

Council Chamber, Dec. 6, 1901.

Special session.

Roll call.

Called to order by Pres. Haarer.

Present—Ald. Hamilton, Schlenker, Roberts, Jenney, Coon, Fischer, Burg, Pres. Haarer—8.

Absent—Ald. Richards, Koch, Kearns, Clancy, Brown, Schumacher, Weeks.—7.

#### THE CALL.

Mayor's Office, Dec. 6, 1901.

Mr. Jas. E. Harkins,

City Clerk,

Dear Sir:—Please issue the usual notice and call for a special meeting of the Common Council for this evening, at 7 o'clock local.

This meeting is called for the purpose of:

I Receiving the report of the special committee on water works.

II To pass to its first and second readings an ordinance to determine, define and fix the rates to be charged the inhabitants of the City of Ann Arbor for water for domestic uses by the Ann Arbor Water Company.

Yours truly,

R. S. COPELAND, Mayor.

Enter Ald. Kearney, Brown, Koch. Mayor Copeland presented.

#### REPORT OF THE SPECIAL COMMITTEE ON WATER WORKS.

##### HISTORICAL.

Sixteen years ago on the 6th of May, 1885, for the purpose of supplying the City of Ann Arbor and its inhabitants with water, a contract was entered into between the mayor, recorder and aldermen of the City of Ann Arbor and the "Ann Arbor Water Company." On the first day of June following, an ordinance approving the same was passed by the Common Council.

Previous to the first of April, 1885, the charter of the City of Ann Arbor did not provide for the granting by the Common Council of an exclusive franchise for the supply of water. During the month of April, however, the charter was so amended as to make such action possible. Within a few days the contract before mentioned had been executed, and on the 19th day of May the articles of association of the Ann Arbor Water Company, incorporating it for a term of thirty years, were filed in the office of the Secretary of State.

By the terms of the contract the water works were to be completed and water turned on on or before the first day of January, 1886. From and after that date the city was to and did pay the sum of \$4,000 per annum for the use of 100 fire hydrants. In addition to this amount, the city agreed to pay a further sum of \$500 per year because of a modification made in the original plan of the engineer. It was found that four-inch pipe would be insufficient in calibre to supply water to certain districts of the city. At an added expense of not to exceed \$6,000, six-inch pipe was laid where the smaller one had been specified, and the city has already more than paid for the change, and under the original contract must yet give over an additional sum of \$7,000.

It was further agreed that for every 700 feet of six-inch pipe laid after the completion of the original plant, another hydrant should be installed. For the use of each additional hydrant, the city was to and does pay \$40 per annum. The hydrants now number 140, and the income from the City of Ann Arbor, not counting the water consumed in the schools, net the Water Company about \$7,000 per year.

By the terms of the contract the Water Company agreed to furnish at all times a sufficient supply of water suitable for domestic purposes at reasonable rates, not exceeding in amount the average sum paid in similarly situated Michigan cities, of like population, and supplied by private companies.

The early years of the Water Company's existence were not satisfactory ones. Bad management and a serious defalcation resulted finally in a receivership, which continued from September 11, 1893, to April 1, 1898. Since that time, at least, according to the admission of its officials, the Water Company's affairs have prospered.

For years the citizens of Ann Arbor have complained of the rate schedule, complaining that in other cities, large and smaller, the water rates are much less. To ascertain the exact facts in the case, the Common Council, on January 15, 1900, appointed a special water committee to investigate the subject. This committee employed Mr. Charles A. Ward, who made a tour of the state personally visiting other water plants and interviewing their officials. He returned enthusiastic for a reduc-

tion in rates of the Ann Arbor water schedule, and so recommended in his report to the Common Council on September 17, 1900.

In February of 1901, the subject of buying the existing plant or of building a new one under municipal ownership was considered by the aldermen. On February 18th the Council voted to ask the legislature to pass an enabling act, permitting the city to issue bonds to build. For some reason the bill prepared under this instruction made provision only for the purchase of the present plant and the issuance of \$450,000 in bonds to pay therefor. This measure passed both branches of the legislature and became a law.

The discussion continued after the annual reorganization of the Council, the Water Company claiming the property to be worth \$450,000. Finally, to determine the value of the plant and the legal right of the Common Council to reduce the water rates, a special water committee was appointed on June 10, 1901.

That committee now presents its report:

#### REPORT OF THE COMMITTEE.

After careful consideration of the problem before it, your committee decided to employ an expert engineer to determine the value of the Water Company's property, and a first-class lawyer to give an opinion on the legal status of the case.

Riggs and Sherman, of Toledo, Ohio, were selected for the first task. The active work in the appraisement was done by the junior member of the firm. We believe his task was well performed, and we know it was not an easy one. We regret to say the members of the committee were not permitted to assist him, because of the reluctance of the Water Company to furnish us with any official data. Under pledge of secrecy, without special details, we understand, a few general statements were imparted to Mr. Sherman. From these he derived some assistance, but the attitude of the Water Company has not been that of open frankness and readiness to assist the citizens to a knowledge of what is best to do in solving this problem. Their plea is that they do not wish their business affairs to be an open secret to every person in Ann Arbor. Even though managing a property devoted to a public use, it is undoubtedly their

privilege, in the absence of an order from the court, to refuse to divulge their income. We are confident, however, that a much kinder feeling toward the Water Company would prevail were they to show greater readiness to co-operate with the city.

#### THE ENGINEER'S REPORT.

The engineer's report describes in detail the pumping-station, the wells, the distribution system, the reservoirs, the real estate, and water rights.

Of the water pipes, he says they are in good condition, here and there slightly affected by electrolysis. The mains running from the station on Washington street are said to be too small. He does not speak of the corrosive action of the spring water on the pipes, although page five of his report calls attention to the effect on the meters.

The quality of the water is considered and an exhibit offered to show the results of numerous chemical and bacteriological examinations. Two recent reports, for September, 1901, indicate that while the water may not have been actually unsafe at that time, it contained germs which demanded an immediate investigation. This condition prevailed for three weeks at least, September 6th to September 27th. Most of the examinations indicate the water to be wholesome.

There are 2,000 taps in use with an average daily consumption of 1,200,000 gallons. This is for the full year, with a maximum consumption of 2,000,000 gallons. The engineer says that the demand during certain seasons of the year taxes the present supply nearly to the limit. He assures us, however, that in the vicinity of the Washington street plant is a great undeveloped water supply, so that for several years to come it will not be necessary to draw on the Huron river.

The buildings and machinery are said to be in reasonably good repair and condition.

#### THE VALUATION.

We reach now the interesting point in the problem—namely the valuation. Mr. Sherman devotes a half dozen pages of his report to quotations from various technical authors as to the proper method of appraising the property. It appears there are four ways to determine the value of a water works plant: (1) the original cost, less depreciation, (2) the cost to duplicate,

less depreciation, (3) the capitalization of the net earnings, less a contribution to the sinking fund, (4) a mean of two or all of these methods. Our engineer chooses the fourth method and proceeds to find the amount under each.

As to the technical results, where engineering skill is involved, we have simply words of praise for the report. It is all we can ask, and more than we expected. But where matters of business judgment are concerned, the engineer will concede our right and duty to form our own opinion. With this in mind we will examine his figures relative to the cost of duplication and the present value of the plant.

A summary of the inventory shows the estimated present values to be as follows:

Real estate .....	\$ 9,500 00
Buildings and machinery .....	23,235 60
Reservoirs and wells .....	44,208 00
Distribution system .....	84,234 83
Supplies, tools and office furniture .....	5,500 00
Total .....	\$166,678 43

In this total is included \$22,727 75, added to cover "incidentals," we suppose.

After invoicing the buildings and machinery, the engineer added 20 per cent. likewise to the value of the reservoirs, wells and supplies he added the same amount, while to the value of the distribution system he added 15 per cent. This is entirely a matter for individual judgment, of course, and our engineer followed his own rule, but we find it a more common practice to add much less to cover oversights and incidentals. We believe, therefore, that the total figures should be reduced to \$150,000, which covers and constitutes the value of the Ann Arbor Water Company's plant.

#### THE WATER RIGHTS.

To revert to the engineer's report, there are two other items which he thinks should be included to accurately determine the present value of the plant. These are, (1) the value of the water rights, and (2) interest on the investment during construction and the unproductive first years of the company's existence.

Mr. Sherman does not attempt to place an exact value on the water rights, but makes simply an estimate. He bases this on the cost of providing

another supply of water equally abundant and equally good.

Without considering the abundance of water he has already mentioned in the vicinity of the Washington street station, the springs at the south, and those to the north of the city, with the right of the city to condemn land for public purposes, he proceeds at once to the Huron river and proposes a mechanical filtration plant. He estimates the cost of a dam across the river, the building of a purification plant, and the water rights for such a project at \$60,000. He estimates this amount, therefore, to equal the value of the water rights of the Ann Arbor Water Company. Of course we cannot and do not concede the correctness of the conclusion. The engineer has already included in the cost the price of the land, and the expense of putting down the wells; Nature furnished the water. Until fresh air and sunlight are placed on the tax rolls, we cannot count water as so valuable in a locality where it is plentiful. We must reject this item, and eliminate it from the inventory.

#### INTEREST DURING UNPRODUCTIVE YEARS.

Now let us consider the second item, that of interest on the investment during the unproductive first years. The engineer proposes to allow three years interest at 6 per cent on their investment of \$200,000, a total of \$36,000. We must reject this for two reasons. In the first place the first investment did not amount to anything like \$200,000, and in the next place the first three years were not unproductive. The City of Ann Arbor itself, as we have already shown, began to contribute the sum of \$4,500 yearly, within seven months of the beginning of construction, and many citizens had hitched on to the system within the year. The income must certainly have been sufficient to operate the plant, small as it was at that time, and to pay 6 per cent interest on the bona fide investment. If there was any deficiency it has been made up since. ~~What is the~~ ~~city of Ann Arbor~~ ~~itself has~~ ~~paid~~ ~~during~~ these fifteen years is no mean sum, amounting as it does to \$100,000.

We realize, of course, the Water Company will say that we had fire protection all that time. We did have, and now have, but it is also true that

if the city could cancel its contract and take out the fire hydrants, the water supply and equipment would be none too great to take care of the domestic demand. In other words, the capacity of the Water Company's plant is not one ounce greater than it would be if it had no contract with the city, and every cent it receives from the city is so much profit.

**THE REAL VALUE.**

The figures as given by the engineer must, therefore, be reduced by eliminating the items of water rights and interest, and reducing the expenses added for incidentals. The same modification must be made in the cost to duplicate. We include here the engineer's summary of these two estimates, and our own conclusions as to the true value:

**ENGINEER'S SUMMARY.**

	COST TO DUPLICATE.	PRESENT VALUE.
Real Estate .....	\$9,500.00	\$9,500.00
Water Rights (estimated)...	60,000.00	60,000.00
Buildings and Machinery,...	32,630.40	23,235.60
Reservoirs and Wells, .....	4,208.00	44,208.00
Distribution System .....	119,599.40	34,234.83
Supplies, Tools, and Office Furniture,.....	5,500.00	5,500.00
Interest on Cost for Three Years	36,000.00	36,000.00
Engineer's Totals	\$307,437.00	\$262,678.43

**OUR SUMMARY.**

	COST TO DUPLICATE	PRESENT VALUE.
Total.....	\$190,000.00	\$150,000.00

**A NEW PLANT.**

When we get at the figures and actually know what it would cost to build a new plant, the idea is very attractive. It would mean a great thing to this city to have municipal ownership of a modern, properly constructed, and brand-new water plant. Its construction would employ many of our working people and furnish labor for a year or more. More than this, we should have a plant which has not seen sixteen years of service, with its certain deterioration, not to speak of the uncertain but probable effects of electrolysis and water corrosion.

**THE ORIGINAL COST.**

Mr. Sherman proceeds next to make a valuation based on the original cost of the plant. On figures furnished by the Water Company he places this amount at \$341,749.62. This includes the defalcation, which was currently reported at the time to amount to

\$60,000. Deducting the same amount for depreciation, \$44,759.37, the present value of the plant, based, of course, on the Water Company's figures of the original cost, is \$296,990.25. The engineer says that the plant has cost much more than it should under proper administration.

**VALUATION BASED ON CAPITALIZATION OF EARNINGS.**

The engineer proceeds next to arrive at a valuation based on capitalization of net earnings. Here, again, we must depend on figures furnished by the company itself. He is enjoined, too, not to make these public, although the earnings are admitted to show a healthy increase each year.

First it is necessary to deduct from the net earnings a contribution to the sinking fund. In our judgment this should be an amount which, put aside annually from the beginning of the company's corporate life would produce a sum equal to the depreciation of the plant during its thirty years' existence. Our engineer differs, however, and takes an amount which, at 3 per cent compound interest during the remaining life of the corporation, will take care of the depreciation.

Estimating the value of the company's property in 1915, he thinks the annual contribution to the sinking fund should be \$4,983.06.

Deducting the annual payment to the sinking fund from the average net earnings for the past three years and capitalizing the result on a basis of 6 per cent, Mr. Sherman places the valuation by this method at \$310,567.00.

Let us analyze these figures. Even if secrecy was enjoined upon the engineer it is not enjoined upon us. \$310,567.00 at 6 per cent amounts to \$18,634.02. Add to this the contribution to the imaginary sinking fund, and we have \$23,617.08 as the net profits after making extensions and repairs and paying salaries all around. This means that on an actual investment of less than \$200,000 there is a net profit of 6 per cent on a sum equal to \$400,000.00, or more than 12 per cent on the actual investment. We are not surprised that the Water Company fix their selling price at \$450,000.00.

**CONCLUSIONS AS TO VALUATION.**

Taking the mean of the results of the three methods of appraisement, the

engineer decides to fix the value of the property and franchises of the Ann Arbor Water Company at \$291,205.60. Since this Common Council is a better judge of the value of the franchise, and, for reasons already given in detail, we revise the engineer's figures, and desire to report that in our judgment the present value of the Water Company's plant is very much less than that amount.

#### IMPRACTICABLE TO BUY.

With this information as to the great earning capacity of the Water Company, it is safe to assume that they cannot be induced to part with their property for what its tangible property is worth today, or even what it would be worth if brand new. The mortgage, in the shape of the bond issue, more than covers the value of the plant. We do not know whether the bonds sold at par, but they are out as a lien upon the property, so, of course, if the city purchased, would have to be satisfied. That means that the smallest possible amount for which the city could hope to get the property is \$225,000.00. The stockholders would never consent to a sale at a price sufficient only to provide for the bondholders. Suppose, however, that they should consent to sell at \$300,000.00. Could the city afford to buy?

There would be relief from the payment of \$8,500.00, the estimated average annual expenditure, a sum which in fourteen years, the life of the franchise, would amount to \$119,000. On the other hand, there would be the interest to count on \$300,000.00 at 5 per cent for fourteen years, amounting to \$210,000.00. Deducting the saving on fire-hydrant rentals there would be a net loss of \$91,000.00. Admitting that the city could run the plant as advantageously as the present company, and make an annual profit of \$23,500.00, at the end of the franchise period it would accumulate \$329,000.00. Subtracting the net loss on interest, \$91,000.00, we would have \$238,000.00 to apply on the bonds, and would still owe \$62,000.00. As an offset to this debt we would have a water plant thirty years old, worth, possibly, counting depreciation, the amount of the unpaid balance.

But to verify these figures in fact, for fourteen years our citizens would have to pay the same extortionate, unreasonable rates which are now charg-

ed. They ought not, cannot, and will not do this.

Therefore, the company must be left in the enjoyment of its franchises until 1915, when it will be possible for our successors to purchase the property at its real value.

#### REVISION OF THE WATER RATES.

In the meantime we have an important duty to perform. The water schedule must be revised and the rates reduced to a reasonable point.

The engineer, in his report, includes a table of rates as furnished by thirteen private water companies doing business in Michigan cities. They have an average population about equal to the population of Ann Arbor. Mr. Sherman calls attention to the fact that in Ann Arbor the rates are at least 10 per cent higher than these rates, and says there should be a reduction to bring them within the requirements of the franchise.

But is this the most we can do? Is it the contract that the rates charged by the Ann Arbor Water Company are to be regulated entirely by the rates charged by other companies? This is not all. The rate charged by other private companies is the maximum rate; it is the rate above which the Ann Arbor Company cannot go. The express stipulation of the contract is that the rates must be reasonable rates. How may these be determined, and what are our rights in the case?

#### LEGAL STATUS.

Much has been made of the provision in Section 8514 of the Compiled Laws of 1897, contained in the following paragraph, viz.: "But no such restriction shall be imposed which will prevent such company realizing upon its capital stock an annual income or dividend of 10 per cent after paying the cost of all necessary repairs and expenses, interest on all moneys borrowed, and 5 per cent per annum into sinking fund, for the extinguishment of funded debts."

Our legal adviser, Hon. De Vere Hall, of Bay City, and Hon. Benton Hanchett, of Saginaw, assure us most positively that this provision is not applicable to the conditions and obligations created by the contract. The Water Company, in contracting with the city, waved the protection afforded by the general law. It must, there-

fore, submit to a schedule of rates which is reasonable.

It is a well-settled doctrine that when a private property is devoted to a public use it is subject to public regulations. Our legal advisers assure us the Common Council has the right under the contract to regulate to a reasonable rate. It is for us now to determine what is a reasonable rate for our citizens to pay for water. We have no desire to impose any hardships upon the Water Company, but, as the servants of the people, it is for us to prevent extortionate and burdensome charges.

Having in mind the large income from a comparatively small investment, we have carefully studied the water-rate problem and made a schedule which we believe to be fair to all concerned. We submit as the final section of our report an ordinance for the regulation of the water rates.

AN ORDINANCE to determine, define and fix the rates to be charged the inhabitants of the City of Ann Arbor, for domestic and other uses by the ANN ARBOR WATER COMPANY.

PREAMBLE.

Whereas, the Ann Arbor Water Company has contracted and agreed to furnish and supply the inhabitants of the city of Ann Arbor water for domestic purposes at reasonable rates, and

Whereas, in the opinion of the Common Council, the rates now and heretofore charged the said inhabitants by the Ann Arbor Water Company are excessive and unreasonable, therefore THE COMMON COUNCIL OF THE CITY OF ANN ARBOR ORDAINS:

Section 1. That the rates to be charged to the inhabitants of the city of Ann Arbor for water for domestic use by the Ann Arbor Water Company shall not exceed the following maximum rate annually:

DWELLING HOUSE RATES.

Kitchen use for one family, occupying not exceeding four rooms	\$2.50
For each additional room	50
For each regular boarder	25
For bath tub, with six persons in family	2 00
For each additional person	25
For each additional bath tub	1 00
For each water-closet, self-closing, and wash bowl	2 50

For each additional water-closet, self-closing	1 00
For each additional wash-bowl	50

For hydraulic pump, operated by city water, the Ann Arbor Water Company may charge schedule rates, herein fixed, for the fixtures served by such pump.

For hydrant in yard, where no domestic rates are paid and water is used for domestic purposes, three dollars in addition to the rates hereinafter fixed for lawn sprinkling.

Sec. 2. Any water consumer may place a meter in his premises for measuring water used for any purpose, subject to the inspection of the Water Company, such meter to be kept in good condition and repair at the expense of the owner or user, and the Water Company shall not be required to furnish water through a defective or imperfect meter, but in case of the refusal or neglect of any water consumer to keep his meter in repair, may charge for its service, the schedule rates herein provided.

METER RATES.

For water measured by meter, the Water Company may charge and collect the following maximum rates:

For a daily consumption of less than one thousand gallons, 20c. per M. gals.

For a daily consumption of 1,000 to 3,000 gallons, 15c. per M. gals.

For a daily consumption of over 3,000 gallons, 10c. per M. gals., provided that the minimum charge for water measured by meter shall be \$5.00 per annum.

Sec. 3. For sprinkling lawns and lawn extension, the Ann Arbor Water Company may charge the sum of four dollars for each lot of 4x8 rods, and a proportionate rate for a greater or less area.

The sprinkling season shall extend from April 1st to October 31st of each year, and all persons paying sprinkling rates shall be entitled to the use of one stream of water through a one-fourth inch nozzle, or other fixtures discharging an equal quantity of water, four hours each day during the sprinkling season; such hours to be determined by the Ann Arbor Water Company, but no such hours shall be fixed earlier than six o'clock a. m. or later than eight o'clock p. m. No sprinkling shall be done during a fire alarm.

Sec. 4. Building Rates—

For stone work, per perch.. 2c.

For brick work, per M.... 5c.

For plastering per 100 yds.....15c

Rates for service not named in this ordinance are subject to agreement between the Ann Arbor Water Company and the applicant for such service.

Sec. 5. The Water Company may collect all schedule rates quarterly in advance on the first day of January, April, July and October, and may turn off the water from any premises for non-payment of rates herein specified. For water measured by meter, the Water Company may collect monthly.

Sec. 6. Water consumers vacating premises must notify the Water Company at its office, that water may be turned off, and may be held responsible for water rates until such notice. When there is a change of residence the water consumer may have the balance of service paid for transferred to the other premises. For turning on or turning off water from any premises, the Water Company may charge a fee of 25c, but no person shall turn the water on any premises until application for service is filed at the office of the Water Company, and opportunity is given the company to inspect the fixtures upon the premises.

Sec. 7. It shall be unlawful for any person or persons to use or permit the use of water for other purposes than those for which water rates are paid.

Sec. 8. The inspector or other authorized agent of the Water Company shall have access, at all reasonable hours, to premises upon which water furnished by the company is used.

Sec. 9. No person or persons other than the chief of the fire department, or persons specially authorized by the chief of the fire department, or the Water Company, shall open any of the fire hydrants, or in any manner injure or molest any of the said hydrants.

Sec. 10. The rates fixed by this ordinance to be charged the inhabitants of the City of Ann Arbor, for water for domestic use and other purposes, by the Ann Arbor Water Company, are subject to change by the Common Council for cause, after notice and opportunity is given for hearing to the Water Company.

Sec. 11. The Ann Arbor Water Company may make rules for the regulation of its service not inconsistent with

the provisions of this ordinance; provided, that no such rule shall be made or enforced, except in case of extended conflagration, restricting the free use of water for domestic purposes, but only to prevent needless and wanton waste.

Sec. 12. Any person or persons violating the provisions of this ordinance, and any agent or employee of the Ann Arbor Water Company collecting or receiving greater sums for supplying the inhabitants of the City of Ann Arbor with water for domestic use than the sums herein specified, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in a sum not exceeding twenty-five dollars and the cost of prosecution for each offense. In imposing such fine, the court shall have power and authority to commit the offender to the county jail until the fine is paid, or for a period not exceeding thirty days.

Sec. 13. This ordinance shall take effect on after legal publication.

EMMETT COON,  
F. H. HAMILTON,  
JOHN W. HAARER,  
ROYAL S. COPELAND.

Ald. Jenney moved that the report be received and placed on file and ordered printed in the minutes of the meeting and that the special committee be discharged. Carried.

Ald. Brown moved that the legal opinions of Messrs. Hall and Hanchett be read to the council. Carried.

Enter Ald. Schumacher and Richards.

Mayor Copeland then presented the opinions of both Mr. Hall and Mr. Hanchett.

Exit Ald. Brown.

Ald. Fischer introduced "An ordinance to determine, define and fix the rates to be charged the inhabitants of the City of Ann Arbor for water for domestic and other uses by the Ann Arbor Water Company," which was given its first reading by title and on motion was passed to and given its second reading, two-thirds of the aldermen elect voting therefor.

Ald. Fischer moved that the ordinance be referred to the Ordinance Committee. Carried.

On motion the Council adjourned.

JAS. E. HARKINS, Clerk,  
per G. O. Clark, Deputy.