .....	225 94	
Oil, Tallow, &c. ....	298 57	
Cartage .....	22 00	
Masonry .....	17 50	
Repairing Machinery .....	112 05	
Stationery .....	11 48	
Packing .....	66 66	
Coal .....	10,132 16	
Miscellaneous .....	24 43	
Tools and Fixtures .....	19 26	
Labor on Dup. Engine .....	20 25	14,511 25

##### OFFICE.

Stationery, Account Books, &c. ....	197 42	
Printing and advertising .....	245 50	
Rent of Office .....	800 00	
Amount forward .....	\$ 1,242 92	14,511 25



Amount brought forward.....\$	1,242 92	14,511 25
Gas Company .....	12 39	
Miscellaneous.....	46 73	
Salaries.....	<u>3,173 55</u>	4,475 59

## MISCELLANEOUS.

Teaming.....	41 75	
Labor.....	2,114 74	
Feed for Horses.....	131 87	
Tools.....	38 89	
Iron Work.....	142 76	
Sundry petty items.....	20 29	
Blacksmithing.....	18 23	
Printing 9th Semi-Annual Report.....	92 00	
Lumber and Carpenter Work.....	91 40	
Buggy Waggon.....	136 29	
Pipe and Hydrant repairs.....	87 60	
Legal Services.....	150 00	
Printing notices.....	9 00	
City assessment on Engine House lot for opening Pine Street.....	<u>326 48</u>	3,401 30

## SALARIES.

Geo. W. Dole, Services as Commis- sioner for the year 1856.....	934 00	
Jno. C. Haines, do do .....	934 00	
Orrington Lunt, do do .....	934 00	
B. F. Walker, Services as Superin- tendent for the year 1856.....	1,800 00	
P. R. Forrest, Services as Secretary for the year 1856.....	<u>1,500 00</u>	6,102 00

## REPAIRS.

Mason Work.....	32 55	
Lumber.....	28 00	
Machinery.....	37 43	
Breakwater.....	6 25	
Hydrants.....	<u>62 12</u>	
Amount forward.....\$	166 35	28,490 14

Amount brought forward.....\$	166 35	28,490 14	
Brasses and Toes for Engine.....	84 60		
Iron work, river pipe.....	12 55	263 50	28,753 64

## INTEREST ON BONDS.

Interest, Coupons for 1856.....	42,500 00		
Exchange paid on Drafts.....	538 48		
Commissions to Duncan Sherman & Co., for paying Coupons.....	98 75	43,137 23	43,137 23

## COAL ACCOUNT.

Amount on hand 1st January, 1857, 1,400 tons at \$5 86 per ton.....	8,204 00	8,204 00
------------------------------------------------------------------------	----------	----------

## SERVICE COCKS.

Tapping, pd. Wilson & Hughes for 1855.....	111 50		
Tools and repairing same.....	66 39		
Tapping Machines.....	75 00		
Teaming.....	1 00		
Horse for Tapper.....	125 00		
Tapper's Services.....	346 65		
Taps.....	732 01		
Boxes, Caps, &c.....	276 85		
Harness.....	25 00		
Blacksmithing.....	4 72	1,764 12	1,764 12

## WATER WORKS.

## PIPE EXTENSION.

Sleeves and Castings.....	599 90		
Iron Work, castings,.....	940 46		
Dockage on Pipes,.....	457 66		
Packing,.....	348 37		
Trenching and back filling,.....	4,678 91		
Miscellaneous,.....	211 80		
Labor,.....	3,978 71		
Hardware,.....	110 15		
Cartage,.....	157 50		
Water Pipes,.....	24,637 56		
Exchange paid on Drafts for Pipes.....	133 05		
Amount forward,.....\$	36,254 07	81,858 99	

Amount brought forward,.....	\$ 36,254 07	81,858 99
Lead, .....	4,129 50	
Stop Cocks, .....	1,158 38	
Hydrants, Boxes, etc., .....	1,163 57	
Lumber, .....	178 28	
Screw, for testing press, .....	42 55	
Rosin, .....	4 25	
Patterns for Pipes, .....	119 25	
Rack Scale, .....	120 00	
Surveying, .....	8 00	43,177 85

## EXTENSION.

Dockage, .....	18 00		
Lumber, .....	256 50		
Heating Apparatus for water guage. ....	45 40		
Advertising and Printing, .....	133 00		
Miscellaneous, .....	228 06		
Gas Fitting, .....	16 25		
Side Walk and Grading Res. Lot on Adams street, .....	166 70		
Cost of Res. lot on Chicago av., N.D. ....	7,800 00		
“ “ “ Morgan st., W.D. ....	8,250 00		
Stone and Carpenter work on Found- ation new Engine. ....	1,106 31		
Hauling Main, etc. ....	602 13		
Stone for foundation New Engine.. ....	674 16		
Cement .....	45 00		
24 inch River pipe at Chicago Av... ..	2,285 00		
Dredging for bed of River pipe. ....	1,200 00		
Piles and pile driving at Chicago Av. and repairs .....	80 58		
Tools, &c., .....	31 35		
Labor .....	2,759 55		
Freight on 24 inch Stop Cocks, ....	107 11		
Back-filling and Trenching .....	3,238 73		
Expenses of D. C. Cregier Eng., to New York for New Engine. ....	151 50		
Pump Springs .....	13 50		
Hydrant .....	27 00		
Amount forward, .....	\$ 29,235 83	43,177 85	81,858 99



• Amount brought forward,-----	\$29,235 83	43,177 85	81,858 99
Castings,-----	80 26		
Pipe for Duplicate Engine,-----	74 97		
Stop Cocks,-----	1,500 00		
Lead,-----	3,343 42		
Exchange paid on Drafts for Mains.	638 74		
24 and 16 inch Mains-----	39,543 03		
Geo. W. Quintard, for account new Engine-----	27,192 98	101,609 23	144,787 08

## COLWELL &amp; CO.

Amount advanced on account pipes,-----	\$	600 09
----------------------------------------	----	--------

## JOHN C. HAINES.

Paid him balance due on services of 1855, -----	700 50
-------------------------------------------------	--------

## D. C. CREGIER.

For amount paid him on account,-----	248 50
--------------------------------------	--------

## JONES &amp; CO.

Paid them for Scrap Iron sold,-----	312 83
-------------------------------------	--------

## R. D. WOOD &amp; CO.

Paid them for Scrap Iron sold, -----	19 17
--------------------------------------	-------

## B. F. WALKER.

Paid him on account of expenses for Water Works,-----	150 00
-------------------------------------------------------	--------

---

\$228,677 16

## TABLE

SHOWING THE NUMBER OF DWELLINGS, STORES, HOTELS, MANUFACTURING ESTABLISHMENTS, &c., IN THE CITY OF CHICAGO, SUBJECT TO WATER RENTS AND ASSESSMENTS, ALSO SHOWING THE ANNUAL RATES ON SAME, FOR THE YEAR COMMENCING MAY 1st, 1856, AND ENDING MAY 1st, 1857.

355	Dwelling Houses	\$ 5 00	\$ 1,775 00
434	" "	6 00	2,604 00
510	" "	7 00	3,570 00
954	" "	8 00	7,632 00
892	" "	9 00	8,028 00
1201	" "	10 00	12,010 00
267	" "	11 00	2,937 00
344	" "	12 00	4,128 00
168	" "	13 00	2,184 00
149	" "	14 00	2,086 00
103	" "	15 00	1,545 00
123	" "	16 00	1,968 00
68	" "	17 00	1,156 00
47	" "	18 00	846 00
30	" "	19 00	570 00
22	" "	20 00	440 00
22	" "	21 00	462 00
11	" "	22 00	242 00
6	" "	23 00	138 00
9	" "	24 00	216 00
6	" "	25 00	150 00
3	" "	26 00	78 00
4	" "	27 00	108 00
6	" "	28 00	168 00
2	" "	29 00	58 00
2	" "	30 00	60 00
2	" "	31 00	62 00
1	" "	32 00	32 00
1	" "	33 00	33 00
1	" "	34 00	34 00
1	" "	35 00	35 00
1	" "	45 00	45 00
32	" Sundry		263 00
<hr/> 5777			<hr/> \$55,663 00

## RECAPITULATION.

## NUMBER DWELLINGS CONTAINING WATER.

South Division	-----	2,312	23,436 00
North	" -----	1,252	13,017 00
West	" -----	1,257	11,964 00
		<u>4,821</u>	<u>\$48,417 00</u>

## NUMBER DWELLINGS WITHOUT WATER.

South Division	-----	267	1,967 00
North	" -----	302	2,392 00
West	" -----	387	2,887 00
		<u>956</u>	<u>7,246 00</u>
		<u>4,821</u>	<u>48,417 00</u>

5,777 Dwelling Houses. \$55,663 00

369 Stores at	\$ 6 00	2,214 00
2 "	7 00	14 00
6 "	8 00	48 00
50 "	9 00	450 00
13 "	10 00	130 00
31 "	12 00	372 00
4 "	13 00	52 00
1 "	15 00	15 00
2 "	20 00	40 00
<u>478</u>		<u>\$ 3,335 00</u>

## RECAPITULATION.

No. Stores water in, 441,-----	3,113 00	
" " assessed, 37,-----	<u>222 00</u>	3,335 00

8 Offices, at	\$ 3 00	\$ 24 00
2 " "	5 00	10 00
42 " "	6 00	252 00

Amount forward,

\$ 58,998 00



	Amount forward,		\$ 58,998 00
1 Office, at	7 00	7 00	
1 " "	8 00	8 00	
1 " "	16 00	16 00	
<u>55</u>		<u>317 00</u>	

## RECAPITULATION.

No. of Offices water in, 43, -----	243 00	
" " " assessed, 12, -----	<u>74 00</u>	317 00

1 Bank,	5 00	5 00	
1 "	6 00	6 00	
2 "	12 00	24 00	
1 "	20 00	20 00	
<u>5</u>		<u>55 00</u>	

4 Buildings,	12 50	50 00	
3 "	14 00	42 00	
3 "	18 00	54 00	
3 "	20 00	60 00	
1 "	22 00	22 00	
5 "	22 50	112 50	
1 "	24 00	24 00	
4 "	25 00	100 00	
2 "	31 00	62 00	
1 "	33 00	33 00	
1 "	35 00	35 00	
1 "	39 00	39 00	
1 "	44 44	44 00	
1 "	53 00	53 00	
1 "	54 00	54 00	
1 "	60 00	60 00	
1 "	83 50	83 50	
2 "	116 00	232 00	
1 "	146 00	146 00	
<u>37</u>		<u>1,306 00</u>	

Amount forward,

\$ 60,676 00

	Amount forward,		\$ 60,676 00
1 Churches	3 00	3 00	
1 "	4 00	4 00	
1 "	6 00	6 00	
1 "	10 00	10 00	
2 "	12 00	24 00	
1 "	20 00	20 00	
<hr/> 7		<hr/>	67 00
2 Theatres	10 00	20 00	
1 "	70 00	70 00	
<hr/> 3		<hr/>	90 00
3 Halls	20 00	60 00	
1 "	10 00	10 00	
<hr/> 4		<hr/>	70 00
1 Schools	5 00	5 00	
1 "	8 00	8 00	
2 "	10 00	20 00	
1 "	14 00	14 00	
1 "	24 00	24 00	
1 "	30 00	30 00	
1 "	38 00	38 00	
1 "	39 00	39 00	
1 "	41 00	41 00	
2 "	43 00	86 00	
1 "	60 00	60 00	
1 "	70 00	70 00	
<hr/> 14		<hr/>	435 00
1 Market Stall,	3 00	3 00	
2 " "	6 00	12 00	
1 " "	8 00	8 00	
1 " "	10 00	10 00	
1 Market,	42 00	42 00	
1 "	48 00	48 00	
1 "	72 00	72 00	
<hr/> 8		<hr/>	195 00
	Amount forward,		\$ 61,533 00

		<i>Amount forward,</i>		\$ 61,533 00
2 Cellars,		8 00	16 00	
2 "		10 00	20 00	
<u>4</u>				36 00
1 Hose,		2 50	2 50	
1 "		3 00	3 00	
59 "		5 00	295 00	
<u>61</u>				300 50
1 Hotels & Bd'g Houses,		11 50	11 50	
1 "	"	12 66	12 66	
1 "	"	13 00	13 00	
12 "	"	13 33	159 96	
4 "	"	13 50	54 00	
2 "	"	14 50	29 00	
2 "	"	15 00	30 00	
2 "	"	16 00	32 00	
1 "	"	16 50	16 50	
1 "	"	17 00	17 00	
2 "	"	17 50	35 00	
1 "	"	18 00	18 00	
1 "	"	18 50	18 50	
2 "	"	18 63	37 26	
3 "	"	19 00	57 00	
6 "	"	20 00	120 00	
5 "	"	21 00	105 00	
2 "	"	21 50	43 00	
9 "	"	22 00	198 00	
1 "	"	22 50	22 50	
3 "	"	23 00	69 00	
1 "	"	23 33	23 33	
2 "	"	23 50	47 00	
4 "	"	24 00	96 00	
2 "	"	25 00	50 00	
1 "	"	25 50	25 50	
2 "	"	27 00	54 00	
1 "	"	29 00	29 00	
			<u>\$1,423 71</u>	
	<i>Amount forward,</i>			\$ 61,869 50



		Amount forward,	\$ 1,423 71	\$ 61,869 50
1	Hotels & Bd'g Houses	29 50	29 50	
10	"	30 00	300 00	
1	"	31 00	31 00	
1	"	31 50	31 50	
2	"	32 00	64 00	
1	"	32 50	32 50	
3	"	33 00	99 00	
4	"	34 00	136 00	
1	"	35 50	35 50	
1	"	38 00	38 00	
1	"	38 64	38 64	
1	"	39 00	39 00	
8	"	40 00	320 00	
1	"	42 00	42 00	
2	"	45 00	90 00	
1	"	50 00	50 00	
1	"	54 00	54 00	
1	"	55 00	55 00	
2	"	58 00	116 00	
2	"	59 00	118 00	
2	"	60 00	120 00	
1	"	61 00	61 00	
1	"	62 00	62 00	
4	"	70 00	280 00	
1	"	74 00	74 00	
3	"	75 00	225 00	
1	"	78 00	78 00	
2	"	80 00	160 00	
1	"	81 00	81 00	
1	"	89 00	89 00	
3	"	100 00	300 00	
1	"	109 00	109 00	
1	"	120 00	120 00	
1	"	125 00	125 00	
1	"	137 00	137 00	
1	"	150 00	150 00	
1	"	156 00	156 00	
1	"	160 00	160 00	
	Amount forward,		\$ 5,630 35	\$ 61,869 50

		Amount forward,	\$ 5,630 35	\$ 61,869 50
1	Hotels & Bd'g Houses	167 00	167 00	
1	"	182 00	182 00	
1	"	200 00	200 00	
1	"	266 00	266 00	
1	"	300 00	300 00	
1	"	400 00	400 00	
1	"	460 00	460 00	
<hr/>			<hr/>	
154				7,605 35
2	Saloons,	4 00	8 00	
9	"	6 00	54 00	
3	"	8 00	24 00	
13	"	10 00	130 00	
7	"	12 00	84 00	
1	"	14 00	14 00	
8	"	16 00	128 00	
1	"	18 00	18 00	
1	"	19 00	19 00	
2	"	20 00	40 00	
<hr/>			<hr/>	
47				519 00
1	Barb' Shop & Bath'g Sal's	3 00	3 00	
1	"	6 00	6 00	
1	"	8 00	8 00	
1	"	8 50	8 50	
8	"	10 00	80 00	
1	"	12 00	12 00	
1	"	15 00	15 00	
1	"	36 00	36 00	
3	"	46 00	138 00	
<hr/>			<hr/>	
18				306 50
1	Fountains	10 00	10 00	
3	"	15 00	45 00	
4	"	60 00	240 00	
<hr/>			<hr/>	
8				295 00
Amount forward,			<hr/>	
			\$ 70,595 35	

	Amount forward,		\$ 70,595 35
8 Stables	2 00	16 00	
3 "	3 00	9 00	
7 "	4 00	28 00	
3 "	5 00	15 00	
3 "	6 00	18 00	
3 "	8 00	24 00	
2 "	9 00	18 00	
7 "	10 00	70 00	
1 "	11 00	11 00	
1 "	14 00	14 00	
5 "	16 00	80 00	
1 "	18 00	18 00	
1 "	19 00	19 00	
6 "	20 00	120 00	
1 "	23 50	23 50	
3 "	24 00	72 00	
1 "	25 00	25 00	
1 "	26 00	26 00	
1 "	28 00	28 00	
2 "	30 00	60 00	
1 "	32 00	32 00	
1 "	36 00	36 00	
4 "	40 00	160 00	
1 "	46 00	46 00	
3 "	50 00	150 00	
1 "	52 50	52 50	
1 "	56 00	56 00	
2 "	60 00	120 00	
1 "	76 00	76 00	
4 "	80 00	320 00	
1 "	86 00	86 00	
1 "	88 00	88 00	
1 "	90 00	90 00	
1 "	95 00	95 00	
1 "	130 00	130 00	
1 "	200 00	200 00	

85

2,432 00

Amount forward,

\$ 73,027 35



	Amount forward,	\$ 73,027 35
1 Bakeries,	3 25	3 25
1 "	5 25	5 25
1 "	11 00	11 00
1 "	16 00	16 00
1 "	17 00	17 00
1 "	17 75	17 75
1 "	19 00	19 00
1 "	20 50	20 50
1 "	24 50	24 50
1 "	33 50	33 50
1 "	43 00	43 00
1 "	58 00	58 00
<hr/> 12		268 75

1 Printing Office & Engine	21 00	21 00
1 " "	23 50	23 50
1 " "	32 00	32 00
1 " "	35 00	35 00
1 " "	40 00	40 00
1 " "	48 50	48 50
1 " "	51 75	51 75
1 " "	74 00	74 00
<hr/> 8		325 75

1 Laundry,	30 00	30 00
1 "	100 00	100 00
<hr/> 2		130 00

1 Stone Yard,	6 00	6 00
2 " "	10 00	20 00
1 " "	12 00	12 00
1 " "	17 50	17 50
1 " "	29 00	29 00
<hr/> 6		84 50

Amount forward,

\$ 73,836 35

	Amount forward,		\$ 73,836 35
1 Dye House.	13 00	13 00	
1 " "	17 00	17 00	
1 " "	21 00	21 00	
<hr/>		<hr/>	51 00
3			
1 Soda Factory	10 50	10 50	
1 " "	14 00	14 00	
1 " "	15 00	15 00	
2 " "	24 00	48 00	
1 " "	26 00	26 00	
1 " "	36 75	36 75	
<hr/>		<hr/>	150 25
7			
32 Warehouses,	6 00	192 00	
1 " "	8 00	8 00	
1 " "	10 00	10 00	
2 " "	12 00	24 00	
1 " " & Engine	23 00	23 00	
<hr/>		<hr/>	257 00
37			
1 Packing Houses	6 00	6 00	
1 " "	18 00	18 00	
1 " "	30 00	30 00	
1 " "	103 00	103 00	
<hr/>		<hr/>	157 00
4			
35 Shops and Engines	3 00	105 00	
1 " "	3 50	3 50	
1 " "	5 00	5 00	
28 " "	6 00	168 00	
1 " "	6 75	6 75	
2 " "	7 00	14 00	
1 " "	7 75	7 75	
4 " "	10 00	40 00	
1 " "	12 00	12 00	
<hr/>		<hr/>	
Amount forward,	\$ 362 00		\$ 74,451 60

		Amount forward,	\$ 362 00	\$ 74,451 60
2	Shops and Engines,	15 00	30 00	
1	" "	16 00	16 00	
1	" "	17 00	17 00	
1	" "	18 00	18 00	
1	" "	18 50	18 50	
4	" "	20 00	80 00	
1	" "	21 00	21 00	
1	" "	23 00	23 00	
1	" "	24 00	24 00	
2	" "	25 00	50 00	
1	" "	25 50	25 50	
1	" "	27 50	27 50	
2	" "	28 00	56 00	
1	" "	29 00	29 00	
2	" "	30 00	60 00	
1	" "	31 00	31 00	
1	" "	32 25	32 25	
1	" "	34 00	34 00	
3	" "	35 00	105 00	
1	" "	36 00	36 00	
1	" "	36 50	36 50	
1	" "	40 00	40 00	
1	" "	41 00	41 00	
1	" "	42 50	42 50	
1	" "	45 25	45 25	
1	" "	45 50	45 50	
2	" "	46 00	92 00	
1	" "	47 50	47 50	
2	" "	48 00	96 00	
2	" "	50 00	100 00	
1	" "	52 00	52 00	
1	" "	53 25	53 25	
1	" "	54 00	54 00	
3	" "	56 50	168 00	
2	" "	58 75	117 50	
4	" "	60 00	240 00	
2	" "	63 00	126 00	
1	" "	63 50	63 50	
		Amount forward,	\$ 2,556 25	\$ 74,451 60



			Amount forward,	\$ 2,556 25	\$ 74,451 60
1	"	"	65 00	65 00	
1	"	"	66 00	66 00	
1	"	"	66 50	66 50	
1	"	"	71 00	71 00	
1	"	"	77 00	77 00	
1	"	"	78 00	78 00	
1	"	"	80 00	80 00	
1	"	"	81 00	81 00	
2	"	"	100 00	200 00	
1	"	"	150 00	150 00	
<hr/>					
142					3,490 75
1	Hospital.		11 00	11 00	
1	"		20 00	20 00	
1	"		32 50	32 50	
<hr/>					
3					63 50
1	Chandlery,		8 00	8 00	
1	"		15 00	15 00	
1	"		25 00	25 00	
<hr/>					
3					48 00
1	Distillery,		6 00	6 00	
1	"		9 00	9 00	
1	"		10 00	10 00	
1	"		12 00	12 00	
1	"		13 00	13 00	
1	"		15 00	15 00	
1	"		18 00	18 00	
4	"		20 00	80 00	
1	"		21 00	21 00	
1	"		27 00	27 00	
1	"		30 00	30 00	
1	"		40 00	40 00	
1	"		59 00	59 00	
<hr/>					
Amount forward,				\$ 340 00	\$ 78,053 85

	Amount forward,	\$	340 00	\$ 78,053 85
1 Breweries,	5 50		5 50	
1 "	15 00		15 00	
1 "	21 00		21 00	
1 "	25 00		25 00	
1 "	26 00		26 00	
1 "	43 00		43 00	
1 "	48 00		48 00	
1 "	52 50		52 50	
1 "	56 00		56 00	
1 "	60 00		60 00	
1 "	72 00		72 00	
1 "	78 00		78 00	
1 "	250 00		250 00	
1 Vinegar Factory,	4 00		4 00	
1 " "	10 00		10 00	
1 " "	18 00		18 00	
1 " "	20 00		20 00	
1 " "	25 00		25 00	

---

 34

---

 1,169 00

1 Rail Road Co.,	732 75		732 75
2 "	600 00		1,200 00
1 "	450 00		450 00
1 "	300 00		300 00
1 "	268 00		268 00
1 "	75 00		75 00
1 Passenger Depot,	38 00		38 00
1 Freight Depot,	10 00		10 00
2 " "	15 00		30 00
1 " "	21 00		21 00

---

 12

---

 3,124 75

1 Book Bindery,	8 50		8 50
1 Post Office,	15 00		15 00
1 Hyde & Leather Co.,	22 50		22 50
1 American Trans. Co.,	28 00		28 00

---

 Amount forward,

---

 \$ 74 00

---

 \$ 82,347 60

	Amount forward,	\$ 74 00	\$ 82,347 60
1	Young Men's Ass'n,	28 00	28 00
13	Fire Engine & Hose Co.,	6 00	78 00
1	Brass Foundry,	48 00	48 00
1	Convent,	32 50	32 50
1	Lead Manufactory,	56 00	56 00
1	U. S. Marine Hospital,	75 00	75 00
1	Bridewell,	40 00	40 00
1	Court House and City		
	Offices,	110 10	110 10
1	Gas and Coke Co.	200 00	200 00

25

\$ 741 60

Building purposes,	842 50
Special "	67 13
Water Cartmen,	270 67
Street Sprinklers,	742 50

\$1,922 80

\$1,922 80

Total amount of Water Rates,

\$85,012 00