

NINTH
SEMI-ANNUAL REPORT
OF THE
Board of Water Commissioners
TO THE
COMMON COUNCIL
OF THE CITY OF CHICAGO,
TOGETHER WITH
ACT OF INCORPORATION AND AMENDMENTS THERETO;
ALSO, THE
ORDINANCES OF THE CITY IN RELATION TO THE
CHICAGO CITY HYDRAULIC COMPANY,

January 1st, 1856.

CHICAGO:
DEMOCRATIC PRESS PRINTING HOUSE, 45 CLARK STREET.
1856.

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.

R E P O R T.

OFFICE OF THE "CHICAGO CITY HYDRAULIC CO." }
CHICAGO, FEBRUARY STR, 1856.

To the Honorable, the Mayor and Common Council of the City of Chicago:

In compliance with the fourteenth section of the Charter of "THE CHICAGO CITY HYDRAULIC Co.," the Water Commissioners present their Ninth Semi-Annual Report, accompanied with the statement of the Treasurer, Secretary, and Report of the Superintendent of the Works under our supervision, which will furnish a full exhibit of the funds and securities of the Corporation, all debts due and owing to or from it, also an account of our expenditures for the last six months, together with a statement of the Receipts and Expenditures for the year ending December 31, 1855.

The Board feel gratified in being able to state that the general condition of the Works is better than at any previous time, and since the last Report have given a more constant supply than heretofore.

We now furnish water to nearly fifty thousand of our inhabitants in the water district, and we believe none of our large eastern cities have as good and pure water as ours. The erection of the Breakwater has contributed largely towards this object, as the water inside of it is comparatively still, except in heavy storms, and thus it has an opportunity to settle before it is raised into the Reservoir. The depth of the water inside of the Breakwater is from three to fourteen feet.

We are happy to state that the Reservoir on the South side is filled from day to day, and answers the purpose intended.

During the past Season about eleven miles of pipe have been laid, and there is now purchased enough to lay about six miles more, making in all about forty-eight miles. Continued additions will have to be made yearly, to keep up with the growing wants of our city.

The receipts for water rents the last year have exceeded our anticipations, being \$27,773 63 over the year previous. This increase we

expect will be larger the coming year, as we as yet have received but little for the pipe laid down this Season, and we see no reason why the works will not pay the interest on the Bonds issued, the operating expenses, and leave a surplus for the ensuing year.

A copy of the Water rates established by the Board during the past year, will be found accompanying this report.

The whole amount of Bonds now issued and disposed of, is \$650,000, one hundred and twenty thousand of which were sold since our last report, bearing interest at six per cent., twenty-five years to run, realizing \$111,600, being a premium of \$4,116, on Bonds bearing seven per cent., the maximum rate at which we were limited by the Charter.

For the purpose of laying a large Main from the Engine house to Halstead street on the West side, the purchase of a new Engine, a Reservoir lot, and further extension of the Works, the Board will be required to make a further issue of Bonds for the ensuing year, estimates of which will soon be laid before the Council.

Our small Engine will soon be unable to pump what will be required, and any accident to the large one will leave us with a limited supply of water; in order therefore to be prepared against any unforeseen difficulty, we must have another large Engine.

The present Main cannot discharge as much water as is pumped. We now furnish as much as was originally estimated, so that when our new pipes are all laid, we shall need a larger Main.

The following is a statement of the expenditures of the Board, and cost of the Works to Dec. 31st, 1855.

| | |
|--|---------------|
| Whole amount of Bonds issued by Commissioners, | \$650,000 00 |
| EXPENDITURES. | |
| Water Works (or Construction and Extension accounts) | \$ 496,849 64 |
| Office Furniture | 229 80 |
| Water Pipes, on hand | 12,261 03 |
| Other materials as per stock account | 3,459 09 |
| S. S. Wiltsee, for trenching not yet settled | 1,300 00 |
| Coal on hand | 4,822 50 |
| Discount on Bonds | 57,181 74 |
| Balance of interest and operating expenses from commencement of works, as per Sec'y's account, | 15,697 28 |
| Due from City of Chicago | 19,044 69 |
| Balance in hands of G. W. Dole, Treas'r, after deducting amounts due sundry persons per Ledger Bal. No. 1, | 39,154 28 |
| | \$650,000 00 |

For a more detailed Statement of Receipts and Expenditures we refer you to our Secretary's report.

A full general statement of the extension and operation of the Works, and other valuable information, will be found in the Superintendent's report.

All of which is respectfully submitted.

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

Board of Water Commissioners of the City of Chicago.

STATE OF ILLINOIS, }
COOK COUNTY, } ss.

I, J. 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. 1856.

J. A. HOISINGTON, J. P.

SUPERINTENDENT'S REPORT.

WATER COMMISSIONER'S OFFICE, }
CHICAGO, January 1st., 1856. }

Board of Water Commissioners:

GENTLEMEN—In my first Annual Report of December 31st, 1854, it became necessary for me to state that a portion of the Works were unfinished, and that some alterations and additions were necessary in order to put them in a condition to give a good supply.

The Reservoir being a very important part as a means of constant supply of water, to that our attention was at first particularly directed. After strengthening it as proposed, by iron rods passing through the building and secured by heavy cast iron washers, it was deemed safe to use part full.

We commenced letting in the water on the 7th day of March, and continued to use it with from four to six feet of water per day until the 15th day of June, when the tank was cleaned out for the purpose of re-caulking some of the joints and painting the inside.

A contract was made with Peter Button, on the 15th day of March, to fill up the window openings; the openings in the foundation, and to build a circular brick wall three feet thick in the centre of the building, from the foundation to the centre of the main arch. The price which was to be paid for this job was \$5,180.00; to which was added for extra work \$126. Mr. Button completed his contract on the 29th day of June.

On the 2d day of July the water was again let into the tank, and it was filled as full as desired. Since then there has been no appearance of weakness in the structure up to the present time.

There was some complaint with the taste of the water for a week or two after the tank was re-painted, the weather being extremely warm and the tank not being covered, caused it to taste of the new paint. Many

7
were the conjectures as to the cause of the trouble, and almost every reason except the true one, assigned by different individuals. After making a statement of the true cause, and allowing the water to change often by flushing out the Fire Hydrants for a few days, the cause and the complaints were both removed, and no complaints have been made since.

Our Reservoir answers a very good purpose for the present, but should the consumption of water continue to increase, as we have every reason to expect, it will soon be too small to answer the end for which a Reservoir is designed. I therefore feel it to be my duty again to urge upon your consideration the opinion expressed in my former report; that we should have a Reservoir large enough to contain a supply for at least two or three days. I am aware that it is expensive building large Reservoirs where there are no elevations upon which to erect them, but still I apprehend that they are cheaper in proportion to their capacity than small ones.

The plan which I presented for your consideration a few days since, for a Reservoir in the North Division, would contain *seven million gallons*. This structure, complete, is estimated to cost two hundred and seventy-five thousand dollars (\$275,000); costing about five times as much as our present one, and would contain over fourteen times as much water. A Reservoir half this size, built upon the same plan, would cost about one hundred and seventy-five thousand dollars (\$175,000).

DESCRIPTION OF NEW RESERVOIR.—The foundation of the proposed Reservoir will cover an area of two hundred and seventy-five feet (275 ft.) square, and will be commenced upon the hard pan. The foundation to be built of solid rubble stone masonry laid in water lime. The main outer wall of the structure to be 240 feet square, exclusive of the projections for the corners and the buttresses. The buttresses to project at the bottom as far as the foundation, and to be made battering to within eight feet of the top, at which point they will project from the main wall about three feet. The basin to be supported by thirteen parallel walls two feet thick, of solid masonry, built upon inverted arches in such a manner as to give an equal bearing upon the whole foundation. The two outer walls to be built 16 feet apart and tied together by cross walls ten feet apart from centre to centre, and 18 inches thick, the whole to be tied together in such a manner as to be nearly equal to a solid wall 20 feet thick, and with a great saving in expense, to which is added the buttresses on the outside which it is believed will make it abundantly sufficient to overcome all the lateral strain caused by the weight of water in the basin.

The height of the structure from the bottom of the foundation to the top of the Basin is 100 feet, the depth of Basin 23 feet. Walls of the

Basin 20 feet thick at the bottom and 10 feet at the top, built in the same manner as the main walls, the batter of 10 feet being on the inside, making the inside area of the basin 200 feet square at the bottom and 220 feet square at the top. The top of the walls to be covered with a stone coping 12 inches thick surmounted with an iron railing. Between the arches under the basin, spandrels or open spaces will be left about $3\frac{1}{2}$ feet in diameter. The inside of the basin to be lined with hard burnt brick laid in cement, which can be covered with asphaltum or some other flexible substance impervious to water; a partition is to be built across the centre in which a filter is to be placed. Four tiers of floor timbers will be put in over the entire building, dividing it into stories which will serve to stiffen the walls, and also make room for a large amount of storage if it should be required. The upper floor to be covered with cement in such a manner as to collect and carry off any drip or leakage from the basin, leaving the remainder of the building perfectly dry. Pipes and manholes to be put through the walls into the Spandrels at convenient distances to take off and show the location of leaks that may occur. All the foundation stone, arches and brick work under the basin to be laid in Water Lime, and a stairway to be carried to the top of the structure at one of the corners.

In getting up this plan, no attempt has been made at Architectural display, the end sought has been strength, utility and economy; if these are attained the undersigned will have accomplished all he aimed at. I am indebted to E. S. Chesbrough, Esq., for some valuable hints upon this subject, as well as other matters pertaining to the works.

It will be perceived that a reservoir can be built upon this plan of any size required, and can be enlarged with very little extra expense.

ESTIMATE FOR RESERVOIR 240 FEET SQUARE.

| | |
|---|--------------|
| 360,527 Cubic feet of Stone in foundation, at 20 cents, . . . | \$ 72,105 40 |
| 208,750 " " " " " outer wall, a 20 cents, . . . | 41,750 00 |
| 10,000,000 Bricks, at \$12,00 m., 6000 bbls. cement at \$100, . . . | 126,000 00 |
| 603,200 Feet Lumber in floors, Carpenter work and stairs, . . . | 13,435 40 |
| 12,480 Feet Stone Coping, \$100 & Cut Stone in Buttresses, . . . | 14,488 00 |
| 960 Feet iron railing, | 1,400 00 |
| Superintendence &c., | 5,821 20 |
| | <hr/> |
| | \$275,000 00 |

Our present Reservoir is only sufficient to contain water enough to last through the night, and the main is so small that it takes at the present rate of consumption, fourteen hours to force a quantity equal to the pres-

ent demand into the tank to last the remaining ten hours. It costs, therefore, much more to do our pumping than it would if we had a large receiving Reservoir, and a main of sufficient capacity to carry off the water as fast as the pumps raise it. I think, with a Reservoir in the North Division of the size above named, and a 24 inch main from the Engine House through which to force the water, that the present number of water takers could be supplied by running the pumps three days in each week. This arrangement would probably give a saving of at least one third the fuel now used, and without additional machinery. By this method the Engineers would have time to make necessary repairs, and keep everything in good order, and unless some extraordinary causality or serious break occurred to the machinery, water takers would always be supplied.

From our experience in these works, we have one fact very forcibly illustrated, that the greater the benefit conferred, and the convenience, the more impatient people are, if from any cause they are for a brief period deprived of it. And we are more likely to receive censure for a few hours unavoidable delay to furnish water than commendation for the most vigilant and untiring exertions, and for a constant supply for months or even years. A Reservoir half the size of the plan proposed would answer very well for the present, but I think it would be wise to secure a lot of sufficient size to add the other part when it shall be needed.

Within three or four years, it is probable that another Reservoir will be required in the West Division, should that portion of the city continue to increase as rapidly as is anticipated. To meet that emergency and also to help the present main without disturbing it, I would recommend that a 24 inch main be laid down early the coming spring, from the Engine House directly West until it crosses the North branch, from thence that smaller mains be laid for the present to connect with the pipes now laid in the West Division. You will perceive that it will be necessary to adopt some plan of a similar nature before anything can be done to enlarge the main on Wolcott and State Streets, as the South Division will have to be supplied via the West, while that is being done. Should the main be put in as above indicated, the one on Wolcott and State Streets might answer for the present.

This 24 inch main would connect with and supply the new Reservoir, and through that the main on Wolcott Street, the West Division, and through that the South Division, via Adams Street crossing. If this main is put down and connected as above, the one leading to our present Reservoir would, in my opinion, be large enough for several years, and probably until another Reservoir is needed in the South Division, as that would only have the South Division to supply.

Another advantage to be derived from using a large Reservoir as proposed is, the body of water being ample it would have time to settle and become clear, and I also propose to have a partition in the center through which the water is to flow before it passes into the mains to be distributed, and in this way we should be able to supply our citizens with much clearer water in stormy weather. Under the present arrangement, if the lake is agitated with high winds, the water, of course, becomes more or less turbid, flows into the well, is immediately taken up by the pumps, and by them forced through a 16 and 12 inch main to the Reservoir, which being small, it has very little time to settle, and it is conducted by the distribution pipes to the dwellings in nearly the same state as when first taken from the lake.

In making these suggestions, I am not finding fault with what has been done, probably the best arrangement was made that could be at the time.

The means in the hands of the Commissioners at the commencement of the Works were limited; they were expected to build a Water Works complete in all its parts, and put it in running order, for a limited sum, and every thing had to be made with reference to the amount of money appropriated for that purpose. The Chief Engineer, after making estimates for four different plans, in each of which a 24 inch Main was designed, from the Engine House to the Reservoir, found that all his estimates were above the amount contemplated, and in the hands of the Commissioners.

The third plan, modified, was adopted, and a 16 and 12 inch main substituted for the 24 inch, with the expectation of its being enlarged at no very distant period. At the time these calculations were made, the population of the city was estimated at thirty-six thousand inhabitants, and the expectation then was, that in the year 1861 there might be eighty thousand; we now find ourselves, in 1855, amidst a population numbering over 80,000, and with every prospect of a continued increase at the same ratio.

In view, then, of the above fact, would it not be well, in laying plans for the future extension of the works, to commence them on a more liberal and extended scale, such as will be likely to meet the wants of our young and growing city?

I am well aware that the plans proposed above are not as extensive as the circumstances require, but I apprehend that they are as extensive as can consistently be carried out at present.

It gives me pleasure to be able to state on this occasion, that I believe all the measures adopted by you the past season for the improve-

ment of the works under your charge, have proved eminently successful, but the claims of the people of Chicago will not suffer the work to stop here. Those now outside of the Water limits are loudly calling for the extension of the works, claiming that it is the duty of the Commissioners to extend the pipes wherever they will pay expenses. In order to meet these wants, measures will have to be adopted commensurate with the rapid increase of our city, and if our population is to double in five years, as many suppose, it will be expected that larger appropriations will have to be made than was at first anticipated.

I think there should be as little delay as possible in ordering the 24 inch main, and also in making preparations for commencing the new Reservoir. Should these be neglected, and the distribution pipes extended as proposed, we shall soon be short of water.

BREAKWATER.—The Breakwater commenced last season by Rawson & Bateham, to protect the inlet pipe, was completed about the 8th of June, the cost of which was \$13,695.22. This work stands well, and answers the purpose for which it was intended. Before this was built it was impossible to prevent our aqueduct, leading from the lake to the pump well, from filling with sand, and large quantities being carried into the well. Since the work was completed, most of the accretion forms outside of this barrier, and we have but little inconvenience from this source.

DREDGING IN BASIN.—After the Breakwater was completed, an agreement was made with Mr. S. S. Durfee, to dredge the basin to an average depth of from 11 to 13 feet in the centre, and within fifty feet of the breakwater. This work was commenced about the 15th June, and was completed on the 15th day of September; the amount excavated was 10,940 $\frac{1}{2}$ cubic yards, for which he was paid 30 cents per cubic yard, amounting to the sum of \$3,282.27, and for stone \$216. It is probable that a small amount of dredging may be required next season, depending of course upon the number and force of the storms; but if the breakwater is kept in good repair, I think a small amount annually expended in dredging, will be all that will be required to protect the aqueduct from sand.

AQUEDUCT AND INLET PIPE.—An Aqueduct has been made and put in, as suggested in my former report. It is constructed of oak planks, three inches thick, spiked to stringers of oak 4 by 6 inches square, and framed together so as to make it continuous; the planks are fitted together tight, and joints battened; area inside, 3 by 4 feet square, the outer end extending into the basin about 50 feet, and protected by a crib seven feet wide by 22 feet long, in which is an iron grating, 6 feet square,

formed of inch iron rods, one inch apart, securely fastened in an oak frame; this grating is placed at the outer end of the crib. At the outer end of the aqueduct is a gate, which is opened and closed by a rack and pinion; also another gate about 75 feet in shore. This aqueduct is sunk 4 feet lower than the old inlet pipe, and will, I think, be sufficient to supply all the water required in the pump well. The aqueduct was completed on the first day of August, and cost, including excavation and backfilling, \$2,442.22.

In order to connect the aqueduct with the pump well, and to sink it as low as was desirable, we were under the necessity of taking down the east wall and foundation of the engine house, and it was deemed best, as previously intimated, to build a culvert of stone masonry over the aqueduct and inlet pipe, to support the foundation of the engine house, and also to enable us hereafter to make any change desired.

The contract for taking down and rebuilding this wall, building the culvert and foundation, was let to Peter Button, and was completed on the 28th day of June. The whole cost of this work was \$1,785.16. Some part of it was very difficult to execute; we had to sink so low into the quicksand that there was danger of undermining the building. The work was carried through, however, without accident and with very little delay.

The old inlet pipe was also sunk lower at the highest point, and through which a portion of the water now flows from the lake into the pump well, making the available area in the two conduits equal to about nineteen and a half feet.

ENGINE HOUSE.—The zinc roofing on the engine house was so leaky in summer, and so troublesome in winter on account of the condensation of steam and frost accumulating on the inside at night, and thawing as soon as the sun shone upon it in the morning, that it was impossible to keep the engines or anything inside of the building, from being wet every day. To remedy this evil, it was decided to remove the zinc, and substitute wood. It was accordingly taken off, and the roof covered with matched flooring, upon which pine shingles were put, and painted with fire-proof paint, the inside ceiling and purlins painted light drab, and the iron rafters and tie rods black. The old zinc, after it was removed, together with the iron purlins, were sold for nearly enough to pay the expense of the alteration. We experience now no inconvenience either from leakage or from condensation of steam in the engine room. The roofs of the wings, or boiler-rooms answer very well in summer, but in cold weather the condensation is very great, rendering the rooms disagreeable, and I should judge unhealthy, and I would recommend that

the same change be made in them as was made with the roof of the main building.

There has been a temporary building erected near the north end of the engine house, which will contain from eight to ten hundred tons of coal. This shed cost \$153.69.

Gas has been introduced into the engine and boiler rooms; also a steam pipe to prevent the water gauge from freezing. The expense of these improvements is \$141.74.

ENGINES.—The ordinary repairs on the low pressure engine for the past year have cost \$14.75.

The extraordinary expenses and additions, such as will not be likely to again occur, are as follows: It was found that the working of the pumps caused considerable vibration to the upper bed plate, and it was deemed best to put in additional bolts running down into the wall below the lower bed plate. Six of these bolts of 1½ inch round iron, were put in, running down into the wall from four to six feet, and firmly secured by being ragged at the lower end, and zinc run around them and well tamped. The cost of the bolts, drilling, zinc, etc. \$92.99. It was also found necessary, after the tank was completed, in order to run the low pressure engine without overflowing the standing column, to add to the main channel way a waste valve, which can be regulated at pleasure, with a pipe to conduct the surplus water back to the well. It is estimated that from one-fourth to one-third of the water that is raised by the low pressure engine is thus wasted back into the well, after passing the pumps. This valve will not be needed after the main is enlarged. \$100 was the cost of it. A smoke pipe has also been added to the boiler for the low pressure engine, at a cost of \$497.80; this was found necessary in order to get a good draft in hot sultry weather; it is now so arranged with valves that the smoke can be conducted out of the smoke pipe, or out of the tower if desired.

DUTY OF ENGINES.—The duty of the engines, as reported by D. C. Cregier, the Engineer in charge, is as follows: From Dec. 31st, 1854 to Dec. 31st, 1855, condensing engine has been run in the months of January, April, July, August, October, November, and December, one hundred and fifty-two days. There was consumed during that time 480²⁸³/₉₀₀ tons of Bituminous coal, 60% tons of which was used to maintain a light pressure of steam when the engine was not running, and for raising steam for starting. The residue of ashes from the above was 49⁶³⁵/₉₀₀ tons. Number of revolutions made by this engine 1,111,059; gallons of water pumped 684,120,147. From July 27th to Dec. 31st, 1855, this engine has been run on an average of fifteen hours out of twenty

four, but it has had to be run as slow as possible, to prevent overflowing the standing column, the main not being sufficiently large to take the water, about one-third of which, since the 4th of August, has been wasted back into the well. This engine works well, and is easily kept in repair.

NON-CONDENSING ENGINE.—This engine has been run in the months of January, February, March, April, May, June, July, October, November, in all 213 days. Coal consumed $598\frac{1750}{1000}$ tons, of which $63\frac{1800}{1000}$ tons were used to keep up steam when the engine was not running, and for getting up steam. The residue of ashes from the above is $63\frac{30}{1000}$ tons. Number of revolutions 1,345,343. Gallons of water pumped 189,304,697. The repairs for the duplicate or high pressure engine for the past year amount to \$324.68. The principal break in this engine was caused by one of the lugs to the valves getting loose, and falling into the pump, was shoved through the pump piston head. It was temporarily repaired in a few hours, by bolting on a plate of boiler iron. This occurred at a time when the pumps of the large engine were taken up, and when there was but little water in the tank, consequently the supply of water was stopped for a short time. A new piston has since been put in, and this engine and pump is now in good repair, but the waste and consumption is so large, that it is barely sufficient to keep up a supply.

If we had a large reservoir and main, as before stated, our present condensing engine would probably be capable of supplying all the water required for a number of years, unless some accident should occur to it. But if we continue to extend the pipes, it will soon be necessary to make provisions for another engine, of equal or greater power than the present condensing engine, or for a duplicate.

BREAKS AND LEAKS OF PIPES.—But very little trouble has been experienced from leaks or breaks in the distribution pipes. In a comparatively few instances the caulking in the joints has started a little, causing a small leak, which was easily repaired. One three-inch pipe was broken off near South Water and Wabash Avenue, caused by undermining for a sewer. That district had to be shut off for a short time in order to repair it. We have had some apprehensions that the main channel way in the Engine House might give way, some new cracks having made their appearance, but they have been repaired without any serious delay, and strengthened so that at the present time there is no appearance of weakness.

A crack in the main pipe under the Tower, (which had been discovered some time previous) on the 22d December, was found to have increased so much that serious consequences were apprehended, and it was decided to stop the supply for the purpose of repairing it. Notice was accordingly given to water takers, that the supply might be stopped for three or four

days to enable them to save a sufficient quantity for use. On the 24th, at noon, the water was shut off, reserving a quantity in the reservoir to use in the event of a fire breaking out before the work could be accomplished. The pipe was repaired by taking out about six feet of the fractured part, and inserting a strong boiler iron pipe. The pipe was repaired, and the engine started in about thirty hours after the water was shut off. This is the longest period that the whole city has been deprived of water the past year. Some sections have been shut off for a longer time to enable us to make connections with the new pipes.

On the 7th May, the river pipe at Kinzie street was again put in and connected with the pipes on either side, the bed for the pipe having been dredged some three or four feet lower than when first put down.

STOP COCKS.—The Stop Cocks first used in these works are faulty in the manner in which the valve is connected with the stem, several of which have worked loose and dropped down. This has been a source of some inconvenience. Those used the present season are a different pattern, the screw being cut on the lower end of the stem upon which the valve is made to rise, which will, I think, obviate the difficulty above noted.

FIRE HYDRANTS.—It has not been deemed necessary to change materially the plan of our Fire Hydrants. With some little improvements we have used the same pattern in our extension, that was used in the commencement of the works.

PUBLIC HYDRANTS.—The Public Hydrants seem to be rather a necessary evil. They were put up during the sickly season of 1854, to accommodate the poor and those living outside the water district, but they have been rather troublesome to keep in repair, and no profit to the works. No new ones have been put in this season; some have been discontinued as they got out of repair, others have been removed to accommodate those living farther out, as the pipes have been extended.

NEW FIRE HYDRANTS.—Have been located as follows:

SOUTH DIVISION.

- 1 on the corner of Eldridge Court and Michigan Avenue.
- 1 " " " " Harmon " " Wabash "
- 1 " " " " State st. " " Liberty street.
- 1 " " " " Michigan Avenue and Twelfth "
- 1 " " " " Peck Court and Wabash Avenue.
- 1 " " " " State street and Twelfth street.
- 1 " Buffalo, between Polk and Taylor streets.
- 1 " " " " Twelfth and Liberty streets.
- 1 " " " " " Taylor "
- 1 " the corner of Wells and " "
- 1 " " " " " Polk "

NORTH DIVISION.

| | | |
|---|------------------|---------------------------------------|
| 1 | on the corner of | Indiana and Sand streets. |
| 1 | " " " | Ontario and " " |
| 1 | " " " | Cass " Indiana " |
| 1 | " " " | Superior " Pine " |
| 1 | " " " | Chicago Avenue and Green-bay streets. |
| 1 | " " " | Wolcott " Whitney " |
| 1 | " " " | " " Oak " |
| 1 | " " " | " " Hinsdale " |
| 1 | " " " | " " Chicago Avenue. |
| 1 | " " " | Erie and Wells streets. |
| 1 | " " " | " " La Salle " |
| 1 | on the corner of | Chicago Avenue and Clark street. |

WEST DIVISION.

| | | | | |
|---|------------------|----------|---|----------------------|
| 1 | on the corner of | Harrison | " | Des Plaines streets. |
| 1 | " " " | " | " | Jefferson " |
| 1 | " " " | " | " | Adams " " |
| 1 | " " " | " | " | Aberdeen " " |
| 1 | " " " | " | " | Morgan " " |
| 1 | " " " | " | " | Peoria " " |
| 1 | " " " | " | " | Halstead " " |
| 1 | " " " | " | " | Des Plaines " " |
| 1 | " " " | " | " | Fulton " " |
| 1 | " " " | " | " | Halstead " " |
| 1 | " " " | " | " | Randolph " " |
| 1 | " " " | " | " | Morgan " " |
| 1 | " " " | " | " | Washington " " |
| 1 | " " " | " | " | Sangamon " " |
| 1 | " " " | " | " | Green " " |
| 1 | " " " | " | " | Union " " |

PIPE EXTENSION.—On the 30th May we commenced laying pipes on Twelfth street, starting at State and running East towards the Lake. We laid of 6 inch pipe, 312 feet; 4 inch, 352 feet; 3 inch, 550 feet; using up all the pipes we had on hand of those sizes.

In the month of April, estimates were made for about fourteen miles of distribution pipes, and on the 1st day of June, bids were received for 1,300 tons of 4, 6, 8, and 10 inch pipe, to be delivered in Chicago, as follows: One-third by the 15th day of August; one-third by the 15th day of September; and the balance on or before the 15th of October. Nine bids were received, the highest being eighty, and the lowest forty-five dollars per ton. The bids were as follows:

| | |
|--|------------------|
| Russell & Anger, of Chicago..... | \$80 00 per ton. |
| Brooks & Onions, of Chicago..... | 65 00 " " |
| W. I. & A. M. Grauger, of Chicago..... | 62 00 " " |

| | |
|---|----------------|
| R. S. Semple, of Cincinnati..... | 57 00 per ton. |
| G. W. Sizer & Co., of Chicago..... | 55 00 " " |
| William Roy, of New York..... | 52 50 " " |
| John Anderson & Co., of Pittsburgh, Pa..... | 52 50 " " |
| Jones & Co., of Philadelphia..... | 47 50 " " |
| R. D. Wood & Co., of Philadelphia..... | 45 00 " " |

R. D. Wood & Co.'s bid being the lowest for one-half the amount required, was accepted, and a contract made with them on the 2d day of June, for about 650 tons.

Jones & Co.'s being the next lowest bid, was also accepted, and a contract was made with them on the 2d day of June, for about 650 tons of pipes; all to be delivered on the dock (to be furnished by the Commissioners) at the time above specified.

The first shipment was received from Jones & Co., on the 16th day of August. The first shipment from R. D. Wood & Co., was received on the 20th August, and the last shipment, filling their contract, was received on the 16th November. The last shipment of about 75 tons, from Jones & Co., was shipped too late to arrive before the close of navigation.

An order of 200 tons extra, of 4, 6, and 8 inch pipes has been partly filled, from Wood & Co., the balance to be forwarded early the coming Spring.

The contract for trenching, back-filling, and hauling pipes, was let to S. S. Wiltsee, on the 15th day of July, 1855. The work was commenced on the 10th of September.

DISTRIBUTION PIPES

Have been laid the past Season in the following Streets, viz :

NORTH DIVISION.

| Size of pipe | Street. | Between what Streets laid. | No. of feet. |
|--------------|----------------|----------------------------|--------------|
| 4 inch | Sand | Indiana to Ontario | 618 feet |
| 4 " | Ohio | Sand to Pine | 345 " |
| 4 " | Indiana | Pine to Rush | 374 " |
| 4 " | Rush | Michigan to Indiana | 596 " |
| 8 " | Ontario | Rush to Cass | 371 " |
| 6 " | " | Rush to Sand | 743 " |
| 4 " | Cass | Michigan to Ohio | 884 " |
| 4 " | " | Huron to Chicago Avenue | 672 " |
| 6 " | Pine | " " " | 645 " |
| 6 " | Chicago Avenue | Pine to Clark | 1892 " |
| 4 " | Dearborn | Chicago Avenue to Superior | 360 " |
| 4 " | Superior | Dearborn to Wolcott | 425 " |
| 6 " | Wolcott | Ontario to Cedar | 3377 " |
| 4 " | Erie | Wolcott to Wells | 1600 " |
| 6 " | Wells | Erie to Ontario | 290 " |
| 10 " | Ontario | Wells to Clark | 809 " |
| 4 " | La Salle | Erie to Indiana | 882 " |
| 4 " | Ohio | Wells to Franklin | 409 " |
| 4 " | Franklin | Ohio to Illinois | 590 " |
| 4 " | Indiana | Franklin to Market | 397 " |
| 6 " | Illinois | " to Wells | 409 " |
| 4 " | Dearborn | Kinzie to Ontario | 1476 " |
| 4 " | Green Bay | From Chicago Av. north | 66 " |
| 4 " | Superior | From Pine, east | 25 " |
| 4 " | Laid for | Hydrants | 305 " |
| Total | | | 18,560 " |

SOUTH DIVISION.

| Size of Pipe | Street. | Between what Streets laid | No. of feet. |
|--------------|-----------------|--------------------------------|--------------|
| 3, 4 & 6 in | Twelfth | State-st. to the lake | 1214 feet |
| 4 inch | Buffalo | Polk to Liberty | 3000 " |
| 4 " | Liberty | State to Clark | 803 " |
| 6 " | State | Twelfth to Liberty | 1223 " |
| 4 " | Michigan Avenue | Hubbard Court to Twelfth | 2048 " |
| 6 " | Twelfth | State to Clark | 803 " |
| 4 " | Wabash Avenue | From Harmon Court, north | 1652 " |
| 8 " | Clark | Harrison, S., almost to Taylor | 2559 " |
| 4 " | Harrison | Wabash Av. to Michigan Av. | 454 " |
| 4 " | Tyler | State-st. to " " | 862 " |
| 4 " | Jackson | " " " | 884 " |
| 6 " | Van Buren | " Edina Place | 280 " |
| | | | 15782 |

| Size of Pipe | Street. | Between what Streets laid. | No. of feet. |
|--------------|-------------|----------------------------|--------------|
| 4 inch | Quincy | Clark to Market | 15,782 feet |
| 4 " | Jackson | Wells to Market | 1,619 " |
| 4 " | Wells | Harrison to Taylor | 770 " |
| 4 " | Griswold | Harrison to Van Buren | 1,690 " |
| 4 " | Edina Place | Taylor to Twelfth | 869 " |
| 4 " | Laid | for Hydrants | 887 " |
| Total | | | 21,693 " |

WEST DIVISION.

| Size of Pipe | Street. | Between what Streets laid. | No. of feet. |
|--------------|-------------|----------------------------|--------------|
| 4 inch | Jackson | Clinton to Halstead | 1700 feet |
| 6 " | Adams | Clinton to Aberdeen | 3722 " |
| 4 " | Aberdeen | Adams to Jackson | 464 " |
| 4 " | Washington | Des Plaines to Morgan | 2169 " |
| 4 " | Randolph | Peoria to Morgan | 650 " |
| 4 " | Morgan | Randolph to Washington | 457 " |
| 6 " | Des Plaines | Harrison to Monroe | 2284 " |
| 6 " | Halsted | Jackson to Kinzie | 4055 " |
| 4 " | Laid | For Hydrants | 285 " |
| Total | | | 15786 " |

RECAPITULATION.

The pipes have been extended the past season a little over ten and two-third miles, making the whole amount of pipes now laid, as follows :

| | |
|-------------------|---------------|
| Three inch Pipe | 30,301 feet |
| Four inch Pipe | 106,047 feet. |
| Six inch Pipe | 49,191 feet. |
| Eight inch Pipe | 14,069 feet. |
| Ten inch Pipe | 5,206 feet. |
| Twelve inch Main | 9,112 feet. |
| Sixteen inch Main | 3,723 feet. |

Total 217,649 feet; or 41 22-100 miles.

SCHEDULE A

Is a list of Pipes, Branches, Hydrants, Stop Cocks, Lead, Etc., Etc., on hand.

SCHEDULE B

Is a list of Tools, Supplies, Etc., at the Engine House.

SCHEDULE C

Is a list of Tools belonging to pipe laying department.

SCHEDULE D

Is a list of Stop Cocks in each division, by districts, and their location.

SCHEDULE E

Is a list of Stop Cocks inserted in each division, in the extension of 1855.

The expenditures for the current year are larger than I had anticipated, owing to the fact that it was deemed necessary to make some permanent alterations and additions to the works as above noted; but the receipts are also above our estimates in a corresponding ratio, notwithstanding the benefit derived from the extensions made this year, are small, on account of receiving our pipes so late in the season.

I think our receipts for water rents for the year 1856, will amount to nearly one hundred thousand dollars (\$100,000), and our operating expenses probably about the same as they have been the past year. Should this result be realized, it will clear the works from all arrears for interest and operating expenses.

The waste of water is becoming a subject of serious consideration. Many seem to think if they pay water rents, they are at liberty to waste as much as they please, not realizing, that in so doing, they are sacrificing their own interests as well as those of every other citizen. The works being the property of the city, all are equally interested in the cost of furnishing a supply of water, and for every gallon thrown away, another has to be raised to supply its place. But it is not easy to make all understand this matter in its true light, and the evil continues to increase. It will, therefore, be necessary to keep two or three men employed the greater part of the time, whose business it shall be to look after this matter, and report any infringement of the law, either from design or carelessness.

Our attention has been called to the subject of procuring meters to attach to the service pipes. This, no doubt, would be a great saving to the works, provided those could be procured which would measure accurately, and at a price which would warrant their being generally used, but as yet, we have seen none that we have thought proper to recommend. We shall, however, give the subject further attention soon.

It is a source of encouragement to know that the people are disposed more and more to appreciate the value of the works, and that they almost universally, now, cheerfully submit to the tax, necessarily imposed for their support.

Which is respectfully submitted,
BENJ. F. WALKER,
Superintendent.

SCHEDULE A.

LIST OF PIPES, BRANCHES, HYDRANTS, STOP COCKS, LEAD, ETC.

| | |
|----------------------------|-----------------------------|
| 1663 Pieces 4 inch Pipe. | 4 pieces 10 inch Cut Pipes. |
| 733 " 6 " " | 21 Street Hatch Frames. |
| 442 " 8 " " | 15 Wood Hydrant Tops. |
| 47 " 10 " " | 62 16 inch Sleeves. |
| 9 " 16 " " | 22 12 " do |
| 42 Street Hatches. | 3 10 " do |
| 2-12 by 16 2 Way Branches. | 23 6 " do |
| 29-3 " 4 1 " " | 16 8 " do |
| 9-6 " 8 1 " " | 2 8 " Caps. |
| 14-8 " 6 1 " " | 27 6 " do |
| 2-6 " 4 1 " " | 30 3 " do |
| 16-4 " 4 1 " " | 13 4 " do |
| 1-10 " 10 2 " " | 7 10 " do |
| 6-6 " 8 2 " " | 2 12 " do |
| 4-4 " 6 2 " " | 4 4 " Stop Cocks. |
| 3-6 " 6 2 " " | 1 12 " do do |
| 8-4 " 6 2 " " | 1 16 " do do |
| 89-4 " 4 2 " " | 21 Hydrant Bends. |
| 2 12 inch Boot Jacks. | 84 Pigs Lead. |

SCHEDULE B.

TOOLS, SUPPLIES, ETC., AT ENGINE HOUSE.

| IN MAIN ROOM. | | 1-2 Bale Cotton Waste. | |
|---------------------------------|--|-----------------------------|--|
| 3 Hand Oil Cans. | | Part set Carpenter's Tools. | |
| 1 Dipper. | | 1 Bed and Mattress. | |
| 2 Screw Wrenches. | | | |
| 1 Tallow Kettle. | | | |
| 2 Small Screw Wrenches. | | | |
| 1 Slate and Log Book. | | | |
| 1 Stove and Pipe. | | | |
| 1 Dudgeon Lifting Pump. | | | |
| 70 feet Rubber Hose. | | | |
| 1 Writing Desk and Book Case. | | | |
| 1 Lithograph of Morgan's Works. | | | |
| 1 Inkstand. | | | |
| 1 Iron Ladder. | | | |
| | | | |
| NORTH BOILER ROOM. | | SOUTH BOILER ROOM. | |
| 1 Grind Stone. | | 2 Stop Cock Wrenches. | |
| 1 Vice. | | 1 Cask new Zinc. | |
| 1 Stop Cock Wrench. | | 1 Pair Banks' Scales. | |
| 1 Table. 1 Set Fire Tools. | | 1 Set Fire Tools. | |
| | | 8 New Grate Bars. | |
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SCHEDULE B.—CONTINUED.
TOOLS, SUPPLIES, ETC., AT ENGINE HOUSE.

| | |
|--|----------------------------------|
| 1 Shackle Bar. | 1 Saw. 2 Planes. |
| 2 Key Wrenches. | 10 Balls Cotton Wicking. |
| 1 Hammer. | 1 Quire Emery Paper. |
| 4 Socket Wrenches. | 3 Pails, 1 Water Cooler, 1 Cup. |
| 2 Pall Wrenches. | 1 Composition Hammer. |
| 1 Lead Ladle. | Oil Cup for Force Pump. |
| A lot scrap India Rubber. | 3 Extra Water Gauge Glasses, |
| Eye Bolts, etc., to Engine. | 2 Long do do do |
| 3 lengths 2 1-2 inch Copper Pipe. | 5 Taps, assorted. |
| 4 Rubber Valves. | 1 Spirit Level. |
| 2 Composition Seats. | 1 lb. Flour Emery. |
| 1 do Guards. | 5 " Ground Glass. |
| 4 2 gallon Tin Cans. | 2 New Water Cocks. |
| 10 gallons Lard Oil. | 3 Old Gauge do |
| 2 Elbows Stove Pipe. | 11 Bars Soap. |
| 2 Side Lamps. | 3 Lengths Brass Pipe. |
| 300 lbs. old Bolts, Nuts and Wash- ers. | Extra set of Springs for Piston. |
| 8 Chisels. | 1 Hoe. 1 Trowel. |
| 5 Drills. | 1 Wire Sieve. |
| 1 Drilling Crab, complete. | Composition Standards and Bolts. |

SCHEDULE C.

TOOLS, ETC., BELONGING TO PIPE LAYING DEPARTMENT.

| | |
|-------------------------|-----------------------------|
| 1 Augur. | 4 Drills. |
| 1 Key Saw. | 4 Sledge Hammers. |
| 7 Oil Pots. | 2 Brass Pumps. |
| 1 do Can. | 2 Tin do |
| 1 Chisel and Gauge. | 2 Hand Saws. |
| 3 Lead Ladles. | 2 Water Casks. |
| 1 Draft Chain. | 5 Long Shovels, |
| 1 Pipe do | 5 Short do |
| 2 Stop Cock Pins. | 1 Grind Stone. |
| 6 Pails. | 2 Presses for testing pipe. |
| 6 Calking Hammers. | 1 do do Cocks. |
| 1 Screw Driver. | 2 Pair Scale Beams. |
| 2 Hand-boxes for Tools. | 1 Blacksmith Vice. |
| 2 Iron Bars. | 6 Cold Chisels. |
| 7 Stop Cock Wrenches. | 1 Hatchet. |
| 1 Hydrant Cap. | 3 Hand Axes. |
| Lot of Plugs. | 50 Calking Irons. |

SCHEDULE C.—CONTINUED.

TOOLS, ETC., BELONGING TO PIPE LAYING DEPARTMENT.

| | |
|-------------------------|---------------------|
| 1 Measuring Rod. | 6 Hydrant Wrenches. |
| 1 Tar Kettle. | 6 Ice Chisels. |
| 3 Lead do | 2 Hydrant Punches. |
| 2 Tool Houses. | 2 Hand Spikes. |
| 4 Wheel Barrows. | 3 Pieces Rope. |
| 2 Broken do | 2 Hydrant Forks. |
| 14 Hardies. | 5 Picks. |
| 30 Hydrant Straps. | 4 Gauge Irons. |
| 3 Screw Wrenches. | 1 Fire Poker. |
| 2 Hydrant Eye Bolts. | 1 Barrel Rosin. |
| 4 Hand Boxes for Tools. | 1 Square. |
| 1 Water Pot. | |

SCHEDULE D.

STOP COCKS IN EACH DIVISION, BY DISTRICTS, AND THEIR LOCATION.

| Div. of city. | District | Location of Stop Cocks. | Size of Cock. |
|------------------|----------|---|------------------|
| South. | No. 1 | Corner Clark and South Water..... | 4 inch |
| do | do | Alley bet. S. Water and Lake, on Clark..... | 4 do |
| do | do | Corner of Clark and Lake | 4 do |
| do | do | Do do and Alley bet. Randolph and Lake | 4 do |
| do | do | Do do do Randolph | 8 do |
| do | do | Do do do Washington | 4 do |
| do | do | Do do do do | 8 do |
| do | do | Do Dearborn do do | 4 do |
| do | do | Do State do do | 8 do |
| do | do | Do Wabash Avenue and do | 4 do |
| do | do | Do Dearborn Park and do | 4 do |
| do | do | Do Michigan Avenue and do | 4 do |
| do | No. 2 | Corner of Clark and Madison | 8 do |
| do | do | Do do do do Monroe | 4 do |
| do | do | Do do do do Adams | 12 do |
| do | do | Do do do do do | 12 do |
| do | do | Do do State do do | 8 do |
| do | do | Do do Wabash Avenue and Adams | 4 do |
| do | do | Do do Michigan do do do | 4 do |
| do | No. 3 | Cor. Clark and Alley bet. Adams and Jackson.. | 4 do |
| do | do | Do do do Van Buren | 8 do |
| do | do | Do do do Harrison | 4 do |
| do | do | Do do do Jackson | 4 do |

SCHEDULE D.—CONTINUED.

LIST OF COCKS IN EACH DIVISION, BY DISTRICTS, AND THEIR LOCATION.

| Div. of city. | District | Location of Stop Cocks. | Size of Cock. |
|---------------|----------|--|---------------|
| South. | No. 4. | Corner of Washington and La Salle..... | 4 inch |
| " | " | Do do do Wells..... | 8 do |
| " | " | Do do do Franklin..... | 4 do |
| " | " | Do do do Market..... | 4 do |
| " | No. 5. | Corner of Wells and Adams..... | 12 do |
| " | " | Do do do do..... | 8 do |
| " | " | Do Market and do..... | 4 do |
| " | " | Do State do do..... | 12 do |
| " | No. 6. | On Reservoir Lot..... | 12 do |
| " | " | do do do..... | 12 do |
| " | " | do do do..... | 12 do |
| " | " | do Main on Adams, front of Reservoir..... | 12 do |
| " | " | do do do State at River..... | 12 do |
| " | " | do do do Adams at River..... | 12 do |
| " | " | At the Court House..... | 4 do |
| " | " | On State, connection near the Market..... | 8 do |
| North. | No. 7. | Corner of Kinzie and Wolcott..... | 4 do |
| " | " | Do Michigan and do..... | 4 do |
| " | " | Do Illinois do do..... | 8 do |
| " | " | Do do do do..... | 8 do |
| " | " | Do Indiana do do..... | 4 do |
| " | " | Do Ohio do do..... | 4 do |
| " | " | Do Ontario do do..... | 8 do |
| " | " | Do do do do..... | 8 do |
| " | " | Do Illinois do Pine..... | 4 do |
| " | " | On the Main and corner Wolcott, near the river.. | 12 do |
| " | " | Corner Wolcott and Kinzie..... | 8 do |
| " | No. 8. | Corner of Illinois and Wells..... | 8 do |
| " | " | Do do do La Salle..... | 4 do |
| " | " | Do do do Clark..... | 4 do |
| " | " | On Kinzie at the River..... | 8 do |
| " | " | At Engine House, one flanged..... | 24 do |
| " | " | Do do do do do..... | 12 do |
| " | " | Do do do do do..... | 16 do |
| West. | No. 10. | On Kinzie near the River..... | 8 do |
| " | " | Corner of Kinzie and West Water..... | 4 do |
| " | " | Do do do Jefferson..... | 4 do |
| " | " | Do do do Des Plaines..... | 8 do |
| " | No. 11. | Corner of Randolph and West Water..... | 4 do |
| " | " | Do do do Canal..... | 4 do |
| " | " | Do do do Clinton..... | 8 do |
| " | " | Do do do Jefferson..... | 4 do |
| " | " | Do do do Des Plaines..... | 8 do |

SCHEDULE D.—CONTINUED.

LIST OF COCKS IN EACH DIVISION, BY DISTRICTS, AND THEIR LOCATION.

| Div. of city. | District | Location of Stop Cocks. | Size of Cock. |
|---------------|----------|--------------------------------|---------------|
| West. | No. 12. | Corner of Adams and Canal..... | 4 inch |
| " | " | Do do do do..... | 4 do |
| " | " | Do do do Clinton..... | 8 do |
| " | " | Do do do do..... | 8 do |
| " | " | On Adams at the River..... | 12 do |

RECAPITULATION.

| | | | |
|------------|--|-------------------------------------|----|
| South. | 4 inch 20.... | 8 inch 9...12 inch 10 together..... | 39 |
| North. | 4 " 7....8 " 7...12 " 2 "..... | | 16 |
| West. | 4 " 7....8 " 6...12 " 1 "..... | | 14 |
| | 1 " 24 inch flanged at Engine House..... | | 1 |
| | 1 " 16 " in Main..... | | 1 |
| | 1 " 16 " on hand..... | | 1 |
| Total..... | | | 72 |

SCHEDULE E.

LIST OF STOP COCKS INSERTED IN EACH DIVISION, IN THE EXTENSION OF '55.

| Divis'n. | District | Location of Stop Cocks. | Size of Cock. |
|----------|----------|--|---------------|
| South. | | Corner of Peck Court and Michigan Avenue.... | 4 inch |
| " | | Do do do do Wabash do..... | 4 do |
| " | | Do Buffalo and Polk..... | 4 do |
| " | | Do Clark do do..... | 8 do |
| " | | Do Wells do do..... | 4 do |
| " | | Do Clark do Twelfth street..... | 8 do |
| " | | Do do do Liberty..... | 4 do |
| North. | | Do Illinois do Rush..... | 4 do |
| " | | Do Illinois and Cass..... | 4 do |
| " | | Do Chicago Avenue and Green Bay street..... | 4 do |
| " | | Do Chicago and Cass..... | 4 do |
| " | | Do Chicago and Wolcott, 2 S. C..... | 8 do |
| " | | Do Maple and Wolcott..... | 8 do |
| " | | Do Dearborn and Illinois..... | 4 do |
| " | | Do Adams and Des Plaines..... | 8 do |
| " | | Do Adams and Halstead..... | 8 do |
| " | | Do Adams and Aberdeen..... | 4 do |
| " | | Do Halstead and Washington..... | 4 do |
| " | | Do do do Randolph..... | 8 do |

SCHEDULE D.—CONTINUED.

RECAPITULATION.

| | | |
|-----------------|------------------------------------|----|
| South Division. | 4 inch 5....8 inch 2 together..... | 7 |
| North do | 4 inch 5....8 inch 2 do | 7 |
| West do | 4 inch 2....8 inch 3 do | 5 |
| Total..... | | 19 |

BOARD OF WATER COMMISSIONERS
OF THE CITY OF CHICAGO,

1855.

In account with GEO. W. DOLE, Treasurer.

Credit.

| | | | | | | |
|---------------------|----|--|------------|------------|--|------------|
| June | 30 | By Balance on hand..... | \$ | | | \$8,390 92 |
| July | 2 | " Proceeds of \$120,000 in Bonds sold | 111,600 | | | |
| | 2 | " Interest accrued on same..... | 105 | | | |
| | 7 | " Received of H. Tucker, Secretary.. | 545 88 | | | |
| | 10 | " " " " " " .. | 583 09 | | | |
| | 13 | " " " " " " .. | 509 66 | | | |
| | 19 | " " " " " " .. | 866 62 | | | |
| | 24 | " " " " " " .. | 495 68 | | | |
| | 28 | " " " " " " .. | 440 14 | 115,146 07 | | |
| Aug. | 4 | " " " " " " .. | 832 34 | | | |
| | 8 | " " " " " " .. | 734 29 | | | |
| | 11 | " " " " " " .. | 455 04 | | | |
| | 15 | " " " " " " .. | 381 25 | | | |
| | 18 | " " " " " " .. | 398 63 | | | |
| | 23 | " " " " " " .. | 547 31 | | | |
| | 28 | " " " " " " .. | 302 70 | | | |
| | 31 | " " " " " " .. | 564 06 | 4,215 62 | | |
| Sept. | 6 | " " " P. R. Forrest, " .. | 344 08 | | | |
| | 11 | " " " " " " .. | 567 79 | | | |
| | 18 | " " " " " " .. | 609 28 | | | |
| | 21 | " " " " " " .. | 266 95 | | | |
| | 26 | " " " " " " .. | 270 48 | | | |
| | 29 | " " " " " " .. | 222 43 | 2,281 01 | | |
| Oct. | 2 | " " " " " " .. | 263 98 | | | |
| | 4 | " " " " " " .. | 286 30 | | | |
| | 6 | " " " " " " .. | 277 05 | | | |
| | 9 | " " " " " " .. | 337 77 | | | |
| | 13 | " " " " " " .. | 272 61 | | | |
| | 17 | " " " " " " .. | 229 | | | |
| | 17 | " In.&Ex.re'd of C.M.&F.Ins.Co.to 13th | 63 93 | | | |
| | 18 | " Rec'd of P. R. Forrest, Secretary... | 268 32 | | | |
| | 20 | " " " " " " .. | 240 | | | |
| | 23 | " " " " " " .. | 228 | | | |
| | 25 | " " " " " " .. | 206 31 | | | |
| | 27 | " " " " " " .. | 257 06 | | | |
| | 29 | " " " " " " .. | 225 25 | | | |
| | 31 | " " " " " " .. | 399 86 | 3,555 44 | | |
| Nov. | 1 | " " " " " " .. | 763 92 | | | |
| | 2 | " " " " " " .. | 675 67 | | | |
| | 3 | " " " " " " .. | 941 30 | | | |
| Amount forward..... | | | \$2,380 89 | 133,589 06 | | |

ACCOUNT CONTINUED.

| | | | | |
|------|----|---|----------|------------|
| | | Amount brought forward.....\$ | 2,380 89 | 133,589 06 |
| Nov. | 5 | By Rec'd of P. R. Forrest, Secretary.. | 1,364 04 | |
| | 6 | " " " " " " " " | 503 50 | |
| | 7 | " " " " " " " " | 280 95 | |
| | 8 | " " " " " " " " | 689 | |
| | 9 | " " " " " " " " | 366 50 | |
| | 10 | " " " " " " " " | 375 74 | |
| | 12 | " " " " " " " " | 527 | |
| | 13 | " " " " " " " " | 520 50 | |
| | 14 | " " " " " " " " | 377 | |
| | 15 | " " " " " " " " | 432 13 | |
| | 16 | " " " " " " " " | 326 13 | |
| | 19 | " " " " " " " " | 813 14 | |
| | 20 | " " " " " " " " | 347 | |
| | 21 | " " " " " " " " | 471 52 | |
| | 22 | " " " " " " " " | 262 50 | |
| | 23 | " " " " " " " " | 478 53 | |
| | 24 | " " " " " " " " | 462 54 | |
| | 26 | " " " " " " " " | * 376 50 | |
| | 28 | " " " " " " " " | 1,085 84 | |
| | 30 | " " " " " " " " | 1,262 09 | 13,703 04 |
| Dec. | 1 | " " " " " " " " | 701 47 | |
| | 3 | " " " " " " " " | 604 27 | |
| | 4 | " " " " " " " " | 627 77 | |
| | 6 | " " " " " " " " | 489 30 | |
| | 8 | " " " " " " " " | 596 53 | |
| | 10 | " " " " " " " " | 335 10 | |
| | 11 | " " " " " " " " | 315 05 | |
| | 13 | " " " " " " " " | 856 48 | |
| | 15 | " " " " " " " " | 355 50 | |
| | 17 | " " " " " " " " | 490 41 | |
| | 18 | " " " " " " " " | 246 94 | |
| | 20 | " " " " " " " " | 621 38 | |
| | 22 | " " " " " " " " | 527 25 | |
| | 24 | " " " " " " " " | 319 44 | |
| | 28 | " " " " " " " " | 348 40 | |
| | 29 | " " " " " " " " | 275 22 | |
| | 31 | " " " " " " " " | 661 56 | |
| | 31 | Int. & Ex. rec'd of C. M. & F. Ins. Co. to date | 100 88 | |
| | 31 | " " " " E. I. Tinkham & Co. " | 2,348 71 | 10,821 66 |
| | | | | 158,113 76 |

ACCOUNT CONTINUED.

| | | | | | |
|-------|----|---|-------------|-------------|--|
| 1855 | | CONTRA DR. | | | |
| Sept. | 1 | To amount paid on Henry Tucker, Sec- ry's Checks, No. 1 to 99 inclusive | \$17,456 88 | | |
| Dec. | 31 | To amount paid on P. R. Forrest, Secy's Checks, No. 100 to 358 inclusive.. | 100,707 93 | | |
| | | To Balance on hand, credit in new ac't. | 39,948 95 | 158,113 76 | |
| | | CONTRA CR. | | | |
| Dec. | 31 | By Balance on hand..... | | \$39,948 95 | |

Which amount is deposited, under advice and control of the Board, as follows:

With Chicago M. and F. Insurance Co.....\$383 60
 " E. I. Tinkham & Co.....39,565 35

\$39,948 95

GEO. W. DOLE, Treasurer.

CHICAGO, January 23, 1856.

SECRETARY'S REPORT.

OFFICE OF THE BOARD OF WATER COMMISSIONERS, }
CHICAGO, January 29th., 1856. }

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

GENTLEMEN:—I have the honor, herewith, to submit to you a Report, comprising the following statements:

- No. 1, Exhibiting the present condition of the "Chicago City Hydraulic Co." as shown by the books to December 31st, 1855, inclusive.
- No. 2, The Receipts and Expenditures from June 30th, 1855, to December 31st, 1855, inclusive.
- No. 3, The Receipts and Expenditures from December 31st, 1854, to December 31st, 1855, inclusive.
- No. 4, The Expenditures for the year 1855, in detail.

The following are the Receipts for Revenue of 1855:

| | |
|---|-----------------|
| Water Rents. Cash received,..... | 54,054 52 |
| Less abated rents,..... | 60 03 53,994 49 |
| Service Cocks. Balance transferred to Cr. Income account,..... | 1,332 40 |
| Interest and Exchange, received in Cash, .. | 3,342 77 |
| Amount of balance of Interest due from the City, 1st Jan'y, 1856, and credited "Int. on Bonds," after deducting Interest on special Loan, and Coupons paid on special Bonds by City,..... | 1,875 61 |
| Total,..... | 60,545 27 |

The disbursements for Interest and Operating Expenses, are as follows:

| | |
|--------------------------|---------------------|
| Interest on Bonds,..... | 35,785 05 |
| Operating Expenses,..... | 27,309 21 63,094 26 |

Deficiency of Revenue,..... \$ 2,548 99

From which should be deducted the amount of Rents and Assessments unpaid on 1st January, 1856, as follows:

| | |
|-----------------------------|---------------------------|
| Rents. South Division,..... | 4,144 75 |
| North do | 725 65 |
| West do | 591 75 5,462 15 |
| Assesments. South do | 1832 00 |
| North do | 1187 00 |
| West do | 1155 50 4,174 50 9,636 65 |

Leaving a surplus for the year's operations of.....\$ 7,087 66

The following are the receipts for Revenue from the commencement of the Works to January 1st, 1856:

| | |
|---------------------------------------|---------------------------------|
| Water Tax of 1852. Rec'd in Cash, | 10,313 70 |
| " " " 1853. " " " | 16,608 33 |
| Interest and Exchange, rec'd in Cash, | 17,761 79 |
| " " " Balance of Int. from City,..... | 1,875 61 19,637 40 |
| Income. Cash rec'd for Water Rents, | 80,215 35 |
| " " for Service Cocks, | 1,332 40 81,547 75 \$128,107 18 |

The Disbursements for Interest, and Operating Expenses from commencement of the Works to January 1st, 1856 are as follows:

| | |
|--|-----------------|
| Interest on Bonds. Cash paid,.... | 95,335 05 |
| Operating Expenses, Cash paid,.... | 46,093 59 |
| " " Sundry transfers from Stock account,..... | 342 61 |
| Operating Expenses, Sundry charges not transferred,..... | 65 20 46,501 40 |
| | \$141,836 45 |

Amount transferred to "Interest on Bonds," being proportionate part of "Discount on Bonds" to 1st Jan'y, 1,967 96 \$143,804 41

Showing a Deficiency of Revenue from commencement of Works,..... \$ 15,697 23

From which deduct Rents and Assessments unpaid on 1st
January, 1856,..... 9,636 65

Leaving a deficiency on 1st of January, 1856, of.... \$ 6,060 58

The number of Taps inserted in 1855, were,..... 907

Inserted previous,..... 1695

Total,..... 2602

The number of buildings into which water was introduced in 1855, is
as follows:

South Division,..... 856

North do 372

West do 278

Total in 1855,..... 1506

Introduced previous to 1855,..... 2745

Total of buildings having Water,..... 4251

Which are shown by the Register to be situated as follows:

South Division,..... 2,558

North do 900

West do 793

Together,..... 4,251

The number of buildings subject to assessment, upon which application
for Water had not been made to January 1st, 1856, are as follows:

South Division,..... 484

North do 214

West do 200

Total,..... 898

Wherever new pipes are laid, the people come forward freely in making
applications for water.

From the numerous buildings in course of erection, and the large num-
ber contemplated, I anticipate a great increase of Revenue from Water
Rents in the present year over those of 1855, and this with very little, if
any outlay on the part of the Company.

I am pleased to exhibit so flourishing a state of affairs, in this my first
financial Report of the proceedings of the Board.

Which is respectfully submitted,

P. R. FORREST,

Secretary.

STATEMENT NO. 1,

OF THE AFFAIRS OF "CHICAGO CITY HYDRAULIC CO.," DECEMBER 31, 1855.

| | Dr. | |
|---|---------------------|--|
| Geo. W. Dole, Treasurer, balance in his hands..... | \$ 39,948 95 | |
| Office Furniture, expenditure..... | 229 80 | |
| Discount on bonds..... | 57,181 74 | |
| Interest on bonds..... | 31,183 58 | |
| Duncan, Sherman & Co., coupon ac't, balance to pay Jan'y interest and back coupons | 19,560 00 | |
| Water Pipes, straight Pipes on hand..... | 12,261 03 | |
| Stock, materials on hand..... | 3,459 09 | |
| Coal, amount on hand, cost..... | 4,822 50 | |
| Tappan, McBurney & Cheever, Agents, freight on Rubber Pipe..... | 37 20 | |
| City of Chicago, amount due from city..... | 19,044 69 | |
| American Water Meter Co., Express charges paid on meters received..... | 3 00 | |
| D. B. Heartt, paid him on acc't collecting Rents and assessments..... | 25 00 | |
| S. S. Wiltsee, paid him on account, Trenching, Back- filling, etc..... | 1,300 00 | |
| Operating Expenses, total expenses to Dec. 31, 1855..... | 46,436 20 | |
| Water Works, total expenditures to Dec. 31, 1855..... | 496,849 64 | |
| | <u>\$732,342 42</u> | |

| | | Cr. |
|---|---------------|---------------------|
| Bond account, Water Loan Bonds issued.. | \$ 650,000 00 | |
| Income " Waterrents collected to December 31, 1855..... | \$80,215 35 | |
| Service Cocks, excess of rec'pts over exp'd'ts. | 1,332 40 | 81,547 75 |
| John C. Haines, due him on acc't services as Commissioner..... | | 700 50 |
| Jones & Co., due them on account broken pipes sold..... | | 75 00 |
| R. D. Wood & Co., due them on acc't broken pipes sold..... | | 19 17 |
| | | <u>\$732,342 42</u> |

STATEMENT NO. 2.

RECEIPTS AND EXPENDITURES FROM JULY 1, '55, TO DEC. 31, '55, INCLUSIVE.

RECEIPTS.

| | | |
|--|--------------|----------|
| Income, Water Rents and assessments..... | \$33,816 70 | |
| Service Cocks, received for Permits granted. | 1,351 80 | |
| Operating Expenses, repairing services, and letting on water..... | 55 87 | |
| Office Furniture sold to E. Peck..... | 132 00 | |
| Bond account, proceeds of 120 Water loan bonds, \$1,000 each, sold for..... | 111,600 00 | |
| Interest on bonds, accrued interest on 120 bonds..... | \$ 105 00 | |
| Interest and Exchange from C. M. & F. Insurance Co., on current account..... | 164 81 | |
| Interest from E. I. Tinkham & Co., on current account..... | 2,348 71 | 2,618 52 |
| Water Pipe Extension, Iron sold H. Warrington..... | | 28 28 |
| Jones & Co., Philadelphia, Iron sold H. Warrington..... | | 92 00 |
| R. D. Wood & Co., Philadelphia, Iron sold H. Warrington..... | | 27 67 |
| | \$149,722 84 | |
| Add balance in Treasurer's hands July 1, 1855..... | 8,390 92 | |
| | \$158,113 76 | |

EXPENDITURES.

| | |
|-----------------------------------|--------------|
| Interest on Bonds..... | \$ 19,686 30 |
| Stop Cocks..... | 828 62 |
| Coal..... | 4,822 50 |
| Water Works..... | 66,156 81 |
| Operating Expenses..... | 10,783 57 |
| Income, rents abated..... | 10 10 |
| American Water Meter Company..... | 3 00 |
| D. B. Heartt..... | 25 00 |
| S. S. Wiltsee..... | 1,300 00 |
| Service Cocks..... | 182 41 |
| Water Pipes..... | 12,095 41 |
| Amount forward..... | \$115,893 72 |

| | |
|---|--------------|
| Amount forward..... | \$115,893 72 |
| Stock..... | 2,271 09 |
| | \$118,164 81 |
| Add balance in Treasurer's hands Dec. 31, 1855..... | 39,948 95 |
| | \$158,113 76 |

STATEMENT NO. 3.

RECEIPTS AND EXPENDITURES FROM DEC. 31, '54, TO DEC. 31, '55, INCLUSIVE.

RECEIPTS.

| | | |
|--|--------------|------------|
| City of Chicago, received on account, etc..... | \$15,531 06 | |
| Interest on Bonds, Interest and Exchange received..... | 3,342 77 | |
| U. S. Marine Hospital, received for Tap.... | 3 00 | |
| Bond Account, proceeds of 30 Water Loan Bonds issued, \$1,000 each..... | \$26,992 80 | |
| Do do Proceeds of 120 Water Loan Bonds issued, \$1,000 each..... | 111,600 00 | 138,592 80 |
| Income account, received for Water Rents and assessments..... | 54,054 52 | |
| Service Cocks, received for Permits granted. | 2,308 80 | |
| Operating expenses, received for letting on water and repairing services..... | 86 62 | |
| Do do received for Coal sold..... | 139 38 | 226 00 |
| Tool account, received for Wrenches sold... | | 18 50 |
| C. Cleaver, received for Cut Pipe sold him. | | 52 10 |
| Special Bonds, received for proceeds of \$50,000 in Bonds, in R. K. Swift's hands, after settlement of Special Loan by city, and interest..... | | 15,933 67 |
| Interest on Special Bonds, received for interest on deposit account..... | | 24 18 |
| Water Pipe Extension, received for Iron sold H. Warrington..... | | 28 28 |
| Jones & Co., received for Iron sold H. Warrington..... | | 92 00 |
| Amount forward..... | \$230,205 68 | |

| | |
|--|---------------------|
| Amount forward..... | \$230,205 08 |
| R. D. Wood & Co., received for Iron sold | |
| H. Warrington..... | 27 67 |
| Office Furniture, received for, sold E. Peck. | 132 00 |
| | <u>\$230,365 35</u> |
| Add balance in Treasurer's hands, Dec. 31, 1854..... | 375 49 |
| | <u>\$230,740 84</u> |

EXPENDITURES.

| | | |
|--|----|---------------------|
| Office Furniture..... | \$ | 12 00 |
| Interest on Bonds..... | | 35,785 05 |
| Water Works..... | | 89,694 82 |
| Water Pipes..... | | 12,095 41 |
| Stock..... | | 2,455 88 |
| Operating Expenses..... | | 27,309 21 |
| Bills Payable..... | | 15,000 00 |
| Stop Cocks..... | | 828 62 |
| Income Account..... | | 60 03 |
| Service Cocks..... | | 1,400 37 |
| Coal..... | | 4,822 50 |
| American Water Motor Company..... | | 3 00 |
| D. B. Heartt..... | | 25 00 |
| S. S. Wiltsee..... | | 1,800 00 |
| | | <u>\$190,791 89</u> |
| Add balance in Treasurer's hands, Dec. 31, 1855..... | | 39,948 95 |
| | | <u>\$230,740 84</u> |

STATEMENT NO. 4,

SHOWING THE EXPENDITURES FROM DEC. 31ST, 1854; TO DEC. 31ST, 1855,

INCLUSIVE, IN DETAIL.

OFFICE FURNITURE.

| | |
|-----------------------------------|------------------|
| 1 Com. Table \$2.00. Top for Desk | |
| \$10.00..... | 12 00 |
| INTEREST ON BONDS. | |
| Interest, Coupons for 1855..... | 35 400 |
| Exchange paid on Drafts..... | 385 05 35,785 05 |
| | <u>35,797 05</u> |

WATER WORKS.

ENGINE HOUSE.

| | | |
|------------------------------------|--------|-----------|
| Mason and McArthur, bill for Smoke | | 35,797 05 |
| Pipe Valve, etc..... | 497 80 | |
| Less Reservoir Iron sold them from | | |
| Stock Account..... | 185 93 | 311 87 |

RESERVOIR REPAIRS.

| | |
|--------------------------------|----------|
| Labor..... | 351 45 |
| Iron Rods & Iron for same..... | 2,507 23 |
| Plumbing..... | 55 65 |
| Miscellaneous..... | 30 |
| Cement..... | 4 50 |
| Carpenter work..... | 22 00 |
| Lumber..... | 244 65 |
| Mason Work..... | 5,325 91 |
| Stone..... | 26 30 |
| Cartage..... | 4 50 |
| Painting..... | 113 08 |
| Ventilator..... | 26 04 |

8681 61

Less Iron sold Mason & McA., from

| | | |
|--------------------|-------|----------|
| Stock Account..... | 48 87 | 8,632 74 |
|--------------------|-------|----------|

BREAKWATER AT ENGINE HOUSE.

| | |
|--------------------------------------|--------|
| Labor..... | 44 00 |
| Lumber..... | 254 80 |
| Crib, paid P. O'Donnel balance due.. | 112 00 |
| Hauling Stone..... | 76 00 |
| Stone..... | 30 00 |
| Spikes for Crib..... | 26 25 |
| Rawson & Bateham, balance due on | |

| | | |
|---------------|----------|----------|
| Estimate..... | 5,588 17 | 6,131 22 |
|---------------|----------|----------|

ENGINE HOUSE REPAIRS.

| | |
|----------------------------------|----------|
| Carpenter work..... | 149 75 |
| Labor..... | 95 00 |
| Lumber..... | 52 67 |
| Shingles..... | 104 18 |
| Masonry..... | 1,785 16 |
| Blacksmithing and Iron Work..... | 71 75 |
| Cornice..... | 61 42 |

| | | |
|---------------------|----------|---------------------|
| Amount Forward..... | 2,319 88 | 15,075 83 35,797 05 |
|---------------------|----------|---------------------|

| | | | |
|--|-----------------|-----------|-----------|
| Amount forward | 2,319 88 | 15,075 83 | 35,797 05 |
| Painting Roof, | 100 00 | | |
| | <u>2,419 88</u> | | |
| Less for Iron used from Stock Account, | 20 56 | 2,399 32 | |

REPAIRS AND IMPROVEMENTS ON LOTS.

| | | | |
|--------------------------------------|---------------|--------|--|
| Lumber for Engine House fence, | 61 37 | | |
| Nails, | 9 50 | | |
| Carpenter work. Sidewalk, | 14 65 | | |
| Labor. Grading and Fencing, | <u>234 00</u> | 319 52 | |

EXTENSION.

| | | | |
|---|--------------|----------|--|
| Labor on Aqueduct, | 599 26 | | |
| Lumber used in do, and for Stop Cocks and Hydrant Boxes, | 492 01 | | |
| Nails, Spikes, etc., | 104 56 | | |
| Iron Work, | 10 60 | | |
| Carpenter work, | 640 50 | | |
| Dredging trench for Aqueduct. S. S. Durfee, | 812 50 | | |
| do Basin. Paid S. S. Durfee, | 3,533 27 | | |
| Soap used in Aqueduct, | 2 02 | | |
| Wire, Wire Cloth, etc., | 20 37 | | |
| 1 Scraper and Drayage, | 8 50 | | |
| Gas fitting at Engine House, | 93 34 | | |
| Coal Sheds. Cost of same, | <u>93 69</u> | 6,413 62 | |

WATER PIPE EXTENSION.

| | | | |
|---|-----------------|-----------|-----------|
| Packing, | 72 52 | | |
| Nails, Repairing Tools, etc., | 22 60 | | |
| Labor, | 1,838 37 | | |
| Lead, | 4,655 12 | | |
| Cartage, | 21 80 | | |
| Exchange paid on Drafts for Pipes, | 356 64 | | |
| Hydrants, | <u>1,615 13</u> | | |
| Three Maps, showing Pipe Extension in N., S. and W. Divisions, | 106 00 | | |
| Trenching and Backfilling, | 3,875 77 | | |
| Dockage on Pipes, part payment, | 200 00 | | |
| Miscellaneous, | 70 74 | | |
| Stop-cock Boxes, | 244 88 | | |
| Superintendence, | <u>750 00</u> | | |
| Amount forward | 13,829 57 | 24,208 29 | 35,797 05 |

| | | | |
|--|------------------|-----------|-----------|
| Amount forward, | 13,829 57 | 24,208 29 | 35,797 05 |
| Sleeves, etc., | 62 72 | | |
| Water Pipes, | <u>41,423 44</u> | | |
| | 55,315 73 | | |
| Less am't chg'd stock ac't on hand, .. | <u>1,414 34</u> | 53,901 39 | |

PIPE YARD.

| | | | |
|---|-------------|----------|--|
| Lumber, | 219 85 | | |
| Iron Work, | 40 49 | | |
| Less sold Wilson & Hughes zinc from stock account, .. 2 50 | 37 99 | | |
| Labor, | 758 30 | | |
| C. R. Vandercook, services as Foreman | 299 97 | | |
| Packing, etc., | 5 92 | | |
| Paint and Turpentine, | <u>4 01</u> | 1,326 04 | |

TOOLS AND FIXTURES.

| | | | |
|-------------------|--|--|------|
| 2 Wrenches, | | | 3 00 |
|-------------------|--|--|------|

ENGINE HOUSE LOT.

| | | | |
|-----------------------|--------------|--------|--|
| Lumber, | 48 40 | | |
| Carpenter work, | 60 50 | | |
| Labor, grading, | <u>32 75</u> | 141 65 | |

MASON WORK AT ENGINE HOUSE.

| | | | |
|--|---------------|----------|--|
| A. S. & O. Sherman, masonry mater'ls | 752 58 | | |
| C. O'Connor, balance due on final es- timate, | <u>378 70</u> | 1,131 28 | |

MASON WORK OF RESERVOIR BUILDING.

| | | | |
|---|--|----------|--|
| P. Page, bal. due on final estimate, .. | | 1,808 09 | |
|---|--|----------|--|

STEAM ENGINE AND PUMPS.

| | | | |
|--|---------------|--------|--|
| Quintard, Merritt & Co., int. due on ac't. | 106 40 | | |
| J. A. Stevens, fee for Patent Cut-off, .. | <u>151 87</u> | 258 27 | |

RESERVOIR BUILDING.

| | | | |
|-----------------------------------|--------------|-----------|--|
| Cornice pattern, | 5 00 | | |
| Mason-work, | 192 88 | | |
| Carpenter-work, | 141 00 | | |
| Lumber, | 32 55 | | |
| Nails, Screws, Butts, etc., | 13 06 | | |
| Painting and Glazing, | <u>72 40</u> | 456 89 | |
| Amount forward, | | 83,234 90 | |

| | | |
|--|-----------|--------------------|
| Amount forward, - - - | 83,234 90 | |
| IRON ROOF OF RESERVOIR. | | |
| Iron bought of E. G. Hall & Co., - - | 84 42 | 35,797 05 |
| " " Jos. T. Ryerson, - - | 88 71 | |
| " " Lake & Brown, - - | 358 87 | |
| Lumber, scantling, - - - | 10 70 | |
| Pattern for Roof, of Mason & McArthur | 22 30 | |
| Mason & McArthur, for estimate on | | |
| iron roof, - - - - - | 1,631 83 | |
| | 2,196 83 | |
| Less sold Mason & McArthur, fmst'k ac't | 22 30 | 2,174 53 |
| RESERVOIR TANK. | | |
| Lumber, - - - - - | 99 60 | |
| Painting, etc., - - - - - | 469 48 | |
| Nails, etc., - - - - - | 57 41 | |
| Cartage, - - - - - | 5 12 | |
| Packing, - - - - - | 21 25 | |
| Storage, - - - - - | 10 00 | |
| Labor, - - - - - | 65 62 | |
| Carpenter-work, - - - - - | 235 00 | |
| Iron-work, waste-pipe, etc., - - - | 150 01 | |
| C. Reissig, balance due on estimate, - | 1,717 62 | |
| | 2,831 11 | |
| Less sale of old iron to Mason & | | |
| McArthur, - - - - - 42 11 | | |
| Less sale of old iron to C. Reissig 107 90 | 150 01 | 2,681 10 |
| STANDING COLUMN. | | |
| Paid Quintard, Merritt & Co., balance | | |
| due them, - - - - - | 234 68 | |
| Less charges against them, - - - - | 10 18 | 224 55 |
| EXTENSION INCIDENTAL EXPENSES. | | |
| P'd int. on bond to Chic. Hydraulic Co. | 900 00 | |
| " Legal services, to E. Peck & Hosmer | 291 00 | |
| " " " J. H. Collins, - - | 50 00 | |
| " for engraving Bonds, Exchange, | | |
| and Telegraphs, - - - - - | 138 74 | 1,379 74 89,694 82 |

WATER PIPES.

| | | |
|--|-----------|------------|
| Straight pipes on hand Jan. 1, '56, cost | 18,207 24 | |
| Amount forward, - - - | 18,207 24 | 125,491 87 |

| | | |
|--|-----------|--------------------|
| Amount forward, - - - | 18,207 24 | 125,491 87 |
| Less stop-cocks charged that account, 165 62 | | |
| " amount balance due Jones & Co., | | |
| drawback on contract 20 per cent., 5,058 11 | | |
| " amount balance due R. D. Wood | | |
| & Co., drawback reserved, - - - | 888 10 | 6,111 83 12,095 41 |

STOCK.

| | | |
|---------------------------------------|----------|----------|
| For amount of articles on hand as per | | |
| Schedule of Superintendent - - - | 3,459 09 | |
| Less stock of 1854 on hand, - - - | 1,008 21 | 2,455 88 |

STOP-COCKS.

| | | |
|--|--------|--------|
| Freight paid on 25, - - - - - | 32 21 | |
| Discharging at pipe yard, - - - | 2 50 | |
| P'd Saml. P. Ayres dft. and ex. for 25 | 793 91 | 828 62 |

SERVICE COCKS.

| | | |
|--|--------|----------|
| Freight, - - - - - | 26 54 | |
| Taps and exchange on drafts, - - - | 989 33 | |
| Labor, - - - - - | 4 75 | |
| Tapping, paid Wilson & Hughes, - - | 366 75 | |
| Less sold them zinc from stock ac't, - | 163 73 | 203 02 |
| Tapper's boxes, paid Brooks & Onions | 176 73 | 1,400 37 |

OPERATING EXPENSES.

INCIDENTALS.

| | | |
|------------------------------------|--------|--------|
| Advertising and Printing, - - - - | 247 78 | |
| Legal services, Peck & Hosmer, - - | 25 00 | |
| Recording deed, - - - - - | 2 00 | |
| Survey of drain, - - - - - | 3 00 | |
| Telegraph and Express charges, - - | 6 79 | 284 57 |

ENGINE HOUSE.

| | | |
|--------------------------------|----------|--|
| Engineers and Firemen, - - - - | 3,262 84 | |
| Carpenter-work, - - - - - | 28 00 | |
| Repairing machinery, - - - - - | 233 97 | |
| Oil, Tallow, etc., - - - - - | 395 32 | |
| Tools and Fixtures, - - - - - | 66 80 | |
| Packing, - - - - - | 60 28 | |
| Stationery, - - - - - | 27 05 | |
| Miscellaneous, - - - - - | 37 65 | |
| Cleaning Well, - - - - - | 9 78 | |

| | | |
|-----------------------|----------|-------------------|
| Amount forward, - - - | 4,121 69 | 284 57 142,272 15 |
|-----------------------|----------|-------------------|

| | | |
|------------------------------------|------------------|-------------------|
| Amount forward, - - - - | 4,121 69 | 234 57 142,272 15 |
| Lumber, - - - - - | 71 00 | |
| Quicksilver and Emery Paper, - - - | 4 95 | |
| Painting, - - - - - | 36 76 | |
| Masonry Repairs, - - - - - | 13 00 | |
| Iron-work, etc., - - - - - | 44 08 | |
| Heater for Duplicate Engine, - - - | 117 52 | |
| Coal, - - - - - | 9,716 21 | |
| | <u>14,125 21</u> | |

Less, Stock ac't, old roof iron

sold Mason & McArthur, - 117 52

Deduct, chg'd Extension ac't,

Cost of Coal Sheds, - - 93 69 211 21 13,914 00

SALARIES.

J. H. Woodworth, back services as

Commissioner in 1854, due - - - 600 00

Geo. W. Dole, back services as Com-

missioner in 1854, due - - - 150 00

John C. Haines, back services as Com-

missioner in 1854, due - - - 750 00

J. H. Woodworth, for services as Com-

missioner 4 months, to May 1, '55, 400 00

Geo. W. Dole, for services as Commis-

sioner 12 months, to Dec. 31, '55, - 850 50

J. C. Haines, for services as Commis-

sioner 12 mos, Dec. 31, '55, 950 50

Less 9 months due him, - - 700 50 250 00

O. Lunt, for services as Commissioner

8 months, to Dec. 31, '55, - - - 622 66

B. F. Walker, for serv'cs as Sup't

13 months, to Dec. 31, '55, - 1,800

Less chg'd Water Pipe Exten'sn, 750 1,050 00

Henry Tucker, for services as Secreta-

ry 9 months, to Aug. 31, '55, - - 1,350 00

P. R. Forrest, for services as Secreta-

ry 4 months, to Dec. 31, '55, - - 500 00 6,523 16

PUMPING AT OLD WORKS.

Phillips & Co, bal. on bill to Dec. 8, '54,

Amount forward, - - - - 944 00 21,665 73 142,272 15

Amount forward, - - - - 21,665 73 142,272 15

OFFICE.

| | | |
|--|----------|----------|
| Salaries, - - - - - | 1,955 38 | |
| Gas and Gas Fixtures, - - - - - | 15 60 | |
| Rent to Nov. 1, 1855, - - - - - | 631 25 | |
| Printing, Advertising, and Ac't Books, - | 195 25 | |
| Miscellaneous items, - - - - - | 33 74 | |
| Stationery, - - - - - | 109 07 | |
| Coal, - - - - - | 4 50 | |
| Work on Counter & Safe, and Painting, - | 72 38 | 3,017 12 |

MISCELLANEOUS.

| | | |
|--------------------------------------|-----------------|--|
| Labor, - - - - - | 1,105 28 | |
| Repairing, - - - - - | 30 22 | |
| Lumber and Carpenter-work, - - - | 32 43 | |
| Rent, - - - - - | 50 00 | |
| Feed for Horses, - - - - - | 180 07 | |
| Hauling, - - - - - | 49 63 | |
| Miscellaneous petty items, - - - - | 8 26 | |
| Tools, - - - - - | 26 44 | |
| Repairs on Buggy, Wagon & Harness, - | 58 21 | |
| Shoeing Horses and Blacksmithing, - | 52 08 | |
| Lead Pipe, Coupling, etc., - - - - | 2 82 | |
| | <u>1,595 44</u> | |

Less zinc sold Wilson & Hughes

from stock account, - - - 2 82

Less labor chg'd W. Pipe Ex., - 14 50 17 32 1,578 12

REPAIRS.

| | | |
|--|--------|--|
| Engine House Fence, - - - - - | 7 44 | |
| Lumber, - - - - - | 73 90 | |
| River Pipe, - - - - - | 288 64 | |
| Duplicate Engine, - - - - - | 324 68 | |
| Reservoir Pipe, - - - - - | 10 95 | |
| Hydrants, - - - - - | 14 88 | |
| Mason-work at Engine House, - - - | 3 05 | |
| Quintard, Merritt & Co., bal. due them | | |
| for Repairs at Engine House, '54, - | 344 45 | |
| Machinery, - - - - - | 102 28 | |
| Sidewalk, - - - - - | 5 22 | |
| State Street Pipe, - - - - - | 25 00 | |

Amount forward, - - - - 1,200 49 26,260 97 142,272 15

| | | | | | | | | | | |
|----------------------|---|---|---|---|-------|----|--------|----|---------|----|
| Amount forward, | - | - | - | - | 1,200 | 49 | 26,260 | 97 | 142,272 | 15 |
| Labor on Smoke-pipe, | - | - | - | - | 21 | 65 | | | | |
| | | | | | 1,222 | 14 | | | | |

| | | | | | | | | | | |
|--------------------------------|---|---|---|---|-----|----|-----|----|-------|--------------|
| Less sold Mason & McArthur | | | | | | | | | | |
| from stock account, | - | - | - | - | 100 | 00 | | | | |
| Less Lumber had of city, 1854, | | | | | | | | | | |
| on account, | - | - | - | - | 73 | 90 | 173 | 90 | 1,048 | 24 27,309 21 |

BILLS PAYABLE.

| | | | | |
|---|---|---|----------|----|
| Paid "Chicago Hydraulic Co." Bond due May 1, '55, | - | - | \$15,000 | 00 |
|---|---|---|----------|----|

INCOME ACCOUNT.

| | | | | | | |
|---------------------|---|---|---|---|----|----|
| Water Rents abated, | - | - | - | - | 60 | 03 |
|---------------------|---|---|---|---|----|----|

COAL ACCOUNT.

| | | |
|--|-------|----|
| Amount on hand 1st Jan., 1856, 803 $\frac{3}{4}$ tons, at \$6 per ton, | 4,822 | 50 |
|--|-------|----|

AMERICAN WATER METOR CO.

| | | | |
|---|---|---|----|
| Paid Express charges on Meteor, received May 7, 1855, | - | 3 | 00 |
|---|---|---|----|

D. B. HEARTT.

| | | | | |
|---------------------------------------|---|---|----|----|
| Paid him on account collecting Rents, | - | - | 25 | 00 |
|---------------------------------------|---|---|----|----|

S. S. WILTSEE.

| | | | | |
|--|---|---|-------|----|
| Paid him on account Trenching and Backfilling, | - | - | 1,300 | 00 |
|--|---|---|-------|----|

| | |
|-----------|----|
| \$190,791 | 89 |
|-----------|----|

CHARTER

OF THE

HYDRAULIC WORKS.

AN ACT

TO INCORPORATE THE CHICAGO CITY HYDRAULIC CO.

Be it enacted by the People of the State of Illinois represented in the General Assembly:

I. That John B. Turner, Horatio G. Loomis, and Alson S. Sherman, be, and they are hereby named and constituted as a board of water commissioners for the City of Chicago; who, and their successors in office, shall be a body politic and corporate, by the name and style of the "Board of Water Commissioners of the city of Chicago," and by that name shall have perpetual succession, with power to contract, sue, and be sued, to purchase, hold and convey personal and real estate, to have a common seal, to alter and break the same at pleasure, to make by-laws, and do all legal acts which may be necessary and proper to carry out the effect, intent and object of this act.

II. The said commissioners shall hold their offices respectively for the term of three, four, and five years; said commissioners shall, within sixty days after the passage of this act, decide by lot their respective terms, which decision shall be notified by a written statement to the common council of said city, which shall be entered of record on the books of said common council; and on the first Tuesday of April, in the year of our Lord one thousand eight hundred and fifty-four, and annually thereafter, there shall be an election held by the qualified voters of said city, in the same manner that elections are held for the election of Mayor, for the election of one or more commissioners to fill all vacancies occasioned by the termination, in any manner, of the term of any commissioner under this act. All commissioners elected subsequent to the first election aforesaid, shall hold their office for the term of three years. And in case of

the death or resignation of any of said commissioners, the remaining commissioners shall nominate some citizen of said city, being a qualified voter, to fill such vacancy, and shall present said citizen to the common council of said city for confirmation; who, if confirmed by said common council, shall have full power to act as such commissioner; but if the said common council shall refuse to confirm such nomination, said commissioners shall nominate another, and so on, until such confirmation shall be made; such person, when so confirmed, shall fill such vacancy until the next regular election of a commissioner, to be held after such confirmation.

III. The said commissioners shall have power to loan, from time to time, for such time as they shall deem expedient, a sum of money not exceeding two hundred and fifty thousand dollars, upon the credit of said city of Chicago, and shall have authority to issue bonds pledging the faith and credit of said city for the payment of principal and interest of said bonds; which bonds shall issue under the seal of said board of commissioners, and shall be signed by them, or a majority of them, and bearing interest not exceeding ten per centum per annum. And it shall be the duty of said commissioners to keep an accurate register of all bonds issued by them, showing the number, date, and amount of each bond, and to whom the same was issued; and it shall also be their duty to furnish to the clerk of said city a copy of such register, as soon as the same is made, which shall be preserved by said clerk, and copied into the records of said city.

IV. It shall be the duty of said commissioners to examine and consider all matters relative to supplying the city of Chicago with a sufficient quantity of pure and wholesome water, to be taken from lake Michigan, for the use of its inhabitants.

V. The said commissioners shall have power, and it is made their duty, to employ engineers, surveyors, and such other persons as, in their opinion, may be necessary to enable them to perform their duties under this act.

VI. Said commissioners shall have the power, and it is hereby made their duty, as soon as may be, after the necessary funds shall have been procured, as herein provided, to purchase such lot or lots of land, and to construct such buildings, machinery, and fixtures, as shall be deemed necessary or desirable to furnish a full supply of water for public and private use in said city.

VII. Said commissioners shall have power to construct reservoirs, jets, and public and private hydrants, and to lay pipes in and through all the alleys and streets of said city; and also across all rivers and streams, not

interfering with the navigation of the same, and with the consent of the common council of said city, to construct fountains in the public squares, or such other public grounds of said city as they shall deem expedient.

VIII. The said commissioners shall, from time to time, assess the water rents to be paid for water used at each house or other building, against the occupant or occupants, owner or owners of such house or other building, upon such basis as they shall deem equitable; and such water rents shall become a continuing lien upon such house or other building, for the accommodation of which water shall have been introduced, and upon the land or lot and house, or other building, on which such house or other building stands, when said lot or land and building are owned by the same person or persons, from the time the water shall have been introduced as aforesaid.

IX. It shall be the duty of said commissioners to collect the rents so assessed, and in case any person or persons, so assessed, shall neglect to pay any such assessment for ten days after the time fixed for the payment thereof, of which notice shall be given in some newspaper published in said city, such notice to be at least ten days before the time fixed for the payment of such rents, said commissioners shall issue their warrants, under the seal of said corporation, directed to the marshal or any constable of said city, commanding him to make the amount specified in such warrant, being the amount due for water rent as aforesaid, together with the costs of advertising the same, and such fees as constables are entitled to by the laws of this State, in the levy and sale of personal property, upon execution, out of goods and chattels of the person or persons so assessed as aforesaid, and the marshal or constable in such case may levy, under said warrant, upon any personal property of the person or persons against whom the same is issued, and sell the same at public auction, after giving ten days' notice of the time and place of sale in some newspaper published in said city; and such warrants shall authorize the sale of any house or building on which any lien shall have attached as aforesaid, subject only to such *bona fide* incumbrances as shall have existed prior to the time of the introduction of such water as aforesaid.

X. And when any such warrants shall be returned by said officer unsatisfied, the said commissioners shall proceed to sell said lands and lots, and building or buildings, when owned by the same person or persons as aforesaid, in the same manner, and after having given the like notice, as is required by the laws of this State, for the sale of lands for taxes; and the certificate of sale in such cases, signed by either of said commissioners, shall have the same force and effect as the certificate required by law on the sale of lands for taxes as aforesaid. In case the said real estate shall

be sold as aforesaid, and the person or persons owning the same shall neglect to redeem the same in manner provided by the laws of this State for the redemption of real estate on sale for taxes, the said commissioners may give a deed under the seal of said corporation, of the said real estate so sold as aforesaid, to the purchaser or purchasers thereof; which deed shall be, as near as may be, the same, and shall have the like force and effect as deeds given upon the sale of lands for taxes as provided by the laws of this State.—*Repealed.*

XI. The said commissioners shall also, from time to time, assess upon the person or persons occupying or owning, any house or other building situated in the vicinity of any public hydrant, when said house or other building is not supplied by a private hydrant, such amount as, in their judgment, the occupant of such house or other building might be benefited by the use of such public hydrant; and such assessment, when so made, shall be a lien upon such house or other building, and upon the lot upon which the same may stand, when said house or other building and lot are owned by the same individual, in same manner as hereinbefore provided, in case of private hydrants, and such assessments may be collected in the manner, in all respects, as hereinbefore provided.

XII. It shall be the duty of said commissioners to construct hydrants of sufficient size and capacity, and in such localities, as they shall deem desirable for the purpose of extinguishing fires; and they shall assess the houses and other buildings in the vicinity of the said hydrants, in the proportion in which they shall deem the same respectively benefited; and the said assessment shall be collected in the same manner as herein provided for the collection of the water rent assessed by said corporation.

XIII. The said commissioners shall keep an accurate record of all proceedings, together with a list of all assessments for water rents, which shall be subject to inspection at all times, and may elect one of their own number to act as secretary of said board, or employ some other competent person for the purpose, as they may deem desirable.

XIV. It shall be the duty of said commissioners to make report to the common council of said city, semi-annually, which report shall embrace a statement of the funds and securities of said corporation, and all debts due and owing to and from said corporation, together with an accurate account of their expenditures; which statement shall be certified by said commissioners under oath, and shall be entered of record by the clerk of said city, and published in some newspaper in said city of Chicago.

XV. Whenever the receipts of said corporation, from water rents or other sources, shall accumulate so that there shall be a surplus, amounting to a sum of not less than five hundred dollars, not needed for the payment

of the current expenses of said corporation, it shall be the duty of the commissioners to invest the same in some safe stocks, or upon other real or personal securities, under the direction and approval of the judge of the circuit court of Cook county, or some other judge in said county having chancery jurisdiction; such approval to be signified in writing under the hand of such judge. Such investment shall be made in the name of said corporation, and in such manner as to make the same available for the payment of interest and the principal of the bonds issued as aforesaid, as soon as may be. It shall be the duty of said commissioners to pay the interest on such bonds as fast as such surplus fund will permit, and also the principal as the bonds become due, as funds for such purpose shall, from time to time, accumulate. The said commissioners may, when they have funds for that purpose, purchase the bonds so issued as aforesaid, whether the same become due or not; and in case the said commissioners shall at any time not have funds on hand sufficient to meet any of the said bonds, at the time when they shall become due, they shall have the right to issue new bonds, for such amount, and on such time as they shall deem expedient, in the place of bonds so becoming due as aforesaid; the said old bonds to be cancelled in the registry thereof, and the said new bonds to be recorded in the manner hereinbefore provided.

XVI. It shall be the duty of said commissioners, at least thirty days before the time fixed by the ordinance of said city for assessing city taxes, to make a special report to the common council of said city, what, if any sum, will be needed by said commissioners over and above the revenue of said corporation, to meet the payment of interest or principal of the bonds issued as aforesaid; and it shall be the duty of the common council to raise said amount by a special tax in the same manner as general taxes, to be designated as water tax; and the said amount shall be paid over to the said corporation by the collector of said city.

XVII. The salary of said commissioners, and also of the secretary of said board, shall be fixed by the common council of said city, from time to time, as soon as may be after the passage of this act, and after each election as herein provided, and the amount of such salary shall not be reduced during the term for which said commissioners shall be elected.

XVIII. Each commissioner, before entering upon the duties of his office, shall give bond to said city in such sum and with surety to the satisfaction of the common council of said city, conditioned for the faithful performance of his duties as such commissioner, and that he will faithfully disburse and account for all moneys coming under his control as such commissioner, the amount of which bond may be increased at any time as the said common council may deem expedient.

XIX. Said commissioners may purchase the corporate rights and real and personal property, fixtures and stock of every name and description of the Chicago Hydraulic Company, on such terms as may be agreed upon between said commissioners and said company; and when such purchase shall be made, the said commissioners shall succeed to, and become invested with, all the powers, rights, privileges and immunities, exercised and enjoyed by the Chicago Hydraulic Company, under their charter, and shall continue to supply water to the citizens of Chicago, under the same, and collect the money and rents therefor, in all respects as fully and effectually, as the Chicago Hydraulic Company can or may do, until the said commissioners, acting under the provisions of this act, shall have completed their arrangements, machinery, engines, pipes, buildings, and other things provided for in this act, for the purpose of supplying the said city with pure and wholesome water; after which time the said Chicago Hydraulic Company and their said charter shall become extinct and null: *Provided always*, that if the said commissioners cannot agree with the said Chicago Hydraulic Company, as to what sum shall be paid the said Chicago Hydraulic Company for their property, rights, and privileges, then the said company shall have the right to establish, by satisfactory proof, the actual costs of their said property before the judge of the circuit court of Cook county, upon petition to him in the term time or vacation; and no greater sum shall be paid for the same than the said judge shall decide the actual cost to have been.

XX. This act may at any time be altered, repealed, or amended.

XXI. All materials procured or partially procured under a contract with the commissioners, shall be exempt from execution, but it shall be the duty of the commissioners to pay the money due for such materials to the judgment creditor of the contractor, under whose execution such material might otherwise have been sold, upon his producing to them due proof that his execution would have so attached, and such payment shall be held a valid payment on the contract.

XXII. No one or more of the said commissioners shall be interested either directly or indirectly in any contract entered into by them with any other person; nor shall they be interested directly or indirectly in the purchase of any material to be used or applied in and about the uses and purposes contemplated by this act.

XXIII. The said commissioners, or either of them, may be removed from office by the judge of the circuit court of Cook county, upon petition presented to him in term time or in vacation, by the common council of the city of Chicago, or if it shall appear after hearing, and proof before said judge, that the said commissioners, or either of them, have been guilty

of misfeasance or malfeasance in office, or any breach of duty, either of commission or omission, under this act, and if the said judge shall remove any two or more of said commissioners from office, for any cause before the expiration of the term of their office, he is hereby authorized and empowered to appoint others in their stead, who shall fill such offices for and during the unexpired term of such commissioners so removed.

XXIV. The said commissioners shall adopt such plan as in their opinion may be most advantageous for procuring such supply of water, and shall ascertain as near as may be, what amount of money may be necessary to carry the same into effect. The said commissioners shall make a report of their proceedings, containing a full statement and description of the plans adopted by them, an estimate of the expense thereof, together with an estimate of the probable amount of revenue to accrue to the city, upon the completion of the work, with the reason and calculations upon which their opinions may be formed, and all such other information, connected with the object of their appointment, as they may deem important.

XXV. Such report shall be made and presented to the common council by the said commissioners, together with all such conditional contracts as may have been made by them by virtue of this act, on or before the first day of January, which will be in the year of our Lord one thousand eight hundred and fifty-two.

XXVI. The said commissioners are hereby authorized to enter upon any land or water, for the purpose of making surveys and to agree with the owner of any property which may be required for the purposes of this act, as to the amount of compensation to be paid to such owner.

XXVII. In case of a disagreement between the commissioners and the owners of any property which may be required for the said purposes, or affected by an operation connected therewith, as to the amount of compensation to be paid to such owner, or in case any such owner shall be an infant, a married woman, or insane, or absent from the State, the judge of the circuit court of Cook county, may, upon the application of either party, nominate and appoint three different persons, to examine such property, and to estimate the value thereof, or damage sustained thereby, and to report thereon to the said Court without delay. (*Repealed.*)

XXVIII. Whenever such report shall have been confirmed by the said circuit judge of Cook county, the said commissioners shall within two months thereafter pay to the said owner or to such person or persons as the court may direct, the sum mentioned in said report, in full compensation for the property required or for the damage sustained, as the case may be, and thereupon the said commissioners shall become seized in fee

of such property so required, and shall be discharged from all claim by reason of any such damage. (*Repealed.*)

XXIX. If any person shall wilfully do or cause to be done, any act whereby any work, materials or property, whatever, enacted or used, within the city of Chicago or elsewhere, by the said commissioners, or by any person acting under their authority, for the purpose of procuring or keeping a supply of water, shall in any manner be injured, or shall wilfully pollute the water, shall be guilty of a misdemeanor, and upon conviction, shall be punished therefor as other misdemeanors are punished.

XXX. All contracts for materials, or for the construction of the work, shall be in writing, and of each contract two copies shall be taken, which shall be numbered and endorsed with the date of the contract and with the name of the contractors, and a summary of the work to be done or materials to be furnished, one copy of which shall be retained by the said commissioners, and the other copy of which shall be filed with, and kept and preserved by the clerk of the common council among the files of said office.

XXXI. Public notice shall be given of the time and place at which sealed proposals will be received for entering into contracts; all sealed proposals for contracts shall be for a sum certain as to the price to be paid or received, and no proposition which is not thus definite and certain, or which contains any alternative condition, or limitation as to price, shall be received or acted upon.

XXXII. No more than one proposition shall be received from any one person for the same contract, and all the propositions of the person offering more than one shall be rejected.

XXXIII. Every person who shall enter into any contract for the supply of materials or the performance of labor, shall give satisfactory security to the commissioners for the faithful performance of his contract according to his terms.

APPROVED, February 15, 1851.

AN ACT

To amend an act entitled "*An Act to incorporate the Chicago City Hydraulic Company.*"

Be it enacted by the people of the State of Illinois represented in the General Assembly, That the commissioners named in "*An act to incorporate the Chicago City Hydraulic Company*" approved February 15, 1851,

and their successors in office, be and they are hereby authorized and empowered to loan from time to time, as they shall deem expedient, in addition to the sum named in the said act, the sum of one hundred and fifty thousand dollars, in the same manner and upon the same terms, conditions, guarantees and securities named in the same act, and this act to be an amendment to and form a part of the said act to incorporate the Chicago City Hydraulic Company herein mentioned. Provided, that no higher rate of interest than seven per centum per annum shall be paid for any such loan made by authority of this act.

SIDNEY BREESE,

Speaker of the House Representatives.

WM. McMURTRY,

Speaker of the Senate.

APPROVED June 15th, 1852.

AUG. C. FRENCH.

AN ACT

In amendment of and supplemental of an act entitled an act to incorporate the Chicago City Hydraulic Company.

SEC. 1. Be it enacted by the people of the State of Illinois, represented in General Assembly, That the persons hereafter to be elected Water Commissioners of said city shall be taken successively from the South, North and West Divisions of said city, in the following order: The first election after the passage hereof shall be of a Commissioner from the South Division, the next from the North Division, and the next from the West Division, and so on in the same order, so that one Commissioner shall be elected for one of said Divisions each year, and shall hold his office for three years from the time of his election. No person shall be elected from any division unless he shall at the time of his election be a freeholder and have been a resident of said city for at least three years, and of said Division for at least six months next preceding such election.

In case of any vacancy in office, of any one or more of said Commissioners, the vacancy shall be filled by the election by the Common Council, of some citizen of said city duly qualified and resident as aforesaid, who shall have power to act as such Commissioner until the expiration of the full term for which the Commissioner was elected in whose place he is appointed. Provided that no person shall be considered elected by said Common Council, unless he shall receive a majority of the votes of all the aldermen

aldermen by law authorized to be elected. The first election under this act shall be for a Commissioner from the South Division, and shall be held on the first Tuesday in May, A. D. 1855, and the succeeding election shall be annually thereafter.

SEC. 2. If any Commissioner shall, during his term of office, remove his place of residence from the Division from which he was elected, such removal shall vacate the office of such Commissioner, and the Common Council shall forthwith declare said office vacant, and proceed to elect some person duly qualified and resident as aforesaid, who shall act as Commissioner during the unexpired term of the Commissioner whose office is thus vacated.

SEC. 3. The said Board shall have the power and it shall be their duty to assess as water rents such amounts as they shall deem equitable upon the owner or owners, occupant or occupants, of any building or buildings, which shall be situated on lots adjoining any street, avenue or alley in said city, through which the distributing water pipes are or may hereafter be laid, from which such building or buildings can be conveniently supplied with water, whether the said owner or owners shall make use of such water or not; and said water rates shall be and become a continuing lien or charge upon all such buildings and the lot or lots upon which such buildings are situated, if owned by the same person or persons as such building or buildings, and shall be collected in like manner with other water rates of said city, as provided by the act of which this is an amendment.

SEC. 4. The said Commissioners may make such division of duties among themselves for each year of their term as they shall deem expedient, and shall report in writing to the Common Council the nature and extent of the duties assigned to each Commissioner, which report shall be made on the third Monday of May, or as soon thereafter as may be in each year, and the Council shall thereupon fix the salary to be paid to each of said Commissioners during the year next succeeding for the performance of the duties so specially signed to him, and such salary shall attach to the performance of the said respective duties, and not be changed during the year for which it was fixed.

SEC. 5. The said Commissioners shall have power to borrow from time to time, as they and the Common Council shall deem expedient, a sum not exceeding three hundred thousand dollars upon the credit of said city of Chicago, and shall have power by and with the approval of the Common Council of said city to issue bonds pledging the faith and credit of the said city for the payment of the principal and interest of said bonds which bonds shall be issued under the seal of said board, and shall be signed

by them, and may be made payable at such place and in such currency as they shall deem expedient, and bearing interest not exceeding seven per cent. per annum. Provided that the said Commissioners shall not sell the said bonds, whatever rate of interest the same may bear, at a rate which will net to the said board less than par value for seven per cent. bonds. Provided further, that no bonds shall be issued until the Common Council shall have approved of such issue by a vote of a majority of all the aldermen by law authorized to be elected, and provided that all bonds issued by the said Board, before they shall be binding upon said city, shall be marked approved by the Mayor and Clerk of said city, under the seal of said city, and that such signature and seal shall be conclusive evidence to the holder of said bonds of the fact of such approval. It shall be the duty of the said Commissioners to keep an accurate register of all bonds and all interest coupons issued by them showing the number, date and amount of each bond and coupon, and to whom issued and where payable, and it shall be the duty of the City Clerk to register the said Bonds when approved as aforesaid in the same manner as the other indebtedness of said city is registered. Provided further, that all funds derived from the sale of the bonds of the said board, or from water rents or otherwise, shall be exclusively used for and appropriated by said board to the objects and purposes specified in said act, of which this is an amendment, nor shall the same or any part thereof be loaned to or used by the said City of Chicago.

SEC. 6. It shall be the duty of the said Board at any time when they shall desire, to make an issue of bonds for any of the purposes specified in the said act to which this is an amendment, to make a report to the Common Council, setting forth in detail the nature and amount of the work proposed to be executed, and the amount which will be required by them for any of the purposes for which said Board was constituted, within a period not exceeding six months from the date of said report, which report shall specify in detail the amount and nature of the work, and of the different kinds of work proposed to be executed in said time, and the estimate cost of said work, and of each kind of work, and the amount of materials required to be purchased, and the estimated cost of the same, and the Common Council may thereupon approve the issue of the whole amount of bonds called for by such report, or such part thereof, as the said Common Council may deem expedient.

SEC. 7. The said Board shall cause to be printed on each Water Permit issued to any party using the water, a copy of all rules and restrictions regulating the use of the water, which shall be adopted by them, and they shall further report a copy thereof to the Common Council who shall

thereupon pass an ordinance establishing such rules and regulations and providing penalties for their violation, which penalties may be enforced in any court having jurisdiction of any offenses against any of the ordinances of said city. In all cases where said rules are not complied with, the said Board shall have the right to stop or cut off the supply of water from any person or persons refusing or neglecting such compliances.

SEC. 8. It shall be the duty of the said Board to return to the Common Council as often as said Board shall deem necessary, the warrants for the collection of Water Rents issued by them as provided in the 9th Section of the act of which this is an amendment, which have been returned to said Board unsatisfied, and shall report to the Common Council at the same time the building or buildings, lot or lots to which the amounts specified in such warrants are respectively chargeable, and the Common Council shall thereupon take the same proceedings for the collection of such amounts as are or may hereafter be provided by the charter and ordinances of said city for the collection of the amount due in any warrant for the collection of sidewalk assessments, after such warrant has been returned unsatisfied, and the amount, when so collected, to be paid to the said Board.

SEC. 9. Whenever the receipts of the said Corporation from Water Rents or other sources shall accumulate that there shall be a surplus amount, to a sum not less than five hundred dollars not needed for the current expenses of the said Corporation, it shall be the duty of the Commissioners to invest the same, first in the payment of the interest on said Bonds, as it becomes due, or in the purchase of the outstanding Bonds of said Company, if they can be purchased at or below par, if not, then in the purchase of United States or State Government Stock or upon unencumbered real estate in the County of Cook of at least double the value of the amount loaned, with the approval of the Mayor and Committee of Finance of the Common Council or of a majority of them, such approval to be signified in writing under their hand of the said Mayor and Committee on Finance or a majority of them. Such investment shall be made in the name of said Corporation and in such manner as to make the same available for the payment of the interest and principal of the Bonds issued by them. The semi-annual report of the said Board shall specify in full in nature and amount of the respective securities in which the said surplus funds is invested.

SEC. 10. No one or more of said Commissioners, nor any of the officers of said Board, nor any member of the Common Council during the term for which they were elected, shall be interested directly or indirectly in any contract entered into by said Board, with any other person, nor in

the purchase of any other materials to be used or applied in or about the uses and purposes contemplated in this act.

SEC. 12. The said Commissioners, or either of them, may be removed from office by the Judge of the Circuit Court, or the Judge of the Court of Common Pleas of Cook county, upon petition addressed to either of said Judges, at any time by the Common Council of said city. The said petition shall be voted by a majority of all the members of said Council, and when presented to such Judge, shall be accompanied by specifications of the charges made against said Commissioner or Commissioners. No technical form shall be required for the statement of said charges so that the same are stated in such a form as to be specific and intelligible. The Judge to whom such petition is addressed, upon presentation of said petition, shall order a copy thereof to be filed in said Court of which he is Judge, and notice of the filing thereof to be issued forthwith by the Clerk of said Court to said Commissioner, and that the same would be taken up in twenty days after the service of such notice upon said Commissioner. The said Judge shall set as a special Commissioner to try said charges, and the course of proceedings in said trial shall be governed by the general rules of procedure in the trial of misdemeanor in the courts of this State, excepting that no Jury shall be allowed, evidence may be given either orally or by deposition as in civil cases, and the said Commissioners may each be interrogated upon oath touching the matter contained in said charges, and if it shall appear to the satisfaction of such Judges, that the said Commissioner or Commissioners charged as aforesaid have been guilty of malfeasance in office or of any breach of duty, either of commission or omission, under this act, which shall have been charged as aforesaid, the said Judge shall order the removal of any one or more of said Commissioners, and if the said Judge shall, for any cause, remove any one or more of said Commissioners from office before the expiration of the term of office, the Common Council shall thereupon appoint a Commissioner or Commissioners, in the stead of those so removed, who shall fill such office for and during the unexpired term of the Commissioner or Commissioners so removed.

SEC. 13. In case of disagreement between the Commissioners and the owners of property which may, in the judgment of the Commissioners, be required for any of the purposes specified in this act, as to the amount of compensation to be paid such owners, or in case any such owner shall be an infant, a married woman, or insane, or absent from this State, or in case of disagreement between the said Commissioners and any owner or owners of property, touching the amount of damages arising from the construction of any part of the work authorized by this act or the act of

which this is an amendment, the said Commissioners shall have the right to condemn said property or to have the amount of such damages ascertained or both, and the proceedings of the condemnation of such property on the ascertainment of such damages or both shall conform as nearly as may be to those specified and provided in the act entitled "An act to amend the law condemning right of way for purposes of internal improvements, approved June 22, 1852, and the act, or acts of which the same is an amendment."

SEC. 14. It shall be the duty of said Board of Water Commissioners to cause such connections to be made between the water pipes and the sewers or drains of said city as they shall be requested to make by the Board of Sewerage Commissioners and to furnish such amount of water for the purpose of clearing out such drains or sewers as the said Board of Water Commissioners shall deem requisite, and the said Board of Water Commissioners can conveniently supply: Provided that such connections shall be made under the superintendence of the Board of Water Commissioners and that said board shall regulate the times, and manner, and amount of such supply of water. In case of disagreement between the two Boards in respect to the matters hereinbefore provided, the Common Council shall have the right to regulate the manner in which such connections shall be made and water supplied for the purposes herein mentioned.

SEC. 15. No account or claim against the said Board shall be allowed except by the vote of a majority of the said Board.

SEC. 16. No member or officer of said Board, and no member of the Common Council, shall either directly or indirectly receive any interest or profit whatsoever, on account of the deposit of any of the funds belonging to the said Commissioners, nor shall any member or officer of the said Board, or any member of the Common Council, either directly or indirectly, make use of or borrow any of the funds of the said Commissioners for his own private benefit or advantage. The funds of the said Commissioners remaining on hand shall at all times, until disposed of, be kept deposited in such place or places of deposit as shall, by an order of said Board, be directed, which order shall be entered upon the records of the said Board, and if either of said Commissioners, or any of the officers of the said Board, shall either directly or indirectly receive or appropriate for his own use or benefit, any of the funds, money or property of the said Board, or shall directly or indirectly take, pledge or borrow any of the said funds or property for his own use or benefit, such Commissioner or such officer of said Board, shall be deemed guilty of embezzlement, and shall be liable to indictment, and on conviction thereof, shall be fined not exceeding one thousand dollars or imprisoned not exceeding one year in the

County Jail. The said Commissioners shall be liable, upon their bond, for the loss of any or all money coming into their possession or control, as such Commissioners.

SEC. 17. The funds of the said Board shall be drawn out upon checks or drafts regularly numbered and payable to the order of the respective person or persons for whose benefit the same are intended, and briefly specifying for what purpose or account the same are drawn. A careful register of the checks or drafts shall be kept in the office of said Board, and the original checks or drafts, when returned to said Board, shall be carefully filed and preserved among the vouchers of the said Board, and the said register and the said returned checks or drafts shall always be subject to the examination of the finance or any other Committee, appointed by the Common Council for such purpose, and it shall be the duty of said Finance Committee, or some other committee or of such other person or persons as may be appointed by the Common Council for such purpose, to examine the said register and the cash accounts and checks and drafts of the said Board at least once in three months, and oftener if the Common Council shall deem it expedient.

SEC. 18. The Chief Engineer and Superintendent in the employ of the said Board shall reside in the City of Chicago, and said Engineer shall employ no assistant who shall not have first been approved by a vote of the said Board, and the said Engineer, Superintendent, or any of his assistants, may at any time be discharged by a vote of the said Board.

SEC. 19. It shall be the duty of the said Commissioners to keep books of account, showing with entire accuracy the amount of the receipts and expenditures of such Board, in such manner as to enable the same to be readily understood and investigated, and also to carefully preserve on file in their office vouchers for all their expenditures, which books and vouchers shall at all times be open to the examination of the Finance Committee of the Common Council or any other committee, person or persons, appointed by the Common Council for such purpose, and it shall be the duty of the said Finance Committee, or any Special Committee appointed for such purpose at the time of the presentation of the semi-annual reports of the said Board to the Council as herein provided, to make a thorough examination of the books, accounts, and vouchers of the said Corporation, and to report in writing to the Common Council the results of said investigations.

SEC. 20. The present Commissioners shall hold their offices, unless removed for cause, in manner hereinbefore provided to fill their respective places.

SEC. 21. Sections 10, 27 and 28, of the act of which this is an amendment, and all laws or parts of laws, or parts of said acts which may

be in conflict with the provisions of this act, are hereby repealed.
 SEC. 22. This act shall take effect from and after its passage.
 APPROVED FEBRUARY 15, 1855.

EXTRACT

From an act amendatory of an act entitled "An Act to reduce the law incorporating the City of Chicago, and the several acts amendatory thereof into one act, and to amend the same." Approved February 14, 1851.

SEC. 6. That the Common Council shall have power to borrow upon the faith of the city, one hundred thousand dollars for the use of the Water Works, if the Council shall hereafter deem such loan advisable: Provided two-thirds of all the Aldermen elected shall concur therein. Approved February 28th, 1854. To take effect from its passage.

AN ORDINANCE

Authorizing a loan of one hundred thousand dollars for the "Chicago City Hydraulic Company."

Be it ordained by the Common Council of the City of Chicago:

SEC. 1. That the loan of one hundred thousand dollars authorized to be made by the late act of the Legislature, approved February 28, 1854, entitled An Act amendatory of an Act entitled "An Act to reduce the law incorporating the City of Chicago, and the several acts amendatory thereof, into one act and to amend the same." Approved February 14, 1851, for the Water Works now in process of construction by the Chicago City Hydraulic Company, is hereby declared to be advisable and authorized.

SEC. 2. That the Mayor and City Clerk be directed to fill up and sign one hundred six per cent Coupon Bonds, of one thousand dollars each, to be dated June 1st, 1854, and payable on the 1st day of July, 1874, at the office of Duncan, Sherman & Co., in the City of New York, with interest payable semi-annually.

SEC. 3. That the said Bonds be designated upon their face with red ink as Water Bonds, and to be treated in every respect by the Water Commissioners as the other Water Bonds are.

Passed May 29th, 1854.

[Approved.]

I. L. MILLIKIN, Mayor.

AN ORDINANCE

To prevent filth from entering into the works of the "Chicago Hydraulic Company," and of the "Chicago City Hydraulic Company" from Lake Michigan.

Be it ordained by the Common Council of the City of Chicago:

1. That no person or persons shall hereafter drive, lead, or swim any horse, sheep, swine, or other animal into Lake Michigan, at the east end of Lake street in said city, or between the works of the "Chicago Hydraulic Company" and the South pier, or within three blocks of South and North of the works of the "Chicago City Hydraulic Company," on Chicago Avenue, commonly called the new Water Works, for the purpose of washing or cleaning such horse, sheep, swine, or other animal. Nor shall any person or persons wash or clean any carriage or other vehicle whatever within said limits, or cause the same to be done.

2. Any person who shall violate any provision of this ordinance, shall forfeit to the City of Chicago the penalty of ten dollars, to be collected before any Justice of the Peace or court having jurisdiction thereof.

Passed January 9, 1854.

AN ORDINANCE

Be it ordained by the Common Council of the City of Chicago:

1. That all the Hydrants now constructed, or which may hereafter be constructed, by the Board of Water Commissioners of the City of Chicago in the said City of Chicago, for the purpose of extinguishing fires in said city, be, and the same are hereby declared to be Public Hydrants.

2. That no person or persons (other than the members of the fire department of said city, for the uses and purposes of said Department, and those specially authorized by said Water Commissioners, or the Superintendent of the Chicago Water Works), shall open any of the said Hydrants, or attempt to draw water from the same, or in any manner interfere with or injure any of said Hydrants.

3. Any person guilty of a violation of any of the foregoing provisions of this ordinance, shall forfeit and pay to the City of Chicago a sum not less than ten, nor exceeding fifty dollars for each and every offense.

4. Any person or persons who shall wilfully or carelessly break or injure any of the Public Hydrants, constructed in said city, for the supply of the citizens with water, or shall pollute, or unnecessarily waste the water at any such Hydrants, shall, on conviction, be fined in a sum not less than ten dollars, nor exceeding fifty dollars for each and every offense.

SEC. 5. Any member of the Fire Department who shall let out, or suffer or permit any person or persons to take the Wrenches furnished by the Board of Water Commissioners to the different Fire Companies, to be used by said Companies in cases of fire, or shall suffer or permit any of the Wrenches furnished said Companies to be taken from the Engine House of said Companies, except as they accompany their Engines on occasions of fire, or for other purposes connected with the Fire Department, shall forfeit and pay, on conviction, a sum not less than ten dollars nor exceeding fifty dollars for each and every offense.

Passed, September 11, 1854.

Approved,

I. L. MILLIKIN, Mayor.

Attest: H. W. ZIMMERMAN, Clerk.

AN ORDINANCE

Authorizing the Board of Water Commissioners to borrow the sum of money therein mentioned, and to issue Bonds therefor.

WHEREAS, The Board of Water Commissioners of the City of Chicago are desirous of loaning an additional sum of money, to the amount of one hundred and twenty thousand four hundred and eighty dollars and eighty cents, (\$120,480 80,) and to issue Bonds therefor, and have made a report to the Common Council of said city, under date of April 13, 1855, setting forth and specifying in detail the nature, amount and kind of work proposed to be executed, etc., together with the estimated cost of the same, in accordance with the provisions of Section Six of an act of the General Assembly of the State of Illinois, entitled "An Act in amendment of and supplemental to an Act entitled 'An Act to incorporate the Chicago City Hydraulic Company,'" approved February 15, 1855, and praying the Common Council to approve of the issuing of the Bonds to the amount aforesaid, by the Board of Water Commissioners, for the objects and purposes specified in their said report; therefore,

Be it ordained by the Common Council of the City of Chicago:

SEC. 1. That the Common Council do hereby approve of the issuing by the said Board of Water Commissioners of the amount of Bonds required by the estimate set forth in their said report, for the purposes and objects therein contained, and in accordance with the provisions and requirements of Section Five (5) of the act mentioned in the preamble hereof; *Provided*, the whole amount of Bonds so issued shall not exceed the sum of one hundred and twenty thousand dollars.

AN ORDINANCE

To establish and provide Penalties for the violation of the Rules, Regulations and Restrictions adopted and established by the Water Commissioners of the City of Chicago.

Be it ordained by the Common Council of the City of Chicago:

SEC. 1. That the following Rules and Restrictions for the government of water takers, be and the same are hereby adopted and established, in the words and figures as the same are now established by the Board of Water Commissioners of the City of Chicago, as follows:

The Board of Water Commissioners, under authority conferred by an act "to incorporate the Chicago City Hydraulic Company," approved 15th February, 1851, and the act amendatory thereof, approved February 15th, 1855, do establish the following Rules and Restrictions for the government of water takers:

1. No Occupant or Owner of any Building, in which the water is introduced, will be allowed to supply other persons or families. If found doing so, the supply will be stopped, and the amount of payment forfeited.

2. Whenever two or more parties shall be supplied from one pipe, connecting with the distribution main, the failure, on the part of any one of said parties, to comply with the Rules and Restrictions of this Board, shall authorize the Board to withhold a supply of water from such main, without any liability whatsoever, and all payments made shall be forfeited.

3. No addition or alteration whatever, in or about any conduit, pipe, or water-cock, shall be made, or caused to be made, by persons taking the water, without notice thereof being previously given to, and permission had, in writing, from the Board.

4. All persons taking the water, shall keep their own service pipes, stop-cocks, and apparatus, in good repair, and protected from frost, at their own expense, and shall prevent all unnecessary waste of water; and it is expressly stipulated, by the Water Commissioners, that no claim shall be made against them or the City, by reason of the breaking of any service cock or service pipe.

5. No hydrant will be permitted on the side-walk, or in the front area, neither will they be permitted to be kept running when not in actual use; taps, at wash-basins, water-closets, baths, and urinals, must be kept closed in like manner.

6. Applications for water must state, fully and truly, all purposes for which it is required; and when paying the semi-annual charges for it, parties must, frankly, and without concealment, answer all questions put to them relating to its consumption. In case of fraudulent misrepresenta-

tion on the part of the applicant, or of uses of the water not embraced in the applicant's bill, or of wilful or unreasonable waste of water, the Board of Water Commissioners shall have the right to forfeit his payment, and the supply of water will be stopped, unless the party shall promptly pay such additional charge as the Board may impose.

7. The various Officers employed by the Board, and every person by them delegated for the purpose, must have free access, at proper hours of the day, to all parts of every building, in which the water is delivered and consumed, to examine the pipes and fixtures, and to ascertain whether there is any unnecessary waste of water.

8. Water rents must be paid semi-annually in advance, on the 1st days of May and November, at the Water Commissioners' office. If not paid at their office within thirty days thereafter, ten per cent. will be added for the expenses of collection. At the termination of thirty days, all Rents or Assessments remaining unpaid, will be collected in the manner provided by law.

9. For a violation of any of the preceding Rules and Requirements, this Board reserves the right to stop the supply of water, without any further or other preliminary notice; nor will it be restored, except upon payment of the expense of shutting it off, and putting it on, and upon a satisfactory understanding with the party that no future cause of complaint shall arise.

SEC. 2. No person shall, in any manner, obstruct the access to any stop-cocks connected with any water-pipe within any street, alley or common of said city, by means of any lumber, brick, building material, or other article, thing or hindrance whatsoever, under a penalty of not less than five nor more than fifty dollars.

SEC. 3. Any person who shall violate any or either of the "Rules and Restrictions for the Government of Water Takers," specified in Section One hereof, shall, on conviction, in addition to the enforcement of the forfeitures, liabilities, and stipulations and reservations therein contained, pay a fine of not less than three nor more than twenty dollars.

Passed, April 30, 1855.

Approved,

L. D. BOONE, Mayor.

Attest: H. W. ZIMMERMAN, City Clerk.

AN ORDINANCE

Authorizing the Board of Water Commissioners to borrow the sum of money therein mentioned.

WHEREAS, The Board of Water Commissioners of the City of Chicago are desirous of loaning an additional sum of money to the amount

one hundred and eighty thousand dollars (\$180,000) and to secure Bonds therefor, and have made a report to the Common Council of said city, under date of February 9th, 1856, setting forth and specifying in detail the nature, amount, and kind of work proposed to be executed, etc., together with the estimated cost of the same, in accordance with the provisions of section six, of an act of the General Assembly of the State of Illinois, entitled "An Act to incorporate the Chicago City Hydraulic Company," approved February, 1855, and praying the Common Council to approve the using of the Bonds to the amount aforesaid, by the Board of Water Commissioners, for the object and purposes specified in their said report, therefore

Be it ordained by the Common Council of the City of Chicago:

SEC. 1. That the Common Council do hereby approve of the issuing, by said Board of Water Commissioners, of the amount of Bonds required by the estimate set forth in their said report, for the purposes and objects therein contained, and in accordance with the provisions and requirements of Section five of the act mentioned in the preamble hereof, provided the whole amount of bonds so issued shall not exceed the sum of one hundred eighty thousand dollars.

JAMES LONG, Chairman Com. on Finance.

Chicago, February 25, 1856.

Report concurred in and ordinance passed.

WATER RATES.

The Board of Water Commissioners, under authority conferred by an act to incorporate the Chicago City Hydraulic Company, approved 15th February, 1851, do establish the following scale of Annual Water Rents, for the CHICAGO WATER WORKS, on all Private Dwelling Houses, occupied by one family only, viz:

| FRONT WIDTH. | | ONE STORY. | TWO STORIES. | THREE STORIES. | FOUR STORIES. | FIVE STORIES. |
|-----------------------|----------|---------------|-----------------|-------------------|------------------|------------------|
| 14 feet and over..... | 12 feet. | \$5 00 | \$7 00 | \$9 00 | \$11 00 | \$13 00 |
| 16 " " " | 14 " | 6 00 | 8 00 | 10 00 | 12 00 | 14 00 |
| 18 " " " | 16 " | 7 00 | 9 00 | 11 00 | 13 00 | 15 00 |
| 20 " " " | 18 " | 8 00 | 10 00 | 12 00 | 14 00 | 16 00 |
| 22½ " " " | 20 " | 9 00 | 11 00 | 13 00 | 15 00 | 17 00 |
| 25 " " " | 22½ " | 10 00 | 12 00 | 14 00 | 16 00 | 18 00 |
| 27½ " " " | 25 " | 11 00 | 13 00 | 15 00 | 17 00 | 19 00 |
| 30 " " " | 27½ " | 12 00 | 14 00 | 16 00 | 18 00 | 20 00 |
| 32½ " " " | 30 " | 13 00 | 15 00 | 17 00 | 19 00 | 21 00 |
| 35 " " " | 32½ " | 14 00 | 16 00 | 18 00 | 20 00 | 22 00 |
| 37½ " " " | 35 " | 15 00 | 17 00 | 19 00 | 21 00 | 23 00 |
| 40 " " " | 37½ " | 16 00 | 18 00 | 20 00 | 22 00 | 24 00 |
| 45 " " " | 40 " | 18 00 | 20 00 | 22 00 | 24 00 | 26 00 |
| 50 " " " | 45 " | 20 00 | 22 00 | 24 00 | 26 00 | 28 00 |

The Family occupying the Dwelling House to number not more than ten persons; for each person beyond that number, fifty cents per year shall be charged. Dwelling Houses occupied by more than one family, shall be charged as follows:

The second Family.....one-third of the Regular Rates.
 " third "one-fourth " " "
 " fourth "one-eighth " " "

Each family, over four families.....one-eighth " " "

Or, extra Families shall be charged such rates as may be determined upon in the discretion of the Board.

And the Board of Water Commissioners do further establish, that the Extra and Miscellaneous Rates shall be as follows:

Dry Goods, Hardware and Book Stores, and others of similar character.....\$6 00 per annum.
 Bakeries, average daily use, for each barrel of flour... 3 50 "

Offices of Professional Persons, from.....\$3 to \$5 00 per annum.
 Saloons, Groceries and Provision Stores, from...\$6 to 100 00 "
 Hotels, in addition to the Regular Rates for private families, each room..... 1 00 "
 Taverns and Boarding Houses, in addition to Regular Rates for private families, each room..... 1 00 "
 Boarding Schools, for each room..... 1 00 "
 Public Schools, from.....\$15 to 25 00 "
 Bathing Tubs, (private,) each..... 3 00 "
 " " (public,) each..... 6 00 "
 Water Closets, (private,)..... 3 00 "
 " " (public,)..... 4 00 "
 Warehouses..... 6 00 "
 Building purposes—for each barrel of Lime or Cement, 5
 Steam Engines, each horse power, ten hours per day. 5 00 per annum.
 Printing Offices, according to the number of persons, not including Steam Engines, from.....\$6 to 40 00 "
 Printing Offices, first Power Press..... 6 00 "
 Balance Press..... 4 00 "
 Hand Press..... 2 00 "
 Private Stables, for each horse up to 2..... 2 00 "
 " " " additional horse over 2..... 1 00 "
 Livery Stables, (including washing of carriages,) each horse..... 2 00 "
 Dray and Team Horses..... 1 00 "
 Street Sprinklers, for each team employed during the season of sprinkling, per day..... 50 cents.
 Water Carts, for each 100 gallons taken, and cart- }
 men not to charge over 10 cents per barrel.... } 3 cents.
 Brewers, for each 100 gallons taken..... 2 "
 Distilleries, " " " " 2 "
 For each Butcher's Stall..... 3 00 per annum.
 Railroad Depots, each locomotive (trip out) from \$75 to 100 00 "
 Gas Works, from.....\$100 to 300 00 "
 Fountains, one-sixteenth of an inch jet, in use four months in the year, average use 3 hours per day, 15 00 "
 Fountains, one-eighth of an inch jet, in use 4 months in the year, average use 3 hours per day..... 60 00 "
 Workshops for ten persons or under..... 3 00 "
 Each additional person..... 25 cents.
 Use of Hose..... 5 00 per annum.

Hose for washing windows, front areas, and sidewalks, shall be used only from the 1st of May to the 1st November, from six to seven o'clock in the morning, and from six to seven o'clock in the evening. If allowed to run at any other hours, the supply will be cut off without previous notice.

All manufacturing and other business requiring a large supply of water, are to be charged therefor per 100 gallons, at the average estimated quantity during the year. The year to be estimated at 300 days, as follows:

When the quantity used averages from 200 to 300 gallons per day, at the rate of 4 cents per 100 gallons.

When the quantity used averages from 300 to 1000 gallons per day, at the rate of $3\frac{1}{2}$ cents per 100 gallons.

When the quantity used averages from 1000 to 5000 gallons per day, at the rate of 3 cents per 100 gallons.

When the quantity used averages from 5000 to 10,000 gallons per day, at the rate of 2 cents per 100 gallons.

When the quantity used exceeds 10,000 gallons per day, the price will in no case be less than one cent per 100 gallons.