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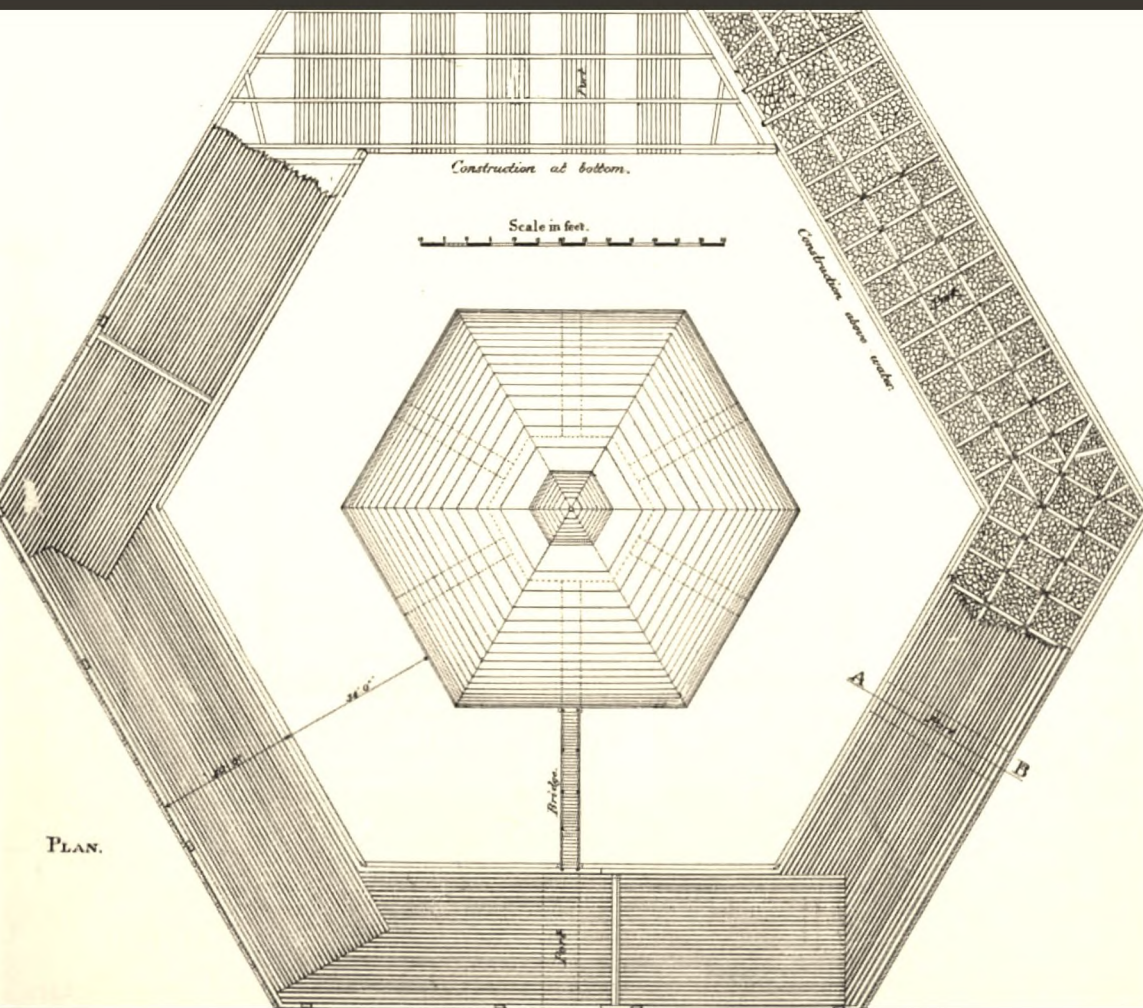
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# *Annual Report*

Chicago (Ill.). Dept. of Public Works

Ill. Doc. 13.5, 15



Harvard College Library.

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Department of public works,

Chicago.

6 Nov, 1896





Ill. Doc. 13.5.15



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Lovestruy  
Geo. P. Swift

ANNUAL MESSAGE

TWENTY-SECOND ANNUAL REPORT

PUBLIC WORKS

1895.

CHICAGO:  
J. N. AMBERG & CO., PRINTERS AND STATIONERS.  
1896.





*John  
K. Swift*

MAYOR'S ANNUAL MESSAGE  
AND THE  
TWENTIETH ANNUAL REPORT  
OF THE  
DEPARTMENT OF  
PUBLIC WORKS  
TO THE  
CITY COUNCIL OF THE CITY OF CHICAGO,  
FOR THE  
Fiscal Year Ending December 31,  
1895.

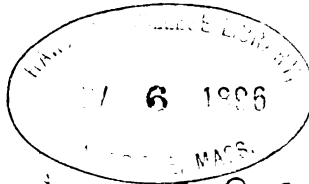
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CHICAGO:  
CAMERON, AMBERG & CO., PRINTERS AND STATIONERS.  
1896.

Ill. Doc. 13. 5. 15  
(C. II. 87)



For Dept. of Pub. Works

MESSAGE OF  
MAYOR SWIFT



# MAYOR'S ANNUAL MESSAGE.

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*To the Honorable the City Council of the  
City of Chicago:*

GENTLEMEN—In accordance with the charter requirement, I submit to you some information and recommendations relative to City affairs. Necessarily only matters of seeming importance can receive attention, for the general subject is too vast for any detailed consideration here.

The past municipal year has been free from any extraordinary troubles or disturbances. Our main trouble has been oft-told, of trying to administer the government of a great city, with its ever expanding necessities, upon a narrow and inadequate income. Happily our citizens are showing an increasing interest in the financial embarrassments of the City as well as in the other municipal problems which affect us, and it seems reasonable to expect that some measure of relief will soon come. But the past year shows substantial results and progress. A civil service law, believed to be the best in existence, has been put into thorough and complete operation. The long pending dispute with the Illinois Central Railroad Company over the lake front has been finally settled, and in a form which promises to give to this City, at an early day, an attractive park near the heart of its business center. Provision has been made for the removal of many miles of railways from the surface of the streets, and the railway companies are manifesting a growing disposition to co-operate with the City in future elevation work. These are some of the events of the past year to which we may look back with satisfaction, both as citizens and as public officials.

## FINANCES.

That the City's revenues are insufficient for its needs is generally understood, but comparatively few people realize the extent of this deplorable insufficiency. At the present time our citizens are finding their taxes considerably increased and a large proportion of them do not understand that no part of this increase goes to the benefit of the municipal government proper. For the last five years, under the operation of the law limiting the amount of the tax levy, there has been no substantial change in the amount of the taxes levied by the City. The levy this year is about \$80,000 less than it was last year. On the other hand there has been a distinct increase in the taxes levied for the drainage canal, for the support of schools, and the maintenance of the park systems. In the meantime the necessities of the City have been increasing in every direction, thus making the disproportion between its revenues and its requirements gradually greater. It has been my determination that the floating indebtedness of the City should not be increased during my administration, and I mean to adhere to that determination if possible. The real credit of the City is good—perhaps too good, for it offers an opportunity to allow much expenditure in response to persistent public demands for which the public has not provided resources, thus incurring indebtedness which must sooner or later be paid. My adherence to the policy of living within the municipal income has brought sharply to the attention of our people the growing need for a larger municipal revenue, and the utter inability of the municipal government at the present time to perform the work required of it with the means at its disposal. In the present condition of things, without unlawfully running into debt, streets cannot be properly cleaned, pavements, bridges and viaducts and other public works cannot be properly maintained, and the police force must continue inadequate.

The total cash shortage on January 1st, 1895, was \$5,148,462.08, made up as follows:

## LIABILITIES.

|                                                         |                        |                        |
|---------------------------------------------------------|------------------------|------------------------|
| Outstanding coupons.....                                | \$ 21,787 72           |                        |
| Electric light and railway companies .....              | 31,000 00              |                        |
| Interest account .....                                  | 486,743 99             |                        |
| Judgments (appropriated for).....                       | 583,613 35             |                        |
| Judgments (not appropriated for).....                   | 601,666 26             |                        |
| Pension funds.....                                      | 328,280 81             |                        |
| Sinking funds.....                                      | 723,166 87             |                        |
| Special funds.....                                      | 373,171 56             |                        |
| Taxes for street intersections.....                     | 1,000,000 00           |                        |
| Track elevation damages .....                           | 100,000 00             |                        |
| Unclaimed wages.....                                    | 4,209 48               |                        |
| Accounts payable (miscellaneous).....                   | 1,902,629 24           |                        |
| <b>Total debt January 1, 1895.....</b>                  | <b>\$ 6,156,269 28</b> |                        |
| <b>Less cash in treasury.....</b>                       | <b>1,674,807 20</b>    |                        |
| <b>Actual net cash shortage January 1, 1895.....</b>    |                        | <b>\$ 4,481,462 08</b> |
| <b>To this add water certificates outstanding .....</b> |                        | <b>667,000 00</b>      |
| <b>Total shortage January 1, 1895.....</b>              |                        | <b>\$ 5,148,462 08</b> |

It has been claimed that this cash shortage was offset by the General Fund amounting to \$2,464,739.19. As a matter of fact the amount to the credit of the General Fund was not available, the entire sum having been loaned to the various City Departments, and used to pay their bills in anticipation of the collection of taxes of 1894 levied for their payment. The actual cash represented by this credit of \$2,464,739.19 was not and could not be available until the taxes of 1894 (collected in full a year later) should come to hand. The amount to the credit of the General Fund on January 1, 1895, was a paper credit and not a cash one, being made up of debts due it from Departments, the payment of which would have to await the collection of their taxes.

January 1, 1895, the accounts of the City were \$6,156,269.28 short, not deducting cash in the treasury. On the same date \$1,674,807.20 comprised the entire cash in the treasury. It follows, therefore, that on said date there was an actual net



cash shortage of \$4,481,462.02. To this add \$667,000 for water certificates, and it is evident that the City at that time was short \$5,148,462.08 to meet liabilities past due.

**FINANCIAL RESOURCES FOR CORPORATE PURPOSES  
FOR THE YEAR 1895.**

**INCOME.**

|                                                                   |                   |                               |
|-------------------------------------------------------------------|-------------------|-------------------------------|
| Equalized valuation of property .....                             | \$ 247,425,422 00 |                               |
| Two per cent. on same.....                                        | 4,948,508 84      |                               |
|                                                                   |                   |                               |
| Amount of taxes actually levied.....                              |                   | \$4,943,213 17                |
| Less 3 per cent. for non-collection .....                         | \$ 148,455 24     |                               |
| Cost of collection .....                                          | 64,920 00         |                               |
|                                                                   |                   | <u>213,375 24</u>             |
| Net income from taxes.....                                        |                   | \$ 4,729,837 93               |
| Income from miscellaneous sources, mainly<br>saloon licenses..... | \$ 3,964,429 66   |                               |
| From other sources .....                                          | 322,963 40        |                               |
|                                                                   |                   | <u>4,287,393 06</u>           |
| Total income .....                                                |                   | <u><u>\$ 9,017,230 99</u></u> |

**EXPENDITURES AS PER APPROPRIATIONS MADE BY COUNCIL.**

|                                                                                   |                 |                               |
|-----------------------------------------------------------------------------------|-----------------|-------------------------------|
| Police Department.....                                                            | \$ 3,396,715 00 |                               |
| Fire Department .....                                                             | 1,597,139 50    |                               |
|                                                                                   |                 |                               |
| Total Police and Fire Departments .....                                           | \$ 4,993,854 50 |                               |
| Total income from taxes.....                                                      | 4,729,837 93    |                               |
|                                                                                   |                 |                               |
| Excess in expenditures of these two Departments<br>over receipts from taxes ..... | \$ 264,016 57   |                               |
|                                                                                   |                 |                               |
| Income from miscellaneous sources .....                                           | \$ 4,287,393 06 |                               |
| Deduct excess Police and Fire Departments.....                                    | 264,016 57      |                               |
|                                                                                   |                 |                               |
| Leaving balance to meet other appropriations as<br>below indicated.....           |                 | <u><u>\$ 4,023,376 49</u></u> |
|                                                                                   |                 |                               |
| City cemetery.....                                                                | \$ 100 00       |                               |
| City Clerk expense.....                                                           | 15,000 00       |                               |
| Contingent fund.....                                                              | 12,000 00       |                               |
| Repairing improved streets.....                                                   | 200,000 00      |                               |
| Street and alley cleaning (\$250,000.00 for clean-<br>ing improved streets) ..... | 665,900 00      |                               |
| Cleaning and repairing unimproved streets.....                                    | 150,000 00      |                               |
| Sidewalks and intersections .....                                                 | 75,000 00       |                               |
| Canal pumping works .....                                                         | 62,880 00       |                               |
| Chicago harbor .....                                                              | 23,390 00       |                               |
| Removing rock, South Branch.....                                                  | 25,000 00       |                               |
| Bridge repairs .....                                                              | 115,000 00      |                               |

|                                                                                                                                                     |    |                 |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|----|-----------------|----|
| Fullerton avenue bridge.....                                                                                                                        | \$ | 10,000          | 00 |
| South Halsted street bridge .....                                                                                                                   |    | 50,000          | 00 |
| Diversey street bridge .....                                                                                                                        |    | 15,000          | 00 |
| Van Buren street bridge .....                                                                                                                       |    | 23,477          | 30 |
| Van Buren street viaduct.....                                                                                                                       |    | 12,000          | 00 |
| Fullerton avenue conduit.....                                                                                                                       |    | 14,755          | 00 |
| Bridge tenders' salaries.....                                                                                                                       |    | 88,080          | 00 |
| Public buildings .....                                                                                                                              |    | 35,000          | 00 |
| Janitors' salaries .....                                                                                                                            |    | 47,883          | 20 |
| Parks .....                                                                                                                                         |    | 10,500          | 00 |
| Bridgeport lock.....                                                                                                                                |    | 12,800          | 00 |
| Street Department salaries ....                                                                                                                     |    | 15,630          | 00 |
| Map Department salaries.....                                                                                                                        |    | 15,840          | 00 |
| City Engineer's Department salaries .....                                                                                                           |    | 12,400          | 00 |
| Commissioner's office salaries.....                                                                                                                 |    | 13,930          | 00 |
| Steam roller engineers' salaries.....                                                                                                               |    | 1,800           | 00 |
| Street openings and obstructions.....                                                                                                               |    | 7,200           | 00 |
| Street Department office expense .....                                                                                                              |    | 1,500           | 00 |
| Map Department office expense .....                                                                                                                 |    | 800             | 00 |
| City Engineer, office expense .....                                                                                                                 |    | 750             | 00 |
| Proportional office expense .....                                                                                                                   |    | 1,750           | 00 |
| Public benefits.....                                                                                                                                |    | 1,000           | 00 |
| Street lamp repairs .....                                                                                                                           |    | 50,000          | 00 |
| Vessel Despatchers' salaries .....                                                                                                                  |    | 2,250           | 00 |
| Bridge Telephone Operators' salaries.....                                                                                                           |    | 8,400           | 00 |
| Election expense.....                                                                                                                               |    | 150,000         | 00 |
| Health Department.....                                                                                                                              |    | 219,200         | 00 |
| House of Correction .....                                                                                                                           |    | 50,000          | 00 |
| Judgment account.....                                                                                                                               |    | 200,000         | 00 |
| Legal expense .....                                                                                                                                 |    | 25,000          | 00 |
| Police Court expense .....                                                                                                                          |    | 2,000           | 00 |
| Pounds .....                                                                                                                                        |    | 2,500           | 00 |
| Printing and stationery .....                                                                                                                       |    | 8,000           | 00 |
| Salaries .....                                                                                                                                      |    | 216,290         | 00 |
| Sewerage fund .....                                                                                                                                 |    | 106,653         | 03 |
| Gas, oil and electric street lamp fund.....                                                                                                         |    | 565,000         | 00 |
| Total .....                                                                                                                                         | \$ | 3,441,658       | 53 |
| To this add extra expenses actually incurred in excess of these appropriations and authorized by City Council by emergency appropriations, etc..... |    |                 |    |
|                                                                                                                                                     |    | 687,365         | 85 |
| Total .....                                                                                                                                         |    | \$ 4,129,024 38 |    |
| Excess of expenses over actual income.....                                                                                                          | \$ | 105,647         | 89 |
| To this should be added additional judgments, not included in foregoing, and rendered against the City, amounting to.....                           |    |                 |    |
|                                                                                                                                                     |    | 440,861         | 90 |
| Showing a total excess of expenses over actual income of 1895, for corporate purposes, amounting to .....                                           |    |                 |    |
|                                                                                                                                                     | \$ | 546,509         | 79 |

It will be seen from the above that during 1895 the City incurred expenses, in excess of its income, for corporate purposes, amounting to \$105,647.89, thereby depleting the General Fund to that extent, and as to this may be added judgments, amounting to \$440,861.90, the result shows a loss to the City during 1895, when compared with its income for the year, of \$546,509.79.

In the expenses of 1895 are bills amounting to \$91,000 which are properly chargeable as expenses of the year 1894 and prior year. There are also some other items which are really beyond the control of the City government, such as election expenses and judgments for damages, etc.

The actual receipts from miscellaneous resources somewhat exceeded the estimates thereof, as will be seen from the following statement from the City Collector's Office:

Comparative statement of receipts in the City Collector's Office for the year commencing May 8, 1895, and ending May 7, 1896, with same dates of the previous year—

*Receipts for Licenses—*

|           |                 |               |
|-----------|-----------------|---------------|
| 1896..... | \$ 3,921,791 54 |               |
| 1895..... | 3,654,069 81    |               |
|           | <hr/>           | \$ 267,721 73 |

*Receipts for Special Cash—*

|           |                 |            |
|-----------|-----------------|------------|
| 1896..... | \$ 1,125,963 05 |            |
| 1895..... | 953,217 95      |            |
|           | <hr/>           | 172,745 10 |

*Receipts for Building Permits—*

|           |              |           |
|-----------|--------------|-----------|
| 1896..... | \$ 55,860 80 |           |
| 1895..... | 37,725 50    |           |
|           | <hr/>        | 18,135 30 |

*Receipts for Elevator Inspection—*

|           |              |          |
|-----------|--------------|----------|
| 1896..... | \$ 13,810 00 |          |
| 1895..... | 11,340 00    |          |
|           | <hr/>        | 2,470 00 |

*Receipts for Dog Pounds—*

|           |             |          |
|-----------|-------------|----------|
| 1896..... | \$ 5,701 65 |          |
| 1895..... | 1,423 75    |          |
|           | <hr/>       | 4,277 90 |

|                     |       |                     |
|---------------------|-------|---------------------|
| Total increase..... | <hr/> | <u>\$465,350 03</u> |
|---------------------|-------|---------------------|

It is sometimes said that the City of Chicago has a sufficient income to meet all necessary expenditures if economy is practised. The statement is not true. Your honorable body reduced the estimates of the Departments for 1895 over two million dollars and appropriated manifestly inadequate sums for absolutely necessary expenses. For example, the sum of \$565,000.00 was appropriated for gas, oil and electric lighting when it was apparent that the actual cost of such lighting would amount to more than \$900,000.00. If we had limited the street lighting according to the appropriation our citizens would have been for months past absolutely without light. The small appropriation was made because of the belief that the gas companies could be put off and made to accept judgments in lieu of cash.

STATEMENT SHOWING APPROPRIATION, COST AND SHORTAGE  
OF STREET LIGHTING FOR 1895.

|                                    | COST.        | APPROPRIATION. | SHORTAGE.    |
|------------------------------------|--------------|----------------|--------------|
| For lighting by gas .....          | \$602,032 62 | \$350,000 00   | \$252,032 62 |
| For lighting by gasoline .....     | 170,983 05   | 75,000 00      | 95,983 05    |
| For lighting by electric light.... | 160,251 66   | 140,000 00     | 20,251 66    |
| Totals .....                       | \$933,267 33 | \$565,000 00   | \$368,267 33 |

Although, on January 1st last, judgments against the City to the amount of \$601,666.26 were unprovided for, there was appropriated only \$200,000.00 towards their payment. During 1895 additional judgments have been rendered against the City amounting to more than \$600,000.00, making a total of \$1,155,922.00 now unprovided for. These additional judgments were entered mainly by confession of the City, and were nearly all due to the fact that the appropriation was insufficient for actual expenses, the contracts for which were entered into previous to the passage of the regular appropriation bill. This small appropriation was compulsory, and due to a lack of

means to provide for the necessary expenses of the City, consequently the corporation was obliged to confess judgment in the premises.

We had in 1895 1,100 miles of improved streets and alleys. There was appropriated the sum of \$225,000.00 for keeping them clean, obviously an insufficient amount. If the appropriation was divided equally among the several months, and each and every street received equal attention, it would result in the expenditure of *sixty-three cents per day for each mile of streets*. At the beginning of the present administration there had been expended for street cleaning, from January to April 1st the sum of \$140,204.55, leaving an unexpended balance for the remaining nine months of \$109,795.45. This, if equally distributed, would make a daily expenditure of not quite *thirty-seven cents per mile*. That portion of the First Ward from Van Buren street north to the River was swept twice per week during the entire time the Civic Federation assisted in cleaning the same, making in all 352 miles at \$18.50 per mile, or a total of \$6,512.00 expended by the City. Previous to the incoming of the present administration the contract for the sweeping of streets had been let to the firm of J. H. Burke, at \$18.50 per mile.

The appropriation for cleaning alleys of garbage, ashes, etc., was \$335,000.00. It is estimated that this refuse accumulates at the rate of 750 tons per day. The sum appropriated will allow only *twelve cents* per ton for its removal. Previous to May first no record was kept of the quantity of garbage, ashes, etc., removed, but since that time, through systematic records, we find that 940,080 loads were removed, representing 4,427,040 yards.

The total appropriation made to clean 1,100 miles of improved streets and alleys and to remove garbage, ashes, etc., including the cost of supervision, was \$665,000.00 (in 1893 the

appropriation was \$1,000,000.00). New York, with less than 400 miles of streets and alleys, had \$3,070,000.00 for street cleaning, removal of garbage, ashes, etc., for the present fiscal year.

For the repair of 1,100 miles of improved streets there was appropriated for the present fiscal year the sum of \$200,000.00, or *\$18.00 per mile per year*.

For the care and cleaning of 1,403 miles of unimproved streets, the sum of \$150,000.00 was appropriated, or *\$10.69 per mile per year*.

Numerous other illustrations, equally striking, of inadequate resources might be given, but the foregoing will suffice. They emphatically show the insufficiency of the City's revenues to meet its requirements.

The conditions stated are mostly due to an insufficient income brought about by the inequalities of taxation, and notwithstanding the appropriations are inadequate as noted, the entire income of the City is yearly appropriated for corporate purposes. Chicago is growing each year and requiring increased expenditures, while its income remains stationary.

We have reduced the bonded debt during the year 1895 \$534,000.00, as per following :

#### BONDS REDEEMED DURING THE YEAR 1895.

|                               |               | PAID.                        |
|-------------------------------|---------------|------------------------------|
| Municipal, 6 per cent .....   | \$ 100,000 00 | General Sinking Fund.        |
| World's Fair, 5 per cent..... | 9,000 00      | Dividends from World's Fair. |
| Town of Lake, 5 per cent..... | 15,000 00     | Water Fund.                  |
| Sewerage, 7 per cent.....     | 13,000 00     | Sewerage Sinking Fund.       |
| Hyde Park, 7 per cent .....   | 322,000 00    | Water Fund.                  |
| Lake View, 7 per cent.....    | 75,000 00     | Water Fund.                  |
|                               | <hr/>         |                              |
|                               | \$ 534,000 00 |                              |

The total cash deficiency on January 1, 1896, to meet all outstanding liabilities, other than the bonded debt, was \$5,597,847.73, made up as follows :

## LIABILITIES.

|                                                                                            |                        |                        |
|--------------------------------------------------------------------------------------------|------------------------|------------------------|
| Outstanding coupons .....                                                                  | \$ 55,096 16           |                        |
| Electric light and railway companies.....                                                  | 56,417 48              |                        |
| Interest account .....                                                                     | 372,605 00             |                        |
| Judgments (appropriated for).....                                                          | 426,190 61             |                        |
| Judgments (not appropriated for).....                                                      | 1,155,922 10           |                        |
| Pension funds .....                                                                        | 215,886 87             |                        |
| Sinking funds .....                                                                        | 1,090,672 21           |                        |
| Special funds.....                                                                         | 643,414 17             |                        |
| Taxes for street intersections.....                                                        | 990,000 00             |                        |
| Track elevation damages .....                                                              | 100,000 00             |                        |
| Unclaimed wages.....                                                                       | 10,236 11              |                        |
| Accounts payable (miscellaneous).....                                                      | 1,021,125 41           |                        |
| Tax loans and revenue warrants.....                                                        | 1,197,679 69           |                        |
| <b>Total debt January 1, 1896.....</b>                                                     | <b>\$ 7,344,245 81</b> |                        |
| <b>Less cash in treasury and banks.....</b>                                                | <b>1,946,898 08</b>    |                        |
| <b>Actual net cash deficiency January 1, 1896.....</b>                                     |                        | <b>\$ 5,397,347 73</b> |
| <b>To this add water certificates (outstanding).....</b>                                   |                        | <b>200,500 00</b>      |
| <b>Total deficiency in cash January 1, 1896, to meet<br/>outstanding obligations .....</b> |                        | <b>\$ 5,597,847 73</b> |

The following is a condensed statement of all assets and liabilities of the City of Chicago, January 1, 1896, as shown by the books of the City Comptroller :

## ASSETS.

|                                                    |                         |
|----------------------------------------------------|-------------------------|
| Buildings, realty, water works, etc., at cost..... | \$ 53,294,257 05        |
| Uncollected taxes of 1895 .....                    | 14,239,685 13           |
| Cash in banks and treasury.....                    | 1,946,898 08            |
| Norwood Park tax certificates .....                | 596 78                  |
| Special taxes levied for paving, etc.....          | 135,800 00              |
| <b>Total .....</b>                                 | <b>\$ 69,617,237 04</b> |

## LIABILITIES.

|                                            |                  |
|--------------------------------------------|------------------|
| Bonded debt.....                           | \$ 17,188,950 00 |
| Special improvement bonds, 6 per cent..... | 135,800 00       |
| Water certificates.....                    | 200,500 00       |
| Trust funds .....                          | 38,920 00        |
| School Board .....                         | 7,983,956 05     |
| Public Library .....                       | 768,671 82       |

|                                                                                                          |                         |
|----------------------------------------------------------------------------------------------------------|-------------------------|
| Coupons outstanding .....                                                                                | \$ 55,096 16            |
| Electric light and railway companies .....                                                               | 56,417 48               |
| Interest account .....                                                                                   | 372,605 00              |
| Judgments (appropriated for) .....                                                                       | 426,190 61              |
| Sinking funds .....                                                                                      | 1,090,672 21            |
| Special funds .....                                                                                      | 643,414 17              |
| Track elevation damages .....                                                                            | 100,000 00              |
| Unclaimed wages .....                                                                                    | 10,236 11               |
| Accounts payable (miscellaneous) .....                                                                   | 1,021,125 41            |
| Tax loans and time warrants, 1895 .....                                                                  | 1,197,679 69            |
| Surplus value of unexpended balance appropriations,                                                      | 102,023 98              |
| Surplus value of general fund .....                                                                      | 2,359,091 30            |
| Surplus value of realty and buildings at cost over<br>bonded debt, water certificates and trust funds... | 35,865,887 05           |
| Total .....                                                                                              | <u>\$ 69,617,237 04</u> |

A floating liability exists in addition to the foregoing, made up as follows :

|                                          |                       |
|------------------------------------------|-----------------------|
| Special taxes street intersections ..... | \$ 990,000 00         |
| Unappropriated judgments .....           | 1,155,922 10          |
| Pension funds .....                      | 215,886 87            |
| Total .....                              | <u>\$2,370,808 97</u> |

This liability for street intersections and judgments will, no doubt, be provided for by future taxation and appropriations. In the meantime, if charged against the City's surplus funds, it would reduce the surplus as shown above proportionately.

The following letter addressed to the Mayor explains this street intersection account more fully :

DEAR SIR : I take pleasure in replying to your inquiry concerning the liability of the City for taxes for street intersections.

This liability is made up of special taxes levied against the City for paving and improving intersections of streets. For example : The County Court, in confirming assessments for the paving of streets, has adjudged the paving of street intersections to be in the nature of a public benefit, and the taxes for their improvement are, therefore, levied against the City of Chicago and not against the individual property owners of the street. It was presumed by the Court that the Common Council would provide for the payment of these taxes by appropriation from the general taxes levied against



the citizens for corporate purposes, thereby making the general public pay for the improvements known as public benefits. For some time the Council did make such appropriations, and the City paid in to the Special Assessment Fund the taxes levied against it for the improvement of street intersections. For some years past, however, the Council has failed, owing to limitation of taxes and lack of income, to appropriate moneys for the special taxes levied against the City and, as a result, such taxes (as reported by the Special Assessment Bureau) have accumulated to the extent of \$1,000,000.00.

All rebates have been based, by the Special Assessment Office, on the collection of these taxes from the City, and, of course, in the absence of such collection the property owner must go without the rebate to which he is clearly entitled. In assessments in which no rebate is due, the contractor is forced to suffer. For instance: A contract is let for \$10,000 to pave a certain street; the citizens owning adjoining property are taxed \$9,000, and the City is taxed \$1,000 for the intersections. The contractor receives the \$9,000 paid in by the property owners, but he must wait for the balance of his money unless the City pays the amount levied for the intersections. The money due the contractor is simply a portion of the \$1,000,000 which the City owes for special taxes. Clearly, then, these taxes are liabilities of the City which should be met, for unless they are paid the citizen must go without the rebate, to which he is justly entitled, and in many cases the contractor must go without pay for work honestly performed.

It is true that a large portion of our taxpayers are unaware of the fact that rebates are due them, but I do not think this gives the City the right to withhold their money and evade its liabilities.

(Signed) LOUIS S. HAYES,

*General Accountant.*

#### INCOME AND EXPENSES FOR 1896.

|                                                                                                                              |                        |
|------------------------------------------------------------------------------------------------------------------------------|------------------------|
| The expenses estimated as necessary by the heads of Departments for the year 1896, for corporate purposes, amounted to ..... | \$11,171,968 04        |
| The income for corporate purposes, based on income of 1895, is estimated at.....                                             | 8,525,308 66           |
| Showing a deficiency in income to meet estimated expenses amounting to.....                                                  | <u>\$ 2,646,659 38</u> |

Owing to the above deficiency there could be appropriated but \$8,500,000.00 for corporate expenses of 1896, thereby crippling all the departments and rendering it impossible to give satisfactory metropolitan service to the community. The administration must struggle along under these adverse conditions until a new revenue law permits it to secure a fair share of the taxes paid by our citizens. The assessed valuation of the township of Lake View for 1895 amounted to \$5,994,429.00, on which a tax of two per cent. was levied for corporate purposes, producing, in money for City expenses, only \$119,888.58. The cost of maintaining the police force in Lake View alone for 1895 amounted to \$130,641.07. It will be seen that the entire town of Lake View does not pay the City enough money, in taxes, to maintain its police force, rendering it unnecessary to refer to its expenses for Fire Department, Street and Alley Cleaning, Bridges, and Municipal Salaries, etc. This is true of many of the other towns. Changes in the revenue law, which will produce a larger income for corporate purposes, is absolutely necessary or these conditions will continue.

|                                                      |                 |
|------------------------------------------------------|-----------------|
| The total bonded debt of Chicago on January 1, 1895, |                 |
| was. ....                                            | \$17,722,950 00 |
| The present bonded debt is .....                     | 17,188,950 00   |
|                                                      | <hr/>           |
| Showing a reduction during 1895 of .....             | \$ 534,000 00   |
|                                                      | <hr/> <hr/>     |

Bonds amounting to \$2,748,000.00, bearing interest at seven per cent. per annum were retired and refunded at four per cent., thus effecting, with the bonds redeemed and canceled, an annual saving, in interest, of \$118,200.00.

As compared with other cities the bonded debt of Chicago is small. The present low assessment of property, in conjunction with the five per cent. limitation for the issuance of bonds, makes it necessary for the present generation to bear the whole cost of many permanent improvements which should

be borne partially by posterity. Here, again, the remedy lies in a new revenue law which is indispensable for our future municipal prosperity.

A few words ought to be added to remove any misconception there may be as to the actual financial credit of this City. The difficulties with which we have to contend, and which I have sought to present, relate to an absence of ready cash to meet current obligations, but there need be no apprehension about the ability of this City to pay every dollar it now owes or appears likely to owe. Since the great fire of 1871 the City has acquired, and now owns, real estate and improvements which cost more than fifty millions of dollars, nearly three times the amount of its total bonded indebtedness. No large city in the country has relatively so small a debt. Our water works system alone yields an annual revenue of more than two millions of dollars above its operating expenses, and when the system is improved by the completion of tunnels and pumping stations now under way its annual net income can be applied toward the payment of the water fund bonded indebtedness now something less than four millions of dollars, and toward the accumulation of a surplus fund available for further extensions and for general City purposes.

### DEPARTMENT OF PUBLIC WORKS.

The Department of Public Works has been administered during the past year with an eye solely to economy and efficiency. It is one of the most difficult branches of the municipal government to administer. My general directions, applicable to it as to other departments, have been that business methods and principles must prevail, that merit must be the sole qualification for employment and promotion, and that a full day's service must be rendered for a day's pay. The results have been very gratifying. For details I refer you to the Commissioner's full report, but a summary shows, among other

things, a decrease of \$678,379.28 in the pay rolls for a period from April 1, 1895, to April 1, 1896, as compared with the period from April 1, 1894, to April 1, 1895.

The following comparative statement shows this decrease by months:

I invite your attention to the Commissioner's detailed report which shows an unusual amount of work done by the Department during the past year.

"The following is a comparative statement by months of the pay rolls of the Department of Public Works, from April 1, 1895, to April 1, 1896, with the previous year, April 1, 1894, to April 1, 1895:

"DEPARTMENT OF PUBLIC WORKS.

| 1894.                 |                 | 1895.                 |                 |
|-----------------------|-----------------|-----------------------|-----------------|
| April .....           | \$ 204,415 23   | April .....           | \$ 189,381 77   |
| May .....             | 224,227 50      | " Investigated.....   | 45,454 19       |
| June .....            | 251,692 08      | May .....             | 158,221 60      |
| July .....            | 215,679 82      | June .....            | 189,158 51      |
| August .....          | 222,759 90      | July .....            | 246,340 53      |
| September .....       | 248,214 28      | August .....          | 233,605 78      |
| October .....         | 358,669 81      | September .....       | 268,485 49      |
| November .....        | 240,146 46      | October .....         | 271,756 05      |
| December .....        | 232,018 21      | November .....        | 204,005 77      |
|                       |                 | December .....        | 193,074 26      |
| 1895.                 |                 | 1896.                 |                 |
| January .....         | 237,707 27      | January .....         | 153,503 66      |
| February .....        | 268,446 06      | February .....        | 188,132 25      |
| March .....           | 474,459 83      | March .....           | 158,937 31      |
| Total for 12 months.. | \$ 3,178,436 45 | Total for 12 months.. | \$ 2,500,057 17 |
| Decrease.....         |                 | \$678,379 28          |                 |

"Of this amount \$18,486.46 is under investigation.

"Of the above pay rolls for 1894, \$51,000 is for contract work. The same work in 1895 was done by the Department of Public Works and carried on the pay rolls.

"Respectfully,

"L. E. GOSSELIN,

*Bookkeeper Department Public Works.*

"ALEX. HARPER,

*Expert Accountant."*

## BUILDING DEPARTMENT.

When the present Commissioner of Buildings entered upon his duties there was a deficit in his Department of \$3,465.00. Notwithstanding the limited building operations of the past year this Department has accomplished the extinguishment of the deficit, and has now a substantial sum to its credit.

I submit a general statement of the Department receipts and expenses from May 1, 1895, to May 1, 1896, from which you will note the excellent showing that the net excess of receipts over expenses is \$19,220.94 :

| 1895.          | Receipts.   | Expenses.   | Gain.       | Loss.     |
|----------------|-------------|-------------|-------------|-----------|
| May .....      | \$ 7,649 35 | \$ 3,765 87 | \$ 3,883 68 | .....     |
| June.....      | 7,013 05    | 4,325 52    | 2,687 53    | .....     |
| July .....     | 7,284 00    | 4,491 84    | 2,792 16    | .....     |
| August .....   | 6,499 00    | 4,343 43    | 2,155 57    | .....     |
| September..... | 6,077 60    | 4,486 84    | 1,590 76    | .....     |
| October.....   | 6,461 70    | 4,400 33    | 2,061 37    | .....     |
| November ..... | 4,724 00    | 4,262 49    | 461 51      | .....     |
| December.....  | 3,231 40    | 3,602 71    | .....       | \$ 371 31 |
| 1896.          |             |             |             |           |
| January .....  | 4,374 00    | 3,565 48    | 808 52      | .....     |
| February ..... | 3,730 00    | 3,890 04    | .....       | 160 04    |
| March .....    | 5,858 40    | 4,262 48    | 1,595 92    | .....     |
| April .....    | 6,085 50    | 4,262 48    | 1,823 02    | .....     |
| Total .....    | \$68,988 20 | \$49,767 26 | \$19,860 04 | \$ 531 35 |

Net gain for one year from May 1, 1895, to May 1, 1896, \$19,220 94.

## HEALTH DEPARTMENT.

I am very much gratified, and I think the public is at least satisfied, with the result of the experiment of placing the Health Department under the charge of a business man as Commissioner of Health. It was an "experiment" only so far as this City is concerned. The model health department of this country, if not of the world—that of New York City—has for many years had a non-professional business man at its head and it has been under such charge that it has made its most marked improvement.

It is not too much to say that, for the period covered by this radical change in our own Health Department, the improvement has been quite as marked as it was in New York. There is a higher degree of efficiency in every branch of the health service and a more systematic organization and location of responsibility resulting from the separation of the practical business details of administration, discipline, expenditure and accountability, from the professional and executive functions.

The effect of this is seen in the great practical development of the Municipal Laboratory in safeguarding the food supplies of the people, including milk, ice, water, etc. ; in the broader scope and more scientific character of the work done by the medical staff, as in vaccination, antitoxin treatment of diphtheria, the prevention and suppression of the contagious diseases, etc. ; and in the greater efficiency of the bureaus of sanitary, smoke, tenement and factory inspection.

Some of those improvements and reforms are worthy more space than can be given them in this connection. But the great work done in improving the quality of our milk supply must be noted. This was one of the matters to which the Commissioner first directed his attention ; and when a vigorous and systematic inspection of milk and cream offered for sale was begun under his instruction, in the early summer of 1895, it was found that out of every 100 samples collected and examined in the City Laboratory, from 60 to 65 were adulterated, watered, colored, or otherwise unfit for food — especially unfit for the food of infants and young children. Prosecution was begun in every instance where the analysis showed adulteration — against high and low alike, without favor or exception — and fines of from \$25 to \$100 were secured. In three weeks the proportion of impure milk and cream fell from 60 to 65 samples in the hundred to from 8 to 10. During September 2,211 samples were collected and examined, and only 185 were found below

grade, or about one-twelfth of the total number, and during the past month the proportion has varied between 1 and 5 of below-grade samples in the 100 collected. Between July 1, 1895, and April 30, 1896, a total of 1,180 violators of the milk ordinance were prosecuted and convictions obtained in 1,072 cases; during the six months prior to July 1, 1895, there were less than 90 offenders, all told, against whom suits were begun, and with few exceptions these suits were dismissed at the cost of the City.

As a result of this work it is thought that our Chicago milk supply is now, and for months has been, the best of any large city in the United States. It is also believed that the reduced number of deaths of children under five years of age during the past twelve months is due, in large measure, to this cause. Fewer such deaths have occurred during this period than in any corresponding period since 1890, notwithstanding our increase in population and the natural increase in the proportion of children, and notwithstanding that the total number of deaths of all ages was larger. The figures furnished me are as follows: Average deaths under five years in 1891, 1892, 1893 and 1894, 12,033. Deaths under five in 1895, 10,499. Saving of child-life, 1,554, part of which, however, may be attributed to the results of a lesson learned in New York.

During an inspection of the New York Health Department last summer the Commissioner was much impressed with the records of the results of treating diphtheria with the antitoxin, which showed that the death rate of the disease in that city had been reduced more than one-half by the use of the new remedy. He called my attention to the matter, and, upon examination, I also became convinced. Through the courtesy of the New York Health Department an agreement was made whereby our Department was enabled to procure antitoxin at the actual cost of its production in New York, which was less

than one-half the price charged to physicians in Chicago. The previous high price had restricted its use here, especially among the poor, whose children furnish the largest number of diphtheria victims. The disease became epidemic in many parts of the City in the early fall, the daily number of deaths in October being higher than for many years previous, and it seemed probable that many of the public and parochial schools would have to be closed on this account. An emergency appropriation of \$5,000.00 was secured, nearly 100 stations for the distribution of antitoxin (to physicians at cost, and for charity cases gratis) were established in different parts of the City, and a corps of fifteen physicians skilled in the administration of antitoxin and the treatment of diphtheria were employed to assist other physicians and to treat charity cases.

The carefully recorded reports of these antitoxin experts, and of several hundred private physicians, show that the epidemic was cut short three months earlier than ever before in the history of diphtheria in Chicago. That is to say, that, reaching its maximum in October, with an average of more than eight deaths per day, the disease steadily declined to less than four deaths a day in January and less than one a day for some time recently; whereas, in former years it continued unabated for from two to four months after reaching its height.

In the best judgment of the medical officers of the Department, and of the members of the antitoxin corps, the lives of not less than 700 children have been saved since October, 1895, by the use of antitoxin, and the most experienced physicians of all schools do not hesitate to say that this much dreaded disease is now less dangerous than many of the minor ailments of childhood, *provided*, it is treated in its early stage with the antitoxin serum. The remarkable success of the Chicago Antitoxin Corps has attracted practically world-wide attention. A recent communication (April 20) from the New York Health



Department asks for a statistical report of the results obtained by our Department in the use of the diphtheria antitoxin and says :

“From such reports as we have obtained of your results, we judge that they have been of extraordinarily satisfactory character, and we believe that they will be of great service to this Department in the pushing of its work in New York City.”

Among the other work of the laboratory, which, since July 1, 1895, has embraced more than 21,000 analyses, involving over 90,000 manipulations, a chemical analysis of the water and expert sanitary inspection of every locality from which ice for domestic use has been cut was made during the fall and winter months. It is believed that the ice now being sold in Chicago for domestic use is purer than the supply has been for many years. Constant supervision is being exercised over its distribution, and no ice has been cut for cooling purposes only, to the knowledge of the Department, except on permit granted on filing a bond for \$5,000, to be forfeited on proof of its sale for domestic purposes.

During the period ended April 30th, 1896, a total of 14,976 violations of the smoke ordinance were investigated, 3,444 of which were on complaints made to the Department, and 11,532 were discovered by the inspectors. In about 90 per cent of the cases an abatement of the nuisance was secured, mainly by changes or repairs of furnaces, application of smoke-preventing devices or insistence on use of those already in place, and in a minority of cases by changes in fuel. It was found necessary to prosecute offenders in 597 cases; 418 convictions were obtained and fines imposed, and 179 cases were dismissed on abatement of nuisance and payment of costs.

## POLICE DEPARTMENT.

The communication to me from the General Superintendent of Police herewith submitted, presents an excellent statement of the past year's work of the Police Department. The record of the Department is a highly commendable one, and shows the growing efficiency, faithfulness and discipline of the police force under its present chief.

CHICAGO, May 9, 1886.

HON. GEORGE B. SWIFT,  
*Mayor.*

DEAR SIR: Complying with your request of this morning, I beg to submit the following figures, showing the practical results attained during the first year of your administration in police matters:

|                                                                     |                 |
|---------------------------------------------------------------------|-----------------|
| The total expenditure for the twelve months ending April 1, 1896,   |                 |
| for salary and miscellaneous expenses . . . . .                     | \$ 3,309,474 00 |
| The total expenditure for the corresponding twelve months prior     |                 |
| to your inauguration . . . . .                                      | 3,674,511 00    |
| Showing a net gain or saving by this Department, for the year, of.. | \$ 365,037 00   |
| Number of arrests during 1895 . . . . .                             | 63,464          |
| Amount of fines assessed . . . . .                                  | \$ 301,555 00   |
| Fugitives arrested in Chicago and sent to other cities . . . . .    | 135             |
| Lost and stolen property recovered . . . . .                        | \$ 404,150 25   |

Upon assuming the position of General Superintendent of Police, one of the first things to which I directed my attention was the enforcement of the Midnight Closing Ordinance and the abolishment of the objectionable concert halls that were everywhere open at that time. This resulted in a large reduction in crime, which was noticed and commented on favorably by the press.

I next addressed myself to the abolition of public gambling, which was running wide open in all parts of the City. Complying with your orders I instigated a crusade against them, which resulted in closing every public gambling house in Chicago.

We next addressed ourselves to the massage parlors, a large majority of which have been driven out of business.

The Department then addressed itself to the question of exterminating the opium joints, and I am pleased to report in this connection that thirty-one of the so-called public "hop joints," where opium

was formerly smoked, have been permanently closed in the South Division. Similar places are now being raided daily in the West Division with similar results.

Chinese gambling has also been virtually wiped out.

During the past year the Department has rendered effective service in preventing disorder instant to the numerous strikes, lock-outs, etc., and I am pleased to report that, with but few exceptions, the policy of the Department in treating organized labor and capital with equal consideration, according to each the fullest protection in their rights, has been the means of avoiding a great deal of trouble that would otherwise have existed. The fact that we have been able to satisfy employers and employes alike, is the best evidence that the Department has directed its efforts in this direction strictly within the law.

Complying with your direction the Department has been taken entirely out of politics, the conduct of the Department at the recent election in this respect being such as to challenge the commendation even of the opposing political parties; absolute order prevailing throughout the day and complete protection was afforded to every citizen at the polls.

Since the inauguration of Civil Service this Department has drawn upon the Civil Service Commission for about 120 men.

The discipline and *esprit de corps* of the Department during the past year has been constantly improving, and the men, from what I am able to learn, are much pleased with the new order of things, for, while the discipline of offenders has been severe, the men who have sought to discharge their duty faithfully have felt themselves secure in their positions. No doubt the merit system, which controls all promotions in the Department since the operation of the civil service law, has acted as a spur to the men and officers of the Department to do more zealous work and a more faithful attention to their duty.

In this connection permit me to return my sincere thanks for the hearty co-operation and assistance which you have afforded me in the discharge of my duties, without which my efforts would have been of no avail.

(Signed) J. J. BADENOCH,  
General Superintendent.

## OTHER DEPARTMENTS.

The work of the other Departments during the past year has been satisfactory, and in general is well understood. There have been no occurrences in connection with any of them calling for special notice here.

## PUBLIC LIGHTING.

The proper lighting of our streets and other public places has been a subject of much perplexity. About two-thirds of the total expense goes for gas, the most of which is furnished by the leading gas companies, formerly constituting what was known as the "Gas Trust." In 1891 the City made a written contract with these companies, under which it agreed to take gas from them for that year at certain prices and the companies agreed to furnish gas at those prices as long as the City should require it; also to pay  $3\frac{1}{2}$  per cent. of their gross receipts into the City Treasury as long as any one of them should so furnish gas to the City, and to reduce their price of gas to private consumers five cents per thousand feet each year until the price should be one dollar per thousand feet. Street lamps consume the bulk of the gas supplied by these companies, and the price fixed by the contract in respect to street lighting, including ordinary maintenance and care of the lamps, was \$22.00 for each lamp per year, bills to be rendered quarterly and payments to be made within thirty days after the bills were rendered, with a rebate of \$2 per lamp upon payments made within the thirty days. At the beginning of my administration it was apparent that the City appropriation made would not enable the City to pay in cash throughout the fiscal year for the gas to be supplied, and some further arrangement had to be made with these companies. After some negotiations it was agreed that the companies should be paid as far as practicable from the appropriations, and should take judgments

for the balance which might become due them; that except to street lighting the prices should be the same as fixed by the contract of 1891, and that the price of gas for each street lamp per year should be \$20.00 net, a reduction of \$2.00 in respect to the considerable portion of the total gas to be furnished for which the City could not make cash payment.

This year the lighting appropriation is again inadequate. The principal gas companies have agreed to furnish gas at the same prices as last year up to the limits of the available appropriation, but they have declined to accept judgments for any portion of the gas to be supplied by them. Provision has therefore been made for public lighting as far as the appropriation will go, but this will cover only a little more than one half of the year with rigid economy and inadequate lighting, and some further provision will have to be made upon the subject later. The problem is a difficult one, but I believe it will be susceptible of reasonably satisfactory solution.

#### SPECIAL ASSESSMENTS.

Complaints are frequently made about the working of our special assessment system, and it must be admitted that there is some foundation for them. The principle underlying the system is undoubtedly sound, for it contemplates that property benefited by an improvement shall bear the cost of the improvement. Unfortunately, like all other human things, it is subject to great abuse in practice. The City's lack of resources often compels it to put the expense of some needed work upon property owners, as it may lawfully do when in fairness the work should justly be paid for out of the public treasury. The law allowing assessments to be paid in installments is particularly unsatisfactory, and, in many if not most cases, results in injustice either to the contractor or to some of the property owners assessed. It is difficult to see what radical changes

can be made in the system without violating sound principles of government. In this matter as in all others the power to do the right thing usually involves the power to do the wrong thing. During the past year great care has been taken by the Department of Public Works to keep the cost of improvements paid for by special assessments down to the lowest practicable point, and this effort has been very successful.

Under instructions from the Mayor, under date of April 15, 1895, the engineers in charge of the various improvements were directed to reduce their estimates. This was done and the estimates made were based upon prices which were bid upon the various improvements at that time. An average reduction of 21 7-10 per cent. resulted, the details of which will be found in the report of the Commissioner of Public Works.

The contracts awarded during the year of 1895 were lower than at any previous time, and if the same favorable figures should be obtained during the present season it would seem that even a farther reduction of the estimates might be safely made and still keep within the actual cost of the work. In all the work now completed, which will have to be paid for in 1896, more than 90 per cent. of the rebates have already been deducted from the assessments which were in the hands of the City Collector up to March 31, so that, with the exception of this small percentage, he turned over to the County Collector, on March 31, as delinquent, only the actual cost of the work, thus doing away with the trouble of paying the full amount of the assessment and collecting the rebates afterwards. Before the time for payment to the County Collector the remaining percentage will be deducted from the assessments which were in his hands on April 1, so that there will virtually be no rebate to collect on all work done in 1895. This, of course, does not apply to those who have already paid their assessments, but this amount is not large.

The volume of business has largely increased over that of the previous year, as there were 1,019 assessments made in 1894, amounting to \$2,904,721.11, while in 1895 there were 1492, amounting to \$4,013,787.11. The expenses of the Bureau were \$84,955.19 less than for 1894.

I cannot find that there is basis for serious complaint respecting the manner in which the special assessment system is administered after an improvement has been once ordered by proper ordinance, but there is undoubtedly much basis for complaint in the hasty ordering of improvements without substantial demand therefor.

The paying of special assessments is oftentimes a great burden upon property owners of moderate and limited means, and great care should be taken to investigate the necessity of an improvement before it is ordered, for the purpose of ascertaining whether it is really needed. The private property owners affected cannot, of course, be allowed the conclusive determination of the matter, for the public welfare must be equally consulted. But many improvements are undoubtedly ordered which are plainly unnecessary and burdensome. Once properly ordered an improvement should be allowed to go forward and not stayed nor abandoned. Uniformly, I have vetoed the repeal of ordinances providing for improvements by special assessment after the work has been undertaken, or after costs have been incurred which would be payable out of the City treasury, because, in the long run, I believe that course will be for the benefit of the public and of the property owners generally. Probably some effort will be made at the next session of the Legislature to modify this special assessment law, and no doubt it can be improved, but while this effort is making we must be alert to see that the law is not in such shape that it will become impracticable and will stop the progress of improvements in this growing City.

## COMPENSATION FOR THE USE OF STREETS.

The subject of compensation for the use of streets is somewhat hackneyed but it is too much alive to be passed over without notice here. Licenses for the use of streets—which we commonly but erroneously call “franchises”—are constantly being granted, and must, in the nature of things, continue to be granted in some degree to corporations of all kinds, and to individuals, for varied purposes. The justification for such grants is the public benefit expected to be derived therefrom, directly or indirectly. Without such benefit they would be without excuse. The subject is one of the most troublesome with which a municipal government has to deal. The general interest of the community as a whole is so intimately connected with and dependent upon the individual interests for private enterprises that it is oftentimes exceedingly hard to know what to do in a given case. We must always keep in mind the fundamental principle that the streets belong to the public and must be used for the public benefit. It does not much matter how this benefit is received, whether directly or indirectly, nor in what shape. Conditions are changing all the time, bringing new demands which must be met. A license to a street railway company to use a certain street at one time might well be something for which the community could afford to pay, where, at a later period, it would be enormously valuable and capable of being sold at a high price if the street were unoccupied. Same thing applies to licenses in different localities of the City, and it applies equally to the use of a street by a fruit stand, by a gas main, or by a railway track. The present sentiment of the community is clearly in favor of exacting a monetary compensation to the City for street privileges in all cases where it is reasonable or practicable, and this sentiment seems to be just. I am heartily in accord with it. The difficulty is to determine just what compensation should be exacted in a given case, and when there should be none at all. It is



plain that the compensation should bear some relation to the value of the privileges granted and to the profits likely to be realized therefrom. During the past year I have made every reasonable effort consistent with what seemed to be a due regard for the public interest to obtain adequate compensation for the privilege of using the streets, and, in most instances, with a fair degree of success. In some instances, where I have felt constrained to yield to my personal judgment, I have done so with great reluctance.

#### TRACK ELEVATION.

Gratifying progress has been made during the past year in the matter of securing the elevation of railway tracks and their consequent removal from the surfaces of the streets. A few years ago the railroad problem in this City seemed almost hopeless. It was so vast that everyone hesitated to attack it. But the necessity of action grew more and more apparent, and presently a beginning was made. The Lake Shore & Michigan Southern Railway Company and the Chicago, Rock Island & Pacific Railway Company had undertaken to elevate their joint track for a considerable portion of its length within the thickly settled portion of the City, and the Chicago & North-Western Railway Company had taken like action as to a portion of its Galena division. During the past year arrangements have been completed between the City and the Chicago & North-Western Railway Company for the elevation of a considerable portion within the City of its Milwaukee and its Wisconsin divisions. Arrangements are also well under way for the elevation of a portion of the railway tracks on and along Rockwell street belonging to the Chicago & North-Western Railway Company, the Pittsburgh, Cincinnati, Chicago & St. Louis Railway Company and the Chicago & Northern Pacific Railway Company. Also for the elevation of the Pittsburgh, Fort Wayne

& Chicago Railway tracks from Fifty-third street to a point south of Englewood. Meantime the work upon the tracks of the Lake Shore & Michigan Southern and Chicago, Rock Island & Pacific Railways is progressing rapidly. It was feared at one time that this latter work might be interfered with by the position of the tracks of the Union Stock Yard & Transit Company, but a plan was agreed upon between the railroad companies and the Stock Yards Company whereby this embarrassment has been removed. The Stock Yards Company will presently submit an ordinance to you to carry out the plan. An ordinance will also be presently presented, by the railroad companies concerned, to provide for the elimination of the railway grade crossing at Clark and Sixteenth streets. This last matter has been a vexatious and perplexing problem. Much time and effort was required to bring about an agreement among the railroad companies themselves, owing to their varying interests, but ultimately such an agreement was reached as to the general plan of work. I have felt some discouragement over the slow progress in this matter, but I have had to realize that it is no easy thing to bring about an agreement between a dozen railroad companies with a dozen different boards of directors regarding the details of an expensive undertaking, and I have been constrained to be patient. In this, as in all matters, my desire has been to bring about some tangible substantial results of benefit to the City as soon as practicable, and to avoid the annoying delay and litigation so easy to be produced by controversy and drastic measures. The railroads of this City are here and are here to stay. They are enormous factors in our City's welfare, just as the City is of enormous benefit to them. Mutual fairness and consideration are necessary in treating the problem which their presence creates, and I am happy to say that in the earnest efforts which I have made in behalf of track elevation, I have been met in a fair and reasonable spirit by the railroad managements.

## LAKE FRONT SETTLEMENT.

For a generation a controversy existed concerning the Lake Front, involving the State, the City and the Illinois Central Railroad Company. The settlement of that controversy during the past year is a subject for congratulation. The details of the settlement need not be referred to here. But the outcome must soon begin to appeal to the pride of our citizens, who were so generally in favor of the settlement. The work of filling the ground west of the railroad tracks is being rapidly pushed, as well as the work done upon the outer wall. When the real improvement begins to take form and shape replacing the present ragged and unpleasant appearance of the locality it will then be possible to realize much better than we do now how much has been accomplished for the City in disposing of this long-pending controversy. I look back to my part in it with as much satisfaction as to anything which has occurred thus far during my administration.

## THE CIVIL SERVICE LAW.

The Civil Service law, which went into effect July 1, 1895, has received in the main the approbation of all good citizens. It is not free from defects, but its defects can easily be remedied. The system which it establishes of making appointments to subordinate positions purely on the merits of the applicant is a vast improvement in every way over the former system of making appointments by mere grace and favor. Sometimes one person and sometimes another is naturally affected by the law when he finds his influence curtailed, but in the end it will be conceded by all fair-minded persons that the working of the merit system tends to promote a better administration of public affairs and to promote the welfare of the City. The Commissioners administering the law have labored with zeal and faithfulness, and they have succeeded in their work with perhaps less friction than was to have been expected in

the case of a new law introducing so radical a change in government. The law has not yet been applied in the offices of the City Treasurer and of the Board of Education, but in my judgment it ought to be applied in both of them, and I believe it ultimately will be.

The effect of the Civil Service law has been very effective in aiding the work of taking the police force entirely out of politics and keeping it out. That was one task which I set for myself at the beginning of my administration, and the General Superintendent of Police has earnestly seconded my efforts. The result is gratifying. At no time within my memory has the police force of this City attended so strictly to police business and kept so free from political work as during the past year. Individual officers naturally have their individual friends and individual preferences, and it is not to be expected that they will lose their attachment merely because they are policemen, but in the performance of their duties the police force as a whole has been lifted out of political partisan work, to the great satisfaction of the public and of the policemen themselves.

#### PAY ROLLS.

One effect of the operation of the Civil Service law caused me to discontinue the publication of the City pay rolls in the Council proceedings. All pay rolls go to the Civil Service Commission for certification before the Comptroller will approve them. As new men can not be placed in the service or upon the pay rolls, nor old men promoted, nor salaries or wages raised except upon the recommendation of the Commission and after examination, it is plain that the verification of the rolls by the Commission is an absolute check upon anything like pay-roll stuffing. The existence of this check seemed to me to render the further publication of the pay rolls with its attendant expense unnecessary.

## TAXATION.

A few months ago, at the suggestion of some public-spirited citizens, who agreed to guarantee the money for the work, I undertook to have some inquiry made into the assessment and the valuation of real estate in the business centre of the City. For the purpose of the investigation I appointed a commission of gentlemen who were singularly well equipped for the work and in whom the public had entire confidence, three of them being particularly acquainted with land values, and the other two men of large experience in building. The report of this commission has been recently made, and I submit their general statement. As expected, their work shows not merely how small the portion is between the actual valuation and the assessed valuation of the lands and improvements on the South Side north of Twelfth street, but what is more important it shows that there are glaring inequalities in assessments, and that much property is escaping its fair share of taxation. Primarily so far as local taxes are concerned, it does not matter whether the assessment be made upon the basis of full value or of some fraction of the full value, nor what that fraction may be, provided the basis be uniform and that all property be assessed fairly and uniformly with regard to it. The underlying purpose in the appointment of the commission, and in the work of the commission, was to bring to light these inequalities and this absence of uniformity. If much property in this City is escaping its fair share of the public burden, it is doubtless equally true that some is being taxed too much. The proper condition of the evil does not necessarily mean an increase of average taxation. Property which is escaping taxation in whole or in part should be made to bear its fair share, and property which is assessed too much should have its share reduced. It is my belief that if all property liable to taxation was fairly assessed

and paying its fair share of the public revenue, the burden upon the average taxpayer would not be increased, and would quite probably be lessened.

The conspicuous inequalities in the assessment of real estate are well known to be more than equaled in the assessment of personal property. I have in mind the fact that the taxation of 1894 on the capital, surplus and undivided profits of banks in this City ranges from 1.88 to 0.38 per cent. I do not understand why there should be this difference of nearly five times the lowest rate; but manifestly there is something wrong in such a condition of things.

The suggestion has already been made to me to appoint a similar commission to investigate personal property assessments, and it is not unlikely that I shall appoint such a commission at an early date. It is not supposed that the work of the real estate commission or of the personal property commission, if one should be appointed, will materially affect either the assessment of property in this City at the present time or the revenue of the City, but the information contained in the report already made will be of great value, and particularly in connection with efforts that must necessarily be made at the next session of the General Assembly to secure amendments of the revenue law.

The expense of the work has been approximately \$10,000, and under the circumstances I think this expense should be borne by the City, and that prompt provision should be made for its payment.

CHICAGO, April 25, 1896.

HON. GEORGE B. SWIFT,  
*Mayor.*

DEAR SIR: Your commission, appointed to report the market value of the land and improvements in the South Division, north of Twelfth street, having completed their work, beg leave to submit herewith detailed valuation of the land and improvements, together with detailed valuation of the same property by the Assessor in

1895. In the detailed report, the valuation made by the commission and the valuation made by the Assessor will be found in parallel columns, a summary of which is as follows :

|                                                                          |                          |
|--------------------------------------------------------------------------|--------------------------|
| We find, in our opinion, value of land to be.....                        | \$ 337,342,880 00        |
| Value of improvements to be .....                                        | 101,104,300 00           |
| Total value (exclusive of property marked<br>Exempt from Taxation) ..... | <u>\$ 438,447,180 00</u> |

The assessed value of the same property returned by the Assessor, for the year 1895, was as follows :

|                    |                         |
|--------------------|-------------------------|
| Land .....         | \$ 24,726,880 00        |
| Improvements ..... | 15,941,840 00           |
| Total .....        | <u>\$ 40,668,720 00</u> |

We also find the value of land and improvements marked Exempt on the Assessor's books, not including the City Hall block or real estate owned by the United States Government, to be :

|                    |                         |
|--------------------|-------------------------|
| Land .....         | \$ 20,404,050 00        |
| Improvements ..... | 1,832,200 00            |
| Total .....        | <u>\$ 22,236,250 00</u> |

We further find the value of railroad property in the above district listed as Railroad Right-of-way (exclusive of Illinois Central) to be..... \$ 24,615,700 00

We further find the value of real estate owned by railroads, exclusive of that listed as Right-of-way, to be ..... \$ 2,789,400 00

We find the value of land and improvements owned by the Illinois Central Railroad to be . \$ 35,180,560 00

Respectfully submitted,

JOSEPH DONNERSBERGER,  
EUGENE H. FISHBURN,  
DUNLAP SMITH,  
CHARLES W. GINDELE,  
GEORGE TAPPER,

*Commission.*

#### THE FINANCIAL PROBLEM.

The great problem always confronting the municipal government is the financial one. A revenue system, probably working fairly well in the smaller communities of this State, is utterly inadequate and impracticable for the requirements of

this great and growing City. Every mayor for years has called attention to the difficulties presented, and every mayor must continue to do so until some radical improvement is made. The township system of assessing and collecting the public revenue is not suitable for this County. No assessor can possibly make a just assessment under the conditions now existing. There must at all times be due regard for economy in administration, but no reasonable economy can possibly bring the necessary and desirable expenses of this City within its present limited income. Some matters have to be neglected or insufficiently provided for. Neglect is often expensive in the end, if not disastrous. An epidemic of smallpox might at any time follow an inadequate supply of funds for the Health Department. Parsimony and cheapness in government are undesirable. The people of this City must come to a fuller realization of the truth that if they wish their public affairs properly ordered and administered they must do their part. They must help the public servants and they can then rightfully hold them to a stricter accountability. The apathy of the average citizen regarding local public matters is sometimes startling. So long as his own affairs are progressing well and his interests are not directly injured he is content to feel that in some way public affairs will be attended to. Sooner or later this condition of things must end. Proper legislation must be had ; changes in the constitution, if necessary, must be made, and our people must take an active interest and participation in the work and the expense of giving to this City a system of revenue and of government and of public works worthy of its size and importance.

Yours respectfully,

GEORGE B. SWIFT,

*Mayor.*





# Department of Public Works, City of Chicago.

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W. D. KENT,  
Commissioner.

JOHN A. MOODY,  
Deputy Commissioner.

S. P. BROWNE,  
Secretary.

J. J. GRAHAM,  
Assistant Secretary.

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## Heads of Bureaus.

|                                                        |                 |
|--------------------------------------------------------|-----------------|
| CITY ENGINEER, . . . . .                               | L. B. JACKSON   |
| SUPERINTENDENT OF SEWERS, . . . . .                    | G. L. CLAUSEN   |
| SUPERINTENDENT OF SPECIAL ASSESSMENTS, . . . . .       | H. J. JONES     |
| SUPERINTENDENT OF WATER BUREAU, . . . . .              | J. C. CRAIG     |
| SUPERINTENDENT OF STREET BUREAU, . . . . .             | R. J. MACDONALD |
| SUPERINTENDENT OF MAP BUREAU, . . . . .                | O. L. WULLWEBER |
| SUPERINTENDENT OF STREET AND ALLEY CLEANING, . . . . . | J. C. W. RHODE  |
| DEPARTMENT BOOK-KEEPER, . . . . .                      | L. E. GOSSELIN  |

## PAST COMMISSIONERS OF PUBLIC WORKS.

### WATER BOARD.

1851-54—John B. Turner, Prest., Horatio G. Loomis, Alson S. Sherman.  
1854-56—Jas. H. Woodworth, Pres., John C. Haines, George W. Dole.  
1856-58—George W. Dole, Prest., Orrington Lunt, John C. Haines.  
1858-60—George W. Dole, Prest., Orrington Lunt, Noah Sturtevant.  
1860-61—Orrington Lunt, Prest., Edward Hamilton, Benjamin Carpenter.

### SEWERAGE BOARD.

1855-59—Wm. B. Ogden, Prest., James D. Webster, Sylvester Lind.  
1859-61—James D. Webster, Prest., Sylvester Lind, Philip Conley.

Water and Sewerage Boards merged May 6, 1861, into

### BOARD OF PUBLIC WORKS.

1861-63—Benjamin Carpenter, Prest., John G. Gindele, Frederick Letz.  
1863-65—Francis C. Sherman, Mayor, *ex-officio* member of the Board.  
1863-67—John G. Gindele, Prest., Frederick Letz, Orrin J. Rose.  
1867-69—Aug. H. Burley, Prest., Wm. H. Carter, John McArthur.  
1869-71—John McArthur, Prest., Wm. H. Carter, Redmond Prindiville.  
1865-69—Wm. Gooding and Roswell B. Mason, members of the Board in matters pertaining to the cleansing of the river.  
1869-71—Wm. Gooding and Edward B. Talcott, members of the Board in matters pertaining to the cleansing of the river.  
1871-73—Wm. H. Carter, Prest., Jas. K. Thompson, Redmond Prindiville.  
1873-76—Redmond Prindiville, Prest., Louis Wahl, Jas. K. Thompson.

Board of Public Works abolished September 18, 1876, and on the same date there was established by the City Council

### THE DEPARTMENT OF PUBLIC WORKS.

1876-78—Monroe Heath, Mayor, Acting Commissioner.  
January 7, to May 18, 1879—E. S. Chesbrough.  
May 19, 1879, to October 18, 1881—Charles S. Waller.  
October 19, 1881, to February 4, 1882—Carter H. Harrison, Mayor, Acting Commissioner.  
February 4, 1882, to January 31, 1886—DeWitt C. Cregier.  
February 1, 1886, to June 28, 1886—Carter H. Harrison, Mayor, Acting Commissioner.  
June 28, 1886, to April 11, 1887—W. H. Purdy.  
April 12, 1887, to April 15, 1889—George B. Swift.  
April 16, 1889, to April 27, 1891—W. H. Purdy.  
April 28, 1891, to December 24, 1892—J. Frank Aldrich.  
December 24, 1892, to April 25, 1893—E. Louis Kuhns, Acting Commissioner.  
April 25, 1893, to November 21, 1894—Hiram J. Jones.  
November 21, 1894, to November 28, 1894—John A. Moody, Acting Commissioner.  
November 28, 1894, to April 8, 1895—John McCarthy.

REPORT OF THE

Commissioner of Public Works

CITY OF CHICAGO



# COMMISSIONER'S REPORT.

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OFFICE OF THE COMMISSIONER OF PUBLIC WORKS, }  
CITY HALL. }

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

GENTLEMEN:—In compliance with the ordinances of the City, I present herewith the Twentieth Annual Report of this Department.

Included in this report, which is for the year ending December 31, 1895, is a summary of the character and extent of the work performed by this Department during the past year. Those desiring further information on this subject are respectfully referred to the accurate and elaborate statistical reports of the Superintendents of the various bureaus.

At the outset, permit me to express my obligations to His Honor, the Mayor, for the lively interest he has manifested in the work executed and the reforms instituted by this Department. No effort has been spared to conduct the Department on business principles, in accordance with his well-known and frequently expressed views.

Allow me also to tender to the Council my cordial thanks for the uniform courtesy it has extended to me personally and officially.

It will be as agreeable to you, no doubt, as it is to me, to record the fact that the chiefs and employes of the various bureaus comprised in this Department are generally giving their best service to the City, and discharging their duties faithfully and efficiently. Although unreasonably criticised, for partisan purposes, in some quarters, the consciousness abides with them that their services, rendered intelligently and honestly, are recognized and appreciated by the public.

In a Department to which vast public interests are committed it is absolutely necessary, for the expeditious and economical transaction of the people's business, that order prevail ; that every employe be conversant with his duties and that he should understand that he can not shirk them in any way. Consequently, on assuming office, a system of time-keeping was inaugurated which resulted in a marked raising of the standard of punctuality and attention to work. It is not to be wondered at, therefore, that the service now is more satisfactory than formerly. The operation of the civil service law was in fact anticipated by this Department. Records of the employes are preserved, so that when a vacancy occurs, a worthy candidate for promotion can be selected. The system now in vogue is the same that prevails in all great manufacturing and commercial establishments. For the first time in the history of the City, the employes now feel that their retention in the public service depends solely on merit, and that promotion is attained only by strict attention to duty.

Firmly resolved that the interests of the taxpayers should have primary consideration in this Department, a system of retrenchment was established by which the expenditures were considerably reduced. Some salaries, regarded as extravagant for the services rendered, were reduced, and some employes who were not making an adequate return for their compensation were retired from the service of the City. This is not the only way in which the public interests have been conserved. It is a notorious fact that for many years the brick manufacturers were in a "combine," or trust, formed for the purpose of keeping the price of brick at a high figure. Although the City does not buy the brick direct from the makers, it suffered from this trust, as the contractors based their bids for public improvements on the rates they would have to pay for the brick. A year ago only the product of three brick yards was eligible for use in the public works. Specimens of other brick were obtained and several of these met all the requirements of the tests provided for in our specifications. These tests, which were thorough and searching, were made at the State University at Champaign. Now the bricks of ten manufacturers meet the requirements of the City. The consequence has been that the brick combination is disrupted, to the financial advantage of the City.

In this Department, the custom which had grown up of allowing "extras" to contractors has been practically abolished. None better understand this than the contractors themselves, and hence their proposals for work are now submitted with full knowledge of the

fact that there will be no "extras" and that they will be required to fulfill to the letter all the conditions of their agreements with the City. Heroic measures had to be taken in a few instances to convince some contractors that the provisions of a contract with the City meant just what they contained. To impress this information on them they have been required, when they failed to comply in every particular with the specifications, to undo their work, and at their own expense make it acceptable to the City. This was frequently a costly lesson, but it had the desired effect. Now no attempt is made to elude the provisions of a contract, for it is known that discovery will bring a penalty which none feel disposed to pay.

While economy has been practised the necessary public work has not been neglected nor curtailed. The extensive operations begun under this administration, with the completion of old enterprises, demonstrate that the public money has been expended judiciously and advantageously. No public improvement has suffered, notwithstanding the fact that more than \$200,000.00 pro rata of the appropriation had been expended during the first three months of the fiscal year. In this connection it might be noted that, during this administration, the Department was not only maintained within the appropriation, but at the close of the year a balance was turned into the City treasury. This policy of economy will be continued, and there is every reason to believe that the financial management of the Department during 1896 will be still more satisfactory.

It is a very sanguine man indeed who hopes that, in this City, public improvements will yet keep pace with private enterprise. That they are very far apart to-day is evident to a casual observer. As the reason for this condition of affairs is apparent, it is not necessary to dwell upon it here, especially as it will, in all probability, be discussed by the Chief Executive of the City. To indicate the efforts that are being made to meet the urgent demands for public improvements, reference might be made here to the tunnel which is now being constructed to give an additional supply of water to the north-western and southwestern sections of the City, and to the contemplated plans for sewerage what is known as the Eighty-third street district. The first, it is estimated, will cost \$2,500,000.00, and the latter \$1,300,000.00.

Annually, during the heated season, reports have been published of lack of water in various sections of the City remote from the lake, notwithstanding the great water system possessed by the City. Owing to the phenomenal growth of the City, the demand for an



additional water supply has been steadily increasing. It is expected that in the near future there will be no occasion for further complaints of this character. A scheme to relieve the west and north-west sections of the City is now on the way. When completed, it will be the means of affording an increased supply to all other parts of the City.

When the two pumping stations about to be constructed, one in the vicinity of Humboldt Park, and the other near Twelfth street west of Rockwell street, each with a capacity of 60,000,000 gallons per twenty-four hours, are in operation, the supply will undoubtedly be equal to the demand for some years to come. Contracts for the land tunnel were let last September. Satisfactory progress is being made with the work. The contract calls for the completion of the work on the first day of October, 1897.

Plans and specifications are now being made for the lake portion of the tunnel, and also for the pumping machinery at the stations. It is expected that work will be started about the 15th of June, 1896, on the lake portion of the tunnel. According to the contracts, the whole work is to be finished on or before January 1st, 1898.

A successful effort has been made to compel all trades which are required to obtain a license to comply with the ordinances. Last year 758 more plumbers' licenses were issued than during the preceding year. This brought an increase of \$2,725.00 to the City treasury. It is not thought that 758 more plumbers than the year before established business in Chicago. The increase in the receipts from this source is due to the fact that the ordinance relating to this branch of trade was impartially administered. There was no discrimination for or against anyone. All were treated justly. They were given to understand that the ordinance was not a dead letter and they cheerfully complied with it.

A special inspection of the entire City by the Water Bureau resulted in increasing the assessment on hose alone \$45,000.

The meter control of the water supply of the City should be extended immediately in view of the fact that last year an average of 146 gallons of water per capita per day was pumped. It is not to our credit that cities of less than one-fourth of our population should have more meters in service than there are in Chicago. In this City we have only 5,120 meters. There should be at least 50,000. This number of meters would not only largely increase the revenue but would tend to compel economy in the use of water by large consumers.

Plans had been prepared for draining the Eighty-third street sewer into the lake. It seemed strange that the drainage canal could not be utilized for this purpose, and thus avoid all possibility of polluting the source of the water supply in that section. The case, which was on the docket of the County Court, was stricken off, and then the Engineering Branch of the Bureau of Sewers was instructed to recast the plans, with the view of having the sewer empty into the drainage canal. At first those who were most directly interested in the drainage of this district objected to this action, on account of the delay that it would occasion, but, on consideration, they have given it their cordial and unqualified approval. Had not the plans of the sewer been changed, the drainage canal, for which the people have paid taxes, and which is being constructed at a cost of \$30,000,000.00, would be of no benefit to them whatsoever. Even in its sewerage system Chicago is unique and distinguished. As far as this Department is informed, this will be the most costly individual sewer in the world. It will drain a territory of ten square miles. This sewer will be of an L shape. It will extend from Seventy-fifth street to Eighty-seventh street, and from the Lake as far west as Albany avenue.

The main outlet sewer of the Washington Heights and West Roseland district along Wentworth avenue has been completed during the year. This sewer will drain all the territory west of State street and south of Eighty-seventh street.

The Indiana avenue sewer system will drain the territory lying south of Ninety-ninth street to the Calumet River, and between State street and the Illinois Central Railroad.

The West Forty-fifth avenue sewer, begins at Mud Lake, with a diameter of nine feet, and runs to Twelfth street; thence north on Forty-seventh avenue to Madison street; thence west on Madison to Forty-eighth avenue; thence to Hayes boulevard, with a branch start at Forty-eighth and Grand avenues, and running thence northwest and west in Grand avenue and Fullerton avenue to the City limits. This sewer drains 4,200 acres of land, and its approximate length is eleven miles.

The six-foot sewer in Montrose boulevard, from the North Branch of the Chicago River west of Milwaukee avenue, is under contract.

It is the purpose of this Department to improve many streets during the coming year. Ordinances are now being drawn, which will be submitted at an early date, authorizing the improvement of at least four hundred streets. This work, judging by the experience of last

year, can be done for a reasonable amount. Owing to the fact that the Department succeeded in disrupting the various trusts, the competition for the City work was sharper than it had been for many years. The City reaped the benefit of this competition, for our paving last year was done at a lower figure than at any time since the incorporation of the City.

Knowing the financial condition of the City I hesitate making any suggestion that would lead to the expenditure of money that has not already been provided for by appropriation, but I cannot refrain from calling attention to the imperative necessity of supplying correct street signs. The names of a large number of the streets, as you are aware, have recently been changed, but the same old street signs are allowed to remain to mystify the public. Those signs now only serve to mislead the people. They should be removed without delay and their places supplied with new signs, which would probably cost not to exceed \$15,000.00.

## THE GROWTH OF CHICAGO.

### AREA.

|                                                                      | Square Miles. |
|----------------------------------------------------------------------|---------------|
| After the sixth annexation, April 29, 1889.....                      | 43.812        |
| Part of Cicero, E. ½ Sec. 4 and 9, T. 39, R. 13, July 15, 1889.....  | 1.000         |
| City of Lake View, July 15, 1889.....                                | 10.408        |
| Town of Jefferson (except Secs. 25, 35 and 36), July 15th, 1889..... | 29.530        |
| Town of Lake, July 15, 1889.....                                     | 36.000        |
| Village of Hyde Park, July 15, 1889.....                             | 49.132        |
| Village of Gano, April, 1, 1890.....                                 | 1.773         |
| South Englewood, May 12, 1890.....                                   | 2.899         |
| Village of Washington Heights, Nov. 4, 1890.....                     | 2.810         |
| Village of West Roseland, Nov. 4, 1890.....                          | 1.793         |
| Village of Fernwood, April 7, 1891.....                              | 0.981         |
| Village of West Ridge, April 19, 1893.....                           | 2.125         |
| Village of Rogers Park, April 19, 1893.....                          | 1.750         |
| Village of Norwood Park, April 19, 1893.....                         | 2.726         |
| Fourteenth extension, part of Calumet, Feb. 25, 1895.....            | 1.000         |
| Total area of the City of Chicago, Dec. 31, 1895.....                | 187.138       |

The extreme width of Chicago is now  $14\frac{1}{2}$  miles, and its extreme length, 26 miles.

The management of the Special Assessment Bureau, in all its branches, has been characterized by marked ability and economy.

The total receipts were \$3,761,689.45, of which the sum of \$3,022,937.06 was collected by the County Treasurer, and \$738,752.39 of which was collected by the City Collector and City Comptroller during the year.

The amount of special assessments levied and certified during the year 1895 was \$2,762,820.08, exclusive of the December and January rolls.

The total expenses were \$238,833.45, exclusive of amount paid to paving inspectors, which is chargeable direct to the warrant. Of this amount \$73,776.75 was spent during the last three months of the previous administration, and the remainder, \$132,433.42, during the nine months last past. These figures are exclusive of the cost of collection, which amounted to \$32,623.28 for the year. A comparison of these amounts shows that the average cost per month of the operation of the Bureau during January, February and March, under the last administration, was \$24,592.25, while during the last nine months, under the present administration, the average was \$14,714.82. This shows an average decrease of \$10,000.00 a month in round figures.

The amount paid paving inspectors during the year was \$39,346.00, a remarkable decrease over the preceding three years, which were as follows: 1892, \$76,015.95; 1893, \$120,294.05; 1894, \$87,460.51.

Following is the itemized statement:

### SALARIES.

|                           | First three months<br>from January 1 to<br>April 1. | First nine months<br>from April 1 to<br>December 31. |
|---------------------------|-----------------------------------------------------|------------------------------------------------------|
| Office Salaries .....     | \$16,000 51                                         | \$36,762 95                                          |
| Sidewalk Department.....  | 3,820 87                                            | 14,996 28                                            |
| General Inspectors.....   | 7,079 56                                            | 15,168 73                                            |
| City Collector.....       | 7,797 50                                            | 3,151 00                                             |
| Engineers .....           | 6,414 90                                            | 18,705 77                                            |
| Comptroller's Office..... | 900 00                                              | 2,405 50                                             |
|                           | <u>\$42,013 34</u>                                  | <u>\$91,190 23</u>                                   |

Total Salaries..... \$133,203 57

## VOUCHERS.

|                                 | First three months<br>from January 1 to<br>April 1. | First nine months<br>from April 1 to<br>December 31. |
|---------------------------------|-----------------------------------------------------|------------------------------------------------------|
| Services as Commissioners ..... | \$ 7,173 00                                         | \$ 11,113 64                                         |
| Legal Services .....            | 10,425 00                                           | 1,949 94                                             |
| Court Costs.....                | 4,061 00                                            | 17,186 27                                            |
| Expert Witnesses.....           | 5,883 95                                            | 5,781 21                                             |
| Advertising .....               | 1,199 40                                            | 2,198 47                                             |
| Cash Items .....                | 148 68                                              | 189 84                                               |
| Books, Stationery, etc .....    | 2,872 38                                            | 2,823 62                                             |
|                                 | <u>\$ 31,763 41</u>                                 | <u>\$ 41,243 19</u>                                  |
| Total Vouchers .....            |                                                     | \$ 73,006 60                                         |
| Cost of Collections .....       |                                                     | 32,623 28                                            |
| Total Expenses .....            |                                                     | <u>\$238,833 45</u>                                  |

In the following comparative statement of the expenses of the Special Assessment Bureau for the years 1892, 1893, 1894 and 1895, it will be noticed that there is an appreciable decrease in the cost of all branches of the assessment work in 1895 compared with the previous years. In the item of legal expenses, which amounted to \$12,374.94 for the year, \$10,425.00 was expended during the first three months, the remainder, \$1,949.94, being spread over the last nine months.

The following are the tabulated figures :

|                                     | 1892.               | 1893.               | 1894.               | 1895.               |
|-------------------------------------|---------------------|---------------------|---------------------|---------------------|
| Salaries clerks, engineers, rodmen. | \$159,315 86        | \$174,055 62        | \$142,733 50        | \$133,208 57        |
| Commissioners, making assessm'ts    | 33,510 75           | 24,383 50           | 29,609 60           | 18,286 84           |
| Clerks of County Court .....        | 20,536 50           | 20,754 75           | 20,427 75           | 21,247 27           |
| Expert services, real estate .....  | 17,654 80           | 29,110 85           | 20,767 75           | 11,665 16           |
| Advertising .....                   | 12,777 71           | 8,928 51            | 3,928 15            | 8,397 87            |
| Legal expenses.....                 | 4,595 45            | 6,275 96            | 6,850 00            | 12,374 94           |
| Printing, stationery, car fare..... | 3,689 87            | 5,398 12            | 4,595 50            | 2,950 00            |
| Collecting assessments.....         | 57,948 56           | 66,891 27           | 44,777 83           | 32,623 28           |
| Repairing sidewalks.....            | .....               | .....               | 5,137 94            | .....               |
| Clerk of Circuit Court.....         | .....               | 708 25              | .....               | .....               |
| Miscellaneous .....                 | 6,960 45            | 3,248 63            | 6,846 11            | 3,084 52            |
| Paving Inspectors.....              | 76,015 95           | 120,294 05          | 87,460 51           | 39,346 00           |
| Total.....                          | <u>\$398,004 90</u> | <u>\$460,049 51</u> | <u>\$363,134 64</u> | <u>\$278,179 45</u> |

Previous to the present administration, as you are aware, the rebates to property owners were enormously large, owing to the high standard adopted for cost. We at once made an average reduction of 21.7 per cent. in prices, as shown by the subjoined statement. As no standard had been adopted for brick pavement, no comparison appears. The reductions not only reduced rebates and brought the estimate very close to the price at which the work was let, but also reduced the receipts of the Bureau, as the 6 per cent. allowed for clerical work, engineering, etc., is based upon the entire estimate.

Following is the table of estimated prices :

| CHARACTER OF IMPROVEMENTS.                                        | PER SQUARE YARD.  |                    |                     |
|-------------------------------------------------------------------|-------------------|--------------------|---------------------|
|                                                                   | Present Estimate. | Previous Estimate. | Decrease, per cent. |
| Asphalt .....                                                     | \$ 2 35           | \$ 3 00            | 21.66               |
| Cedar on plank.....                                               | 90                | 1 25               | 28.00               |
| Cedar on macadam.....                                             | 1 15              | 1 40               | 16.30               |
| Brick on concrete .....                                           | 2 00              | ....               | ....                |
| Brick on macadam .....                                            | 1 70              | ....               | ....                |
| Macadam (average 9 inches).....                                   | 60                | 80                 | 25.00               |
| Macadam (average 12 inches) .....                                 | 80                | 1 20               | 33.33               |
| Granite .....                                                     | 2 90              | 3 50               | 17.00               |
| Macadam, granite top (3 inches granite and 9 inches macadam ..... | 1 10              | 1 70               | 37.00               |
|                                                                   | PER LINEAL FOOT.  |                    |                     |
|                                                                   |                   |                    |                     |
| Limestone curb (5-inch stone) .....                               | \$ 0 75           | \$ 0 90            | 16.67               |
| Limestone curb (4-inch stone) .....                               | 60                | 75                 | 20.00               |
| Bedford stone curb (5-inch stone).....                            | 75                | 90                 | 16.67               |
| Bedford stone curb (4-inch stone). ....                           | 60                | 75                 | 20.00               |
| Sandstone curb (5-inch stone) .....                               | 70                | 90                 | 22.20               |
| Sandstone curb (4-inch stone) .....                               | 60                | 75                 | 20.00               |
| Limestone comb. C. and G. (18-inch gutter) .....                  | 75                | 90                 | 16.67               |
| Granite comb. C. and G. (18-inch gutter).....                     | 85                | 1 00               | 15.00               |
| Curb wall,..... per cord, \$12.00 to \$14.00                      |                   |                    |                     |

One of the drains on the fund known as Appropriation W, is the passage of ordinances by your Honorable Body, which are allowed to proceed, in many instances, until confirmed by court, and put into collection and then repealed, the entire cost of the work falling on the Bureau. This expense comes out of Appropriation W, and is a total loss. This matter, to which your attention has been already called, should receive the careful attention of your Honorable Body, and a stop put to the practice, as it involves a great drain on the Bureau funds. All warrants for the year 1895, drawn against Appropriation W, have been paid, and there is a sufficient sum to the credit of the fund in the treasury to meet those unpaid.

During the year, 91,121,532,749 gallons of water have been pumped into the City mains, an average of 251,839,816 gallons per twenty-four hours. Estimating the population at 1,725,000, this consumption is at the rate of 146 gallons per capita per day.

The total pumpage last year was 4,847,589,400 gallons in excess of the preceding year. The expense of all the stations for 1895 was \$30,130.22 less than for the preceding year.

The pumping stations are in good repair and fully equipped, with the exception of the Chicago Avenue and Lake View stations, where new engines are required.

The City is drawing all its water through four tunnels, the first of which was commenced in 1864. The total length of all is 105,800 lineal feet, or a little over 20 miles.

## NEW LAND TUNNELS.

To feed these stations with water, a new Lake tunnel, with attending land ramifications, is necessary, contracts for the construction of which have been let during the year and the work of construction begun.

### SECTION ONE.

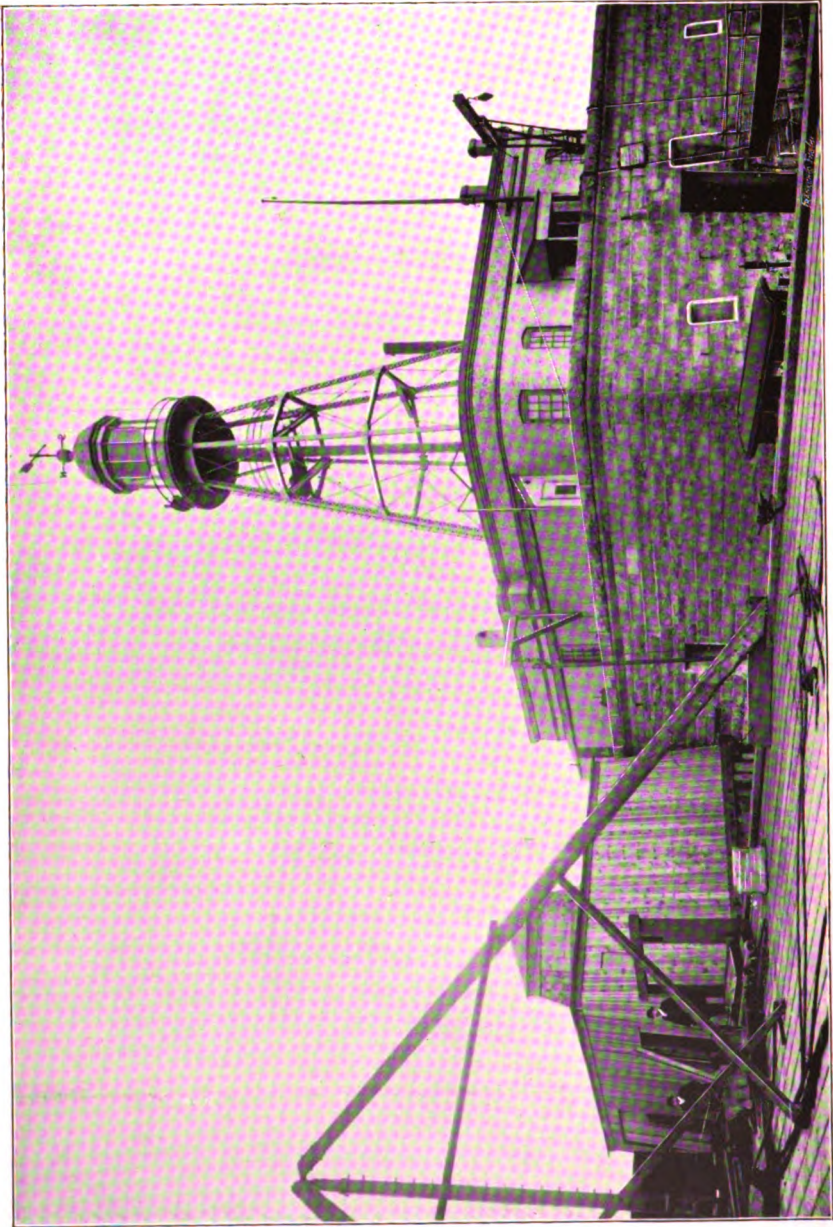
Section One of this tunnel begins at the foot of Oak street, on Lake shore and extends to the intersection of North Green street and Grand avenue on the West Side, a distance of about 8,500 feet, with an inside diameter of ten feet.

### SECTION TWO.

Section Two is an extension of Section One in a southwesterly direction to the proposed pumping station west of Rockwell Street, with an inside diameter of eight feet. Up to the end of the year, 232 lineal feet of this tunnel had been constructed.







NORTH SHORE EXTENSION TUNNEL.  
INTAKE PROTECTION.

## SECTION THREE.

Section Three is a branch tunnel of eight feet inside diameter, extending from the junction of Sections One and Two northwesterly to the proposed pumping station in the vicinity of Humboldt Park. The work of construction on this branch has been begun.

## TUNNEL AND CRIB CONSTRUCTION.

## LAKE VIEW TUNNEL.

An interesting review of the work on this tunnel, now practically completed, will be found in the Engineer's report.

## NORTH SHORE INLET EXTENSION.

The shore tunnel, extended in 1891 to the northwest end of the United States exterior breakwater, has been practically useless, owing to the proximity of the intake to the shore. It was decided to extend it to the two-mile crib, and the contract for such extension has been let. Up to the end of the year, 1,344 lineal feet of this tunnel had been built.

## HYDE PARK BREAKWATER.

The outer Hyde Park crib, rendered unsafe by the ice of the last two winters, has been protected by an hexagonal breakwater thirty feet wide, according to new plans, omitting the opening for the admittance of water, and constructing in lieu thereof ports through four of the six sides forming the breakwater.

This structure during the past winter has demonstrated its efficiency, reducing the danger of ice blockades to a minimum, and causing a saving to the City for tug-boat hire and salaries of about \$3,000 per month during the winter season.

## WATER PIPE EXTENSION.

There were laid during the year 350,405 feet of mains, of the following dimensions :

|              |             |
|--------------|-------------|
| 4-inch.....  | 1,428 feet. |
| 6-inch.....  | 203,645 "   |
| 8-inch.....  | 92,952 "    |
| 12-inch..... | 17,618 "    |
| 16-inch..... | 1,177 "     |
| 24-inch..... | 28,198 "    |
| 36-inch..... | 2,687 "     |

**Pipe taken up and relaid during the year :**

|              |           |
|--------------|-----------|
| 6-inch.....  | 563 feet. |
| 8-inch.....  | 5,171 "   |
| 12-inch..... | 5,599 "   |

**HYDRANTS.**

Seven hundred new hydrants were placed during the year, making the total number in use at the close of 1895, 16,466.

**STOP-VALVES.**

|                                               |        |
|-----------------------------------------------|--------|
| Stop-valves put in during the year . . . . .  | 477    |
| Total number in at the close of the year..... | 12,073 |

**HYDRANT AND STOP-VALVE BASINS.**

Brick hydrant and stop-valve basins to the number of 1,679 were built during the year, and 81 composition basins were placed during the same period.

**DIVISION OF BRIDGE AND VIADUCT CONSTRUCTION.****VAN BUREN STREET BRIDGE.**

This structure was completed and formally opened for traffic February 4, 1895. Its total cost was \$169,700.00.

**WEST VAN BUREN STREET VIADUCT.**

This work consisted of the rebuilding of the upper portions of the old abutments and the placing of the new viaduct of steel girders. Its cost was \$7,644.30.

**FULLERTON AVENUE BRIDGE.**

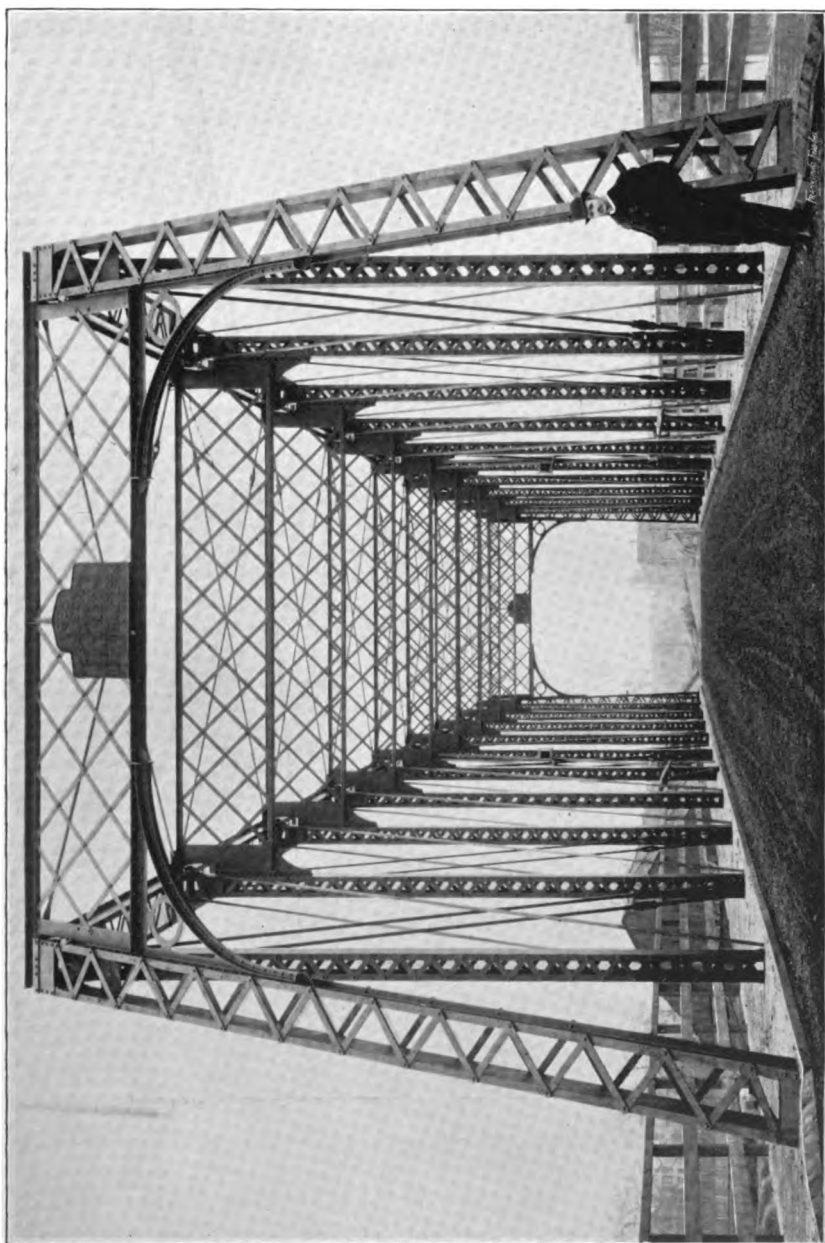
This bridge spans the North Branch of the Chicago River. It was formally opened for traffic October 20, 1895. It has a permanent concrete and masonry centre pier, founded on solid rock, with the usual pile and timber protection, pile abutments and trestle bent approaches. The superstructure is the ordinary Pratt truss construction. Total cost, \$26,752.67.

**DIVERSEY AVENUE BRIDGE.**

This bridge spans the North Branch and is similar in all respects to the Fullerton avenue bridge, except that the superstructure is nearly twenty feet longer and the centre pier is founded on piles. Cost, \$32,000.00.

**WELLS STREET VIADUCT.**

Plans are prepared for this structure which is to be rebuilt by the Northwestern Elevated Railway Company, and to be paid for by that company and the Chicago & North-Western Railway Company.



DIVERSEY BOULEVARD BRIDGE.



## WELLS STREET BRIDGE.

This bridge is to be remodeled. The work will amount to a practical rebuilding of it. The expense is to be borne by the Northwestern Elevated Railway Company.

## NORTH HALSTED STREET BRIDGE.

Plans are prepared, and contract for the structure has been awarded. The bridge is to be completed September 1st, 1896.

## NEW BRIDGES AND VIADUCTS NEEDED.

There is urgent need for new bridges and viaducts at the following points:

1. Kinzie street, North Branch.
2. North avenue, North Branch.
3. Division street, Ogden Canal.
4. Polk street, South Branch.
5. Western avenue, west fork of South Branch.
6. California avenue, west fork of South Branch.
7. Archer avenue, south fork of South Branch.
8. Chittenden avenue, Calumet River.
9. Kedzie avenue, I. & M. Canal (fixed span).
10. Canal and Sixteenth streets (viaduct).

## BRIDGE AND VIADUCT MAINTENANCE.

The expense incurred in the maintenance of all bridges and viaducts for the year 1895, including labor, materials, supplies, etc., has been \$148,936.28.

## HARBORS OF THE CITY.

Material removed from the Chicago River and its branches during the year amounted to 117,414 cubic yards, costing \$17,138.40.

There was also 387,800 cubic yards of private dredging done during the year.

Work on the west fork (or the Lawndale branch) of the South Branch, under the order of the Council passed May 29, 1893, has progressed. Three thousand three hundred and sixty-nine cubic yards of material were taken out in 1895 at a cost of \$13,139.10. There yet remains to be blasted and dredged 24,000 cubic yards of rock to make the waterway available, for which an appropriation of \$94,500 would be necessary.

## COMMERCE BY THE LAKE.

A comparison of the number of vessels entered and cleared during the year with those of other cities and ports will disclose the magnitude of the Lake commerce.

|                                          |                                          |
|------------------------------------------|------------------------------------------|
| Chicago River entered 7,637 vessels..... | 4,602,508 tons                           |
| Calumet River entered 1,404 vessels..... | 1,682,003 tons                           |
| <b>Total.....</b>                        | <b>9,041 vessels..... 6,284,511 tons</b> |
| Chicago River cleared 7,687 vessels..... | 4,585,831 tons                           |
| Calumet River cleared 1,504 vessels..... | 1,760,838 tons                           |
| <b>Total.....</b>                        | <b>9,191 vessels..... 6,346,660 tons</b> |

A Treasury report dated June 30, 1895, shows total arrivals and clearances at the several points named, as follows :

|                     |       |        |
|---------------------|-------|--------|
| Baltimore .....     | 3,992 |        |
| Boston .....        | 5,884 |        |
| New Orleans .....   | 2,364 |        |
| Philadelphia .....  | 3,831 |        |
| San Francisco ..... | 2,515 |        |
|                     |       | 18,586 |
| New York . . . . .  |       | 13,853 |
| Chicago .....       |       | 18,575 |

These figures disclose the fact that the entrances and clearances for the harbors of Chicago equaled those of Baltimore, Boston, New Orleans, Philadelphia and San Francisco combined, and were greater than those of New York by 4,722, for the same period of time.

The following figures show a comparison of the tonnage with that of the year 1894 :

|                     | 1894                   | 1895                   |
|---------------------|------------------------|------------------------|
| Clearances .....    | 5,447,273 tons         | 6,346,699 tons         |
| Arrivals.....       | 5,424,171 tons         | 6,284,511 tons         |
| <b>Totals .....</b> | <b>10,871,444 tons</b> | <b>12,631,210 tons</b> |

## STREET AND ALLEY IMPROVEMENTS.

## STREETS AND ALLEYS.

During the year 42.48 miles of streets and 5.27 miles of alleys, a total of 47.75 miles, were paved.

Streets curbed and filled, 6.03 miles.

The introduction of vitrified brick on Milwaukee avenue and of sheet asphalt on Madison street, from Jefferson street to Center avenue, marks a new departure in street paving in Chicago. The

heavy traffic on these streets will afford a thorough test of the durability of these materials and demonstrate the advisability of continuing their use in business districts.

It is suggested that when a street is ordered to be improved, upon which substantial sidewalks are needed, the ordinance be drawn providing for all improvements necessary between lot lines.

#### SIDEWALKS.

During the year 94.45 miles of plank sidewalk, 88.81 miles of concrete walk, and 1.35 miles of stone walk were constructed ; a total of 184.61 miles.

4.70 miles of stone and 11.81 miles of concrete walks were constructed by the various Park Boards.

Thus the grand total for the year is 201.12 miles.

#### FINANCIAL.

|                                                                                                             |                 |
|-------------------------------------------------------------------------------------------------------------|-----------------|
| Amount paid Contractors for Street Improvements by Special Assessments.....                                 | \$ 1,026,202 45 |
| For Sidewalks built by the Bureau under Special Assessment....                                              | 50,817 91       |
| For Re-paving and Repairing Improved Streets .....                                                          | 267,671 89      |
| For Grading, Ditching, Building and Repairing Aprons, Culverts, Crossings, etc., on Unimproved Streets..... | 143,696 30      |
| For Sidewalk, General Repairs and Intersections.....                                                        | 106,211 11      |
| For City Parks .....                                                                                        | 9,361 96        |
| For New and Repaired Street Lamps and Signs.....                                                            | 63,397 24       |
| Grand Total .....                                                                                           | \$ 1,667,358 95 |

#### WATER OFFICE.

##### COLLECTIONS.

The net receipts of this office from all sources amounted to \$3,215,137.10. A further sum of \$25,352.86 is properly creditable to this year's business, the same having been paid out by drawbacks from this year's collections for vacancies occurring during 1894, as provided for in the ordinance of January 14, 1895, making a total of \$3,240,489.06. These figures show an actual increase in the collections of 1895 over 1894 of \$230,230.04.



Taking in connection with this the fact that during the first four months of 1895 the meter earnings ran behind the earnings of the same period of 1894, \$53,878.76, and that the assessed rates collections fell off \$79,864.71, a very favorable showing is made.

Meter collections increased during the last eight months of the year \$45,685.68 over those of the same period in 1894. The increase in the number of meters in service has been 296.

#### TOWN OF LAKE OFFICE.

This, the last of the sub-offices, has been discontinued, and the work of that district consolidated with that of the remainder of the City in the main office. This action has resulted in much better control of the detail of the district, in a general revision of the old-fashioned systems in use, and in a reduction of the operating expenses.

It was also discovered that this section had not been inspected for several years, and an immediate re-assessment resulted in an increased revenue from this district of over \$40,000.

#### AMENDMENTS TO ORDINANCE.

The effect of the amended ordinance, passed July 11th, to provide a separate period for the payment of water taxes in each division of the City, has been to lessen the crowded and congested condition of the office during the last few days of the terms, as well as in relieving the force of a large share of the extra work and spreading it over a longer period.

#### SERVICE PIPES.

During the year 5,357 service pipes were laid, at an average cost of \$11.73, a saving to the property owners of \$6.05 per pipe over the cost of those laid in 1894, making a total saving to the people of \$32,409.31.

#### PLUMBERS' LICENSES.

Plumbers' licenses to the number of 758, at a profit to the City of \$18,200.00, as against 619 in 1894 for which \$15,475.00 was paid, were issued; a net increase of \$2,725.00.

#### INSPECTION DEPARTMENT.

By a special inspection of the entire City, this branch of the Bureau increased the assessment on hose alone \$45,000.00, in addition to the increase of over \$40,000.00 in the Town of Lake.

Following is a table showing, among other things, the appropriations for Public Works from 1888 to 1894, increase of population and area during the same period, and other matters of interest connected with the work of the Department:

| YEAR.      | Appropriation. | Expenses.      | Square Miles of Territory. | Census.   |
|------------|----------------|----------------|----------------------------|-----------|
| 1888 ..... | \$1,942,495 65 | \$2,057,422 79 | 37                         | 802,651   |
| 1889 ..... | 2,817,291 20   | 2,220,365 30   | 37                         | 880,000   |
| 1890 ..... | 2,581,445 20   | 2,492,808 45   | 100                        | 1,208,669 |
| 1891 ..... | 2,429,644 05   | 2,929,481 47   | 180                        | 1,850,000 |
| 1892 ..... | 2,597,148 17   | 2,508,771 98   | 180                        | 1,438,010 |
| 1893 ..... | 2,708,175 36   | 2,845,571 38   | 186.2                      | 1,500,000 |
| 1894 ..... | 1,979,863 85   | 2,220,321 43   | 186.2                      | 1,600,000 |
| 1895 ..... | 2,026,568 53   | 2,024,542 06   | 186.2                      | 1,725,000 |

| YEAR.      | Number of Miles of Paved Streets. | Number of Miles of Unimproved Streets. | Cost of Cleaning and Repairing Improved and Unimproved Streets. | Amount of Appropriation per Square Mile of Territory. | Amount of Appropriation per Capita. | Cost per Mile of Cleaning and Repairing Improved and Unimproved Sts. |
|------------|-----------------------------------|----------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------|
| 1888 ..... | 348                               | 314                                    | \$345,204 69                                                    | \$52,499 88                                           | \$2 42                              | \$521 45                                                             |
| 1889 ..... | 348                               | 314                                    | 477,866 65                                                      | 62,629 49                                             | 2 63                                | 721 85                                                               |
| 1890 ..... | 669                               | 1,567                                  | 583,468 69                                                      | 14,341 36                                             | 2 13                                | 260 94                                                               |
| 1891 ..... | 774                               | 1,559                                  | 803,171 02                                                      | 13,498 02                                             | 1 79                                | 344 26                                                               |
| 1892 ..... | 879                               | 1,493                                  | 896,017 02                                                      | 14,428 60                                             | 1 80                                | 377 74                                                               |
| 1893 ..... | 1,007                             | 1,459                                  | 999,558 58                                                      | 14,494 23                                             | 1 80                                | 405 33                                                               |
| 1894 ..... | 1,086                             | 1,400                                  | 696,627 99                                                      | 10,615 89                                             | 1 23                                | 280 22                                                               |
| 1895 ..... | 1,123.54                          | 1,406.63                               | 681,234 06                                                      | 10,883 82                                             | 1 17                                | 269 24                                                               |

Of the 1,123.54 miles of pavement 104.52 are alleys, but in the total mileage of 2,530.17 miles are treated as streets.

## EXTENSION OF WATER SYSTEM.

|                                                                                                                                                                                     |         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 66.36 miles of water pipe, from four to thirty-six inches in diameter, were laid during the year (.77 miles being exchange), making a total of 1,612.37 miles now laid in the City. |         |
| 477 new valves were added; total in place.....                                                                                                                                      | 12,073  |
| 700 new fire hydrants were added; total in place.....                                                                                                                               | 16,466  |
| Total number of fire cisterns.....                                                                                                                                                  | 98      |
| *12,811 new house service taps were added; making total....                                                                                                                         | 233,792 |
| *12,811 new house service pipes were added; making total....                                                                                                                        | 233,792 |
| The number of service taps inserted in water mains, including retaps and taps inserted for enlarged service pipes to buildings previously supplied, is.....                         | 13,990  |

## STREET IMPROVEMENTS.

There were 47.75 miles of streets improved during the past year.

There were 181,316 square yards of street pavement repaired.

|                                                         |                |
|---------------------------------------------------------|----------------|
| Total streets in the City.....                          | 2,530.17 miles |
| Total streets paved in the City.....                    | 1,123.54 miles |
| New sidewalks constructed.....                          | 184.61 miles   |
| Sidewalks repaired.....                                 | 3.26 miles     |
| Total sidewalks in the City.....                        | 4,624.85 miles |
| Streets cleaned (under contract).....                   | 6,132 miles    |
| Number of aprons, culverts, crossings, etc., built..... | 4,773          |
| Sidewalk intersections constructed.....                 | 1,327          |
| Number of street lamps (gas).....                       | 37,853         |
| Number of street lamps (oil and gasoline).....          | 11,673         |
| Number of street lamps (electric).....                  | 1,617          |
| Total number of street lamps in the City.....           | 51,143         |
| Number of buildings removed.....                        | 1,150          |

## MAPS AND PLATS MADE.

|                                                            |       |
|------------------------------------------------------------|-------|
| For street improvement assessments.....                    | 436   |
| For opening, widening and vacating streets and alleys..... | 304   |
| For sidewalks.....                                         | 950   |
| For Street Engineer's estimates.....                       | 710   |
| For lamp posts.....                                        | 1,071 |
| For surveys.....                                           | 132   |
| For Law Department.....                                    | 720   |
| For water pipe assessments.....                            | 194   |
| For miscellaneous purposes.....                            | 151   |
| Total.....                                                 | 4,668 |

## MISCELLANEOUS.

## SPECIAL IMPROVEMENTS.

Furnishing pumping engines.  
 Furnishing cast-iron water pipe.  
 Furnishing rings and covers for hydrant chambers.  
 Furnishing special castings for hydrants and stop valves.  
 Furnishing composition hydrant basins.  
 Furnishing composition valve basins.  
 Furnishing special castings for water pipe.  
 Furnishing manhole and catch-basin covers.  
 Furnishing corporation ferrules.  
 Furnishing lumber.  
 Constructing new water tunnel (land).  
 Constructing north shore inlet extension.  
 Constructing Fullerton avenue bridge.  
 Constructing Diversey avenue bridge.  
 Constructing Van Buren street viaduct.  
 Constructing air lock Western avenue tunnel.  
 Constructing dams at Bridgeport lock.  
 Constructing isolation hospital.  
 Constructing fire engine house, Maryland avenue.  
 Constructing breakwater, Sixty-eighth street crib.  
 Constructing pile outlet, Belmont avenue sewer.  
 Constructing pile outlet, Seventy-third street sewer.  
 Constructing pile outlet, Fifty-first street sewer.  
 Paving approach to Fullerton avenue bridge.  
 Boring for new water tunnel.  
 Boring for sewers.  
 Removing dead animals.  
 Repairing breakwater, four-mile crib.

## CONTRACTS.

|                                                                                |               |
|--------------------------------------------------------------------------------|---------------|
| 1 Contract for pumping engines, aggregating . . . . .                          | \$ 275,668 00 |
| 4 Contracts for furnishing cast-iron water pipe,<br>aggregating . . . . .      | 145,649 54    |
| 1 Contract for substructure, Fullerton avenue<br>bridge, aggregating . . . . . | 12,404 00     |

|                                                                                      |              |
|--------------------------------------------------------------------------------------|--------------|
| 1 Contract for superstructure, Fullerton avenue bridge, aggregating .....            | \$ 11,596 12 |
| 1 Contract for Van Buren street viaduct.....                                         | 6,790 78     |
| 1 Contract for substructure, Diversey avenue bridge, aggregating .....               | 15,000 00    |
| 1 Contract for superstructure, Diversey avenue bridge, aggregating .....             | 15,000 00    |
| 1 Contract for rings and covers for hydrant chambers, aggregating .....              | 1,822 19     |
| 1 Contract for special castings, hydrant and stop-valves, aggregating.....           | 2,822 89     |
| 1 Contract for composition hydrant basins, aggregating .....                         | 634 10       |
| 1 Contract for composition valve basins, aggregating .....                           | .....        |
| 1 Contract for special castings, for water pipe, aggregating .....                   | 5,208 90     |
| 1 Contract for air lock, Western avenue tunnel, aggregating .....                    | 2,357 17     |
| 1 Contract for dams, at Bridgeport lock, aggregating .....                           | 1,363 87     |
| 1 Contract for paving approach to Fullerton avenue bridge, aggregating .....         | 1,282 45     |
| 1 Contract for boring for tunnel, aggregating.....                                   | 4,336 05     |
| 1 Contract for extension of north shore inlet tunnel, aggregating .....              | 105,000 00   |
| 3 Contract for land tunnel, aggregating.....                                         | 1,100,000 00 |
| 1 Contract for repairing breakwater, at four-mile crib, aggregating.....             | 573 90       |
| 1 Contract for constructing breakwater at Sixty-eighth street crib, aggregating..... | 99,724 92    |
| 2 Contracts for dredging, aggregating.....                                           | 17,138 60    |
| 12 Contracts for tug service, aggregating.....                                       | 6,199 56     |
| 8 Contracts for coal for pumping stations, aggregating .....                         | 89,307 83    |
| 1 Contract for constructing isolation hospital, aggregating .....                    | 112,011 00   |
| 1 Contract for plumbing, isolation hospital, aggregating .....                       | 5,315 00     |
| 1 Contract for outside sewerage, isolation hospital, aggregating .....               | 1,999 00     |

|                                                                                   |    |              |
|-----------------------------------------------------------------------------------|----|--------------|
| 1 Contract for steam heating, isolation hospital, aggregating .....               | \$ | 9,425 00     |
| 1 Contract for constructing fire engine house (Maryland avenue) aggregating ..... |    | 4,794 11     |
| 4 Contracts for teaming, aggregating .....                                        |    | 52,789 25    |
| 8 Contracts for lumber, aggregating .....                                         |    | 8,206 41     |
| 98 Contracts for constructing sewers, aggregating ..                              |    | 311,783 99   |
| 23 Contracts for laying private drains, aggregating ..                            |    | 11,571 40    |
| 1 Contract for manhole and catch-basin covers, aggregating .....                  |    | 3,147 74     |
| 1 Contract for pile outlet, Belmont avenue sewer, aggregating .....               |    | 1,500 00     |
| 1 Contract for pile outlet, Seventy-third street sewer, aggregating .....         |    | 1,645 00     |
| 1 Contract for pile outlet, Fifty-first street sewer, aggregating .....           |    | 4,500 00     |
| 1 Contract for boring sewer, aggregating .....                                    |    | 591 75       |
| 190 Contracts for improving streets and alleys, aggregating .....                 |    | 1,113,025 21 |
| 3 Contracts for repaving streets, aggregating .....                               |    | 267,671 89   |
| 108 Contracts for laying water service pipes, aggregating .....                   |    | 36,111 12    |
| 2 Contracts for corporation ferrules, aggregating ..                              |    | 4,826 93     |
| 26 Contracts for removing garbage, etc. ....                                      |    | .....        |
| 1 Contract for sweeping and cleaning streets .....                                |    | .....        |
| 1 Contract for removing dead animals .....                                        |    | .....        |

### WATER SUPPLY SYSTEM.

This system, as shown by the City Engineer's report, makes the present nominal engine capacity, as follows:

Lake View pumping station, 31,500,000 gallons per 24 hours.  
 North Side pumping station, 99,000,000 gallons per 24 hours.  
 Central pumping station, 36,000,000 gallons per 24 hours.  
 14th street pumping station, 54,000,000 gallons per 24 hours.  
 West Side pumping station, 60,000,000 gallons per 24 hours.  
 68th street pumping station, 77,000,000 gallons per 24 hours.

Total..... 357,500,000 gallons per 24 hours.

All these engines draw their water from the lake through tunnels. There are, besides, small pumping stations at Washington Heights and Norwood Park, which draw their water from artesian wells.

## TUNNELS.

The nominal tunnel capacity is as follows:

|                     |                                          |
|---------------------|------------------------------------------|
| Lake View tunnel,   | 72,000,000 gallons per 24 hours.         |
| Two-mile tunnels,   | 150,000,000 gallons per 24 hours.        |
| Four-mile tunnel,   | 140,000,000 gallons per 24 hours.        |
| 68th street tunnel, | <u>122,000,000 gallons per 24 hours.</u> |
| Total . . . . .     | 484,000,000 gallons per 24 hours.        |

There is, besides, one emergency or shore inlet tunnel, opposite the North Side pumping station, now being extended to two-mile crib.

## PIPE SYSTEM.

Water pipes were laid during the year as follows:

|                                 |                    |
|---------------------------------|--------------------|
| Four (4) inch . . . . .         | 4,128 feet.        |
| Six (6) inch . . . . .          | 203,645 feet.      |
| Eight (8) inch . . . . .        | 92,952 feet.       |
| Twelve (12) inch . . . . .      | 17,618 feet.       |
| Sixteen (16) inch . . . . .     | 1,177 feet.        |
| Twenty-four (24) inch . . . . . | 28,198 feet.       |
| Thirty-six (36) inch . . . . .  | <u>2,687 feet.</u> |
| Total . . . . .                 | 350,405 feet.      |

The whole being equal to 66.36 miles. Small pipe taken up or abandoned, 0.75 miles; net pipe added to the system during the year, 65.61 miles—making a total of 1,612.36 miles of water mains laid within the City limits.

|                                                            |        |
|------------------------------------------------------------|--------|
| Fire hydrants placed in position during the year . . . . . | 700    |
| Net number of hydrants added to the system . . . . .       | 695    |
| Total number of fire hydrants now in use . . . . .         | 16,466 |
| Stop valves put in place during the year . . . . .         | 477    |
| Net number of valves added to the system . . . . .         | 476    |
| Total number now in use . . . . .                          | 12,073 |

## WATER METERS AND HYDRAULIC ELEVATORS.

|                                                                  |       |
|------------------------------------------------------------------|-------|
| Number of new meters put in during the year 1895 . . . . .       | 429   |
| Number of old meters removed . . . . .                           | 49    |
| Net increase . . . . .                                           | 380   |
| Total number of meters now in use . . . . .                      | 5,120 |
| Total number of meters repaired . . . . .                        | 2,483 |
| Number of City meters removed and replaced by new ones . . . . . | 1     |

The revenue derived from water measured by these meters and hydraulic elevators for the past year amounted to \$1,004,203.48.

The following table shows the quantity of water furnished, the total revenue received, and the average amount per million gallons annually, from 1858 to 1895, inclusive :

| YEAR                       | Million Gallons<br>Furnished | Revenue      | Revenue per<br>Million Gallons |
|----------------------------|------------------------------|--------------|--------------------------------|
| 1858.....                  | 1,092                        | \$102,178 85 | \$93 57                        |
| 1859.....                  | 1,415                        | 122,753 50   | 86 75                          |
| 1860.....                  | 1,717                        | 131,162 73   | 76 39                          |
| 1861.....                  | 1,767                        | 131,035 10   | 74 15                          |
| 1862..... (15 months)..... | 2,705                        | 188,448 25   | 69 66                          |
| 1863.. (9 months).....     | 2,336                        | 192,246 39   | 82 29                          |
| 1864.....                  | 2,523                        | 224,902 57   | 89 14                          |
| 1865.....                  | 2,778                        | 253,114 49   | 91 11                          |
| 1866.....                  | 3,169                        | 302,017 59   | 95 30                          |
| 1867.....                  | 4,232                        | 338,929 28   | 80 08                          |
| 1868.....                  | 5,375                        | 420,686 94   | 78 26                          |
| 1869.....                  | 6,801                        | 476,968 24   | 70 13                          |
| 1870.....                  | 7,945                        | 539,180 19   | 67 86                          |
| 1871.....                  | 8,423                        | 445,834 64   | 52 93                          |
| 1872.....                  | 10,051                       | 544,465 90   | 54 17                          |
| 1873.....                  | 11,723                       | 708,804 32   | 60 46                          |
| 1874.....                  | 13,903                       | 705,926 64   | 50 77                          |
| 1875..... (9 months).....  | 10,957                       | 635,996 54   | 58 04                          |
| 1876.....                  | 15,346                       | 771,940 38   | 50 30                          |
| 1877.....                  | 19,047                       | 908,509 64   | 47 70                          |
| 1878.....                  | 19,564                       | 944,190 97   | 48 26                          |
| 1879.....                  | 20,558                       | 922,001 26   | 44 85                          |
| 1880.....                  | 21,003                       | 865,618 35   | 41 21                          |
| 1881.....                  | 23,332                       | 936,922 07   | 40 16                          |
| 1882.....                  | 24,151                       | 1,049,576 90 | 43 46                          |
| 1883..                     | 26,742                       | 1,142,868 54 | 42 73                          |
| 1884.....                  | 29,286                       | 1,204,338 74 | 41 12                          |
| 1885.....                  | 33,451                       | 1,339,038 00 | 40 03                          |
| 1886.....                  | 35,693                       | 1,374,837 32 | 38 52                          |
| 1887.....                  | 37,199                       | 1,490,023 68 | 40 05                          |
| 1888.....                  | 38,122                       | 1,557,116 78 | 40 84                          |
| 1889.....                  | 40,504                       | 1,621,786 34 | 40 04                          |
| 1890.....                  | 55,614                       | 2,202,724 58 | 39 61                          |
| 1891.....                  | 63,552                       | 2,364,463 09 | 37 21                          |
| 1892.....                  | 71,035                       | 2,738,434 10 | 38 55                          |
| 1893.....                  | 86,298                       | 2,949,548 87 | 34 18                          |
| 1894.....                  | 87,074                       | 3,158,492 94 | 36 27                          |
| 1895.....                  | 91,922                       | 3,318,483 85 | 36 20                          |



## SEWERAGE.

The sewerage system has been extended in the various divisions of the City during the year, as follows :

|                                        |              |
|----------------------------------------|--------------|
| Constructed in the West Division.....  | 10.598 miles |
| Constructed in the South Division..... | 17.453 miles |
| Constructed in the North Division..... | 9.136 miles  |

---

Total ..... 37.187 miles

|                                   |       |
|-----------------------------------|-------|
| Number of catch-basins built..... | 1,515 |
| Number of manholes built.....     | 1,409 |

The cost of constructing sewers and catch-basins during the year was as follows :

|                     |                      |
|---------------------|----------------------|
| West Division.....  | \$ 62,829.48         |
| South Division..... | 234,459.41           |
| North Division..... | 59,651.12            |
|                     | <u>\$ 356,950.01</u> |

|                                                 |           |
|-------------------------------------------------|-----------|
| Total number of catch-basins.....               | 43,583    |
| Total number of manholes.....                   | 46,164    |
| Total number of miles of sewer in the City..... | 1,248.438 |

## MAINTENANCE OF SEWERS.

The cost of cleaning and repairing sewers, the cost per mile, and number of miles, also the number of catch-basins and manhole chambers distributed in the three divisions of the City, are as follows :

| DIVISION.   | MILES OF SEWER. | NUMBER OF CATCH-BASINS. | NUMBER OF MANHOLE CHAMBERS. |
|-------------|-----------------|-------------------------|-----------------------------|
| West.....   | 529.822         | 19,138                  | 18,910                      |
| South.....  | 487.280         | 16,596                  | 18,295                      |
| North.....  | 231.336         | 7,849                   | 8,959                       |
| Totals..... | 1,248.438       | 43,583                  | 46,164                      |

The cost of repairing sewers during the year was \$52,665.38, being an average cost of \$42.18 per mile.

The cost of cleaning was \$134,424.44, making the average cost \$107.67 per mile.

The total cost of both repairs and cleaning was \$187,079.82, making an average of \$149.85 per mile.

Of the 37.187 miles of sewers constructed during the year, 6.321 miles are of brick and 30.866 miles of vitrified pipe.

Of the 1,248.438 miles of sewers constructed, 482.769 miles are of brick and 765.669 miles are of vitrified pipe.

### TOTAL COST OF SEWERS.

| DIVISIONS.  | MILES.    | COST.           | AVERAGE<br>COST<br>PER MILE. |
|-------------|-----------|-----------------|------------------------------|
| West .....  | 529.822   | \$ 7,137,793 24 | \$13,472 06                  |
| South ..... | 487.280   | 6,926,666 08    | 14,214 96                    |
| North ..... | 231.336   | 2,875,225 34    | 12,428 77                    |
| Totals..... | 1,248.438 | \$16,939,684 66 | \$13,568 70                  |

During the year 1895 streets were improved as follows :

|                                 |              |
|---------------------------------|--------------|
| Paved with cedar blocks.....    | 28.62 miles. |
| Paved with macadam.....         | 9.35 miles.  |
| Paved with granite blocks ..... | 1.16 miles.  |
| Paved with Medina stone.....    | .... miles.  |
| Paved with brick .....          | 2.86 miles.  |
| Paved with asphalt .....        | 5.76 miles.  |
| Curbed and filled.....          | 6.03 miles.  |

Total number of miles improved..... 53.78 miles.

### DISTRIBUTION OF KINDS OF PAVEMENT.

The following table gives the mileage of each class of pavement in use in the three principal divisions of the City :

| DIVISION.    | Cedar<br>Block,<br>Miles. | Macadam<br>Miles. | Medina<br>Stone,<br>Miles. | Granite,<br>Miles. | Sheet<br>Asphalt,<br>Miles. | Block<br>Asphalt,<br>Miles. | Brick,<br>Miles. | Burned<br>Clay,<br>Miles. | Found'n,<br>Miles. | Total<br>Miles. |
|--------------|---------------------------|-------------------|----------------------------|--------------------|-----------------------------|-----------------------------|------------------|---------------------------|--------------------|-----------------|
| North ..     | 157.66                    | 57.89             | 0.49                       | 0.10               | 5.03                        | .....                       | 0.64             | .....                     | 1.08               | 222.89          |
| South.....   | 201.23                    | 254.08            | 1.61                       | 19.99              | 5.86                        | 3.59                        | 1.92             | .....                     | .....              | 488.28          |
| West.....    | 367.12                    | 20.17             | 0.39                       | 3.22               | 19.86                       | .....                       | 1.61             | .....                     | .....              | 412.37          |
| Totals ..... | 726.01                    | 332.14            | 2.49                       | 23.31              | 30.75                       | 3.59                        | 4.17             | .....                     | 1.08               | 1123.54         |

Repaving and repairs have been made on improved streets in each division of the City, as follows :

North Division..... 50,376 square yards.  
 South Division..... 64,273 square yards.  
 West Division..... 66,667 square yards.  
 \*Total.....181,316 square yards.

### SIDEWALKS.

Number of miles of wood, stone and concrete sidewalks built during 1895 :

| DIVISION.   | MATERIAL.    |               |                  | Total Miles. | Sidewalks Repaired, Miles. | Total Work, Miles. |
|-------------|--------------|---------------|------------------|--------------|----------------------------|--------------------|
|             | Wood, Miles. | Stone, Miles. | Concrete, Miles. |              |                            |                    |
| North.....  | 9.98         | .10           | 29.86            | 39.94        | .28                        | 40.22              |
| South.....  | 47.90        | .74           | 35.68            | 84.32        | 1.98                       | 86.30              |
| West .....  | 36.57        | .51           | 23.27            | 60.35        | 1.00                       | 61.35              |
| Totals..... | 94.45        | 1.35          | 88.81            | 184.61       | 3.26                       | 187.87             |

Total number of miles of sidewalks under the control of the City and the South, West and Lincoln Park Commissioners, at the close of the year :

| CONTROLLED BY.                  | MATERIAL. |        |           | Total Miles. |
|---------------------------------|-----------|--------|-----------|--------------|
|                                 | Wood.     | Stone. | Concrete. |              |
| City .....                      | 3,749.30  | 230.50 | 527.00    | 4,506.80     |
| South Park Commissioners.....   |           | 20.00  | 30.00     | 50.00        |
| West Park Commissioners.....    |           | 11.05  | 50.70     | 61.75        |
| Lincoln Park Commissioners..... |           | 2.17   | 4.13      | 6.30         |
| Total Miles.....                | 3,749.30  | 263.72 | 611.83    | 4,624.85     |

\*This does not include the repaving done by private corporations.

PARKS.

The cost of maintaining the various parks under the control of this Department during the past year was as follows :

|                              |            |
|------------------------------|------------|
| Jefferson Park.....          | \$ 168 70  |
| Congress Park.....           | 550 50     |
| Oak Park.....                | 486 50     |
| Lakewood Park.....           | 156 25     |
| Green Bay Park.....          | 422 80     |
| Washington Park.....         | 3,212 12   |
| Shedd's Park.....            | 146 07     |
| Douglas Monument Square..... | 998 50     |
| Aldine Square.....           | 946 13     |
| Bickerdike Square.....       | 810 65     |
| Gross Park.....              | 436 25     |
| Ellis Park.....              | 920 75     |
| Total.....                   | \$9,255 22 |

The report of the Commissioner of Buildings shows that during the year 8,633 buildings were erected, extending over an aggregate frontage of 218,360 feet, at a cost of \$35,000,000.00, the same being distributed in the divisions of the City as follows :

| DIVISION.       | NUMBER<br>BUILDINGS<br>ERECTED. | AGGREGATE<br>FRONTAGE<br>IN FEET. | FRONTAGE<br>IN MILES. | ESTIMATED<br>VALUE. |
|-----------------|---------------------------------|-----------------------------------|-----------------------|---------------------|
| North Side..... | 1,863                           | 46,149                            | 8.74                  | \$ 6,674,165 00     |
| South Side..... | 3,551                           | 91,085                            | 17.25                 | 16,652,265 00       |
| West Side.....  | 3,219                           | 81,126                            | 15.37                 | 11,683,613 00       |
| Totals.....     | 8,633                           | 218,360                           | 41.36                 | \$35,010,043 00     |

## COMPARISON WITH TEN PREVIOUS YEARS.

| YEAR.       | NUMBER<br>BUILDINGS<br>ERECTED. | AGGREGATE<br>FRONTAGE IN<br>FEET. | FRONT-<br>AGE IN<br>MILES. | ESTIMATED<br>VALUE. |
|-------------|---------------------------------|-----------------------------------|----------------------------|---------------------|
| 1885.....   | 4,638                           | 108,850                           | 20.62                      | \$19,624,100 00     |
| 1886.....   | 4,664                           | 112,302                           | 21.27                      | 21,324,400 00       |
| 1887.....   | 4,833                           | 115,506                           | 21.88                      | 19,778,100 00       |
| 1888.....   | 4,958                           | 116,419                           | 22.05                      | 20,360,800 00       |
| 1889.....   | 4,931                           | 119,573                           | 22.65                      | 25,065,500 00       |
| 1890.....   | 11,608                          | 266,284                           | 50.43                      | 47,322,100 00       |
| 1891.....   | 11,805                          | 282,672                           | 53.54                      | 54,201,800 00       |
| 1892.....   | 13,194                          | 327,573                           | 62.04                      | 64,740,800 00       |
| 1893.....   | 8,359                           | 216,893                           | 41.07                      | 28,708,750 00       |
| 1894.....   | 9,855                           | 232,487                           | 44.03                      | 33,863,570 00       |
| 1895.....   | 8,633                           | 218,360                           | 41.36                      | 35,010,043 00       |
| Totals..... | 87,478                          | 2,116,919                         | 400.94                     | \$369,999,963 00    |

## HOUSE MOVING.

Under the supervision of this Department, 1,150 buildings were moved, 931 being frame, 202 brick, and 17 iron.

The following table gives the number moved in the different sections of the City, the height, and the total frontage :

| NORTH SIDE. | SOUTH SIDE.  | WEST SIDE.     | TOTAL.        |
|-------------|--------------|----------------|---------------|
| 350         | 327          | 473            | 1,150         |
| ONE STORY.  | TWO STORIES. | THREE STORIES. | FOUR STORIES. |
| 508         | 579          | 57             | 6             |

The total frontage was 24,231 feet, or more than five miles.

## ASSESSMENTS PREPARED.

|                                                  |             |
|--------------------------------------------------|-------------|
| Cedar block pavement .....                       | 101         |
| Asphalt pavement .....                           | 19          |
| Macadam pavement .....                           | 25          |
| Vitrified brick pavement .....                   | 7           |
| Granite pavement.....                            | 5           |
| Miscellaneous street and alley improvements..... | 57          |
| Openings and widenings .....                     | 9           |
| Water supply pipes .....                         | 277         |
| Water service pipes .....                        | 99          |
| Sewers .....                                     | 114         |
| Private drains .....                             | 92          |
| Plank sidewalks .....                            | 244         |
| Cement sidewalks .....                           | 104         |
| Stone sidewalks.....                             | 7           |
| Gas lamp posts .....                             | 171         |
| Boulevard lamp posts .....                       | 59          |
| Gasoline lamp posts.....                         | 2           |
| Total .....                                      | <hr/> 1,392 |

## STREET LAMPS.

The following table shows the number of street lamps of each kind in use, and the number erected during the year:

| DIVISION.    | GAS LAMPS.                      |                            |                               |                                  | ELECTRIC LAMPS.                 |                            |                               |                                  |
|--------------|---------------------------------|----------------------------|-------------------------------|----------------------------------|---------------------------------|----------------------------|-------------------------------|----------------------------------|
|              | No. in City<br>Jan. 1,<br>1896. | Erected<br>during<br>1896. | Discontin-<br>ued in<br>1896. | No. in City<br>Dec. 31,<br>1896. | No. in City<br>Jan. 1,<br>1896. | Erected<br>during<br>1896. | Discontin-<br>ued in<br>1896. | No. in City<br>Dec. 31,<br>1896. |
| North .....  | 6,693                           | 586                        | 153                           | 7,126                            | 237                             | .....                      | .....                         | 237                              |
| South .....  | 11,943                          | 1,136                      | 612                           | 12,466                           | 726                             | 120                        | .....                         | 846                              |
| West .....   | 17,578                          | 975                        | 294                           | 18,254                           | 521                             | 13                         | 6                             | 528                              |
| Totals ..... | 36,208                          | 2,697                      | 1,059                         | 37,846                           | 1,484                           | 133                        | 6                             | 1,611                            |
| DIVISION.    | GASOLINE LAMPS.                 |                            |                               |                                  | OIL LAMPS.                      |                            |                               |                                  |
|              | No. in City<br>Jan. 1,<br>1896. | Erected<br>during<br>1896. | Discontin-<br>ued in<br>1896. | No. in City<br>Dec. 31,<br>1896. | No. in City<br>Jan. 1,<br>1896. | Erected<br>during<br>1896. | Discontin-<br>ued in<br>1896. | No. in City<br>Dec. 31,<br>1896. |
| North .....  | 1,333                           | 46                         | 148                           | 1,233                            | .....                           | .....                      | .....                         | .....                            |
| South .....  | 5,218                           | 741                        | 768                           | 5,191                            | 191                             | 3                          | .....                         | 194                              |
| West .....   | 5,310                           | 319                        | 744                           | 4,885                            | .....                           | .....                      | .....                         | .....                            |
| Totals ..... | 11,861                          | 1,108                      | 1,660                         | 11,309                           | 191                             | 3                          | .....                         | 194                              |

SCHEDULE I.

GAS BOULEVARD LAMPS.

|                      |                                      |
|----------------------|--------------------------------------|
| North Division ..... | 7,126                                |
| South Division.....  | 12,466                               |
| West Division .....  | 18,254                               |
|                      | <hr/>                                |
|                      | 37,846 @ \$25 00 each, \$ 946,150 00 |

GASOLINE OIL LAMPS.

|                      |                                 |
|----------------------|---------------------------------|
| North Division ..... | 1,233                           |
| South Division.....  | 5,385                           |
| West Division .....  | 4,885                           |
|                      | <hr/>                           |
|                      | 11,503 @ \$7 00 each, 80,521 00 |
|                      | <hr/>                           |
|                      | \$1,026,671 00                  |
|                      | <hr/> <hr/>                     |

EXPENSE OF LIGHTING.

The following table shows the cost of lighting the City and maintaining lamps, during the year ending December 31, 1895, including the cost of extinguishing, under schedule adopted by the Council :

|                                                        |                |
|--------------------------------------------------------|----------------|
| Total cost of lighting and maintaining gas lamps ..... | \$ 707,034 33  |
| For material for and lighting of oil lamps and .....   | } 152,184 46   |
| For gasoline used by the City for maintaining lamps .. |                |
| For maintaining electric lamps—City plants .....       | 107,565 91     |
| For lighting electric lamps by contract .....          | 53,260 99      |
| For rental of real estate—Morrison tract .....         | 2,500 00       |
|                                                        | <hr/>          |
| Total cost of lighting the City .....                  | \$1,022,545 69 |



## ELECTRIC LIGHTING.

The following table gives the annual extension of the system from 1887 to December 31, 1895, including the total cost of the same :

| YEAR.     | Number of Power Houses Erected. | Estimated Capacity of Power Houses in 2,000 Candle Power Lights. | Horse Power of Engines installed. | Number of Arc Lights Placed in Operation as a result of Appropriation each Year. | Number of Arc Lights Displacing Gas Lights. | Number of Gas Lights Displaced. | Average Number of Gas Lights Displaced by each Electric Light. | Expended for Electric Light Construction and Maintenance. |
|-----------|---------------------------------|------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------|---------------------------------------------|---------------------------------|----------------------------------------------------------------|-----------------------------------------------------------|
| 1887..... | * 1                             | † 125                                                            | 125                               | 105                                                                              | 76                                          | .....                           | .....                                                          | \$ 89,976 25                                              |
| 1888..... | * 1                             | † 300                                                            | 300                               | 192                                                                              | 192                                         | 826                             | 4 <sub>10</sub>                                                | 69,414 25                                                 |
| 1889..... | † 3                             | 3,000                                                            | 1,500                             | 372                                                                              | 372                                         | 1,452                           | 3 <sub>10</sub>                                                | 307,856 62                                                |
| 1890..... | 1                               | 850                                                              | 425                               | 260                                                                              | 260                                         | 1,343                           | 5 <sub>10</sub>                                                | 189,630 60                                                |
| 1891..... | .....                           | .....                                                            | .....                             | 64                                                                               | 58                                          | 273                             | 4 <sub>70</sub>                                                | 243,141 05                                                |
| 1892..... | .....                           | .....                                                            | .....                             | 109                                                                              | 88                                          | 341                             | 3 <sub>10</sub>                                                | 189,898 16                                                |
| 1893..... | .....                           | .....                                                            | .....                             | 10                                                                               | 10                                          | 40                              | 4                                                              | 133,168 21                                                |
| 1894..... | 1                               | 1,000                                                            | 1,000                             | § 4                                                                              | .....                                       | .....                           | .....                                                          | 186,551 32                                                |
| 1895..... | .....                           | .....                                                            | .....                             | 8                                                                                | 1                                           | 1                               | .....                                                          | 177,411 33                                                |
| Total.... | 4                               | 3,850                                                            | 2,300                             | 1,116                                                                            | 1,057                                       | 4,276                           | .....                                                          | \$ 1,437,042 79                                           |

\* Abandoned. † Moved to Plant No. 1. § Decrease.

The Throop street plant, with capacity for 1,000 2,000-candle power arc lights and 625-horse power, with the real estate, was sold to the Metropolitan Elevated Railroad Company in 1893 for \$95,000.00 and real estate upon which to erect a new plant.

The latter was erected at 299 to 301 South Halsted street, in 1894 and 1895, \$1,342,042.79 being the net amount expended altogether for electric light construction and maintenance. The City at present operates 1,116 2,000-candle power arc lamps from its power stations and rents 495 2,000-candle power arc lamps from private companies. All electric lights, whether operated from City power stations or from private plants, burn all night, from dusk to daylight, every night in the year.

THE CITY ELECTRIC LIGHT SYSTEM COMPRISES—

|                                                              |         |
|--------------------------------------------------------------|---------|
| Power stations .....                                         | 4       |
| 125-horse power high speed engines .....                     | 9       |
| 300-horse power Corliss engines .....                        | 1       |
| 500-horse power vertical compound condensing engines .....   | 2       |
| 100-horse power tubular boilers, heaters, pumps, etc .....   | 6       |
| 125-horse power tubular boilers, heaters, pumps, etc .....   | 8       |
| 500-horse power tubular boilers, heaters, pumps, etc .....   | 3       |
| 2,000-candle power double carbon and single carbon arc lamps | 1,233   |
| Incandescent arc lamps .....                                 | 6       |
| Lamp posts .....                                             | 1,043   |
| Lamp hoods .....                                             | 1,076   |
| 100-light high tension dynamos .....                         | 8       |
| 60-light high tension dynamos .....                          | 8       |
| 50-light high tension dynamos .....                          | 8       |
| 35-light high tension dynamos .....                          | 8       |
| Miles of electric light cable .....                          | 188     |
| Number of feet underground conduit .....                     | 12,580  |
| Number of feet iron pipe laid underground .....              | 591,184 |
| Number of manholes .....                                     | 363     |
| Number of handholes .....                                    | 109     |

SUMMARY OF ELECTRICAL INSPECTION.

MOTORS INSPECTED.

| YEAR.                  | NUMBER. | CAPACITY AND HORSE-POWER. |
|------------------------|---------|---------------------------|
| Previous to 1892 ..... | 668     | 2,004                     |
| 1892 .....             | 504     | 1,492                     |
| 1893 .....             | 601     | 1,881                     |
| 1894 .....             | 568     | 1,128                     |
| 1895 .....             | 558     | 1,319                     |
| Totals .....           | 2,899   | 7,824                     |

|                                                        |     |
|--------------------------------------------------------|-----|
| Completed inspections of wiring only during 1895 ..... | 910 |
| Certificates issued for wiring only during 1895 .....  | 284 |

Isolated plants reinspected during 1895, as follows :

| ARC<br>LAMPS. | INCANDESCENT. | MOTORS. |              | GENERATORS. |              |
|---------------|---------------|---------|--------------|-------------|--------------|
|               |               | Number. | Horse Power. | Number.     | Horse Power. |
| 351           | 7,739         | 6       | 7½           | 45          | 1,309        |

Isolated plants in progress of reinspection :

|                                       |     |
|---------------------------------------|-----|
| Isolated plants previous to 1895..... | 556 |
| New installation, 1895 .....          | 55  |
| Total .....                           | 611 |

STATEMENT OF YEARLY INSPECTION OF ELECTRIC LIGHT LAMPS, FROM  
FEBRUARY 14, 1894, TO JANUARY 1, 1896.

| YEAR.       | NUMBER OF<br>ARC LAMPS. | NUMBER OF<br>INCANDESCENTS. |
|-------------|-------------------------|-----------------------------|
| 1884 .....  | 1,148                   | 1,885                       |
| 1885 .....  | 392                     | 7,609                       |
| 1886 .....  | 479                     | 5,225                       |
| 1887 .....  | 837                     | 5,424                       |
| 1888 .....  | 2,369                   | 17,717                      |
| 1889 .....  | 2,623                   | 24,906                      |
| 1890 .....  | 2,682                   | 39,543                      |
| 1891 .....  | 3,974                   | 87,913                      |
| 1892 .....  | 5,046                   | 101,668                     |
| 1893 .....  | 6,279                   | 150,545                     |
| 1894 .....  | 3,604                   | 67,593                      |
| 1895 .....  | 3,228                   | 53,090                      |
| Totals..... | 32,661                  | 563,178                     |

FINANCIAL.

Statement of the sum appropriated by the Common Council, together with various amounts from other sources, to be expended in public improvements under the supervision of the Department of Public Works during the year 1895 :

Balance January 1, 1895, to the credit of Water Fund, \$ 203,155 95

## RECEIPTS.

|                                                                                       |                        |
|---------------------------------------------------------------------------------------|------------------------|
| From appropriation for 1895.....                                                      | \$ 2,026,568 53        |
| From rent of Rookery lot .....                                                        | 35,000 04              |
| From water revenue, including meter and private work<br>and tapping permits .....     | 3,288,378 95           |
| From advances to lay water mains.....                                                 | 71,208 18              |
| From hydrant wrenches.....                                                            | 642 00                 |
| From sale of water certificates.....                                                  | 699,185 00             |
| From drain permits and drain licenses .....                                           | 36,923 75              |
| From house-moving permits.....                                                        | 2,636 00               |
| From deposits for street permits (work done).....                                     | 72,997 70              |
| From special assessment sewer inspection and work..                                   | 130,796 38             |
| From deposits for sundry improvements, special assess-<br>ments and other funds ..... | 407,506 49             |
| From special assessment collections.....                                              | 3,044,871 29           |
| Total.....                                                                            | <u>\$10,019,870 26</u> |

## EXPENDITURES.

|                                                                                                                                                                                                                                                                                               |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| For bridges and viaducts, street cleaning and removal<br>of garbage, repairing improved and unimproved<br>streets, public buildings and parks, Fullerton ave-<br>nue and Canal pumping stations, improved street<br>intersections, sewers, catch-basins, labor material<br>and salaries ..... | \$ 2,642,097 45 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|

## CONSTRUCTION.

|                                                      |                     |
|------------------------------------------------------|---------------------|
| For extension water pipe system.....                 | \$464,550 60        |
| For water pipe and special castings.....             | 155,376 55          |
| For Four-mile tunnel, Onderdonk judg-<br>ments ..... | 111,617 83          |
| For Lake View water tunnel.....                      | 103,066 13          |
| For Sixty-eighth street tunnel and crib..            | 84,223 74           |
| For Northwest land tunnel.....                       | 60,555 25           |
| For Western avenue tunnel.....                       | 27,379 23           |
| For West pumping station .....                       | 4,351 26            |
| For Four-mile crib.....                              | 4,264 54            |
| For North Shore inlet extension.....                 | 21,093 09           |
| For Water Works shop.....                            | 1,688 85            |
| For Lake View pumping station.....                   | 850 45              |
| For Sixty-eighth street pumping station.             | 527 69              |
| For Lake View crib.....                              | 100 00              |
| Total Construction.....                              | <u>1,039,645 21</u> |

|                                                                                                                                     |                         |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| For maintenance of water system, operating pumping stations, cost of assessing and collecting water taxes, stock on hand, etc. .... | \$ 1,435,515 98         |
| For water certificates .....                                                                                                        | 1,168,185 00            |
| For Hyde Park bonds .....                                                                                                           | 310,000 00              |
| For Lake View bonds .....                                                                                                           | 69,000 00               |
| For interest on bonds and certificates .....                                                                                        | 74,256 93               |
| For 7% water bonds .....                                                                                                            | 10,000 00               |
| For advances for laying water pipe refunded .....                                                                                   | 60,560 40               |
| For street improvements, street openings, sidewalks, sewers, private drains, water service pipes and lamp posts .....               | 3,044,871 29            |
| Total .....                                                                                                                         | \$ 9,854,132 26         |
| Balance to credit Water Fund, January 1, 1896. ....                                                                                 | 133,299 83              |
| Balance to credit Appropriation Fund, January 1, 1896. ....                                                                         | 32,438 17               |
| Total .....                                                                                                                         | <u>\$ 10,019,870 26</u> |

### WATER WORKS RECEIPTS AND EXPENDITURES, 1895.

Credit balance January 1, 1895..... \$ 203,155 95

#### RECEIPTS.

|                                                                        |                        |
|------------------------------------------------------------------------|------------------------|
| Water rate collections (including delinquents) .....                   | 3,076,077 57           |
| Water service cocks (permits and plumbers' licenses, etc.) .....       | 76,679 15              |
| Water meter labor, etc., for private parties .....                     | 128,087 34             |
| Rent for Rookery lot .....                                             | 35,000 04              |
| Advance to lay water pipes .....                                       | 71,208 18              |
| From sale of water certificates .....                                  | 699,185 00             |
| Hydrant wrenches .....                                                 | 642 00                 |
| Old material sold .....                                                | 1,997 75               |
| W. A. Prendergast—his change account collection agency abandoned ..... | 100 00                 |
| King & Andrews, account forfeiture of contract .....                   | 500 00                 |
| Interest on certificates sold .....                                    | 4,937 14               |
| Total .....                                                            | <u>\$ 4,297,570 12</u> |

## EXPENDITURES.

|                                                       |                        |
|-------------------------------------------------------|------------------------|
| For water pipe extension .....                        | \$ 464,550 60          |
| For water pipe and special castings .....             | 155,376 55             |
| For Water Works repairs .....                         | 396,379 63             |
| For Four-mile tunnel—Onderdonk judgments .....        | 111,617 83             |
| For Northwest land tunnel .....                       | 60,555 25              |
| For North shore inlet extension .....                 | 21,093 09              |
| For Western avenue tunnel .....                       | 27,379 23              |
| For Sixty-eighth street tunnel extension .....        | 84,223 74              |
| For meter and private works .....                     | 99,917 81              |
| For water service cocks .....                         | 54,366 93              |
| For North pumping station .....                       | 160,150 05             |
| For West pumping station .....                        | 113,946 53             |
| For South pumping station .....                       | 82,116 75              |
| For Central pumping station .....                     | 57,769 33              |
| For Sixty-eighth street pumping station .....         | 87,900 23              |
| For Lake View pumping station .....                   | 63,856 25              |
| For Washington Heights pumping station .....          | 5,393 08               |
| For Norwood Park pumping station .....                | 2,261 66               |
| For Two-mile crib .....                               | 14,024 24              |
| For Four-mile crib .....                              | 13,434 77              |
| For Lake View crib .....                              | 3,907 15               |
| For Lake View tunnel .....                            | 103,066 13             |
| For Water Office salary .....                         | 221,351 38             |
| For Water Office expense .....                        | 14,954 33              |
| For water proportional, office salary .....           | 32,810 02              |
| For water proportional, office expense .....          | 13,716 16              |
| For advance for laying water mains, refunded .....    | 60,560 40              |
| For hydrant wrench deposits, refunded .....           | 442 00                 |
| For Water Works shops .....                           | 1,688 85               |
| For refund vouchers .....                             | 4,018 39               |
| For water certificates .....                          | 1,168,185 00           |
| For Hyde Park water loan bonds .....                  | 320,000 00             |
| For Lake View water loan bonds .....                  | 69,000 00              |
| For water loan interest .....                         | 74,256 93              |
| <b>Total .....</b>                                    | <b>\$ 3,164,270 29</b> |
| Balance to credit of the Water Fund January 1, 1896.. | 133,299 83             |
| <b>Total .....</b>                                    | <b>\$ 4,297,570 12</b> |

Total cost of Water Works of the City to December 31, 1895, is as follows :

Cost, up to May 1, 1861, when the works were transferred from the Board of Commissioners to Board of Public Works . . . . . \$ 1,020,160 21

## EXPENDITURES SINCE 1861.

|                                                        |                 |
|--------------------------------------------------------|-----------------|
| Cost of water pipe, including labor.....               | \$12,976,559 57 |
| Cost of North pumping works.....                       | 929,532 44      |
| Cost of West pumping works.....                        | 944,217 77      |
| Cost of Sixty-eighth street pumping works.....         | 284,366 60      |
| Cost of Central pumping works.....                     | 372,227 77      |
| Cost of Washington Heights pumping works.....          | 10,246 96       |
| Cost of Lake View pumping works.....                   | 145,243 82      |
| Cost of South pumping works.....                       | 569,272 84      |
| Cost of new lake tunnel.....                           | 1,104,744 12    |
| Cost of Lake View tunnel.....                          | 615,575 50      |
| Cost of new lake shore inlet.....                      | 132,345 34      |
| Cost of new lake shore inlet extension.....            | 146,459 04      |
| Cost of new lake shore inlet extension.....            | 21,093 09       |
| Cost of North breakwater crib.....                     | 41,780 11       |
| Cost of Two-mile crib.....                             | 102,744 41      |
| Cost of Four-mile crib.....                            | 467,927 83      |
| Cost of Lake View crib.....                            | 88,051 62       |
| Cost of Sixty-eighth street tunnel extension.....      | 555,217 80      |
| Cost of Ashland avenue tunnel.....                     | 17,453 36       |
| Cost of first lake tunnel.....                         | 464,866 05      |
| Cost of second lake tunnel.....                        | 415,709 36      |
| Cost of lake crib protection.....                      | 149,431 63      |
| Cost of land tunnel to West pumping works.....         | 542,912 63      |
| Cost of new land tunnel.....                           | 284,380 04      |
| Cost of Water Works shops.....                         | 27,240 58       |
| Cost of Water Works stock.....                         | 29,318 00       |
| Cost of water reservoir fence.....                     | 1,702 87        |
| Cost of addition to stables.....                       | 1,019 48        |
| Cost of real estate for sites of pumping stations..... | 206,972 35      |
| Cost of works, annexed territory.....                  | 1,160,164 24    |
| Cost of Jefferson street tunnel.....                   | 15,968 17       |
| Cost of Northwest tunnel.....                          | 61,575 25       |
| Cost of Western avenue tunnel.....                     | 27,379 23       |

Total cost of entire Works to December 31, 1895.. \$23,933 860 08

## Paid for as follows :

|                                                                    |                        |
|--------------------------------------------------------------------|------------------------|
| From general taxes .....                                           | \$ 2,713,878 53        |
| From City of Chicago Water Loan bonds, 6 per cent..                | 132,000 00             |
| From City of Chicago Water Loan bonds, 4 per cent..                | 1,485,000 00           |
| From City of Chicago Water Loan bonds, 4 per cent..                | 1,706,500 00           |
| From City of Chicago Water Loan bonds, 3 $\frac{1}{8}$ % per cent. | 332,000 00             |
| From City of Chicago Water Loan bonds, 3 $\frac{1}{2}$ per cent.   | 333,500 00             |
| From bonds canceled .....                                          | 1,905,500 00           |
| From Hyde Park Water Loan bonds, 5 per cent.....                   | 50,000 00              |
| From Hyde Park Water Loan bonds, 7 per cent.....                   | 11,000 00              |
| From Town of Lake Water Loan bonds, 5 per cent...                  | 120,000 00             |
| From Lake View Water Loan bonds, 4 per cent .....                  | 50,000 00              |
| From Lake View Water Loan bonds, 5 per cent .....                  | 23,000 00              |
| From Lake View Water Loan bonds, 7 per cent .....                  | 6,000 00               |
| From water certificates.....                                       | 198,000 00             |
| From water earnings.....                                           | 14,867,481 55          |
| Total.....                                                         | <u>\$23,933,860 08</u> |

Total Water Works income to December 31, 1895..... \$38,956,673 80

Total operating expenses and maintenance to December 31, 1895 (including \$8,058,642.64 interest on bonded debt and bonds and certificates canceled).. 24,223,369 90

Difference between income and expenses ..... \$14,733,311 90

## Accounted for as follows :

|                                                                                         |                        |
|-----------------------------------------------------------------------------------------|------------------------|
| Paid toward Water Works construction.                                                   | \$14,867,481 55        |
| J. W. Lyons, cashier water office.....                                                  | 2,000 00               |
| Meter Department, stock on hand .....                                                   | 8,113 50               |
| Water Works shop, stock on hand .....                                                   | 16,699 50              |
| Tapping Department, stock on hand...                                                    | 4,079 03               |
| Water pipe, etc., stock on hand .....                                                   | 136,538 00             |
| Balance to credit of Water Fund, Jan. 1, 1896 .....                                     | 133,299 83             |
|                                                                                         | <u>\$15,168,211 41</u> |
| Less amount due depositors for hydrant wrenches .....                                   | \$ 2,171 82            |
| Less amount advanced by private parties to lay water-pipe in non-paying districts ..... | 432,727 69             |
|                                                                                         | <u>434,899 51</u>      |
|                                                                                         | <u>\$14,733,311 90</u> |



## BONDED DEBT OF WATER WORKS.

City of Chicago Water Loan bonds outstanding December 31, 1895, bearing 4 per cent. interest and maturing as follows :

|                    |               |                 |
|--------------------|---------------|-----------------|
| July 1, 1908 ..... | \$ 150,000 00 |                 |
| July 1, 1910 ..... | 159,500 00    |                 |
| July 1, 1912 ..... | 821,000 00    |                 |
| July 1, 1914 ..... | 576,000 00    |                 |
| July 1, 1915 ..... | 1,485,000 00  |                 |
|                    |               | \$ 3,191,500 00 |

Bearing 3½ per cent. interest, maturing—

|                    |               |            |
|--------------------|---------------|------------|
| July 1, 1909 ..... | \$ 225,000 00 |            |
| July 1, 1910 ..... | 108,500 00    |            |
|                    |               | 333,500 00 |

Bearing 3<sup>5</sup>/<sub>10</sub> per cent. interest, maturing—

|                    |               |            |
|--------------------|---------------|------------|
| July 1, 1902 ..... | \$ 332,000 00 |            |
|                    |               | 332,000 00 |

Bearing 6 per cent. interest, maturing—

|                    |              |            |
|--------------------|--------------|------------|
| July 1, 1897 ..... | \$ 50,000 00 |            |
| July 2, 1898 ..... | 82,000 00    |            |
|                    |              | 132,000 00 |

## ANNEXED DISTRICTS.

Town of Lake bonds :

|                                          |              |            |
|------------------------------------------|--------------|------------|
| 5 per cent. bonds, due April 1, 1896.... | \$ 15,000 00 |            |
| 5 per cent. bonds, due April 1, 1897.... | 15,000 00    |            |
| 5 per cent. bonds, due April 1, 1898.... | 15,000 00    |            |
| 5 per cent. bonds, due April 1, 1899.... | 15,000 00    |            |
| 5 per cent. bonds, due April 1, 1900.... | 15,000 00    |            |
| 5 per cent. bonds, due April 1, 1901.... | 15,000 00    |            |
| 5 per cent. bonds, due April 1, 1902.... | 15,000 00    |            |
|                                          |              | 105,000 00 |

Hyde Park bonds :

|                                          |             |           |
|------------------------------------------|-------------|-----------|
| 7 per cent. bonds, due January 1, 1896.. | \$ 9,000 00 |           |
| 5 per cent. bonds, due January 1, 1904.. | 50,000 00   |           |
|                                          |             | 59,000 00 |

Lake View Water bonds :

|                                          |              |           |
|------------------------------------------|--------------|-----------|
| 5 per cent. bonds, due July 1, 1904..... | \$ 23,000 00 |           |
| 4 per cent. bonds, due July 1, 1907..... | 50,000 00    |           |
|                                          |              | 73,000 00 |

Total bonded debt of Water Works..... \$ 4,226,000 00

Total interest paid on Water Loan to Jan. 1, 1896.... \$ 7,886,598 61

Floating indebtedness Water Loan certificates outstanding ..... \$ 200,500 00

In conclusion I wish to express my hearty appreciation of the courtesy which has characterized the intercourse between this Department and the City Council. .

Respectfully,

W. D. KENT,

*Commissioner of Public Works.*



REPORT OF THE  
**Bureau of Engineering**  
CITY OF CHICAGO.



# CITY ENGINEER'S REPORT.

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HON. W. D. KENT,

*Commissioner of Public Works.*

DEAR SIR—I have the honor to submit herewith the annual report of the Bureau of Engineering for the year ending December 31, 1895.

The subject matter is treated under the following headings, viz:

1. Water Supply System and Auxiliary Stations.
2. Tunnel and Crib Construction.
3. Water Pipe Extension.
4. Bridge and Viaduct Construction.
5. Bridge and Viaduct Maintenance.
6. Harbor.
7. Architecture.

During the year, 91,921,532,749 gallons of potable water have been pumped into the City mains by all the pumping stations combined, or an average of 251,839,816 gallons per twenty-four hours.

Assuming the population to have increased 10 per cent since the last school census, making the population of the City 1,725,000, this consumption is at the rate of 146 gallons per capita per day.

The total pumpage for 1895 was 4,847,589,400 gallons in excess of 1894, and the expense of all the stations for the last year was \$30,130.22 less than the preceding year.

The pumping stations are in good repair, and with the exception of the Chicago avenue station and Lake View, where new engines are needed, the stations are fully equipped.

The City is drawing all its water from Lake Michigan through tunnels—the first one of which was commenced in 1864. The length of tunnels in use at the present date is :

|                      |              |
|----------------------|--------------|
| 8 feet diameter..... | 9,715 feet.  |
| 7 feet diameter..... | 38,469 feet. |
| 6 feet diameter..... | 39,026 feet. |
| 5 feet diameter..... | 18,590 feet. |

---

Total.....105,800 lineal feet,

or a little over twenty miles, and yet with this great system, the demand for additional supply, owing to the rapid growth of the City, is steadily increasing, especially in the extreme west and northwest

sections of the City and districts that have been made part of the City by annexation. Steps have been taken to relieve these sections by the building of some eight miles of land tunnel, which is noted in detail under the head of Tunnel Construction.

I would respectfully recommend that during the coming year the 7-foot tunnel between the Sixty-eighth street Two-mile crib and the submerged intake be extended westward to the Yates avenue shaft, at the Sixty-eighth street Pumping Station, a distance of about 6,000 feet, the extension to be seven feet internal diameter. I consider this necessary to supply the southern and southeastern portions of the City.

We have laid during the year 350,405 lineal feet of water mains, which is 29,567 feet less than was laid in 1894. In this connection, it may be stated that during 1895 we laid 2,687 feet of 36-inch pipe, while in 1894 there was no pipe of that size laid; also in 1895, there were 24,174 feet more 24-inch pipe laid than during the preceding year. The City employes lay all mains above twelve inches in size, so that in reality there was more work done in 1895 than in 1894.

I beg to call your attention to the particular necessity of placing additional valves in the district bounded on the north and west by the Chicago river, on the east by Michigan avenue and on the south by Harrison street.

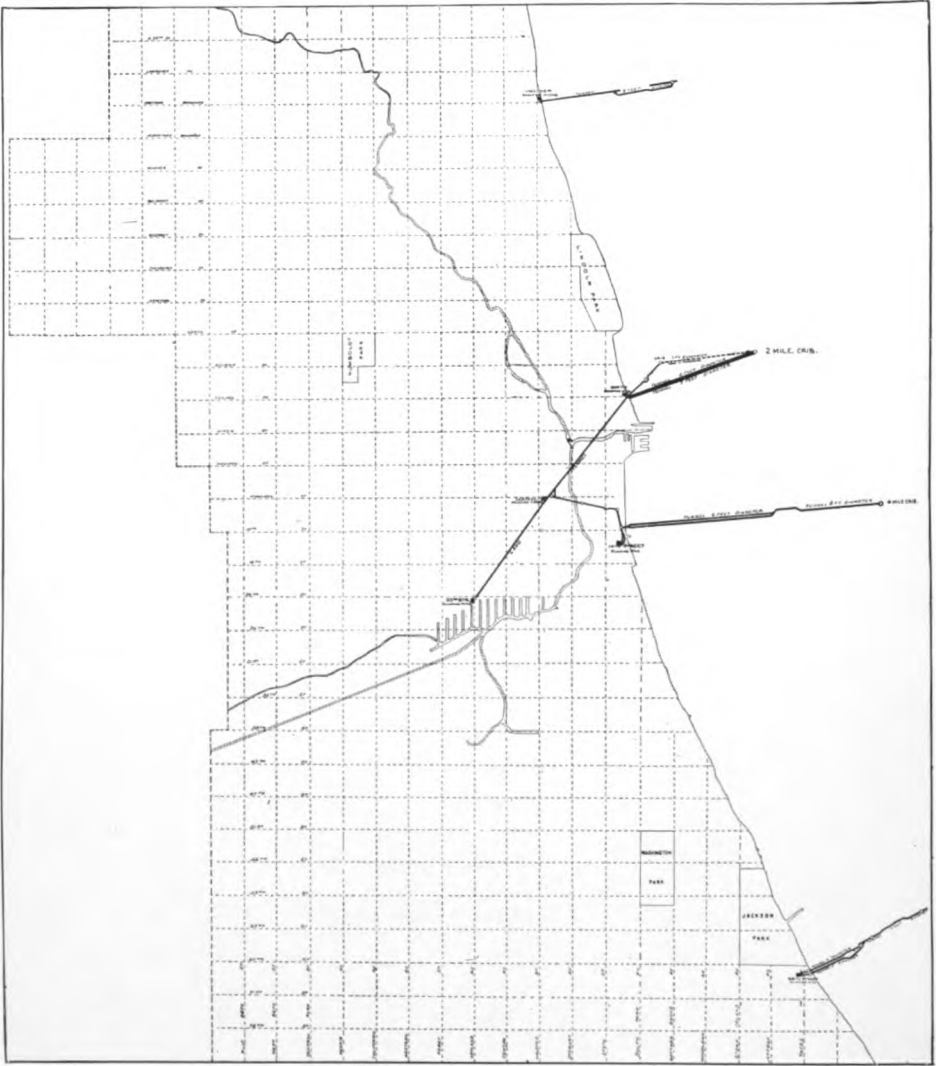
I respectfully recommend that a sufficient number of valves be placed in this district so that when it is necessary to shut off a main only one side of a block need be affected. With the present limited number of valves there are a great many points that, when it is necessary to shut off a main, from one to four blocks are affected. I also recommend that all small mains that are inadequate to supply the district in which they are laid be taken up and replaced with larger ones as speedily as possible.

I desire, also, to call your attention to the necessity of renewing a number of bridges which are noted under the head of Bridge and Viaduct Construction. These bridges were built from eighteen to twenty-seven years ago, and for light traffic. They are to-day inadequate and really dangerous, and are called upon to sustain a much heavier load, owing to the increase in traffic, than they were originally designed for.

I respectfully recommend that these bridges be renewed during the ensuing year.







MAP OF TUNNELS AND PUMPING STATIONS.

## WATER SUPPLY SYSTEM.

## OPERATION.

## TUNNELS, CRIBS AND INTAKES.

The water tunnels supplying the various pumping stations are in good condition.

The length and internal diameters of the tunnels in use during the year are as follows :

## LAKE VIEW TUNNEL.

6 ft. diameter, length 6,000 feet, supplying Lake View Pumping Station.

## CHICAGO AVENUE LAKE TUNNELS.

5 ft. diameter, length 10,560 feet. }  
7 ft. diameter, length 10,560 feet. } Supplying North Pumping Station.

## CHICAGO AVENUE LAND TUNNEL.

7 ft. diameter, length 20,856 feet, being an extension of 7-ft. lake tunnel from Chicago avenue Pumping Station to West Pumping Station.

## FOUR-MILE LAKE TUNNEL.

8 ft. diameter, length 9,139 feet. }  
6 ft. diameter, length 25,200 feet. } From Four-mile crib to Park Row shaft.

## FOUR-MILE LAND TUNNEL.

8 ft. diameter, length 516 feet. }  
6 ft. diameter, length 2,320 feet. } From Park Row shaft, supplying Fourteenth street Pumping Station.

The specifications provided for an 8-foot tunnel from the Four-mile crib to Park Row shaft and thence to the Fourteenth street Pumping Station, but owing to the character of the soil it was found necessary to split the 8-foot tunnel into two 6-foot tunnels, as shown on the diagram.

7 ft. diameter, length 7,053 feet. }  
6 ft. diameter, length 480 feet. } From Park Row shaft, supplying Central Pumping Station.

## JEFFERSON STREET CONNECTION.

6 ft. diameter, length 625 feet, between Chicago avenue land tunnel and Four-mile land tunnel.

## SIXTY-EIGHTH STREET TUNNELS.

7 ft. diameter, length 5,037 feet. }  
5 ft. diameter, length 8,030 feet. } From Two-mile crib, supplying Sixty-eighth street Pumping Station.

6 ft. diameter, length 5,026 feet, from submerged crib, supplying Sixty-eighth street Pumping Station.

(See diagram attached.)

## LAKE VIEW CRIB.

The Lake View tunnel being nearly finished, it will be necessary to construct the superstructure on the outer crib during the coming summer. The temporary intake at the inner crib has been in good condition during the year.

Mr. Edward Slattery looks after the intake.

## TWO-MILE CRIB.

The usual repairs and cleaning have been done at this crib during the summer. There has been no interruption to the flow of water at the intake during the year.

Captain William Dall is crib-keeper.

## FOUR-MILE CRIB.

This structure is in good condition, with the exception of the interior of the dwelling, which needs painting. The rip-rap in the landing fell out between the piles on the east side during the year. This work has been repaired by placing large stones nearest the piles and then by filling with rip-rap. The ice has in no way interfered with ports or intakes of this crib.

Captain C. N. Frennesen is in charge of the crib.

## SIXTY-EIGHTH STREET CRIB.

This crib has been protected by the construction of a breakwater of which mention is made under new construction. Plans have been drawn for a new permanent superstructure, and this should be built during the coming summer. There has been no interference by the ice to the flow of water at this intake.

Captain C. E. Cherry is the keeper.

## PUMPING STATIONS.

## NORTH PUMPING STATION.

MR. THOMAS FERRIS is the Engineer in charge at this station.

The condition of the engines and boilers at this station is about the same as for some years past. The 1872 Cregier engine has been running continuously for the year.

The 1867 Quintard engine was shut down eleven days in April for overhauling and is now in fair condition. The two Gaskill engines were thoroughly overhauled in October and are in good condition for continued service.

The 1853 and 1857 Morgan engines have been out of service a great deal, the former having been in service only 61 days during the year. These engines should be replaced by new ones without delay.

The brickwork on the Murphy boilers and on two of the Holly boilers has been repaired during the year, otherwise the condition of the boiler plant is the same as during the preceding year.

The Holly room needs repainting and the roof should be repaired at an early date.

#### WEST PUMPING STATION.

MR. JOHN SANBORN is the Engineer in charge at this station.

This station is equipped with four Quintard engines, and, with the exception of engine No. 50, have been pumping continuously during the year. The large main crank shaft of engine No. 50 broke at 7:20 a. m. on the twelfth of November, in a similar manner that the main shaft of engine No. 51 broke in 1894. A new steel shaft was immediately ordered and this engine will be ready for service in a few days. During the time the engine has been out of service, other necessary repairs have been made.

Engine No. 51 is in fair condition, but engines No. 25 and No. 26 need overhauling. The boiler plant is in good condition, with the exception of boilers No. 1 and No. 2, on the south end, which need some slight flue repairs. The roofs of the engine and boiler rooms and of the coal shed need repairing and the building both inside and outside should be repainted.

#### FOURTEENTH STREET PUMPING STATION.

MR. GEORGE W. MATTHEWS is the Engineer in charge at this station.

The engines at this station have been running continually during the year, and are in good condition.

The bottom sheet of boiler No. 1 has been repaired, and four new flues placed in it. All small valves have been renewed, and all boilers equipped with "Reliance" water columns.

The steam-pipe system is in bad condition and should be overhauled and repaired at the earliest possible date.

Each engine should also be piped separately from the header, to prevent the necessity of shutting down more than one engine at a time in case of a break in the steam pipe.

## CENTRAL PUMPING STATION.

MR. PHILIP PETRIE is the Engineer in charge at this station.

During the last year no extensive repairs were made on the engines at this station, and they are, though running continuously during the year, in good condition.

New bottom sheets were placed in boilers 4, 5 and 6, at an expenditure of \$798.00—the sheets running the whole length of the boilers. This leaves the boiler plant at this station in good condition.

## SIXTY-EIGHTH STREET PUMPING STATION.

MR. GRANVILLE KIMBALL is the Engineer in charge at this station.

The engines at this station, or so many of them as were necessary to maintain an average pressure of about fifty-four pounds to the square inch on the mains at the station, have been running continuously.

The four Gaskill and the Worthington engines, which are our main reliance at this station, are in good condition, with the exception of an air pump cylinder of the Worthington engine, which, on December 8th, cracked open. This has been temporarily repaired. There has been no other break-down during the year.

The old Cope Maxwell engines were thoroughly overhauled in the beginning of the year, at an expense of \$4,600.

The boiler plant is in fair condition, with the exception of two boilers, which have been condemned and are out of service. These boilers should be removed and new ones substituted at an early date.

The electric light plant has been thoroughly overhauled, and is rendering better service at a greatly reduced cost. This station has been thoroughly cleaned and painted during the year.

## LAKE VIEW PUMPING STATION.

MR. F. D. PARKER is the Engineer in charge at this station.

All the engines at this station, with the exception of the small Flanders engine, have been running continuously during the year, and, with the exception of the Worthington, are in good condition. The Worthington engine should be provided with a new condenser and air pumps.

This station is taxed to its utmost capacity, and an additional pump should be added at the earliest possible date.

## WASHINGTON HEIGHTS PUMPING STATION.

MR. SIDNEY CURNICK is the Engineer in charge at this station.

Less water has been pumped this year at this station than during 1894, owing to the fact that Fernwood, which formerly was supplied from this station, has been connected with the main running from the Sixty-eighth street Pumping Station to West Pullman. An 8-inch pipe has also been laid and connected with the cistern at the Washington Heights Station, which feeds this station whenever the well pump is out of order.

## NORWOOD PARK PUMPING STATION.

MR. FRANK NORTON is the Engineer in charge at this station.

The small pump at this station was thoroughly overhauled during the year. The boiler was reset and put in good condition. During the year 18,639,800 gallons of water were pumped.

## AUXILIARY PUMPING STATIONS.

## CANAL PUMPING STATION.

MR. FRANK M. NYE is the Engineer in charge at this station.

Extensive repairs were made at this station during the year. New brasses were put in all crossheads of the engines, keys and other minor parts were renewed, all receivers have been repaired and the engines repainted; the arches of the south battery of boilers were repaired and the boilers furnished with the Hawley down-draft furnaces; the north battery was equipped with the McMillan furnaces. New blow-off valves and water columns were placed on all the boilers. A new twelve-inch header was put in during the year, and the whole plant thoroughly renovated.

The pumps are in good condition and the inside of the station presents a neat and clean appearance.

The pumps had to be shut down for a short time on various occasions during the year for the purpose of repairing and to allow vessels, that had been drawn in towards the screens by the current, to get away.

At times vessels have been stuck in the draw at the Fuller Street bridge when it has been necessary to stop the engines long enough to allow the river to rise sufficiently to float the vessels. The extraordinary rainfall in the latter part of December flooded the Illinois and Michigan Canal and enforced the stoppage of the pumps for two days.

The amount of water pumped from the Chicago River into the Illinois and Michigan Canal at this station during the year was 25,959,190,008 cubic feet, or an average of 49,390 cubic feet per minute for the whole year. The average head pumped against was 5.7 feet.

#### FULLERTON AVENUE PUMPING WORKS.

MR. FRED. GIELOW is the Engineer in charge at this station.

Thorough repairs to the engines were made during the year. New piston rods and new valve seats were put in. New bottom sheets running the whole length of the boilers were placed. Two of the boilers were equipped with Orvis retort down-draft furnaces and the bridge walls renewed. This leaves this plant in good shape.

The total amount of lake water pumped into the North Branch of the Chicago River at this station during the year was 3,300,519,266 cubic feet.

The accompanying tables give information in detail regarding pumpage, expenditure, etc.

The appended diagram shows the daily pumpage of each station, separately and combined, with the quantities, heads and temperature of the air and water.

Table "A" gives the monthly and annual pumpages, and table "B" gives the most important figures relating to quantities and expenses. Table "C" gives a comparative statement of pumpage, expenses, etc., for the years 1894 and 1895.





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TABLE "A." MONTHLY PUMPAGE IN GALLONS, 1895.

| MONTH.                                  | North Pumping Works. | West Pumping Works. | 14th Street Pumping Works. | Central Pumping Works. | 68th Street Pumping Works. | Lake View Pumping Works. | Washington Heights Pumping Works. | The City as a Whole. |
|-----------------------------------------|----------------------|---------------------|----------------------------|------------------------|----------------------------|--------------------------|-----------------------------------|----------------------|
| January.....                            | 2,241,211,230        | 1,670,654,760       | 1,393,464,840              | 766,211,770            | 1,156,749,493              | 641,128,056              | 8,407,880                         | 7,877,807,469        |
| February.....                           | 2,260,845,675        | 1,766,957,220       | 1,354,127,601              | 432,862,104            | 1,126,055,194              | 632,895,522              | 6,242,140                         | 7,628,985,396        |
| March.....                              | 2,200,970,430        | 1,587,201,960       | 1,368,381,276              | 844,913,567            | 1,145,445,630              | 628,231,516              | 6,849,580                         | 7,891,984,009        |
| April.....                              | 1,969,732,015        | 1,495,842,420       | 1,178,395,537              | 967,060,980            | 1,079,151,855              | 587,383,398              | 6,667,060                         | 7,284,182,765        |
| May.....                                | 1,937,448,100        | 1,623,826,800       | 1,232,840,530              | 930,738,946            | 1,175,887,935              | 677,123,193              | 7,010,020                         | 7,693,875,524        |
| June.....                               | 1,920,534,065        | 1,669,498,660       | 1,354,133,208              | 939,639,078            | 1,215,018,027              | 730,297,569              | 7,184,700                         | 7,886,295,307        |
| July.....                               | 1,969,360,645        | 1,693,534,660       | 1,316,606,145              | 933,660,691            | 1,229,767,307              | 736,653,824              | 8,080,800                         | 7,937,654,132        |
| August.....                             | 1,972,825,340        | 1,777,072,620       | 1,303,272,354              | 989,929,311            | 1,283,941,061              | 756,684,660              | 7,870,000                         | 8,091,595,346        |
| September....                           | 1,878,164,080        | 1,687,264,340       | 1,242,250,203              | 959,243,268            | 1,204,682,931              | 708,871,780              | 6,804,120                         | 7,688,280,732        |
| October....                             | 1,856,052,045        | 1,715,311,700       | 1,178,993,511              | 981,606,816            | 1,169,289,540              | 682,519,998              | 6,885,870                         | 7,590,659,540        |
| November....                            | 1,811,725,240        | 1,462,411,660       | 1,118,248,289              | 939,331,120            | 1,118,522,273              | 626,060,512              | 6,638,440                         | 7,072,927,534        |
| December....                            | 2,013,573,040        | 1,437,447,400       | 1,194,973,766              | 988,809,392            | 1,094,055,445              | 637,949,332              | 6,886,920                         | 7,378,645,195        |
| Totals.....                             | 24,038,441,965       | 19,586,984,260      | 15,255,686,760             | 10,847,606,943         | 13,998,566,131             | 8,045,239,360            | 85,467,530                        | 91,902,892,949       |
| Total pumpage Norwood Park Station..... |                      |                     |                            |                        |                            |                          |                                   | 18,689,800           |
| Grand Total, City as a whole.....       |                      |                     |                            |                        |                            |                          |                                   | 91,921,532,749       |

TABLE "B." OPERATIONS OF PUMPING STATIONS, CHICAGO, DURING 1895.

|                                                              | North Side.       | West Side.         | Fourteenth Street. | Central.           |
|--------------------------------------------------------------|-------------------|--------------------|--------------------|--------------------|
| Anthracite Coal, tons .....                                  | 14,368.888        | .....              | .....              | .....              |
| Bituminous Coal, tons. ....                                  | 9,430.188         | 16,797.688         | 9,463.886          | 7,299.188          |
| Fuel Oil, gallons .....                                      | .....             | .....              | .....              | .....              |
| Average price of Anthracite Coal, per ton .....              | \$4.94            | .....              | .....              | .....              |
| Average price of Bituminous Coal, per ton .....              | 2.70              | \$2.50             | \$2.73             | \$2.69             |
| Price of Fuel Oil, per 100 gallons .....                     | .....             | .....              | .....              | .....              |
| Cost of Anthracite Coal .....                                | 70,993.83         | .....              | .....              | .....              |
| Cost of Bituminous Coal .....                                | 25,485.54         | 42,026.76          | 25,860.92          | 19,686.62          |
| Cost of Fuel Oil .....                                       | .....             | .....              | .....              | .....              |
| Total Cost of Fuel .....                                     | .....             | 42,026.76          | 25,860.92          | 19,686.62          |
| Salaries .....                                               | 96,488.87         | 41,724.15          | 46,024.64          | 31,323.97          |
| Cost of Oil, Stores and Lighting .....                       | 53,826.35         | 4,247.39           | 2,577.12           | 8,179.91           |
| Repairs to Buildings, Pumps, Engines and Boilers .....       | 3,148.43          | 4,358.12           | 4,340.49           | 4,380.81           |
| Total Expense of Operation and Maintenance .....             | 3,069.66          | 92,351.42          | 79,408.17          | 58,571.31          |
| All other Expenses combined .....                            | 155,533.81        | .....              | .....              | .....              |
| Grand Total of Expenses .....                                | 1,208.86          | 19,944.96          | .....              | .....              |
| Total Gallons Pumped during the year .....                   | 156,742.27        | 112,296.88         | 79,408.17          | 58,571.31          |
| *Per Cent of Pumpage of City as a whole .....                | 24,088,441.965    | 19,586,984.260     | 15,255,551.760     | 10,847,506.943     |
| Greatest Amount Pumped in one day, gallons .....             | 26.3              | 21.3               | 16.6               | 11.8               |
| Least Amount Pumped in one day, gallons .....                | 85,647.795 Feb. 7 | 65,744.600 Feb. 13 | 50,588.748 Feb. 13 | 32,741.888 Mar. 27 |
| Average Pumped per day, gallons .....                        | 50,296.810 Mar. 9 | 39,789.180 Mar. 21 | 30,412,023 Dec. 23 | 15,970.212 Feb. 19 |
| Average Head against Pumps, in feet .....                    | 66,983.088        | 58,662.971         | 41,796.402         | 29,719.197         |
| Cost of Fuel Pumping 1,000,000 gallons, one foot high .....  | 111               | 101.8              | 112.1              | 101.2              |
| Total Cost of Pumping 1,000,000 gallons, one foot high ..... | 3.66c.            | 2.46c.             | 1.66c.             | 1.76c.             |
|                                                              | 5.76c.            | 4.66c.             | 4.66c.             | 5.76c.             |

\*Norwood Park Station not included.

TABLE "B." OPERATIONS OF PUMPING STATIONS, CHICAGO, DURING 1895—CONTINUED.

|                                                              | Sixty-eighth Street. | Lake View.          | Washington Hts. | The City as a whole. |
|--------------------------------------------------------------|----------------------|---------------------|-----------------|----------------------|
| Anthracite Coal, tons .....                                  | .....                | .....               | .....           | 14,368.88            |
| Bituminous Coal, tons .....                                  | .....                | .....               | .....           | 58,461.88            |
| Fuel Oil, gallons .....                                      | 405                  | 9,866,768           | 699,788         | 2,160,816            |
| Average price of Anthracite Coal, per ton .....              | 2,160,816            | .....               | .....           | \$4.94               |
| Average price of Bituminous Coal, per ton .....              | .....                | .....               | .....           | 2.64                 |
| Price of Fuel Oil, per 100 gallons .....                     | \$3.67               | \$2.67              | \$2.65          | 1.49                 |
| Cost of Anthracite Coal .....                                | 1.49                 | .....               | .....           | 70,993.83            |
| Cost of Bituminous Coal .....                                | 1,486.84             | 24,995.95           | 1,856.18        | 141,408.26           |
| Cost of Fuel Oil .....                                       | 32,155.10            | .....               | .....           | 32,155.10            |
| Total Cost of Fuel .....                                     | 38,641.44            | 24,995.95           | 1,856.18        | 244,556.69           |
| Salaries .....                                               | 39,451.23            | 25,948.56           | 8,150.00        | 241,043.89           |
| Cost of Oil, Stores and Lighting .....                       | 5,286.70             | 1,972.18            | 45.00           | 20,456.73            |
| Repairs to Buildings, Pumps, Engines and Boilers .....       | 5,119.08             | 8,219.71            | 90.50           | 29,578.32            |
| Total Expense of Operation and Maintenance .....             | 88,493.30            | 61,131.40           | 5,141.63        | 535,630.63           |
| All other Expenses combined .....                            | 618.27               | .....               | .....           | 21,770.19            |
| Grand Total of Expenses .....                                | 84,114.66            | 61,131.40           | 5,141.63        | 557,400.82           |
| Total Gallons Pumped during the year .....                   | 18,998,566,131       | 8,045,239,360       | 85,467,530      | 91,931,532,749       |
| *Per Cent of Pumpage of City as a whole .....                | 15.2                 | 8.7                 | 0.1             | 100                  |
| Greatest Amount Pumped in one day, gallons .....             | 46,632,942 Aug. 9    | 26,490,380 Aug. 22  | 380,200         | 291,823,581 Feb. 9   |
| Least Amount Pumped in one day, gallons .....                | 31,532,992 Sept. 1   | 16,516,608 March 30 | 212,760         | 217,707,258 Nov. 9   |
| Average Pumped per day, gallons .....                        | 38,352,236           | 23,041,751          | 234,158         | 251,889,816          |
| Average Head against Pumps, in feet .....                    | 128                  | 110.5               | 104.7           | 109.9                |
| Cost of Fuel Pumping 1,000,000 gallons, one foot high .....  | 1.68 c.              | 2.76 c.             | 20.76 c.        | 2.65 c.              |
| Total Cost of Pumping 1,000,000 gallons, one foot high ..... | 4.98 c.              | 6.95 c.             | 57.43 c.        | 5.10 c.              |

\*Norwood Park Station not included.

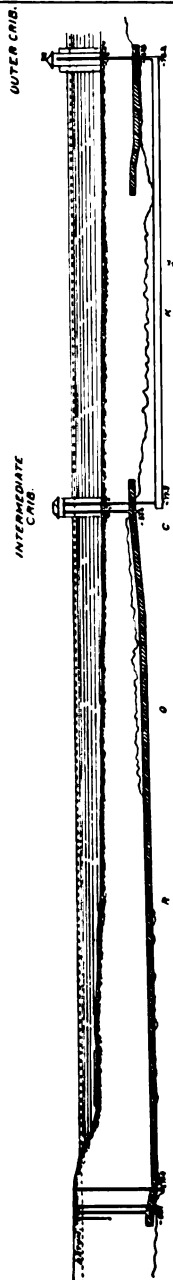
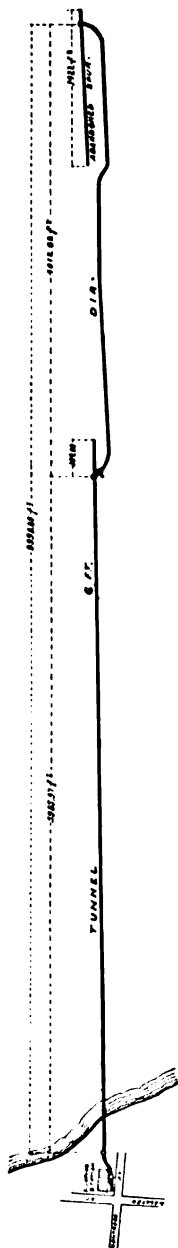
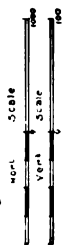
TABLE "C." COMPARATIVE STATEMENT OF OPERATIONS OF PUMPING STATIONS, 1894 AND 1895.

|                                                        | North Side.    | West Side.     | Fourteenth Street. | Central.       | Sixty-eighth Street. | Lake View.    | Washington Heights. | *The City as a whole. |
|--------------------------------------------------------|----------------|----------------|--------------------|----------------|----------------------|---------------|---------------------|-----------------------|
| Total Pumpage, 1895...                                 | 24,088,441,965 | 19,586,984,260 | 15,255,686,760     | 10,847,506,943 | 13,998,566,131       | 8,045,239,360 | 85,467,530          | 91,902,892,949        |
| Total Pumpage, 1894...                                 | 31,699,013,770 | 19,276,164,320 | 16,052,764,564     | 10,257,974,975 | 12,798,587,308       | 6,853,272,432 | 132,470,900         | 87,060,267,849        |
| Increase, 1895.....                                    | 2,884,429,195  | 310,819,880    | .....              | 589,531,968    | 1,209,978,823        | 1,191,966,928 | .....               | 4,842,625,600         |
| Decrease, 1895.....                                    | .....          | .....          | 797,097,824        | .....          | .....                | .....         | 47,008,870          | .....                 |
| Total Expense of Operation and Maintenance, 1894.....  | \$ 157,416.24  | \$ 105,865.63  | \$ 97,284.97       | \$ 63,263.86   | \$ 76,246.02         | \$ 59,063.05  | \$ 6,621.08         | \$ 565,760.35         |
| Total Expense of Operation and Maintenance, 1895.....  | 155,533.31     | 92,851.42      | 79,403.17          | 58,571.31      | 83,498.39            | 61,131.40     | 5,141.63            | 585,680.68            |
| Decrease in Cost, 1895..                               | 1,883.93       | 13,514.21      | 17,881.80          | 4,692.55       | .....                | .....         | 1,479.45            | 30,130.23             |
| Increase in Cost, 1895..                               | .....          | .....          | .....              | .....          | 7,252.37             | 2,068.35      | .....               | .....                 |
| Total Cost of Pumping 1 Mill Gall. 1 ft. high, 1894... | 6.75c.         | 5.13c.         | 5.76c.             | 5.78c.         | 4.76c.               | 7.83c.        | 44.33c.             | 5.75c.                |
| Total Cost of Pumping 1 Mill Gall. 1 ft. high, 1895... | 5.83c.         | 4.65c.         | 4.16c.             | 5.73c.         | 4.65c.               | 6.77c.        | 57.45c.             | 5.78c.                |
| Decrease in Cost, 1895..                               | 76c.           | 76c.           | 76c.               | 76c.           | 16c.                 | 76c.          | .....               | 76c.                  |
| Increase in Cost, 1895..                               | .....          | .....          | .....              | .....          | .....                | .....         | 12.83c.             | .....                 |

\*Norwood Park Station not included.



# ALIGNMENT PROFILE 6 FT TUNNEL EXTENSION LAKE VIEW



## TUNNEL AND CRIB CONSTRUCTION.

MR. JOHN ERICSON, Assistant City Engineer, is in charge of this branch of the Bureau work.

### LAKE VIEW TUNNEL.

This tunnel being practically completed, a short history of its construction follows:

Owing to the inadequate supply and the unsatisfactory quality of the water furnished by the short intake pipes, the authorities of the former City of Lake View decided to construct this tunnel.

The first contract, awarded by the old City of Lake View to Messrs. Shailer & Schnigla, contractors, is dated May 24, 1889, and calls for 5,000 lineal feet of brick tunnel of 6 feet inside diameter, shore shaft, lake shaft, lake crib, light house and electric lights, for a bulk sum of \$159,650.00.

For an extension beyond 5,000 feet, limited to 500 feet, a price of \$16.85 per lineal foot was to be paid.

For a difference in depth either way of 80 feet below datum, \$49.75 per lineal foot for the shore shaft is to be added or subtracted from this bulk sum.

For a difference either way from a depth of 79 feet below datum, \$144.00 per lineal foot for the lake shaft is to be added or subtracted from bulk sum.

The second contract, dated September 23, 1890, calls for an extension of the 5,500 feet provided for in the first contract, of 4,500 feet in length and 6 feet inside diameter. In consideration of the longer haul, taking material in and bringing excavated material out of the tunnel, the larger plant necessary for ventilation, etc., a price of \$18.50 per lineal foot shall be paid for the 4,500 lineal feet of tunnel, arranged on the following basis:

|               |                                    |       |     |
|---------------|------------------------------------|-------|-----|
| First .....   | 500 feet, \$16.85 per lineal foot. |       |     |
| Second .....  | 500 "                              | 17.03 | " " |
| Third .....   | 500 "                              | 17.31 | " " |
| Fourth .....  | 500 "                              | 17.69 | " " |
| Fifth .....   | 500 "                              | 18.17 | " " |
| Sixth .....   | 500 "                              | 18.75 | " " |
| Seventh ..... | 500 "                              | 19.43 | " " |
| Eighth .....  | 500 "                              | 20.21 | " " |
| Ninth .....   | 500 "                              | 21.09 | " " |

For the necessary additional height of the crib on account of the extension of the tunnel, the contract calls for an extra sum of \$11,116.00.



The tunnel construction commenced with a shaft on shore, from which the tunnel was driven eastward under the Lake. Some six thousand three hundred (6,300) feet of tunnel was thus built before any work was done from the Two-mile crib, which meanwhile had been built and placed. Owing to the slow progress made on the tunnel, the poor quality of the water pumped through the old intake pipes and the trouble from ice in the winter time, it was decided to place a temporary crib over the tunnel about six thousand (6,000) feet from shore; sink an intake shaft with gates; put a bulkhead in the east drift close to the shaft, and then build the remainder of the tunnel from the outer crib.

This temporary crib was finished and the shaft connected with the tunnel April 2, and water was let in April 6, 1892. The Lake View Pumping Works have since been pumping water supplied through this intake.

The plans and specifications specify that "the bottom of the inside surface of the west end of the tunnel shall not be less than eighty (80) feet below City datum, and have a gradual inclination upward of one foot per mile to the eastern terminus."

This grade, however, was changed to seventy (70) feet below datum before work was commenced. The heading running eastward from shore had to be driven almost constantly through more or less rock, making progress very slow and the cost great.

In the early part of October, 1891, the face of the tunnel then being about four thousand nine hundred and twenty (4,920) feet from shore, the contractors were ordered by the City Engineer to change the grade so as to rise out of the rock.

The change was made, and the last one thousand (1,000) feet of the shore heading was built to an inclined grade upward until an elevation of fifty-seven (57) feet below datum was reached at the end of the shore heading six thousand three hundred (6,300) feet east from the shore shaft.

Tunneling from the outer crib commenced in November, 1892. The grade as established by the engineer at this point is 63.5 feet below datum, or 6.5 feet lower than the east end of the shore heading. The work proceeded through good soil at a slightly inclined grade upward until a distance of one thousand two hundred and sixty (1,260) feet west from the crib was reached, when the water began to come in through a sand and gravel pocket in the roof of the drift in such quantities as to flood the pumps and fill the whole tunnel and shaft with water up to lake level. This occurred February 15, 1893. Attempts were made to pump the water out, but proved unsuccessful.

It was then decided to resort to compressed air for the purpose of driving the water out of the tunnel, and in a letter of March 7, 1893, the City Engineer instructed the contractors to proceed with the installation of the same.

By means of the compressed air plant, after a lot of clay had been dumped over the break, water was forced out of the shaft through a pipe reaching up through the air lock. When the water in the shaft had been lowered so as to create a head of about thirty feet, the air pressure was reduced. It was then found that the leak was very small, since the water remained at nearly the same level. A few more scow loads of clay were dumped, however, which almost stopped the leak.

According to the diver's report on his first examination of the bottom of the lake, the hole was supposed to be quite small. It was, therefore, considered safer to pump the water out of the tunnel than to force it by air pressure, since it was feared that when the compressed air reached the face it would find its way out and open up the hole. The air lock was, therefore, taken out and the pump placed in the shaft. All went well until the water in the shaft had been pumped out, so as to reach the eye of the tunnel, which was at eleven o'clock a. m., June 22, 1893, or four hours after the commencing of pumping, when in an instant the water began to rise and filled the shaft in a few minutes.

On the 23d a diver was engaged to examine the ground at the location of the leak, and he reported that there was a large opening in the lake bottom, about eight feet in diameter.

After the failure to stop the leak at the end of the west drift, from the outer crib, it was decided to build a temporary pile crib adjacent to the inner Lake View Crib, sink a shaft and commence to build a tunnel at a lower level, so as to be entirely in rock, out toward the outer crib. This work was commenced early in August, 1893.

After the completion of the crib, the sinking of the shaft progressed more or less satisfactorily until the required depth was reached.

Tunneling eastward commenced in February, 1894, and has since progressed without interruption.

It was first intended to connect this tunnel with the west end of that part built from the outer crib, but it was finally considered entirely too risky, and the present construction was carried on with a view of connecting with the shaft at the outer crib.

At the expiration of the second contract, there remained about 2,000 feet of tunnel to be built. By agreement between the contractors and the City, the contractors were to receive \$20.00 per lineal foot for the said remaining part of the tunnel.

At the beginning of the year 1895, 2,205 lineal feet of tunnel from the center of the shaft at the intermediate crib had been constructed, and 1,959.8 lineal feet of tunnel have been constructed during the year. The abandoned spur running west from the outer crib has been bulkheaded off by placing alternate piles of bags of cement and sand, a distance of fourteen feet. The water was then pumped out of the shaft and a brick bulkhead 4.5 feet thick built nearest the shaft. The shaft was then sunk to the level of the new tunnel and connection between the tunnel and the shaft made December 27th. The connection at the inner crib, the removal of a bulkhead, some brick work and the cleaning out of the tunnel remains to be done after the first of January, 1896. This tunnel will not add to the present supply, but will greatly improve the quality of the water for that section of the City.

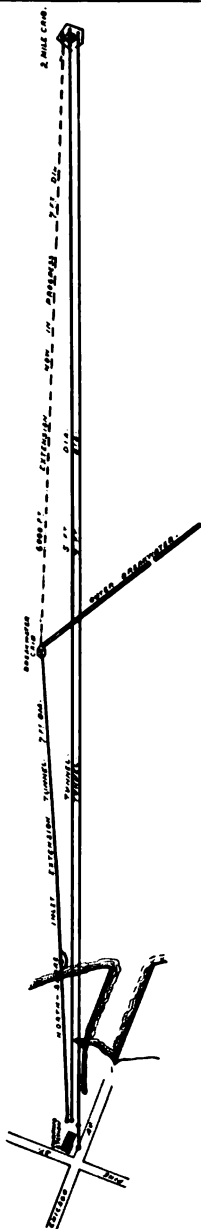
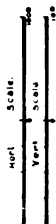
Mr. R. B. Wilcox, Assistant Engineer, is in local charge of this construction.

#### NORTH SHORE INLET EXTENSION.

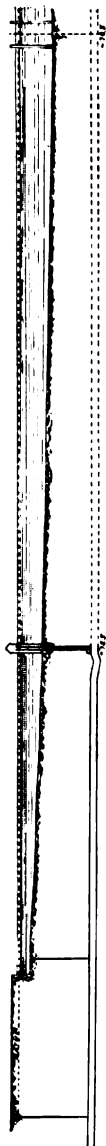
The seven-foot shore tunnel, which in 1891 was extended to the northwest end of the United States exterior breakwater, has, since its completion, been practically useless, owing to the proximity of the intake to the shore. The two old tunnels terminating at the two-mile crib have in late years been taxed to their utmost capacity, and, in order to utilize the shore tunnel and relieve the old ones, it was decided to extend the former to the two-mile crib. A contract for this work was entered into on August 22 with Ross & Ross, of this City.

In order to use this shore tunnel as an emergency intake, during the construction of the extension, the specifications provide for the sinking of a new working shaft on the south-west side of the breakwater crib. This provision, however, was changed, in that permission was granted the contractors to use the outer shaft in the breakwater crib for a working shaft, and for this purpose to isolate the shore tunnel by closing the intake ports in the inner shaft and by placing a wooden plug over the west eye of the tunnel in the shaft at the Chicago Avenue pumping station, the contractor binding himself to have these shafts opened up for use at the request of the City.

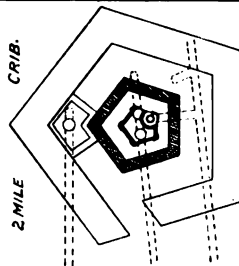
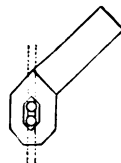
# ALIGNMENT & PROFILE 7 FT TUNNEL EXTENSION



PROFILE OF NORTH 7 FT TUNNEL.



BREAKWATER CRIB.





Owing to the insufficient port area and the small size of the well at the two-mile crib, it was decided to sink a new intake shaft between the crib proper and its protection breakwater and to protect the same with a pile crib filled with rip rap.

#### BREAKWATER CRIB.

The contractors commenced operations on September 9. After considerable delay on account of improper machinery, etc., the shaft was finally pumped dry and the eye of the new tunnel was turned on October 21.

The work from this shaft has since then progressed without any serious interruption, only delayed a few days by fire damp and storms. The progress by months has been as follows:

|                         |                  |                |            |
|-------------------------|------------------|----------------|------------|
| October—6 working days, | 122 lineal feet; | daily average, | 19.3 feet. |
| November—26             | “ 636            | “ “            | 24.5 “     |
| December—23             | “ 586            | “ “            | 25.48 “    |

Making a total of 1,344 lineal feet of tunnel built during the year.

Blasting with dynamite in moderate charges of from five to ten pounds has been permitted whenever the ground was of such a nature to allow it with advantage. The character of the ground has been mostly blue clay with strata of loam and pockets of dry gravel. The soil, being stratified, frequently needs timber support to hold it up until the brick work is placed. In many cases for the same reason timbers and boards had to be left permanently in the tunnel and bricked in.

The excavated material is by permission dumped on the south-east side of the crib, under the condition that it will be removed by dredging whenever deemed necessary.

#### TWO-MILE CRIB.

Work on the new crib house was commenced September 11, 1895, by the driving of piles for the protection of the intake shaft. Work on the house proper was commenced on October 14, and was practically finished by the end of that month. The cast-iron sections have been placed on the crib. The length of the cast-iron shaft thus provided will allow of sinking the shaft to about twenty-three feet below the bottom of the lake, at which depth it is estimated that the soil will be hard enough to allow brick underpinning, and the balance of the shaft thus built to the required depth.

The bottom of the lake where the shaft will be sunk has been cleared of the stone and rubbish alluded to in the specifications. All of this work had to be done by divers.

Mr. C. T. Anderson is engineer in local charge of this work, and Mr. Paul G. Brown is his assistant.

### NEW LAND TUNNELS.

For some years past the remote west and northwest sections of the City have been suffering more or less on account of an insufficient water supply, although the City has been continually adding to its water supply plant. Since 1887 over twelve miles of tunnels, varying in size from five feet to eight feet inside diameter, have been constructed. Two new pumping stations, with a combined capacity of about 90,000,000 gallons per day, have been erected, and the old stations greatly extended and new machinery added. Preparations have also been made on a grand scale to relieve the above mentioned districts. It has been decided to construct two additional pumping stations—one in the vicinity of Humboldt Park and another near Jackson boulevard, west of Rockwell street—each with a capacity of 60,000,000 gallons per twenty-four hours. To feed these stations with water, it is necessary to construct a new lake tunnel with attending land ramifications, since the existing tunnels cannot supply the additional amount of water or any part thereof to the proposed stations. Contracts for the construction of these land tunnels have been let during the year, and the work of construction commenced.

#### SECTION ONE.

Section one comprises that part of the proposed tunnel between a point near Green Bay Park and a point near the intersection of North Green street and Grand avenue on the West Side.

This tunnel is to be about 6,650 feet long and to have an inside diameter of 10 feet. The contract for the construction of the same was awarded September 30, 1895, to the FitzSimons & Connell Company, of this City.

An engineering party was immediately organized and surveys commenced on September 4th. This work comprised a skeleton survey between the termini of the section, the location of all buildings and streets on the line of the tunnel and the running of levels to establish the necessary bench marks in the vicinity of the proposed shafts. A complete circuit was established and the latitude and







NEW LAND TUNNEL—SECTION 2.

CARROLL AVENUE SHAFT.

DRIFT NO. 1.



NEW LAND TUNNEL—SECTION 3.

KEITH STREET SHAFT.

DRIFT NO. 2.



departure of each point was found with reference to an established base line. The notes have all been reduced and platted on a scale of 100 feet to the inch.

Mr. John H. Spengler is in local charge of this section, and Mr. Edwin Woods is his assistant.

#### SECTION TWO.

This section comprises an extension of section one in a south-westerly direction to the proposed pumping station west of Rockwell street. The inside diameter of this tunnel is eight feet. The contract for the construction of this part was awarded September 30, 1895, to Mr. Joseph J. Duffy, of this City. The engineering party of this section was organized simultaneously with the one of section one, and the surveys were commenced immediately after the letting of the contract. This work is of the same character as that for section one.

The actual work of construction commenced November 23d, when the contractor began the sinking of a ten-foot shaft on Carroll avenue, between Ann and Elizabeth streets, at a point previously located on the line of the proposed tunnel. The shaft was finished to the required depth in about twelve days; the eyes were turned and tunneling commenced. To the end of the year, 232 lineal feet of tunnel were constructed. The soil has thus far been a hard, blue clay, with occasional nests of large boulders, some of which require blasting in order to be removed.

Mr. F. G. Ewald is in local charge of section two, and Mr. N. A. Sager is sub-assistant.

#### SECTION THREE.

Section three is a branch tunnel of eight feet inside diameter extending from the junction of sections one and two in a north-westerly direction to a proposed pumping station in the vicinity of Humboldt Park.

The field work for this section was commenced on September 5th. Thirteen and one-third miles of overground survey lines have been run and checked, embracing a strip of territory about three blocks in width and extending from Green street and Grand avenue on the southeast to Lawndale avenue and Humboldt avenue on the northwest.

Within this area have been located and platted forty-five blocks of buildings, which is about one-half the work of this character to be done. Levels have been run and bench marks established along this line.

Locations for shafts have been made on Keith street north of Huron street, and on Potomac avenue just west of Leavitt street. The contractors, Messrs. Weir, McKechney & Co., to whom was awarded the contract for this section, on October 19, 1895, have commenced the work of construction. One shaft has been sunk in Keith street to a depth of sixty-five feet, and in Potomac avenue to a depth of fifty-two feet below street grade. At these respective depths rock was encountered in both shafts. After striking rock the work was temporarily suspended by the contractors in order to provide the necessary equipment.

The contractors, at this writing, have resumed work, with an apparent intention of pushing it to the best of their ability.

This section is placed in local charge of Mr. E. W. Jackson, Assistant Engineer, with Mr. Eugen La Mana as sub-assistant.

#### LAKE TUNNEL.

Plans and specifications for this part of the work are being prepared. Borings in the lake bottom 500 feet on either side of the proposed tunnel were made during the summer, and a profile showing the stratification of the soil has been prepared.

This work, as a whole, is expected to be finished in about two years.

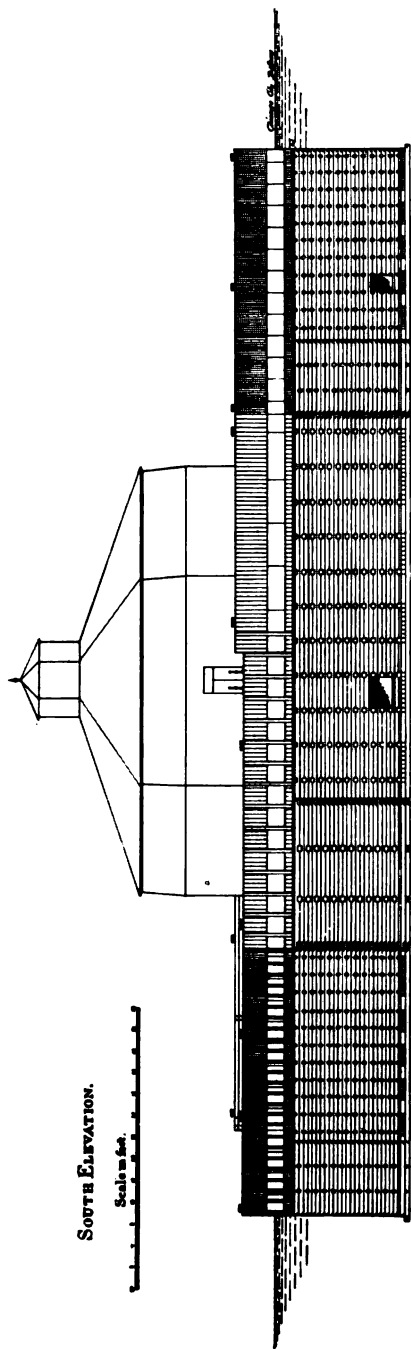
#### NORTH WESTERN AVENUE WATER PIPE TUNNEL.

This tunnel, through which the new Western avenue 24-inch water main is to be laid, was constructed during the year. The tunnel, which is 404 feet long, between centres of shafts, is constructed through solid limestone, and is of sufficient size to accommodate at least two 24-inch pipes. The tunnel is not lined with brick. In sinking the shafts, one on either side of the river, it was found that the stratum of sand overlying the rock contained water under pressure in such quantities that it was necessary to adopt the pneumatic process of construction, greatly retarding the progress and increasing the cost.

This work was done by the City. Mr. W. D. Hotchkiss, Assistant Engineer, had local charge of the construction of this tunnel.

#### HYDE PARK BREAKWATER.

The ice of the last two winters had so badly damaged the outer Hyde Park crib, which is constructed of timber cribs filled with rip rap, as to render it unsafe, and in order to prevent any further



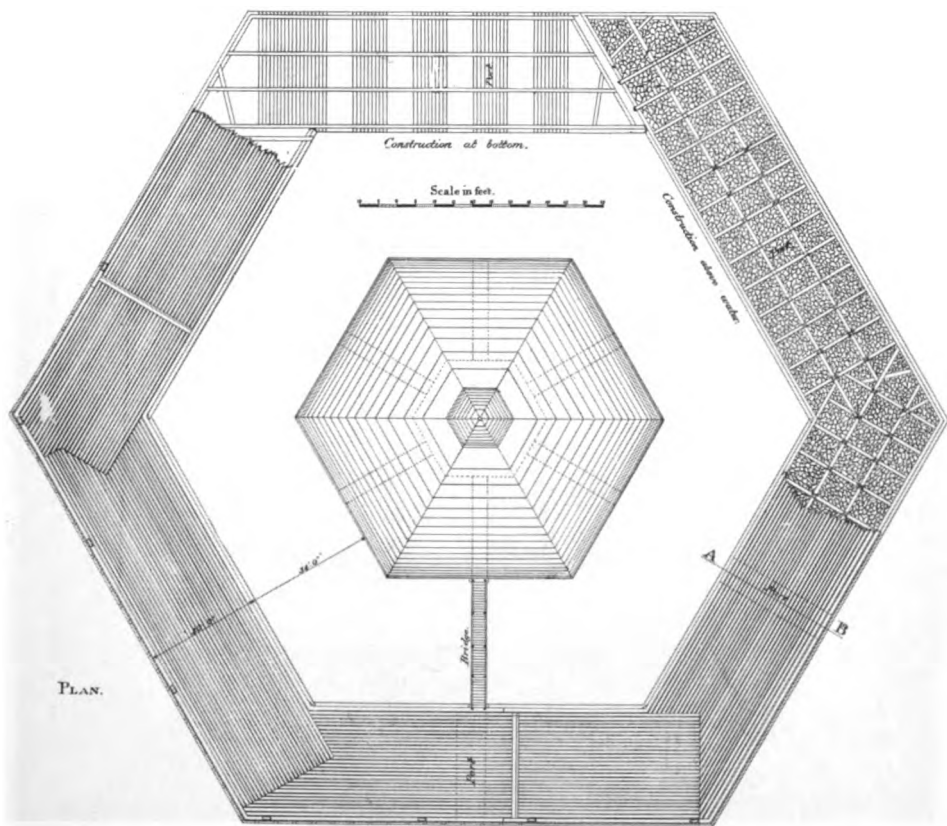
SOUTH ELEVATION.



HYDE PARK CRIB—PROTECTION BREAKWATER.



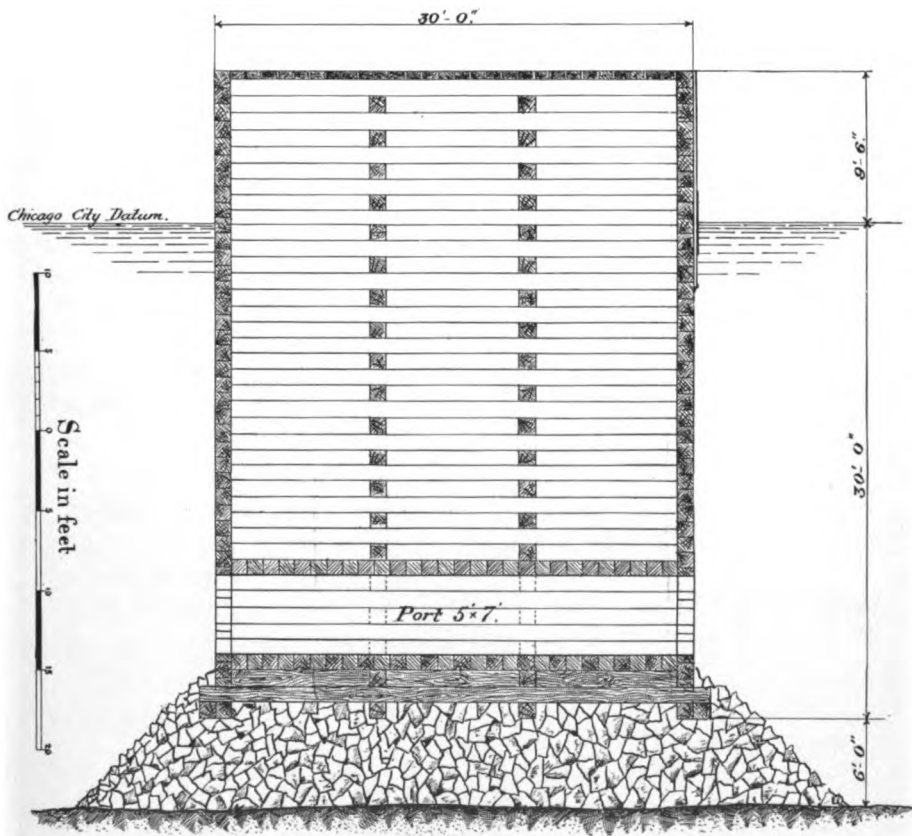




**HYDE PARK CRIB—PROTECTION BREAKWATER.**  
**PLAN.**







HYDE PARK CRIB—PROTECTION BREAKWATER.  
CROSS SECTION.



damage, it was decided to protect it by a hexagonal breakwater thirty feet wide. The original plans for this breakwater provided for an opening for the admittance of tug boats between the crib and its breakwater, and the proposed construction was in detail very similar to the one protecting the old two-mile crib off Chicago avenue. The great expense and trouble in keeping the intake at this last mentioned crib free from ice in winter time and other floating matter in the summer, convinced me that the plans were not practicable. New plans were prepared, omitting the opening, and in lieu thereof there were constructed, for the admittance of water, ports 7 feet by 5 feet in size, through four of the six sides forming the breakwater. The detail construction was also changed so as to conform to the latest and most improved practice in such constructions.

This structure, as far as experience of this winter shows, has proved an entire success, reducing the danger of ice blockades to a minimum, and causing a saving to the City for tug boat hire and salaries of about \$3,000 per month during the winter season.

The contract for this work was awarded July 11, 1895, to the FitzSimons & Connell Company, and was completed during the year.

Mr. L. B. Fuller, Assistant Engineer, has been in local charge of the work.

#### NORTH SIDE SHOPS.

MR. E. K. PARKER, Superintendent.

Repairs on machinery and buildings during the year have placed them in good condition, with the exception of the roof of shops 3 and 4, which requires renewing.

The following new pipe-line fixtures and work for the various departments have been made during the year :

#### HYDRANTS—NEW.

|                                         | 2¼-inch<br>Single | 2½-inch<br>Double | 4-inch<br>Double |
|-----------------------------------------|-------------------|-------------------|------------------|
| On hand January 1, 1895.....            | 26                | 23                | 4                |
| Manufactured during 1895 .....          | 68                | 597               | 11               |
| <b>Total .....</b>                      | <b>94</b>         | <b>620</b>        | <b>15</b>        |
| Delivered to Water Pipe Extension ..... | 94                | 604               | 2                |
| On hand January 1, 1896.....            | .....             | 16                | 13               |

## STOP-VALVES—NEW.

|                                   | 4-inch | 6-inch | 8-inch | 12-inch | 16-inch | 24-inch | *36-inch |
|-----------------------------------|--------|--------|--------|---------|---------|---------|----------|
| On hand January 1, 1895 .....     | 7      | 8      | 8      | 0       | 4       | 8       | .....    |
| Manufactured during 1895 .....    | 10     | 299    | 180    | 87      | 7       | 12      | .....    |
| Total .....                       | 17     | 307    | 188    | 87      | 11      | 15      | .....    |
| Delivered to Water Pipe Extension | 8      | 305    | 118    | 25      | 8       | 11      | 2        |
| On hand January 1, 1896 .....     | 9      | 2      | 15     | 12      | 3       | 4       | 1        |

\* 36-inch valves are not manufactured at these shops.

The expenditures for labor and material during the year are as follows :

|                                                                                           |                    |
|-------------------------------------------------------------------------------------------|--------------------|
| 68 hydrants, single nozzle, 2½ inches, costing .....                                      | \$ 952 00          |
| 597 " double " 2½ " " .....                                                               | 16,202 58          |
| 11 " " 4 " " .....                                                                        | 330 00             |
|                                                                                           | <u>\$17,484 58</u> |
| 10 stop valves, 4-inch, costing .....                                                     | \$ 124 00          |
| 299 " " 6 " " .....                                                                       | 5,501 60           |
| 130 " " 8 " " .....                                                                       | 3,224 00           |
| 37 " " 12 " " .....                                                                       | 1,683 50           |
| 7 " " 16 " " .....                                                                        | 859 14             |
| 12 " " 24 " " .....                                                                       | 2,126 40           |
|                                                                                           | <u>\$13,518 64</u> |
| Repairs to hydrants .....                                                                 | \$ 8,256 43        |
| Repairs to valves .....                                                                   | 2,038 16           |
| Repairing and testing meters .....                                                        | 4,845 13           |
|                                                                                           | <u>\$15,139 72</u> |
| Expenditures on account of repairs for water supply system<br>and other departments ..... | <u>\$33,662 64</u> |

## WATER PIPE EXTENSION.

Mr. H. P. Thompson is Superintendent and Mr. A. R. Porter is Assistant Superintendent.

During the year, 350,405 feet of mains of the following dimensions were laid :

|                   |         |
|-------------------|---------|
| 1,428 feet.....   | 4-inch. |
| 203,645 feet..... | 6 "     |
| 92,952 feet.....  | 8 "     |
| 17,618 feet.....  | 12 "    |
| 1,177 feet.....   | 16 "    |
| 28,198 feet.....  | 24 "    |
| 2,687 feet.....   | 36 "    |

Of this amount of pipe, 136,238 feet of different size pipe have been laid under contract, by special assessment. About twelve miles of pipe, costing \$78,758.61, have been laid at the expense of private parties. Of this amount, \$16,220.59 was advanced by contractors for street improvements, who have been required to advance the money to cover the cost of laying water pipe, where necessary, before going on with the street improvements. The City agrees to refund all money advanced for water pipe when the annual revenue from it pays 10 cents per foot frontage. During the year, 130,526 feet of different size pipe has been laid on revenue and for circulation.

Through the building of the Wentworth avenue sewer, the City was compelled to take up and replace 5,171 feet of 8-inch pipe, 563 feet of 6-inch pipe and 58 feet of 12-inch pipe. The changing of location of 12-inch main in West Lake street, commenced some time prior, was continued during the year between Forty-first avenue and Forty-ninth avenue. Fifty-five hundred and forty-one feet of 12-inch pipe was taken up and relaid by this Department. In doing this work, 944 feet of new pipe was used. The cost of this was charged to the Lake Street Elevated Railroad.

Sixteen hundred and seventy-nine brick hydrant and stop-valve basins were built during the year, and eighty-one composition basins were placed during the same period. In the building of basins and repairs, there have been used 1,828,330 brick and 5,235 barrels of cement.

Five fire cisterns were rebuilt in 1895 at the following locations:

One at Randolph street and Fifth avenue.

One at Sedgwick and Oak streets.

One at Washington and State streets.

One at Randolph street and Wabash avenue.

One at Canal and Twelfth streets.

Water mains have been abandoned in the following streets and larger mains put in :

Eagle street from Desplaines street to Halsted street.

Eighty-third street from Constance street to Anthony avenue.

Green street from Madison street to Monroe street.

Superior street from Clark street to Wells street.

Water mains abandoned and same size laid during the year 1895 :

Ashland avenue from Grand avenue to Austin avenue.

Poplar avenue from Twenty-ninth street northward.

Four-inch water mains abandoned during the year and not relaid:

Jefferson street from the south line of Lake street to Randolph.

Jefferson street from the south line of Fulton street to Lake street.

Thirty-third street from eighty feet west of Armour avenue southward.

Water mains were lowered on the following streets during the year 1895 :

Eddy street from Racine to Clark.

Fortieth street from 124 feet north of Carroll avenue northward.

Fortieth street from sixty-six feet north of Carroll avenue northward.

Homan avenue from eighty feet north of Carroll avenue northward.

Hamlin avenue from 284 feet north of Fulton street northward.

Jefferson avenue from Sixty-eighth street to Seventy-first street.

Kedzie avenue from sixty-six feet north of Carroll avenue northward.

Kinzie street from Fortieth street westward.

Langley avenue from the north line of Sixty-third street to Sixty-sixth street.

Milwaukee avenue from 375 feet north of Irving Park boulevard to 750 feet northward.

Prairie avenue from Thirty-first street to Thirty-second street.

Rhodes avenue from Sixty-fourth street to Sixty-sixth street.

Ross avenue from Indiana avenue to the Alley "L."

St. Lawrence avenue from Sixtieth street to Sixty-ninth street.

St. Louis avenue from ninety feet north of Carroll avenue northward.

Seventy-fifth street from Jeffrey avenue to Oglesby avenue.

Twenty-fifth street from Armour avenue 300 feet westward.

Twenty-seventh street from Armour avenue 300 feet westward.

Twenty-ninth street from Armour avenue 250 feet westward.

Thirtieth street from Armour avenue 275 feet westward.

Thirty-first street from Armour avenue 275 feet westward.

Thirty-second street from Armour avenue 100 feet westward.

Thirty-third street from Armour avenue 250 feet westward.

Thirty-fifth street from Armour avenue 300 feet westward.

Thirty-seventh street from Armour avenue 200 feet westward.

Thirty-eighth street from Armour avenue 200 feet westward.

The accompanying tables show in detail the number of new hydrants and new valves placed, the size and length of pipe laid and name of street and district.

#### HYDRANTS PLACED IN 1895.

| DIVISION.       | 2½-inch<br>Single. | 2½-inch<br>Double. | 4-inch<br>Double. | Total. |
|-----------------|--------------------|--------------------|-------------------|--------|
| North .....     |                    |                    |                   |        |
| South .....     | 1                  | 6                  |                   | 7      |
| West .....      | 8                  | 169                |                   | 172    |
| Hyde Park ..... | 80                 | 95                 |                   | 125    |
| Lake View ..... | 27                 | 97                 |                   | 124    |
| Lake .....      | 11                 | 62                 |                   | 78     |
| Jefferson ..... | 8                  | 133                | 2                 | 148    |
| Calumet .....   | 14                 | 42                 |                   | 56     |
| Total .....     | 94                 | 604                | 2                 | 700    |

During the year 1895 there were taken out in West Division three 2½-inch single hydrants, in South Division one 2½-inch single hydrant, all of which were replaced by 2½-inch double hydrants; also one 2½-inch double hydrant in West Division taken out, which was not replaced.



## TOTAL NUMBER OF FIRE HYDRANTS AT THE CLOSE OF 1895.

| DIVISION.       | 2½-inch<br>Single. | 2½-inch<br>Double. | 4-inch<br>Double. | 2½-inch<br>Double, with<br>one 4-inch<br>Single. | TOTAL. |
|-----------------|--------------------|--------------------|-------------------|--------------------------------------------------|--------|
| North .....     | 417                | 505                | 182               | ...                                              | 1,054  |
| South .....     | 799                | 1,021              | 198               | .....                                            | 2,018  |
| West .....      | 1,500              | 3,894              | 237               | .....                                            | 5,681  |
| Hyde Park ..... | 332                | 1,665              | 8                 | 605                                              | 2,610  |
| Lake View ..... | 202                | 997                | .....             | 1                                                | 1,200  |
| Lake .....      | 165                | 718                | 2                 | 1,594                                            | 2,479  |
| Jefferson ..... | 105                | 833                | 4                 | .....                                            | 942    |
| Calumet .....   | 118                | 364                | .....             | 55                                               | 537    |
| Total .....     | 3,688              | 9,997              | 576               | 2,255                                            | 16,466 |

## STOP-VALVES PUT IN DURING THE YEAR 1895.

| DIVISION.       | SIZE OF VALVES. |       |       |        |        |        |        | TOTAL |
|-----------------|-----------------|-------|-------|--------|--------|--------|--------|-------|
|                 | 4-in.           | 6-in. | 8-in. | 12-in. | 16-in. | 24-in. | 36-in. |       |
| North .....     | .....           | ..... | 2     | .....  | .....  | .....  | .....  | 2     |
| South .....     | .....           | 8     | 3     | .....  | .....  | .....  | .....  | 5     |
| West .....      | 8               | 93    | 31    | 6      | 1      | .....  | .....  | 134   |
| Hyde Park ..... | .....           | 44    | 22    | 6      | 4      | 6      | 2      | 84    |
| Lake View ..... | 4               | 45    | 10    | 2      | 1      | .....  | .....  | 62    |
| Lake .....      | 1               | 49    | 17    | 2      | .....  | .....  | .....  | 69    |
| Jefferson ..... | .....           | 47    | 30    | 8      | 2      | 5      | .....  | 92    |
| Calumet .....   | .....           | 24    | 4     | 1      | .....  | .....  | .....  | 29    |
| Totals .....    | 8               | 305   | 118   | 25     | 8      | 11     | 2      | 477   |

During the year 1895, in South Division, one 4-inch valve was taken out, which was not replaced.

**TOTAL NUMBER AND SIZE OF VALVES IN USE AT THE  
CLOSE OF 1895.**

| DIVISION.      | SIZE OF VALVES. |         |         |         |          |          |          |          |          |          |          |          |          | TOTAL  |
|----------------|-----------------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------|
|                | 3-inch.         | 4-inch. | 6-inch. | 8-inch. | 10-inch. | 12-inch. | 14-inch. | 16-inch. | 18-inch. | 20-inch. | 24-inch. | 30-inch. | 36-inch. |        |
| North .....    |                 | 164     | 423     | 293     | ....     | 32       | ...      | 13       | ....     | ....     | 12       | ....     | 3        | 940    |
| South .....    |                 | 155     | 680     | 655     | ....     | 85       | ....     | 25       | ...      | ....     | 29       | ....     | 13       | 1,642  |
| West.....      |                 | 583     | 2,163   | 1,158   | ....     | 267      | ....     | 72       | ....     | ....     | 31       | ....     | 11       | 4,285  |
| Hyde Park..... |                 | 93      | 986     | 238     | 20       | 71       | 4        | 49       | ....     | 1        | 21       | ....     | 6        | 1,489  |
| Lake View. 1   |                 | 257     | 659     | 147     | ....     | 31       | 3        | 5        | ....     | 3        | 5        | ....     | 4        | 1,115  |
| Lake.....      |                 | 126     | 1,029   | 303     | 2        | 66       | 14       | 13       | 2        | ....     | 18       | ....     | 2        | 1,575  |
| Jefferson..... |                 | 22      | 423     | 224     | ....     | 61       | ....     | 8        | ....     | ....     | 24       | ....     | ....     | 762    |
| Calumet....    |                 | 3       | 184     | 67      | ....     | 8        | ....     | 2        | ....     | ....     | 1        | ....     | ....     | 265    |
| Totals..       | 1               | 1,403   | 6,547   | 3,085   | 22       | 621      | 21       | 187      | 2        | 4        | 141      | ...      | 39       | 12,073 |

## WORK IN DETAIL.

The following tables show in detail the work of water-pipe extension :

## NORTH DIVISION.

| STREET                                   | FROM         | TO              | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|------------------------------------------|--------------|-----------------|---------------------------------|-----------------------|
| Hawthorne avenue .....                   | Hobbie ..... | Northward ..... | 500                             | 8                     |
| Superior .....                           | Clark .....  | Wells .....     | 667                             | 8                     |
| Total feet laid in North Division ... .. |              |                 | 1,167                           |                       |

## SOUTH DIVISION.

| STREET                                  | FROM                       | TO                     | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|-----------------------------------------|----------------------------|------------------------|---------------------------------|-----------------------|
| Carlin .....                            | Washington .....           | Northward .....        | 38                              | 6                     |
| Poplar avenue .....                     | Crossing .....             | Archer avenue .....    | 36                              | 6                     |
| Poplar avenue .....                     | Twenty ninth .....         | Northward .....        | 675                             | 6                     |
| Robey .....                             | Archer avenue .....        | Thirty-fifth .....     | 875                             | 8                     |
| Spaulding avenue .....                  | Joseph .....               | Thirty-ninth .....     | 333                             | 6                     |
| Thirty-first .....                      | Vermont .....              | Robey .....            | 306                             | 6                     |
| †Thirty-second .....                    | Illinois avenue .....      | Auburn avenue .....    | 890                             | 6                     |
| Thirty-fourth .....                     | Crossing .....             | Robey .....            | 41                              | 6                     |
| Thirty-fourth .....                     | 65 ft. E. of Lincoln ..... | Archer avenue .....    | 350                             | 8                     |
| Thirty-sixth .....                      | Hoyne avenue .....         | Eastward .....         | 72                              | 6                     |
| Thirty-eighth place .....               | Albany avenue .....        | Kedzie avenue .....    | 665                             | 6                     |
| †Thirty-eighth .....                    | St. Louis avenue .....     | Central Park avenue .. | 669                             | 6                     |
| Thirty-ninth .....                      | Leggitt .....              | Westward .....         | 300                             | 8                     |
| Thirty-ninth .....                      | Spaulding avenue .....     | Homan avenue .....     | 618                             | 6                     |
| Total .....                             |                            |                        | 4,868                           |                       |
| Add Branch Pipe for Hydrants .....      |                            |                        | 12                              | 4                     |
| Add Branch Pipe for Hydrants .....      |                            |                        | 72                              | 6                     |
| Total feet laid in South Division ..... |                            |                        | 4,952                           |                       |

†Laid by Special Assessment.

## WEST DIVISION.

| STREET                             | FROM                     | TO                               | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|------------------------------------|--------------------------|----------------------------------|---------------------------------|-----------------------|
| Alley W. Central Park boulevard... | Augusta .....            | Southward .....                  | 48                              | 6                     |
| *Alley N. Jackson blvd...          | Central Park avenue...   | Eastward .....                   | 220                             | 4                     |
| Alley S. Madison .....             | 202 ft. E. of Loomis ..  | Eastward .....                   | 127                             | 6                     |
| *Adams .....                       | Hamlin avenue .....      | N. Fortieth avenue ...           | 1,300                           | 6                     |
| Albany avenue .....                | Crossing .....           | Chicago avenue .....             | 72                              | 6                     |
| *Ashland avenue .....              | Grand avenue .....       | 100 ft. N. of Austin av.         | 280                             | 6                     |
| *Armitage avenue .....             | Elston avenue .....      | 41 ft. W. of Mendell..           | 176                             | 6                     |
| *Augusta .....                     | Grand avenue .....       | Kedzie avenue .....              | 470                             | 6                     |
| *Augusta .....                     | Kedzie avenue .....      | Eastward .....                   | 750                             | 6                     |
| Augusta .....                      | Springfield avenue...    | Eastward .....                   | 212                             | 8                     |
| Beach avenue .....                 | N. Spaulding avenue...   | Eastward .....                   | 285                             | 6                     |
| Bonney avenue .....                | Colorado avenue .....    | Harrison .....                   | 442                             | 6                     |
| †Bonney avenue .....               | Sixteenth .....          | Douglas Park blvd. ...           | 1,122                           | 6                     |
| Central Park avenue .....          | Lake .....               | Northward .....                  | 25                              | 8                     |
| Central Park avenue .....          | Central Park blvd. ....  | Southward .....                  | 26                              | 6                     |
| †Central Park boulevard ..         | Kedzie avenue .....      | Central Park avenue ..           | 2,685                           | 6                     |
| Chicago avenue .....               | Kedzie avenue .....      | 150 ft. W. of Central Park blvd. | 921                             | 16                    |
| †Chicago avenue .....              | Kedzie avenue .....      | Central Park blvd .....          | 1,088                           | 6                     |
| Chicago avenue .....               | Crossing .....           | Kedzie avenue .....              | 25                              | 12                    |
| Chicago avenue .....               | Grand avenue .....       | Drummond avenue .....            | 375                             | 6                     |
| Christiana avenue .....            | Crossing .....           | Chicago avenue .....             | 48                              | 6                     |
| *Clarkson .....                    | Lake .....               | Walnut .....                     | 468                             | 6                     |
| Colorado avenue .....              | 141 ft. E. of Medora ..  | Eastward .....                   | 425                             | 8                     |
| *Colorado avenue .....             | Medora .....             | Eastward .....                   | 141                             | 8                     |
| *Colorado avenue .....             | 50 ft. W. of Hamlin av.  | Springfield avenue .....         | 607                             | 8                     |
| Colorado avenue .....              | Forty-seventh .....      | Eastward .....                   | 572                             | 8                     |
| *Congress .....                    | Hamlin avenue .....      | Westward .....                   | 1,301                           | 6                     |
| Congress .....                     | Forty-fifth court .....  | Eastward .....                   | 41                              | 6                     |
| *Cornelia .....                    | Washtenaw avenue .....   | Rockwell .....                   | 662                             | 6                     |
| *Crystal .....                     | 411 ft. E. of Robey ..   | Eastward .....                   | 67                              | 4                     |
| †Douglas Park blvd., N. S.         | Kedzie avenue .....      | Troy .....                       | 687                             | 6                     |
| Eagle .....                        | Halsted .....            | Desplaines .....                 | 824                             | 6                     |
| Erie .....                         | N. Forty-eighth av ..    | Westward .....                   | 990                             | 6                     |
| Fifty-second avenue, N ..          | Huron .....              | Southward .....                  | 490                             | 8                     |
| Fifteenth .....                    | Trumbull .....           | Eastward .....                   | 68                              | 6                     |
| †Flournoy .....                    | Kedzie .....             | Albany .....                     | 508                             | 6                     |
| †Flournoy .....                    | 320 ft. W. of Kedzie av  | Central Park avenue ..           | 2,272                           | 6                     |
| †Flournoy .....                    | California avenue .....  | Washtenaw avenue .....           | 615                             | 6                     |
| Flournoy .....                     | 810 ft. E. of S. 47th av | Eastward .....                   | 72                              | 6                     |
| Fortieth avenue, S .....           | Thirty-first .....       | Thirty-third .....               | 1,325                           | 8                     |
| Fortieth avenue, N .....           | 101 ft. N. of Kinzie...  | Northward .....                  | 348                             | 12                    |
| *Fortieth avenue, S .....          | Harrison .....           | Madison .....                    | 2,656                           | 8                     |
| Forty-first court, S .....         | Harvard .....            | Northward .....                  | 600                             | 6                     |
| Forty-first court, S .....         | Crossing .....           | Adams .....                      | 76                              | 6                     |
| Forty-second avenue, S ..          | Twelfth .....            | Northward .....                  | 177                             | 6                     |
| †Forty-second avenue, S ..         | Twenty-sixth .....       | Twenty-eighth .....              | 625                             | 6                     |
| †Forty-second avenue, S ..         | Harrison .....           | Colorado .....                   | 645                             | 6                     |
| †Forty-second avenue, S ..         | Harvard .....            | Greshaw .....                    | 1,059                           | 6                     |
| Forty-second avenue, S ..          | Crossing .....           | Adams .....                      | 76                              | 6                     |
| Forty-second avenue, S ..          | Colorado avenue .....    | Harvard .....                    | 605                             | 6                     |
| †Forty-second avenue, S ..         | Sixteenth .....          | Southward .....                  | 25                              | 6                     |
| *Forty-second court, S .....       | Colorado avenue .....    | Northward .....                  | 208                             | 6                     |
| †Forty-third avenue, S .....       | Twenty-second .....      | C., B. & Q. tracks .....         | 1,403                           | 6                     |
| †Forty-third court, S .....        | C., B. & Q. Tracks ..... | Twenty-second .....              | 1,480                           | 6                     |
| Forty-fourth avenue, S ..          | Madison .....            | Lake .....                       | 1,782                           | 8                     |

## WEST DIVISION—CONTINUED.

| STREET                     | FROM                     | TO                       | Length<br>of<br>Pipe<br>in feet | Diameter<br>in<br>inches |
|----------------------------|--------------------------|--------------------------|---------------------------------|--------------------------|
| Forty-fourth avenue, S...  | Crossing.....            | Twenty-second.....       | 155                             | 8                        |
| Forty-fourth avenue, S...  | Adams.....               | Southward.....           | 72                              | 8                        |
| †Forty-fourth avenue, S... | Twenty-second.....       | C., B. & Q. tracks...    | 1,650                           | 8                        |
| Forty-fifth avenue, S...   | Adams.....               | Southward.....           | 73                              | 8                        |
| Forty-fifth court, S...    | Congress.....            | Northward.....           | 284                             | 6                        |
| Forty-seventh avenue, S... | Colorado.....            | Lilla.....               | 313                             | 6                        |
| Fulton.....                | S. Forty-fourth.....     | Eastward.....            | 25                              | 6                        |
| Fulton.....                | S. Forty-sixth av.....   | Westward.....            | 336                             | 6                        |
| Green.....                 | Monroe.....              | Madison.....             | 471                             | 6                        |
| *Gladys avenue.....        | S. Fortieth av.....      | Westward.....            | 29                              | 6                        |
| *Gladys avenue.....        | Hamlin avenue.....       | Westward.....            | 1,276                           | 6                        |
| Hamlin avenue.....         | Crossing.....            | Chicago avenue.....      | 31                              | 8                        |
| *Hamlin avenue.....        | Colorado avenue.....     | Madison.....             | 2,383                           | 8                        |
| Hamlin avenue.....         | Ogden avenue.....        | Twenty second.....       | 360                             | 6                        |
| *Hamlin avenue.....        | Twenty-fourth.....       | Northward.....           | 666                             | 8                        |
| Hamlin avenue.....         | Twenty-sixth.....        | Northward.....           | 250                             | 8                        |
| †Hamliu avenue.....        | Swift.....               | Thirty-first.....        | 1,426                           | 8                        |
| Harding avenue.....        | Chicago Terrace.....     | Met. Terrace.....        | 217                             | 6                        |
| †Harding avenue.....       | Fourteenth.....          | Sixteenth.....           | 1,331                           | 6                        |
| Harrison.....              | Crossing.....            | S. Forty-second av.....  | 24                              | 8                        |
| Harvard.....               | Springfield avenue...    | Westward.....            | 340                             | 6                        |
| Harvard.....               | S. Forty-second avenue   | Eastward.....            | 334                             | 6                        |
| Harvard.....               | S. Forty-second avenue   | Eastward.....            | 460                             | 6                        |
| †Hawley av.....            | Twenty-second.....       | C., B. & Q. tracks...    | 1,660                           | 6                        |
| Homan avenue.....          | Chicago avenue.....      | Northward.....           | 320                             | 8                        |
| Homan avenue.....          | Central Park blvd...     | Northward.....           | 30                              | 8                        |
| †Homan avenue.....         | Twenty-sixth.....        | Twenty-eighth.....       | 1,300                           | 8                        |
| Holstein Park, W. S...     | Hamburg.....             | Northward.....           | 191                             | 6                        |
| Huron.....                 | Hamlin.....              | Eastward.....            | 53                              | 6                        |
| Iowa.....                  | Washtenaw avenue...      | Eastward.....            | 594                             | 6                        |
| *Jackson boulevard...      | Hamlin avenue.....       | S. Fortieth avenue...    | 1,300                           | 6                        |
| *Jackson boulevard...      | Central Park avenue...   | Eastward.....            | 177                             | 4                        |
| *Lawndale avenue.....      | Thirty-first.....        | Thirty-fourth.....       | 2,025                           | 8                        |
| †Lexington.....            | Central Park avenue...   | Lawndale avenue...       | 612                             | 6                        |
| Lilla.....                 | S. Forty-seventh av...   | Westward.....            | 200                             | 6                        |
| Lull place.....            | Connecting.....          | Milwaukee avenue...      | 7                               | 6                        |
| Madison.....               | Connecting.....          | Garfield Park blvd...    | 15                              | 6                        |
| Milwaukee avenue...        | Ashland avenue.....      | Wood.....                | 1,400                           | 12                       |
| *Monroe.....               | Hamlin avenue.....       | S. Fortieth avenue...    | 1,312                           | 6                        |
| Monticello avenue...       | Grand avenue.....        | Southward.....           | 252                             | 8                        |
| Monticello avenue...       | Ohio.....                | Huron.....               | 668                             | 8                        |
| Monticello avenue...       | Le Moyne.....            | Hirsch.....              | 602                             | 6                        |
| †Ogden avenue.....         | S. Forty-fourth avenue   | S. Forty-second.....     | 1,429                           | 8                        |
| Ogden avenue.....          | Crossing.....            | S. Forty-second avenue   | 31                              | 8                        |
| Ogden avenue.....          | Central Park avenue...   | Millard avenue.....      | 314                             | 6                        |
| †Park avenue.....          | S. Forty-fifth avenue... | S. Forty-sixth avenue... | 500                             | 6                        |
| Paulina.....               | Connecting.....          | Milwaukee avenue...      | 18                              | 6                        |
| Pierce avenue.....         | Kedzie avenue.....       | Westward.....            | 282                             | 6                        |
| Rice.....                  | Rockwell.....            | Washtenaw avenue...      | 619                             | 6                        |
| Ridgeway avenue...         | Chicago avenue.....      | Southward.....           | 60                              | 6                        |
| Rockwell.....              | Chicago avenue.....      | Rice.....                | 318                             | 12                       |
| Rockwell.....              | Jane.....                | Southward.....           | 276                             | 12                       |
| Rockwell.....              | Crossing.....            | Twenty-first.....        | 90                              | 6                        |
| †Sawyer avenue.....        | Twenty-sixth.....        | Twenty-fourth.....       | 1,032                           | 6                        |
| †Sixteenth, W.....         | S. Forty-second av.....  | S. Forty-third av.....   | 627                             | 8                        |

## WEST DIVISION—CONTINUED.

| STREET                                 | FROM                           | TO                           | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|----------------------------------------|--------------------------------|------------------------------|---------------------------------|-----------------------|
| Sixteenth .....                        | Trumbull avenue .....          | Eastward .....               | 68                              | 8                     |
| Spaulding avenue .....                 | Adams .....                    | Colorado avenue .....        | 254                             | 6                     |
| Spaulding avenue .....                 | Monroe .....                   | Adams .....                  | 380                             | 6                     |
| †Spaulding avenue .....                | Twenty-fourth .....            | Twenty-sixth .....           | 982                             | 8                     |
| Springfield avenue .....               | North avenue .....             | Southward .....              | 258                             | 8                     |
| St Louis avenue .....                  | Twenty-eighth .....            | Southward .....              | 214                             | 8                     |
| Superior .....                         | Forty-seventh .....            | Westward .....               | 225                             | 6                     |
| Thirtieth .....                        | Kedzie avenue .....            | Eastward .....               | 300                             | 6                     |
| Thirty-first, W .....                  | S. Fortieth court .....        | S. Fortieth avenue .....     | 361                             | 8                     |
| *Thirty-fourth .....                   | Lawndale avenue .....          | Bonney avenue .....          | 360                             | 6                     |
| Troy .....                             | Crossing .....                 | Chicago avenue .....         | 53                              | 6                     |
| Troy .....                             | Thirtieth .....                | Southward .....              | 452                             | 6                     |
| †Trumbull avenue .....                 | 305 ft. S. of Sixteenth .....  | Douglas Park blvd .....      | 1,547                           | 6                     |
| Trumbull avenue .....                  | Sixteenth .....                | Douglas Park blvd .....      | 20                              | 6                     |
| †Trumbull avenue .....                 | 328 ft. S. Twenty-second ..... | Twenty-third .....           | 809                             | 6                     |
| †Trumbull avenue .....                 | 120 ft. S. Twenty-third .....  | Twenty-fifth .....           | 1,166                           | 6                     |
| *Turner avenue .....                   | Twenty-fifth .....             | Northward .....              | 325                             | 6                     |
| *Turner avenue .....                   | Twenty-sixth .....             | Southward .....              | 598                             | 6                     |
| *Twenty-first, W .....                 | Rockwell .....                 | Eastward .....               | 667                             | 6                     |
| †Twenty-second, S. S .....             | S. Fortieth av. ....           | S. Forty-fourth avenue ..... | 2,604                           | 6                     |
| †Twenty-second, N. S. ....             | S. Fortieth av. ....           | S. Forty-fourth avenue ..... | 2,618                           | 6                     |
| Twenty-third .....                     | Connecting .....               | Hamlin avenue .....          | 41                              | 6                     |
| Twenty-fourth .....                    | Trumbull avenue .....          | Eastward .....               | 75                              | 6                     |
| Twenty fifth .....                     | Trumbull avenue .....          | Eastward .....               | 70                              | 6                     |
| *Van Buren .....                       | Hamlin avenue .....            | S. Fortieth avenue .....     | 1,300                           | 6                     |
| *Wilcox avenue .....                   | Hamlin avenue .....            | S. Fortieth avenue .....     | 1,300                           | 6                     |
| Total .....                            |                                |                              | 81,829                          |                       |
| Add Branch Pipe for Hydrant .....      |                                |                              | 86                              | 4                     |
| Add Branch Pipe for Hydrant .....      |                                |                              | 2,028                           | 6                     |
| Total feet laid in West Division ..... |                                |                              | 83,898                          |                       |

\* Laid by Deposit.

† Laid by Special Assessment.

## HYDE PARK DISTRICT.

| STREET                    | FROM                      | TO                          | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|---------------------------|---------------------------|-----------------------------|---------------------------------|-----------------------|
| *Alley W. of Drexel blvd. | Forty-fourth .....        | Northward .....             | 355                             | 6                     |
| Alley W. of Drexel blvd.  | Forty-fifth .....         | Southward .....             | 240                             | 6                     |
| Alley E. of Grand blvd.   | Forty-ninth .....         | Southward .....             | 188                             | 6                     |
| Alley W. of Grand blvd.   | 158 ft. N. Forty-eighth   | 159 ft. S. Forty-eighth     | 383                             | 4                     |
| Alley E. of Grand blvd.   | Ione place .....          | Forty-ninth .....           | 331                             | 6                     |
| Bissell avenue .....      | Seventy-third .....       | Southward .....             | 96                              | 6                     |
| Buffalo avenue .....      | Eighty-seventh .....      | Ninety-second .....         | 3,330                           | 24                    |
| Calumet avenue .....      | 836 ft. S. of Fifty-ninth | Southward .....             | 264                             | 6                     |
| Calumet avenue .....      | Sixtieth .....            | Southward .....             | 408                             | 6                     |
| †Carlin avenue .....      | Seventy-ninth .....       | Eighty-first .....          | 1,360                           | 6                     |
| †Central avenue .....     | Seventy-ninth .....       | Eighty-third .....          | 2,586                           | 6                     |
| †Champlain avenue .....   | Sixty-seventh .....       | Sixty-eighth .....          | 672                             | 6                     |
| Eighty-third .....        | Yates avenue .....        | Superior avenue .....       | 5,617                           | 24                    |
| Eighty-third .....        | Constance .....           | Anthony avenue .....        | 264                             | 8                     |
| †Eighty-third .....       | Anthony .....             | Elizabeth .....             | 1,418                           | 8                     |
| Eighty-seventh .....      | Superior avenue .....     | Buffalo avenue .....        | 232                             | 24                    |
| *Eighty-ninth .....       | Marquette avenue .....    | Saginaw avenue .....        | 380                             | 6                     |
| †Elizabeth avenue .....   | Eighty-first .....        | Eighty-third .....          | 1,311                           | 6                     |
| †Ewing avenue .....       | Ninety fifth .....        | Ninety eighth .....         | 1,039                           | 6                     |
| Forty-eighth .....        | 175 ft. W. Langley av.    | Champlain avenue .....      | 180                             | 6                     |
| Forty-eighth .....        | Crossing .....            | Greenwood avenue .....      | 48                              | 6                     |
| Fiftieth .....            | Crossing .....            | Cottage Grove avenue        | 192                             | 6                     |
| Fifty-second .....        | Hibbard .....             | Madison avenue .....        | 450                             | 6                     |
| Fifty-third .....         | Horton avenue .....       | Ellis avenue .....          | 425                             | 8                     |
| Fifty-sixth .....         | Indiana avenue .....      | Eastward .....              | 400                             | 6                     |
| Fifty-eighth .....        | Madison avenue .....      | Monroe avenue .....         | 440                             | 6                     |
| Harbor avenue .....       | Ninety-second .....       | S. Chicago avenue .....     | 1,919                           | 24                    |
| Indiana avenue .....      | 113th .....               | Northward .....             | 58                              | 6                     |
| †Jeffrey avenue .....     | Seventy-ninth .....       | Eighty-third .....          | 2,642                           | 8                     |
| Madison avenue .....      | Eighty-third .....        | Southward .....             | 848                             | 6                     |
| *Marquette avenue .....   | Eighty-eighth .....       | Eighty-ninth .....          | 680                             | 6                     |
| Michigan avenue .....     | 103d .....                | 50 ft. N. of 100th place    | 1,741                           | 6                     |
| McChesney avenue .....    | Sixty-sixth .....         | Southward .....             | 444                             | 6                     |
| Ninety-first .....        | Crossing .....            | Buffalo avenue .....        | 47                              | 16                    |
| Ninety-second .....       | Buffalo avenue .....      | Harbor avenue .....         | 811                             | 24                    |
| Ninety-second .....       | Crossing .....            | Harbor avenue .....         | 48                              | 8                     |
| Ninety second .....       | Connecting .....          | Harbor avenue .....         | 24                              | 12                    |
| Ninety-second .....       | Connecting .....          | Harbor avenue .....         | 24                              | 16                    |
| †Ninety-third .....       | Stony Island avenue ..... | Luella avenue .....         | 4,390                           | 8                     |
| Ninety-seventh .....      | Commercial avenue .....   | Exchange avenue .....       | 878                             | 6                     |
| †Ninety-ninth place ..... | Michigan avenue .....     | State .....                 | 890                             | 6                     |
| †Ninety-ninth .....       | Indiana avenue .....      | Michigan avenue .....       | 435                             | 12                    |
| Nutt avenue .....         | 40 ft. N. Seventy-first.  | 23 ft. S. Seventy-first pl. | 332                             | 6                     |
| †100th .....              | Michigan avenue .....     | State .....                 | 935                             | 6                     |
| 106th .....               | 40 ft. E. of Hoxie av.    | Westward .....              | 312                             | 8                     |
| 118th .....               | South Park avenue .....   | Eastward .....              | 400                             | 6                     |
| 114th .....               | Michigan avenue .....     | Westward .....              | 182                             | 6                     |
| 119th .....               | Connecting .....          | Michigan avenue .....       | 58                              | 8                     |
| Plaisance court .....     | Washington avenue .....   | Eastward .....              | 128                             | 6                     |
| Ross avenue .....         | Indiana avenue .....      | Eastward .....              | 600                             | 6                     |
| Rupp avenue .....         | Ninety-third .....        | Southward .....             | 214                             | 6                     |
| *Saginaw avenue .....     | Eighty-ninth .....        | Northward .....             | 215                             | 6                     |
| Sixty-second .....        | Woodlawn avenue .....     | Eastward .....              | 225                             | 6                     |
| Sixty-fourth .....        | Crossing .....            | Rhodes avenue .....         | 60                              | 6                     |
| Sixty-fourth .....        | Crossing .....            | Langley avenue .....        | 60                              | 6                     |



## HYDE PARK DISTRICT—CONTINUED.

| STREET                             | FROM                      | TO                        | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|------------------------------------|---------------------------|---------------------------|---------------------------------|-----------------------|
| Sixty-fourth .....                 | Crossing .....            | St. Lawrence avenue..     | 78                              | 6                     |
| Sixty-fifth .....                  | Crossing .....            | Langley avenue .....      | 60                              | 6                     |
| Sixty-fifth .....                  | Crossing .....            | Rhodes avenue .....       | 72                              | 6                     |
| Sixty-fifth .....                  | Crossing .....            | St. Lawrence avenue..     | 81                              | 6                     |
| Sixty-fifth .....                  | Wharton avenue .....      | Westward .....            | 175                             | 6                     |
| *Sixty-fifth .....                 | Woodlawn .....            | Eastward .....            | 180                             | 6                     |
| Sixty-sixth .....                  | Crossing .....            | St. Lawrence avenue..     | 81                              | 6                     |
| Sixty-sixth .....                  | Crossing .....            | Langley avenue .....      | 60                              | 6                     |
| Sixty-sixth .....                  | Crossing .....            | Rhodes avenue .....       | 60                              | 6                     |
| Sixty-eighth .....                 | Crossing .....            | St. Lawrence avenue..     | 72                              | 6                     |
| Sixty-ninth .....                  | S. Park avenue .....      | Vernon avenue .....       | 398                             | 6                     |
| Superior avenue .....              | Eighty-third .....        | Eighty-seventh .....      | 2,653                           | 24                    |
| *Seventy-first .....               | S. Park avenue .....      | St. Lawrence avenue..     | 1,260                           | 8                     |
| Seventy-third .....                | La Salle avenue .....     | Westward .....            | 254                             | 6                     |
| Seventy-third place .....          | Railroad avenue .....     | Eastward .....            | 252                             | 6                     |
| †Seventy-ninth .....               | Carlin avenue .....       | Duncan avenue .....       | 532                             | 12                    |
| †State .....                       | Seventieth .....          | Seventy-fifth .....       | 3,325                           | 8                     |
| St. Lawrence avenue .....          | Sixty-fifth .....         | Sixty-seventh .....       | 1,877                           | 6                     |
| *South Park avenue .....           | Sixty-third .....         | Sixty-seventh .....       | 2,668                           | 8                     |
| South Park avenue .....            | 118th .....               | Southward ..              | 300                             | 8                     |
| Vernon avenue .....                | Sixty-seventh .....       | Sixty-sixth .....         | 656                             | 6                     |
| Vernon avenue .....                | Crossing .....            | Sixty-ninth .....         | 20                              | 6                     |
| Vincennes avenue .....             | 400 ft. S. of Sixty-fifth | 260 ft. S. of Sixty-sixth | 676                             | 6                     |
| Wabash avenue .....                | Sixty-ninth .....         | Southward .....           | 390                             | 6                     |
| †Wabash avenue .....               | 300 ft. S. of Sixty-ninth | Seventy-first .....       | 866                             | 6                     |
| Wabash avenue .....                | 107th .....               | Southward .....           | 348                             | 6                     |
| †Wendell avenue .....              | Seventy-ninth .....       | Eighty-first .....        | 1,360                           | 6                     |
| Woodlawn avenue .....              | Seventy-first .....       | Seventy-second .....      | 675                             | 8                     |
| Yates avenue .....                 | Seventy-ninth .....       | Eighty-third .....        | 2,687                           | 36                    |
| Total .....                        |                           |                           | 62,083                          |                       |
| Add Branch Pipe for Hydrants ..... |                           |                           | 360                             | 4                     |
| Add Branch Pipe for Hydrants ..... |                           |                           | 1,140                           | 6                     |
| Total feet laid in Hyde Park ..... |                           |                           | 63,583                          |                       |

\*Laid by deposit.

†Laid by Special Assessment.

## LAKE VIEW DISTRICT.

| STREET                            | FROM                     | TO                               | Length<br>of<br>Pipe<br>in feet | Diameter<br>in<br>inches |
|-----------------------------------|--------------------------|----------------------------------|---------------------------------|--------------------------|
| †Alley E. of East Ravenswood Park | Foster avenue.....       | Berwyn avenue.....               | 641                             | 6                        |
| Alley E. of East Ravenswood Park  | Connecting .....         | Berwyn avenue.....               | 115                             | 6                        |
| Addison .....                     | Western avenue .....     | Eastward .....                   | 60                              | 16                       |
| †Ashland avenue .....             | Bryn Mawr avenue ..      | 125 ft. N. Edgewater av.         | 1,050                           | 6                        |
| †Balmoral avenue .....            | W. Ravenswood Park.      | Robey .....                      | 1,149                           | 6                        |
| †Berteau avenue.....              | Lincoln avenue.....      | Robey .....                      | 657                             | 8                        |
| †Berwyn avenue.....               | Robey .....              | W. Ravenswood Park.              | 1,157                           | 6                        |
| *Berwyn avenue.....               | Leavitt.....             | Palifox court.....               | 332                             | 6                        |
| †Bryn Mawr avenue .....           | Clark .....              | Hamilton avenue.....             | 1,150                           | 8                        |
| †Carmen avenue.....               | Clark .....              | Southport avenue.....            | 932                             | 6                        |
| †Carmen avenue.....               | 110 ft. W. Ashland av.   | E. Ravenswood Park..             | 728                             | 6                        |
| Carmen avenue.....                | 510 ft. W. Ashland av.   | Connection .....                 | 24                              | 6                        |
| Claremont avenue .....            | 166 ft. N. Sunnyside av. | Northward .....                  | 75                              | 6                        |
| Claremont avenue .....            | Cosgrove avenue .....    | Northward .....                  | 168                             | 6                        |
| *Claremont avenue .....           | Cosgrove avenue .....    | Southward.....                   | 283                             | 6                        |
| Cornelia .....                    | Reta .....               | Rokeby .....                     | 328                             | 6                        |
| *Cosgrove .....                   | Commercial avenue...     | E. Ravenswood Park..             | 400                             | 6                        |
| Craft .....                       | 50 ft. N. of School..    | Southward.....                   | 470                             | 4                        |
| Dakin .....                       | Sheffield avenue.....    | Eastward .....                   | 170                             | 4                        |
| Eastwood avenue.....              | Western avenue.....      | Eastward .....                   | 114                             | 6                        |
| †Edgewater avenue.....            | Ashland avenue.....      | Hamilton avenue.....             | 850                             | 6                        |
| †Farragut avenue.....             | N. Lincoln .....         | Robey .....                      | 831                             | 6                        |
| †Farragut avenue.....             | N. Paulina .....         | Alley E. of E. Ravenswood Park   | 460                             | 6                        |
| †Farragut avenue.....             | N. Lincoln .....         | W. Ravenswood Park .             | 333                             | 6                        |
| *Farragut avenue.....             | Leavitt .....            | Oakley avenue .....              | 628                             | 6                        |
| †Foster avenue.....               | Robey .....              | E. Ravenswood Park .             | 1,411                           | 6                        |
| *George .....                     | Robey .....              | North Lincoln .....              | 978                             | 6                        |
| Grace .....                       | Western avenue .....     | Eastward .....                   | 60                              | 12                       |
| *Grace .....                      | Hoyle .....              | Robey .....                      | 660                             | 8                        |
| †Grace .....                      | Lincoln avenue .....     | W. Ravenswood Park.              | 558                             | 6                        |
| Gill avenue .....                 | Racine avenue .....      | Westward .....                   | 636                             | 6                        |
| †Graceland avenue .....           | Irving avenue .....      | N. Branch of Chicago River ..    | 2,381                           | 8                        |
| Grand avenue.....                 | Winthrop avenue.....     | Westward .....                   | 275                             | 8                        |
| *Hamilton avenue N.....           | Grace .....              | Graceland avenue .....           | 1,325                           | 6                        |
| †Hollywood avenue.....            | Ashland avenue .....     | Hamilton avenue.....             | 850                             | 6                        |
| Hoyne avenue.....                 | Sunnyside avenue .....   | Southward.....                   | 408                             | 6                        |
| *Hoyne avenue .....               | Graceland avenue .....   | Grace .....                      | 1,319                           | 6                        |
| Irving avenue .....               | Cosgrove avenue .....    | Northward.....                   | 168                             | 6                        |
| *Irving avenue .....              | Cosgrove avenue .....    | Southward.....                   | 283                             | 6                        |
| *Lawrence avenue.....             | Sheffield avenue.....    | Lake Michigan.....               | 256                             | 6                        |
| *Lincoln avenue.....              | Montrose boulevard       | 156 ft. S. of Wilson...          | 1,235                           | 8                        |
| *Leavitt .....                    | 166 ft. N. of Berwyn..   | Foster avenue.....               | 855                             | 6                        |
| *Leavitt .....                    | Graceland avenue .....   | Byron .....                      | 663                             | 6                        |
| †Lincoln .....                    | Berwyn avenue.....       | Balmoral avenue .....            | 685                             | 6                        |
| Lincoln avenue.....               | 44 ft. N. of Wilson ..   | Southward.....                   | 200                             | 8                        |
| †Miller court.....                | Foster avenue .....      | Northward .....                  | 28                              | 6                        |
| *North Fifty-ninth.....           | Leavitt .....            | Oakley avenue .....              | 650                             | 6                        |
| *Oakdale avenue .....             | Robey .....              | 138 ft. E. of W. Ravenswood Park | 1,204                           | 6                        |
| Oakley avenue .....               | Cosgrove avenue .....    | Northward.....                   | 168                             | 6                        |
| *Oakley avenue .....              | Cosgrove avenue .....    | Southward.....                   | 283                             | 6                        |
| Oakley avenue .....               | Graceland avenue.....    | Southward .....                  | 31                              | 6                        |
| *Oakley avenue .....              | Winnemac avenue.....     | North Fifty-ninth .....          | 1,050                           | 6                        |
| †Olive avenue.....                | Ashland avenue .....     | Hamilton avenue.....             | 850                             | 6                        |
| *Palifox court .....              | Berwyn avenue.....       | Northward .....                  | 300                             | 6                        |
| *Paulina.....                     | Diversey avenue.....     | Southward.....                   | 399                             | 6                        |

## LAKE VIEW DISTRICT—CONTINUED.

| STREET                                     | FROM                    | TO                   | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|--------------------------------------------|-------------------------|----------------------|---------------------------------|-----------------------|
| Paulina .....                              | Glenlake avenue.....    | Northward .....      | 153                             | 6                     |
| †Paulina .....                             | Foster avenue .....     | Berwyn avenue .....  | 700                             | 6                     |
| *Ravenswood Park, W.....                   | Wellington avenue ...   | Oakdale avenue ..... | 356                             | 6                     |
| †Ravenswood Park, W.....                   | Foster avenue .....     | Southward .....      | 49                              | 6                     |
| Ravenswood Park, E.....                    | Foster avenue.....      | Southward .....      | 50                              | 6                     |
| *Ridge avenue .....                        | N. Hermitage avenue     | E. Ravenswood Park.. | 455                             | 6                     |
| *Robey .....                               | Oakdale avenue .....    | Noble avenue .....   | 1,297                           | 6                     |
| Roscoe .....                               | Western avenue.....     | Eastward .....       | 20                              | 12                    |
| *Seeley avenue.....                        | Grace .....             | Graceland avenue ... | 1,325                           | 6                     |
| *Seeley avenue.....                        | Addison .....           | Cornelia .....       | 720                             | 6                     |
| †Seminary avenue .....                     | Waveland avenue.....    | Northward .....      | 261                             | 4                     |
| *Seminary avenue .....                     | Grace .....             | Southward .....      | 465                             | 4                     |
| †Summerdale avenue .....                   | W. Ravenswood Park.     | Robey .....          | 1,152                           | 6                     |
| Wellington avenue.....                     | 139 ft. E. of Robey ... | W. Ravenswood Park.  | 938                             | 6                     |
| Western avenue .....                       | Roscoe .....            | Southward .....      | 25                              | 8                     |
| *Western avenue .....                      | Wilson .....            | Eastwood avenue..... | 336                             | 8                     |
| †Western avenue .....                      | Haynes avenue.....      | Roscoe .....         | 3,569                           | 8                     |
| *Western avenue .....                      | Sunnyside avenue .....  | Northward .....      | 380                             | 8                     |
| †Wilson avenue .....                       | Ashland avenue.....     | Eastward .....       | 215                             | 6                     |
| †Wilton avenue .....                       | Grace .....             | Byron .....          | 630                             | 6                     |
| *Winthrop avenue.....                      | Rosemont avenue .....   | Devon avenue.....    | 668                             | 6                     |
| *Wolfram.....                              | Robey .....             | North Lincoln .....  | 973                             | 6                     |
| Total .....                                |                         |                      | 48,905                          |                       |
| Add Branch Pipe for Hydrants .....         |                         |                      | 324                             | 4                     |
| Add Branch Pipe for Hydrants .....         |                         |                      | 1,164                           | 6                     |
| Total feet laid in Lake View District..... |                         |                      | 50,393                          |                       |

\*Laid by Deposit.

†Laid by Special Assessment.

## LAKE DISTRICT.

| STREET                        | FROM                        | TO                | Length<br>of<br>Pipe<br>in feet | Diameter<br>in<br>inches |
|-------------------------------|-----------------------------|-------------------|---------------------------------|--------------------------|
| †Alley 1st S. of Fifty-fifth. | Center avenue               | Loomis            | 1,293                           | 6                        |
| *Alley 1st N. of Fifty-fifth. | Loomis                      | Westward          | 182                             | 6                        |
| Alley 1st S. of Fifty-fifth.  | Crossing                    | Loomis            | 61                              | 6                        |
| Alley 1st S. of Fifty-fifth.  | Connecting                  | Center avenue     | 4                               | 6                        |
| †Aberdeen                     | Seventy-third               | Southward         | 162                             | 6                        |
| †Ada                          | Alley S. of Fifty-fifth     | Fifty-seventh     | 974                             | 6                        |
| †Ashland avenue               | Fifty-ninth                 | Sixty-third       | 2,676                           | 8                        |
| Ashland avenue                | Fifty-ninth                 | Northward         | 24                              | 8                        |
| Ashland avenue                | Crossing                    | Sixty-third       | 53                              | 8                        |
| †Bishop                       | Sixtieth                    | Sixty-third       | 1,985                           | 6                        |
| Bishop                        | Crossing                    | Sixty-third       | 41                              | 6                        |
| †Bishop                       | Fifty-eighth                | Fifty-ninth       | 340                             | 6                        |
| *Butler                       | Thirty-ninth                | Southward         | 411                             | 6                        |
| Butler                        | Fortieth                    | Northward         | 186                             | 6                        |
| California avenue             | Fortieth place              | Southward         | 66                              | 6                        |
| *Dearborn                     | Fifty-ninth                 | Northward         | 412                             | 6                        |
| *Elizabeth                    | Fifty-ninth                 | Sixtieth          | 636                             | 6                        |
| Fortieth place                | California avenue           | Underwood avenue  | 666                             | 6                        |
| Forty-fourth                  | Albany avenue               | Westward          | 485                             | 6                        |
| Forty-sixth                   | Union avenue                | Eastward          | 200                             | 4                        |
| Fiftieth                      | Crossing                    | Fifth avenue      | 66                              | 6                        |
| Fifty-second                  | Crossing                    | Fifth avenue      | 66                              | 6                        |
| Fifty-third                   | Center avenue               | Morgan            | 1,149                           | 6                        |
| †Fifty-fourth                 | Robey                       | Seeley avenue     | 346                             | 6                        |
| Fifty-fourth                  | Butler                      | Westward          | 240                             | 6                        |
| Fifty-sixth                   | Halsted                     | Green             | 298                             | 6                        |
| Fifty-eighth                  | Crossing                    | Carpenter         | 66                              | 6                        |
| Fifty-eighth                  | Wood                        | Hermitage avenue  | 330                             | 6                        |
| Hamilton avenue               | Sixty-third                 | Sixty-seventh     | 2,654                           | 8                        |
| Loomis                        | Alley 1st S. of Fifty-fifth | Southward         | 280                             | 6                        |
| Marshfield avenue             | Fifty-first                 | Southward         | 250                             | 6                        |
| Marshfield avenue             | Fifty-third                 | Northward         | 150                             | 6                        |
| Morgan                        | Seventy-second              | Seventy-third     | 691                             | 8                        |
| *Paulina                      | 1st Alley N. of Fifty-fifth | Fifty-fourth      | 458                             | 6                        |
| Peoria                        | Crossing                    | Fifty-first court | 66                              | 6                        |
| †Robey                        | Fifty-third                 | Fifty-fourth      | 673                             | 8                        |
| †Robey                        | Sixty-third                 | Sixty-seventh     | 2,654                           | 8                        |
| Sangamon                      | Eighty-sixth                | Northward         | 300                             | 6                        |
| Sangamon                      | Sixty-ninth                 | Northward         | 325                             | 6                        |
| Sacramento avenue             | Fortieth place              | Southward         | 580                             | 6                        |
| †Seeley avenue                | Fifty-fourth                | Northward         | 178                             | 6                        |
| Sixtieth                      | Crossing                    | Ashland avenue    | 90                              | 6                        |
| Sixty-first                   | Crossing                    | Ashland avenue    | 90                              | 6                        |
| Sixty-second                  | Crossing                    | Ashland avenue    | 90                              | 6                        |
| Sixty-third                   | Ashland avenue              | Marshfield avenue | 300                             | 12                       |
| Sixty-third                   | Crossing                    | Ashland avenue    | 105                             | 12                       |
| Sixty-sixth                   | Crossing                    | Green             | 66                              | 6                        |
| *Sixty-eighth                 | Emerald avenue              | Sherman           | 309                             | 6                        |

## DEPARTMENT OF PUBLIC WORKS.

## LAKE DISTRICT—CONTINUED.

| STREET                                 | FROM                 | TO              | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|----------------------------------------|----------------------|-----------------|---------------------------------|-----------------------|
| South Normal Parkway ..                | Stewart avenue ..... | Eastward .....  | 410                             | 6                     |
| Troy .....                             | Forty-fourth .....   | Southward ..... | 225                             | 6                     |
| Union avenue .....                     | Sixty-first .....    | Northward ..... | 166                             | 6                     |
| Union avenue .....                     | Sixty-third .....    | Southward ..... | 182                             | 6                     |
| Vincennes road .....                   | Seventy-fourth ..... | Southward ..... | 155                             | 8                     |
| Wentworth avenue .....                 | Seventy-fourth ..... | Southward ..... | 155                             | 8                     |
| Total .....                            |                      |                 | 25,872                          |                       |
| Add Branch Pipe for Hydrants .....     |                      |                 | 132                             | 4                     |
| Add Branch Pipe for Hydrants .....     |                      |                 | 744                             | 6                     |
| Total feet laid in Lake District ..... |                      |                 | 26,748                          |                       |

\* Laid by Deposit.

† Laid by Special Assessment.

## JEFFERSON DISTRICT.

| STREET                         | FROM                            | TO                                | Length<br>of<br>Pipe<br>in feet | Diameter<br>in<br>inches |
|--------------------------------|---------------------------------|-----------------------------------|---------------------------------|--------------------------|
| *Albany avenue . . . . .       | Conneaut avenue . . . . .       | Humboldt boulevard . .            | 550                             | 6                        |
| Albany avenue . . . . .        | Elston avenue . . . . .         | Grace . . . . .                   | 2,264                           | 6                        |
| Aubert avenue . . . . .        | Western avenue . . . . .        | Westward . . . . .                | 840                             | 6                        |
| *Ballou . . . . .              | Diversey avenue . . . . .       | Marianna . . . . .                | 648                             | 6                        |
| †Berteau avenue . . . . .      | Western avenue . . . . .        | Westward . . . . .                | 802                             | 8                        |
| *Belleplain avenue . . . . .   | Western avenue . . . . .        | Westward . . . . .                | 660                             | 6                        |
| Belmont avenue . . . . .       | Crossing . . . . .              | Western avenue . . . . .          | 100                             | 16                       |
| *Belmont avenue . . . . .      | 75 ft. E. California av.        | 91 ft. E. of Laurel av.           | 716                             | 6                        |
| *Broad Oak avenue . . . . .    | Ormonde avenue . . . . .        | Emerson road . . . . .            | 284                             | 6                        |
| Carmen avenue . . . . .        | Crossing . . . . .              | Lincoln avenue . . . .            | 96                              | 6                        |
| *Carpenter road . . . . .      | Chicago river . . . . .         | Prescott avenue . . . .           | 878                             | 8                        |
| †Carpenter road . . . . .      | Carpenter court . . . . .       | Chicago river . . . . .           | 4,564                           | 8                        |
| *Central Park avenue . . . . . | Medill avenue . . . . .         | Fullerton avenue . . . .          | 836                             | 8                        |
| *Clifton avenue . . . . .      | Greenwood avenue . . . .        | 146 ft. S. of Humboldt boulevard  | 427                             | 6                        |
| Conneaut avenue . . . . .      | Wallace . . . . .               | Westward . . . . .                | 25                              | 6                        |
| †Cosgrove avenue . . . . .     | Western avenue . . . . .        | Westward . . . . .                | 840                             | 6                        |
| *Crescent road . . . . .       | 220 ft. S. of Lorain pl.        | Enfield avenue . . . . .          | 1,148                           | 6                        |
| Dakin . . . . .                | N. Forty-eighth av . . .        | N. Forty-ninth avenue .           | 648                             | 6                        |
| †Diversey avenue . . . . .     | Milwaukee avenue . . . .        | Kedzie avenue . . . . .           | 1214                            | 8                        |
| Diversey avenue . . . . .      | Crossing . . . . .              | Hamlin avenue . . . . .           | 43                              | 8                        |
| †Diversey avenue . . . . .     | Homan avenue . . . . .          | Hamlin avenue . . . . .           | 2,599                           | 8                        |
| *Dunning . . . . .             | 136 ft. W. of Monticello avenue | Lawndale avenue . . . .           | 200                             | 6                        |
| Dunning . . . . .              | Monticello avenue . . . .       | Westward . . . . .                | 136                             | 6                        |
| *Dunning . . . . .             | Spaulding avenue . . . . .      | Campbell avenue . . . .           | 870                             | 6                        |
| Eddy . . . . .                 | Irving avenue . . . . .         | N. Forty-first court . . .        | 240                             | 6                        |
| *Ellerton avenue . . . . .     | Fountain avenue . . . . .       | Dixon avenue . . . . .            | 785                             | 6                        |
| *Emerson road . . . . .        | Ellerton avenue . . . . .       | Broad Oak avenue . . . .          | 87                              | 6                        |
| *Enfield avenue . . . . .      | Ellerton avenue . . . . .       | Prescott avenue . . . . .         | 650                             | 6                        |
| *Fairfield avenue . . . . .    | Armitage avenue . . . . .       | Courtland . . . . .               | 660                             | 6                        |
| †Fiftieth court, N . . . . .   | Armitage avenue . . . . .       | Wrightwood avenue . . .           | 1,245                           | 6                        |
| Fiftieth court, N . . . . .    | Crossing . . . . .              | Armitage avenue . . . . .         | 20                              | 6                        |
| †Fiftieth avenue, N . . . . .  | Armitage avenue . . . . .       | Medill avenue . . . . .           | 2,375                           | 8                        |
| Fiftieth avenue, N . . . . .   | Crossing . . . . .              | Armitage avenue . . . . .         | 5                               | 8                        |
| Fortieth avenue, N . . . . .   | Courtland . . . . .             | Southward . . . . .               | 144                             | 12                       |
| Forty-first avenue, N . . . .  | Grace . . . . .                 | Byron . . . . .                   | 193                             | 6                        |
| Forty-third avenue, N . . . .  | Montrose avenue . . . . .       | Northward . . . . .               | 502                             | 6                        |
| Forty-fourth avenue, N . . .   | Holcomb avenue . . . . .        | Belleplain avenue . . . .         | 479                             | 8                        |
| Forty-fourth avenue, N . . .   | 100 ft. S. of Wabasha avenue    | Northward . . . . .               | 690                             | 8                        |
| Forty-fourth court, N . . . .  | Sunnyside avenue . . . . .      | Northward . . . . .               | 251                             | 6                        |
| Forty-fifth avenue, N . . . .  | 41 ft. S. of Irving Park blvd.  | Southward . . . . .               | 608                             | 6                        |
| Forty-fifth avenue, N . . . .  | Leland avenue . . . . .         | Northward . . . . .               | 291                             | 8                        |
| †Forty-eighth avenue, N . . .  | Wrightwood avenue . . . .       | Medill avenue . . . . .           | 1,078                           | 8                        |
| Forty-eighth avenue, N . . .   | Milwaukee avenue . . . .        | Dakin avenue . . . . .            | 407                             | 8                        |
| Franklin . . . . .             | Laurel avenue . . . . .         | Westward . . . . .                | 334                             | 6                        |
| *Francisco avenue . . . . .    | Diversey avenue . . . . .       | Northward . . . . .               | 517                             | 6                        |
| *Fullerton avenue . . . . .    | Central Park avenue . . . .     | Monticello avenue . . . .         | 341                             | 12                       |
| Grace . . . . .                | Western avenue . . . . .        | Westward . . . . .                | 24                              | 8                        |
| †Grace . . . . .               | Albany avenue . . . . .         | Sacramento avenue . . .           | 644                             | 6                        |
| Grace . . . . .                | Western avenue . . . . .        | Westward . . . . .                | 834                             | 6                        |
| †Grand avenue . . . . .        | N. Fifty-second avenue . . .    | N. Sixtieth avenue . . . .        | 5,656                           | 8                        |
| Gunnison avenue . . . . .      | Everett . . . . .               | Williams . . . . .                | 620                             | 6                        |
| *Hancock avenue . . . . .      | Diversey avenue . . . . .       | Marianna avenue . . . . .         | 644                             | 6                        |
| *Homan avenue . . . . .        | Montrose avenue . . . . .       | 200 ft. S. of Berteau av.         | 1,524                           | 8                        |
| Humboldt avenue . . . . .      | N. Forty-fourth avenue . .      | Eastward . . . . .                | 312                             | 6                        |
| *Humboldt avenue . . . . .     | Diversey avenue . . . . .       | 254 ft. N. of Franklin avenue . . | 910                             | 6                        |

## JEFFERSON DISTRICT—CONTINUED.

| STREET                       | FROM                             | TO                             | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|------------------------------|----------------------------------|--------------------------------|---------------------------------|-----------------------|
| Humboldt avenue              | Diversey avenue                  | 345 ft. S. of Conneaut avenue. | 1,021                           | 6                     |
| *Irving Park boulevard       | Milwaukee avenue                 | Westward                       | 5,500                           | 12                    |
| Irving Park boulevard        | 5,500 ft. W. Milwaukee avenue    | Westward                       | 5,832                           | 12                    |
| Irving Park boulevard        | N. Forty-fifth avenue            | Westward                       | 99                              | 12                    |
| Irving Park boulevard        | N. Sixty-fifth avenue            | Westward                       | 571                             | 12                    |
| Irving Park boulevard        | W. of N. Sixty-fourth avenue     | North to Poor House            | 34                              | 8                     |
| †Kedzie avenue               | Milwaukee avenue                 | Diversey avenue                | 1,043                           | 8                     |
| †Kedzie avenue               | 388 ft. N. of Diversey avenue    | Garden avenue                  | 904                             | 8                     |
| Lawndale avenue              | 320 ft. N. of Dunning            | Northward                      | 170                             | 6                     |
| *Lawndale avenue             | Dunning                          | Northward                      | 320                             | 6                     |
| Lawndale avenue              | 400 ft. N. of North av           | 172 ft. N. of Wabansia avenue  | 425                             | 6                     |
| Lawndale avenue              | 392 ft. S. of Armitage av        | Courtland avenue               | 232                             | 6                     |
| Laurel avenue                | Franklin avenue                  | Northward                      | 517                             | 6                     |
| Laurel avenue                | Crossing                         | Belmont avenue                 | 22                              | 6                     |
| †Lutz avenue                 | Western avenue                   | Westward                       | 840                             | 6                     |
| *Meade avenue                | N. Fifty-ninth                   | Northward                      | 436                             | 6                     |
| †Medill avenue               | N. Fiftieth avenue               | N. Forty-eighth avenue         | 1,375                           | 6                     |
| Medill avenue                | Central Park avenue              | Westward                       | 41                              | 6                     |
| McLean avenue                | Crossing                         | N. Forty-third avenue          | 36                              | 6                     |
| Monticello avenue            | Armitage avenue                  | Southward                      | 370                             | 6                     |
| Monticello avenue            | 294 ft. N. of Fullerton avenue   | W. Dunning                     | 378                             | 6                     |
| *Monticello avenue           | Fullerton avenue                 | Northward                      | 294                             | 6                     |
| Monticello avenue            | 425 ft. N. of North av           | 325 ft. N. of Wabansia avenue  | 545                             | 6                     |
| Montrose avenue              | N. Forty-third avenue            | Westward                       | 330                             | 8                     |
| Montrose avenue              | N. Forty-eighth avenue           | Westward                       | 290                             | 8                     |
| *Montrose avenue             | Homan avenue                     | Prospect avenue                | 303                             | 8                     |
| Mozart                       | Diversey avenue                  | Northward                      | 363                             | 6                     |
| North avenue                 | Crossing                         | Western avenue                 | 26                              | 8                     |
| North avenue                 | Crossing                         | Western avenue                 | 25                              | 16                    |
| †North Fifty-ninth           | 1,517 ft. W. of Lincoln avenue   | Central Park avenue            | 4,778                           | 6                     |
| Norwood Park avenue          | Crossing                         | Grace                          | 106                             | 6                     |
| *Ormonde avenue              | Carpenter road                   | Broad Oak avenue               | 471                             | 6                     |
| *Pensacola avenue            | Campbell avenue                  | Westward                       | 587                             | 4                     |
| *Prescott avenue             | Enfield avenue                   | Carpenter road                 | 800                             | 8                     |
| *Prospect avenue             | Prescott avenue                  | Montrose avenue                | 1,921                           | 6                     |
| †Ridgeway avenue             | George                           | Milwaukee avenue               | 1,080                           | 6                     |
| Spaulding avenue             | 235 ft. S. of Humboldt           | Dickens avenue                 | 324                             | 6                     |
| *Spaulding avenue            | Fullerton avenue                 | Wrightwood avenue              | 1,250                           | 6                     |
| Stave                        | Cornelia                         | Eastward                       | 172                             | 6                     |
| †Theodosia avenue            | Milwaukee avenue                 | Austin avenue                  | 2,327                           | 6                     |
| Wabansia avenue              | Central Park avenue              | 156 ft. W. of Ridgeway avenue  | 1,141                           | 8                     |
| Western avenue               | Belmont avenue                   | Noble avenue                   | 681                             | 24                    |
| Western avenue               | Homer                            | North avenue                   | 2,249                           | 24                    |
| Western avenue               | Franklin avenue                  | Armitage avenue                | 6,042                           | 24                    |
| Western avenue               | 166 ft. S. of Irving Park avenue | Belmont avenue                 | 5,164                           | 24                    |
| Western avenue               | Belmont avenue                   | Northward                      | 20                              | 8                     |
| Winona                       | Crossing                         | Lincoln avenue                 | 99                              | 6                     |
| Total                        |                                  |                                | 94,901                          |                       |
| Add Branch Pipe for Hydrants |                                  |                                | 96                              | 4                     |
| Add Branch Pipe for Hydrants |                                  |                                | 1,620                           | 6                     |
| Total feet laid in Jefferson |                                  |                                | 96,617                          |                       |

\*Laid by Deposit.

†Laid by Special Assessment.

## CALUMET DISTRICT.

| STREET                                    | FROM                            | TO                            | Length<br>of<br>Pipe<br>in feet | Diameter<br>in inches |
|-------------------------------------------|---------------------------------|-------------------------------|---------------------------------|-----------------------|
| Carpenter .....                           | 155 ft. S. of Eighty-eighth ..  | Eighty-ninth.....             | 450                             | 6                     |
| †Clinton .....                            | 118th .....                     | 119th .....                   | 598                             | 6                     |
| Eighty-eighth .....                       | Canal .....                     | Holland road .....            | 1,181                           | 6                     |
| Fifth avenue.....                         | Crossing .....                  | 121st .....                   | 187                             | 6                     |
| Harvard .....                             | 300 ft. N. of Eighty-eighth ..  | Eighty-ninth .....            | 988                             | 6                     |
| †Hilliard avenue .....                    | 104th .....                     | 107th .....                   | 1,975                           | 6                     |
| Holland road .....                        | Eighty-eighth .....             | Yale .....                    | 116                             | 6                     |
| Jefferson avenue.....                     | 115th .....                     | 107 ft. S. of 116th .....     | 795                             | 6                     |
| †Loomis .....                             | Ninetieth .....                 | Ninety-fifth.....             | 8,295                           | 6                     |
| Morgan .....                              | 146 ft. N. of 119th.....        | 117th .....                   | 1,112                           | 6                     |
| 108d .....                                | Wentworth avenue .....          | Park avenue .....             | 1,288                           | 12                    |
| 104th .....                               | Hilliard avenue .....           | Vincennes road.....           | 476                             | 6                     |
| 106th .....                               | Prospect avenue .....           | Westward .....                | 230                             | 6                     |
| 111th place .....                         | 283 ft. W. of Portland avenue.  | Stewart avenue .....          | 841                             | 6                     |
| 112th place .....                         | 236 ft. W. of Wentworth avenue  | Portland avenue.....          | 283                             | 6                     |
| 113th place .....                         | 120 ft. E. of Butterfield ..... | 150 ft. E. of Wentworth av .. | 540                             | 6                     |
| 113th .....                               | Butterfield .....               | Eastward .....                | 209                             | 6                     |
| 117th .....                               | Union avenue .....              | Lowe avenue .....             | 490                             | 6                     |
| †118th .....                              | Canal .....                     | Wallace .....                 | 995                             | 6                     |
| 118th .....                               | Morgan .....                    | Sangamon .....                | 832                             | 6                     |
| 118th .....                               | Connecting .....                | Scanlan avenue .....          | 22                              | 6                     |
| †118th .....                              | Stewart avenue .....            | Canal .....                   | 310                             | 6                     |
| 119th .....                               | Halsted .....                   | Sangamon .....                | 1,002                           | 8                     |
| Peoria .....                              | 119th .....                     | 117th .....                   | 1,282                           | 6                     |
| Sangamon .....                            | 119th .....                     | 117th .....                   | 1,283                           | 6                     |
| Scanlan avenue.....                       | 119th .....                     | 118th .....                   | 636                             | 6                     |
| Union avenue .....                        | 117th .....                     | Southward.....                | 218                             | 6                     |
| Vincennes road .....                      | 104th .....                     | Southward.....                | 185                             | 6                     |
| Vincennes road .....                      | 210 ft. S. of 104th .....       | W. to Pumping Station         | 93                              | 6                     |
| Webster avenue .....                      | 300 ft. N. of Eighty-eighth ..  | Eighty-ninth.....             | 997                             | 6                     |
| Yale .....                                | Holland road .....              | Eighty-ninth.....             | 517                             | 6                     |
| Total .....                               |                                 |                               | 22,380                          |                       |
| Add Branch Pipe for Hydrants .....        |                                 |                               | 168                             | 4                     |
| Add Branch Pipe for Hydrants .....        |                                 |                               | 504                             | 6                     |
| Total feet laid in Calumet District ..... |                                 |                               | 23,052                          |                       |

†Laid by Special Assessment.



## DEPARTMENT OF PUBLIC WORKS.

## RECAPITULATION OF PIPE LAID DURING 1895, INCLUDING HYDRANT BRANCHES.

| DIVISION.           | DIAMETER OF PIPE IN INCHES. |         |         |          |          |          | Total length of<br>Pipe in Feet. |
|---------------------|-----------------------------|---------|---------|----------|----------|----------|----------------------------------|
|                     | 4-inch.                     | 6-inch. | 8-inch. | 12-inch. | 16-inch. | 24-inch. | 36-inch.                         |
| North .....         | .....                       | .....   | 1,167   | .....    | .....    | .....    | 1,167                            |
| South .....         | 12                          | 3,915   | 1,025   | .....    | .....    | .....    | 4,952                            |
| West .....          | 500                         | 56,576  | 28,529  | 2,367    | 921      | .....    | 88,893                           |
| Hyde Park .....     | 743                         | 27,259  | 17,770  | 991      | 71       | 14,062   | 63,588                           |
| Lake View .....     | 1,690                       | 37,695  | 10,868  | 80       | 60       | .....    | 50,998                           |
| Lake .....          | 332                         | 16,276  | 9,785   | 405      | .....    | .....    | 26,748                           |
| Jefferson .....     | 683                         | 41,380  | 27,856  | 12,487   | 125      | 14,186   | 96,617                           |
| Calumet .....       | 168                         | 20,594  | 1,002   | 1,288    | .....    | .....    | 28,052                           |
| Total in feet ..... | 4,128                       | 203,645 | 92,952  | 17,618   | 1,177    | 28,198   | 350,405                          |

TABLE SHOWING AMOUNT OF PIPE IN THE CITY OF CHICAGO,  
AT THE CLOSE OF 1895.

| Diameter of Pipe.   | 1894.                           | 1895.                                          |                               |                                                           |                                |
|---------------------|---------------------------------|------------------------------------------------|-------------------------------|-----------------------------------------------------------|--------------------------------|
|                     | Amount<br>in<br>Use in<br>Feet. | Amount<br>Taken Up or<br>Abandoned<br>in Feet. | Amount<br>Laid<br>in<br>Feet. | Grand Total<br>in Feet in Use<br>at the<br>close of 1895. | Grand<br>Total<br>in<br>Miles. |
| 48                  | 1,355                           | .....                                          | .....                         | 1,355                                                     | 0.1158                         |
| 36                  | 115,250                         | .....                                          | 2,687                         | 117,937                                                   | 22.1117                        |
| 30                  | 5,351                           | .....                                          | .....                         | 5,351                                                     | 1.1110                         |
| 28                  | 160                             | .....                                          | .....                         | 160                                                       | .1110                          |
| 24                  | 250,804                         | .....                                          | 28,198                        | 279,002                                                   | 52.1118                        |
| 20                  | 7,931                           | .....                                          | .....                         | 7,931                                                     | 1.1111                         |
| 18                  | 1,000                           | .....                                          | .....                         | 1,000                                                     | 0.1111                         |
| 16                  | 233,887                         | .....                                          | 1,177                         | 235,064                                                   | 44.1111                        |
| 14                  | 22,552                          | .....                                          | .....                         | 22,552                                                    | 4.1111                         |
| 12                  | 475,997                         | .....                                          | 17,618                        | 493,615                                                   | 93.1118                        |
| 10                  | 26,860                          | .....                                          | .....                         | 26,860                                                    | 5.1110                         |
| 8                   | 1,662,865                       | .....                                          | 92,952                        | 1,755,817                                                 | 332.1117                       |
| 6                   | 4,262,294                       | 1,146                                          | 203,645                       | 4,464,793                                                 | 845.1118                       |
| 4                   | 1,091,551                       | 2,812                                          | 4,128                         | 1,092,867                                                 | 206.1118                       |
| 3                   | 8,996                           | .....                                          | .....                         | 8,996                                                     | 1.1118                         |
| Total in feet. .... | 8,166,853                       | 3,958                                          | 350,405                       | 8,513,300                                                 | .....                          |
| Total in miles. ... | 1,546.1118                      | 0.1118                                         | 66.1118                       | 1,612.1118                                                | 1,612.1118                     |

Amount of wooden pipe in use in Norwood Park, 16,618 feet of 4-inch and 325 feet of 6-inch, not included in above.

## DIVISION OF BRIDGE AND VIADUCT CONSTRUCTION.

MR. A. G. RITER, Bridge Engineer, in charge.

Van Buren Street Bridge.—This structure, which was fully described and illustrated in the annual report for 1894, was completed and formally opened to traffic on Monday, February 4, 1895, the work having been prosecuted without interruption from January 4, 1894, when the old bridge was closed to traffic and the work of demolition begun. The cost of the structure was as follows:

|                                 |                     |
|---------------------------------|---------------------|
| Substructure .....              | \$ 79,600 00        |
| Superstructure .....            | 73,100 00           |
| Electric Equipment.....         | 11,150 00           |
| Engineering and Inspection..... | 5,850 00            |
| <b>TOTAL.....</b>               | <b>\$169,700 00</b> |

West Van Buren Street Viaduct.—This structure was built to replace the old plate girder span over the Fort Wayne tracks, near Canal street. The work consisted of the rebuilding of the upper portions of the old abutments, and the placing of the new viaduct, which consists of three steel plate girders, each five feet six inches deep by sixty-seven feet long, spaced twenty-one feet centre to centre, leaving two roadways, each eighteen feet clear between wheel guards, and two sidewalks, each eight feet clear. The contractor for the work complete was the Chicago Bridge and Iron Company, and the total cost was \$7,644.30.

Fullerton Avenue Bridge.—This structure spans the North Branch of the Chicago River, and was built to replace the old combination draw at this point. The old bridge was closed to traffic and the work of demolition begun on Monday, May 13, 1895. The new structure was formally opened to traffic October 20, 1895. The work consists of a permanent concrete and masonry centre pier founded on solid rock, with the usual pile and timber protection; pile abutments and trestle bent approaches, the lower ends of which were brought down to grade with filling. (See diagram.) A pontoon bridge was made by City employes and maintained during the construction of the new bridge.

The FitzSimons & Connell Company were the contractors for the substructure.

The superstructure is of the ordinary Pratt truss construction, with two trusses spaced 22 feet centres, with one roadway 18 feet clear between wheel guards, and two sidewalks, each 5 feet clear—the length of bridge being 164 feet 6 inches on centre by 35 feet 4

inches wide over guards. The turn-table is rim-bearing and the gearing arranged with the idea of placing an electric motor on the structure, taking the current from the trolley line.

The Chicago Bridge & Iron Company were the contractors for the superstructure, and the total cost is \$26,752.67, of which the North Chicago Street Railway Company paid \$18,000.00.

We are making arrangements now to equip this bridge with electrical power, which will cost about \$1,500.00, and the west half of the protection, which is yet to be built, will cost \$1,700.00.

Diversey Avenue Bridge.—This structure spans the North Branch, and both substructure and superstructure are similar in all respects to Fullerton avenue bridge, except that the superstructure is 184 feet 2 inches on center line and the center pier is founded on piles. (See illustration.)

Lydon & Drews were the contractors for the substructure, while the Lassig Bridge & Iron Company constructed and erected the superstructure.

This structure furnishes the long-sought link between the West and North Side boulevard systems, as well as taking the traffic of a rapidly-growing territory.

This bridge, upon which the work was commenced July 10, will be opened for traffic early in January, 1896. The cost will be about \$32,000.00.

The City is in urgent need of new bridges and viaducts at the following points :

1. Kinzie street, North Branch.
2. North avenue, North Branch.
3. Division street, Ogden Canal.
4. Polk street, South Branch.
5. Western avenue, west fork of South Branch.
6. California avenue, west fork of South Branch.
7. Archer avenue, south fork of South Branch.
8. Chittenden avenue, Calumet River.
9. Kedzie avenue, I. & M. Canal (fixed span).
10. Canal and Sixteenth streets (viaduct).

Wells Street Viaduct.—Plans are complete for the new plate girder viaduct on Wells street, over the tracks of the Chicago & North-Western Railway, which will be built in connection with the rebuilding of the Wells street bridge by the Northwestern Elevated Railway Company, and is to be paid for by the Chicago & North-Western Railway Company and the Northwestern Elevated Railway Company.

Wells Street Bridge.—The work of remodeling Wells street bridge to carry the overhead work of the “L” road amounts to practically rebuilding the structure—for all of which work full calculations were made by the Department and all necessary figures and data furnished the “L” road engineers. Entire cost of same is to be borne by the Northwestern Elevated Railway Company.

North Halsted Street Bridge.—Full and complete plans and specifications for the substructure of the North Halsted street bascule bridge were prepared and the contract awarded. The date fixed for completion of substructure is May 1, 1896.

Plans and specifications for the superstructure will be completed and proposals asked for on or before the first of February. The bridge is to be completed August 1, 1896.

### BRIDGE AND VIADUCT MAINTENANCE.

MR. J. L. GARRETSON is Superintendent and Mr. J. E. ROEMHELD is Engineer of Bridge and Viaduct Repairs.

There are at present under the direct supervision of this Department eighty-nine bridges over the rivers and canals, of which twenty-six are owned and maintained by various railroad companies, including a bascule lift bridge, owned and maintained by the Metropolitan Elevated Railway. Sixty-three are highway bridges, operated and maintained by the City, of which fifty are movable structures, seven are fixed spans over the Illinois and Michigan Canal and west fork of the South Branch, and six fixed spans are over the unnavigable part of the North Branch.

Among the above highway bridges are two folding or jackknife bridges, one lift or elevator bridge, one bascule or rolling lift bridge, and one combination railroad and highway bridge used by the Lake Street Elevated Railway, the remainder being common swing bridges. Three are operated by electric power, thirteen by steam and the remainder by hand power.

In addition to the above, the City maintains thirty-eight systems of highway viaducts over railway tracks.

Two new bridges have been added to the list this year, viz; Van Buren bascule and Fullerton avenue swing bridge.

In this synopsis, mention will only be made of those structures which have undergone extensive and permanent repairs.

Rush Street Bridge.—The old, worn out steam swinging machinery, which was a constant source of expense for repairs, was discarded and a twenty horse-power electric motor substituted, which has eliminated all the repair work necessary to put the many



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parts of the steam plant in working order. This motor has been in service since August and has not involved any expense whatever in repairs to the swinging gear of the bridge. A new set of thirty-seven cast-steel turn-table rollers was put in, supplanting the badly worn cast-iron set of seventy-four. This work was done with a delay of only ten hours to traffic. Both approaches were rebuilt.

State Street Bridge.—At State street, a new and altered floor system was put in the viaduct and approaches, so as to make the structure safe to carry electric motor cars. It might be mentioned that the general introduction of motor cars during the past year has necessitated the reconstruction of most of the floors of bridges and viaducts crossed by them, and in several instances new structures will have to be built.

Clark Street Bridge.—This bridge has been partly repaved, and the parapet of the south pier, which became loose and fell, was rebuilt. Both sidewalks were replanked throughout with 2-inch maple.

Wells Street Bridge.—This structure was also replanked with new maple sidewalks.

Lake Street Bridge.—On this bridge the wiring of the electric motors, which was not properly installed in the first place, gradually gave out and became grounded in several places, which culminated in the burning out of one of the brush holders, field and commutators, thus disabling the bridge. This bridge was operated with two motors (one for each pinion) which were controlled by an old form of railway rheostat, which was also in bad condition. The armatures of both motors were also grounded. All this has just been completely overhauled and a controller of the "series parallel type" installed, and all wiring enclosed in armored conduits, which lead to the under side of motor houses, thereby making short circuit by water practicably impossible. This bridge is now in perfect swinging condition, the tracks, racks and turn-table having also been carefully readjusted.

Randolph Street Bridge.—The east approach of this bridge, which was gradually encroaching and binding the bridge, was readjusted and braced throughout.

Adams Street Bridge.—Adams street bridge received a new set of forty cast-steel turn-table rollers in place of the pre-existing eighty cast-iron rollers.

Jackson Street Bridge.—Jackson street bridge also received a new set of rollers, as above.



**Van Buren Street Bridge.**—This bascule bridge has been the source of trouble from the day it was opened to traffic, February 4, 1895. This new type of bridge contains numerous vital faults, which have occasioned frequent repairs. In May, the mechanical and electrical operating system went to pieces and disabled the structure, which was closed to traffic for a period of four weeks, during which time the electrical and mechanical systems were overhauled and the excess of counterweight in the bridge, which was the main cause of this failure, was removed. The structure was operated during the busy summer season without mishap, although it was evident that the electric motors were not of sufficient capacity nor in proper condition to do the work. In October these motors had to be taken out, two armatures were reinsulated, and the other two armatures were so badly burned that they had to be rewound. This work was done by the Bridge Department, and was accomplished at a cost of about \$100.00. Similar electric repairs at the time of the general breakdown in May, which had been done by the electric firm that had originally installed the plant, cost about \$950.00.

**Canal Street Bridge.**—This bridge was badly damaged by a collision with a canal boat, in which the south half of the structure was moved three feet out of line and the operating mechanism disabled. This was repaired by the Department and traffic was delayed but a few days.

**South Halsted Street Bridge.**—South Halsted street bridge was disabled for a few days, due to sleet forming in one of the tower sheaves, which forced the lifting cable from its position. This was reset at nominal expense.

**Archer Avenue Bridge.**—This structure is one of the bridges that had to be reinforced to sustain the weight of motor cars. This work was done by this Department and paid for by street car company.

**Ashland Avenue Bridge.**—The Ashland avenue and Thirty-ninth street bridge was changed in its floor system by the street car company so as to carry motor cars.

**Deering Street Bridge.**—A new floor was put in this bridge.

**Kinzie Street Bridge.**—Kinzie street bridge was knocked off its center by collision with a steamer. This was readjusted with only forty-eight hours delay to traffic.

**Indiana and Erie Street Bridges.**—The Indiana and Erie street bridges have been reinforced in floor systems for electric car service.

**North Halsted Canal Bridge.**—The North Halsted (canal) bridge has been reconstructed in its floor system by the street car company, as have also both Division street and North avenue bridges, for electric car service.

Weed Street Bridge.—The Weed street bridge (jackknife) has been overhauled in its cables.

Clybourn Place Bridge.—This bridge was changed in its floor system for electric cars.

North Kedzie Avenue Bridge.—Filled approaches were built to the North Kedzie avenue bridge, opening that thoroughfare to the public.

State Street Viaduct.—The State street viaduct was reconstructed throughout in its floor system in order to safely carry electric cars.

Van Buren Street Viaduct.—This viaduct was so badly damaged by locomotive fumes that it had to be taken down and a new structure built.

Twelfth Street Bridge.—The paving and sub-planking of the Fifth avenue approach to Twelfth street bridge was so rotted that vehicles would frequently break through. The woodwork of this bridge was completely renovated.

Ogden Avenue Viaduct.—The sidewalks of Ogden avenue viaduct were badly rotted and had to be renewed.

West Twelfth Street Viaduct.—Extensive pavement repairs were made to West Twelfth street viaduct.

The following structures were painted in the trusses :

|                           |                              |
|---------------------------|------------------------------|
| Madison street bridge,    | State street bridge,         |
| Washington street bridge, | Twenty-second street bridge, |
| Randolph street bridge,   | Thirty-fifth street bridge,  |
| Lake street bridge,       | Deering street bridge,       |
| Wells street bridge,      | Archer avenue bridge,        |
| Clark street bridge,      | State street viaduct.        |
| Dearborn street bridge,   |                              |

This Department has also been called upon to do various pieces of work at pumping stations, cribs, etc.

The expense incurred in the maintenance of all the bridges and viaducts for the year 1895, including labor, material, supplies, etc., has been \$148,936.28, which is very small, considering the magnitude of this branch of the Department.

## HARBORS OF THE CITY OF CHICAGO,

CONSISTING OF THE CHICAGO RIVER AND BRANCHES AND THE  
CALUMET RIVER AND BRANCHES.

MR. RICARD O'S. BURKE, Assistant Engineer, in charge.

CAPTAIN JOHN F. MOORE, Harbor Master.

MR. JOHN C. WECKLER, Vessel Dispatcher.

During the year the quantity of material removed from the Chicago River and its branches amounted to 117,414 cubic yards, costing \$17,138.40 in all, or an average of 14.6 cents per cubic yard.

Dredging by parties other than the City and the Sanitary District of Chicago has been done under special permits to the following extent, viz. :

|                                  |                      |
|----------------------------------|----------------------|
| Chicago River and branches ..... | 219,800 cubic yards, |
| Calumet River and branches ..... | 168,000    "    "    |

being a total of 387,800 cubic yards of private dredging during the year. The dredging carried on under the orders of the United States Engineer, Major Marshall, Corps of Engineers, is not included in any of these quantities.

Removal of rock and hard-pan from the bottom of the west fork (or the Lawndale branch) of the South Branch has been carried on during the past year under a contract, dated September 1, 1893, with the Fitz Simons & Connell Company, by an order of the City Council, passed May 29, 1893. This improvement contemplates making a channel 60 feet wide and about 1,900 feet long, through the rock ledge west from Western avenue, cutting to a depth of 17 feet below City datum, so as to allow any vessels that could pass the tunnels to have a free waterway in this rock cut. The total rock removed to date is 9,306.38 cubic yards, which, with clay and hard-pan, makes the total cost of this work to date \$44,526.89. Of this, 3,369 cubic yards, at a cost of \$13,139.10, has been done during 1895. There remains yet to be blasted and dredged, 24,000 cubic yards of rock to make this waterway available, for which an appropriation of \$94,500 would be necessary. On the West Side, especially, there is a material encroachment on harbor area, which, as in hundreds of other cases, is the result of years of gradual movement of the dock line toward the centre of the river. In the early years of the City's life, few, if any, checks were kept to secure the integrity of the harbor area, and abutting property-owners have steadily moved their dock lines out into the legal waterway, until the condition is reached that there are few property-owners who are not guilty of this wrong upon the public. With the passage of the harbor ordinance of 1890 some check was provided, for when a property-owner, whose dock line was materially out into the waterway area, wanted to renew his dock, under that ordinance he could not do so without a permit; and under this permit the renewal was to be done back on the original dock line. But in many cases it was difficult, if not impossible, to decide which was the dividing line between public and private title, because of the many ordinances for the establishment of harbor lines, which performed in part only the operation of taking private property for public purposes. That work seemed to terminate with the passage of the ordinance by

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the City Council, the other parts of the operation of exercising the right of eminent domain having never been carried out in most cases. Of these the ordinance for improving the east fork of the South Branch in 1869, that for the North Branch in 1854, and that for the establishment of harbor lines from Belmont avenue to Lawrence avenue of March 8, 1895, are the chief, although no material difficulties, as yet, have arisen between the property-owners and the City in the last case. This last improvement from Belmont avenue to Lawrence avenue is based on careful surveys made in 1891 and 1892, resulting in a series of contour maps, showing elevations at intervals of one foot, and the points of intersection of all United States and property lines traversed.

Dock construction and frontage permits were issued during 1895 for the construction, renewal or repair of docks on the Chicago and Calumet Rivers and their branches. Nine of these were for 1,895 lineal feet of dock, one railroad bridge and bridge protections and abutments in the Calumet River. Many of these required careful surveys before lines for the construction under the permit could be given. This is particularly true of the original town and immediate neighborhood, where the great value of real property renders it constantly necessary to guard the public waterway from further encroachment.

The constructed dock frontage of the Chicago River is 214,296 feet, or 40.6 miles. Calumet division, 55,065 feet, or 10.4 miles, Calumet River. Total, harbors, City of Chicago, 269,361 feet, or 51 miles. The length for the Calumet River has been verified by a statement furnished by the office of Major Marshall, Corps of Engineers, U. S. A., in general charge of Lake Michigan harbors.

#### COMMERCE BY THE LAKE.

Those whose interests are connected directly with the commerce of the City may well study the imperative lessons presented by the following table, showing the trade conditions for each year from 1871 to 1895, inclusive, and the following details for 1895:

|                       |       |         |       |           |       |
|-----------------------|-------|---------|-------|-----------|-------|
| Chicago River entered | 7,637 | vessels | ..... | 4,602,508 | tons. |
| Calumet River entered | 1,404 | "       | ..... | 1,682,003 | "     |
| Total entered,        | 9,041 | "       | ..... | 6,284,511 | "     |
| Chicago River cleared | 7,687 | "       | ..... | 4,585,831 | "     |
| Calumet River cleared | 1,504 | "       | ..... | 1,760,838 | "     |
| Total cleared,        | 9,191 | "       | ..... | 6,346,669 | "     |

Total commerce, City of Chicago, 18,232 vessels and 12,631,180 tons.

The magnitude of the commerce by lake of the City may be realized from the following results of last year's trade, noting the gratifying fact that the entrances and clearances for the harbors of Chicago are equal to the entrances and clearances of Baltimore, Boston, Philadelphia, New Orleans and San Francisco combined, and surpasses New York City by 4,722 entrances and clearances.

COMMERCE BY LAKE AND CANAL—CITY OF CHICAGO, FROM  
1871 TO 1895, BY YEARS—WITH POPULATION.

| Year. | VESSELS BY LAKE. |                |                     | BY ILL. & MICH. CANAL. |           |                 | POPULATION. |
|-------|------------------|----------------|---------------------|------------------------|-----------|-----------------|-------------|
|       | Total No.        | Total Tonnage. | Average Cargo, Ton. | Boats. No.             | Tonnage.  | Tolls. Dollars. |             |
| 1871  | 24,632           | 6,178,336      | 251                 | 186                    | 629,975   | \$ 159,050      | 334,270     |
| 1872  | 25,353           | 6,077,542      | 239                 | 173                    | 783,641   | 165,874         | 367,396     |
| 1873  | 23,734           | 6,564,542      | 239                 | 172                    | 849,533   | 166,641         | 380,000     |
| 1874  | 21,547           | 6,329,711      | 294                 | 152                    | 712,020   | 144,831         | 395,400     |
| 1875  | 21,095           | 6,279,055      | 298                 | 142                    | 676,025   | 107,081         | 407,000     |
| 1876  | 19,245           | 6,167,736      | 320                 | 145                    | 691,943   | 113,293         | 420,000     |
| 1877  | 20,517           | 6,585,415      | 321                 | 145                    | 605,912   | 96,913          | 439,776     |
| 1878  | 20,984           | 7,239,673      | 345                 | 140                    | 598,792   | 84,330          | 450,000     |
| 1879  | 23,873           | 7,757,395      | 325                 | 136                    | 669,559   | 89,064          | 475,000     |
| 1880  | 25,520           | 9,154,351      | 345                 | 133                    | 751,360   | 92,296          | 503,298     |
| 1881  | 26,005           | 8,762,247      | 337                 | 133                    | 826,133   | 85,130          | 540,000     |
| 1882  | 26,977           | 9,754,949      | 362                 | 132                    | 1,011,287 | 85,947          | 560,693     |
| 1883  | 23,982           | 7,793,337      | 325                 | 132                    | 925,575   | 77,975          | 580,000     |
| 1884  | 22,826           | 7,508,696      | 330                 | 134                    | 956,721   | 77,102          | 630,000     |
| 1885  | 21,542           | 7,306,222      | 339                 | 135                    | 827,355   | 66,800          | 664,634     |
| 1886  | 22,372           | 7,877,080      | 352                 | 130                    | 808,012   | 62,516          | 704,000     |
| 1887  | 23,972           | 8,749,852      | 365                 | 132                    | 742,074   | 58,025          | 760,000     |
| 1888  | 22,095           | 8,890,658      | 402                 | 127                    | 751,055   | 56,028          | 880,000     |
| 1889  | 21,788           | 10,267,831     | 471                 | 114                    | 917,047   | 65,305          | 1,100,000   |
| 1890  | 20,133           | 10,116,051     | 502                 | 104                    | 742,392   | 55,111          | 1,200,000   |
| 1891  | 19,680           | 10,862,898     | 522                 | 97                     | 641,156   | 49,457          | 1,320,000   |
| 1892  | 21,123           | 11,780,393     | 565                 | 95                     | 783,288   | 54,987          | 1,450,000   |
| 1893  | 17,044           | 10,788,029     | 692                 | 82                     | 503,326   | 38,326          | 1,600,000   |
| 1894  | 16,202           | 10,284,178     | 635                 | 81                     | 587,266   | 44,547          | 1,640,000   |
| 1895  | 18,232           | 12,631,180     | 693                 | 78                     | 591,407   | 39,106          | 1,725,000   |

A Treasury report dated June 30th last, shows total arrivals and clearances, as follows :

|                    |       |        |
|--------------------|-------|--------|
| Baltimore .....    | 3,992 |        |
| Boston .....       | 5,884 |        |
| New Orleans .....  | 2,364 |        |
| Philadelphia ..... | 3,831 |        |
| San Francisco..... | 2,515 | 18,586 |
| New York.....      |       | 13,853 |
| Chicago .....      |       | 18,575 |

During navigation, in 1895, there were shipped from Chicago—

82,300,214 bushels of grain.  
 1,507,543 barrels of flour.  
 4,063,729 miscellaneous packages of general freight.

And during the same period Chicago received by water—

3,207,053 tons of coal.  
 1,276,527,000 feet of lumber, lath and shingles.  
 1,629,033 bushels of grain.  
 13,409,684 packages of freight.

From the records of the Despatcher's office, the following table has been compiled, showing the vessel movement inside the Chicago river :

MOVEMENT OF VESSELS AND OPERATION OF BRIDGES, FROM  
 APRIL TO DECEMBER, 1895—DAY AND NIGHT—FROM  
 RECORDS OF THE VESSEL DESPATCHER.

| BRIDGES.        | NUMBER.          |                                |                 |                   | AVERAGE.                |                        |                              |                              |                                | PERCENTAGE OF TIME. |              |
|-----------------|------------------|--------------------------------|-----------------|-------------------|-------------------------|------------------------|------------------------------|------------------------------|--------------------------------|---------------------|--------------|
|                 | Days in Service. | Hours Open.                    | Vessels Passed. | Swings of Bridge. | No. of Vessels per Day. | No. of Swings per Day. | Time Open per Swing.         | Time Open per Hour.          | Time Open per Day.             | Bridge Closed.      | Bridge Open. |
| Rush street..   | 280              | <small>h. m.</small><br>421.20 | 11,509          | 8,996             | 50.08                   | 89.11                  | <small>m. s.</small><br>2.48 | <small>m. s.</small><br>4.33 | <small>m. s.</small><br>109.06 | 92.37               | 7.63         |
| State street..  | 280              | 378.19                         | 10,452          | 8,304             | 45.44                   | 86.10                  | 2.44                         | 4.07                         | 98.41                          | 93.45               | 6.55         |
| Dearborn st..   | 280              | 331.24                         | 10,361          | 8,314             | 45.04                   | 86.14                  | 2.23                         | 3.86                         | 86.27                          | 94.00               | 6.00         |
| Wells street..  | 280              | 324.48                         | 9,483           | 7,483             | 41.01                   | 82.53                  | 2.36                         | 3.32                         | 84.44                          | 94.12               | 5.88         |
| Lake street..   | 280              | 333.48                         | 7,440           | 5,090             | 32.04                   | 22.13                  | 3.56                         | 3.88                         | 87.04                          | 93.95               | 6.05         |
| Jackson street  | 280              | 284.09                         | 7,395           | 6,008             | 32.15                   | 26.12                  | 2.50                         | 3.05                         | 74.08                          | 94.85               | 5.15         |
| Harrison st..   | 280              | 350.19                         | 6,429           | 5,813             | 27.90                   | 25.27                  | 3.36                         | 3.48                         | 91.23                          | 93.65               | 6.35         |
| 12th street...  | 280              | 273.15                         | 7,139           | 5,692             | 31.03                   | 24.74                  | 2.53                         | 2.58                         | 71.17                          | 95.05               | 4.95         |
| 18th street...  | 280              | 285.40                         | 6,216           | 5,178             | 27.02                   | 22.51                  | 3.18                         | 3.06                         | 74.81                          | 94.82               | 5.18         |
| 22nd street ..  | 280              | 331.00                         | 6,291           | 5,078             | 27.35                   | 22.07                  | 3.54                         | 3.36                         | 86.21                          | 94.00               | 6.00         |
| Kinzie street.. | 280              | 264.12                         | 4,357           | 3,576             | 18.94                   | 15.54                  | 4.26                         | 2.52                         | 68.55                          | 95.21               | 4.79         |
| Chicago ave..   | 280              | 224.23                         | 3,206           | 3,007             | 13.93                   | 13.07                  | 4.28                         | 2.26                         | 58.32                          | 95.94               | 4.06         |



By considering the facts of this table, we see that only 75.11 per cent. of our total trade by Chicago River goes west of Rush street bridge, leaving the balance, or 24.89 per cent. east of Rush street. 48.55 per cent. of our trade by Chicago River goes to the South Branch. Of this, over half, or 54.66 per cent., goes beyond Twenty-second street bridge; while of the vessels that pass Rush street bridge going west, 37.86 per cent. go up the North Branch, 26.42 per cent. of them stopping at docks between Kinzie street and Chicago avenue, and the remainder, or 73.58 per cent. of the total North Branch trade going up the North Branch and Ogden Canal, beyond Chicago avenue bridge.

The low water in Lake Michigan during the year has been a serious embarrassment to trade; the elevation of water, as observed at the Four-Mile crib, being above datum only on five days in the whole year. The deficiency of appropriation for dredging for harbor (being only \$15,000) rendered it impossible to provide any adequate relief for a condition so general. The movement of vessels in the Chicago River was accomplished with difficulty and expense during the entire year.

#### ELEVATION OF LAKE MICHIGAN.

|                             | Maximum. | Minimum. | Mean. |
|-----------------------------|----------|----------|-------|
| January .....               | -0.63    | -1.04    | -0.67 |
| February .....              | -0.40    | -1.24    | -0.87 |
| March .....                 | -0.30    | -1.00    | -0.76 |
| April .....                 | -0.00    | -0.63    | -0.28 |
| May .....                   | -0.10    | -0.67    | -0.31 |
| June.....                   | -0.21    | -0.60    | -0.41 |
| July .....                  | -0.17    | -0.57    | -0.30 |
| August .....                | -0.12    | -0.38    | -0.21 |
| September.....              | -0.10    | -0.42    | -0.24 |
| October.....                | -0.10    | -0.97    | -0.48 |
| November .....              | -0.20    | -1.57    | -0.64 |
| December.....               | -0.13    | -1.23    | -0.74 |
| Mean water during 1895..... | .....    | .....    | -0.49 |

The City is indebted to the courtesy of Major Marshall, Corps of Engineers, U. S. A., Prof. Willis L. Moore, Chief of the Weather Bureau, Martin J. Russell, U. S. Collector, for commercial, climatic and other data embraced in this report.

The appropriation of \$42,000.00 for 1895 for docks, dredging and rock excavation, was drawn on to the amount of \$20,400.00 for work done in 1894 and not paid for out of that year's appropriation. This left but about \$20,000.00 for the year of 1895, the actual work done being to the amount of \$30,277.50.

TABLE SHOWING MAXIMUM, MINIMUM AND MEAN WATER IN  
LAKE MICHIGAN, ANNUALLY, FROM 1854 TO 1895, BOTH  
INCLUSIVE.

| Year.     | Max.  | Min.  | Mean. | Year.     | Max. | Min.  | Mean. |
|-----------|-------|-------|-------|-----------|------|-------|-------|
| 1854..... | ..... | ..... | 1.83  | 1875..... | 3.01 | -0.34 | 1.45  |
| 1855..... | 3.45  | 0.15  | 1.56  | 1876..... | 4.31 | 0.34  | 2.56  |
| 1856..... | 3.56  | 0.42  | 1.60  | 1877..... | 3.56 | 1.04  | 2.31  |
| 1857..... | 4.35  | 0.60  | 2.42  | 1878..... | 3.14 | 0.51  | 2.00  |
| 1858..... | 4.69  | 1.33  | 2.00  | 1879..... | 2.51 | -0.49 | 1.06  |
| 1859..... | 4.45  | 1.31  | 2.98  | 1880..... | 2.81 | -0.99 | 1.16  |
| 1860..... | 3.53  | 1.30  | 2.54  | 1881..... | 3.01 | -2.19 | 1.26  |
| 1861..... | 4.40  | 1.20  | 2.56  | 1882..... | 3.01 | -0.99 | 2.00  |
| 1862..... | 3.30  | 0.70  | 2.50  | 1883..... | 3.81 | -0.99 | 2.10  |
| 1863..... | 3.30  | -0.80 | 2.10  | 1884..... | 3.31 | -0.01 | 2.24  |
| 1864..... | 2.80  | -0.40 | 1.57  | 1885..... | 3.71 | -0.01 | 2.48  |
| 1865..... | 3.66  | -1.08 | 1.30  | 1886..... | 4.41 | 0.01  | 2.64  |
| 1866..... | 2.50  | 0.00  | 1.07  | 1887..... | 3.11 | 0.01  | 1.96  |
| 1867..... | 2.60  | -0.41 | 1.49  | 1888..... | 3.01 | 0.01  | 1.30  |
| 1868..... | 2.58  | -1.00 | 1.01  | 1889..... | 2.51 | -0.79 | 0.77  |
| 1869..... | 2.13  | 0.41  | 1.13  | 1890..... | 2.21 | -0.99 | 0.63  |
| 1870..... | 3.25  | -0.30 | 2.09  | 1891..... | 1.61 | -2.39 | 0.05  |
| 1871..... | 2.80  | -0.40 | 1.77  | 1892..... | 1.30 | -3.60 | -0.17 |
| 1872..... | 1.80  | -0.74 | 0.81  | 1893..... | 1.00 | -1.30 | -0.20 |
| 1873..... | 2.73  | -0.76 | 1.40  | 1894..... | 1.80 | -1.80 | 0.50  |
| 1874..... | 2.80  | -0.20 | 1.67  | 1895..... | 0.63 | -1.24 | -0.49 |

**PRECIPITATION AT CHICAGO, ILL., FOR EACH MONTH AND YEAR,  
FROM JANUARY, 1871, TO DECEMBER, 1895, INCLUSIVE.**

| YEAR.              | January.     | February.    | March.       | April.       | May.         | June.        | July.        | August.      | September.   | October.     | November.    | December.    | Annual.       |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| 1871 .....         | 4.13         | 1.45         | 2.66         | 3.70         | 3.90         | 5.56         | 2.52         | 2.01         | 0.74         | .....        | 3.62         | 3.44         | .....         |
| 1872 .....         | 0.68         | 0.84         | 3.79         | 3.03         | 3.24         | 3.45         | 3.09         | 2.59         | 6.43         | 0.65         | 1.06         | 0.23         | 29.07         |
| 1873 .....         | 2.56         | 0.47         | 0.89         | 6.22         | 7.20         | 1.44         | 4.04         | 1.58         | 3.53         | 2.43         | 1.61         | 4.44         | 36.41         |
| 1874 .....         | 3.47         | 1.51         | 2.15         | 2.67         | 2.08         | 3.25         | 0.58         | 3.15         | 3.76         | 2.55         | 2.83         | 0.63         | 28.63         |
| 1875 .....         | 0.96         | 1.99         | 1.43         | 2.32         | 3.64         | 5.17         | 7.18         | 3.29         | 4.39         | 4.32         | 0.75         | 2.62         | 68.06         |
| 1876 .....         | 3.22         | 3.90         | 4.04         | 3.07         | 1.85         | 5.96         | 3.11         | 3.66         | 3.74         | 1.20         | 3.25         | 0.48         | 36.48         |
| 1877 .....         | 1.91         | 0.06         | 5.37         | 2.42         | 1.81         | 6.04         | 2.98         | 3.06         | 2.02         | 6.51         | 6.08         | 2.75         | 41.01         |
| 1878 .....         | 1.31         | 2.12         | 4.39         | 5.57         | 5.22         | 3.02         | 6.09         | 3.66         | 1.99         | 5.17         | 0.83         | 2.58         | 41.95         |
| 1879 .....         | 0.54         | 1.47         | 2.37         | 1.93         | 3.89         | 3.18         | 5.58         | 0.45         | 1.18         | 2.72         | 4.93         | 2.47         | 30.71         |
| 1880 .....         | 3.53         | 2.91         | 2.25         | 5.20         | 4.97         | 3.50         | 3.07         | 4.47         | 2.25         | 3.19         | 0.87         | 1.11         | 37.33         |
| 1881 .....         | 0.87         | 5.98         | 2.99         | 1.84         | 1.85         | 5.93         | 4.31         | 0.54         | 4.34         | 6.89         | 5.97         | 2.67         | 44.18         |
| 1882 .....         | 1.55         | 2.24         | 3.43         | 6.72         | 5.52         | 5.71         | 3.43         | 4.96         | 0.91         | 3.40         | 1.48         | 1.99         | 41.34         |
| 1883 .....         | 1.74         | 4.74         | 0.42         | 3.72         | 7.32         | 5.61         | 5.53         | 1.21         | 1.36         | 7.36         | 5.26         | 1.59         | 45.66         |
| 1884 .....         | 1.39         | 3.27         | 5.16         | 3.05         | 1.53         | 2.11         | 3.71         | 2.50         | 2.29         | 3.59         | 1.80         | 4.21         | 34.61         |
| 1885 .....         | 3.18         | 2.01         | 0.57         | 4.00         | 3.17         | 5.20         | 2.44         | 11.28        | 2.97         | 3.87         | 2.33         | 3.35         | 44.37         |
| 1886 .....         | 3.56         | 1.51         | 1.79         | 1.29         | 1.00         | 0.94         | 1.58         | 3.38         | 6.93         | 1.42         | 1.66         | 1.76         | 26.77         |
| 1887 .....         | 3.13         | 5.10         | 0.89         | 0.46         | 1.38         | 1.68         | 1.05         | 3.35         | 4.03         | 2.03         | 2.41         | 3.67         | 29.18         |
| 1888 .....         | 1.56         | 1.51         | 2.99         | 2.13         | 6.22         | 1.66         | 3.93         | 2.10         | 0.98         | 2.95         | 2.89         | 1.94         | 30.86         |
| 1889 .....         | 1.64         | 1.31         | 1.43         | 2.35         | 5.38         | 2.93         | 9.56         | 0.39         | 2.75         | 1.82         | 3.49         | 1.90         | 34.95         |
| 1890 .....         | 2.96         | 2.42         | 2.10         | 3.23         | 5.13         | 3.25         | 2.57         | 2.58         | 1.39         | 4.20         | 1.59         | 1.25         | 32.69         |
| 1891 .....         | 1.99         | 1.95         | 2.13         | 3.14         | 2.09         | 2.42         | 2.47         | 4.52         | 0.83         | 0.36         | 3.83         | 1.32         | 26.54         |
| 1892 .....         | 1.99         | 1.57         | 2.21         | 2.17         | 6.77         | 10.58        | 2.23         | 1.85         | 1.34         | 1.54         | 2.68         | 1.63         | 36.56         |
| 1893 .....         | 2.08         | 2.44         | 1.69         | 4.16         | 1.93         | 3.59         | 3.08         | 0.18         | 1.98         | 1.75         | 2.45         | 2.33         | 27.65         |
| 1894 .....         | 1.55         | 2.13         | 3.66         | 3.65         | 3.35         | 1.96         | 0.60         | 0.60         | 8.28         | 0.84         | 1.18         | 1.66         | 27.46         |
| 1895 .....         | 2.15         | 1.60         | 1.82         | 0.86         | 1.99         | 1.79         | 2.43         | 6.49         | 0.89         | 0.51         | 5.60         | 6.76         | 33.38         |
| <b>Sums .....</b>  | <b>53.67</b> | <b>56.50</b> | <b>61.12</b> | <b>76.90</b> | <b>92.43</b> | <b>95.88</b> | <b>87.10</b> | <b>73.85</b> | <b>70.79</b> | <b>71.27</b> | <b>70.45</b> | <b>58.76</b> | <b>834.99</b> |
| <b>Means .....</b> | <b>2.15</b>  | <b>2.26</b>  | <b>2.44</b>  | <b>3.08</b>  | <b>3.70</b>  | <b>3.83</b>  | <b>3.48</b>  | <b>2.95</b>  | <b>2.83</b>  | <b>2.97</b>  | <b>2.82</b>  | <b>2.35</b>  | <b>34.79</b>  |

## CHICAGO, ILLINOIS, DAILY PRECIPITATION, 1895.

| DATE.             | January. | February | March. | April. | May.  | June. | July. | August. | September | October. | November | December |
|-------------------|----------|----------|--------|--------|-------|-------|-------|---------|-----------|----------|----------|----------|
| 1 .....           | .00      | .00      | Trace  | .18    | .00   | .21   | .00   | .00     | .00       | .00      | .00      | 0.27     |
| 2 .....           | .00      | .00      | .00    | .00    | Trace | .00   | .00   | .00     | .00       | .00      | .00      | 0.15     |
| 3 .....           | .04      | Trace    | Trace  | .00    | .00   | .00   | .00   | .00     | .00       | .00      | .00      | Trace    |
| 4 .....           | .00      | Trace    | .10    | .00    | Trace | Trace | .00   | .00     | .12       | .00      | .00      | 0.05     |
| 5 .....           | Trace    | .00      | Trace  | Trace  | .57   | .00   | .00   | .14     | .00       | .00      | .00      | 0.0      |
| 6 .....           | .15      | .91      | .00    | Trace  | .41   | .00   | .00   | Trace   | .01       | .36      | .18      | 0.0      |
| 7 .....           | .00      | .43      | .00    | .27    | .04   | .00   | .72   | .00     | .18       | .02      | 1.68     | Trace    |
| 8 .....           | .03      | .00      | .04    | .38    | .14   | .00   | .14   | .00     | .00       | .00      | .18      | 0.03     |
| 9 .....           | .00      | .00      | .00    | .01    | .00   | .00   | .00   | .00     | .00       | .00      | .72      | 0.0      |
| 10 .....          | Trace    | .00      | .00    | .00    | .01   | .00   | .00   | .58     | .00       | Trace    | Trace    | 0.0      |
| 11 .....          | .05      | .00      | .00    | .00    | .39   | .15   | .00   | Trace   | .00       | .12      | .00      | 0.02     |
| 12 .....          | .80      | Trace    | .01    | .01    | .00   | .26   | .00   | .00     | .00       | .00      | .00      | 0.01     |
| 13 .....          | .08      | Trace    | .00    | .00    | .19   | .01   | .00   | .00     | Trace     | .00      | Trace    | 0.00     |
| 14 .....          | .01      | Trace    | .01    | Trace  | .00   | .00   | .04   | .00     | .00       | Trace    | Trace    | 0.00     |
| 15 .....          | .03      | .00      | .01    | .00    | .00   | .00   | .00   | .00     | .37       | .01      | Trace    | 0.00     |
| 16 .....          | .00      | .00      | Trace  | .00    | .00   | .00   | Trace | .00     | .21       | .00      | .09      | Trace    |
| 17 .....          | .00      | .06      | .00    | .00    | .02   | .00   | .33   | .00     | .00       | .00      | Trace    | 0.17     |
| 18 .....          | .03      | Trace    | .00    | .00    | .05   | .56   | .00   | .00     | .00       | .00      | .00      | 1.10     |
| 19 .....          | .00      | .00      | .00    | .00    | .17   | .00   | .80   | .00     | .00       | .00      | .91      | 2.66     |
| 20 .....          | .10      | .03      | .00    | .00    | .00   | .00   | .00   | .00     | .00       | Trace    | .00      | 1.67     |
| 21 .....          | .41      | .00      | .00    | Trace  | .00   | .00   | .08   | .00     | .00       | .00      | .15      | 0.05     |
| 22 .....          | .01      | Trace    | .00    | .00    | .00   | .00   | Trace | .00     | .00       | .00      | .04      | 0.00     |
| 23 .....          | .00      | Trace    | .02    | .00    | .00   | .00   | Trace | 1.18    | .03       | .00      | .08      | 0.10     |
| 24 .....          | .00      | .00      | .00    | .00    | .00   | .00   | .07   | 2.47    | .00       | .00      | .00      | 0.34     |
| 25 .....          | .44      | .00      | .00    | .00    | .00   | .11   | .00   | .00     | Trace     | .00      | .55      | 0.06     |
| 26 .....          | .45      | .00      | .00    | .02    | Trace | .49   | .05   | .74     | Trace     | .00      | 1.02     | 0.00     |
| 27 .....          | .00      | .16      | .00    | .04    | Trace | .00   | .19   | .02     | .00       | .00      | .00      | 0.00     |
| 28 .....          | .00      | .01      | .00    | .00    | .00   | .00   | .00   | .98     | .02       | .00      | .00      | 0.00     |
| 29 .....          | Trace    | .....    | .00    | .00    | .00   | .00   | .00   | .38     | .00       | .00      | .10      | 0.00     |
| 30 .....          | .00      | .....    | .00    | .00    | .00   | .00   | .00   | .00     | .00       | .00      | .00      | 0.08     |
| 31 .....          | .00      | .....    | .73    | .....  | .00   | ..... | .00   | .00     | .....     | Trace    | .....    | Trace    |
| Sums .....        | 2.15     | 1.60     | 1.82   | 0.86   | 1.99  | 1.79  | 2.42  | 6.49    | 0.89      | 0.61     | 5.60     | 6.76     |
| Daily Means ..... | .069     | .057     | .043   | .029   | .064  | .060  | .078  | .209    | .030      | .016     | .187     | .218     |

**MAXIMUM, MINIMUM AND MEAN DAILY TEMPERATURE,  
YEAR 1895.**

| DATE.      | JANUARY. |      |       | FEBRUARY |       |       | MARCH. |      |       | APRIL. |       |       | MAY. |      |       | JUNE. |       |       |
|------------|----------|------|-------|----------|-------|-------|--------|------|-------|--------|-------|-------|------|------|-------|-------|-------|-------|
| 1895.      | Max.     | Min. | Mean. | Max.     | Min.  | Mean. | Max.   | Min. | Mean. | Max.   | Min.  | Mean. | Max. | Min. | Mean. | Max.  | Min.  | Mean. |
| 1.....     | 25       | 12   | 18    | 3        | -3    | 0     | 30     | 24   | 27    | 34     | 32    | 33    | 68   | 46   | 57    | 85    | 73    | 79    |
| 2.....     | 32       | 17   | 24    | 15       | -9    | 3     | 38     | 19   | 28    | 36     | 32    | 34    | 81   | 54   | 68    | 92    | 72    | 82    |
| 3.....     | 29       | 21   | 25    | 12       | 3     | 8     | 36     | 19   | 28    | 41     | 29    | 35    | 87   | 59   | 73    | 95    | 66    | 80    |
| 4.....     | 10       | -3   | 4     | 2        | -13   | -6    | 19     | 13   | 16    | 62     | 34    | 48    | 84   | 59   | 72    | 86    | 64    | 75    |
| 5.....     | 26       | 10   | 18    | 6        | -15   | -4    | 29     | 12   | 20    | 65     | 40    | 52    | 82   | 58   | 70    | 72    | 55    | 64    |
| 6.....     | 33       | 25   | 29    | 5        | 1     | 3     | 33     | 16   | 24    | 62     | 48    | 55    | 77   | 63   | 70    | 58    | 50    | 54    |
| 7.....     | 33       | 26   | 30    | 7        | -5    | 1     | 45     | 29   | 37    | 51     | 42    | 46    | 71   | 57   | 64    | 79    | 54    | 66    |
| 8.....     | 30       | 7    | 14    | 0        | -15   | -8    | 34     | 24   | 29    | 38     | 36    | 37    | 80   | 57   | 68    | 75    | 61    | 68    |
| 9.....     | 28       | 13   | 20    | 12       | -8    | 2     | 49     | 18   | 34    | 51     | 36    | 44    | 90   | 64   | 77    | 83    | 63    | 73    |
| 10.....    | 34       | 27   | 30    | 9        | 2     | 6     | 23     | 19   | 21    | 37     | 32    | 34    | 87   | 68   | 78    | 86    | 68    | 77    |
| 11.....    | 21       | 1    | 11    | 10       | -6    | 2     | 30     | 20   | 25    | 60     | 33    | 46    | 57   | 43   | 50    | 88    | 70    | 79    |
| 12.....    | 27       | -9   | 9     | 14       | 4     | 9     | 36     | 25   | 30    | 62     | 47    | 54    | 52   | 36   | 44    | 72    | 62    | 67    |
| 13.....    | 18       | 10   | 14    | 23       | 10    | 16    | 34     | 19   | 26    | 65     | 42    | 48    | 45   | 36   | 40    | 83    | 60    | 72    |
| 14.....    | 19       | 6    | 12    | 28       | 14    | 21    | 18     | 9    | 14    | 40     | 54    | 37    | 40   | 32   | 36    | 74    | 63    | 68    |
| 15.....    | 28       | 18   | 23    | 26       | 9     | 18    | 19     | 12   | 6     | 42     | 30    | 36    | 46   | 35   | 40    | 68    | 61    | 64    |
| 16.....    | 35       | 19   | 27    | 29       | 10    | 20    | 33     | 13   | 23    | 44     | 36    | 40    | 48   | 39   | 44    | 75    | 61    | 68    |
| 17.....    | 27       | 12   | 20    | 30       | 17    | 24    | 44     | 20   | 32    | 42     | 30    | 39    | 61   | 41   | 51    | 88    | 65    | 76    |
| 18.....    | 41       | 25   | 33    | 26       | 11    | 18    | 44     | 32   | 38    | 50     | 39    | 44    | 60   | 48   | 54    | 76    | 66    | 71    |
| 19.....    | 35       | 28   | 32    | 31       | 15    | 23    | 31     | 27   | 29    | 54     | 43    | 48    | 41   | 38   | 40    | 71    | 62    | 66    |
| 20.....    | 42       | 27   | 34    | 38       | 16    | 27    | 32     | 25   | 28    | 71     | 48    | 60    | 40   | 36   | 38    | 66    | 62    | 64    |
| 21.....    | 51       | 20   | 36    | 36       | 25    | 30    | 33     | 27   | 30    | 64     | 43    | 54    | 53   | 37   | 45    | 75    | 62    | 68    |
| 22.....    | 20       | 8    | 14    | 34       | 14    | 24    | 42     | 28   | 35    | 64     | 37    | 50    | 68   | 45   | 56    | 74    | 63    | 68    |
| 23.....    | 13       | 4    | 8     | 30       | 20    | 25    | 58     | 35   | 40    | 50     | 39    | 44    | 75   | 51   | 63    | 85    | 64    | 74    |
| 24.....    | 18       | -2   | 8     | 47       | 26    | 36    | 66     | 37   | 52    | 81     | 41    | 61    | 71   | 57   | 64    | 78    | 65    | 72    |
| 25.....    | 23       | 16   | 20    | 46       | 36    | 41    | 50     | 36   | 43    | 67     | 47    | 57    | 73   | 59   | 66    | 93    | 66    | 80    |
| 26.....    | 28       | 5    | 16    | 49       | 32    | 40    | 46     | 32   | 39    | 47     | 42    | 44    | 52   | 45   | 48    | 78    | 63    | 70    |
| 27.....    | -1       | -9   | -5    | 46       | 40    | 43    | 73     | 38   | 56    | 48     | 41    | 44    | 49   | 41   | 45    | 65    | 59    | 62    |
| 28.....    | 6        | -9   | -2    | 61       | 46    | 54    | 32     | 30   | 31    | 58     | 44    | 51    | 88   | 48   | 68    | 65    | 60    | 62    |
| 29.....    | 19       | 3    | 11    | .....    | ..... | ..... | 80     | 31   | 56    | 64     | 48    | 56    | 93   | 70   | 82    | 68    | 61    | 64    |
| 30.....    | 6        | -8   | -1    | .....    | ..... | ..... | 41     | 34   | 38    | 61     | 44    | 52    | 91   | 67   | 79    | 71    | 63    | 67    |
| 31.....    | 22       | 0    | 11    | .....    | ..... | ..... | 35     | 31   | 33    | .....  | ..... | 94    | 72   | 83   | ..... | ..... | ..... | ..... |
| Sums.....  | 768      | 820  | 543   | 675      | 277   | 476   | 1213   | 754  | 984   | 1601   | 1175  | 1383  | 2104 | 1561 | 1833  | 2324  | 1884  | 2100  |
| Means..... | 24.8     | 10.3 | 17.5  | 24.1     | 9.9   | 17.0  | 39.1   | 24.3 | 31.7  | 53.4   | 39.2  | 46.1  | 67.9 | 50.4 | 59.1  | 77.5  | 62.8  | 70.0  |

**MAXIMUM, MINIMUM AND MEAN DAILY TEMPERATURE,  
YEAR 1895 — CONTINUED.**

| DATE.       | JULY. |      |       | AUGUST. |      |       | SEPT. |      |       | OCTOBER. |      |       | NOV. |      |       | DEC. |      |       |
|-------------|-------|------|-------|---------|------|-------|-------|------|-------|----------|------|-------|------|------|-------|------|------|-------|
| 1895.       | Max.  | Min. | Mean. | Max.    | Min. | Mean. | Max.  | Min. | Mean. | Max.     | Min. | Mean. | Max. | Min. | Mean. | Max. | Min. | Mean. |
| 1.....      | 67    | 62   | 64    | 69      | 60   | 64    | 72    | 52   | 62    | 62       | 37   | 50    | 41   | 25   | 33    | 36   | 33   | 34    |
| 2.....      | 71    | 61   | 63    | 81      | 60   | 70    | 78    | 58   | 68    | 70       | 43   | 56    | 57   | 30   | 44    | 20   | 13   | 16    |
| 3.....      | 76    | 64   | 70    | 74      | 65   | 70    | 85    | 63   | 74    | 64       | 48   | 56    | 65   | 40   | 52    | 16   | .00  | 8     |
| 4.....      | 74    | 63   | 68    | 77      | 66   | 72    | 82    | 64   | 73    | 58       | 54   | 56    | 67   | 50   | 58    | 18   | 10   | 14    |
| 5.....      | 83    | 65   | 74    | 85      | 70   | 78    | 78    | 67   | 72    | 60       | 53   | 56    | 67   | 49   | 58    | 15   | 6    | 10    |
| 6.....      | 84    | 68   | 76    | 78      | 65   | 72    | 81    | 67   | 74    | 65       | 51   | 58    | 59   | 43   | 51    | 30   | 11   | 20    |
| 7.....      | 86    | 65   | 76    | 82      | 63   | 72    | 65    | 60   | 62    | 59       | 49   | 54    | 52   | 40   | 46    | 39   | 25   | 32    |
| 8.....      | 78    | 65   | 72    | 87      | 67   | 77    | 78    | 59   | 68    | 41       | 36   | 38    | 41   | 37   | 39    | 28   | 21   | 24    |
| 9.....      | 63    | 50   | 56    | 91      | 69   | 80    | 83    | 64   | 74    | 49       | 33   | 41    | 37   | 33   | 35    | 22   | 16   | 19    |
| 10.....     | 71    | 56   | 64    | 92      | 72   | 82    | 91    | 69   | 80    | 63       | 38   | 50    | 37   | 30   | 34    | 34   | 14   | 24    |
| 11.....     | 82    | 59   | 70    | 76      | 69   | 72    | 92    | 72   | 82    | 57       | 46   | 52    | 39   | 32   | 36    | 36   | 30   | 33    |
| 12.....     | 86    | 63   | 74    | 75      | 66   | 70    | 82    | 60   | 71    | 54       | 38   | 46    | 44   | 30   | 37    | 23   | 24   | 26    |
| 13.....     | 79    | 64   | 72    | 76      | 64   | 70    | 64    | 60   | 62    | 69       | 40   | 54    | 42   | 35   | 38    | 26   | 14   | 20    |
| 14.....     | 91    | 70   | 80    | 93      | 67   | 80    | 67    | 60   | 64    | 51       | 47   | 49    | 47   | 41   | 44    | 37   | 24   | 30    |
| 15.....     | 85    | 66   | 76    | 73      | 70   | 72    | 87    | 58   | 72    | 50       | 41   | 46    | 47   | 31   | 39    | 36   | 33   | 34    |
| 16.....     | 92    | 70   | 81    | 82      | 69   | 76    | 81    | 65   | 73    | 63       | 44   | 54    | 41   | 36   | 38    | 43   | 29   | 36    |
| 17.....     | 84    | 67   | 76    | 78      | 72   | 75    | 86    | 70   | 78    | 54       | 41   | 48    | 49   | 35   | 42    | 50   | 42   | 46    |
| 18.....     | 83    | 65   | 74    | 85      | 68   | 76    | 87    | 70   | 78    | 68       | 44   | 56    | 44   | 40   | 42    | 48   | 36   | 42    |
| 19.....     | 79    | 66   | 72    | 74      | 64   | 69    | 91    | 74   | 82    | 41       | 33   | 37    | 34   | 28   | 31    | 54   | 37   | 46    |
| 20.....     | 74    | 67   | 70    | 82      | 58   | 70    | 91    | 72   | 82    | 36       | 24   | 30    | 21   | 16   | 18    | 48   | 35   | 42    |
| 21.....     | 78    | 67   | 72    | 72      | 65   | 68    | 90    | 71   | 80    | 58       | 31   | 44    | 29   | 14   | 22    | 41   | 37   | 39    |
| 22.....     | 68    | 64   | 66    | 86      | 62   | 74    | 90    | 73   | 82    | 50       | 40   | 45    | 35   | 28   | 32    | 38   | 34   | 36    |
| 23.....     | 72    | 63   | 68    | 89      | 68   | 78    | 62    | 45   | 54    | 45       | 25   | 35    | 36   | 27   | 32    | 39   | 34   | 36    |
| 24.....     | 79    | 66   | 72    | 80      | 64   | 72    | 69    | 49   | 59    | 58       | 31   | 44    | 33   | 17   | 25    | 54   | 32   | 43    |
| 25.....     | 73    | 64   | 68    | 81      | 68   | 74    | 83    | 53   | 68    | 46       | 37   | 42    | 34   | 29   | 32    | 56   | 33   | 44    |
| 26.....     | 83    | 64   | 74    | 74      | 65   | 70    | 74    | 58   | 66    | 71       | 44   | 58    | 24   | 10   | 17    | 36   | 28   | 32    |
| 27.....     | 70    | 65   | 68    | 77      | 67   | 72    | 54    | 45   | 50    | 50       | 37   | 44    | 33   | 8    | 20    | 38   | 30   | 34    |
| 28.....     | 70    | 61   | 66    | 80      | 67   | 74    | 63    | 49   | 56    | 41       | 24   | 32    | 40   | 28   | 34    | 41   | 31   | 36    |
| 29.....     | 78    | 59   | 68    | 70      | 62   | 66    | 52    | 43   | 48    | 35       | 24   | 30    | 39   | 32   | 36    | 27   | 24   | 26    |
| 30.....     | 62    | 58   | 60    | 72      | 63   | 68    | 52    | 36   | 44    | 40       | 27   | 34    | 34   | 27   | 30    | 20   | 16   | 18    |
| 31.....     | 69    | 54   | 62    | 65      | 61   | 63    | ....  | .... | ....  | 42       | 34   | 38    | ..   | .... | ....  | 19   | 11   | 15    |
| Sums .....  | 2390  | 1961 | 2175  | 2456    | 2036 | 2246  | 2310  | 1806 | 2058  | 1670     | 1194 | 1433  | 1268 | 921  | 1095  | 1073 | 763  | 915   |
| Means ..... | 77.1  | 63.3 | 70.2  | 79.2    | 65.7 | 72.5  | 77.0  | 60.2 | 68.6  | 53.9     | 38.5 | 46.2  | 42.8 | 30.7 | 36.5  | 33.0 | 25.0 | 30.0  |

MEAN MONTHLY TEMPERATURE—CHICAGO, FROM  
1871 TO 1895, INCLUSIVE.

| YEAR.     | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Annual. |
|-----------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|---------|
| 1871..... | 30.9     | 30.2      | 41.2   | 51.2   | 56.7 | 66.8  | 73.0  | 72.7    | 61.0       | .....    | 35.0      | 20.0      | .....   |
| 1872..... | 23.0     | 25.5      | 27.6   | 48.7   | 56.3 | 69.3  | 71.7  | 72.1    | 64.0       | 50.2     | 31.9      | 19.1      | 45.6    |
| 1873..... | 20.4     | 24.1      | 34.3   | 43.0   | 53.8 | 70.8  | 70.8  | 72.1    | 62.1       | 48.9     | 34.3      | 32.0      | 47.2    |
| 1874..... | 28.9     | 31.4      | 36.5   | 38.6   | 59.3 | 70.5  | 74.8  | 71.8    | 66.4       | 53.0     | 40.3      | 33.5      | 50.4    |
| 1875..... | 17.9     | 14.7      | 31.8   | 42.5   | 55.5 | 63.1  | 68.8  | 68.4    | 61.0       | 47.5     | 37.0      | 36.8      | 45.4    |
| 1876..... | 33.0     | 31.8      | 33.9   | 46.5   | 59.0 | 67.5  | 73.5  | 73.5    | 61.1       | 48.8     | 39.3      | 20.0      | 49.0    |
| 1877..... | 21.9     | 36.4      | 29.4   | 45.4   | 56.9 | 66.1  | 73.1  | 71.1    | 66.5       | 54.7     | 39.7      | 42.8      | 50.8    |
| 1878..... | 31.2     | 35.7      | 44.3   | 52.2   | 55.5 | 65.4  | 74.8  | 73.6    | 65.9       | 52.0     | 43.1      | 23.7      | 51.4    |
| 1879..... | 21.4     | 27.4      | 39.1   | 46.8   | 57.6 | 64.7  | 75.9  | 72.6    | 61.2       | 59.9     | 41.9      | 30.8      | 49.9    |
| 1880..... | 40.1     | 34.6      | 37.9   | 48.5   | 64.2 | 69.9  | 72.4  | 72.4    | 62.5       | 50.8     | 31.4      | 23.0      | 50.6    |
| 1881..... | 19.5     | 24.7      | 32.2   | 41.5   | 61.0 | 63.0  | 72.9  | 75.0    | 69.5       | 55.9     | 39.9      | 37.1      | 49.4    |
| 1882..... | 28.3     | 38.2      | 38.3   | 45.9   | 51.7 | 63.6  | 68.6  | 71.2    | 65.0       | 56.5     | 41.7      | 26.0      | 49.6    |
| 1883..... | 16.3     | 23.0      | 31.4   | 45.6   | 52.1 | 64.1  | 71.0  | 68.3    | 60.7       | 51.8     | 41.5      | 30.1      | 46.3    |
| 1884..... | 19.2     | 27.7      | 34.2   | 44.3   | 56.7 | 65.0  | 69.2  | 68.8    | 68.9       | 56.4     | 39.6      | 28.4      | 48.2    |
| 1885..... | 18.3     | 16.8      | 30.0   | 45.3   | 52.8 | 65.4  | 72.8  | 68.1    | 63.9       | 51.0     | 41.9      | 31.1      | 46.4    |
| 1886..... | 21.4     | 28.1      | 36.1   | 49.1   | 57.0 | 66.0  | 71.4  | 73.4    | 66.1       | 56.6     | 38.2      | 25.0      | 49.0    |
| 1887..... | 17.3     | 27.1      | 31.9   | 47.4   | 59.4 | 67.3  | 76.0  | 69.7    | 62.5       | 47.3     | 38.0      | 28.1      | 47.7    |
| 1888..... | 15.1     | 23.0      | 30.5   | 45.4   | 52.6 | 67.4  | 72.6  | 69.4    | 59.8       | 49.1     | 41.6      | 32.2      | 46.6    |
| 1889..... | 29.0     | 19.9      | 38.4   | 46.8   | 56.8 | 62.3  | 70.5  | 70.6    | 62.8       | 49.4     | 38.6      | 40.6      | 48.8    |
| 1890..... | 30.8     | 32.4      | 29.5   | 45.6   | 53.4 | 70.2  | 72.1  | 67.6    | 60.4       | 51.4     | 41.9      | 30.6      | 48.8    |
| 1891..... | 30.2     | 28.6      | 30.6   | 47.0   | 53.4 | 65.7  | 67.0  | 69.0    | 69.0       | 52.6     | 33.8      | 35.4      | 48.5    |
| 1892..... | 19.5     | 30.2      | 31.0   | 44.0   | 52.4 | 64.4  | 71.6  | 70.9    | 63.9       | 53.6     | 34.7      | 23.4      | 46.6    |
| 1893..... | 12.0     | 21.5      | 33.2   | 44.3   | 52.4 | 67.8  | 73.8  | 69.8    | 64.1       | 52.6     | 36.0      | 25.4      | 46.1    |
| 1894..... | 27.5     | 23.0      | 41.2   | 46.8   | 56.1 | 71.4  | 73.4  | 70.8    | 66.2       | 52.1     | 34.4      | 32.4      | 49.6    |
| 1895..... | 17.5     | 17.0      | 31.7   | 46.1   | 59.1 | 70.0  | 70.2  | 72.5    | 68.6       | 46.2     | 36.5      | 30.0      | 47.1    |

**MONTHLY MEAN BAR. PRESSURE—ANNUAL MEANS FROM  
1873 TO 1895—FOR CHICAGO.**

| YEAR.     | January. | February. | March. | April. | May.  | June. | July. | August. | September. | October. | November. | December. | Annual. |
|-----------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|---------|
| 1873..... | 29.13    | 29.14     | 29.14  | 29.05  | 29.02 | 29.10 | 29.13 | 29.17   | 29.17      | 29.15    | 29.11     | 29.21     | 29.13   |
| 1874..... | .21      | .22       | .18    | .19    | .11   | .09   | .13   | .13     | .16        | .21      | .19       | .22       | .17     |
| 1875..... | .31      | .19       | .10    | .10    | .06   | .10   | .12   | .10     | .17        | .10      | .17       | .03       | .13     |
| 1876..... | .16      | .15       | .10    | .09    | .10   | .02   | .12   | .16     | .12        | .06      | .10       | .18       | .11     |
| 1877..... | .22      | .27       | .14    | .07    | .15   | .04   | .09   | .09     | .14        | .11      | .14       | .19       | .14     |
| 1878..... | .14      | .05       | .04    | 28.91  | .06   | .06   | .11   | .04     | .8         | .12      | .15       | .16       | .08     |
| 1879..... | .22      | .19       | .18    | 29.13  | .16   | .13   | .10   | .11     | .21        | .25      | .18       | .19       | .17     |
| 1880..... | .13      | .16       | .19    | .06    | .11   | .10   | .12   | .16     | .18        | .18      | .28       | .21       | .16     |
| 1881..... | .23      | .21       | .00    | .13    | .15   | .07   | .15   | .15     | .09        | .20      | .18       | .21       | .15     |
| 1882..... | .23      | .13       | .16    | .15    | .11   | .02   | .15   | .12     | .21        | .14      | .25       | .20       | .16     |
| 1883..... | .23      | .35       | .15    | .07    | .06   | .06   | .12   | .20     | .20        | .22      | .19       | .19       | .17     |
| 1884..... | .25      | .13       | .13    | .07    | .07   | .16   | .06   | .17     | .15        | .24      | .19       | .20       | .15     |
| 1885..... | .22      | .10       | .18    | .13    | .05   | .15   | .10   | .11     | .16        | .11      | .09       | .15       | .13     |
| 1886..... | .15      | .17       | .08    | .17    | .09   | .12   | .11   | .11     | .17        | .30      | .13       | .27       | .16     |
| 1887..... | .16      | .23       | .18    | .07    | .11   | .11   | .10   | .14     | .20        | .17      | .17       | .16       | .15     |
| 1888..... | .31      | .14       | .20    | .25    | .04   | .05   | .16   | .16     | .19        | .09      | .24       | .17       | .17     |
| 1889..... | .09      | .21       | .11    | .13    | .07   | .10   | .10   | .20     | .14        | .25      | .18       | .15       | .14     |
| 1890..... | .23      | .16       | .18    | .21    | .04   | .11   | .14   | .19     | .23        | .06      | .17       | .20       | .16     |
| 1891..... | .16      | .11       | .14    | .12    | .23   | .07   | .16   | .12     | .25        | .22      | .17       | .14       | .16     |
| 1892..... | .20      | .20       | .17    | .15    | .02   | .06   | .20   | .15     | .21        | .18      | .17       | .20       | .16     |
| 1893..... | .08      | .19       | .11    | .01    | .03   | .10   | .10   | .15     | .12        | .13      | .14       | .18       | .11     |
| 1894..... | .17      | .20       | .11    | .12    | .07   | .13   | .16   | .17     | .17        | .06      | .17       | .19       | .14     |
| 1895..... | 29.10    | .22       | .14    | .12    | .13   | .17   | .14   | .08     | .14        | .18      | .21       | 30.00     | 29.25   |



## DIVISION OF ARCHITECTURE.

MR. R. BRUCE WATSON, ARCHITECT.

The following buildings have been designed and supervised by this division during the year :

## CITY TELEGRAPH DEPARTMENT.

## BLUE ISLAND AVENUE ELECTRIC LIGHT STATION.

June 1, 1895, the Blue Island avenue electric light station was completed. Dimension of building is 50 x 220 feet. The front exteriors are of pressed brick and terra cotta, faced inside with red pressed brick; tile roof on iron frame work. The entire cost of building was \$27,609.00.

## HEALTH DEPARTMENT.

CHICAGO ISOLATION HOSPITAL—MR. D. E. WAID IS THE SUPERINTENDENT.

A municipal isolation hospital for contagious diseases, to be located on the block between Thirty-fourth and Thirty-fifth streets and Lawndale and Hamlin avenues, was planned, and the general contract was let under the preceding administration. Work was begun April 8, 1895. Shortly afterwards the Commissioner of Public Works being dissatisfied with the terms of the contract caused the work to be stopped pending a revision and investigation. Subsequently defective work was found on the foundations. The result of the inquiry led to the making of a new set of drawings on a radically different plan, which provides a normal capacity for about fifty patients, but arranged with heating and executive facilities for an epidemic, in which event, by adding some temporary wards, five hundred patients could be cared for upon short notice with small cost. This plan was approved by the Mayor and Board of Health.

An estimate was made showing that the hospital under the original plans would have cost, completed, \$216,000.00. It consisted of twenty-five buildings with capacity for only about one hundred and twenty beds, and covered a larger area of ground, and would have been expensive for heating and general administration. As now being constructed, the hospital will consist of eight fire-proof buildings, and completed (not including the cheap temporary wards, which may never be needed) is estimated to cost \$112,000.00.

The general contract, as originally let to William Fallon & Company, amounted to \$124,850.00. As revised, it was made to include additional items of work and was reduced to \$80,000.00, according to the new lay-out.

Work was begun in September, 1895.

The buildings are being roofed, and, with good weather, ought soon to be ready for plastering.

#### FIRE DEPARTMENT.

##### MARYLAND AVENUE FIRE ENGINE HOUSE.

Contracts were let for a two-story fire engine house located on Maryland avenue, near Sixty-third street, on September 25, 1895. Work was commenced first of October, and building will be completed and ready for occupancy the first of February, 1896. Contract price of building is \$6,447.00. The dimension of the building is 26 x 82 feet.

The first story front is of blue Bedford stone; second story of buff brick with copper bay. The hardwood interior to be finished in oil.

##### SOUTH SIDE PUBLIC BATH HOUSE.

On December 24 plans and specifications were completed for a public bath house, to be located on Wentworth avenue, near Thirty-ninth street. Dimension of the building is 49.5 x 100 feet; building to cost \$15,000.00.

The basement contains a barber shop, soup kitchen, free laundry, steam heating and hot water apparatus. The first story consists of thirty-two baths for females and thirty-two baths for males, separate waiting room and entrance for each sex, and general office.

The second floor is divided into apartments for the attendants in charge. The front is to be of pressed brick and terra cotta trimmings.

#### DEPARTMENT OF SEWERS.

Sketches have been made for a proposed pumping station to be located at Seventy-ninth and Sangamon streets. Dimension, 90 x 130 feet. The three main sides to be of pressed brick, and the entire interior of the pumping room to be laid up in pressed brick.

In conclusion, I thank you for the uniform courtesy you have shown and the support you have given me in all matters connected with this office; and I fully appreciate the hearty co-operation of the office force, and the efficient assistance of the heads of sub-departments.

Respectfully submitted,

LEWIS B. JACKSON,

*City Engineer.*



REPORT OF THE  
**Bureau of Water Rates**  
CITY OF CHICAGO



# WATER OFFICE REPORT

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HON. W. D. KENT,

*Commissioner of Public Works.*

DEAR SIR: In submitting herewith for your approval the Annual Report of the Water Office for the year ending December 31, 1895, I desire to state that the figures and statements as shown are actually drawn and compiled from the books of the Department. In no instance are they swelled or exaggerated for purposes of favorable comparison. In the cases of certain branches of the Department showing a loss over former years, it is not due to the fact that the administration has been careless or inefficient but is rather caused by the fact that we have confined ourselves to the records as they actually appear, thereby enabling us to overcome in the future such weaknesses as business methods and faithful work will remedy.

## IMPROVEMENTS.

Feeling assured that needed reforms and improvements when suggested to you will, as in the past, meet with your prompt approval and co-operation in securing them, I deem it unnecessary to embody such recommendations in this report except by reference in a general way. That such improvements will be needed from time to time you are no doubt satisfied, as I am, it being my desire that the Department advance with the times and as far as possible outgrow the systems and conditions inaugurated when Chicago was a small town instead of a city of nearly two million inhabitants.

A general rearrangement of the office in order to provide more room from the present space occupied by the Bureau will be one of the first improvements suggested. This can be done at a comparatively small expense, and will facilitate and economize the work of the office to such an extent that in my opinion the City will be well repaid for the cost incurred.

## TIME-KEEPING.

The system of time-keeping established by your instructions May 1 is being rigidly enforced in this Bureau. Its successful operation is indicated by the fact that the standard of punctuality and attendance upon work is at present very satisfactory.

Records of each employee are kept in accordance with civil service ideas, in order to guide us in selecting candidates for promotion caused by vacancies, resignations, or otherwise.

## COLLECTIONS.

The total net receipts of this office from all sources for the year amounted to \$3,215,137.10. Properly creditable to this year's business is an addition of \$25,352.86; same having been paid out by draw-backs from this year's collections for vacancies occurring during 1894, as provided for in the ordinance of January 14, 1895, making a total of \$3,240,489.06. Deducting from this amount \$3,010,259.92, the net collection of 1894 shows an actual increase in the collections of 1895 of \$230,230.04. Considering the fact that during the first four months of 1895 the meter earnings ran behind the earnings of the same period for 1894, \$53,878.76, and that the assessed rates collections fell off \$79,864.71, this appears to me a very favorable showing.

The meter collections of 1895 were \$1,004,203.48, as against \$1,012,296.56 for 1894.

May 1 to December 31, 1895, the meter collections were \$700,-506.71; for the same term in 1894 they were \$654,821.03, or an increase of \$45,685.68 during the period of my incumbency.

## EXPENSES.

The entire expense of operating this Bureau, including the Meter Mechanical and Permit Departments, amounted to \$309,273.30, or about 9½ per cent. of the total net collections.

## COMPARATIVE STATEMENT OF AMOUNT ASSESSED FOR WATER.

|                                           | 1894.          | 1895.          |
|-------------------------------------------|----------------|----------------|
| General Assessment.....                   | \$2,227,687 77 | \$2,392,640 90 |
| Increase Checks.....                      | 205,337 30     | 217,465 10     |
|                                           | <hr/>          | <hr/>          |
|                                           | \$2,433,025 07 | \$2,610,106 00 |
| *Decrease Checks.....                     | 111,650 41     | 134,479 39     |
|                                           | <hr/>          | <hr/>          |
| Net Assessed Rates.....                   | \$2,321,374 66 | \$2,475,626 61 |
| Meter Rates .....                         | 1,012,346 71   | 1,058,411 88   |
|                                           | <hr/>          | <hr/>          |
| Total .....                               | \$3,333,721 37 | \$3,534,038 49 |
| Increase in 1895 over 1894, \$200,317.12. |                |                |

\* Decreases for draw-backs, charitable, municipal and educational institutions, not included in these amounts.

The increase in the amount of the decrease checks of 1895 over those of 1894 is due to the large number of buildings removed or destroyed for elevated railway purposes; also to the increase in the number of buildings controlled by meter measurement, causing the assessed rates on such property to be decreased.

#### UNCOLLECTED.

The amount due the City, and uncollected December 31, 1895, is \$439,860.62. Out of this \$54,208.40 is due for water used through meters, largely composed of the current monthly tax which will be collected during the coming month. The balance, \$385,652.22, is due for assessed rates, and with the exception of about \$100,000.00 will be collected by the first of May, by enforcing payment through the Shut-off Department. The \$100,000.00 which we do not expect to collect seems to be the average amount standing on the books from year to year. It is uncollectible during the ordinary period and by ordinary methods by reason of the fact that the property has become vacant and no water is wanted; the water in the meantime having been shut off by the Department; again, where premises are not being supplied with City water, there being no connections with the main and water procured by means of wells, though a frontage charge is made the same as if connected.

It must not be understood that this back tax remains on the same property from year to year. On the contrary it is daily being paid up when owners are compelled to do so after the property becomes occupied and before water is turned on by the City, or when wells run dry or become contaminated and owners or occupants are of necessity forced to resort to the mains for their supply. The places of those paid up are filled by others of like character, so that the uncollected of this description seems to remain about the same each year.

Special legislation to enforce payment on this class of delinquents might be desirable but I doubt the ability of the City Council to enact ordinances which would cover the difficulty. The remedy lies, as in all kinds of delinquents, in keeping the number down to a minimum by the watchfulness and persistency of the Department through the Shut-off force.



## EXEMPTIONS.

During the year the Department has decreased, owing to the ordinance covering same, \$36,932.70 for municipal and public buildings; \$26,456.76 for religious, charitable and educational purposes; total, \$63,389.46, as against \$53,929.91 in 1894. The advance is largely owing to the number of new schools built during the year as well as the increase in religious, charitable and educational institutions, but is partly accountable by the fact that a large amount of property entitled to exemption was not decreased until 1895, though the water taxes accrued in 1894. In addition to the above the City furnishes free water to the extent, I should estimate, of at least \$50,000; covering a number of buildings supplied by meter and not included in the foregoing, but which are also exempt under the ordinance, as well as the Cook County buildings and the West Side Parks.

## TOWN OF LAKE OFFICE.

On the 15th of May the branch office located at Nos. 4723 and 4725 Halsted street, through which the entire assessed water rates for the Town of Lake, comprising the Twenty-ninth, Thirtieth, Thirty-first wards, and that portion of the Thirty-fourth ward lying west of State street, was, by your instructions, discontinued, and the work of this district consolidated with that of the remainder of the City in the main office; thus abolishing the last of the sub-offices. The wisdom of this change was immediately demonstrated in securing for the Department a much better control of the vast amount of detail of this district and in a general revision of the old-fashioned systems in use; also in a reduction in the operating expenses naturally incidental to the maintenance of a branch office. We also discovered that this section had not been inspected for several years, an immediate re-assessment resulting in an increased revenue from these wards of over \$40,000.

## AMENDMENTS TO ORDINANCE.

In the latter part of June I presented to you an amendment to the ordinance governing the payment of water rates, providing for an extension of fifteen days on each of the semi-annual periods for payments in the North Division of the City, which, with your

approval, was passed by the City Council, July 11. The effect of this was to provide a separate period for the payment of water taxes in each division of the City instead of two as previously, and to a large extent to lessen the crowded and congested condition of the office during the last few days of the terms as well as relieving the force of a large share of the extra work and spreading it over a longer period. To such an extent has this amendment operated to the benefit of the Department and the tax payers that I shall recommend additional changes and reforms along the same lines during the coming season.

#### WEST PULLMAN.

Pursuant to an order you issued in October, a six-inch meter supplying the town of West Pullman, which had previously been annexed to the City, was removed. The seven meters controlling the supply of water for the factories in that district were taken charge of by the Department and the remainder of the property was assessed by the ordinary frontage rates, resulting in an increase of over \$1,000 per annum over the rates formerly paid through the single meter.

#### UNITED STATES AND PACIFIC EXPRESS CO.

Under the supervision of the United States and Pacific Express Company, to whom is delegated the exclusive right to collect water taxes outside of this office, there was collected and turned in through their 175 branch offices \$354,360.09. These offices are scattered all over the City, two or more in each ward, and are the means of enabling the tax payers, on the addition of five cents, or one car-fare, to make their payments within a convenient distance of their homes and without the loss of time necessary to a long journey to the heart of the City.

#### ACCOUNTING DEPARTMENT.

In the fall of 1893 a system of double entry book-keeping was inaugurated in this Department, and the wisdom of such action has been clearly demonstrated during the past year. The system has been enlarged and extended so that now the accounts of all the sub-departments are kept with as much detail and precision as was that of the "assessed rates" heretofore.

Under the direction of the present capable chief accountant of this Bureau the former antiquated systems of accounting in vogue have been superseded by a complete and thorough system of "up-to-date" book-keeping, so that the work of this Department is more in the nature of an "auditing department" than a book-keeping one, and it is my purpose to continue to improve the system until there can absolutely be no opportunity for any leakage whatsoever.

#### NEW AND REPAIRED METERS.

At the end of December, 1894, there were in service 4,824 meters. During 1895 the total number of meters set in new locations was 345. The number removed permanently and property assessed, 49. The number set replacing others, 84. Total number set in 1895, 429. Total number in use December 31, 1894, 4,824. Total number in use December 31, 1895, 5,120. Net increase, 296.

The number of hydraulic elevator indicators in use December 31, 1895, was 278. Number of meters repaired for which bills were rendered, 1,248.

I see no particular reason why this branch of the Bureau should show a large profit at the expense of the water tax payers, as the extension of the meter service naturally increases the revenue of the City, and while the report of this branch shows a loss for the year 1895 of \$2,787.90, in reality it has been more than self-sustaining. In proof of which I will simply say that material was purchased to the amount of \$4,483.32, the labor for which was performed and credited to 1894 while the bills were held over to be paid and charged in 1895. There was also \$1,000.00 deposited for labor to be performed in 1895, while the amount was credited to 1894.

#### METER CONTROL.

I am strongly in favor of increasing and extending by all practical and legitimate means the meter control of the water supply of the City, and while I consider the work of the mechanical branch satisfactory, it appears to me ridiculous that the City of Chicago has in service only 5,120 meters when towns like Milwaukee, Providence, and others of like description are using twice as many, especially when our per capita of consumption per day, about 140 gallons, stands among the highest. I shall, therefore, recommend measures to enforce the purchase of meters by all large consumers of

water. I believe the City should have in use at least 50,000 meters, which would not only increase the revenue materially but compel economy in the use of water to such a degree that, together with the improvements in tunnels and mains now under process of construction, and a rigid enforcement of the present rules governing the waste of water by those assessed under frontage rates, it would furnish all the water necessary for all the people of the City.

#### QUALITY OF METERS.

In my judgment a matter of the utmost importance to the Department is the grade of meters used. A great deal of attention has been given to this subject. Tests and examinations were made of the different makes offered, independent of former records, and as a result I feel safe in saying that only those are used which, while they are fair to the consumer, are giving the most accurate and reliable service to the City.

#### SERVICE PIPES.

During the year 1895 there were 5,357 service pipes laid at an average cost, per pipe, of \$11.73, or a saving to the property owners of \$6.05 per pipe as compared to cost of those laid in 1894, making a total saving to the people of \$32,409.31.

#### PLUMBERS' LICENSES.

The Permit Department issued, during 1895, 728 plumbers' licenses at a profit to the City of \$18,200.00, as against 619 in 1894, for which \$15,475.00 was paid, showing an increase over 1894 of \$2,725.00.

#### INSPECTION DEPARTMENT.

In addition to a thorough re-inspection of the Town of Lake wards, covering the Twenty-ninth, Thirtieth, Thirty-first, and a portion of the Thirty-fourth wards, this branch of the Bureau increased the assessment on hose alone \$45,000.00 by a special inspection of the entire City during the summer months.

A total of 9,749 special examinations were also made.

## SHUT-OFF DEPARTMENT.

In conjunction with its ordinary work, as detailed in the report, to this sub-department has been intrusted the inspection of sprinkling carts, tugs, etc., and as a result the revenue from this source has been increased \$6,600.00 over last year.

## INSPECTION DEPARTMENT.

The following is the report of the work done by Water Inspectors for the year 1895:

All buildings in the Twenty-ninth, Thirtieth and Thirty-first wards and that part of the Thirty-fourth ward west of State street were thoroughly re-inspected.

During the summer months, when water was scarce, an Inspector was detailed in each ward and one in each of the public parks, excepting Lincoln Park, to look after hose and prevent any unnecessary waste of water.

Five hundred and forty-seven (547) surveys were made for pipe petitions and pipe deposits.

## BUILDINGS EXAMINED.

| 1895.           | One-Story. | Two-Story. | Three-Story. | Four-Story. | Five-Story. | Six-Story. | Special Examinations | Total per Month. |
|-----------------|------------|------------|--------------|-------------|-------------|------------|----------------------|------------------|
| January .....   | 22         | 69         | 43           | 7           | 3           | 1          | 951                  | 1,096            |
| February .....  | 89         | 85         | 71           | 11          | 7           | ....       | 710                  | 928              |
| March .....     | 43         | 73         | 64           | 4           | 2           | 1          | 123                  | 810              |
| April .....     | 21         | 52         | 80           | 6           | 1           | .....      | 121                  | 231              |
| May ..          | 17         | 40         | 23           | 8           | 3           | 1          | 1,413                | 1,505            |
| June .....      | 218        | 341        | 142          | 12          | 1           | .....      | 1,331                | 2,045            |
| July .....      | 1,691      | 2,816      | 257          | 54          | 4           | 2          | 1,010                | 5,834            |
| August .....    | 1,642      | 2,695      | 251          | 40          | 3           | .....      | 689                  | 5,320            |
| September ..... | 1,893      | 3,206      | 456          | 21          | 6           | .....      | 577                  | 6,159            |
| October .....   | 1,815      | 3,146      | 540          | 14          | 2           | .....      | 487                  | 6,004            |
| November .....  | 1,143      | 2,481      | 292          | 20          | 2           | 1          | 1,246                | 5185,            |
| December .....  | 1,019      | 2,141      | 190          | 22          | 1           | .....      | 1,091                | 4,464            |
| TOTAL .....     | 9,563      | 17,145     | 2,359        | 219         | 35          | 6          | 9,749                | 39,076           |

## LEAK, WASTE AND SHUT-OFF DEPARTMENTS.

The following table shows the work done by the leak, waste and shut-off force :

| 1896.          | Bills and<br>Shut-off notices<br>Delivered. | Shut-off for<br>unpaid taxes. | Shut-off for<br>leaks and waste. | Water<br>turned on. | Complaints<br>Investigated. | Notices of leaks<br>and waste. |
|----------------|---------------------------------------------|-------------------------------|----------------------------------|---------------------|-----------------------------|--------------------------------|
| January.....   |                                             | 38                            | 10                               | 18                  | 40                          | 25                             |
| February.....  |                                             | 36                            | 9                                | 18                  | 61                          | 38                             |
| March.....     |                                             | 28                            | 12                               | 10                  | 25                          | 24                             |
| April.....     | 20,250                                      | 25                            | 8                                | 14                  | 16                          | 43                             |
| May.....       |                                             | 80                            | 16                               | 43                  | 58                          | 68                             |
| June.....      |                                             | 281                           | 21                               | 162                 | 208                         | 320                            |
| July.....      |                                             | 340                           | 22                               | 180                 | 212                         | 297                            |
| August.....    |                                             | 458                           | 12                               | 203                 | 179                         | 312                            |
| September..... |                                             | 305                           | 14                               | 120                 | 126                         | 186                            |
| October.....   | 88,750                                      | 281                           | 10                               | 160                 | 92                          | 98                             |
| November.....  |                                             | 206                           | 18                               | 123                 | 131                         | 82                             |
| December.....  |                                             | 298                           | 15                               | 178                 | 85                          | 103                            |
| TOTAL.....     | * 59,000                                    | 2,326                         | 167                              | 1,224               | 1,228                       | 1,595                          |

\* These bills were delivered in districts where there is no free delivery, and where the address (street number) is not known.

## PERMIT DEPARTMENT.

## SCREW FERRULES INSERTED DURING YEAR 1895.

| MONTHS.         | $\frac{3}{8}$ -inch<br>Ferrules<br>Inserted. | $\frac{1}{2}$ -inch<br>Ferrules<br>Inserted. | 1-inch<br>Ferrules<br>Inserted. | Grand Total of<br>Screw Ferrules<br>Inserted. |
|-----------------|----------------------------------------------|----------------------------------------------|---------------------------------|-----------------------------------------------|
| January... ..   | 45                                           | 50                                           | 3                               | 98                                            |
| February... ..  | 46                                           | 66                                           | 6                               | 118                                           |
| March... ..     | 153                                          | 156                                          | 10                              | 319                                           |
| April... ..     | 305                                          | 501                                          | 20                              | 827                                           |
| May... ..       | 328                                          | 383                                          | 21                              | 732                                           |
| June... ..      | 298                                          | 435                                          | 9                               | 742                                           |
| July... ..      | 253                                          | 612                                          | 19                              | 884                                           |
| August... ..    | 254                                          | 471                                          | 13                              | 738                                           |
| September.... . | 242                                          | 364                                          | 14                              | 620                                           |
| October... ..   | 267                                          | 459                                          | 11                              | 737                                           |
| November... ..  | 278                                          | 321                                          | 11                              | 610                                           |
| December... ..  | 225                                          | 251                                          | 2                               | 478                                           |
| TOTAL... ..     | 2,694                                        | 4,069                                        | 139                             | 6,903                                         |



## DRIVEN FERRULES INSERTED DURING YEAR 1895.

| MONTHS.         | $\frac{3}{4}$ -inch<br>Ferrules<br>Inserted. | $\frac{3}{4}$ -inch<br>Ferrules<br>Inserted. | 1-inch<br>Ferrules<br>Inserted. | Grand Total<br>of Driven<br>Ferrules<br>Inserted. |
|-----------------|----------------------------------------------|----------------------------------------------|---------------------------------|---------------------------------------------------|
| January.....    | 19                                           | 441                                          | ...                             | 460                                               |
| February.....   | 3                                            | .....                                        | .....                           | 3                                                 |
| March .....     | 15                                           | 52                                           | .....                           | 67                                                |
| April .....     | 3                                            | 580                                          | .....                           | 583                                               |
| May .....       | 3                                            | 1,066                                        | 4                               | 1,073                                             |
| June.....       | 2                                            | 750                                          | .....                           | 752                                               |
| July .....      | 5                                            | 696                                          | .....                           | 701                                               |
| August .....    | .....                                        | 834                                          | .....                           | 834                                               |
| September ..... | .....                                        | 660                                          | .....                           | 660                                               |
| October.....    | .....                                        | 895                                          | .....                           | 895                                               |
| November.....   | .....                                        | 781                                          | .....                           | 781                                               |
| December.....   | .....                                        | 954                                          | .....                           | 758                                               |
| TOTAL.. .....   | 50                                           | 7,709                                        | 4                               | 7,763                                             |

## SUMMARY OF FERRULES INSERTED.

|                       | $\frac{1}{2}$ -inch. | $\frac{3}{4}$ -inch. | 1-inch. | Grand Total. |
|-----------------------|----------------------|----------------------|---------|--------------|
| Screw ferrules .....  | 2,694                | 4,069                | 139     | 6,902        |
| Driven ferrules ..... | 50                   | 7,709                | 4       | 7,763        |
| GRAND TOTAL .....     | 2,744                | 11,778               | 143     | 14,665       |

The number of applications made at this office for ferrules to water service pipes during the past year (exclusive of City contracts and retaps) were as follows:

|                                    |       |
|------------------------------------|-------|
| Inserted in old part of City ..... | 2,829 |
| Inserted in Lake View .....        | 1,551 |
| Inserted in Hyde Park .....        | 1,541 |
| Inserted in Town of Lake .....     | 869   |
| Inserted in Calumet .....          | 404   |
| Inserted in Cicero .....           | 324   |
| Inserted in Jefferson .....        | 773   |

GRAND TOTAL ..... 8,291

## PERMITS.

Permits were issued during the year 1895 as follows:

|                                                                                        |       |
|----------------------------------------------------------------------------------------|-------|
| For tapping water mains for pipes to inside of curb for future use .....               | 8,088 |
| For tapping water mains for enlarged service pipes to houses previously supplied ..... | 663   |
| For tapping water mains for service pipes to houses not previously supplied .....      | 4,723 |
| For connections to service pipes inside of curb lines .....                            | 575   |
| For 8-inch cast-iron pipes to be used as service pipes .....                           | 2     |
| For 6-inch cast-iron pipes to be used as service pipes .....                           | 12    |
| For 4-inch cast-iron pipes to be used as service pipes .....                           | 44    |
| For 3-inch cast-iron pipes to be used as service pipes .....                           | 5     |
| For 2-inch cast-iron pipes to be used as service pipes .....                           | 114   |
| For miscellaneous or special permits .....                                             | 436   |

GRAND TOTAL ..... 14,662

WATER SERVICE PIPES LET AND PUT IN BY CONTRACT DURING YEAR ENDING DECEMBER 31, 1895,  
SHOWING THE NUMBER OF PIPES AND THE TOTAL AMOUNT OF CONTRACT  
AND AMOUNT FOR TAPS AND ASSESSOR'S COST.

| STREET.               | FROM                        | TO                      | Number<br>of Pipes. | Assessor's<br>Cost. | Taps.     | Amount<br>of Contract. |
|-----------------------|-----------------------------|-------------------------|---------------------|---------------------|-----------|------------------------|
| Ashland avenue.....   | Fifty-ninth .....           | Sixty-third.....        | 163                 | \$ 244 86           | \$ 570 50 | \$ 1,706 25            |
| Attica .....          | Laurel.....                 | Auburn.....             | 15                  | 23 54               | 52 50     | 90 71                  |
| Arch.....             | Lyman .....                 | Archer avenue.....      | 7                   | 10 53               | 24 50     | 78 54                  |
| Adams avenue .....    | Seventy-third.....          | Seventy-fifth.....      | 58                  | 87 43               | 303 00    | 346 99                 |
| *Ada .....            | Fifty-ninth .....           | Sixty-third.....        | .....               | .....               | .....     | .....                  |
| Bishop .....          | Forty-ninth .....           | Sixty-third.....        | 198                 | 297 88              | 698 00    | 1,252 51               |
| Balmoral.....         | E. Ravenswood Park.....     | Ashland avenue.....     | 24                  | 36 19               | 84 00     | 123 65                 |
| Bradley place.....    | Rokeby .....                | Halsted .....           | 10                  | 15 05               | 35 00     | 104 65                 |
| Champlain avenue..... | Archer avenue.....          | Thirty-seventh.....     | 81                  | 46 50               | 108 50    | 181 65                 |
| Champlain avenue..... | Sixtieth.....               | Sixty-first.....        | 25                  | 37 49               | 87 50     | 139 28                 |
| Carroll avenue.....   | Kedzie avenue.....          | Homan avenue.....       | 5                   | 7 50                | 17 50     | 41 80                  |
| Carroll avenue.....   | Francisco.....              | Sacramento avenue.....  | 11                  | 16 53               | 38 50     | 89 51                  |
| Carlisle place.....   | Kedzie avenue.....          | Albany avenue.....      | 19                  | 28 48               | 66 50     | 175 01                 |
| Congress.....         | W. Fortieth .....           | W. Forty-sixth .....    | 157                 | 286 26              | 549 50    | 1,083 87               |
| Colorado avenue.....  | Douglas Park boulevard..... | Crawford avenue.....    | 10                  | 15 00               | 35 00     | 126 00                 |
| Center .....          | Clark .....                 | Southport avenue.....   | 40                  | 60 00               | 140 00    | 259 60                 |
| Dickens avenue.....   | California avenue.....      | Humboldt boulevard..... | 21                  | 31 66               | 78 50     | 64 10                  |
| Diversey avenue.....  | Milwaukee avenue.....       | Kedzie avenue.....      | 53                  | 78 00               | 182 00    | 626 24                 |
| Ellis avenue.....     | Seventy-first.....          | S. Chicago avenue.....  | 45                  | 67 75               | 157 50    | 248 15                 |
| Escanaba avenue.....  | Eighty-seventh .....        | Ninety-first .....      | 51                  | 76 66               | 178 50    | 390 50                 |
| Elston avenue .....   | Belmont avenue.....         | Kedzie avenue.....      | 56                  | 84 82               | 196 00    | 280 80                 |
| Evans avenue.....     | Sixty-third .....           | Sixty-ninth .....       | 140                 | 211 36              | 490 00    | 751 84                 |
| Evanston avenue.....  | Archer avenue.....          | Lyman .....             | 8                   | .....               | 28 00     | 111 20                 |
| Evergreen avenue..... | Montrose boulevard.....     | N. Fifty-ninth.....     | 121                 | 181 52              | 423 50    | 1,161 58               |
| *Ewing avenue .....   | Rockwell.....               | California avenue.....  | 21                  | 81 64               | 78 50     | 181 98                 |
|                       | Ninety-second .....         | 100th .....             | .....               | .....               | .....     | .....                  |

|                         |                             |                             |     |        |        |        |
|-------------------------|-----------------------------|-----------------------------|-----|--------|--------|--------|
| Forty-ninth.....        | Wallace.....                | Halsted.....                | 19  | 28 40  | 68 50  | 129 68 |
| Fifty-first.....        | Wood.....                   | Lincoln.....                | 23  | 83 00  | 77 00  | 131 44 |
| Fifty-eighth.....       | Wentworth avenue.....       | Stewart avenue.....         | 13  | 173 80 | 423 00 | 746 05 |
| Forty-third.....        | Goodspeed.....              | Western avenue.....         | 115 | 27 00  | 403 50 | 107 68 |
| †Forty-eighth.....      | Wallace.....                | U. S. Y. & T. R. R.....     | 18  | 31 60  | 68 00  | 106 08 |
| †Fifty-third.....       | Lake Michigan.....          | Cottage Grove avenue.....   | 31  | 117 14 | 273 00 | 493 60 |
| Fillmore.....           | Douglas boulevard.....      | W. Fortieth.....            | 98  | 144 00 | 338 00 | 614 40 |
| Fairfield avenue.....   | W. Sixteenth.....           | W. Twenty-second.....       | 28  | 84 68  | 80 50  | 130 46 |
| Francis.....            | Charlton.....               | Southport avenue.....       |     |        |        |        |
| †Flournoy.....          | Kedzie avenue.....          | Central Park avenue.....    |     |        |        |        |
| †Flournoy.....          | Albany avenue.....          | Central Park avenue.....    |     |        |        |        |
| Fifty-first.....        | Lincoln.....                | Leavitt.....                | 104 | 157 02 | 364 00 | 753 10 |
| Fairfield avenue.....   | Chicago avenue.....         | Augusta.....                | 29  | 48 51  | 101 50 | 176 89 |
| *Flournoy.....          | California avenue.....      | Washtenaw avenue.....       |     |        |        |        |
| *Forty-sixth.....       | Union avenue.....           | Stewart avenue.....         |     |        |        |        |
| *Fiftieth.....          | Cottage Grove avenue.....   | St. Lawrence avenue.....    |     |        |        |        |
| Green.....              | Sixty-seventh.....          | Sixty-ninth.....            | 26  | 81 20  | 91 00  | 150 86 |
| Herndon.....            | Balmoral avenue.....        | Roscoe.....                 | 29  | 43 49  | 101 50 | 189 87 |
| Homan avenue.....       | Central Park boulevard..... | Washington boulevard.....   | 26  | 39 00  | 91 00  | 168 74 |
| Humboldt avenue.....    | Western avenue.....         | California avenue.....      | 27  | 40 43  | 94 50  | 185 56 |
| Hamlin avenue.....      | Ogden avenue.....           | Twenty-sixth.....           | 163 | 244 84 | 570 50 | 987 74 |
| Hamlin avenue.....      | Ogden avenue.....           | Thirty-first.....           | 141 | 212 79 | 488 50 | 743 19 |
| Hamlin avenue.....      | Douglas Park boulevard..... | W. Sixteenth.....           | 63  | 94 79  | 230 50 | 394 09 |
| Hinman.....             | Western avenue.....         | Pan-Handle R. R.....        | 11  | 16 50  | 88 50  | 91 74  |
| Irving avenue.....      | Everett.....                | Center.....                 | 84  | 60 94  | 119 00 | 218 68 |
| James.....              | Laurel avenue.....          | Auburn.....                 | 16  | 24 15  | 56 00  | 126 77 |
| Kedzie avenue.....      | Milwaukee avenue.....       | Belmont avenue.....         | 137 | 205 61 | 479 50 | 971 07 |
| Langley avenue.....     | Sixty-third.....            | Sixty-ninth.....            | 145 | 216 99 | 507 50 | 806 71 |
| Lawndale avenue.....    | Wallace.....                | Chicago river.....          | 78  | 116 94 | 273 00 | 456 36 |
| Logan avenue.....       | Wallace.....                | U. S. Y. and T. R. R.....   | 26  | 38 84  | 91 00  | 142 90 |
| Lawrence avenue.....    | Sheffield avenue.....       | Lake Michigan.....          | 35  | 53 58  | 122 50 | 392 97 |
| Melrose.....            | Western avenue.....         | Robey.....                  | 48  | 64 66  | 160 50 | 269 02 |
| Montrose boulevard..... | Robey.....                  | Lincoln avenue.....         | 19  | 28 50  | 68 50  | 188 33 |
| Mead.....               | Fullerton avenue.....       | Logan.....                  | 61  | 91 50  | 213 50 | 385 98 |
| May.....                | Fifty-ninth.....            | Sixty-third.....            | 37  | 55 50  | 129 50 | 242 63 |
| May.....                | Sixty-ninth.....            | Sixty-ninth.....            | 86  | 54 27  | 126 00 | 223 21 |
| *Moore.....             | Wood.....                   | Douglas Park boulevard..... |     |        |        |        |
| Thirty-third court..... | Ashland avenue.....         | Wood.....                   | 25  | 87 60  | 87 50  | 249 40 |
| Thirtieth.....          | Oakley avenue.....          | Boulevard.....              | 13  | 18 00  | 42 00  | 65 64  |
| North Fifty-ninth.....  | Clark.....                  | Robey.....                  | 28  | 42 00  | 98 00  | 231 20 |

## WATER SERVICE PIPES LET AND PUT IN BY CONTRACT DURING YEAR 1895—CONTINUED.

| STREET.                   | FROM                        | TO                         | Number of Pipes. | Assessor's Cost. | Taps.     | Amount of Contract. |
|---------------------------|-----------------------------|----------------------------|------------------|------------------|-----------|---------------------|
| Nutt avenue.....          | Seventieth.....             | Seventy-fifth.....         | 30               | \$ 45 00         | \$ 105 00 | \$ 177 72           |
| *120th.....               | Halsted.....                | Clinton.....               |                  |                  |           |                     |
| Paulina.....              | Belmont avenue.....         | Roscoe.....                | 32               | 48 06            | 112 00    | 281 62              |
| Peoria.....               | Sixty-seventh.....          | Sixty-ninth.....           | 49               | 78 77            | 171 50    | 281 48              |
| Rascher avenue.....       | E. Ravenswood Park.....     | Ashland avenue.....        | 36               | 54 00            | 126 00    | 245 52              |
| Selwyn avenue.....        | Everett.....                | Center.....                | 46               | 69 02            | 161 00    | 807 72              |
| St. Charles avenue.....   | Everett.....                | Center.....                | 23               | 34 48            | 80 50     | 154 85              |
| Swift.....                | Francis.....                | Ridge road.....            | 28               | 42 00            | 98 00     | 125 06              |
| Sherman.....              | Root.....                   | Forty-third.....           | 4                | 14 00            | 6 00      | 24 76               |
| Seventieth court.....     | St. Lawrence avenue.....    | Eastern terminus.....      | 33               | 49 50            | 115 50    | 195 69              |
| Seventy-second place..... | Stony Island avenue.....    | Illinois Central R. R..... | 166              | 248 30           | 581 00    | 1,305 46            |
| South Chicago avenue..... | South Park avenue.....      | Stony Island avenue.....   | 49               | 78 75            | 171 50    | 278 56              |
| Seventy-second.....       | Stony Island avenue.....    | Illinois Central R. R..... | 53               | 79 73            | 185 50    | 333 07              |
| Seventy-third.....        | Stony Island avenue.....    | Illinois Central R. R..... | 21               | 81 67            | 78 50     | 106 51              |
| Sangamon.....             | Sixty-seventh.....          | Sixty-ninth.....           | 12               | 18 00            | 42 00     | 63 56               |
| Sawyer avenue.....        | Twenty-second.....          | Twenty-fourth.....         | 74               | 111 00           | 259 00    | 653 96              |
| Seventy-fifth.....        | Stony Island avenue.....    | Illinois Central R. R..... | 240              | 360 96           | 840 00    | 1,832 64            |
| St. Lawrence avenue.....  | Sixty-third.....            | Seventy-third.....         | 203              | 805 53           | 710 50    | 1,533 65            |
| South Park avenue.....    | Sixty-third.....            | Seventy first.....         | 5                | 7 50             | 17 50     | 68 10               |
| Shields avenue.....       | Fifty-fifth.....            | Fifty-eighth.....          |                  |                  |           |                     |
| *Sixty-seventh.....       | South Park avenue.....      | Stony Island avenue.....   |                  |                  |           |                     |
| ¶Sixty-seventh.....       | Halsted.....                | Sangamon.....              | 18               | 27 12            | 68 00     | 148 20              |
| Sixty-ninth court.....    | Cottage Grove avenue.....   | South Chicago avenue.....  | 20               | 29 97            | 70 00     | 159 83              |
| Thirty-second.....        | Halsted.....                | Laurel.....                | 384              | 502 01           | 1,169 00  | 2,009 67            |
| Trumbull avenue.....      | Douglas Park boulevard..... | West Twenty sixth.....     |                  |                  |           |                     |
| *Union avenue.....        | Fifty-ninth.....            | Sixty-first.....           | 17               | 25 65            | 59 50     | 112 05              |
| Vernon avenue.....        | Irving Park boulevard.....  | Everett avenue.....        | 139              | 208 53           | 486 50    | 810 34              |
| Vernon avenue.....        | Sixty-ninth.....            | Seventy third.....         | 62               | 93 04            | 217 00    | 474 26              |
| Vernon avenue.....        | Everett.....                | Center.....                | 37               | 55 50            | 129 50    | 165 76              |
| Webster.....              | Clark.....                  | Robey.....                 | 15               | 22 53            | 53 50     | 91 02               |
| Wilson.....               | Leavitt.....                | Robey.....                 |                  |                  |           |                     |
| Wallace avenue.....       | Belmont avenue.....         | Humboldt boulevard.....    | 130              | 195 59           | 455 00    | 791 11              |

|                        |                         |                        |       |            |             |             |
|------------------------|-------------------------|------------------------|-------|------------|-------------|-------------|
| West Twenty-first..... | Pan Handle R. R.....    | Boulevard .....        | 61    | 76 74      | 178 50      | 421 02      |
| Wilton.....            | Grace .....             | Byron .....            | 180   | 195 59     | 455 00      | 791 11      |
| West Sixteenth .....   | Kedzie avenue.....      | Albany avenue.....     | 21    | 81 56      | 78 50       | 248 75      |
| Wolcott.....           | Webster avenue .....    | North Fifty-ninth..... | 27    | 40 50      | 94 50       | 188 89      |
| Wright.....            | Fifty-ninth .....       | Claremont avenue ..... | 68    | 94 76      | 220 50      | 339 94      |
| Wabash avenue.....     | Sixty-seventh .....     | Seventy-third .....    | 120   | 180 00     | 420 00      | 655 62      |
| West Taylor .....      | California avenue ..... | Kedzie avenue .....    | 41    | 61 50      | 143 50      | 238 21      |
| West Twentieth.....    | Rockwell.....           | Washienaw avenue ..... | 16    | 24 00      | 56 00       | 116 00      |
| Palmer avenue.....     | Webster avenue.....     | North Fifty-ninth..... | 21    | 31 64      | 78 50       | 126 49      |
| TOTALS .....           |                         |                        | 5,357 | \$8,085 07 | \$18,749 50 | \$36,111 12 |

\* Not Finished.      † On Account.      ‡ Withdrawn.      § Paved.      ¶ No Main.

Average cost per pipe under contract let in 1894..... \$17 77<sup>65</sup>/<sub>100</sub>

Average cost per pipe under contract let in 1895..... 11 72<sup>58</sup>/<sub>100</sub>

Average saving per pipe in 1895 over 1894..... 6 04<sup>78</sup>/<sub>100</sub>

Being a saving to property holders of \$92,409 81.

## REPORT OF METER MECHANICAL DEPARTMENT.

|                                                                          |       |
|--------------------------------------------------------------------------|-------|
| Number of meters in service December 31, 1894 .....                      | 4,824 |
| Number of meters set in new location during 1895 .....                   | 345   |
| Total number of meters in service during 1895.....                       | 5,169 |
| Number of meters removed—property assessed .....                         | 21    |
| Number of meters removed permanently—supply cut off .....                | 28    |
| Total number of meters removed during 1895 .....                         | 49    |
| Total number of meters in service December 31, 1895 .....                | 5,120 |
| Number of hydraulic elevators in use December 31, 1894 .....             | 280   |
| Number of hydraulic elevators removed during 1895 .....                  | 2     |
| Total number of hydraulic elevators in use December 31, 1895.....        | 278   |
| Number of meters set during 1895 in new location .....                   | 345   |
| Number of meters set during 1895 replacing others.....                   | 84    |
| Total number of meters set during 1895 .....                             | 429   |
| Number of meters in stock December 31, 1894 .....                        | 59    |
| Number of meters bought from manufacturers during 1895 .....             | 283   |
| Number of meters bought from private parties during 1895 .....           | 35    |
| Number of meters furnished by private parties during 1895 .....          | 32    |
| Number of City meters repaired and in stock December 31, 1895.....       | 48    |
| Total number of meters on hand during 1895.....                          | 457   |
| Total number of meters set during 1895.....                              | 429   |
| Total number of meters on hand December 31, 1895 .....                   | 28    |
| Number of meters repaired during 1895 for which bills were rendered..... | 1,248 |
| Number of meters repaired during 1894 for which bills were rendered..... | 1,235 |

## REPORT OF THE ACCOUNTING DEPARTMENT.

## INCOME ACCOUNT.

## REVENUE.

|                                        |                 |
|----------------------------------------|-----------------|
| General assessment (May 1, 1895) ..... | \$ 2,392,640 90 |
| Increase back tax.....                 | 4,120 74        |
| Increase current tax .....             | 209,112 03      |
| Increase shut off.....                 | 4,232 33        |
|                                        | <hr/>           |
|                                        | \$ 2,610,106 00 |
| Less —                                 |                 |
| Discount allowed .....                 | \$ 298,223 26   |
| Erroneous assessments refunded.....    | 2,757 95        |

|                                                                                                                                                                          |                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Decreased on account of municipal and public buildings .....                                                                                                             | \$ 36,932 70          |
| Decreased on account of religious, charitable and educational institutions.....                                                                                          | 26,456 76             |
| Decreased on account of over-payments, as per affidavits and special examinations, removal or destruction of buildings, changes to meter control, and other causes ..... | 134,479 39            |
| Allowances made on current bills to cover drawback on amounts previously paid on vacant property, in accordance with City Ordinance passed January 14, 1895.....         | 34,992 72             |
|                                                                                                                                                                          | <hr/> \$ 533,842 78   |
| Net revenue from assessed rates.....                                                                                                                                     | \$ 2,076,263 22       |
| Amount charged for water supplied through meters.....                                                                                                                    | 1,058,411 88          |
| Assessor's miscellaneous charges for sprinkling-wagons, tugs, skating rinks, etc.....                                                                                    | 24,089 25             |
| Assessor's charges on special assessments.....                                                                                                                           | 8,035 07              |
| Net gain of Permit Department, as per statement.....                                                                                                                     | 5,719 71              |
|                                                                                                                                                                          | <hr/> \$ 3,172,519 13 |
| Net loss of Meter Department, as per statement.....                                                                                                                      | 2,787 90              |
|                                                                                                                                                                          | <hr/>                 |
| Net revenue .....                                                                                                                                                        | \$ 3,169,731 23       |

## EXPENSES.

|                                                    |                     |
|----------------------------------------------------|---------------------|
| Rent of Hyde Park office to May 15, 1895 .....     | \$ 945 00           |
| Rent of Town of Lake office to April 30, 1895..... | 333 32              |
| Gas bills, Town of Lake office.....                | 48 20               |
| Expressmen, Shut-off Department. ....              | 234 00              |
| Binding vouchers and Assessor's checks.....        | 318 42              |
| Postage.....                                       | 7,300 00            |
| Railroad transportation .....                      | 294 73              |
| Street car tickets .....                           | 1,380 32            |
| Stationery .....                                   | 3,490 94            |
| Shut-off tools, tapes, etc.....                    | 275 87              |
| Horse feed for Plumbing Inspector....              | 126 00              |
| Miscellaneous.....                                 | 252 81              |
| Pay rolls (Meter and Permit Departments omitted).  | 221,351 38          |
|                                                    | <hr/> \$ 236,350 99 |
|                                                    | <hr/>               |
| Net income .....                                   | \$ 2,933,380 24     |



## BALANCE SHEET.

## DEBIT.

|                                                   |               |
|---------------------------------------------------|---------------|
| Balance uncollected December 31, 1894.....        | \$ 377,250 35 |
| Inventory, Meter Department, December 31, 1894..  | 7,004 70      |
| Inventory, Permit Department, December 31, 1894,  | 5,279 77      |
| Cash from Comptroller in 1895 (for merchandise).  | 37,957 82     |
| Cash from Comptroller in 1895 (for expenses)..... | 309,273 30    |
| Net income 1895, as per income account.....       | 2,933,380 24  |

## CREDIT.

|                                                           |                |                |
|-----------------------------------------------------------|----------------|----------------|
| Debit balance against Comptroller December 31, 1895 ..... |                | \$3,165,835 98 |
| Amount charged Cashier, Department of Public Works.....   | 20,688 05      |                |
| Amount charged Special Assessment Department,             | 26,784 57      |                |
| Amount charged City Engineer's Department....             | 1,828 50       |                |
| Inventory, Meter Department.....                          | 8,113 50       |                |
| Inventory, Permit Department.....                         | 4,079 03       |                |
| Balance uncollected—assessed rates.....                   | 385,652 22     |                |
| Balance uncollected—meter rates.....                      | 54,208 40      |                |
| Balance uncollected—meter repairs.....                    | 2,955 93       |                |
|                                                           | <hr/>          |                |
|                                                           | \$3,670,146 18 | \$3,670,146 18 |

## PERMIT DEPARTMENT.

## INCOME ACCOUNT.

## CREDIT.

|                                                                                                                                    |              |
|------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Amount received for inserting ferrules, per Cash Book..                                                                            | \$ 28,180 00 |
| Amount charged for ferrules inserted for street improvement service and deducted from contractors' bills—5,357 at \$3.50 each..... | 18,749 50    |
| Amount received for 728 plumbers' licenses at \$25.00 each .....                                                                   | 18,200 00    |
| Stock on hand, as per inventory .....                                                                                              | 4,079 03     |
| Amount due for re-taps.....                                                                                                        | 1,828 50     |
|                                                                                                                                    | <hr/>        |
|                                                                                                                                    | \$ 71,037 03 |

## DEBIT.

|                                                       |             |
|-------------------------------------------------------|-------------|
| Stock account, January 1, 1895, per inventory.....    | \$ 5,279 77 |
| Ferrules, plugs and drills purchased during 1895..... | 4,826 93    |
| Tools, tapes, etc., purchased during 1895.....        | 128 99      |
| Printing and stationery.....                          | 55 40       |
| Transportation .....                                  | 22 77       |
| Repairs to tools at Water Works shop.....             | 843 69      |
| Salaries, as per pay rolls.....                       | 54,159 77   |
|                                                       | <hr/>       |
|                                                       | 65,317 32   |
| Net profit of the Department.....                     | <hr/>       |
|                                                       | \$ 5,719 71 |

## METER MECHANICAL DEPARTMENT.

## INCOME ACCOUNT.

## DEBIT.

|                                                       |             |                     |
|-------------------------------------------------------|-------------|---------------------|
| Stock account, January 1, 1895, per inventory.....    | \$ 7,004 70 |                     |
| Meters bought during 1895.....                        | 28,285 76   |                     |
| Labor and material supplied at Water Works shops..... | 4,845 13    |                     |
| Printing and stationery.....                          | 55 40       |                     |
| Transportation.....                                   | 17 70       |                     |
| Horseshoeing and repair to buggy.....                 | 29 25       |                     |
| Freight and express charges.....                      | 10 20       |                     |
| Tools.....                                            | 80 25       |                     |
| Sawdust.....                                          | 16 00       |                     |
| Horse feed.....                                       | 54 00       |                     |
| Gasoline, oil, matches, nails, etc.....               | 41 36       |                     |
| Salaries, as per pay rolls.....                       | 17,407 53   |                     |
|                                                       |             | <u>\$ 57,847 28</u> |

## CREDIT.

|                                                 |              |                    |
|-------------------------------------------------|--------------|--------------------|
| Cash received for meters 2 inches and over..... | \$ 20,688 05 |                    |
| Cash received for meters under 2 inches.....    | 16,518 64    |                    |
| Cash received for repairs to meters.....        | 6,783 26     |                    |
| Amount due and uncollected for repairs.....     | 2,955 93     |                    |
| Stock on hand, as per inventory.....            | 8,113 50     |                    |
|                                                 |              | <u>55,059 38</u>   |
| Net loss of the Department.....                 |              | <u>\$ 2,787 90</u> |

## DETAILED STATEMENT OF CASH COLLECTED DURING 1895.

(NET.)

| 1895.          | Assessed Rates. | Meter Rates.   | Permits.    | Licenses.   | Assessor's Miscellaneous. | Meter Mechanical Dept. | TOTAL.         |
|----------------|-----------------|----------------|-------------|-------------|---------------------------|------------------------|----------------|
| January.....   | \$ 74,868 64    | \$ 81,224 72   | \$ 300 30   | \$3,250 00  | \$ 21 25                  | \$2,030 03             | \$161,694 94   |
| February.....  | 32,584 06       | 73,611 90      | 519 45      | 2,900 00    | 31 50                     | 1,390 95               | 111,037 86     |
| March.....     | 28,525 44       | 74,777 37      | 1,919 20    | 2,750 00    | 33 50                     | 1,783 54               | 109,789 05     |
| April.....     | 14,727 74       | 74,082 78      | 3,313 00    | 2,550 00    | 224 77                    | 2,283 32               | 97,181 61      |
| May.....       | 474,532 83      | 88,622 60      | 3,475 20    | 2,075 00    | 2,428 74                  | 1,949 55               | 573,083 92     |
| June.....      | 357,181 98      | 69,720 60      | 2,659 80    | 1,925 00    | 3,046 01                  | 1,962 54               | 436,495 93     |
| July.....      | 120,196 46      | 81,037 26      | 2,157 95    | 1,525 00    | 3,571 14                  | 2,258 15               | 210,745 96     |
| August.....    | 45,995 61       | 88,701 13      | 2,119 50    | 600 00      | 3,613 32                  | 1,849 25               | 142,878,81     |
| September..... | 30,809 85       | 78,730 12      | 2,628 10    | 250 00      | 3,140 63                  | 2,018 71               | 117,577 41     |
| October.....   | 28,999 48       | 89,422 83      | 4,895 20    | 200 00      | 1,571 88                  | 2,067 10               | 127,156 49     |
| November.....  | 333,437 61      | 89,851 26      | 1,822 30    | 100 00      | 5,772 76                  | 2,178 86               | 493,162 79     |
| December.....  | 468,759 60      | 114,420 91     | 2,370 00    | 75 00       | 633 75                    | 1,529 90               | 587,789 16     |
| TOTALS.....    | \$2,070,619 30  | \$1,004,203 48 | \$28,180 00 | \$18,200 00 | \$24,089 25               | \$23,301 90            | \$3,168,593 93 |

The following amounts should be added to the foregoing :

|                                                                                                |                    |
|------------------------------------------------------------------------------------------------|--------------------|
| Amounts due from Cashier, Department of Public Works on account of large meters .....          | \$20,688 05        |
| Amount due from Special Assessment Department for ferrules on street improvements .....        | 18,749 50          |
| Amount due from Special Assessment Department for Assessor's cost on street improvements ..... | 8,035 07           |
| Amount due from Engineer's Department for retaps. ....                                         | 1,828 50           |
| <b>TOTAL .....</b>                                                                             | <b>\$49,301 12</b> |

DETAILED STATEMENT OF ASSESSOR'S MISCELLANEOUS RECEIPTS.

|                    | Inspection.       | Leak and Waste. | Shut Off.        | Sprinklers.        | Tugs.          | Miscellaneous.    | Total.             |
|--------------------|-------------------|-----------------|------------------|--------------------|----------------|-------------------|--------------------|
| January .....      |                   |                 | \$ 16 25         |                    |                | \$ 5 00           | \$ 21 25           |
| February .....     |                   |                 | 29 25            |                    |                | 2 25              | 31 50              |
| March .....        |                   |                 | 31 50            |                    |                | 2 00              | 33 50              |
| April .....        |                   |                 | 110 24           | \$ 63 33           |                | 51 20             | 224 77             |
| May .....          | \$ 91 00          |                 | 82 74            | 2,235 00           | \$20 00        |                   | 2,428 74           |
| June .....         | 73 50             |                 | 93 67            | 2,837 50           | 10 00          | 31 34             | 3,046 01           |
| July .....         | 8 00              |                 | 88 89            | 3,450 00           | 30 00          | 44 25             | 3,571 14           |
| August .....       | 20 00             | \$ 7 50         | 29 75            | 3,487 50           |                | 68 57             | 3,618 32           |
| September .....    | 71 50             | 16 63           |                  | 2,987 50           |                | 65 00             | 3,140 63           |
| October .....      | 24 50             | 4 75            | 17 13            | 1,520 50           |                | 5 00              | 1,571 88           |
| November .....     | 281 00            |                 | 19 13            | 497 50             |                | 5,025 13          | 5,772 76           |
| December .....     | 438 00            |                 | 40 75            |                    |                | 155 00            | 633 75             |
| <b>Total .....</b> | <b>\$1,007 50</b> | <b>\$28 88</b>  | <b>\$ 509 30</b> | <b>\$17,018 83</b> | <b>\$60 00</b> | <b>\$5,464 74</b> | <b>\$24,089 25</b> |

WATER OFFICE REPORT.

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WATER OFFICE—DETAILED STATEMENT OF PAY ROLLS FOR THE YEAR ENDING DECEMBER 31, 1895.

| DEPARTMENTS.           | Assessor's. | Collector's. | Inspector's. | Meter Rates. | Meter Repairs. | Permit.     | Shut-off.   | * Town of Lake. | Total.        |
|------------------------|-------------|--------------|--------------|--------------|----------------|-------------|-------------|-----------------|---------------|
| January (Note A).....  | \$ 1,916 01 | \$ 3,566 36  | \$ 2,622 90  | \$ 2,014 47  | \$ 1,942 88    | \$ 3,422 82 | \$ 2,687 63 | \$ 1,515 14     | \$ 19,688 21  |
| February (Note A)..... | 2,335 27    | 3,729 82     | 4,228 79     | 1,878 75     | 1,814 13       | 3,580 56    | 2,390 63    | 1,832 75        | 21,790 70     |
| March (Note A).....    | 3,478 40    | 7,352 59     | 8,573 00     | 2,595 24     | 1,894 00       | 5,820 53    | 8,649 49    | 3,253 18        | 36,616 43     |
| April.....             | 2,422 68    | 4,761 66     | 3,625 00     | 2,190 00     | 1,351 50       | 4,198 67    | 1,771 50    | 2,007 41        | 22,328 40     |
| May.....               | 1,850 69    | 5,770 11     | 2,972 67     | 2,281 50     | 1,116 00       | 4,289 85    | 2,161 51    | 602 50          | 21,044 83     |
| June.....              | 2,191 70    | 6,362 24     | 4,165 00     | 2,135 50     | 1,143 50       | 4,165 00    | 2,908 50    | .....           | 23,071 44     |
| July.....              | 2,388 57    | 6,050 47     | 4,965 71     | 2,323 50     | 1,326 00       | 4,880 82    | 3,329 25    | .....           | 25,264 83     |
| August.....            | 2,543 51    | 6,042 36     | 4,656 05     | 2,323 50     | 1,360 02       | 4,738 52    | 2,907 50    | .....           | 24,571 46     |
| September.....         | 2,584 16    | 6,166 66     | 4,612 50     | 2,312 50     | 1,340 00       | 4,702 00    | 2,812 75    | .....           | 24,430 57     |
| October.....           | 2,572 42    | 6,103 76     | 4,612 50     | 2,323 50     | 1,392 00       | 4,836 00    | 2,969 25    | .....           | 24,809 43     |
| November.....          | 2,606 16    | 6,191 66     | 4,612 50     | 2,268 00     | 1,377 50       | 4,762 00    | 2,836 50    | .....           | 24,654 32     |
| December.....          | 2,606 16    | 6,241 66     | 4,612 50     | 2,268 00     | 1,350 00       | 4,763 00    | 2,807 25    | .....           | 24,648 57     |
| Total.....             | \$29,495 71 | \$68,339 85  | \$54,259 12  | \$26,814 46  | \$17,407 53    | \$54,159 77 | \$33,231 76 | \$ 9,210 98     | \$ 292,918 68 |
| Monthly Average.....   | \$ 2,457 97 | \$ 5,694 95  | \$ 4,521 51  | \$ 2,234 54  | \$ 1,450 63    | \$ 4,513 31 | \$ 2,769 31 | \$ 2,046 83     | \$24,409 89   |

Note A.—25 per cent. of January and February Pay Rolls were retained and added to the March Rolls.

\* Town of Lake Office closed May 15. Books removed to City Hall and employees distributed among the regular departments.

## DEPARTMENT OF PUBLIC WORKS.

## DETAILED STATEMENT OF ASSESSOR'S INCREASE AND DECREASE CHECKS FOR THE YEAR 1895.

| 1895            | INCREASE.     |             |             |               | DECREASE.     |              |              |               |
|-----------------|---------------|-------------|-------------|---------------|---------------|--------------|--------------|---------------|
|                 | Current Tax.  | Back Tax.   | Shut-off.   | Total.        | Current Tax.  | Back Tax.    | Draw-Back.   | Total.        |
| January .....   | \$ 4,760 16   | \$ 295 57   | \$ 288 17   | \$ 5,343 90   | \$ 12,547 27  | \$ 1,446 74  | \$ 36 50     | \$ 14,030 51  |
| February .....  | 2,022 37      | 55 00       | 189 37      | 2,266 74      | 3,665 94      | 810 66       | 47 23        | 4,528 83      |
| March .....     | 3,320 88      | 149 25      | 336 12      | 3,806 25      | 2,119 91      | 368 10       | 335 95       | 2,878 96      |
| April .....     | 2,692 89      | 28 50       | 245 47      | 2,966 86      | 2,776 84      | 799 69       | 18 50        | 3,595 03      |
| May ... ..      | 50,792 19     | 711 18      | 83 75       | 51,587 12     | 15,250 63     | 3,032 03     | 6,332 77     | 24,615 48     |
| June ... ..     | 18,335 34     | 441 67      | 167 00      | 18,944 01     | 7,249 82      | 3,854 61     | 8,590 81     | 19,695 24     |
| July .....      | 21,703 74     | 225 88      | 552 30      | 22,481 92     | 8,046 85      | 2,703 92     | 4,279 25     | 15,030 02     |
| August .....    | 40,326 53     | 326 08      | 1,017 62    | 41,670 23     | 9,513 99      | 3,257 37     | 1,162 11     | 13,933 47     |
| September ..... | 31,017 21     | 543 75      | 537 51      | 32,098 47     | 9,439 84      | 2,646 65     | 558 77       | 12,645 26     |
| October .....   | 22,726 01     | 1,268 58    | 290 50      | 24,285 09     | 6,283 04      | 1,776 48     | 990 51       | 9,050 03      |
| November .....  | 6,178 01      | 20 00       | 328 68      | 6,526 69      | 15,717 63     | 2,833 80     | 4,454 45     | 23,005 88     |
| December .....  | 5,236 70      | 55 28       | 195 84      | 5,487 82      | 79,030 21     | 2,697 33     | 8,195 87     | 89,863 41     |
| Total .....     | \$ 209,112 03 | \$ 4,120 74 | \$ 4,232 33 | \$ 217,465 10 | \$ 171,641 97 | \$ 26,226 88 | \$ 34,992 72 | \$ 232,861 57 |

Permit me in closing this report to express my grateful appreciation of your courteous treatment, active interest, and earnest co-operation in the welfare of this Bureau, as well as to testify to the faithful and conscientious assistance of the gentlemen with whom I am fortunate enough to be surrounded as heads of the various sub-departments, and whose loyal support has rendered it possible for me to express my conviction that the instructions of yourself and his honor, Mayor Swift, that this Department be conducted in accordance with honest methods and business principles, has been adhered to.

Yours respectfully,

J. C. CRAIG,  
*Supt. Water Department.*



REPORT OF

Map Department

FOR 1895.





# MAP DEPARTMENT.

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HON. W. D. KENT :

DEAR SIR :—I have the honor to submit herewith the annual report of the Map Department for the year 1895.

The work performed by the Department during the year was as follows :

Plats prepared for—

|                                            |       |
|--------------------------------------------|-------|
| Lamp post ordinances.....                  | 552   |
| Lamp post orders .....                     | 368   |
| Lamp post assessments .....                | 151   |
| Street improvement assessments .....       | 436   |
| Street and alley opening assessments ..... | 16    |
| Street and alley opening ordinances .....  | 288   |
| Street Engineer's estimates.....           | 710   |
| Surveys .....                              | 132   |
| Sidewalk assessments.....                  | 950   |
| Water pipe assessments.....                | 194   |
| Law department .....                       | 720   |
| Miscellaneous purposes .....               | 151   |
| Total.....                                 | 4,668 |

Two hundred and seventy-two (272) new subdivisions of real estate within the City limits were recorded, and three hundred and seventy-two (372) entries were made of the same upon the several sets of atlases in charge of this office.

Thirty-two (32) vacations were placed on record and thirty-five (35) entries were made of the same on the atlases.

Fourteen (14) street openings were recorded and twenty (20) entries were made of the same on the atlases.

Plats of the entire City of Chicago, for the use of the City Gas Inspector's Department, were begun during the summer of 1895. Two volumes have been completed.

The names of 1,576 streets were changed on the atlases during the year. The consequent changes were made in the house numbers.

The combined length of all the alleys in the City of Chicago was computed in this Department, and is shown in the following table :

## DEPARTMENT OF PUBLIC WORKS.

DETAILED REPORT SHOWING THE LENGTH IN MILES AND FEET OF ALL OPEN ALLEYS IN THE  
CITY OF CHICAGO, ON THE FIRST DAY OF JANUARY, 1896.

| PARTS OF CHICAGO       | Total<br>Number of<br>Volumes | NORTH AND SOUTH |       | EAST AND WEST |       | N.-W. AND S.-E. |       | N.-E. AND S.-W. |       |
|------------------------|-------------------------------|-----------------|-------|---------------|-------|-----------------|-------|-----------------|-------|
|                        |                               | Miles           | Feet  | Miles         | Feet  | Miles           | Feet  | Miles           | Feet  |
| Rogers Park .....      | I                             | 4               | 3,573 | 9             | 389   | 3               | 1,293 | 0               | 865   |
| Lake View .....        | I                             | 52              | 2,275 | 40            | 1,320 | 6               | 1,170 | 0               | 3,075 |
| Norwood Park .....     | I                             | 2               | 3,155 | 2             | 258   | 4               | 908   | 1               | 3,828 |
| Jefferson .....        | III                           | 63              | 5,074 | 41            | 2,443 | 8               | 4,859 | 4               | 1,718 |
| Original Chicago ..... | IV                            | 201             | 1,965 | 179           | 2,324 | 18              | 4,025 | 15              | 735   |
| Cicero .....           | I                             | 32              | 1,850 | 18            | 3,035 | 2               | 3,820 | 0               | 4,520 |
| Town of Lake .....     | IV                            | 167             | 2,375 | 85            | 2,335 | 1               | 1,295 | 3               | 1,975 |
| Hyde Park .....        | V                             | 169             | 815   | 49            | 505   | 18              | 2,223 | 4               | 185   |
| Calumet .....          | I                             | 58              | 3,945 | 27            | 4,300 | 3               | 2,110 | 2               | 1,365 |
| Total .....            | XXI                           | 772             | 3,907 | 453           | 969   | 66              | 5,263 | 32              | 2,426 |

Grand total length of all open alleys : 1,325 miles and 2,005 feet.

The thirteenth extension of the City, Norwood Park, was added to Chicago November 7, 1893, but was not platted on the official atlases of this Department until the past year.

The City was enlarged one square mile by the addition of the fourteenth extension of the City limits, to Calumet, as authorized by the ordinance passed February 25, 1895. This extension consists of the south half of section 20 and the north half of section 29, township 37 north, range 14 east of 3d principal meridian.

Volume 3 of the Town of Jefferson was platted in this Department in the year 1895.

#### THE GROWTH OF CHICAGO — AREA.

|                                                                | Square Miles. |
|----------------------------------------------------------------|---------------|
| After the sixth annexation, April 29, 1889.....                | 43.812        |
| Part of Cicero, E. ½ Sec. 4 and 9—39—13, July 15, 1889.....    | 1.000         |
| City of Lake View, July 15, 1889 .....                         | 10.408        |
| Town of Jefferson (exc. Secs. 25, 35 and 36), July 15, 1889... | 29.530        |
| Town of Lake, July 15, 1889.....                               | 36.000        |
| Village of Hyde Park, July 15, 1889 .....                      | 49.132        |
| Village of Gano, April 1, 1890.....                            | 1.773         |
| South Englewood, May 12, 1890 .....                            | 2.899         |
| Village of Washington Heights, Nov. 4, 1890.....               | 2.810         |
| Village of West Roseland, Nov. 4, 1890.....                    | 1.793         |
| Village of Fernwood, April 7, 1891 .....                       | 0.981         |
| Village of West Ridge, April 19, 1893. ....                    | 2.125         |
| Village of Rogers Park, April 19, 1893 .....                   | 1.750         |
| Village of Norwood Park, Nov. 7, 1893.....                     | 2.125         |
| Fourteenth extension, part of Calumet, Feb. 25, 1895.....      | 1.000         |

Total area of the City of Chicago, December 31, 1895.... 187.138

The extreme width of Chicago is now 14½ miles, and its extreme length, 26 miles.

Respectfully submitted,

O. L. WULLWEBER,

*Superintendent Map Department.*



REPORT OF THE

# Bureau of Sewers

CITY OF CHICAGO



# BUREAU OF SEWERS

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HON. W. D. KENT,

*Commissioner of Public Works:*

DEAR SIR :—Herewith I submit the Twentieth Annual Report of the Bureau of Sewers, for year ending December 31, 1895.

|                                                                                    |              |
|------------------------------------------------------------------------------------|--------------|
| For building sewers and catch-basins.....                                          | \$356,940 01 |
| For cleaning sewers and catch-basins.....                                          | 134,424 44   |
| For repairing sewers and catch-basins.....                                         | 52,655 38    |
| For adjusting to grade manholes and catch-basins<br>on streets being improved..... | 41,058 28    |
| For house drains.....                                                              | 31,225 47    |
| For appropriated salaries .....                                                    | 27,819 28    |
| For office expenses.....                                                           | 760 46       |
| For pumping stations.....                                                          | 35,447 96    |
| Total.....                                                                         | \$680,331 28 |

During the year the important question of how to plan sewers so as to avoid the emptying of sewage into Lake Michigan has occupied much of the attention of this Bureau. The drainage canal, which will soon be completed at a cost of millions of dollars, and which is designed to improve the sanitary condition of the City, should certainly be the outlet for all new systems of sewers. Had this outlet been considered from its beginning the problem which confronts this Department would have been materially simplified, as in the last two or three years several large systems of sewers have been completed which discharge into the lake. For this reason the intercepting sewers will necessarily cost a great deal more because of their increased size and greater depth, as some of the systems built within the last few years were low-level sewers necessitating pumping.

A system of sewers on the old plan had been designed for the so-called Eighty-third street district, which were to drain ten square miles of territory into the lake. Pending confirmation by the Court,



His Honor, the Mayor, and yourself, called attention to the fact that this system ought to be reversed so as to flow toward the new drainage canal. Investigation showed that by adding to the district six and one-half miles of territory lying north along Western avenue an outfall sewer could be constructed along Western avenue from Seventy-ninth street north to the south fork of the south branch of the Chicago river at the Stock Yards slip. This outfall sewer would drain one mile on both sides of Western avenue between the P., C., C. & St. L. Ry. and Albany avenue, and extending from Eighty-seventh street north to the Stock Yards slip, and at the same time form an outlet for the low lands between Seventy-fifth and and Eighty-seventh streets, and east of Western avenue to Lake Michigan. By building a pumping station in the vicinity of Seventy-ninth and Sangamon streets, where the higher territory begins, the sewage could be made to flow into the drainage canal. Owing to the favorable topographical conditions of the land a saving of fifteen per cent. could be effected for the land owners, as the fall of the outfall sewers was such that an increase in the diameter of the sewer of one foot, making it twelve feet instead of eleven feet, as planned, would be sufficient for the addition of six and one-half square miles of new territory. An ordinance has been passed by the City Council for this new system, and it is hoped that the assessment will be filed and tried in the April term of court so that the sewer can be constructed in the summer of this year.

The question of diverting the sewage from Lake Michigan in the southern or Hyde Park district is especially difficult, as from Seventy-third street north to Twelfth street there are ten outfall sewers, from five to six feet in diameter, emptying into the lake, three of which are low-level sewers with independent pumping stations. The district from Twelfth street north to Fullerton avenue has no sewers draining into the lake. The streets of this district, therefore, will not have to be torn up. North of Fullerton avenue to the City Limits there are twelve brick sewers, from two to five feet in diameter, emptying into the lake. To intercept these a sewer will have to be built which will flow south, from the northern limits to Fullerton avenue, a distance of five miles. At this point possibly the Fullerton avenue conduit, twelve feet in diameter (now in operation), could be utilized to convey the sewage west to the north branch of the Chicago river.

Millions of dollars have been expended in the district between Twelfth and Seventy-third streets, and to reverse the sewers here is out of the question because of the expense. The original intention

of the Board of Sanitary Trustees to build an open channel somewhere in this territory, leading into the drainage canal and forming an outlet for the sewers, has been abandoned. The nearest present outlet is the Stock Yards slip at Thirty-ninth and Halsted streets. The only remedy left is the building of a large conduit, or intercepting sewer, as near the lake as practicable, from Seventy-third street north to Thirty-ninth, and from Thirty-fifth to Thirty-ninth; thence west along Thirty-ninth to Halsted street. This would necessitate the building of a pumping plant in the vicinity of Halsted and Thirty-ninth streets to lift the sewage into the slip so that it would flow to the drainage canal. It will be necessary to reverse the Twenty-second and Twelfth street sewers westwardly into the river, as this is the most economical plan. The conduit along Thirty-ninth street may be extended to Lake Michigan in order to have an intake from the lake and to utilize the pumping plant in the dry seasons of the year for flushing purposes and furnish the drainage canal with the required volume of water. These conduits along the lake and Thirty-ninth street may be placed sufficiently below the surface to admit of tunneling and thus avoid disturbing the roadbed and existing underground work. In this way no expense will be incurred in the condemnation of lands, as all sewers and conduits can follow the streets or be so far under the surface as to avoid injury to private property. It will also do away with the expense of keeping several small pumping stations in operation.

Borings taken from Seventy-third street north to Thirty-ninth and west to Halsted show that no great engineering difficulties will interfere with the tunneling of the conduits. In the southern portion, however, it may be necessary to make an open cut.

The territory lying south of the southern limits of the drainage districts, or Eighty-seventh street, will have to be sewered into the Calumet river. It is only a question of time when something will have to be done with that stream, as there are a number of large brick sewers draining into it—among others, the ten and one-half foot Wentworth avenue sewer. The Indiana avenue outlet sewer, draining Roseland and Kensington, to be built this summer, will also empty into this river. Several sewers in South Chicago, and three from the villages of Morgan Park, Blue Island and Harvey also pollute this stream. The reversal of this river to the Drainage Canal, from an engineering standpoint, could be made without serious difficulty.

The main outlet sewer of the Washington Heights and West Roseland district along Wentworth avenue was completed during the year. This sewer will drain all the territory west of State street and south of Eighty-seventh street. The connection between the upper and lower portions of this sewer at 103rd street was not made until lately, and on that account the heavy rains during the latter part of December caused the overflow of the low lands in the Calumet region. Hereafter the water falling west of State street and south of Eighty-seventh street will be conducted south, to the Calumet river.

The Indiana avenue sewer system, which has been pending in court for several years, will probably be confirmed by the County Court in the latter part of January, 1896. This sewer will drain the territory lying south of Ninety-ninth street to the Calumet river, and between State street and the Illinois Central Railroad; Kensington, a part of this district, is much in need of sewers.

The West Forty-fifth avenue system has also been confirmed by the Court. This sewer begins at Mud Lake, or the south branch of the Chicago river, with a diameter of nine feet, and runs north along West Forty-fifth avenue to Twelfth street; thence west in Twelfth street to West Forty-seventh avenue; thence north in Forty-seventh avenue to Madison street; thence west in Madison street to West Forty-eighth avenue; thence in Forty-eighth avenue to Hayes boulevard, with a branch starting at Forty-eighth and Grand avenues, and running thence northwest and west in Grand avenue and Fullerton avenue to the City limits. This sewer drains 4,200 acres of land and its approximate length is eleven miles. Work will be commenced in the spring.

The six-foot sewer in Montrose boulevard, from the north branch of the Chicago river west to Milwaukee avenue, is under contract and work will be started as soon as the weather permits.

The County Court has confirmed the assessments for a number of small brick and pipe sewers, contracts for which will soon be let.

It is a pleasure to acknowledge that I have received the most courteous consideration from yourself and all of the officials of the City with whom I have come in contact, and this has greatly assisted me in the performance of my duties.

Respectfully submitted,

G. L. CLAUSEN,

*Superintendent Bureau of Sewers.*

**NEW SEWERS AND CATCH-BASINS BUILT DURING THE YEAR 1895,  
AND COST OF SAME.**

| Length in Feet. | Size.               | Average Cut. | Average Price per Foot. | Cost.         |
|-----------------|---------------------|--------------|-------------------------|---------------|
| 817             | 9 inch.             | 9.5          | \$0.79                  | \$ 645 75     |
| 97,890          | 12 "                | 7.7          | 1.02                    | 99,165 89     |
| 62,942          | 15 "                | 9.1          | 1.17                    | 78,400 65     |
| 1,175           | 18 "                | 8.7          | 1.55                    | } 4,468 61    |
| 647             | 18 in. do. strength | 21.5         | 3.97                    |               |
| 18,707          | 2 foot.             | 11.6         | 1.99                    | 37,237 49     |
| 4,214           | 2½ "                | 18.0         | 2.11                    | 8,892 15      |
| 2,762           | 3 "                 | 11.5         | 3.90                    | 10,774 07     |
| 940             | 3½ "                | 18.5         | 4.82                    | 4,526 40      |
| 2,005           | 9 "                 | 21.0         | 16.05                   | 32,198 30     |
| 4,650           | 9½ "                | 23.0         | 17.91                   | 83,294 69     |
| 100             | 10 "                | 26.5         | 23.42                   | 2,341 51      |
| 196,849         |                     |              |                         | \$ 356,940 01 |

The above figures include cost of catch-basins, etc.

**TOTAL NUMBER OF MANHOLES AND CATCH-BASINS IN PLACE  
DECEMBER 31, 1895, IN THE CITY LIMITS.**

| DIVISIONS.      | Constructed During the Year. |       |        | Total Built During 1895. | Total Built Previous to 1895. | Total in Place December 31, 1895. |
|-----------------|------------------------------|-------|--------|--------------------------|-------------------------------|-----------------------------------|
|                 | South.                       | West. | North. |                          |                               |                                   |
| Catch-basins .. | 673                          | 454   | 388    | 1,515                    | 42,068                        | 43,583                            |
| Manholes, ..... | 637                          | 417   | 355    | 1,409                    | 44,755                        | 46,164                            |

SIZE AND LENGTH OF SEWERS CONSTRUCTED IN THE DIFFERENT WARDS IN THE CITY DURING  
THE YEAR 1895.

| WARDS.                 | 9-inch.    | 12-inch.      | 15-inch.      | 18-inch.     | 2-foot.       | 2½-foot.     | 3-foot.      | 3½-foot.   | 9-foot.      | 9½-foot.     | 10-foot.   | TOTAL.         |
|------------------------|------------|---------------|---------------|--------------|---------------|--------------|--------------|------------|--------------|--------------|------------|----------------|
| 6th . . . . .          | .....      | 2,309         | 1,619         | .....        | .....         | .....        | .....        | .....      | .....        | .....        | .....      | 4,928          |
| 10th . . . . .         | .....      | 6,640         | 2,511         | .....        | 688           | .....        | .....        | .....      | .....        | .....        | .....      | 9,819          |
| 11th . . . . .         | .....      | .....         | .....         | .....        | .....         | .....        | 824          | .....      | .....        | .....        | .....      | 824            |
| 12th . . . . .         | .....      | 9,076         | 7,448         | .....        | .....         | .....        | .....        | .....      | .....        | .....        | .....      | 16,519         |
| 13th . . . . .         | .....      | 4,242         | 325           | .....        | .....         | .....        | .....        | .....      | .....        | .....        | .....      | 4,567          |
| 14th . . . . .         | .....      | 7,932         | 3,092         | .....        | .....         | .....        | .....        | .....      | .....        | .....        | .....      | 11,024         |
| 15th . . . . .         | .....      | 2,768         | 680           | .....        | .....         | .....        | .....        | .....      | .....        | .....        | .....      | 3,448          |
| 24th . . . . .         | .....      | .....         | 875           | .....        | 687           | .....        | .....        | .....      | .....        | .....        | .....      | 1,562          |
| 25th . . . . .         | .....      | 5,377         | 4,024         | 742          | 965           | .....        | .....        | .....      | .....        | .....        | .....      | 11,108         |
| 26th . . . . .         | .....      | 14,819        | 8,204         | .....        | 3,970         | 1,335        | .....        | .....      | .....        | .....        | .....      | 28,328         |
| 27th . . . . .         | .....      | 5,268         | 8,098         | 438          | 1,415         | 1,790        | .....        | .....      | .....        | .....        | .....      | 17,004         |
| 29th . . . . .         | .....      | 615           | 685           | .....        | 639           | .....        | .....        | .....      | .....        | .....        | .....      | 1,889          |
| 30th . . . . .         | .....      | 13,105        | 8,088         | .....        | 639           | .....        | .....        | .....      | .....        | .....        | .....      | 21,892         |
| 31st . . . . .         | 176        | 13,763        | 8,607         | 647          | 2,386         | 415          | 1,938        | 940        | .....        | .....        | .....      | 28,872         |
| 32nd . . . . .         | 641        | 1,577         | .....         | .....        | .....         | .....        | .....        | .....      | .....        | .....        | .....      | 2,218          |
| 33rd . . . . .         | .....      | 4,484         | 5,082         | .....        | 700           | .....        | .....        | .....      | .....        | .....        | .....      | 10,216         |
| 34th . . . . .         | .....      | 4,855         | 3,659         | .....        | 6,638         | 674          | .....        | .....      | 2,005        | 4,650        | 100        | 22,981         |
| <b>TOTAL</b> . . . . . | <b>817</b> | <b>97,890</b> | <b>62,942</b> | <b>1,832</b> | <b>18,707</b> | <b>4,214</b> | <b>2,762</b> | <b>940</b> | <b>2,005</b> | <b>4,650</b> | <b>100</b> | <b>196,349</b> |

**TOTAL COST FOR THE CONSTRUCTION OF SEWERS AND CATCH-BASINS, AND MAINTAINING SAME, SINCE THE ESTABLISHMENT OF THE SEWERAGE SYSTEM IN 1855 TO JANUARY 1, 1896.**

| Year.                                               | Lineal feet of Sewers Built. | No. of Catch-Basins Built. | No. of Man-holes Built. | No. of House Drains Put In.                                         | Cost of Cleaning Sewers and Catch-Basins. | Street Intersections and Repairs of Sewers. | Cost of Construction.  |
|-----------------------------------------------------|------------------------------|----------------------------|-------------------------|---------------------------------------------------------------------|-------------------------------------------|---------------------------------------------|------------------------|
| Previous to 1861.                                   | 283,586                      | 1,174                      | 2,102                   | 2,194                                                               | \$ 5,619 48                               | No amts. found on reports.                  | \$ 665,188 46          |
| 1861.....                                           | 2,826                        | 18                         | 33                      | 243                                                                 | 1,715 60                                  | \$ 2,951 76                                 | 3,617 81               |
| 1862.....                                           | 15,676                       | 72                         | 66                      | 365                                                                 | 4,897 24                                  | 3,024 07                                    | 57,036 42              |
| 1863.....                                           | 39,605                       | 192                        | 204                     | 536                                                                 | 5,065 40                                  | 2,053 11                                    | 169,527 88             |
| 1864.....                                           | 25,021                       | 189                        | 183                     | 512                                                                 | 9,417 81                                  | 4,597 63                                    | 87,221 48              |
| 1865.....                                           | 29,948                       | 223                        | 168                     | 1,288                                                               | 13,818 07                                 | 7,493 56                                    | 137,648 03             |
| 1866.....                                           | 48,127                       | 327                        | 271                     | 3,732                                                               | 28,445 16                                 | 7,773 65                                    | 225,564 58             |
| 1867.....                                           | 89,681                       | 418                        | 555                     | 3,703                                                               | 26,540 81                                 | 9,581 42                                    | 416,730 51             |
| 1868.....                                           | 47,841                       | 480                        | 293                     | 3,261                                                               | 26,954 06                                 | 11,287 08                                   | 197,152 92             |
| 1869.....                                           | 139,705                      | 771                        | 928                     | 3,979                                                               | 26,015 68                                 | 7,527 16                                    | 654,141 26             |
| 1870.....                                           | 78,166                       | 626                        | 468                     | 5,187                                                               | 21,464 30                                 | 10,954 74                                   | 258,664 70             |
| 1871.....                                           | 50,716                       | 277                        | 357                     | 3,093                                                               | 17,415 46                                 | 42,557 72                                   | 153,295 86             |
| 1872.....                                           | 47,342                       | 245                        | 341                     | 1,435                                                               | 21,484 16                                 | 16,975 40                                   | 173,255 76             |
| 1873.....                                           | 146,702                      | 897                        | 1,015                   | 4,601                                                               | 31,229 27                                 | 29,781 97                                   | 450,222 90             |
| 1874.....                                           | 222,322                      | 1,054                      | 1,474                   | 6,292                                                               | 36,884 57                                 | 21,996 72                                   | 587,507 88             |
| 1875.....                                           | 120,971                      | 958                        | 789                     | 3,365                                                               | 32,098 23                                 | 28,107 40                                   | 342,982 89             |
| 1876.....                                           | 15,248                       | 155                        | 75                      | 1,172                                                               | 29,345 41                                 | 19,803 29                                   | 79,545 28              |
| 1877.....                                           | 64,666                       | 363                        | 431                     | 1,822                                                               | 35,763 33                                 | 10,959 44                                   | 291,829 63             |
| 1878.....                                           | 88,031                       | 492                        | 603                     | 1,544                                                               | 25,704 37                                 | 19,259 49                                   | 37,264 97              |
| 1879.....                                           | 145,381                      | 820                        | 1,043                   | 2,953                                                               | 29,286 67                                 | 10,649 69                                   | 180,840 50             |
| 1880.....                                           | 79,128                       | 271                        | 554                     | 4,196                                                               | 25,561 48                                 | 25,068 11                                   | 92,544 08              |
| 1881.....                                           | 132,076                      | 548                        | 917                     | 4,810                                                               | 34,512 15                                 | 30,967 89                                   | 452,310 06             |
| 1882.....                                           | 98,515                       | 792                        | 725                     | 5,677                                                               | 33,969 35                                 | 26,618 05                                   | 224,450 16             |
| 1883.....                                           | 75,364                       | 835                        | 497                     | 5,963                                                               | 34,749 74                                 | 25,140 81                                   | 232,084 33             |
| 1884.....                                           | 101,547                      | 751                        | 654                     | 5,957                                                               | 43,678 03                                 | 37,893 29                                   | 258,020 91             |
| 1885.....                                           | 118,647                      | 796                        | 854                     | 6,325                                                               | 40,532 18                                 | 45,333 02                                   | 203,188 03             |
| 1886.....                                           | 103,193                      | 734                        | 723                     | 7,441                                                               | 51,110 46                                 | 50,707 64                                   | 177,647 24             |
| 1887.....                                           | 90,584                       | 756                        | 605                     | 8,100                                                               | 50,264 65                                 | 43,789 60                                   | 186,496 98             |
| 1888.....                                           | 104,903                      | 816                        | 674                     | 8,152                                                               | 52,492 41                                 | 53,782 97                                   | 228,587 57             |
| 1889.....                                           | 171,023                      | 1,351                      | 1,190                   | 4,303                                                               | 61,503 01                                 | 63,459 25                                   | 350,234 54             |
| Annexed Districts }<br>previous to 1890, }          | 993,573                      | 6,102                      | 8,620                   | Estimated cost of construction,<br>cost of maintenance not known. } |                                           |                                             | 2,614,224 75           |
| 1890.....                                           | 379,203                      | 2,986                      | 2,604                   | 9,279                                                               | 107,873 34                                | 83,888 08                                   | 826,718 67             |
| 1891.....                                           | 546,918                      | 3,979                      | 3,736                   | 11,812                                                              | 123,620 44                                | 95,906 75                                   | 1,532,990 44           |
| 1892.....                                           | 549,258                      | 3,866                      | 3,714                   | 12,562                                                              | 142,720 52                                | 70,747 83                                   | 1,290,017 98           |
| Herwood and Rogers Park<br>annexed previous to 1893 | 96,697                       | 326                        | 231                     | No. of house drains and cost<br>of construction not known. }        |                                           |                                             | 172,846 30             |
| 1893.....                                           | 708,176                      | 4,811                      | 4,825                   | 14,198                                                              | 132,633 51                                | 114,702 78                                  | 1,606,720 09           |
| 1894.....                                           | 350,944                      | 2,597                      | 2,259                   | 8,928                                                               | 154,235 45                                | 130,749 03                                  | 1,014,489 86           |
| 1895.....                                           | 196,349                      | 1,515                      | 1,409                   | 1,621                                                               | 134,424 44                                | 93,713 66                                   | 356,950 01             |
| <b>Totals.....</b>                                  | <b>*6,597,659</b>            | <b>43,583</b>              | <b>46,190</b>           | <b>170,191</b>                                                      | <b>\$1,658,963 24</b>                     | <b>\$1,265,309 06</b>                       | <b>\$16,939,634 66</b> |

\*Of this amount, 5,897 feet have been taken up and replaced by sewers of larger size, leaving in place January 1, 1896, 6,591,762 feet, or 1,248.438 miles.

†Of this number, 26 manholes have been abandoned, leaving in place January 1, 1895, 46,164.

Of the above 1,248.438 miles, 482.769 miles are of brick construction and 765.669 miles are of vitrified pipe.

Length and Interior Diameter of Sewers in Place December 31, 1895, in the Different Wards of the City.

| WARDS.  | 6<br>Inch. | 9<br>Inch. | 12<br>Inch. | 15<br>Inch. | 18<br>Inch. | 20<br>Inch. | 22<br>Inch. | 2<br>Feet. | 2½<br>Feet. | 2½<br>Feet. | 3<br>Feet. | 3½<br>Feet. | 3½<br>Feet. | 4<br>Feet. |
|---------|------------|------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| 1st ..  |            |            | 66,572      | 1,870       |             |             |             | 15,210     | 6,077       | 17,033      | 12,327     |             |             | 1,926      |
| 2d ..   |            |            | 42,821      | 1,320       | 985         |             |             | 25,869     | 382         | 15,280      | 3,648      |             |             | 670        |
| 3d ..   |            |            | 37,861      | 6,904       | 3,720       |             |             | 22,750     |             | 14,692      | 668        |             |             | 670        |
| 4th ..  |            | 1,889      | 43,481      | 10,462      | 6,156       |             |             | 28,117     |             | 24,784      |            | 916         |             | 1,061      |
| 5th ..  |            |            | 50,315      | 16,249      | 5,288       |             |             | 34,157     |             | 7,020       | 6,966      | 1,600       |             | 4,180      |
| 6th ..  |            |            | 78,006      | 37,095      | 10,128      | 1,625       |             | 54,127     |             | 24,670      | 10,446     | 1,685       |             | 4,975      |
| 7th ..  |            |            | 92,167      | 37,686      |             |             |             | 21,572     |             | 3,683       | 4,137      | 2,958       |             | 5,040      |
| 8th ..  |            |            | 36,601      | 4,403       |             |             |             | 20,085     |             | 2,545       | 1,868      | 2,323       |             | 4,000      |
| 9th ..  |            |            | 40,987      | 18,726      | 125         |             |             | 13,013     |             | 971         | 4,214      | 3,972       |             | 4,925      |
| 10th .. |            |            | 159,528     | 112,245     | 667         |             |             | 47,817     |             | 15,818      | 12,128     | 11,088      |             | 12,856     |
| 11th .. |            |            | 45,789      | 3,925       | 999         |             |             | 34,093     |             | 2,225       | 1,582      |             |             | 9,541      |
| 12th .. |            | 1,249      | 146,383     | 87,461      | 10,665      |             |             | 81,637     |             | 10,725      | 14,090     | 10,430      |             | 10,260     |
| 13th .. |            | 860        | 94,059      | 53,048      | 4,761       |             |             | 37,730     |             | 7,555       | 9,851      | 333         |             | 11,950     |
| 14th .. |            | 116        | 111,163     | 59,967      | 4,230       |             |             | 51,178     |             | 8,329       | 4,604      | 332         |             | 5,217      |
| 15th .. |            |            | 117,641     | 113,966     | 330         |             |             | 60,583     |             | 16,776      | 5,444      | 1,626       |             | 2,399      |
| 16th .. |            |            | 29,271      | 9,371       |             |             |             | 16,778     |             | 382         | 2,265      |             |             | 5,275      |
| 17th .. |            |            | 21,493      | 650         |             |             |             | 35,074     |             |             | 4,315      |             |             | 6,755      |
| 18th .. |            |            | 31,529      |             |             |             |             | 32,845     |             |             |            |             |             |            |
| 19th .. |            |            | 42,641      | 1,014       |             |             |             | 86,055     |             |             | 1,023      |             |             | 9,390      |
| 20th .. |            |            | 38,838      | 13,860      | 5,010       |             |             | 28,619     |             | 7,333       | 3,168      | 2,739       |             | 3,000      |
| 21st .. |            |            | 40,847      | 6,848       | 1,275       |             |             | 16,900     |             | 12,010      | 515        | 1,020       |             | 2,510      |
| 22d ..  |            |            | 35,182      | 789         | 1,526       |             |             | 22,499     |             | 7,525       | 2,179      |             |             | 660        |
| 23d ..  |            |            | 33,146      | 1,726       |             |             |             | 25,833     |             | 3,841       | 1,962      |             |             | 3,157      |
| 24th .. |            |            | 36,071      | 4,482       | 601         |             |             | 44,310     |             | 1,441       | 4,531      |             |             | 2,591      |
| 25th .. |            | 47,475     | 169,180     | 86,013      | 20,490      | 2,604       |             | 31,122     | 4,817       | 15,074      | 11,580     | 4,810       | 885         | 7,591      |
| 26th .. |            | 2,520      | 148,299     | 91,217      | 3,380       |             |             | 35,013     |             | 11,192      | 12,508     | 10,480      |             | 11,965     |
| 27th .. |            |            | 41,206      | 114,220     | 433         |             |             | 23,975     |             | 6,850       | 3,314      | 4,609       |             | 4,566      |
| 28th .. |            |            | 124,234     | 58,939      |             |             |             | 25,018     |             | 18,864      | 11,572     |             |             | 2,336      |
| 29th .. |            | 225        | 30,101      | 36,905      | 12,392      | 3,100       |             | 9,313      |             | 6,342       | 7,023      | 740         |             | 6,380      |
| 30th .. |            | 1,913      | 146,198     | 126,928     | 24,151      | 1,300       |             | 42,604     |             | 12,117      | 6,639      | 7,982       |             | 9,440      |
| 31st .. | 16,270     | 33,287     | 90,862      | 81,713      | 13,852      | 380         | 261         | 22,234     |             | 17,835      | 9,084      | 7,102       |             | 5,104      |
| 32d ..  |            | 770        | 31,977      | 57,128      | 4,119       | 520         |             | 112,118    |             | 5,377       | 4,726      | 2,451       |             | 19,017     |
| 33d ..  |            |            | 28,401      | 32,560      | 658         |             |             | 17,285     |             | 5,642       | 4,896      | 4,516       |             | 3,970      |
| 34th .. | 769        | 81,766     | 141,697     | 80,651      | 6,917       |             |             | 70,485     | 4,771       | 24,821      | 3,589      | 222         |             | 7,035      |
| Total   | 17,039     | 123,020    | 2,415,547   | 1,835,841   | 142,918     | 9,479       | 261         | 1,199,578  | 15,947      | 328,352     | 1,985      | 103,089     | 885         | 190,412    |

Length and Interior Diameter of Sewers in Place December 31, 1895, in the Different Wards of the City—Continued.

| WARDS.   | 4½<br>Feet. | 4¾<br>Feet. | 5<br>Feet. | 5½<br>Feet. | 6<br>Feet. | 6½<br>Feet. | 7<br>Feet. | 7½<br>Feet. | 8<br>Feet. | 8½<br>Feet. | 9<br>Feet. | 9½<br>Feet. | 10<br>Feet. | 10½<br>Feet. | TOTAL.    |
|----------|-------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|-------------|--------------|-----------|
| 1st....  | .....       | .....       | 247        | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 121,262   |
| 2d....   | .....       | .....       | 4,255      | .....       | 1,480      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 96,110    |
| 3d....   | .....       | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 86,265    |
| 4th....  | .....       | 1,261       | 1,058      | .....       | 704        | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 124,946   |
| 5th....  | .....       | 2,600       | 1,860      | .....       | 1,680      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 131,415   |
| 6th....  | .....       | 3,532       | 8,018      | .....       | 3,112      | 2,132       | .....      | 667         | .....      | .....       | .....      | .....       | .....       | .....        | 235,218   |
| 7th....  | .....       | 280         | 5,750      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 79,273    |
| 8th....  | .....       | 3,955       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 75,775    |
| 9th....  | .....       | 3,675       | .....      | 2,651       | .....      | .....       | .....      | .....       | .....      | .....       | 1,625      | .....       | .....       | .....        | 94,884    |
| 10th.... | .....       | 6,114       | .....      | 1,463       | 8,308      | 1,380       | 1,462      | .....       | 5,161      | .....       | 11,636     | .....       | .....       | .....        | 411,051   |
| 11th.... | .....       | 18,440      | .....      | .....       | .....      | .....       | 1,988      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 116,594   |
| 12th.... | .....       | 4,075       | .....      | 2,656       | 1,582      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 383,196   |
| 13th.... | .....       | 1,995       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 234,926   |
| 14th.... | .....       | 7,030       | .....      | 1,870       | 518        | .....       | 2,702      | 3,972       | 1,350      | .....       | .....      | .....       | .....       | .....        | 276,287   |
| 15th.... | .....       | .....       | 6,823      | 3,994       | 7,359      | .....       | 2,125      | 6,630       | 3,952      | .....       | 5,865      | .....       | .....       | .....        | 355,513   |
| 16th.... | .....       | .....       | 5,210      | .....       | 1,494      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 70,046    |
| 17th.... | .....       | 6,940       | 6,817      | .....       | 1,306      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 83,340    |
| 18th.... | .....       | 4,011       | 10,775     | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 79,160    |
| 19th.... | .....       | 10,130      | 9,305      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 109,558   |
| 20th.... | .....       | 2,220       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 99,787    |
| 21st.... | .....       | 2,843       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 90,768    |
| 22d....  | .....       | 655         | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 73,780    |
| 23d....  | .....       | .....       | 2,765      | .....       | 753        | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 76,001    |
| 24th.... | .....       | 2,615       | 5,537      | .....       | 3,301      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 105,540   |
| 25th.... | .....       | 1,335       | .....      | 2,150       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 409,966   |
| 26th.... | .....       | 2,648       | 11,555     | 2,362       | 6,660      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 349,799   |
| 27th.... | .....       | 5,880       | 3,530      | 5,113       | 9,743      | 2,660       | 6,507      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 232,166   |
| 28th.... | .....       | 1,350       | 1,458      | .....       | 1,532      | .....       | .....      | .....       | .....      | .....       | 3,634      | .....       | .....       | .....        | 256,720   |
| 29th.... | .....       | 2,650       | 7,070      | .....       | 4,730      | .....       | 1,984      | 667         | 2,669      | .....       | 4,715      | .....       | .....       | .....        | 139,808   |
| 30th.... | .....       | 7,812       | .....      | .....       | 2,635      | 3,965       | 4,010      | .....       | 5,339      | 5,300       | .....      | .....       | .....       | .....        | 413,671   |
| 31st.... | .....       | 4,116       | 15,847     | 3,975       | 6,552      | 3,942       | 4,005      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 336,371   |
| 32d....  | .....       | 2,200       | 1,950      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 299,107   |
| 33d....  | .....       | 2,358       | 1,676      | 1,488       | 9,410      | 3,936       | .....      | .....       | .....      | .....       | .....      | .....       | .....       | .....        | 116,796   |
| 34th.... | .....       | 5,299       | 3,615      | 8,414       | 4,794      | 1,325       | 2,656      | .....       | .....      | .....       | 2,005      | 4,650       | 5,300       | 5,285        | 427,665   |
| Total .. | 118,019     | 3,933       | 143,436    | 38,290      | 77,583     | 19,340      | 32,724     | 11,936      | 18,441     | 5,300       | 29,480     | 4,650       | 5,300       | 5,285        | 6,591,762 |



**SEWERS CONSTRUCTED DURING THE YEAR 1895 IN THE  
WEST DIVISION.**

| STREET                       | FROM                      | TO                                 | Diam.<br>in<br>feet | Length<br>in<br>feet |
|------------------------------|---------------------------|------------------------------------|---------------------|----------------------|
| Adams .....                  | W. Fortieth .....         | Jan Huss .....                     | 1½                  | 655                  |
| Adams .....                  | Jan Huss .....            | Hamlin avenue .....                | 1                   | 439                  |
| Avers avenue .....           | Fourteenth .....          | 300 ft. S. of Fifteenth .....      | 1                   | 1,000                |
| Avers avenue .....           | North avenue .....        | Prince avenue .....                | 1½                  | 605                  |
| Avers avenue .....           | Division .....            | Prince avenue .....                | 1                   | 1,988                |
| Avondale avenue .....        | Francisco .....           | Northwest .....                    | 1                   | 128                  |
| Avondale avenue .....        | Mozart .....              | Northwest .....                    | 1                   | 130                  |
| Carroll avenue .....         | Francisco .....           | Sacramento .....                   | 1                   | 605                  |
| Carroll avenue .....         | St. Louis .....           | East .....                         | 1                   | 317                  |
| S. of Central Park blvd.     | Homan avenue .....        | Trumbull avenue .....              | 1½                  | 325                  |
| Clarkson court .....         | Lake .....                | Walnut .....                       | 1                   | 420                  |
| Colorado avenue .....        | Hamlin avenue .....       | Jan Huss .....                     | 1                   | 700                  |
| Columbia avenue .....        | North avenue .....        | Waubansia avenue .....             | 1½                  | 663                  |
| Columbia avenue .....        | Waubansia avenue .....    | Bloomington road .....             | 1                   | 636                  |
| Columbia avenue .....        | Armitage avenue .....     | Courtland avenue .....             | 1½                  | 669                  |
| Columbia avenue .....        | Courtland avenue .....    | Bloomington road .....             | 1                   | 595                  |
| Congress .....               | Central Park avenue ..... | Alley E. of St. Louis avenue ..... | 1½                  | 892                  |
| Congress .....               | W. Fortieth .....         | Jan Huss .....                     | 1½                  | 655                  |
| Congress .....               | Jan Huss .....            | Hamlin avenue .....                | 1                   | 439                  |
| Cromwell .....               | Fullerton avenue .....    | Berlin .....                       | 1½                  | 299                  |
| Cromwell .....               | Berlin .....              | Rhine .....                        | 1                   | 339                  |
| Cromwell .....               | Rhine .....               | Milwaukee avenue .....             | 1½                  | 381                  |
| Eighteenth .....             | Western avenue .....      | West .....                         | 1½                  | 570                  |
| Fairfield avenue .....       | Armitage avenue .....     | Courtland avenue .....             | 1                   | 510                  |
| Flournoy .....               | Kedzie avenue .....       | Albany avenue .....                | 1                   | 623                  |
| Flournoy .....               | Kedzie avenue .....       | Spaulding avenue .....             | 1½                  | 667                  |
| Flournoy .....               | Central Park avenue ..... | St. Louis avenue .....             | 1½                  | 670                  |
| Flournoy .....               | Spaulding avenue .....    | St. Louis avenue .....             | 1                   | 1,344                |
| Fourteenth .....             | W. Fortieth .....         | Jan Huss .....                     | 2                   | 668                  |
| Fourteenth .....             | Jan Huss .....            | Hamlin avenue .....                | 1½                  | 610                  |
| Forty-fifth avenue .....     | Irving Park avenue .....  | Prescott avenue .....              | 1½                  | 659                  |
| Forty-fifth avenue .....     | Prescott .....            | North .....                        | 1                   | 668                  |
| Francisco avenue .....       | Diversey avenue .....     | George .....                       | 1½                  | 658                  |
| Francisco avenue .....       | George .....              | Avondale avenue .....              | 1                   | 530                  |
| Gladys .....                 | W. Fortieth .....         | Jan Huss .....                     | 1½                  | 655                  |
| Gladys .....                 | Jan Huss .....            | Hamlin avenue .....                | 1                   | 439                  |
| Hamlin avenue .....          | Madison .....             | Colorado avenue .....              | 1                   | 2,195                |
| Hamlin avenue .....          | Fourteenth .....          | 300 ft. S. of Fifteenth .....      | 1                   | 1,043                |
| Hamlin avenue .....          | North avenue .....        | Prince avenue .....                | 1½                  | 606                  |
| Hamlin avenue .....          | Division .....            | Prince avenue .....                | 1                   | 1,966                |
| Harding avenue .....         | Grand avenue .....        | Frederick .....                    | 1½                  | 236                  |
| Harding avenue .....         | North avenue .....        | Prince avenue .....                | 1½                  | 603                  |
| Harding avenue .....         | Frederick .....           | Prince avenue .....                | 1                   | 662                  |
| Harding avenue .....         | Grand avenue .....        | Dorr place .....                   | 1½                  | 438                  |
| Harding avenue .....         | Division .....            | Dorr place .....                   | 1                   | 652                  |
| Harding avenue .....         | Fourteenth .....          | Sixteenth .....                    | 1                   | 1,265                |
| E. S. of Holstein Park ..... | Hamburg .....             | Ems .....                          | 1                   | 460                  |
| W. S. of Holstein Park ..... | Hamburg .....             | Ems .....                          | 1                   | 463                  |
| Humboldt .....               | Diversey avenue .....     | George .....                       | 1½                  | 658                  |
| Humboldt .....               | George .....              | Wellington avenue .....            | 1                   | 670                  |
| Huron .....                  | Rockwell .....            | Campbell avenue .....              | 1                   | 675                  |
| Jackson .....                | W. Fortieth .....         | Jan Huss .....                     | 1½                  | 655                  |
| Jackson .....                | Jan Huss .....            | Hamlin avenue .....                | 1                   | 439                  |
| Jan Huss .....               | Fourteenth .....          | 300 ft. S. of Fifteenth .....      | 1                   | 1,000                |

## WEST DIVISION—CONTINUED.

| STREET                   | FROM                    | TO                                  | Diam.<br>in<br>feet | Length<br>in<br>feet |
|--------------------------|-------------------------|-------------------------------------|---------------------|----------------------|
| Monroe .....             | W. Fortieth .....       | Jan Huss .....                      | 1½                  | 655                  |
| Monroe .....             | Jan Huss .....          | Hamlin avenue .....                 | 1                   | 439                  |
| Mozart .....             | Diversey avenue .....   | George .....                        | 1½                  | 658                  |
| Mozart .....             | George .....            | Avondale avenue .....               | 1                   | 274                  |
| S. S. Ogden avenue ..... | Hamlin avenue .....     | Southwest .....                     | 1                   | 621                  |
| Park avenue .....        | Kedzie avenue .....     | East .....                          | 1                   | 207                  |
| Rhine .....              | Milwaukee avenue .....  | Myrtle avenue .....                 | 1                   | 922                  |
| Rockwell .....           | Grand avenue .....      | Huron .....                         | 1                   | 560                  |
| Sacramento .....         | Twenty-second .....     | Twenty-third .....                  | 1½                  | 663                  |
| Sawyer avenue .....      | Ohio .....              | South .....                         | 1                   | 388                  |
| Sixteenth .....          | W. Fortieth .....       | Jan Huss .....                      | 1½                  | 668                  |
| Spaulding avenue .....   | Fullerton avenue .....  | Wrightwood avenue .....             | 1½                  | 1,332                |
| Spaulding avenue .....   | Monroe .....            | South .....                         | 1                   | 106                  |
| Springfield avenue ..... | Division .....          | Prince avenue .....                 | 1                   | 1,988                |
| Springfield avenue ..... | North avenue .....      | Prince avenue .....                 | 1½                  | 604                  |
| Taylor .....             | Campbell avenue .....   | West .....                          | 1½                  | 629                  |
| Throop .....             | Van Buren .....         | Harrison .....                      | 8                   | 824                  |
| Tripp avenue .....       | Humboldt avenue .....   | Belden avenue .....                 | 1½                  | 669                  |
| Trumbull avenue .....    | Central Park blvd ..... | Governor's Parkway .....            | 1                   | 617                  |
| Trumbull avenue .....    | Twenty-sixth .....      | Twenty-seventh .....                | 1                   | 667                  |
| Trumbull avenue .....    | Ohio .....              | Alley E. of Central Park blvd ..... | 1                   | 392                  |
| Twentieth .....          | Rockwell .....          | East .....                          | 1                   | 587                  |
| Twentieth .....          | Western avenue .....    | West .....                          | 1                   | 458                  |
| Van Buren .....          | W. Fortieth .....       | Jan Huss .....                      | 1½                  | 655                  |
| Van Buren .....          | Jan Huss .....          | Hamlin avenue .....                 | 1                   | 653                  |
| Washington .....         | Albany avenue .....     | West .....                          | 1                   | 400                  |
| Weage avenue .....       | Kedzie avenue .....     | Sheridan avenue .....               | 1                   | 630                  |
| Wilcox avenue .....      | W. Fortieth .....       | Jan Huss .....                      | 1½                  | 655                  |
| Wilcox avenue .....      | Jan Huss .....          | Hamlin avenue .....                 | 1                   | 653                  |
| Total .....              |                         |                                     |                     | 55,410               |

SEWERS CONSTRUCTED DURING THE YEAR 1895 IN THE  
SOUTH DIVISION.

| STREET                           | FROM                  | TO                        | Diam.<br>in<br>feet | Length<br>in<br>feet |
|----------------------------------|-----------------------|---------------------------|---------------------|----------------------|
| Alley E. of Cottage Grove avenue | Forty-fifth           | South                     | 1                   | 229                  |
| Alley E. of Grand blvd.          | Forty-eighth          | Forty-ninth               | 1                   | 338                  |
| Alley W. of Grand blvd.          | Forty fifth           | Forty-sixth               | 1                   | 629                  |
| Alley E. of Michigan av.         | Thirty-ninth          | Fortieth                  | $\frac{1}{2}$       | 641                  |
| Aberdeen                         | Sixty-seventh         | Sixty-ninth               | $1\frac{1}{2}$      | 1,321                |
| Bishop                           | Sixty-third           | Sixty-fifth               | 1                   | 1,326                |
| Bishop                           | Sixty-fifth           | Sixty-sixth               | $1\frac{1}{2}$      | 660                  |
| Bishop                           | Sixty-sixth           | Sixty-seventh             | 1                   | 675                  |
| Bonaparte                        | Fake                  | East                      | 1                   | 245                  |
| Burtis                           | Forty-seventh         | Fifty-first               | $1\frac{1}{2}$      | 2,413                |
| Center avenue                    | Sixty-third           | Sixty-fourth              | 1                   | 659                  |
| Center avenue                    | Sixty-fourth          | Sixty-fifth               | $1\frac{1}{2}$      | 665                  |
| Center avenue                    | Sixty-fifth           | Sixty-sixth               | $1\frac{1}{2}$      | 668                  |
| Center avenue                    | Sixty-sixth           | Sixty-seventh             | 1                   | 663                  |
| Center avenue                    | Sixty-seventh         | Sixty-eighth              | $1\frac{1}{2}$      | 663                  |
| Center avenue                    | Sixty-eighth          | Sixty-ninth               | 1                   | 666                  |
| Center avenue                    | Sixty-ninth           | Seventieth                | $1\frac{1}{2}$      | 663                  |
| Champlain                        | Thirty-third          | North                     | $1\frac{1}{2}$      | 546                  |
| Cregier avenue                   | Sixty-ninth           | Seventieth                | $1\frac{1}{2}$      | 658                  |
| Dearborn                         | Fifty-ninth           | North                     | 1                   | 389                  |
| Elias                            | Archer avenue         | Lyman                     | 1                   | 825                  |
| Emerald avenue                   | Sixty-fourth          | South                     | 1                   | 466                  |
| Escanaba avenue                  | Eighty-eighth         | Ninetieth                 | $1\frac{1}{2}$      | 1,814                |
| Escanaba avenue                  | Eighty-eighth         | Eighty-seventh            | 1                   | 648                  |
| Escanaba avenue                  | Ninetieth             | Ninety-first              | 1                   | 647                  |
| Fake                             | Bonaparte             | South                     | 1                   | 154                  |
| Fiftieth                         | Princeton avenue      | Shields avenue            | $1\frac{1}{2}$      | 310                  |
| Fiftieth                         | Hoyne avenue          | Leavitt                   | 1                   | 775                  |
| Fiftieth court                   | Hoyne avenue          | Leavitt                   | 1                   | 617                  |
| Fifty-fourth place               | Elias avenue          | Greenwood avenue          | 1                   | 386                  |
| Fifty-sixth                      | South Park avenue     | Calumet avenue            | $1\frac{1}{2}$      | 440                  |
| Fifty-sixth                      | Calumet avenue        | 150 ft. E. of Indiana av. | 1                   | 690                  |
| Fifth avenue                     | 119th                 | 121st                     | 1                   | 1,129                |
| Forty-sixth                      | Wentworth avenue      | Princeton avenue          | $1\frac{1}{2}$      | 685                  |
| Forty-sixth                      | Princeton avenue      | Stewart avenue            | 1                   | 615                  |
| Forty-seventh                    | Robey                 | Leavitt                   | 2                   | 1,278                |
| Forty-seventh court              | Hoyne avenue          | Leavitt                   | 1                   | 612                  |
| Forty-eighth                     | Alley E. of Hoyne av. | Leavitt                   | 1                   | 774                  |
| Forty-eighth court               | Hoyne avenue          | Leavitt                   | 1                   | 613                  |
| Forty-ninth                      | Hoyne avenue          | Leavitt                   | 1                   | 615                  |
| Forty-ninth court                | Hoyne avenue          | Leavitt                   | 1                   | 619                  |
| Ford                             | Wallace               | 375 ft. E. of Wright      | 1                   | 1,100                |
| Goodspeed                        | Fifty-first           | Fiftieth                  | $1\frac{1}{2}$      | 655                  |
| Goodspeed                        | Fifty-first           | Grand Trunk R. R.         | 1                   | 535                  |
| Graylock avenue                  | Princeton avenue      | Shields avenue            | $1\frac{1}{2}$      | 351                  |
| Green                            | Sixty-sixth           | Sixty-seventh             | $1\frac{1}{2}$      | 663                  |
| Green                            | Seventy-third         | Seventy-second            | 1                   | 663                  |
| Hoyne avenue                     | Forty-seventh         | Fifty-first               | $1\frac{1}{2}$      | 2,511                |
| Hope avenue                      | Sixty-second          | Sixty-third               | 1                   | 792                  |
| Jeffery avenue                   | Seventy-third         | Seventy-fourth            | $1\frac{1}{2}$      | 661                  |
| Jeffery avenue                   | Seventy-fourth        | Seventy-fifth             | 1                   | 657                  |
| Justine                          | Sixty-third           | Sixty-fifth               | 1                   | 1,328                |
| Justine                          | Sixty-fifth           | Sixty-sixth               | $1\frac{1}{2}$      | 660                  |
| Justine                          | Sixty-sixth           | Sixty-seventh             | 1                   | 667                  |

## SOUTH DIVISION—CONTINUED.

| STREET                       | FROM                      | TO                         | Diam.<br>in<br>feet | Length<br>in<br>feet |
|------------------------------|---------------------------|----------------------------|---------------------|----------------------|
| Laffin .....                 | Sixty-third .....         | Sixty-fifth .....          | 1                   | 1,880                |
| Laffin .....                 | Sixty-fifth .....         | Sixty-sixth .....          | 1½                  | 656                  |
| Laffin .....                 | Sixty-sixth .....         | Sixty-seventh .....        | 1                   | 675                  |
| La Salle .....               | Sixty-first .....         | South .....                | 1                   | 995                  |
| Leavitt .....                | Thirty-third .....        | Bross avenue .....         | 1½                  | 620                  |
| Lincoln .....                | Fifty-first .....         | Fiftieth .....             | 1½                  | 657                  |
| Lincoln .....                | Fiftieth .....            | Grand Trunk R. R. ..       | 1                   | 535                  |
| Loomis .....                 | Sixty-third .....         | Sixty-fifth .....          | 1                   | 1,328                |
| Loomis .....                 | Sixty-fifth .....         | Sixty-sixth .....          | 1½                  | 660                  |
| Loomis .....                 | Sixty-sixth .....         | Sixty-seventh .....        | 1                   | 675                  |
| Ninety-third .....           | Superior avenue .....     | West .....                 | 1                   | 291                  |
| Ninety-third .....           | Huston avenue .....       | Ontario avenue .....       | 1                   | 632                  |
| 103d .....                   | Charles avenue .....      | Prospect avenue .....      | 8½                  | 940                  |
| 103d .....                   | Prospect avenue .....     | Meridian avenue .....      | 3                   | 1,938                |
| 103d .....                   | Meridian avenue .....     | Washington avenue ..       | 2½                  | 415                  |
| 103d .....                   | Washington avenue ..      | Belmont avenue .....       | 1½                  | 647                  |
| 103d .....                   | Belmont avenue .....      | Highland avenue .....      | 2                   | 1,026                |
| Paulina .....                | Fifty-first .....         | Grand Trunk R. R. ....     | 1                   | 1,156                |
| Paulina .....                | Fifty-fourth .....        | South .....                | 1½                  | 493                  |
| Peoria .....                 | Sixty-seventh .....       | Sixty-sixth .....          | 1½                  | 660                  |
| Portland avenue .....        | 119th .....               | 121st .....                | 1                   | 1,124                |
| Prairie avenue .....         | Sixty-seventh .....       | Sixty-ninth .....          | 2                   | 1,330                |
| E. S. of Railroad av. ..     | Seventy-third .....       | Seventy-third place ..     | 1                   | 433                  |
| Sangamon .....               | Seventy-first .....       | Seventy-fourth .....       | 1                   | 1,985                |
| Seventh avenue .....         | 100th .....               | Ninety-ninth .....         | 2                   | 700                  |
| Seventh avenue .....         | Ninety-ninth .....        | Ninety-eighth .....        | 1½                  | 701                  |
| Seventh avenue .....         | Ninety-eighth .....       | Ninety-seventh .....       | 1                   | 662                  |
| Seventy third place .....    | Railroad avenue .....     | East .....                 | 1                   | 217                  |
| Shields avenue .....         | Graylock avenue .....     | Alley N. of Forty-ninth .. | 1                   | 1,377                |
| Sixty-third place .....      | Maryland avenue .....     | East .....                 | 1                   | 297                  |
| Sixty-fifth .....            | Ashland avenue .....      | Loomis .....               | 2                   | 1,360                |
| Sixty-seventh .....          | Ashland avenue .....      | Loomis .....               | 1                   | 1,328                |
| Sixty-seventh .....          | Madison avenue .....      | Hope avenue .....          | 2½                  | 674                  |
| Sixty-seventh .....          | Hope .....                | East .....                 | 1½                  | 511                  |
| State .....                  | Sixty-ninth .....         | Seventy-fifth .....        | 2                   | 3,960                |
| State .....                  | Sixty-ninth .....         | Sixty-eighth .....         | 1                   | 620                  |
| W. S. of Stony Island av. .. | Seventy-third .....       | Seventy-fifth .....        | 1½                  | 1,000                |
| Superior avenue .....        | Ninety-second .....       | Ninety-third .....         | 1½                  | 660                  |
| Thirty-eighth court .....    | Halsted .....             | Laurel .....               | 1                   | 1,295                |
| Thirty-third court .....     | Paulina .....             | East .....                 | 1                   | 882                  |
| Wall .....                   | 248 ft. S. of Springer .. | South .....                | 1½                  | 417                  |
| Wall .....                   | 714 ft. S. of Springer .. | South .....                | 1                   | 418                  |
| Washington avenue .....      | 103d .....                | 105th .....                | 2                   | 1,348                |
| Washington avenue .....      | 105th .....               | 107th .....                | 1½                  | 1,337                |
| Washington avenue .....      | 103d .....                | 101st .....                | 1½                  | 1,371                |
| Wentworth avenue .....       | 113th .....               | South .....                | 10                  | 100                  |
| Wentworth avenue .....       | 113th .....               | 106th .....                | 9½                  | 4,650                |
| Wentworth avenue .....       | 106th .....               | 103d .....                 | 9                   | 2,005                |
| Winchester avenue .....      | Fifty-first .....         | Fiftieth .....             | 1½                  | 658                  |
| Winchester avenue .....      | Fiftieth .....            | Grand Trunk R. R. ....     | 1                   | 536                  |
| Wood .....                   | Fifty-second .....        | Grand Trunk R. R. ....     | 1                   | 1,877                |
| Total .....                  |                           |                            |                     | 91,816               |

SEWERS CONSTRUCTED DURING THE YEAR 1895 IN THE  
NORTH DIVISION.

| STREET                        | FROM                     | TO                                   | Diam.<br>in<br>feet | Length<br>in<br>feet |
|-------------------------------|--------------------------|--------------------------------------|---------------------|----------------------|
| Albion avenue .....           | Winthrop avenue.....     | W. S. Evanston av ...                | 1½                  | 1,170                |
| Albion avenue .....           | Winthrop avenue.....     | East .....                           | 1                   | 385                  |
| Broadock avenue .....         | Ormonde avenue .....     | Emerson avenue .....                 | 1                   | 209                  |
| Buena avenue.....             | Halsted .....            | Lake Michigan.....                   | 1                   | 405                  |
| Carpenter road.....           | Chicago river .....      | Crescent road .....                  | 2½                  | 202                  |
| Carpenter road.....           | Crescent road .....      | S. of Ormonde avenue..               | 1½                  | 433                  |
| Carpenter road.....           | S. of Ormonde avenue..   | Ormonde avenue .....                 | 2                   | 232                  |
| Claremont avenue .....        | Cosgrove avenue .....    | South .....                          | 1                   | 272                  |
| Columbia avenue.....          | Evanston avenue .....    | Webber avenue.....                   | 1½                  | 746                  |
| Columbia avenue.....          | Evanston avenue .....    | East .....                           | 1                   | 850                  |
| Columbia avenue.....          | Webber avenue.....       | Railroad avenue.....                 | 1                   | 400                  |
| Cornelia .....                | Halsted .....            | Rokeby .....                         | 1½                  | 625                  |
| Cornelia .....                | Rokeby .....             | Sheffield avenue .....               | 1                   | 604                  |
| Cosgrove avenue .....         | Western avenue .....     | Leavitt .....                        | 1½                  | 1,817                |
| Cosgrove avenue .....         | Leavitt .....            | East .....                           | 1                   | 213                  |
| Crescent road.....            | Enfield avenue.....      | Fountain avenue .....                | 2                   | 437                  |
| Crescent road.....            | Fountain avenue .....    | Grassmere road .....                 | 1½                  | 694                  |
| Ellerton avenue.....          | Dixon avenue .....       | Fountain avenue .....                | 1                   | 689                  |
| Enfield avenue .....          | Prescott avenue .....    | Ellerton avenue .....                | 1½                  | 683                  |
| Evanston avenue .....         | Columbia avenue.....     | Albion avenue.....                   | 1½                  | 742                  |
| Evanston avenue .....         | Columbia avenue.....     | Pratt avenue .....                   | 1                   | 281                  |
| Evanston avenue .....         | Albion avenue.....       | Hayes avenue .....                   | 1                   | 343                  |
| N. Fifty-ninth, now Foster av | Lincoln avenue.....      | 542 ft. N. of W. line of Lincoln av. | 1½                  | 539                  |
| George .....                  | Robey.....               | Walcott avenue .....                 | 1½                  | 656                  |
| George .....                  | Walcott .....            | East .....                           | 1                   | 327                  |
| Grace .....                   | Robey .....              | Hoyne avenue .....                   | 3                   | 658                  |
| Grace .....                   | Hoyne avenue .....       | Mara avenue.....                     | 1½                  | 335                  |
| Hoyne avenue.....             | Grace .....              | S. of Irving Park av ..              | 1                   | 1,136                |
| Irving Park avenue ..         | Cosgrove avenue .....    | South .....                          | 1                   | 272                  |
| Irving Park boulevard.        | Western avenue .....     | Irving Park avenue ..                | 2                   | 981                  |
| Irving Park boulevard.        | Irving Park avenue.....  | Leavitt .....                        | 1½                  | 330                  |
| Irving Park boulevard.        | River .....              | Western avenue.....                  | 2½                  | 1,588                |
| Kenmore avenue .....          | Rosemont avenue .....    | Devon avenue .....                   | 1                   | 660                  |
| Leavitt .....                 | Cosgrove avenue .....    | Montrose boulevard...                | 1                   | 675                  |
| Leavitt .....                 | Irving Park avenue ..... | Byron .....                          | 1                   | 667                  |
| Mara avenue .....             | Grace .....              | S. of Irving Park av ..              | 1                   | 1,137                |
| Nellie avenue.....            | Robey.....               | W. of Lincoln avenue..               | 1                   | 863                  |
| Nelson .....                  | Ashland avenue.....      | Paulina.....                         | 1½                  | 660                  |
| Nelson .....                  | Paulina .....            | Wood .....                           | 1                   | 654                  |
| North Shore avenue ..         | Lake Michigan avenue     | Evanston avenue .....                | 2                   | 965                  |
| North Shore avenue ..         | Evanston avenue .....    | Webber avenue .....                  | 1½                  | 748                  |
| North Shore avenue ..         | Webber avenue.....       | Railroad avenue .....                | 1                   | 191                  |
| Oakdale avenue.....           | Robey .....              | Walcott .....                        | 1½                  | 658                  |
| Oakdale avenue.....           | Walcott .....            | C. & N.-W. Ry. ....                  | 1                   | 574                  |
| Oakley avenue .....           | Webster avenue .....     | Washington avenue.....               | 1½                  | 686                  |
| Oakley avenue .....           | Washington avenue.....   | S. of Foster avenue.....             | 1                   | 196                  |
| Oakley avenue .....           | Cosgrove avenue .....    | South .....                          | 1                   | 275                  |
| Ormonde avenue .....          | Carpenter road.....      | Broadock avenue.....                 | 1                   | 433                  |
| Patterson avenue .....        | Robey .....              | W. of Lincoln avenue..               | 1                   | 965                  |
| Paulina .....                 | Diversey avenue .....    | South .....                          | 1                   | 853                  |
| Prescott avenue .....         | Carpenter road.....      | Enfield avenue.....                  | 2                   | 746                  |
| E. Ravenswood Park ..         | Addison avenue .....     | Waveland avenue .....                | 1½                  | 658                  |
| E. Ravenswood Park ..         | Waveland avenue.....     | Byron .....                          | 1                   | 1,344                |
| E. Ravenswood Park ..         | Byron .....              | Irving Park avenue ..                | 1½                  | 610                  |

## NORTH DIVISION—CONTINUED.

| STREET                  | FROM                     | TO                     | Diam.<br>in<br>feet | Length<br>in<br>feet |
|-------------------------|--------------------------|------------------------|---------------------|----------------------|
| W. Ravenswood Park..    | Wellington .....         | Oakdale avenue.....    | 1                   | 333                  |
| Ridge avenue.....       | Charlton.....            | Wayne avenue .....     | 1½                  | 655                  |
| Ridge avenue.....       | Wayne avenue .....       | Southport avenue ..... | 1                   | 602                  |
| Robey.....              | George .....             | Nelson .....           | 2                   | 995                  |
| Robey.....              | Webster avenue .....     | Grant place.....       | 1½                  | 983                  |
| Robey.....              | Grant place.....         | Lawrence avenue.....   | 1                   | 628                  |
| School .....            | Leavitt .....            | W. of Hoyne avenue..   | 1                   | 494                  |
| School .....            | Robey .....              | E. of Hoyne avenue ..  | 1                   | 455                  |
| Seeley avenue.....      | Addison avenue .....     | Cornelia .....         | 1                   | 638                  |
| Tyson avenue.....       | Grace .....              | S. of Irving Park av.. | 1                   | 1,138                |
| North Water.....        | St. Clair.....           | East .....             | 2                   | 687                  |
| North Water.....        | 687 ft. E. of St. Clair. | East .....             | 1½                  | 875                  |
| Wellington avenue ..... | Robey .....              | Walcott .....          | 1½                  | 654                  |
| Wellington avenue ..... | Walcott .....            | W. Ravenswood Park..   | 1                   | 448                  |
| Western avenue .....    | Montrose boulevard ..    | Berteau avenue.....    | 2½                  | 1,335                |
| Western avenue .....    | Berteau .....            | Irving Park avenue ... | 2                   | 1,336                |
| Winthrop place.....     | Rosemont avenue .....    | Devon avenue.....      | 1                   | 656                  |
| Wolfram .....           | Robey .....              | Walcott .....          | 1½                  | 657                  |
| Wolfram .....           | Walcott .....            | East .....             | 1                   | 324                  |
| Total .....             |                          |                        |                     | 47,765               |

WING SEWERS CONSTRUCTED DURING THE YEAR 1895 IN  
THE WEST DIVISION.

| STREET           | FROM                            | TO                      | Diam.<br>in<br>feet | Length<br>in<br>feet |
|------------------|---------------------------------|-------------------------|---------------------|----------------------|
| Franklin .....   | Manhole in Wallace ..           | East .....              | 1                   | 38                   |
| Garden .....     | Manhole in Wallace ..           | East .....              | 1                   | 38                   |
| Huron .....      | Manhole in Hamlin ..            | East .....              | 1                   | 38                   |
| Hamlin .....     | Manhole in N. line o Kinzie ..  | N. line of Kinzie ..... | 1                   | 75                   |
| Kinzie .....     | Manhole in W. Fortieth ..       | West .....              | 1                   | 45                   |
| Mead .....       | Manhole in Chicago avenue ..    | North .....             | 1                   | 46                   |
| Sheldon .....    | Manhole in Milwaukee avenue ..  | West .....              | 1                   | 40                   |
| Sheridan .....   | Manhole in Courtland ..         | West .....              | 1                   | 44                   |
| St. Louis .....  | Manhole in N. line of Kinzie .. | S. line of Kinzie ..... | 1                   | 110                  |
| Vernon .....     | Manhole in Milwaukee avenue ..  | West .....              | 1                   | 40                   |
| Washington ..... | Manhole in Milwaukee avenue ..  | West .....              | 1½                  | 40                   |
| Total .....      |                                 |                         |                     | 553                  |

**WING SEWERS CONSTRUCTED DURING THE YEAR 1895 IN  
THE SOUTH DIVISION.**

| STREET                 | FROM                   | TO              | Diam.<br>in<br>feet | Length<br>in<br>feet |
|------------------------|------------------------|-----------------|---------------------|----------------------|
| Avenue M . . . . .     | Manhole in 100th. . .  | South . . . . . | 1½                  | 88                   |
| Bonaparte . . . . .    | Manhole in Fake . . .  | West . . . . .  | 1½                  | 36                   |
| Peoria . . . . .       | Manhole in Fifty-third | North . . . . . | 1½                  | 40                   |
| Sangamon . . . . .     | Manhole in Fifty-third | North . . . . . | 1                   | 40                   |
| Sixty-eighth . . . . . | Manhole in Emerald av  | East . . . . .  | ½                   | 176                  |
| Total . . . . .        |                        |                 |                     | 380                  |



**WING SEWERS CONSTRUCTED DURING THE YEAR 1895 IN  
THE NORTH DIVISION.**

| STREET                | FROM                  | TO          | Diam.<br>in<br>feet | Length<br>in<br>feet |
|-----------------------|-----------------------|-------------|---------------------|----------------------|
| Foster .....          | Manhole in Lincoln av | West .....  | 1½                  | 48                   |
| Hanson court .....    | Manhole in Lincoln av | East .....  | 1                   | 42                   |
| Hanson court .....    | Manhole in Lincoln av | West .....  | 1½                  | 38                   |
| Jackson .....         | Manhole in Lincoln av | West .....  | 1                   | 42                   |
| School .....          | Manhole in Western av | East .....  | 1                   | 38                   |
| Swift place .....     | Manhole in Bryn Mawr  | North ..... | 1½                  | 40                   |
| Webster avenue.....   | Manhole in Lincoln av | East .....  | 1                   | 48                   |
| Webster avenue.....   | Manhole in Lincoln av | West .....  | 1½                  | 48                   |
| Wayne avenue .....    | Manhole in Bryn Mawr  | South ..... | 1½                  | 40                   |
| Washington avenue.... | Manhole in Lincoln av | West .....  | 1½                  | 42                   |
| Washington avenue.... | Manhole in Lincoln av | East .....  | 1                   | 50                   |
| Total .....           |                       |             |                     | 476                  |



SEWERS AND CATCH-BASINS CLEANED IN THE THREE DIVISIONS OF THE CITY  
DURING THE YEAR 1895.

| METHOD.                                                        | South Division. |             | West Division. |            | North Division. |             | Total.        |              | Average Cost<br>per 100 feet. |
|----------------------------------------------------------------|-----------------|-------------|----------------|------------|-----------------|-------------|---------------|--------------|-------------------------------|
|                                                                | Feet Cleaned.   | Cost.       | Feet Cleaned.  | Cost.      | Feet Cleaned.   | Cost.       | Feet Cleaned. | Cost.        |                               |
| Flushing.....                                                  | 605,444         | \$7,568 05  | 230,418        | \$2,880 22 | 399,592         | \$4,994 90  | 1,235,454     | \$15,443 17  | \$1 25                        |
| Iron Scraper.....                                              | 513,196         | 40,542 48   | 20,115         | 1,589 08   | 156,075         | 12,329 93   | 689,386       | 54,461 49    | 7 90                          |
| Wood Scraper.....                                              | 33,510          | 1,491 19    | 105,014        | 4,673 12   | 93,490          | 4,160 31    | 232,014       | 10,324 62    | 4 45                          |
| Total.....                                                     | 1,152,150       | \$49,601 72 | 355,547        | \$9,142 42 | 649,157         | \$21,485 14 | 2,156,854     | \$80,229 28  |                               |
| Opening Inlets to Catch-basins, attending complaints, etc..... |                 |             |                |            |                 |             |               |              |                               |
| Total.....                                                     |                 |             |                |            |                 |             |               | 5,298 13     |                               |
|                                                                |                 |             |                |            |                 |             |               | \$85,527 41  |                               |
| Catch-basins Cleaned ...                                       |                 |             |                |            |                 |             |               |              |                               |
|                                                                | No. of.         | Cost.       | No. of.        | Cost.      | No. of.         | Cost.       | No. of.       | Cost.        | Average Cost<br>per Basin.    |
| Catch-basins Cleaned ...                                       | 8,025           | \$28,087 50 | 2,667          | \$9,394 50 | 3,011           | \$10,538 50 | 13,703        | \$47,960 50  | \$3 50                        |
| Cost of Cleaning Sewers and Catch-basins.....                  |                 |             |                |            |                 |             |               |              |                               |
| Miscellaneous Bills for Repairs of Tools, Supplies, etc.....   |                 |             |                |            |                 |             |               | \$133,487 91 |                               |
|                                                                |                 |             |                |            |                 |             |               | 936 53       |                               |
| Total Cost of Cleaning Sewers and Catch-basins.....            |                 |             |                |            |                 |             |               | \$134,424 44 |                               |

**RECEIPTS IN HOUSE DRAIN DEPARTMENT DURING  
THE YEAR 1895.**

| DIVISION.                                   | PERMITS ISSUED. |         |          |          |       |            |       |                     | Receipts.    |
|---------------------------------------------|-----------------|---------|----------|----------|-------|------------|-------|---------------------|--------------|
|                                             | 6-inch.         | 9-inch. | 12-inch. | 15-inch. | Total | Junctions. |       | Special<br>Ass'tmt. |              |
|                                             |                 |         |          |          |       | 6-in.      | 9-in. |                     |              |
| West .....                                  | 1,985           | 48      | 8        | 1        | 2,042 | 28         | 2     | 120                 | \$ 14,452 00 |
| North .....                                 | 1,875           | 19      | .....    | .....    | 1,893 | 24         | 2     | 44                  | 10,707 50    |
| South .....                                 | 2,666           | 57      | 8        | 1        | 2,727 | 109        | 12    | 167                 | 9,669 25     |
| Totals .....                                | 6,526           | 123     | 11       | 2        | 6,662 | 156        | 16    | 331                 | \$ 34,828 75 |
| Receipts from licenses.....                 |                 |         |          |          |       |            |       |                     | 2,095 00     |
| Receipts from special assessments, etc..... |                 |         |          |          |       |            |       |                     | 8,105 00     |
| Total receipts .....                        |                 |         |          |          |       |            |       |                     | \$ 45,028 75 |

**NUMBER OF DRAINS PUT IN PLACE DURING THE YEAR 1895  
UNDER SPECIAL ASSESSMENT.**

| DIVISION.   | Total number of drains. | Total length of drains. | Total cost. | Average cost per drain. | Average length drain in feet. | Average cost per foot in cents |
|-------------|-------------------------|-------------------------|-------------|-------------------------|-------------------------------|--------------------------------|
| West .....  | 924                     | 30,070                  | \$ 3,545 21 | \$ 3 84                 | 32.54                         | 11.78                          |
| North ..... | 474                     | 12,908                  | 1,784 51    | 3 66                    | 27.22                         | 13.44                          |
| South ..... | 228                     | 6,208                   | 911 10      | 4 09                    | 27.28                         | 14.69                          |
| Total ..... | 1,621                   | 49,176                  | \$ 6,190 82 | \$ 3 82                 | 30.33                         | 12.6                           |

Making a total of 9.31 miles of six (6) inch drain laid by contract and paid for by special assessment.



REPORT OF THE

**Bureau of Streets**

CITY OF CHICAGO



# BUREAU OF STREETS.

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HON. W. D. KENT,

*Commissioner of Public Works.*

DEAR SIR: I have the honor to submit herewith the Twentieth Annual Report of the Bureau of Streets for the year ending December 31, 1895.

A review of the work accomplished during the past year by the various departments of this Bureau is presented in detail; also information relative to the different railroads centering in this City, and extension of the various street railway lines operating within the corporation limits.

## FINANCIAL STATEMENT.

|                                                                                                                    |                       |
|--------------------------------------------------------------------------------------------------------------------|-----------------------|
| Amount paid contractors for street improvements<br>by special assessments.....                                     | \$1,026,202 45        |
| For sidewalks built by the Bureau under special<br>assessment .....                                                | 50,817 91             |
| For re-paving and repairing improved streets....                                                                   | 267,671 89            |
| For grading, ditching, building and repairing<br>aprons, culverts, crossings, etc., on unimproved<br>streets ..... | 143,696 39            |
| For sidewalk general repairs, and intersections...                                                                 | 106,211 11            |
| For City parks.....                                                                                                | 9,361 96              |
| For new and repaired street lamps and signs .....                                                                  | 63,397 24             |
| GRAND TOTAL.....                                                                                                   | <u>\$1,667,358 95</u> |



## STREET AND ALLEY IMPROVEMENTS.

In addition to attending to work under construction fourteen lettings have been prepared and advertised, and contracts for forty-five alleys and 145 streets awarded; eighty-eight surveys for street and alley openings, and seventeen surveys of obstructions have been made; grades and lines have been furnished for sidewalks by an engineer detailed from this Department; and 396 preliminary estimates for new work have been made, divided as follows:

| KINDS OF PAVEMENT.    | Square Yards. | Lineal Feet. | Miles. | Estimated Cost. |
|-----------------------|---------------|--------------|--------|-----------------|
| Cedar block.....      | 1,742,064     | 468,805      | 91.63  | \$3,206,164 90  |
| Vitrified brick ..... | 323,566       | 87,434       | 16.56  | 741,871 65      |
| Asphalt.....          | 134,803       | 39,635       | 7.50   | 379,233 60      |
| Macadam.....          | 574,880       | 185,350      | 35.10  | 1,055,900 09    |
| Granite .....         | 33,707        | 9,485        | 1.80   | 108,594 88      |
| Total.....            | 2,808,520     | 805,709      | 152.59 | \$5,491,765 12  |

Of the 47.75 miles of pavement laid during the year 59.9 per cent. has been cedar block and 12.1 per cent. macadam. By reference to the "Tables Showing Percentage of Each Class of Pavement" it will be seen that the proportion of these two classes of pavement is rapidly diminishing, being replaced by vitrified brick, granite blocks and sheet asphalt. The introduction of vitrified brick on Milwaukee avenue, from Lake street to Chicago avenue, and of sheet asphalt on Madison street, from Jefferson street to Center avenue, is a new departure which will be watched with a great deal of interest. Each of these pavements is an ideal specimen of its class and was laid in strict accord with the specifications and under the most rigid inspection. The heavy traffic on these streets will be a severe and thorough test.

The tendency towards substantial pavements has been greatly assisted by the action of the Council in ordering that all cedar block pavements be laid on a foundation of compacted crushed stone, six inches in depth, instead of the two-inch hemlock plank and three-inch sand foundation as formerly specified.

I would recommend that when a street has been ordered improved, upon which substantial sidewalks are needed, the ordinance be drawn providing for all improvements necessary between lot lines. Sidewalk elevations, which are the cause of frequent contentions, would be properly fixed, the cost of making one assessment would be saved, greater uniformity between sidewalk and street elevations would ensue, and the general appearance of the street greatly benefited.

The following tables show the progress in street and alley improvements and the character of pavement laid on each:

## ALLEYS IMPROVED IN THE

| NAME        | FROM                        | BETWEEN                    | Commenced      |
|-------------|-----------------------------|----------------------------|----------------|
| Alley ..... | Webster to Garfield avs ..  | Osgood and Seminary av.    | June 4, 1895   |
| Alley ..... | First W. of Franklin .....  | Wendell and Oak .....      | May 13, 1895   |
| Alley ..... | First N. E. of Maud av...   | Sheffield av. and Poe .... | July 9, 1895   |
| Alley ..... | Lincoln avenue .....        | Belden av. and Larrabee .. | Aug. 24, 1895  |
| Alley ..... | Lincoln avenue .....        | Webster av. and Orchard .. | Oct. 10, 1895  |
| Alley ..... | Larrabee to Willow .....    | Howe and Center .....      | Aug. 26, 1895  |
| Alley ..... | Locust to Pearson .....     | Franklin and Market ....   | Sept. 28, 1895 |
| Alley ..... | North av. to 475 ft. north. | Dayton and Halsted .....   | Oct. 12, 1895  |
| Alley ..... | Goethe to 411 ft. north...  | State and Dearborn .....   | Oct. 1, 1895   |
| Alley ..... | Seminary av. to Clifton ..  | Webster and Garfield avs.  | Oct. 9, 1895   |

## NORTH DIVISION, 1895.

| Finished      | CONTRACTOR               | Nature of Improvement | Square Yards | Lineal Feet |
|---------------|--------------------------|-----------------------|--------------|-------------|
| June 5, 1895  | J. B. Smith & Co. ....   | Cedar .....           | 1,215        | 720         |
| May 15, 1895  | R. F. Conway .....       | " .....               | 884          | 219         |
| July 9, 1895  | Sackley & Peterson ..... | " .....               | 866          | 199         |
| Oct. 7, 1895  | O. Vider .....           | " .....               | 1,265        | 866         |
| Oct. 20, 1895 | White & Valentine .....  | " .....               | 1,198        | 784         |
| Nov. 5, 1895  | H. Rath .....            | " .....               | 2,678        | 1,700       |
| Jan. 4, 1896  | H. Rath .....            | " .....               | 1,744        | 873         |
| Oct. 16, 1895 | H. Rath .....            | " .....               | 894          | 460         |
| Oct. 10, 1895 | H. Rath .....            | " .....               | 885          | 410         |
| Oct. 26, 1895 | A. J. McBean & Co. ....  | " .....               | 1,219        | 722         |

## STREETS IMPROVED IN THE

| NAME                 | FROM                    | TO                      | Commenced      |
|----------------------|-------------------------|-------------------------|----------------|
| Balmoral avenue..    | Clark .....             | Southport avenue.....   | Unfinished...  |
| *Bellevue place...   | Rush .....              | Lake Shore Drive .....  | .....          |
| Berwyn avenue...     | Clark .....             | Southport avenue.....   | Unfinished...  |
| Bryn Mawr .....      | Clark .....             | Evanston avenue .....   | May 23, 1895   |
| *Clark .....         | Center .....            | North avenue .....      | .....          |
| Dearborn avenue..    | Michigan .....          | Ohio .....              | June 4, 1895   |
| *Dearborn avenue..   | Kinzie .....            | Michigan .....          | June 4, 1895   |
| Farragut avenue..    | Clark .....             | Southport avenue.....   | Unfinished...  |
| Herndon .....        | George .....            | Wellington .....        | Oct. 7, 1895   |
| Huron .....          | Wells .....             | State .....             | Aug. 1, 1895   |
| *Kenmore avenue..    | Rosemont avenue .....   | Devon avenue.....       | .....          |
| Lawrence avenue..    | Sheffield avenue.....   | Lake Michigan .....     | April 18, 1895 |
| Lincoln avenue...    | Montrose boulevard..... | Bowmanville road .....  | May 12, 1895   |
| Melrose .....        | Robey .....             | Western avenue .....    | May 23, 1895   |
| N. Fifty-ninth ..... | Clark .....             | Robey .....             | Unfinished...  |
| N. Fifty-ninth ..... | Clark .....             | Southport avenue.....   | Unfinished...  |
| *Rosemont avenue..   | Evanston avenue .....   | Kenmore avenue .....    | .....          |
| School .....         | Clark .....             | Lincoln avenue.....     | June 30, 1895  |
| Southport avenue..   | N. Fifty-ninth.....     | Balmoral avenue.....    | Unfinished...  |
| Summerdale av....    | Clark .....             | Southport avenue.....   | Unfinished...  |
| Superior .....       | Wells .....             | Clark .....             | Nov. 14, 1895  |
| *Thorndale avenue..  | Evanston avenue .....   | Winthrop avenue.....    | .....          |
| Ward .....           | Clybourn avenue .....   | Fullerton avenue .....  | Aug. 8, 1894   |
| Western avenue...    | Belmont avenue .....    | Roscoe boulevard.....   | July 22, 1895  |
| Wilton avenue....    | Grace .....             | Sheridan boulevard..... | Aug. 1, 1895   |
| *Webster avenue...   | Evanston avenue .....   | 916 ft. west .....      | .....          |
| *Winthrop avenue..   | Rosemont avenue .....   | Devon avenue.....       | .....          |

\* Private Contract.

## NORTH DIVISION, 1895.

| Finished       | CONTRACTOR                   | Nature of Improvement   | Square Yards | Lineal Feet |
|----------------|------------------------------|-------------------------|--------------|-------------|
| .....          | H. Rath .....                | Curbed and filled. .... |              | 900         |
| .....          | Dolese & Shepard .....       | Macadam .....           | 8,570        | 918         |
| .....          | H. Rath .....                | Curbed and filled. .... |              | 900         |
| July 22, 1895  | O. Vider.....                | Macadam .....           | 8,088        | 2,426       |
| .....          | O. Vider.....                | Cedar .....             | 8,177        | 8,066       |
| Sept. 21, 1895 | H. Rath .....                | Vitrified brick .....   | 4,635        | 1,055       |
| June 15, 1895  | J. B. Smith & Co.....        | Cedar .....             | 1,168        | 218         |
| .....          | H. Rath .....                | Curbed and filled. .... |              | 900         |
| Oct. 31, 1895  | H. Rath .....                | Cedar .....             | 1,141        | 597         |
| Aug. 9, 1895   | H. Rath .....                | " .....                 | 6,806        | 1,580       |
| .....          | Dolese & Shepard .....       | Macadam .....           | 2,088        | 625         |
| Oct. 24, 1895  | Netterstrom & Bairstow ..... | " .....                 | 5,193        | 1,230       |
| Aug. 9, 1895   | Naugle, Holcomb & Co.....    | Cedar .....             | 21,635       | 6,517       |
| July 30, 1895  | R. F. Wilson & Co.....       | " .....                 | 11,532       | 2,731       |
| .....          | H. Rath .....                | " .....                 | 6,756        | 1,600       |
| .....          | H. Rath .....                | Curbed and filled. .... |              | 900         |
| .....          | Dolese & Shepard .....       | Macadam .....           | 8,231        | 898         |
| July 8, 1895   | R. F. Wilson & Co.....       | Cedar .....             | 17,612       | 4,487       |
| .....          | H. Rath .....                | Curbed and filled. .... |              | 1,400       |
| .....          | H. Rath .....                | " .....                 |              | 900         |
| Nov. 23, 1895  | Garden City P. & P. Co.....  | Cedar .....             | 3,534        | 880         |
| .....          | Dolese & Shepard .....       | Macadam .....           | 1,786        | 496         |
| July 10, 1895  | Sackley & Peterson .....     | Cedar .....             | 7,324        | 1,785       |
| Sept. 17, 1895 | A. J. McBean & Co.....       | " .....                 | 5,728        | 1,837       |
| Oct. 24, 1895  | J. Bairstow.....             | Macadam .....           | 1,743        | 523         |
| .....          | C. M. Netterstrom.....       | " .....                 | 3,058        | 916         |
| .....          | Dolese & Shepard .....       | " .....                 | 2,048        | 618         |

Total lineal feet of cedar block pavement in alleys ..... 6,902 or 1.81 miles.

Total lineal feet of cedar block pavement in streets ..... 24,668 " 4.67 "

Total lineal feet of macadam pavement in streets ..... 8,640 " 1.64 "

Total lineal feet of brick pavement in streets..... 1,055 " 0.20 "

Total lineal feet of curbed and filled streets..... 5,900 " 1.12 "

Total..... 47,165 or 8.98 miles.

## ALLEYS IMPROVED IN THE

| NAME         | FROM                                | BETWEEN                             | Commenced      |
|--------------|-------------------------------------|-------------------------------------|----------------|
| Alley .....  | Thirty-ninth to Fortieth ..         | Dearborn and Armour av.             | Oct. 1, 1895   |
| Alley .....  | Fiftieth to Fifty-first .....       | State and Dearborn av....           | May 8, 1895    |
| *Alley ..... | Fifth avenue to 82 ft. east.        | Lake and S. Water .....             | July 1, 1895   |
| Alley .....  | State to Dearborn .....             | Lake and S. Water .....             | Oct. 1, 1895   |
| *Alley ..... | Fifth av. to 120 ft. east...        | Randolph and Washington             | Aug. 1, 1895   |
| *Alley ..... | Fifth av. to 181 ft. east...        | First alley S. of Madison.          | Aug. 1, 1895   |
| *Alley ..... | Van Buren to North end..            | Wabash and Michigan avs.            | July 1, 1895   |
| Alley .....  | Eighteenth to S. terminus.          | First east of State .....           | Jan. 1, 1895   |
| Alley .....  | Cottage Grove to Prairie av....     | 100 ft. S. of Twenty-fourth         | May 9, 1895    |
| Alley .....  | Swift pl. to Whitehouse pl.         | Wentworth and Fifth avs.            | April 25, 1895 |
| Alley .....  | Thirtieth to Thirty-first ..        | Cottage Grove and Groveland avs..   | May 13, 1895   |
| Alley .....  | Prairie av. to 135 ft. west.        | Thirty-first and Thirty-second....  | June 13, 1895  |
| Alley .....  | Thirty-first to Thirty-second ..... | Wentworth and Fifth avs. ....       | May 6, 1895    |
| Alley .....  | Thirty-first to Thirty-second ..... | Dearborn and Armour av.             | May 8, 1895    |
| *Alley ..... | Thirty-eighth to 100 ft. north...   | Langley avenue and Johnson place.   | Sept. 1, 1895  |
| Alley .....  | Thirty-ninth to Fortieth..          | Michigan and Indiana avs.           | April 25, 1895 |
| Alley .....  | Forty-fourth to Forty-fifth.        | Greenwood and Sidney avs. ....      | Aug. 26, 1895  |
| *Alley ..... | Forty-ninth to 300 ft. north.....   | Cottage Grove av. and Drexel blvd.. | July 1, 1895   |
| *Alley ..... | Forty-ninth south.....              | Cottage Grove av. and Drexel blvd.. | July 15, 1895  |

\* Private Contract.

## SOUTH DIVISION, 1895.

| Finished       | CONTRACTOR                  | Nature of Improvement | Square Yards | Lineal Feet |
|----------------|-----------------------------|-----------------------|--------------|-------------|
| Oct. 11, 1895  | A. J. McBean & Co.....      | Cedar .....           | 886          | 592         |
| May 15, 1895   | Garden City P. & P. Co..... | " .....               | 850          | 546         |
| July 30, 1895  | Dillon & Conlan.....        | Granite.....          | 213          | 82          |
| Oct. 22, 1895  | Dillon & Conlan.....        | Vitrified brick...    | 469          | 385         |
| Aug. 15, 1895  | Dillon & Conlan .....       | Granite .....         | 240          | 120         |
| Aug. 15, 1895  | Gaffney & Long .....        | " .....               | 131          | 130         |
| July 31, 1895  | Simpson Bros.....           | Asphalt.....          | 238          | 178         |
| Jan. 10, 1895  | T. F. Moore .....           | Concrete.....         | 71           | 84          |
| May 12, 1895   | Garden City P. & P. Co..... | Cedar .....           | 340          | 306         |
| May 7, 1895    | Garden City P. & P. Co..... | " .....               | 842          | 492         |
| May 27, 1895   | A. J. McBean & Co.....      | " .....               | 788          | 580         |
| June 22, 1895  | Barber Asphalt Paving Co... | Asphalt. ....         | 207          | 135         |
| May 10, 1895   | Garden City P. & P. Co..... | Cedar .....           | 938          | 552         |
| May 11, 1895   | Garden City P. & P. Co..... | " .....               | 994          | 833         |
| Sept. 15, 1895 | J. V. McAdam .....          | " .....               | 133          | 109         |
| July 31, 1895  | R. F. Wilson & Co.....      | " .....               | 1,257        | 595         |
| Sept. 4, 1895  | J. V. McAdam .....          | " .....               | 765          | 459         |
| Aug. 1, 1895   | C. E. Blair.....            | Concrete.....         | 667          | 300         |
| Aug. 1, 1895   | C. E. Blair.....            | " .....               | 755          | 875         |



## STREETS IMPROVED IN THE

| NAME                           | FROM                    | TO                       | Commenced      |
|--------------------------------|-------------------------|--------------------------|----------------|
| Ashland avenue...              | Fifty-ninth .....       | Sixty-third .....        | Unfinished...  |
| Atlantic .....                 | Forty-seventh .....     | Fifty-fifth .....        | Aug. 29, 1895  |
| Aberdeen .....                 | Fifty-first .....       | Fifty-fourth .....       | Sept. 21, 1894 |
| Bishop court .....             | Fifty-first .....       | Fifty-fifth .....        | Oct. 1, 1894   |
| Butler .....                   | 121st .....             | 123d .....               | Sept. 27, 1894 |
| Carpenter .....                | Fifty-fifth .....       | Fifty-ninth .....        | June 3, 1895   |
| Carpenter .....                | Fifty-first .....       | Fifty-fourth .....       | Sept. 21, 1894 |
| Canal .....                    | 119th .....             | 123d .....               | Sept. 27, 1894 |
| Champlain avenue.              | Fiftieth .....          | Fiftieth court .....     | May 1, 1895    |
| Champlain avenue.              | Fiftieth court .....    | Fifty-first .....        | May 1, 1895    |
| Duncan Park .....              | Wallace .....           | Stewart avenue .....     | Oct. 1, 1894   |
| Emerald avenue .....           | 118th .....             | 119th .....              | Sept. 27, 1894 |
| Emerald avenue .....           | 121st .....             | 123d .....               | Sept. 27, 1894 |
| Escanaba avenue .....          | Eighty-seventh .....    | Ninety-first .....       | May 7, 1895    |
| Farrell avenue .....           | Archer avenue .....     | Thirty-first .....       | Aug. 5, 1895   |
| Fifth avenue .....             | 119th .....             | 123d .....               | Sept. 27, 1894 |
| Fox .....                      | Thirty-first .....      | Waterville .....         | May 1, 1895    |
| *Forty-seventh .....           | Drexel boulevard .....  | Lake avenue .....        | Oct. 1, 1895   |
| Fifty-first court .....        | Halsted .....           | Morgan .....             | Sept. 21, 1894 |
| Fifty-third .....              | Halsted .....           | Center avenue .....      | Sept. 21, 1894 |
| Fifty-third .....              | I. C. R. R. track ..... | Lake Michigan .....      | May 11, 1895   |
| Fifty-third .....              | Woodlawn avenue .....   | Lake avenue .....        | Nov. 1, 1894   |
| Fifty fourth .....             | Halsted .....           | Morgan .....             | Sept. 21, 1894 |
| Fifty-fourth .....             | Drexel boulevard .....  | Woodlawn avenue .....    | April 27, 1895 |
| Fifty fifth .....              | I. C. R. R. track ..... | Cornell avenue .....     | April 1, 1895  |
| Green .....                    | Sixty-sixth .....       | Sixty-seventh .....      | July 30, 1895  |
| Honore .....                   | Sixty-seventh .....     | Sixty-ninth .....        | May 29, 1895   |
| Hickling avenue .....          | Halsted .....           | Morgan .....             | Sept. 21, 1894 |
| High .....                     | 106th .....             | 114th .....              | Oct. 19, 1894  |
| Hope avenue .....              | Sixty-third .....       | Sixty-fourth .....       | June 10, 1895  |
| Hoynes avenue .....            | Archer avenue .....     | Thirty-seventh .....     | Unfinished ..  |
| Jeffery avenue .....           | Seventy-first .....     | Seventy-third .....      | Sept. 10, 1894 |
| LaSalle .....                  | Sixty-first .....       | Sixty-third .....        | Unfinished ..  |
| Langley avenue .....           | Sixty-third .....       | Sixty-seventh .....      | June 20, 1895  |
| Lowe avenue .....              | Diana .....             | 123d .....               | Sept. 27, 1894 |
| Lake Park avenue .....         | Thirty-first .....      | Thirty-third .....       | April 30, 1895 |
| W. 16 ft. LaSalle .....        | Madison .....           | Randolph .....           | Oct. 21, 1895  |
| E. 16 ft. LaSalle .....        | Washington .....        | Randolph .....           | Nov. 1, 1895   |
| *Lake .....                    | Wabash avenue .....     | Market .....             | July 1, 1895   |
| Morgan .....                   | Fifty-first .....       | Fifty-fourth .....       | Sept. 21, 1894 |
| May .....                      | Fifty-first .....       | Fifty-fourth .....       | Sept. 21, 1894 |
| *E. $\frac{1}{2}$ Market ..... | Madison .....           | 190 ft. N. .....         | June 1, 1895   |
| *W. $\frac{1}{2}$ Market ..... | Madison .....           | 190 ft. N. .....         | June 15, 1895  |
| Ninety-third .....             | Commercial avenue ..... | Harbor avenue .....      | May 23, 1895   |
| 100th .....                    | Ewing avenue .....      | Avenue "L" .....         | Sept. 27, 1895 |
| 118th .....                    | Wallace .....           | Halsted .....            | Sept. 27, 1894 |
| 119th .....                    | Wentworth avenue .....  | Halsted .....            | Oct. 3, 1894   |
| 122d .....                     | Wentworth avenue .....  | Halsted .....            | Sept. 27, 1894 |
| Peoria .....                   | Fifty-third .....       | Fifty-fourth court ..... | Sept. 21, 1894 |
| Parnell avenue .....           | 119th .....             | 120th .....              | Sept. 27, 1894 |
| Parnell avenue .....           | 121st .....             | 123d .....               | Sept. 27, 1894 |
| Portland avenue .....          | 119th .....             | 123d .....               | Sept. 27, 1894 |
| Rosenmerkle .....              | Wallace .....           | Wright .....             | Oct. 1, 1894   |
| Rhodes avenue .....            | Sixty-third .....       | S. Chicago avenue .....  | Oct. 9, 1895   |
| Robertson avenue .....         | Grace avenue .....      | I. C. R. R. .....        | Jan. 17, 1895  |
| Sherman .....                  | Sixty-seventh .....     | Sixty-ninth .....        | April 1, 1895  |
| St. Lawrence av .....          | Sixty-third .....       | S. Chicago avenue .....  | Unfinished ..  |

## SOUTH DIVISION, 1895.

| Finished       | CONTRACTOR                  | Nature of Improvement | Square Yards | Lineal Feet |
|----------------|-----------------------------|-----------------------|--------------|-------------|
| Oct. 9, 1895   | R. F. Conway                | Brick                 | 4,977        | 1,400       |
| July 1, 1895   | R. F. Conway                | Cedar                 | 22,150       | 5,813       |
| May 15, 1895   | P. Farrell                  | "                     | 8,461        | 2,004       |
| July 15, 1895  | P. Farrell                  | "                     | 11,423       | 2,852       |
| June 30, 1895  | Netterstrom & Bairstow      | Macadam               | 1,000        | 500         |
| July 1, 1895   | R. F. Wilson & Co.          | Cedar                 | 10,005       | 2,370       |
| July 15, 1895  | Farrell & Wilson            | "                     | 8,461        | 2,004       |
| June 30, 1895  | Netterstrom & Bairstow      | Macadam               | 3,913        | 1,246       |
| June 30, 1895  | Goodwin & Quaid             | "                     | 1,516        | 364         |
| June 30, 1895  | Goodwin & Quaid             | "                     | 1,232        | 285         |
| May 22, 1895   | Farrell & Wilson            | Cedar                 | 3,880        | 970         |
| July 15, 1895  | Netterstrom & Bairstow      | Macadam               | 2,158        | 610         |
| July 15, 1895  | Netterstrom & Bairstow      | "                     | 1,000        | 500         |
| Aug. 15, 1895  | Kimball & Cobb Stone Co.    | "                     | 10,174       | 2,693       |
| Sept. 9, 1895  | Garden City P. & P. Co.     | Cedar                 | 5,511        | 2,110       |
| July 15, 1895  | Netterstrom & Bairstow      | Macadam               | 8,238        | 2,540       |
| Aug. 27, 1895  | R. F. Wilson & Co.          | Cedar                 | 4,927        | 1,167       |
| Nov. 1, 1895   | Chicago City Railway Co.    | Macadam               | 9,302        | 3,220       |
| July 1, 1895   | Farrell & Wilson            | Cedar                 | 5,485        | 1,299       |
| July 1, 1895   | Farrell & Wilson            | "                     | 10,454       | 2,476       |
| July 17, 1895  | J. H. Palmer                | Macadam               | 3,513        | 719         |
| July 3, 1895   | Sackley & Peterson          | Vitrified brick       | 12,523       | 2,562       |
| July 1, 1895   | Farrell & Wilson            | Cedar                 | 11,286       | 2,673       |
| Aug. 3, 1895   | Brownell Improvement Co.    | Macadam               | 6,307        | 1,892       |
| Aug. 5, 1895   | R. F. Wilson & Co.          | "                     | 944          | 250         |
| Sept. 12, 1895 | J. V. McAdam                | Cedar                 | 2,053        | 616         |
| June 6, 1895   | J. Lyman & Co.              | Macadam               | 4,394        | 1,041       |
| July 1, 1895   | Farrell & Wilson            | Cedar                 | 5,442        | 1,289       |
| July 1, 1895   | H. Hiensen                  | Macadam               | 1,000        | 500         |
| July 5, 1895   | H. Rath                     | "                     | 1,507        | 620         |
| April 13, 1895 | R. F. Conway                | Curbed and filled.    |              | 1,272       |
|                | M. Steude                   | Macadam               | 1,000        | 500         |
|                | H. Rath                     | "                     | 1,883        | 565         |
| Aug. 24, 1895  | A. J. McBean & Co.          | Cedar                 | 10,351       | 2,556       |
| July 15, 1895  | Netterstrom & Bairstow      | Macadam               | 10,274       | 2,975       |
| June 30, 1895  | Western Paving & Supply Co. | Sheet asphalt         | 4,712        | 1,414       |
| Nov. 12, 1895  | J. B. Smith & Co.           | Vitrified brick       | 1,405        | 790         |
| Nov. 12, 1895  | J. B. Smith & Co.           | "                     | 619          | 384         |
| Aug. 1, 1895   | Dillon & Conlan             | Granite               | 12,205       | 3,309       |
| July 1, 1895   | Farrell & Wilson            | Cedar                 | 8,449        | 2,001       |
| July 1, 1895   | Farrell & Wilson            | "                     | 8,461        | 2,004       |
| June 15, 1895  | Dillon & Conlan             | Granite               | 950          | 190         |
| July 1, 1895   | James Conlan                | "                     | 950          | 190         |
| Oct. 18, 1895  | R. F. Conway                | Cedar                 | 5,058        | 1,550       |
| Oct. 27, 1895  | Brownell Improvement Co.    | Macadam               | 4,572        | 1,010       |
| July 15, 1895  | Netterstrom & Bairstow      | "                     | 1,950        | 1,210       |
| April 4, 1895  | Kimball & Cobb Stone Co.    | "                     | 1,000        | 500         |
| July 15, 1895  | Netterstrom & Bairstow      | "                     | 13,945       | 3,900       |
| July 1, 1895   | Farrell & Wilson            | Cedar                 | 3,897        | 923         |
| July 15, 1895  | Netterstrom & Bairstow      | Macadam               | 1,000        | 500         |
| July 15, 1895  | Netterstrom & Bairstow      | "                     | 1,000        | 500         |
| July 15, 1895  | Netterstrom & Bairstow      | "                     | 8,231        | 2,540       |
| July 12, 1895  | O. Vider                    | "                     | 2,016        | 605         |
| Nov. 15, 1895  | Garden City P. & P. Co.     | Cedar                 | 13,905       | 3,534       |
| June 25, 1895  | Goodwin & Quaid             | Macadam               | 1,329        | 520         |
| July 20, 1895  | A. J. McBean & Co.          | Cedar                 | 3,205        | 1,009       |
|                | Garden City P. & P. Co.     | Curbing               |              | 5,500       |

## STREETS IMPROVED IN THE

| NAME                 | FROM                    | TO                         | Commenced      |
|----------------------|-------------------------|----------------------------|----------------|
| Short .....          | Hickory .....           | C. & A. Ry. ....           | July 20, 1895  |
| Springer avenue ..   | Laurel avenue .....     | Waterville .....           | June 26, 1895  |
| Sixty-fifth court... | Stewart avenue .....    | Honore .....               | April 5, 1893  |
| Sixty-first .....    | Halsted .....           | Center avenue .....        | May 25, 1895   |
| Sixty-eighth .....   | Halsted .....           | Wallace .....              | April 1, 1895  |
| Sixty-seventh .....  | S. Park avenue .....    | Stony Island avenue .....  | Unfinished ..  |
| Seventy-first .....  | S. Park avenue .....    | Cottage Grove avenue ..... | Unfinished ..  |
| Thirty-second .....  | Halsted .....           | Laurel .....               | May 10, 1895   |
| Thirty-sixth .....   | State .....             | Armour avenue .....        | May 27, 1895   |
| Thirty-sixth .....   | Western boulevard ..... | Oakley avenue .....        | Aug. 1, 1895   |
| Thirty-eighth court  | Halsted .....           | Laurel .....               | July 1, 1895   |
| Wabash avenue ....   | Sixty-sixth .....       | Seventy-first .....        | Unfinished ..  |
| Wallace .....        | Diana .....             | 128d .....                 | Sept. 27, 1894 |

\* Private Contract.

## SOUTH DIVISION, 1895—CONTINUED.

| Finished       | CONTRACTOR                  | Nature of Improvement   | Square Yards | Lineal Feet |
|----------------|-----------------------------|-------------------------|--------------|-------------|
| Aug. 8, 1895   | Garden City P. & P. Co..... | Cedar .....             | 1,301        | 418         |
| Sept. 26, 1895 | R. F. Wilson & Co.....      | " .....                 | 8,891        | 2,106       |
| Aug. 16, 1895  | Eggleston & Brownell.....   | Macadam .....           | 3,189        | 942         |
| July 10, 1895  | Gahan & Byrne .....         | " .....                 | 4,777        | 1,131       |
| .....          | A. J. McBean & Co.....      | Cedar .....             | 4,300        | 1,290       |
| .....          | Naugle, Holcomb & Co....    | Curbing .....           |              | 12,000      |
| .....          | H. Hiensen.....             | Curbed and filled. .... |              | 4,600       |
| Aug. 14, 1895  | R. F. Wilson & Co.....      | Cedar .....             | 5,169        | 1,224       |
| June 6, 1895   | A. J. McBean & Co.....      | " .....                 | 2,485        | 577         |
| Aug. 10, 1895  | R. F. Wilson & Co. ....     | " .....                 | 1,847        | 489         |
| July 31, 1895  | Garden City P. & P. Co..... | " .....                 | 5,609        | 1,329       |
| .....          | Mexican Asphalt Co.....     | Asphalt .....           | 1,400        | 500         |
| July 15, 1895  | Netterstrom & Bairstow .... | Macadam .....           | 11,060       | 2,975       |

|                                                         |          |             |
|---------------------------------------------------------|----------|-------------|
| Total lineal feet cedar block pavement in alleys .....  | 5,069 or | 0.96 miles. |
| Total lineal feet cedar block pavement in streets ..... | 47,684 " | 9.02 "      |
| Total lineal feet asphalt pavement in alleys .....      | 313 "    | 0.06 "      |
| Total lineal feet asphalt pavement in streets .....     | 1,914 "  | 0.36 "      |
| Total lineal feet granite pavement in alleys .....      | 338 "    | 0.06 "      |
| Total lineal feet granite pavement in streets .....     | 3,689 "  | 0.70 "      |
| Total lineal feet macadam pavement in streets .....     | 37,853 " | 7.07 "      |
| Total lineal feet brick pavement in alleys .....        | 885 "    | 0.07 "      |
| Total lineal feet brick pavement in streets .....       | 5,186 "  | 0.98 "      |
| Total lineal feet curbed and filled in streets .....    | 24,131 " | 4.57 "      |

Total ..... 125,971 or 23.85 miles.

## ALLEYS IMPROVED IN THE

| NAME         | FROM                             | BETWEEN                           | Commenced      |
|--------------|----------------------------------|-----------------------------------|----------------|
| Alley .....  | Halsted to S. Union .....        | Twenty-first and Lisle. . .       | May 22, 1895   |
| Alley .....  | Sibley to Fayette .....          | Harrison and Vernon Park pl . . . | May 30, 1895   |
| Alley .....  | Adams to Morgan. ....            | Jackson and Aberdeen . . .        | May 22, 1895   |
| Alley ..     | Jackson to Van Buren. . .        | Francisco and Stevens. . .        | June 10, 1895  |
| Alley .....  | Aberdeen to Center av. . .       | Tilden and Congress. . . .        | June 25, 1895  |
| Alley .....  | Desplaines to Jefferson . .      | Madison and Monroe. . . .         | July 20, 1895  |
| Alley .....  | Jefferson to Desplaines . .      | Taylor and DeKoven . . .          | July 20, 1895  |
| Alley .....  | Sangamon to Peoria. ....         | Madison and Monroe. . . .         | July 20, 1895  |
| Alley .....  | Halsted to Marble. ....          | Adams and Desplaines. . .         | Aug. 20, 1895  |
| Alley .....  | Monroe to Marble. ....           | Desplaines and Halsted . .        | Aug. 20, 1895  |
| Alley .....  | Taylor to W. Eleventh. . .       | Sholto and Blue Island av. .      | Aug. 22, 1895  |
| Alley .....  | Polk to Hope. ....               | Blue Island av. and Morgan. .     | June 25, 1895  |
| Alley .....  | Halsted to Newberry av. .        | Fourteenth and Henry . . .        | Oct. 11, 1895  |
| Alley .....  | Morgan to Sangamon . . .         | Twelfth and Maxwell. . . .        | Nov. 18, 1895  |
| Alley .....  | Clarinda to Cornelia. . .        | Paulina and Rumsey. . . .         | July 20, 1895  |
| Alley .....  | California av. to C. & N. W. Ry. | Madison and Warren av. . .        | July 30, 1895  |
| Alley .....  | Desplaines to Alley E. . .       | Madison and Washington. .         | Aug. 2, 1895   |
| Alley .....  | Oakley to Western avs. . .       | Lake and Park av. ....            | July 15, 1895  |
| Alley .....  | May to Curtis. ....              | Madison and Washington. .         | Sept. 17, 1895 |
| Alley .....  | Morgan to Sangamon . . .         | Washington and Randolph . .       | Sept. 23, 1895 |
| Alley .....  | Curtis to May. ....              | Lake and Randolph. . . .          | Sept. 27, 1895 |
| Alley .....  | May to Ann. ....                 | Randolph and Lake. ....           | Oct. 15, 1895  |
| Alley .....  | Canal to Clinton. ....           | Randolph and Washington .         | Oct. 16, 1895  |
| Alley .....  | Lake to Fulton. ....             | Maplewood and Rockwell. .         | Sept. 10, 1895 |
| Alley .....  | St. Johns pl. to Union Park pl.  | Lake and Fulton. ....             | July 8, 1895   |
| Alley .....  | Randolph to Lake. ....           | Halsted and Green. ....           | May 15, 1895   |
| Alley ..     | Blanche to North avenue. .       | Holt and Dickson. ....            | Nov. 15, 1895  |
| *Alley ..... | Jefferson to Desplaines . .      | Lake and Randolph. ....           | .....          |
| Alley .....  | Shober to Leavitt. ....          | North and Waubansia avs. .        | July 14, 1895  |
| Alley .....  | Oakley avenue to Leavitt. .      | Milwaukee and Wilmot avs. . .     | Aug. 8, 1895   |
| Alley .....  | Western to Oakley avs. . .       | Milwaukee and Wilmot avs. . .     | Sept. 28, 1895 |

\*Private Contract.

## WEST DIVISION, 1895.

| Finished       | CONTRACTOR                 | Nature of Improvement | Square Yards | Lineal Feet |
|----------------|----------------------------|-----------------------|--------------|-------------|
| May 25, 1895   | R. F. Conway.....          | Cedar .....           | 854          | 746         |
| May 31, 1895   | R. F. Conway.....          | " .....               | 302          | 175         |
| May 25, 1895   | A. J. McBean & Co.....     | " .....               | 344          | 240         |
| June 26, 1895  | Garden City P. & P. Co.... | " .....               | 1,199        | 696         |
| Aug. 9, 1895   | Geo. A. Thatcher & Co..... | " .....               | 610          | 610         |
| Aug. 17, 1895  | White & Valentine.....     | " .....               | 172          | 162         |
| Aug. 16, 1895  | Sackley & Peterson .....   | " .....               | 497          | 354         |
| Aug. 17, 1895  | H. Rath.....               | " .....               | 103          | 101         |
| Aug. 27, 1895  | R. F. Conway.....          | " .....               | 324          | 201         |
| Aug. 27, 1895  | R. F. Conway.....          | " .....               | 199          | 190         |
| Sept. 17, 1895 | R. F. Conway.....          | " .....               | 1,229        | 615         |
| Aug. 22, 1895  | Geo. A. Thatcher & Co. . . | " .....               | 715          | 700         |
| Oct. 22, 1895  | H. Rath.....               | " .....               | 570          | 376         |
| Dec. 8, 1895   | J. Bairstow.....           | " .....               | 322          | 216         |
| Aug. 2, 1895   | Talbot Paving Co.....      | " .....               | 467          | 400         |
| Aug. 5, 1895   | J. B. Smith & Co.....      | " .....               | 1,971        | 1,109       |
| Aug. 5, 1895   | Talbot Paving Co.....      | " .....               | 280          | 151         |
| Sept. 12, 1895 | R. F. Wilson.....          | " .....               | 988          | 1,190       |
| Oct. 2, 1895   | Sackley & Peterson .....   | " .....               | 417          | 192         |
| Sept. 30, 1895 | Sackley & Peterson .....   | " .....               | 215          | 126         |
| Oct. 20, 1895  | White & Valentine.....     | " .....               | 530          | 415         |
| Oct. 20, 1895  | H. Rath.....               | " .....               | 569          | 510         |
| Oct. 25, 1895  | H. Rath.....               | " .....               | 159          | 125         |
| Sept. 23, 1895 | R. F. Conway.....          | " .....               | 1,531        | 875         |
| Aug. 8, 1895   | Sackley & Peterson .....   | " .....               | 734          | 595         |
| May 16, 1895   | R. F. Conway.....          | " .....               | 589          | 511         |
| Dec. 27, 1895  | H. Rath.....               | " .....               | 1,122        | 734         |
| .....          | Gaffney & Long .....       | Granite .....         | 451          | 220         |
| Aug. 4, 1895   | Sackley & Peterson .....   | Cedar .....           | 1,248        | 760         |
| Aug. 11, 1895  | Chas. McAdam.....          | " .....               | 1,377        | 800         |
| Oct. 2, 1895   | R. F. Conway.....          | " .....               | 1,251        | 800         |

## STREETS IMPROVED IN THE

| NAME                  | FROM                      | TO                       | Commenced      |
|-----------------------|---------------------------|--------------------------|----------------|
| Adams .....           | W. Fortieth.....          | W. Forty-sixth .....     | May 15, 1895   |
| Augusta.....          | California avenue.....    | Grand avenue .....       | May 14, 1895   |
| Augusta.....          | Western avenue .....      | Seymour avenue.....      | May 1, 1895    |
| Ashland avenue.....   | Lake .....                | Indiana .....            | July 15, 1895  |
| Almond .....          | Ashland .....             | Taylor .....             | June 5, 1895   |
| Byron.....            | Humboldt boulevard.....   | California avenue.....   | Unfinished ..  |
| Colorado avenue.....  | Douglas boulevard.....    | W. Fortieth.....         | July 22, 1895  |
| Carroll avenue.....   | Homan avenue .....        | 326 ft. east.....        | June 10, 1895  |
| Chicago avenue.....   | California avenue.....    | Crawford avenue.....     | Aug. 3, 1894   |
| *Clarkson court.....  | Lake .....                | Walnut .....             | Unfinished ..  |
| Desplaines.....       | Madison .....             | Lake .....               | July 22, 1895  |
| Dickens avenue.....   | Humboldt boulevard.....   | California avenue.....   | Unfinished ..  |
| Eagle.....            | Union .....               | Desplaines .....         | Unfinished ..  |
| Fillmore.....         | Douglas Park boulevard .. | W. Fortieth.....         | May 20, 1895   |
| Francisco.....        | Chicago avenue .....      | Division .....           | May 31, 1895   |
| Front .....           | Sangamon .....            | Lessing .....            | Oct. 5, 1895   |
| Frankfort.....        | Western avenue .....      | Oakley avenue .....      | Unfinished ..  |
| Greenshaw .....       | Douglas boulevard.....    | W. Fortieth.....         | Aug. 3, 1894   |
| Green.....            | Lake .....                | Van Buren .....          | Sept. 24, 1895 |
| Harrison .....        | Paulina.....              | Western avenue .....     | Sept. 1, 1895  |
| Hamlin avenue.....    | Chicago avenue .....      | Kinzie .....             | May 1, 1895    |
| Hamlin avenue.....    | Ogden avenue.....         | Twenty-sixth.....        | Aug. 1, 1894   |
| Howard avenue.....    | North avenue .....        | Humboldt .....           | Unfinished ..  |
| Humboldt .....        | Palmer avenue .....       | Armitage avenue.....     | Unfinished ..  |
| Iowa.....             | Lincoln .....             | Robey .....              | June 7, 1895   |
| *Jefferson .....      | Lake .....                | Carroll avenue .....     | Unfinished ..  |
| Kedzie avenue.....    | Twenty-second .....       | Twenty-sixth.....        | Feb. 27, 1893  |
| Kedzie avenue.....    | Twenty-sixth.....         | Thirty-first.....        | April 17, 1893 |
| Madison.....          | Jefferson .....           | Center avenue.....       | Oct. 8, 1895   |
| May .....             | W. Twentieth .....        | W. Twenty-second ..      | May 22, 1895   |
| Milwaukee avenue..... | Lake .....                | Chicago avenue .....     | Aug. 2, 1895   |
| Milwaukee avenue..... | Chicago avenue .....      | Ashland avenue.....      | Unfinished ..  |
| Milwaukee avenue..... | Crawford avenue.....      | Irving Park boulevard... | Oct. 14, 1894  |
| Morgan .....          | Fulton .....              | Carroll avenue .....     | June 15, 1895  |
| Mozart .....          | Palmer avenue .....       | Armitage avenue.....     | Unfinished ..  |
| Ohio.....             | Kedzie avenue .....       | Ayres avenue .....       | May 1, 1895    |
| Polk .....            | Douglas boulevard.....    | W. Fortieth.....         | July 11, 1895  |
| Palmer avenue.....    | Humboldt boulevard.....   | California avenue.....   | Oct. 3, 1895   |
| Perry avenue.....     | Milwaukee avenue.....     | Fullerton avenue.....    | Sept. 2, 1895  |
| Randolph .....        | Halsted .....             | Ann .....                | Oct. 15, 1895  |
| Rebecca.....          | Rockwell .....            | Pan Handle Ry.....       | June 13, 1895  |
| Shakespeare av.....   | Humboldt boulevard.....   | California avenue.....   | Oct. 3, 1895   |
| Sheridan avenue.....  | Armitage avenue.....      | Bloomingdale road.....   | May 25, 1895   |
| Trumbull avenue.....  | Douglas boulevard.....    | W. Twenty-sixth.....     | Aug. 3, 1894   |
| Twenty-first .....    | Pan Handle Ry.....        | Douglas boulevard.....   | July 20, 1894  |
| Union .....           | Kinzie.....               | Milwaukee avenue.....    | June 21, 1895  |
| Wallace avenue.....   | Humboldt boulevard.....   | Belmont avenue.....      | June 8, 1895   |

\* Private Contract.

## WEST DIVISION, 1895.

| Finished       | CONTRACTOR                    | Nature of Improvement  | Square Yards | Lineal Feet |
|----------------|-------------------------------|------------------------|--------------|-------------|
| June 7, 1895   | Bermudez Asphalt Paving Co.   | Asphalt.....           | 12,573       | 3,988       |
| Sept. 19, 1895 | R. F. Conway.....             | Cedar.....             | 12,378       | 2,988       |
| Sept. 18, 1895 | R. F. Conway.....             | ".....                 | 2,658        | 616         |
| July 24, 1895  | Sackley & Peterson.....       | ".....                 | 2,008        | 1,286       |
| Sept. 2, 1895  | R. F. Conway.....             | ".....                 | 1,478        | 370         |
| .....          | Naugle, Holcomb & Co.....     | Curbed and filled..... | .....        | 1,800       |
| Dec. 31, 1895  | R. F. Wilson & Co.....        | Cedar.....             | 5,000        | 1,800       |
| Sept. 20, 1895 | R. F. Conway.....             | ".....                 | 1,398        | 880         |
| July 2, 1895   | R. F. Conway.....             | ".....                 | 42,378       | 7,489       |
| .....          | Dolase & Shepard.....         | Macadam.....           | 1,388        | 480         |
| Aug. 22, 1895  | James Conlan.....             | Granite.....           | 5,262        | 1,388       |
| .....          | Naugle, Holcomb & Co.....     | Cedar.....             | 2,512        | 754         |
| .....          | James Conlan.....             | Granite.....           | 500          | 160         |
| Nov. 8, 1895   | Standard Paving Co.....       | Asphalt.....           | 4,145        | 1,889       |
| Aug. 2, 1895   | O. Vider.....                 | Cedar.....             | 10,956       | 2,596       |
| Nov. 4, 1895   | H. Rath.....                  | ".....                 | 708          | 202         |
| July 6, 1895   | Garden City P. & P. Co.....   | ".....                 | 2,498        | 590         |
| Dec. 31, 1895  | Bermudez Asphalt Paving Co.   | Asphalt.....           | 4,143        | 1,296       |
| Nov. 23, 1895  | White & Valentine.....        | Cedar.....             | 12,572       | 2,902       |
| Nov. 14, 1895  | Bermudez Asphalt Paving Co.   | Asphalt.....           | 12,474       | 4,611       |
| Dec. 2, 1895   | Gaffney & Long.....           | Brick.....             | 10,588       | 2,599       |
| Dec. 24, 1895  | J. O'Laughlin.....            | Macadam.....           | 9,867        | 2,960       |
| .....          | O. Vider.....                 | Cedar.....             | 1,700        | 400         |
| .....          | Naugle, Holcomb & Co.....     | ".....                 | 8,000        | 900         |
| June 12, 1895  | J. B. Smith & Co.....         | ".....                 | 2,350        | 557         |
| .....          | Gaffney & Long.....           | Granite.....           | 2,176        | 388         |
| Aug. 27, 1895  | P. Farrell and R. F. Wilson.. | Cedar.....             | 10,963       | 2,509       |
| Dec. 31, 1895  | J. V. McAdam.....             | ".....                 | 11,365       | 2,692       |
| Nov. 28, 1895  | Barber Asphalt Paving Co....  | Asphalt.....           | 15,282       | 3,958       |
| Aug. 17, 1895  | R. F. Wilson & Co.....        | Cedar.....             | 8,601        | 850         |
| Oct. 1, 1895   | J. B. Smith & Co.....         | Brick.....             | 17,784       | 5,928       |
| .....          | Talbot Paving Co.....         | Cedar.....             | 6,000        | 2,000       |
| July 31, 1895  | O. Vider.....                 | ".....                 | 18,070       | 4,525       |
| June 17, 1895  | J. B. Smith & Co.....         | ".....                 | 1,329        | 249         |
| .....          | Naugle, Holcomb & Co.....     | ".....                 | 8,000        | 900         |
| Oct. 25, 1895  | Andrew Jaicks.....            | Asphalt.....           | 16,794       | 5,011       |
| Aug. 1, 1895   | Standard Paving Co.....       | ".....                 | 4,116        | 1,296       |
| Nov. 2, 1895   | Naugle, Holcomb & Co.....     | Cedar.....             | 3,666        | 1,100       |
| Sept. 14, 1895 | O. Vider.....                 | ".....                 | 7,122        | 1,686       |
| Nov. 15, 1895  | Sackley & Peterson.....       | ".....                 | 9,791        | 2,708       |
| Oct. 26, 1895  | Talbot Paving Co.....         | ".....                 | 1,784        | 415         |
| Nov. 28, 1895  | Naugle, Holcomb Paving Co.... | ".....                 | 3,666        | 1,100       |
| June 8, 1895   | O. Vider.....                 | ".....                 | 5,410        | 1,280       |
| Dec. 31, 1895  | Bermudez Asphalt Paving Co.   | Asphalt.....           | 20,070       | 6,690       |
| Nov. 14, 1895  | R. F. Conway.....             | Cedar.....             | 18,391       | 2,851       |
| July 5, 1895   | Garden City P. & P. Co.....   | ".....                 | 1,827        | 244         |
| Aug. 8, 1895   | Sackley & Peterson.....       | ".....                 | 16,416       | 3,887       |

|                                                        |                       |
|--------------------------------------------------------|-----------------------|
| Total lineal feet cedar block pavement in alleys.....  | 14,675 or 2.78 miles. |
| Total lineal feet cedar block pavement in streets..... | 52,166 " 9.88 "       |
| Total lineal feet asphalt pavement in streets.....     | 28,184 " 5.34 "       |
| Total lineal feet granite pavement in alleys.....      | 220 " 0.04 "          |
| Total lineal feet granite pavement in streets.....     | 1,886 " 0.36 "        |
| Total lineal feet macadam pavement in streets.....     | 3,390 " 0.64 "        |
| Total lineal feet brick pavement in streets.....       | 8,528 " 1.61 "        |
| Total lineal feet curbed and filled.....               | 1,800 " 0.34 "        |

Total.....110,844 or 20.99 miles.



## SUMMARY OF STREETS IMPROVED DURING 1895.

| PAVEMENT.               | NORTH DIVISION,<br>Including<br>Lake View and Rogers Park. |                 |        |  | SOUTH DIVISION,<br>Including<br>Hyde Park and Lake. |                 |        |  | WEST DIVISION,<br>Including<br>Jefferson and Cicero. |                 |        |  | TOTALS.          |                 |        |                  |                   |
|-------------------------|------------------------------------------------------------|-----------------|--------|--|-----------------------------------------------------|-----------------|--------|--|------------------------------------------------------|-----------------|--------|--|------------------|-----------------|--------|------------------|-------------------|
|                         | Square<br>Yards.                                           | Lineal<br>Feet. | Miles. |  | Square<br>Yards.                                    | Lineal<br>Feet. | Miles. |  | Square<br>Yards.                                     | Lineal<br>Feet. | Miles. |  | Square<br>Yards. | Lineal<br>Feet. | Miles. | Alleys<br>Miles. | Streets<br>Miles. |
| Cedar Blocks.....       | 102,746                                                    | 31,570          | 5.96   |  | 200,204                                             | 52,717          | 9.96   |  | 236,076                                              | 66,841          | 12.66  |  | 539,026          | 151,123         | 28.62  | 5.04             | 23.63             |
| Asphalt .....           |                                                            |                 |        |  | 6,567                                               | 2,227           | 0.42   |  | 89,597                                               | 23,184          | 5.34   |  | 96,164           | 30,411          | 5.76   | 0.06             | 5.70              |
| Granite .....           |                                                            |                 |        |  | 14,689                                              | 4,023           | 0.76   |  | 8,389                                                | 2,106           | 0.40   |  | 23,078           | 6,123           | 1.16   | 0.10             | 1.06              |
| Macadam .....           | 30,790                                                     | 8,640           | 1.64   |  | 123,394                                             | 37,383          | 7.07   |  | 11,206                                               | 3,830           | 0.64   |  | 165,389          | 49,353          | 9.35   |                  | 9.35              |
| Brick .....             | 4,635                                                      | 1,055           | 0.20   |  | 19,993                                              | 5,531           | 1.05   |  | 28,317                                               | 8,523           | 1.61   |  | 52,945           | 15,069          | 2.86   | 0.07             | 2.79              |
| Totals.....             | 138,171                                                    | 41,265          | 7.82   |  | 364,597                                             | 101,840         | 19.28  |  | 374,184                                              | 109,044         | 30.65  |  | 877,192          | 262,149         | 47.76  | 5.27             | 43.48             |
| Curbed and Filled ..... |                                                            | 5,900           | 1.12   |  |                                                     | 24,181          | 4.57   |  |                                                      | 1,900           | 0.34   |  |                  | 31,891          | 6.03   |                  | 6.03              |
| Grand Totals .....      | 138,171                                                    | 47,165          | 8.94   |  | 364,597                                             | 126,021         | 23.85  |  | 374,184                                              | 110,944         | 30.99  |  | 877,192          | 293,960         | 53.79  | 5.27             | 49.51             |

TABLE SHOWING PERCENTAGE OF EACH CLASS OF PAVEMENT  
TO TOTAL MILEAGE.

| PAVEMENT.           | Miles.   | Percentage. |
|---------------------|----------|-------------|
| Cedar Block.....    | 726.01   | 64.62       |
| Macadam .....       | 332.14   | 29.56       |
| Medina Stone .....  | 2.49     | 0.22        |
| Granite Block ..... | 23.81    | 2.07        |
| Sheet Asphalt.....  | 80.75    | 7.24        |
| Block Asphalt.....  | 3.59     | 0.32        |
| Brick.....          | 4.17     | 0.37        |
| "Foundation" .....  | 1.08     | 0.10        |
| Totals .....        | 1,123.54 | 100.00      |

DISTRIBUTION OF KINDS OF PAVEMENT.

The following table shows the mileage of each class of pavement in use in the principal divisions of the City, December 31, 1895:

| DIVISION.   | Cedar Block. | Macadam | Medina Stone. | Granite. | Sheet Asphalt. | Block Asphalt. | Brick. | Founda-<br>tion. | Totals.  |
|-------------|--------------|---------|---------------|----------|----------------|----------------|--------|------------------|----------|
| North ..... | 157.66       | 57.89   | 0.49          | 0.10     | 5.03           | .....          | 0.64   | 1.08             | 222.89   |
| South ..... | 301.23       | 254.08  | 1.61          | 19.99    | 5.86           | 3.59           | 1.92   | .....            | 488.28   |
| West .....  | 367.12       | 20.17   | 0.39          | 3.22     | 19.86          | .....          | 1.61   | .....            | 412.37   |
| TOTALS..... | 726.01       | 332.14  | 2.49          | 23.81    | 80.75          | 3.59           | 4.17   | 1.08             | 1,123.54 |

RECAPITULATION OF STREETS AND ALLEYS BY TOWNSHIPS, SHOWING IMPROVED AND UNIMPROVED  
STREETS AND ALLEYS, AT THE CLOSE OF THE YEAR 1895.

| TOWNSHIP.                    | Total Streets—<br>Miles. | Total Alleys—<br>Miles. | Cedar Block.  | Macadam.      | Medina Stone. | Granite.     | Sheet Asphalt. | Block Asphalt. | Brick.      | "Foundation." | Improved<br>Streets—<br>Miles. | Unimproved<br>Streets—<br>Miles. | Repaved in<br>1895—Miles. |
|------------------------------|--------------------------|-------------------------|---------------|---------------|---------------|--------------|----------------|----------------|-------------|---------------|--------------------------------|----------------------------------|---------------------------|
| *Calumet.....                | 160.51                   | 92.22                   | .....         | 8.79          | .....         | .....        | .....          | .....          | .....       | .....         | 8.79                           | 151.72                           | .....                     |
| Hyde Park.....               | 581.78                   | 260.71                  | 22.90         | 166.05        | .....         | .....        | 2.78           | .....          | 1.16        | .....         | 192.89                         | 388.89                           | 0.61                      |
| Jefferson....                | 300.92                   | 118.67                  | 29.53         | .....         | .....         | .....        | 0.77           | .....          | .....       | .....         | 30.80                          | 270.62                           | .....                     |
| Lake.....                    | 387.47                   | 257.49                  | 57.29         | 69.93         | .....         | .....        | .....          | .....          | 0.27        | .....         | 127.49                         | 259.98                           | 0.23                      |
| Lake View.....               | 151.12                   | 99.49                   | 56.80         | 52.80         | .....         | .....        | .....          | .....          | 0.44        | .....         | 110.03                         | 41.08                            | .....                     |
| North Town.....              | 169.72                   | 78.60                   | 98.18         | 1.07          | 0.49          | 0.10         | 4.72           | .....          | 0.20        | .....         | 104.76                         | 64.96                            | 1.45                      |
| Norwood Park.....            | 26.50                    | 10.48                   | .....         | .....         | .....         | .....        | .....          | .....          | .....       | .....         | .....                          | 26.50                            | .....                     |
| Rogers Park and West Ridge.. | 35.00                    | 17.16                   | 2.68          | 4.02          | .....         | .....        | 0.31           | .....          | .....       | 1.08          | 8.09                           | 26.91                            | .....                     |
| South Town.....              | 229.74                   | 107.70                  | 121.04        | 9.31          | 1.61          | 19.99        | 3.08           | 3.59           | 0.49        | .....         | 159.11                         | 70.63                            | 1.06                      |
| West Town.....               | 487.41                   | 282.90                  | 337.59        | 20.17         | 0.89          | 3.22         | 19.09          | .....          | 1.61        | .....         | 332.07                         | 105.34                           | 4.91                      |
| <b>Totals.....</b>           | <b>2,530.17</b>          | <b>1,238.87</b>         | <b>796.01</b> | <b>332.14</b> | <b>2.49</b>   | <b>23.31</b> | <b>80.75</b>   | <b>8.59</b>    | <b>4.17</b> | <b>1.06</b>   | <b>1,123.54</b>                | <b>1,406.63</b>                  | <b>8.26</b>               |

\* Including Washington Heights and Gano.    † Of this total paved mileage 1,019.02 are Streets and 104.52 Alleys.

The following table shows the amount of pavement laid in streets and alleys each year since the introduction of street paving in 1855 to the present year. From 1835 to 1844 the work on streets consisted of grading only. From 1844 to 1855 improvements were made by planking, after which the more substantial forms of paving came into use:

| YEAR.       | MILES. | YEAR. | MILES. | YEAR.  | MILES.  |          |          |
|-------------|--------|-------|--------|--------|---------|----------|----------|
|             |        |       |        |        | Alleys. | Streets. | Totals.  |
| 1855        | 1.72   | 1869  | 5.46   | 1881   | 0.18    | 24.39    | 24.52    |
| 1856        | 0.26   | 1869  | 18.32  | 1882   | 0.58    | 24.37    | 24.95    |
| 1857        | 2.62   | 1870  | 19.96  | 1883   | 1.96    | 20.53    | 22.49    |
| 1858        | 7.20   | 1871  | 25.63  | 1884   | 1.60    | 32.92    | 34.52    |
| 1859        | 5.70   | 1872  | 1.82   | 1885   | 1.16    | 36.90    | 38.06    |
| 1860        | .....  | 1873  | 10.19  | 1886   | 1.51    | 42.15    | 43.66    |
| 1861        | 0.69   | 1874  | 9.07   | 1887   | 2.60    | 34.15    | 36.75    |
| 1862        | 2.57   | 1875  | 11.49  | 1888   | 2.19    | 52.14    | 54.33    |
| 1863        | 2.00   | 1876  | 10.50  | 1889 } | .....   | .....    | *146.54  |
| 1864        | 2.40   | 1877  | 12.29  | 1890   | 3.78    | 103.90   | 107.68   |
| 1865        | 2.03   | 1878  | 11.01  | 1891   | 8.50    | 91.22    | 99.72    |
| 1866        | 8.87   | 1879  | 6.83   | 1892   | 12.86   | 104.73   | 117.59   |
| 1867        | 11.87  | 1880  | 16.84  | 1893 } | 14.26   | 93.71    | 107.97   |
|             |        |       |        | 1894 } | .....   | .....    | *6.91    |
|             |        |       |        | 1895 } | 81.86   | 106.10   | 187.96   |
|             |        |       |        | 1896   | 16.94   | 75.01    | 91.95    |
|             |        |       |        | 1897   | 5.27    | 42.48    | 47.75    |
| Totals..... |        |       |        |        | 104.70  | 924.70   | 1,349.69 |

\* The mileage in heavy type opposite the years 1889 and 1893 gives the total amount of paved streets prior to those years in the annexed territories of Hyde Park, Lake and Lake View, and of Rogers Park and West Ridge, respectively.

Of this amount 226.15 miles have been repaved during the same period, which reduces the actual amount of paved streets and alleys within the corporate limits on December 31, 1895, to 1,123.54 miles (streets, 1,019.02; alleys, 104.52). To this may be added 1,406.63 miles of unpaved streets; which makes a total of 2,530.17 miles of streets in Chicago at this date.

## REPAVING.

The amount of repaving done by the division foremen in repairing improved streets, the replacing of pavement where openings were made by Water, Sewer and Fire Departments, etc., and on account of street permits and general repairs, is shown in detail in the following table :

| FOR WHAT PURPOSE.                                                           | NORTH DIV.  | SOUTH DIV.  | WEST DIV.   | TOTAL.      |
|-----------------------------------------------------------------------------|-------------|-------------|-------------|-------------|
|                                                                             | Square Yds. | Square Yds. | Square Yds. | Square Yds. |
| General Repairs.....                                                        | 34,807      | 22,994      | 55,858      | 113,659     |
| Water Department.....                                                       | 405         | 889         | .....       | 1,244       |
| Sewer Department.....                                                       | 228         | 379         | 312         | 914         |
| Fire Department.....                                                        | .....       | 15          | 214         | 229         |
| Street Permits.....                                                         | 7,479       | 3,857       | 2,307       | 13,543      |
| TOTALS.....                                                                 | 42,914      | 28,084      | 58,591      | 129,589     |
| Amount of repaving done by contractors on street repairs for the City.... } | 7,462       | 36,189      | 8,076       | 51,727      |
| GRAND TOTAL.....                                                            | 50,376      | 64,273      | 66,667      | 181,316     |

(Of the 129,589 square yards of repaving, 56,073 square yards was with old material.)

Total number of square yards, 181,316.

The above does not include any repaving done by contractors for gas companies, Bureau of Light, etc.

## LUMBER.

The following table shows in detail the amount of lumber used by the division foremen in the construction and repair of aprons, culverts, crossings, etc., and also for sidewalk intersections and general repairs :

| FOR WHAT USED.                  | NORTH DIVISION. |           | SOUTH DIVISION. |           | WEST DIVISION. |           |
|---------------------------------|-----------------|-----------|-----------------|-----------|----------------|-----------|
|                                 | No.             | LUMBER.   | No.             | LUMBER.   | No.            | LUMBER.   |
|                                 |                 | Sq. Feet. |                 | Sq. Feet. |                | Sq. Feet. |
| Aprons .....                    | 95              | 9,058     | 379             | 30,105    | 848            | 45,636    |
| Crossings .....                 | 168             | 25,688    | 934             | 114,079   | 497            | 51,084    |
| Culverts .....                  | 100             | 8,952     | 889             | 135,774   | 326            | 52,915    |
| Drains .....                    | 2               | 280       | 34              | 9,616     | 26             | 2,810     |
| Steps and Railings.....         | 53              | 1,878     | 184             | 9,997     | 288            | 15,281    |
| Street repairs.....             | .....           | 19,821    | .....           | 10,976    | .....          | 6,965     |
| Sidewalk intersections..        | 120             | 18,645    | 651             | 63,791    | 556            | 57,777    |
| Sidewalk, general repairs ..... | .....           | 257,617   | .....           | 698,592   | .....          | 876,582   |
| Totals.....                     | .....           | 335,924   | .....           | 1,067,930 | .....          | 608,900   |

## RECAPITULATION.

North Division..... 335,924 feet of lumber.  
 South Division..... 1,067,930 feet of lumber.  
 West Division..... 608,900 feet of lumber.

Grand Total..... 2,012,754 feet of lumber.

(In this amount is included 326,543 feet of old lumber.)

Total number of aprons built and repaired.....1,322  
 Total number of crossings built and repaired .....1,599  
 Total number of culverts built and repaired.....1,315  
 Total number of drain boxes built and repaired..... 62  
 Total number of steps and railings built and repaired..... 475  
 Total number of intersections built and repaired.....1,327

## UNIMPROVED STREETS.

The money at the disposal of this Bureau for the purpose of grading, ditching, etc., has been judiciously expended in keeping unimproved streets in good, passable condition, and keeping ditches flooded in localities where sewers have not yet been built.

The total length of streets graded and ditched by the division foremen amounts, in the aggregate, to one thousand one hundred and eleven (1,111) miles, proportioned as follows :

|                      | Grading.   | Ditching.  |
|----------------------|------------|------------|
| North Division ..... | 122 miles. | 140 miles. |
| South Division ..... | 51 miles.  | 184 miles. |
| West Division .....  | 578 miles. | 36 miles.  |
| Totals .....         | 751 miles. | 360 miles. |

## SIDEWALKS.

During the year 1895, 94.45 miles of plank sidewalk, 88.81 miles of concrete walk, and 1.35 miles of stone walk were constructed, making a total of 184.61 miles; 4.70 miles of stone and 11.81 miles of concrete walks were constructed by the various park boards, making a grand total for the year of 201.12 miles.

Six hundred and seventy-seven ordinances were passed for wood walks of which thirty-seven were repealed, 204 for concrete walks of which fourteen were repealed, and sixteen for stone walks, making a total of 897 ordinances passed for sidewalks, of which number 846 are now in force.

There were 285 estimates for plank walks and 133 estimates for concrete and stone walks prepared for the Honorable City Council during the year.

Five thousand six hundred and sixty-five (5,665) complaints of defective walks were registered, reported on by the inspectors and notice sent to the property owners to put same in proper condition. About eighty-five per cent. complied with said notice.

The following tables show in detail the amount of sidewalk constructed during the year, and the total mileage now under control of the City and various park boards.

**NUMBER OF MILES OF WOOD, STONE AND CONCRETE SIDEWALKS  
BUILT DURING 1895.**

| DIVISION.    | Wood,<br>Miles. | Stone,<br>Miles. | Concrete,<br>Miles. | Total<br>Miles. | Sidewalks<br>Repaired. | Total<br>Miles. |
|--------------|-----------------|------------------|---------------------|-----------------|------------------------|-----------------|
| North .....  | 9.98            | .10              | 29.86               | 39.94           | .28                    | 40.22           |
| South .....  | 47.90           | .74              | 35.68               | 84.32           | 1.98                   | 86.30           |
| West .....   | 86.57           | .51              | 28.27               | 60.35           | 1.00                   | 61.85           |
| Totals ..... | 94.45           | 1.35             | 88.81               | 184.61          | 3.26                   | 187.87          |

**TOTAL NUMBER OF MILES OF SIDEWALKS UNDER THE CONTROL  
OF THE CITY AND THE SOUTH, WEST AND LINCOLN PARK  
COMMISSIONERS AT THE CLOSE OF THE YEAR.**

| UNDER CONTROL OF                | MATERIAL.       |                  |                     | TOTAL<br>MILES. |
|---------------------------------|-----------------|------------------|---------------------|-----------------|
|                                 | Wood,<br>Miles. | Stone,<br>Miles. | Concrete,<br>Miles. |                 |
| City .....                      | 3,749.30        | 230.50           | 527.00              | 4,506.80        |
| South Park Commissioners .....  |                 | 20.00            | 30.00               | 50.00           |
| West Park Commissioners.....    |                 | 11.05            | 50.70               | 61.75           |
| Lincoln Park Commissioners..... |                 | 2.17             | 4.13                | 6.30            |
| Totals. ....                    | 3,749.30        | 263.72           | 611.83              | 4,624.85        |



Wooden sidewalks at present are prohibited in the three divisions of the City, as follows :

**NORTH DIVISION :**

Division street to the river ;  
Lake Michigan to Wells street.

**SOUTH DIVISION :**

Van Buren street to the river ;  
Lake Michigan to the river.

**WEST DIVISION :**

The river to Halsted street ;  
Van Buren street to Lake street.

In connection with the above I would recommend the extension of the district in which only stone and concrete walks may be built as follows :

That part of the North Division west of Lake Michigan, north of the river, east of the west line of Wells street, north to the south line of Division street, west on the south line of Division street to the west line of Halsted street, north along the west line of Halsted street to the southwest line of Clybourn avenue, thence northwest along this line to the north line of Belmont avenue, along the north line of Belmont avenue to the lake.

All that portion of the South Division lying west of Lake Michigan, south of the main river and east of the South branch to and including the south line of Harrison street, east along the south line of Harrison street to the west line of Fifth avenue, south on the west line of Fifth avenue to the south line of Taylor street, east on the south line of Taylor street to the west line of Clark street, south on the west line of Clark street to the north line of Thirty-fifth street, west on this line to the west line of Wentworth avenue, thence south on the west line of Wentworth avenue to the south line of Garfield boulevard, along the south line of Garfield boulevard to a point intersecting with Lake Michigan.

In making the above recommendation I am fully convinced that no hardship will be imposed on the property owners, as over seventy-five per cent. of the walks laid in this territory are cement or stone. The difference in the cost of concrete and wood walks is very slight, and taking into consideration the improved appearance of the street, the saving in cost of repair to the property owner and the City, and the impossibility of accident from loose or defective plank, the change more than justifies the extra expense.

## PERMITS FOR OPENING STREETS.

Three thousand and eight (3,008) permits were issued to sundry persons to open improved streets. A cash deposit covering cost of replacing pavement, etc., to its original condition was made on each permit issued.

One thousand eight hundred and twenty-three (1,823) openings were made on improved streets by gas companies and sundry other corporations, under general and special deposits, the work of replacing the pavements being done by contractors, subject to inspection and acceptance of the Department, the cost of such inspection being borne by the respective corporations.

Five thousand seven hundred and eighty-nine (5,789) permits were issued to sundry persons to open unimproved streets. The City incurring no expense on account of these openings, no deposit was required. These permits, however, are issued to licensed plumbers, contractors, etc., only upon filing a bond to protect the City against damages resulting from accidents through such openings.

Total number of openings, ten thousand six hundred and twenty (10,620).

The following statement shows in detail the amount of deposits, cost of repairs, amount rebated, etc.:

### OPENING STREETS.

|                                           |             |
|-------------------------------------------|-------------|
| Amount of deposits made.....              | \$59,677 99 |
| Amount retained for cost of repaving..... | 10,968 49   |
| Amount rebated to depositors.....         | 35,202 85   |
| Amount retained on unsettled permits..... | 13,506 65   |
| Average amount of each deposit.....       | 19 83       |
| Average amount retained for costs.....    | 3 64        |

### CORPORATION PERMITS.

|                                                 |             |
|-------------------------------------------------|-------------|
| Amount of deposits made.....                    | \$45,051 63 |
| Amount of repaving charges.....                 | 20,742 11   |
| Amount rebated to depositors.....               | 9,134 06    |
| Amount retained on unsettled permits.....       | 15,175 46   |
| Amount paid by corporations for inspection..... | 30,634 01   |

### PERMITS FOR USE OF STREETS.

Eight hundred and fifty-three (853) permits were issued to sundry parties to occupy streets for the purpose of depositing material thereon during the construction of buildings. A uniform deposit is made in each instance, and a bond filed by the party securing permit to protect the City against possible damage suits in case of accident, due to the negligence of owner or contractor, during life of permits.

The following statement shows in detail the amount of deposits, cost of repairs, amount rebated, etc.:

|                                                 |             |
|-------------------------------------------------|-------------|
| Amount of cash deposits made.....               | \$27,877 00 |
| Amount retained for use of streets.....         | 4,141 00    |
| Amount rebated to depositors .....              | 15,187 50   |
| Amount retained on unsettled permits .....      | 8,548 50    |
| Average amount of cash deposits .....           | 32 68       |
| Average amount retained for use of streets..... | 4 85        |

### HOUSE-MOVING.

One thousand one hundred and fifty (1,150) permits to move buildings were granted, of which nine hundred and thirty-one (931) were for frame buildings, two hundred and two (202) brick, and seventeen (17) iron, the total frontage aggregating twenty-four thousand two hundred and thirty-one (24,231) lineal feet.

Of this number three hundred and fifty (350) were in the North Division, three hundred and twenty-seven (327) in the South Division and four hundred and seventy-three (473) in the West Division. Five hundred and eight (508) were one story, five hundred and seventy-nine (579) were two stories, fifty-seven (57) were three stories, and six (6) were four stories high.

Total cash receipts, two thousand six hundred and eight dollars (\$2,608.00).

Your attention is respectfully called to the want of equity in the fees charged house-movers for permits to use the streets.

For some years a uniform fee of five dollars (\$5.00) has been collected for moving a building from one lot to another, where street is used, irrespective of the distance traversed, or the weight of the structure moved; and one dollar (\$1.00) for moving a building to another part of the lot upon which the building stands.

Inasmuch as the amount of damage to streets over which buildings are moved depends wholly upon the weight of the building, and the amount of pavement disturbed by the driving of stakes and other

methods necessarily employed by the house-mover in the prosecution of his work, the fees should be graded proportionate to the injury inflicted.

The total receipts from permits issued during the year are but little in excess of the salaries of the permit clerk and inspector (which salaries must be paid from this fund), the surplus being scarcely sufficient to properly repair the streets damaged. The necessity for a more equitable adjustment of charges for permits is apparent.

I respectfully submit that the following scale of fees, if embodied in an ordinance and passed by the Honorable City Council, would obviate the injustice above referred to, and would very materially increase the revenue of this Department, which, under existing ordinances, is yearly diminishing, as fewer houses are moved, in consequence of track elevation, etc.

For moving building from one location to another on the same lot on which the building stands, a permit fee of one dollar (\$1.00) should be charged.

|                                                           |         |
|-----------------------------------------------------------|---------|
| For frame cottage, where street is used .....             | \$ 5 00 |
| For frame building of two stories and over .....          | 10 00   |
| For brick or iron cottage under two stories .....         | 10 00   |
| For brick or stone building of two stories and over ..... | 15 00   |

Under City ordinances at present the fees are limited to one dollar (\$1.00) for moving a building to another part of the same lot upon which the building stands; and a charge of five dollars (\$5.00) for moving a building from one lot to another, where street is used.

To further compensate the City for damage to streets, and to lessen the liability of irresponsible parties embarking in a business which not only entails annoyance to the people along the route, but is fraught with actual danger, I recommend that house-movers be compelled to pay a license fee of fifty dollars (\$50.00) per annum.

## HOUSE-MOVING.

| MONTHS, 1885.  | Permits Issued. | MATERIAL. |        |       | STORIES HIGH. |      |        |       | DIVISION. |        |       | FRONTAGE.    | FEES.  |        | Cash Receipts. |
|----------------|-----------------|-----------|--------|-------|---------------|------|--------|-------|-----------|--------|-------|--------------|--------|--------|----------------|
|                |                 | Frame.    | Brick. | Iron. | One.          | Two. | Three. | Four. | North.    | South. | West. | Lineal feet. | \$1.00 | \$5.00 |                |
| January.....   | 84              | 31        | 3      | ..... | 13            | 20   | 1      | ....  | 11        | 10     | 13    | 683          | 16     | 18     | \$ 106 00      |
| February.....  | 33              | 30        | 3      | ..... | 17            | 15   | 1      | ....  | 7         | 8      | 18    | 653          | 29     | 4      | 49 00          |
| March.....     | 123             | 102       | 21     | ..... | 57            | 63   | 2      | 1     | 84        | 39     | 60    | 2,580        | 86     | 37     | 271 00         |
| April.....     | 143             | 123       | 20     | ..... | 64            | 78   | 6      | ....  | 39        | 36     | 68    | 3,063        | 97     | 46     | 327 00         |
| May.....       | 105             | 89        | 16     | ..... | 52            | 52   | 1      | ....  | 29        | 37     | 39    | 2,271        | 67     | 38     | 237 00         |
| June.....      | 116             | 90        | 26     | ..... | 48            | 61   | 6      | 1     | 43        | 30     | 43    | 2,450        | 77     | 39     | 272 00         |
| July.....      | 104             | 88        | 16     | ..... | 49            | 46   | 8      | 1     | 32        | 25     | 47    | 2,240        | 73     | 31     | 228 00         |
| August.....    | 106             | 91        | 15     | ..... | 47            | 55   | 4      | ....  | 38        | 35     | 33    | 2,288        | 78     | 26     | 208 00         |
| September..... | 104             | 88        | 21     | ..... | 48            | 54   | 1      | 1     | 24        | 28     | 52    | 2,185        | 77     | 27     | 212 00         |
| October.....   | 128             | 92        | 31     | 5     | 56            | 58   | 14     | ....  | 54        | 39     | 35    | 2,707        | 85     | 48     | 300 00         |
| November.....  | 101             | 69        | 20     | 12    | 34            | 58   | 7      | 2     | 43        | 32     | 26    | 2,050        | 66     | 35     | 241 00         |
| December.....  | 53              | 43        | 10     | ..... | 23            | 24   | 6      | ....  | 15        | 18     | 20    | 1,163        | 32     | 21     | 137 00         |
| TOTALS.....    | 1,150           | 931       | 202    | 17    | 508           | 579  | 57     | 6     | 350       | 327    | 478   | 24,331       | 783    | 365    | \$2,608 00     |

## STREET LAMPS.

The volume of work done by the City Lamp Department during the year 1895 is the largest in the City's history, including some improvements and new features, among which are the manufacturing of boulevard lamps at less cost than the City could purchase them direct from the manufacturers in Philadelphia—the only place where they have heretofore been manufactured. Also the repairing, by this Department, of service pipes, erecting, straightening, raising and placing to grade and proper location of posts, heretofore done by the gas companies, resulting in a large saving to the City.

During the year 1895 there were erected ten thousand four hundred and eighty-five (10,485) new and repaired gas and gasoline lamps, of which six thousand six hundred and ninety-three (6,693) were City gas pattern, two thousand eight hundred and six (2,806) boulevard gas pattern, and the remainder, nine hundred and eighty-six (986), gasoline, which, together with the number of lamps previously erected, gives a grand total of fifty-one thousand one hundred and forty-three (51,143) lamps in service December 31, 1895.

The above grand total, including lights of all descriptions, is made up as follows:

|                                             |        |
|---------------------------------------------|--------|
| Gas lamps .....                             | 37,853 |
| Gasoline lamps, City .....                  | 3,333  |
| Gasoline lamps, Globe Light & Heat Co. .... | 8,146  |
| Kerosene lamps .....                        | 194    |
| City plant electric lights .....            | 1,124  |
| Electric lamps lighted by contract .....    | 493    |
| Grand total .....                           | 51,143 |

## GAS LAMPS ERECTED.

|                                                                                                                                                       |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| New gas lamps placed on posts for Special Assessment Department during the year 1895, and for which credit will be made to the Street Lamp Fund ..... | 2,585 |
| New gas lamps placed on posts to replace worn-out ones..                                                                                              | 3,818 |
| Repaired gas lamps placed on posts .....                                                                                                              | 3,096 |
| Total number .....                                                                                                                                    | 9,499 |

## GASOLINE LAMPS ERECTED.

|                                                                            |     |
|----------------------------------------------------------------------------|-----|
| New gasoline lamps erected, and iron and wood posts erected for same ..... | 125 |
| New gasoline lamps placed on posts to replace worn-out lamps .....         | 460 |
| Repaired gasoline lamps placed on posts .....                              | 401 |
| Total number .....                                                         | 986 |

## STREET SIGNS.

There were manufactured and placed in position eleven thousand, five hundred and sixty-three (11,563) street signs of various kinds, as follows :

|                                                   |        |
|---------------------------------------------------|--------|
| Blue glass signs, 3x16 inches.....                | 10,757 |
| Electric signs, 4x18 inches, with opal backs..... | 368    |
| Miner lamp signs, 3½x11¼ inches.....              | 43     |
| Sign frames.....                                  | 392    |
| Bulletin boards for City Hall.....                | 2      |
| Wood sign for Harbor Master.....                  | 1      |
| Total number.....                                 | 11,563 |

The following statement shows in detail the amount of work done and the total expenditure for the year, including the amount paid the different gas companies, pay rolls, supplies, etc.:

Total cost of lamps of all kinds erected for Special Assessment

|                                                            |             |
|------------------------------------------------------------|-------------|
| Department.....                                            | \$17,814 00 |
| Total cost of new and repaired gas lamps of all kinds..... | 24,023 88   |

AMOUNT PAID THE DIFFERENT GAS COMPANIES FOR  
REPAIRS ON LAMP POSTS AND SERVICE PIPES  
DURING 1895:

|                                       |                 |
|---------------------------------------|-----------------|
| Peoples Gas Light & Coke Company..... | \$4,874 49      |
| Chicago Gas Light & Coke Company..... | 3,382 83        |
| Lake Gas Company.....                 | 2,528 39        |
| Hyde Park Gas Company.....            | 1,587 82        |
| Suburban Gas Company.....             | 958 53          |
| Consumers Gas Company.....            | 54 35           |
| Calumet Gas Company.....              | 14 75           |
|                                       | <hr/> 13,401 16 |

|                                                                                                                                                                                                          |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Total cost of new and repaired gasoline lamps erected, together with the cost of work done by this Department in connection with and incidental to the operations of gasoline lighting and supplies..... | 4,823 89 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|

|                                                          |          |
|----------------------------------------------------------|----------|
| Total cost of signs of all kinds put up during 1895..... | 3,564 15 |
|----------------------------------------------------------|----------|

|                                                                                                                                                                                                                                                                       |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Grand total of cost of material and labor of all kinds used in the manufacture and repair of street lamps, lamp posts and lamp service pipes, also parts incidental to gasoline operations as well as the manufacture of street name signs, during the year 1895..... | <hr/> \$63,627 08 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|

|                                             |           |
|---------------------------------------------|-----------|
| Total expenditure during the year 1895..... | 63,627 08 |
|---------------------------------------------|-----------|

|                                                                                                                                     |                 |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Deduct cost of work done on orders from the Special Assessment Department, and for which payment will be made to the lamp fund..... | <hr/> 17,814 00 |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------|

|                                                                                               |             |
|-----------------------------------------------------------------------------------------------|-------------|
| Net cost of repairs of all kinds done by the Street Lamp Department during the year 1895..... | \$45,813 08 |
|-----------------------------------------------------------------------------------------------|-------------|

|                                             |          |
|---------------------------------------------|----------|
| Leaving a credit to this Department of..... | 4,186 92 |
|---------------------------------------------|----------|

I most respectfully suggest that an appropriation be made for changing the signs on sixteen hundred (1,600) streets (the names of which have been changed by ordinance), which will require seventy-eight thousand (78,000) new street signs to be placed upon lamps, and involve an expense of fifteen thousand dollars (\$15,000.00).

The present condition of the iron lamp posts throughout the City requires attention. I therefore recommend that sixteen thousand (16,000) posts, about one-third of the total number in service, be painted during the year 1896. The Lamp Department can do this work for thirty-two hundred dollars (\$3,200.00). The adoption of this system would secure the needed protection by a fresh coat of paint once in three years.



## RAILROAD GATES AND FENCES.

The amount of work done up to date by the various railroad companies in compliance with the Council order of March 26th, 1890, for the erection of gates, fences and lights for the greater safety of the public, is shown in the following table :

| NAME.                                   | Fences Constructed—Miles. |        |         |        |        | Total Miles. | Gates in Operation | Kind of Lights in Use. |
|-----------------------------------------|---------------------------|--------|---------|--------|--------|--------------|--------------------|------------------------|
|                                         | Wall.                     | Board. | Picket. | Metal. | Wire.  |              |                    |                        |
| Chicago & North-Western .....           | .46                       | 6.79   | 10.17   | 2.55   | 38.59  | 58.56        | 118                | Gas.                   |
| Illinois Central .....                  | 10.28                     | .20    | .15     | 1.24   | 22.00  | 33.87        | 32                 | Electric.              |
| Chicago, Rock Island & Pacific .....    | .40                       | 2.00   | 6.17    | ....   | 5.02   | 13.59        | 33                 | Electric.              |
| Chicago, Milwaukee & St. Paul .....     | ....                      | ....   | ....    | ....   | 13.69  | 13.69        | 55                 | Gas.                   |
| Chicago & Northern Pacific .....        | ....                      | .34    | ....    | 2.75   | 6.50   | 9.59         | 29                 | Oil.                   |
| Pennsylvania Railroad Co. ....          | ....                      | .08    | 10.92   | .80    | 2.02   | 13.82        | 47                 | Electric.              |
| Lake Shore & Michigan Southern .....    | .76                       | 10.23  | ....    | ....   | 2.40   | 13.39        | 31                 | Electric.              |
| Chicago, Burlington & Quincy .....      | ....                      | 5.05   | ....    | ....   | 4.74   | 9.79         | 34                 | Gas and oil.           |
| New York, Chicago & St. Louis. ....     | ....                      | ....   | 4.18    | ..     | 6.77   | 10.95        | ...                | Oil.                   |
| Baltimore & Ohio .....                  | ....                      | .60    | ....    | ....   | 5.91   | 6.51         | 22                 | Electric.              |
| Pittsburg, Cincinnati & St. Louis ..... | .31                       | .16    | 3.01    | .63    | 12.42  | 16.53        | 102                | Oil and electric.      |
| Atchison, Topeka & Santa Fe .....       | ....                      | .41    | ....    | ....   | 5.78   | 6.19         | 23                 | Oil.                   |
| Chicago & Grand Trunk .....             | ....                      | ....   | ....    | ....   | 3.60   | 3.60         | 7                  | Oil.                   |
| Chicago & Western Indiana .....         | ....                      | ....   | 1.36    | ....   | 33.31  | 34.67        | 48                 | Electric.              |
| Wabash .....                            | ....                      | ....   | ....    | ....   | 7.50   | 7.50         | ...                | Electric.              |
| Chicago & Alton .....                   | .11                       | ...    | .08     | ....   | 3.48   | 3.67         | 54                 | Oil and gas.           |
| Union Stock Yards & Transit Co. ....    | ....                      | ....   | ....    | ....   | ....   | ....         | 15                 | Electric.              |
| Totals .....                            | 12.32                     | 25.86  | 36.04   | 7.97   | 173.73 | 255.92       | 650                |                        |

## STREET RAILWAYS.

The following statements show the number of miles of streets occupied, routes and motive power, of the different Street Railway Companies operating within the City.

## WEST CHICAGO STREET RAILROAD COMPANY.

| STREET                   | FROM                 | TO                   | Lineal feet | POWER     |
|--------------------------|----------------------|----------------------|-------------|-----------|
| Ashland avenue .....     | Blue Island avenue.  | Twelfth .....        | 5,280       | Electric. |
| Ashland avenue .....     | Lake .....           | Clybourn place...    | 11,352      | "         |
| Adams .....              | Center avenue .....  | The river .....      | 5,016       | "         |
| Adams .....              | The river .....      | Michigan avenue..    | 3,960       | Horse.    |
| Adams .....              | Dearborn .....       | Market .....         | 1,854       | Cable.    |
| Armitage avenue .....    | W. Forty-fourth...   | Milwaukee avenue.    | 13,140      | Electric. |
| Blue Island avenue ..... | Western avenue...    | Halsted .....        | 15,312      | Cable.    |
| Blackhawk .....          | Noble .....          | Holt .....           | 528         | Electric. |
| Canalport avenue.....    | Halsted .....        | Canal .....          | 2,376       | "         |
| Canal .....              | Canalport avenue..   | Harrison .....       | 6,072       | "         |
| Clinton .....            | Twelfth .....        | Milwaukee avenue.    | 6,864       | Horse.    |
| Center avenue .....      | Twenty-first .....   | Adams .....          | 8,976       | Electric. |
| Center avenue .....      | Austin avenue .....  | Erie .....           | 1,162       | "         |
| California avenue.....   | Chicago avenue ..... | Division .....       | 2,640       | "         |
| California avenue.....   | North avenue .....   | Armitage avenue..    | 2,640       | "         |
| Colorado avenue .....    | W. Fortieth...       | Madison .....        | 8,712       | "         |
| Chicago avenue .....     | California avenue..  | Milwaukee avenue.    | 11,352      | "         |
| Clybourn place.....      | Lincoln .....        | Ashland avenue...    | 1,584       | "         |
| Desplaines .....         | Harrison .....       | Washington .....     | 3,168       | "         |
| Desplaines .....         | Washington .....     | Milwaukee avenue.    | 2,376       | Cable.    |
| Division .....           | California avenue..  | Milwaukee avenue.    | 8,448       | Electric. |
| Dearborn .....           | Van Buren .....      | Adams .....          | 950         | Cable.    |
| Eighteenth .....         | Leavitt .....        | The river .....      | 13,464      | Electric. |
| Fourteenth .....         | Robey .....          | Canal .....          | 10,032      | "         |
| Fifth avenue .....       | Twelfth .....        | Randolph .....       | 6,072       | Horse.    |
| Grand avenue .....       | W. Fortieth...       | Western avenue...    | 12,408      | Electric. |
| Halsted .....            | The river .....      | Van Buren .....      | 9,768       | Cable.    |
| Halsted .....            | Van Buren .....      | Chicago avenue ..... | 7,124       | Electric. |
| Harrison .....           | Kedzie avenue .....  | The river .....      | 34,880      | "         |
| Harrison .....           | The river .....      | Fifth avenue.....    | 792         | Horse.    |
| Holt .....               | Blackhawk .....      | North avenue .....   | 1,320       | Electric. |
| Indiana .....            | Western avenue...    | Halsted .....        | 10,560      | "         |
| Jefferson .....          | Meagher .....        | Madison .....        | 7,892       | Horse.    |
| Jefferson .....          | Madison .....        | Washington .....     | 528         | Cable.    |
| Kedzie avenue .....      | Twelfth .....        | Madison .....        | 5,280       | Electric. |
| Leavitt .....            | Blue Island avenue.  | Eighteenth .....     | 3,960       | "         |
| Leavitt .....            | Indiana .....        | Chicago avenue ..... | 1,848       | "         |
| Lake .....               | Forty-eighth .....   | The river .....      | 29,040      | "         |
| Lake .....               | The river .....      | State .....          | 2,640       | "         |
| Madison .....            | Fortieth .....       | Jefferson .....      | 21,912      | Cable.    |
| Madison .....            | Jefferson .....      | Fifth avenue.....    | 2,640       | Horse.    |
| Madison .....            | Fifth avenue.....    | State .....          | 1,584       | Cable.    |
| Milwaukee avenue.....    | Desplaines .....     | Armitage avenue..    | 15,840      | "         |
| Milwaukee avenue.....    | Armitage avenue..    | Logan Square...      | 5,808       | Electric. |
| Market .....             | Adams .....          | Van Buren .....      | 485         | Cable.    |
| North avenue .....       | Fortieth .....       | Milwaukee avenue.    | 13,200      | Electric. |
| Noble .....              | Milwaukee avenue.    | Blackhawk .....      | 2,112       | "         |
| Ogden avenue.....        | Fortieth .....       | Randolph .....       | 20,866      | "         |

## WEST CHICAGO STREET RAILROAD COMPANY—CONTINUED.

| STREET              | FROM                | TO                  | Lineal feet | POWER        |
|---------------------|---------------------|---------------------|-------------|--------------|
| Paulina.....        | Twelfth.....        | Lake.....           | 6,600       | Electric.    |
| Robey.....          | Blue Island avenue. | Eighteenth.....     | 3,168       | "            |
| Robey.....          | Fourteenth.....     | Milwaukee avenue.   | 17,160      | "            |
| Randolph.....       | Union Park.....     | The river.....      | 7,920       | "            |
| Randolph.....       | The river.....      | State.....          | 2,640       | Horse.       |
| Sangamon.....       | Adams.....          | Austin avenue.....  | 3,960       | Electric.    |
| Twenty sixth.....   | Fortieth.....       | Western avenue..... | 10,560      | "            |
| Twenty-first.....   | Douglas boulevard.  | Halsted.....        | 13,990      | "            |
| Twelfth.....        | Fortieth.....       | The river.....      | 24,552      | "            |
| Taylor.....         | Western avenue..... | The river.....      | 13,728      | "            |
| Van Buren.....      | Market.....         | Dearborn.....       | 1,848       | Cable.       |
| Van Buren.....      | Kedzie avenue.....  | Halsted.....        | 15,840      | Electric.    |
| Van Buren.....      | Halsted.....        | Clinton.....        | 1,689       | Cable.       |
| Van Buren.....      | Clinton.....        | State.....          | 3,696       | Horse.       |
| Western avenue..... | Blue Island avenue. | Milwaukee avenue.   | 25,872      | Electric.    |
| Washington.....     | Desplaines.....     | State.....          | 4,488       | Cable.       |
| Total.....          |                     |                     | 507,408     | 96.10 miles. |

## NORTH CHICAGO STREET RAILROAD COMPANY.

| STREET                | FROM                 | TO                     | Lineal feet | POWER     |
|-----------------------|----------------------|------------------------|-------------|-----------|
| Ashland avenue.....   | Belmont avenue.....  | Graceland avenue.....  | 5,280       | Electric. |
| Belmont avenue.....   | Robey.....           | Lincoln avenue.....    | 2,640       | "         |
| Clark.....            | Washington.....      | S. Water.....          | 1,320       | Horse.    |
| Clark.....            | South Water.....     | Kinzie.....            | 422         | Electric. |
| Clark.....            | Kinzie.....          | Illinois.....          | 633         | Horse.    |
| Clark.....            | Illinois.....        | Dewey court.....       | 15,840      | Cable.    |
| Clark.....            | Dewey court.....     | Ridge road.....        | 23,760      | Electric. |
| Clark.....            | Ridge road.....      | Church road.....       | 3,168       | Horse.    |
| Clybourn avenue.....  | Division.....        | Cooper.....            | 10,560      | Electric. |
| Clybourn avenue.....  | Cooper.....          | Belmont avenue.....    | 7,920       | "         |
| Chicago avenue.....   | Milwaukee avenue.    | Clark.....             | 6,600       | "         |
| Center.....           | Racine avenue.....   | Lincoln avenue.....    | 5,280       | "         |
| Center.....           | Lincoln avenue.....  | Clark.....             | 792         | Cable.    |
| Division.....         | Clybourn avenue..... | Wells.....             | 1,320       | "         |
| Division.....         | Milwaukee avenue.    | State.....             | 10,032      | Electric. |
| Dearborn.....         | Polk.....            | Kinzie.....            | 6,072       | Horse.    |
| Evanston avenue.....  | Clark.....           | Graceland avenue.....  | 8,184       | "         |
| Fullerton avenue..... | Milwaukee avenue.    | Lincoln avenue.....    | 13,828      | Electric. |
| Graceland avenue..... | Clark.....           | Evanston avenue.....   | 3,168       | Horse.    |
| Graceland avenue..... | Ashland avenue.....  | Clark.....             | 1,848       | Electric. |
| Garfield avenue.....  | Racine avenue.....   | Lincoln avenue.....    | 4,646       | "         |
| Halsted.....          | Chicago avenue.....  | Graceland avenue.....  | 21,120      | "         |
| Illinois.....         | Market.....          | Wells.....             | 792         | "         |
| Illinois.....         | Wells.....           | Clark.....             | 950         | Cable.    |
| Kinzie.....           | Market.....          | State.....             | 2,270       | Electric. |
| Larrabee.....         | Chicago avenue.....  | Webster avenue.....    | 9,240       | Horse.    |
| Lincoln avenue.....   | Center.....          | Wrightwood avenue..... | 5,544       | Cable.    |
| Lincoln avenue.....   | Wrightwood av.....   | Belmont avenue.....    | 5,544       | Electric. |
| La Salle.....         | Monroe.....          | Illinois.....          | 3,801       | Cable.    |
| Monroe.....           | La Salle.....        | Dearborn.....          | 792         | "         |

## NORTH CHICAGO STREET RAILROAD COMPANY—CONTINUED.

| STREET                 | FROM                   | TO                     | Lineal feet | POWER        |
|------------------------|------------------------|------------------------|-------------|--------------|
| Michigan .....         | Market .....           | Wells .....            | 792         | Electric.    |
| Market .....           | Kinzie .....           | Division .....         | 5,280       | "            |
| North avenue .....     | Milwaukee avenue ..... | Clark .....            | 12,408      | "            |
| Roscoe .....           | Western avenue .....   | Robey .....            | 2,640       | "            |
| Robey .....            | Belmont avenue .....   | Roscoe .....           | 1,820       | "            |
| Racine avenue .....    | Center .....           | Fullerton avenue ..... | 2,640       | "            |
| State .....            | Lake .....             | Division .....         | 7,600       | "            |
| Sedgwick .....         | Chicago avenue .....   | Center .....           | 7,920       | "            |
| Sheffield avenue ..... | Wrightwood av. ....    | Clark .....            | 5,280       | "            |
| Southport avenue ..... | Clybourn avenue .....  | Clark .....            | 12,936      | "            |
| Webster avenue .....   | Racine avenue .....    | Lincoln avenue .....   | 8,960       | "            |
| Wells .....            | Randolph .....         | Illinois .....         | 2,876       | Horse.       |
| Wells .....            | Illinois .....         | Wisconsin .....        | 9,240       | Cable.       |
| Total .....            |                        |                        | 255,840     | 48.36 miles. |

## OGDEN STREET RAILWAY COMPANY.

| STREET                 | FROM                   | TO                   | Lineal feet | POWER     |
|------------------------|------------------------|----------------------|-------------|-----------|
| Central avenue....     | Twenty-fifth .....     | Twenty-sixth .....   | 264         | Electric. |
| W. Forty-eighth .....  | Madison .....          | Twenty-fifth .....   | 12,936      | "         |
| Ridgeland avenue ..... | Twenty-sixth .....     | Thirty-first .....   | 2,640       | "         |
| Twenty-fifth .....     | Central avenue .....   | Forty-eighth .....   | 5,280       | "         |
| Twenty-sixth .....     | Ridgeland avenue ..... | Central avenue ..... | 5,280       | "         |
| Thirty-first .....     | Harlem avenue ..       | Ridgeland avenue ..  | 5,280       | "         |
| Total .....            |                        |                      | 31,680      | 6 miles.  |

## NORTH SIDE ELECTRIC STREET RAILWAY COMPANY.

| STREET               | FROM               | TO                   | Lineal feet | POWER       |
|----------------------|--------------------|----------------------|-------------|-------------|
| Clybourn place ..... | Clybourn avenue .. | Elston avenue .....  | 2,270       | Electric.   |
| Crosby .....         | Larrabee .....     | Division .....       | 1,848       | "           |
| Erie .....           | Franklin .....     | The river .....      | 2,259       | "           |
| Elm .....            | Franklin .....     | Crosby .....         | 2,687       | "           |
| Franklin .....       | Kinzie .....       | Elm .....            | 5,000       | "           |
| Kingsbury .....      | Erie .....         | Chicago avenue ..... | 423         | "           |
| Total .....          |                    |                      | 14,486      | 2.74 miles. |

## CHICAGO NORTH SHORE STREET RAILWAY COMPANY.

| STREET                | FROM               | TO                | Lineal feet | POWER     |
|-----------------------|--------------------|-------------------|-------------|-----------|
| Church road .....     | Evanston avenue .. | Clark .....       | 2,640       | Electric. |
| Chicago avenue .....  | Church road .....  | .....             | 13,200      | "         |
| Evanston avenue ..... | Graceiand avenue.  | Church road ..... | 21,120      | "         |
| Sherman avenue. ....  | .....              | .....             | 5,280       | "         |
| Total .....           |                    |                   | 42,240      | 8 miles.  |

## NORTH CHICAGO ELECTRIC RAILWAY COMPANY.

| STREET                 | FROM                 | TO                 | Lineal feet | POWER       |
|------------------------|----------------------|--------------------|-------------|-------------|
| Milwaukee avenue ..... | Logan square .....   | Lawrence avenue .. | 21,120      | Electric.   |
| Lincoln avenue .....   | Belmont avenue ..... | Foster .....       | 10,240      | "           |
| Total .....            |                      |                    | 31,360      | 6.01 miles. |

## CHICAGO &amp; JEFFERSON URBAN TRANSIT COMPANY.

| STREET       | FROM              | TO                | Lineal feet | POWER       |
|--------------|-------------------|-------------------|-------------|-------------|
| Fulton ..... | Western avenue .. | Ashland avenue .. | 5,280       | Electric.   |
| Fulton ..... | Ashland avenue .. | Morgan ..         | 3,960       | "           |
| Morgan ..... | Monroe .....      | Fulton ..         | 2,376       | "           |
| Monroe ..... | Morgan ..         | Canal .....       | 3,432       | "           |
| Total .....  |                   |                   | 15,048      | 2.85 miles. |

## CHICAGO ELECTRIC TRANSIT COMPANY.

| STREET               | FROM              | TO                  | Lineal feet | POWER       |
|----------------------|-------------------|---------------------|-------------|-------------|
| Belmont avenue ..... | Ashland avenue .. | Halsted ..          | 5,280       | Electric.   |
| Belmont avenue ..... | Milwaukee avenue. | Robey .....         | 12,144      | "           |
| Elston avenue .....  | Milwaukee avenue. | Montrose blvd. .... | 30,782      | "           |
| Total .....          |                   |                     | 48,206      | 9.13 miles. |

## LAKE STREET ELEVATED RAILROAD COMPANY.

| STREET       | FROM        | TO                 | Lineal feet | POWER       |
|--------------|-------------|--------------------|-------------|-------------|
| Lake .....   | State ..... | W. Fifty-second... | 34,320      | Steam.      |
| Market ..... | Lake .....  | Madison .....      | 1,350       | "           |
| Total .....  |             |                    | 35,670      | 6.75 miles. |

## METROPOLITAN WEST SIDE ELEVATED RAILROAD COMPANY.

| BRANCH             | FROM                    | TO                 | Lineal feet | POWER       |
|--------------------|-------------------------|--------------------|-------------|-------------|
| Main .....         | Franklin .....          | Forty-eighth ..... | 26,400      | Electric.   |
| Northwestern ..... | Congress and Paulina .. | Logan Square ..... | 28,428      | "           |
| Northwestern ..... | Robey and Milwaukee av. | Lawndale avenue .. | 11,291      | "           |
| Total .....        |                         |                    | 61,119      | 11.2 miles. |

## CHICAGO GENERAL RAILWAY COMPANY.

| STREET                 | FROM             | TO                  | Lineal feet | POWER       |
|------------------------|------------------|---------------------|-------------|-------------|
| Homan avenue .....     | Twenty-second .. | Twenty-fifth .....  | 1,769       | Electric.   |
| Kedzie avenue .....    | Twenty-second .. | Thirty-first .....  | 5,280       | "           |
| Lawndale avenue .....  | Twenty-second .. | Twenty-eighth ..... | 3,960       | "           |
| Rockwell .....         | Nineteenth ..... | Twenty-sixth .....  | 4,620       | "           |
| W. Twenty-second ..... | The river .....  | W. Fortieth .....   | 22,704      | "           |
| W. Twenty-fifth .....  | Rockwell .....   | Lawndale avenue ..  | 7,260       | "           |
| Total .....            |                  |                     | 45,598      | 8.61 miles. |

## CICERO &amp; PROVISIO STREET RAILWAY COMPANY.

| STREET                | FROM                | TO                 | Lineal feet | POWER       |
|-----------------------|---------------------|--------------------|-------------|-------------|
| Chicago avenue .....  | West Forty-eighth.  | W. Fifty-second... | 2,640       | Electric.   |
| W. Forty-eighth ..... | Madison .....       | Chicago avenue...  | 5,280       | "           |
| Lake .....            | West Forty-eighth.  | W. Fifty-second... | 2,640       | "           |
| Madison .....         | West Fortieth ..... | W. Fifty-second... | 7,920       | "           |
| Total .....           |                     |                    | 18,480      | 3.50 miles. |

## SOUTH CHICAGO CITY RAILWAY COMPANY.

| STREET                    | FROM                   | TO                     | Lineal<br>feet | POWER        |
|---------------------------|------------------------|------------------------|----------------|--------------|
| Buffalo avenue .....      | Eighty-seventh. . .    | Ninety-second . . .    | 3,326          | Electric.    |
| Coles avenue. ....        | Seventy-first . . . .  | Seventy-ninth. . . .   | 6,230          | "            |
| Cheltenham place . . . .  | Railroad avenue. . .   | Coles avenue. ....     | 422            | "            |
| Commercial avenue. . . .  | Seventy-ninth . . . .  | 100th . . . . .        | 10,560         | "            |
| Ewing avenue. ....        | Harbor avenue. . . .   | 106th . . . . .        | 9,873          | "            |
| Eighty-third . . . . .    | Ontario avenue . . .   | Superior avenue. . .   | 317            | "            |
| Eighty-seventh . . . . .  | Superior avenue . .    | Buffalo avenue. . .    | 211            | "            |
| Indianapolis avenue . . . | Ewing avenue . . . .   | State line. . . . .    | 4,805          | "            |
| Notre Dame avenue . . .   | Muskegon avenue . .    | 100th . . . . .        | 2,376          | "            |
| Ninety-second. ....       | Commercial avenue      | Harbor avenue. . . .   | 2,165          | "            |
| Ontario avenue. ....      | Seventy-ninth . . . .  | Eighty-third . . . .   | 2,640          | "            |
| 104th. ....               | Torrence avenue . .    | Muskegon avenue . .    | 1,267          | "            |
| 106th. ....               | Torrence avenue . .    | State line. . . . .    | 9,557          | "            |
| Superior avenue. ....     | Eighty-third . . . .   | Eighty-seventh. . .    | 2,640          | "            |
| Seventieth . . . . .      | Yates avenue . . . .   | Stony Island av. . . . | .....          | "            |
| Seventy-first . . . . .   | Yates avenue . . . .   | Coles avenue . . . .   | 475            | "            |
| Seventy-fifth . . . . .   | Stony Island av. . . . | Lake Michigan. . . .   | 8,870          | "            |
| Seventy-ninth . . . . .   | Stony Island av. . .   | Ontario avenue. . . .  | 10,618         | "            |
| Stony Island avenue . . . | Sixty-fourth . . . .   | Seventy-ninth. . . .   | 9,873          | "            |
| Torrence avenue . . . .   | 104th . . . . .        | 106th . . . . .        | 1,320          | "            |
| Yates avenue. ....        | Sixty-eighth . . . .   | Seventy-first . . . .  | 1,953          | "            |
| Total .....               |                        |                        | 89,493         | 16.95 miles. |

## CHICAGO &amp; SOUTH SIDE RAPID TRANSIT RAILROAD COMPANY.

| STREET            | FROM                | TO                    | Lineal<br>feet | POWER       |
|-------------------|---------------------|-----------------------|----------------|-------------|
| Alley. ....       | Congress . . . . .  | Sixty-third . . . . . | 34,980         | Steam.      |
| Sixty-third. .... | Calumet avenue. . . | Stony Island av. . .  | 8,860          | "           |
| Total .....       |                     |                       | 43,840         | 8.21 miles. |

## CALUMET ELECTRIC STREET RAILWAY COMPANY.

| STREET                  | FROM                 | TO                    | Lineal<br>feet | POWER     |
|-------------------------|----------------------|-----------------------|----------------|-----------|
| Cottage Grove avenue. . | Seventy-second . . . | Ninety-fifth. . . . . | 15,312         | Electric. |
| Drexel avenue . . . . . | Ninety-third . . . . | Ninety-fourth . . . . | 528            | "         |
| Exchange avenue. ....   | Ninety-third . . . . | S. Chicago avenue. .  | 528            | "         |
| Erie avenue. ....       | Ninety-first . . . . | Ninety-third . . . .  | 1,056          | "         |
| Eighty-ninth. ....      | Mackinaw avenue . .  | The Strand. ....      | 528            | "         |
| Halsted . . . . .       | 119th . . . . .      | 121st. ....           | 1,584          | "         |
| Harbor avenue . . . . . | Ninety third . . . . | Mackinaw avenue . .   | 1,056          | "         |
| Kensington avenue . . . | Michigan avenue . .  | I. C. R. R. ....      | 2,112          | "         |
| Michigan avenue . . . . | Ninety-fifth. ....   | 124th . . . . .       | 19,008         | "         |

## CALUMET ELECTRIC STREET RAILWAY COMPANY—CONTINUED.

| STREET                   | FROM                | TO                  | Lineal feet | POWER       |
|--------------------------|---------------------|---------------------|-------------|-------------|
| Mackinaw avenue .....    | Harbor avenue ....  | Eighty-ninth. ....  | 528         | Electric.   |
| Madison avenue .....     | S. Chicago avenue.  | Seventy-fifth. .... | 1,056       | "           |
| Ninety-first .....       | S. Chicago avenue.  | Erie avenue. ....   | 2,112       | "           |
| Ninety-third .....       | Cottage Grove av..  | Harbor avenue. .... | 13,728      | "           |
| Ninety-fifth .....       | Cottage Grove av..  | Michigan avenue. .  | 4,224       | "           |
| Ninety-fifth .....       | S. Chicago avenue.  | Avenue "M" ....     | 2,112       | "           |
| 115th. ....              | Michigan avenue ..  | I. C. R. R. ....    | 2,112       | "           |
| 116th. ....              | Michigan avenue ..  | Wentworth avenue.   | 3,696       | "           |
| 119th. ....              | Michigan avenue ..  | Halsted .....       | 5,808       | "           |
| Stony Island avenue ..   | Sixty-fourth .....  | Ninety-seventh. .   | 21,648      | "           |
| S. Chicago avenue. ....  | Noble court. ....   | Ninety-fifth .....  | 18,480      | "           |
| S. Chicago av. (leased). | Vincennes avenue .. | Cottage Grove av..  | 2,640       | "           |
| Sixty seventh (leased).. | Cottage Grove av..  | Vernon avenue. .... | 2,640       | "           |
| Sixty-seventh .....      | Stony Island av ..  | Cottage Grove av..  | 5,280       | "           |
| Seventy-fifth .....      | Stony Island av ..  | C., R. I. & P. Ry.. | 13,728      | "           |
| Vernon avenue (leased).  | Sixty-seventh ..... | Sixty-third. ....   | 2,640       | "           |
| Vincennes av. (leased).. | Sixty-seventh ..... | S. Chicago avenue.  | 528         | "           |
| Wentworth avenue ....    | 116th .....         | 119th .....         | 1,584       | "           |
| Total .....              |                     |                     | 146,256     | 27.7 miles. |

## CHICAGO CITY RAILWAY COMPANY.

| STREET                 | FROM                | TO                   | Lineal feet | POWER     |
|------------------------|---------------------|----------------------|-------------|-----------|
| Archer avenue .....    | Clark .....         | State .....          | 970         | Horse.    |
| Archer avenue .....    | Twentieth .....     | Thirty-eighth ....   | 13,300      | Electric. |
| Ashland avenue .....   | Archer avenue ....  | Sixty-ninth .....    | 25,250      | "         |
| Butler .....           | Thirtieth .....     | Thirty-first .....   | 660         | Horse.    |
| Cottage Grove avenue.. | Twenty-second. .... | Seventy-first .....  | 32,497      | Cable.    |
| Cottage Grove avenue.. | Sixty-first .....   | Sixty-third .....    | 1,325       | Electric. |
| Clark .....            | Washington .....    | Twenty-second. ....  | 10,985      | "         |
| Eighteenth .....       | Wabash avenue ..    | Indiana avenue. .... | 870         | Horse.    |
| Forty-third .....      | Oakenwald avenue.   | State .....          | 7,856       | Electric. |
| Forty-seventh .....    | Lake avenue .....   | Western avenue ....  | 25,072      | "         |
| Fifty-first .....      | Grand boulevard ..  | State .....          | 2,620       | "         |
| Fifty-fifth .....      | Cottage Grove av..  | Lake avenue. ....    | 5,296       | Cable.    |
| Fifty-fifth .....      | Lake avenue. ....   | Jefferson .....      | 1,640       | "         |
| Hanover .....          | Twenth-ninth .....  | Thirtieth .....      | 660         | Horse.    |
| Hanover. ....          | Archer avenue. .... | Twenty-ninth .....   | 3,370       | Electric. |
| Halsted .....          | The river .....     | Sixty-ninth .....    | 29,245      | "         |
| Indiana avenue. ....   | Eighteenth .....    | Thirty-ninth .....   | 16,160      | Horse.    |
| Indiana avenue. ....   | Thirty-ninth .....  | Fifty-first .....    | 7,926       | Electric. |
| Lake .....             | State .....         | Wabash avenue ....   | 450         | Cable.    |
| Madison .....          | State .....         | Michigan avenue. .   | 880         | "         |
| Michigan avenue .....  | Madison .....       | Randolph .....       | 870         | "         |
| Pitney court. ....     | Thirty-first .....  | Archer avenue. ....  | 580         | Electric. |
| Randolph .....         | Wabash avenue ..    | Michigan avenue. .   | 460         | Cable.    |
| Root .....             | State. ....         | Union Stock Yards    | 5,303       | Electric. |
| State .....            | Lake .....          | Sixty-third .....    | 38,280      | Cable.    |
| State .....            | Root .....          | Forty-third .....    | 980         | Electric. |
| State .....            | Sixty-first .....   | Sixty-ninth .....    | 5,309       | "         |



## CHICAGO CITY RAILWAY COMPANY—CONTINUED.

| STREET                   | FROM                   | TO                     | Lineal feet | POWER        |
|--------------------------|------------------------|------------------------|-------------|--------------|
| Stanton avenue.....      | Thirty-fifth . . . .   | Thirty-ninth . . . .   | 2,649       | Horse.       |
| South Chicago avenue .   | Seventy-first . . . .  | Seventy-fifth . . . .  | 3,750       | "            |
| South Park court.....    | Sixtieth . . . . .     | Sixty-first . . . . .  | 570         | Electric.    |
| Sixty-first.....         | S. Park court . . . .  | Wentworth avenue..     | 10,921      | "            |
| Sixty-third.....         | Stony Island av . . .  | Cottage Grove av..     | 5,360       | "            |
| Sixty-third.....         | Wentworth avenue       | Ashland avenue . . .   | 9,262       | "            |
| Sixty-ninth.....         | State.....             | Leavitt . . . . .      | 14,596      | "            |
| Twenty-second . . . . .  | State.....             | Cottage Grove av..     | 1,820       | Cable.       |
| Twenty-second . . . . .  | State.....             | The river . . . . .    | 8,517       | Horse.       |
| Twenty-sixth.....        | Cottage Grove av..     | Halsted . . . . .      | 7,958       | Electric.    |
| Twenty-ninth . . . . .   | Hanover . . . . .      | Wallace . . . . .      | 890         | "            |
| Thirtieth . . . . .      | Hanover . . . . .      | Butler.....            | 380         | Horse        |
| Thirty-first . . . . .   | Lake Park avenue..     | Pitney court . . . . . | 13,744      | Electric.    |
| Thirty-fifth . . . . .   | Stanton avenue . . .   | Cottage Grove av..     | 1,050       | Horse.       |
| Thirty-fifth . . . . .   | Michigan avenue..      | Sacramento avenue      | 20,808      | Electric.    |
| Thirty-eighth . . . . .  | Archer avenue . . . .  | Kedzie avenue . . . .  | 4,770       | "            |
| Thirty-ninth . . . . .   | Cottage Grove av..     | Halsted . . . . .      | 10,638      | "            |
| Ullman . . . . .         | Thirty-first . . . . . | Thirty-fifth . . . . . | 2,657       | Horse        |
| Van Buren . . . . .      | Clark . . . . .        | Wabash avenue . . .    | 1,280       | "            |
| Vincennes avenue . . . . | Sixty-ninth . . . . .  | Eighty-first . . . . . | 8,414       | Electric.    |
| Wabash avenue . . . . .  | Lake.....              | Twenty-second....      | 11,900      | Cable.       |
| Wallace . . . . .        | Twenty-sixth . . . . . | Twenty-ninth . . . .   | 1,320       | Horse.       |
| Wallace . . . . .        | Twenty-ninth.....      | Root . . . . .         | 8,275       | Electric.    |
| Wentworth avenue.....    | Archer avenue . . . .  | Seventy-third . . . .  | 33,737      | "            |
| Total .....              |                        |                        | 418,680     | 79.28 miles. |

**NUMBER OF MILES OF STREETS OCCUPIED BY HORSE, CABLE  
ELECTRIC AND ELEVATED RAILWAYS IN SERVICE  
DECEMBER 31, 1895.**

| CORPORATIONS.                                | Cable.       | Horse.       | Electric.     | Elevated.    |             | Total.        |
|----------------------------------------------|--------------|--------------|---------------|--------------|-------------|---------------|
|                                              |              |              |               | Steam.       | Electric    |               |
| Chicago City Railway Co . . . . .            | 17.72        | 6.79         | 54.75         | .....        | .....       | 79.26         |
| West Chicago Street Railroad Co . . . . .    | 14.98        | 6.95         | 74.17         | .....        | .....       | 96.10         |
| North Chicago Street Railroad Co . . . . .   | 9.25         | 4.72         | 84.89         | .....        | .....       | 48.86         |
| Calumet Electric Street Railway Co . . . . . | .....        | .....        | 27.7          | .....        | .....       | 27.7          |
| Cicero & Proviso Electric Co . . . . .       | .....        | .....        | 8.5           | .....        | .....       | 8.5           |
| Chicago North Shore Street Railway . . . . . | .....        | .....        | 8.00          | .....        | .....       | 8.00          |
| South Chicago City Railway Co . . . . .      | .....        | .....        | 16.95         | .....        | .....       | 16.95         |
| Chicago General Railway Co . . . . .         | .....        | .....        | 8.61          | .....        | .....       | 8.61          |
| Chicago Electric Transit Co . . . . .        | .....        | .....        | 9.18          | .....        | .....       | 9.18          |
| North Chicago Electric Railway Co . . . . .  | .....        | .....        | 6.75          | .....        | .....       | 6.75          |
| Chicago & S. S. Rapid Transit . . . . .      | .....        | .....        | .....         | 8.21         | .....       | 8.21          |
| Lake Street Elevated Railroad Co . . . . .   | .....        | .....        | .....         | 6.75         | .....       | 6.75          |
| Metropolitan L . . . . .                     | .....        | .....        | .....         | .....        | 11.2        | 11.2          |
| *Northwestern Elevated . . . . .             | .....        | .....        | .....         | .....        | .....       | .....         |
| Ogden Street Railway Co . . . . .            | .....        | .....        | 6.00          | .....        | .....       | 6.00          |
| Chicago & Jefferson Urban Transit . . . . .  | .....        | .....        | 2.85          | .....        | .....       | 2.85          |
| North Side Electric Street Railway . . . . . | .....        | .....        | 2.84          | .....        | .....       | 2.84          |
| <b>Totals . . . . .</b>                      | <b>41.95</b> | <b>18.46</b> | <b>255.64</b> | <b>14.96</b> | <b>11.2</b> | <b>342.21</b> |

\* In course of construction.

In conclusion, I desire to bear testimony to the prompt and efficient aid rendered this Bureau by the Police Department in reporting violations and in the enforcement of the ordinances regulating the use of sidewalk space and streets.

I desire also to record my appreciation of the uniform courtesy extended me by your Department in the many perplexing incidents inseparable from official life, and to thank the heads of the several departments of this Bureau, and all subordinates for fidelity to duty.

Respectfully submitted,

R. J. MacDONALD,

*Superintendent of Streets.*



REPORT OF THE  
BUREAU OF  
**Street and Alley Cleaning**  
CITY OF CHICAGO



# BUREAU OF STREET AND ALLEY CLEANING

---

HON. W. D. KENT,  
*Commissioner of Public Works.*

DEAR SIR: Herewith I submit the report of this Bureau for the year ending December 31, 1895:

Following is a statement of the expenses of the Bureau: The total appropriation for the year was \$665,900. Of this amount, there was expended during the first three months, up to April 1, before this administration came in power, the sum of \$259,134.95, or more than one-third of the entire appropriation, leaving but \$406,765.05 to carry on the work for the remaining nine months.

## STREET CLEANING.

The total cost of street cleaning for the year was \$271,283.77; of this amount \$120,412.88 was expended during the first three months.

## REMOVAL OF GARBAGE.

The total cost of the removal of garbage for the year was \$385,218.54; of this amount \$98,282.93 was expended during the first three months.

## REMOVAL OF DEAD ANIMALS.

Total cost of the removal of dead animals for the year was \$37,500.00.

## WARD INSPECTORS.

Total cost of ward inspectors for the year was \$33,991.63.

## OFFICE SALARY.

Total amount of office salaries for the year was \$9,452.68.

The total amount of contracts by wards for nine months was \$240,014, or \$26,668.22 per month.

In averaging the expense of removing garbage it was found that each team cost \$4.23 per day. 50,326 teams cost \$213,145.78. The same number of teams at \$3.50 per day would cost \$176,141.00, showing a difference of \$37,004.78.

The receipts from dumps amounted to \$5,467.05. During the year, 6,132 miles of streets were cleaned at an expense of \$18.50 per mile, making a total of \$113,442.00.

The total expense to the City for removing snow was \$8,578.42.

During the year, 9,854 dead animals were removed from the City. Of this number 3,795 were horses, 93 cows, 5,714 dogs and 252 small animals.

Respectfully,

J. C. W. RHODE,  
*Superintendent.*

REPORT OF THE

**Bureau of Special Assessments**

CITY OF CHICAGO





# BUREAU OF SPECIAL ASSESSMENTS.

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HON. WM. D. KENT,

*Commissioner of Public Works.*

DEAR SIR:—I submit herewith, in tabular form, a statement of special assessments made in this department during the year 1895, with a summary of the estimated cost of the same; also the amount of special assessments made each year during the past thirty-five years.

Respectfully,

H. J. JONES,

*Sup't of Special Assessments.*

## WOODEN BLOCK PAVEMENT.

| No. of<br>Warrt. | IMPROVEMENT.          | NAME OF STREET.      | FROM                      | TO                   | AMOUNT.      |
|------------------|-----------------------|----------------------|---------------------------|----------------------|--------------|
| 19973            | C. F. and P.          | Perry avenue         | Milwaukee avenue          | Fullerton avenue     | \$ 19,670 37 |
| 19974            | G. and P.             | Ashland avenue       | West Lake                 | Indiana              | 2,972 55     |
| 19985            | G. and P.             | Union                | West Kinzie               | Milwaukee avenue     | 2,454 99     |
| 19986            | C. G. and P.          | Fox                  | Thirty-first              | Waterville           | 11,117 75    |
| 19987            | C. F. and P.          | Springer avenue      | Laurel                    | Waterville           | 16,048 88    |
| 19989            | C. G. and P.          | Lexington avenue     | Francisco                 | Kedzie avenue        | 84 00        |
| 19990            | C. G. and P.          | Warren avenue        | Leavitt                   | Pollock              | 127 60       |
| 19993            | C. F. and P.          | Francisco            | West Chicago avenue       | West Division        | 22,120 59    |
| 19997            | C. F. and P.          | Sixty-seventh        | Morgan                    | Loomis               | 21,240 70    |
| 19998            | G. and P.             | Desplaines           | West Lake                 | West Madison         | 16,587 84    |
| 20037            | C. F. and P.          | Frankfort            | Oakley avenue             | Western avenue       | 4,835 31     |
| 20092            | C. G. and P.          | Almond               | Taylor                    | Ashland              | 2,768 78     |
| 20094            | C. G. and P.          | Cottage Grove avenue | Fifty-second              | Fifty-ninth          | 28,666 53    |
| 20107            | C. G. and P.          | Mead                 | Fullerton avenue          | Logan                | 8,690 55     |
| 20175            | C. F. and P.          | Rockwell             | West Sixteenth            | Ogden avenue         | 11,340 25    |
| 20178            | C. F. and P.          | Thirty-third         | Ashland avenue            | Archer avenue        | 14,224 91    |
| 20182            | C. G. and P. (system) | Atlantic             | Forty-seventh-Fifty-fifth | Etc                  | 41,925 61    |
| 20191            | C. F. and P. (system) | St. George's court   | Prindville                | Etc                  | 55,726 04    |
| 20221            | C. G. and P.          | Farrell              | Archer avenue             | Thirty-first         | 6,384 08     |
| 20231            | C. F. and P. (system) | Humboldt-Mozart      | Palmer avenue             | Etc                  | 45,497 50    |
| 20242            | C. F. and P.          | Fairfield avenue     | West Sixteenth            | West Twenty-second   | 25,310 59    |
| 20243            | G. and P.             | Front                | Lessing                   | Sangamon             | 1,031 40     |
| 20244            | G. F. and P.          | Flournoy             | Washtenaw avenue          | California avenue    | 5,187 02     |
| 20297            | C. G. and P.          | Rhodes avenue        | Sixty third               | South Chicago avenue | 26,583 97    |
| 20298            | C. F. and P.          | Sixty-seventh        | Stony Island avenue       | South Park avenue    | 52,179 31    |
| 20318            | C. F. and P.          | Fillmore             | California avenue         | Kedzie avenue        | 21,497 61    |
| 20317            | C. F. and P.          | May                  | Fifty-ninth               | Sixty-third          | 28,310 72    |
| 20319            | C. F. and P.          | North Fifty-ninth    | North Clark               | Robey                | 2,090 02     |
| 20404            | C. G. and P.          | Herndon              | George                    | Wellington           | 27,500 00    |
| 20412            | G. and P.             | Milwaukee avenue     | West Chicago              | Ashland avenue       | 20,079 58    |
| 20418            | C. G. and P.          | Green                | West Lake                 | Ann                  | 15,702 24    |
| 20421            | G. and P.             | Randolph             | Halsted                   | Wells                | 4,897 21     |
| 20495            | G. and P.             | Superior             | North Clark               | Etc                  | 69,120 14    |
| 20507            | C. F. and P. (system) | Myrtle avenue        | Laurel avenue             | Lake                 | 16,809 73    |
| 20512            | C. G. and P.          | Crawford avenue      | Madison                   | Etc                  | 89,159 80    |
| 20519            | C. F. and P.          | California avenue    | Elston avenue             | Humboldt boulevard   |              |

|       |                           |                                  |                           |                                             |           |
|-------|---------------------------|----------------------------------|---------------------------|---------------------------------------------|-----------|
| 20523 | C. F. and P.              | Moore.....                       | Wood.....                 | P., C., C. & St. L. R. R.....               | 43,667 13 |
| 20536 | C. F. and P.              | West Indiana.....                | Monticello avenue.....    | Crawford avenue.....                        | 16,170 36 |
| 20577 | C. G. and P.              | Forty-seventh.....               | Cottage Grove avenue..... | Drexel boulevard.....                       | 4,781 72  |
| 20607 | C. F. and P.              | Howard avenue.....               | North avenue.....         | Humboldt avenue.....                        | 28,412 17 |
| 20608 | C. G. and P.              | LaSalle.....                     | Illinois.....             | Chicago avenue.....                         | 15,500 00 |
| 20611 | C. F. C. and P.           | Market.....                      | Pratt avenue.....         | Jackson avenue.....                         | 12,000 00 |
| 20614 | C. G. and P.              | Diversey.....                    | Kedzie avenue.....        | N. E. line of Milwaukee av.....             | 8,822 98  |
| 20617 | C. F. and P.              | Crossing.....                    | Paulina.....              | Right of way of C. & N. W. Ry.....          | 8,290 15  |
| 20626 | C. F. and P.              | Dreyer.....                      | Forty-second.....         | Fifty-first.....                            | 24,928 68 |
| 20698 | C. F. and P.              | Commercial.....                  | Paulina.....              | Terra Cotta.....                            | 4,941 54  |
| 20700 | C. F. and P.              | Irrving Park avenue.....         | Halsted.....              | 925 feet east.....                          | 6,386 32  |
| 20724 | C. F. and P. (system)     | Rascher (Ashland avenue).....    | E. Ravenswood Park.....   | Etc.....                                    | 43,885 75 |
| 20725 | C. G. and P.              | St. Lawrence avenue.....         | Sixty third.....          | South Chicago avenue.....                   | 37,739 44 |
| 20733 | C. F. and P.              | Olga.....                        | Grace.....                | Waveland avenue.....                        | 4,565 75  |
| 20738 | C. F. and P.              | Bradley place.....               | Halsted.....              | Orleans (North Market).....                 | 8,046 94  |
| 20739 | Platg. O. Wall, G. and P. | Ohio.....                        | Wells.....                | Halsted.....                                | 9,757 48  |
| 20772 | C. F. and P.              | Root.....                        | State.....                | Sixty-ninth.....                            | 37,765 27 |
| 20777 | C. F. and P.              | Center avenue.....               | Sixty-third.....          | 516 ft. E. of East line of Franklin st..... | 36,645 61 |
| 20784 | C. G. and P.              | Lant avenue.....                 | Ashland avenue.....       | Archer avenue.....                          | 13,500 00 |
| 20788 | C. G. and P.              | Thirty-third place.....          | Exchange avenue.....      | Green Bay avenue.....                       | 47,000 00 |
| 20791 | C. F. and P.              | Ninety-first.....                | Rockwell.....             | California avenue.....                      | 8,438 13  |
| 20813 | C. G. and P.              | Evergreen avenue.....            | Turner avenue.....        | Spaulding avenue.....                       | 2,345 22  |
| 20831 | C. G. and P.              | West Nineteenth.....             | Eddy.....                 | Newport avenue.....                         | 4,152 11  |
| 20832 | C. G. and P.              | Seminary avenue.....             | Milwaukee avenue.....     | Belmont avenue.....                         | 29,643 97 |
| 20870 | C. G. and P.              | Kedzie avenue.....               | West Madison.....         | Warren avenue.....                          | 3,003 00  |
| 20887 | C. G. and P.              | Fall.....                        | Ogden avenue.....         | West Twelfth.....                           | 3,998 54  |
| 20888 | Platg. O. Wall, G. and P. | Leavitt.....                     | Union avenue.....         | R. R. right of way in Wallace.....          | 4,578 16  |
| 20899 | C. G. and P.              | Fifty-fourth place.....          | Wabash avenue.....        | Michigan avenue.....                        | 2,739 37  |
| 20944 | C. G. and P.              | Twenty-fourth.....               | Wells.....                | Clark.....                                  | 3,988 55  |
| 20947 | C. G. and P.              | Ontario.....                     | Austin avenue.....        | Kinzle.....                                 | 2,692 69  |
| 20983 | C. G. and P.              | Elizabeth.....                   | West Harrison.....        | Vernon Park place.....                      | 1,466 54  |
| 20994 | C. G. and P.              | Fayette.....                     | California avenue.....    | Washtenaw avenue.....                       | 4,294 91  |
| 21018 | C. G. and P.              | West Superior.....               | West Park avenue.....     | West Randolph.....                          | 2,934 78  |
| 21019 | C. G. and P.              | North Fortieth court.....        | North Clark.....          | Wells.....                                  | 4,653 04  |
| 21028 | C. G. and P.              | Oak.....                         | Division.....             | Vedder.....                                 | 8,121 40  |
| 21041 | C. G. and P.              | Grace.....                       | Milwaukee avenue.....     | Elston avenue.....                          | 6,193 88  |
| 21069 | C. G. and P.              | Augusta.....                     | Racine avenue.....        | Perry.....                                  | 18,500 00 |
| 21130 | C. G. and P.              | Fletcher.....                    | West Chicago avenue.....  | Grand avenue.....                           | 5,778 23  |
| 21132 | C. G. and P.              | Washtenaw avenue.....            | West Huron.....           | Grand avenue.....                           | 2,179 55  |
| 21133 | C. F. and P.              | Wright court.....                | Leavitt.....              | Hoyle avenue.....                           | 5,277 96  |
| 21157 | C. F. and P.              | West Twenty-fifth (Coulter)..... | Lincoln avenue.....       | Perry.....                                  | 4,705 91  |
| 21158 | C. G. and P.              | Wellington avenue.....           |                           |                                             |           |

## WOODEN BLOCK PAVEMENT—CONTINUED.

| No. of War'nt. | IMPROVEMENT.              | NAME OF STREET.           | FROM                       | TO                                        | AMOUNT.        |
|----------------|---------------------------|---------------------------|----------------------------|-------------------------------------------|----------------|
| 21159          | C. G. and P.              | West Adams.               | Halsted.                   | Morgan                                    | \$ 5,461 24    |
| 21174          | C. F. and P.              | Moffat                    | Rockwell                   | Western avenue.                           | 8,669 82       |
| 21177          | C. F. and P.              | Moffat                    | Kedzie avenue.             | New Albany avenue                         | 2,873 14       |
| 21178          | C. F. and P.              | Homer                     | Kedzie avenue.             | Albany avenue.                            | 2,579 24       |
| 21179          | C. G. and P.              | Marshfield avenue.        | Lincoln                    | Cornelia                                  | 7,027 08       |
| 21181          | C. G. and P.              | Broom                     | Grand avenue.              | West Ohio                                 | 2,676 89       |
| 21182          | C. F. and P.              | West Twentieth place      | Peoria                     | E. line of R. R. right of way in Sangamon | 1,895 28       |
| 21183          | Plat. C. Walls, P. and P. | West Nineteenth place     | May                        | Fisk                                      | 1,598 89       |
| 21184          | C. F. and P.              | Hinman avenue.            | Western avenue.            | P., C., & St. L. R. right of way.         | 5,101 44       |
| 21185          | C. F. and P.              | North Forty-fourth avenue | Armistage avenue           | Humboldt avenue.                          | 11,000 00      |
| 21186          | C. G. and P.              | Eastwood avenue           | Robey                      | Leavitt                                   | 8,278 83       |
| 21190          | C. F. and P.              | Justine                   | Forty-ninth.               | Fifty-first                               | 9,500 00       |
| 21193          | C. G. and P.              | Whiting                   | Wells                      | East 214 feet.                            | 1,345 91       |
| 21221          | C. F. and P.              | Ada                       | Fiftieth                   | Fifty-first.                              | 5,000 00       |
| 21223          | C. F. and P.              | Elizabeth                 | Fiftieth                   | Fifty-first.                              | 5,000 00       |
| 21223          | C. G. and P.              | Lafin                     | Forty-ninth.               | Fifty-first.                              | 10,500 00      |
| 21236          | C. G. and P.              | Otto                      | Ashland.                   | C., E. & L. S. R. R.                      | 15,500 00      |
| 21273          | C. G. and P.              | Rhodes avenue             | Sixty-third                | South Chicago avenue.                     | 2,063 28       |
| 21313          | C. F. and P.              | West Twentieth.           | West lot line of Rockwell. | East lot line of Washtenaw av.            | 5,014 72       |
| 21316          | C. F. and P.              | Elizabeth.                | Forty-seventh              | Forty-ninth.                              | 10,500 00      |
| 21331          | C. G. and P.              | Newport avenue            | Lincoln avenue             | East Ravenswood Park                      | 8,167 56       |
| 21345          | G. and P.                 | Sixty-fifth               | State                      | C., R. I. & P. Ry.                        | 7,785 28       |
| 21346          | C. F. and P.              | Ewing avenue              | Ninety-second              | 102d                                      | 60,000 00      |
| Total.....     |                           |                           |                            |                                           | \$1,896,679 15 |

## ASPHALT PAVEMENT.

| No. of War'nt. | IMPROVEMENT. | NAME OF STREET. | FROM                   | TO                     | AMOUNT.      |
|----------------|--------------|-----------------|------------------------|------------------------|--------------|
| 24000          | C. G. and P. | Hamlin avenue   | West Sixteenth         | Douglas Park boulevard | \$ 18,302 27 |
| 24104          | C. G. and P. | Trumbull avenue | Douglas Park boulevard | West Twenty-sixth      | 79,556 41    |
| 24200          | C. G. and P. | Lexington       | Douglas Park boulevard | Crawford avenue        | 270 00       |

## MACADAMIZED PAVEMENTS.

| No.   | Improvement        | Name of Street    | From           | To                     | Amount        |
|-------|--------------------|-------------------|----------------|------------------------|---------------|
| 20405 | C. G. and P.       | Wabash avenue     | Sixty-sixth    | Seventy-first          | 45,059 20     |
| 20515 | C. F. and P.       | Harding avenue    | Chicago avenue | 2,581 feet south, etc. | 28,667 26     |
| 20516 | C. F. and P.       | South Park avenue | Sixty-third    | Sixty-seventh          | 30,405 48     |
| 20540 | C. G. and P.       | Greenwood avenue  | Western avenue | Oakley avenue          | 7,409 96      |
| 20589 | Gutting, G. and P. | Oakenwald avenue  | Fourth-third   | Forty-fourth place     | 9,500 00      |
| 20612 | C. G. and P.       | Madison           | Jefferson      | Center avenue          | 41,788 74     |
| 20774 | C. G. and P.       | Collins           | Albany avenue  | Kedzie avenue          | 6,455 78      |
| 20775 | C. G. and P.       | West Sixteenth    | Albany avenue  | Kedzie avenue          | 6,485 07      |
| 20779 | G. and P.          | Lake Park avenue  | Thirty-first   | Thirty-third           | 18,429 15     |
| 20785 | C. G. and P.       | Flournoy          | Albany avenue  | Central Park avenue    | 37,500 00     |
| 20866 | C. G. and P.       | West Congress     | West Fortieth  | West Forty-sixth       | 41,060 20     |
| 20869 | C. G. and P.       | Gladys avenue     | West Fortieth  | West Forty-sixth       | 41,111 45     |
| 21814 | C. F. and P.       | Evergreen avenue  | Rockwell       | California avenue      | 15,000 00     |
| 21886 | C. G. and P.       | West Congress     | Homan avenue   | Central Park avenue    | 15,215 68     |
| 21844 | G. and P.          | Carlisle place    | Albany avenue  | Kedzie avenue          | 6,565 20      |
| 21849 | G. and P.          | Lake Park avenue  | Thirty-first   | Thirty-third           | 1,496 42      |
| Total |                    |                   |                |                        | \$ 486,123 27 |

| No. of War'nt. | Improvement          | Name of Street   | From                | To                      | Amount      |
|----------------|----------------------|------------------|---------------------|-------------------------|-------------|
| 19980          | C. F. and M.         | Hope avenue      | Sixty-third         | Sixty-fourth            | \$ 3,496 09 |
| 20176          | C. F. and M.         | Wilton avenue    | Grace               | Sheridan road           | 3,597 26    |
| 20227          | C. G. and M. (typem) | Southport avenue | Balmoral avenue     | North Fifty-ninth, etc. | 32,758 39   |
| 20241          | C. G. and M.         | Center           | North Clark         | Southport avenue        | 4,989 43    |
| 20318          | C. F. and M.         | Leland avenue    | Pemberton           | Sheridan road           | 9,277 57    |
| 20406          | C. G. and M.         | LaSalle          | Sixty-first         | Sixty-third             | 5,847 98    |
| 20415          | C. G. and M.         | Seventy-fourth   | Yates avenue        | Bond avenue             | 12,813 48   |
| 20420          | C. G. and M.         | Ellis avenue     | Forty-third         | Forty-sixth             | 9,973 44    |
| 20510          | C. F. and M.         | North court      | Evanson avenue      | Linden                  | 1,860 60    |
| 20526          | C. F. and M.         | Kenmore avenue   | Lawrence avenue     | Montrose boulevard      | 19,707 90   |
| 20583          | C. G. and M.         | Forty-sixth      | Ellis avenue        | Greenwood avenue        | 3,073 59    |
| 20587          | C. F. and M.         | Forty eighth     | St. Lawrence avenue | Vincennes avenue        | 3,000 00    |
| 20609          | C. F. and M.         | State            | Sixty-eighth        | Seventy-fifth           | 41,873 83   |
| 20624          | C. G. and M. (typem) | Seventy first    | Etc                 | Etc                     | 55,623 20   |
| 20773          | C. F. and M.         | Cornelia         | Halsted             | Sheffield avenue        | 8,070 90    |
| 20873          | C. F. and M. (typem) | Francis          | Swift               | Victor                  | 15,968 04   |

## MACADAMIZED PAVEMENTS—CONTINUED.

| No. of War't. | IMPROVEMENT. | NAME OF STREET.    | FROM                     | TO                            | AMOUNT.       |
|---------------|--------------|--------------------|--------------------------|-------------------------------|---------------|
| 20942         | C. F. and M. | Melrose            | Lake Shore drive         | East line of lot 89, block 1  | \$ 1,512 74   |
| 20943         | C. F. and M. | Pine Grove avenue  | Irving Park avenue       | 190 ft. north of Byron        | 3,000 00      |
| 20945         | C. F. and M. | Twenty-third       | Central Park boulevard   | Homan avenue                  | 6,000 00      |
| 20946         | C. F. and M. | South Park avenue  | Sixtieth                 | Sixty-third                   | 8,040 00      |
| 21131         | C. F. and M. | Montrose boulevard | Evanston avenue          | Chicago & Evanston R. R.      | 3,034 86      |
| 21175         | C. F. and M. | Stratford place    | Present eastern terminus | West line of Lake Shore drive | 742 18        |
| 21176         | C. F. and M. | Hawthorne place    | Eastern terminus         | Lake Shore drive              | 1,028 18      |
| 21180         | C. F. and M. | Roscoe             | Present eastern terminus | West line of Lake Shore drive | 1,766 56      |
| 21191         | C. G. and M. | Sixty-second       | Madison avenue           | Ill. Cent. R. R.              | 1,284 68      |
|               | Total        |                    |                          |                               | \$ 257,029 35 |

## VITRIFIED BRICK PAVEMENT.

| No. of War't. | IMPROVEMENT. | NAME OF STREET.  | FROM             | TO                  | AMOUNT.       |
|---------------|--------------|------------------|------------------|---------------------|---------------|
| 20133         | G. and P.    | Illinois         | North Clark      | Wells               | \$ 5,365 87   |
| 20174         | C. G. and P. | Milwaukee avenue | West Lake        | West Chicago avenue | 50,861 95     |
| 20230         | C. F. and P. | Ashland avenue   | Fifty-ninth      | Sixty-third         | 29,576 18     |
| 20411         | G. and P.    | LaSalle          | Randolph         | Madison             | 3,150 99      |
| 20538         | C. F. and P. | Forty-eighth     | Vincennes avenue | Grand Boulevard     | 7,000 00      |
| 20708         | C. G. and P. | Paulina          | Bertea           | Graceland avenue    | 11,003 05     |
| 20871         | G. and P.    | Peck court       | State            | Michigan avenue     | 7,361 52      |
|               | Total        |                  |                  |                     | \$ 114,889 06 |

## GRANITE BLOCK PAVEMENT.

| No. of War't. | IMPROVEMENT           | NAME OF STREET | FROM                 | TO               | AMOUNT.     |
|---------------|-----------------------|----------------|----------------------|------------------|-------------|
| 20336         | Paving, & Walls, & P. | Engle          | Desplaines           | Union            | \$ 8,924 10 |
| 20941         | C. G. and P.          | Twenty-seventh | Cottage Grove avenue | Ill. Cent. R. R. | 7,930 40    |

|            |                                |                  |                             |                                   |              |
|------------|--------------------------------|------------------|-----------------------------|-----------------------------------|--------------|
| 21315      | C. F. and P. ....              | North Water..... | West line of St. Clair..... | East line of west half of lot 11. | 20,896 80    |
| 21340      | Plat. G. Walls, G. and P. .... | Jefferson .....  | Randolph .....              | Madison.....                      | 14,410 13    |
| 21348      | G. and P. ....                 | Eagle .....      | Union.....                  | Halsted.....                      | 5,144 55     |
| Total..... |                                |                  |                             |                                   | \$ 51,795 98 |

## ALLEYS—WOODEN BLOCK PAVEMENT.

| No. of<br>Warrant | IMPROVEMENT                            | FROM                                              | BETWEEN                                        | AMOUNT.     |
|-------------------|----------------------------------------|---------------------------------------------------|------------------------------------------------|-------------|
| 19968             | C. G. and P. ....                      | Jackson to Van Buren.....                         | Francisco and Stevens.....                     | \$ 1,879 87 |
| 19992             | C. G. and P. ....                      | Sibley to east terminus .....                     | Harrison and Vernon Park place .....           | 478 50      |
| 19995             | C. G. and P. ....                      | Leavitt to Oakley avenue .....                    | Wilmot and Milwaukee avenue.....               | 2,005 51    |
| 20180             | C. F. and P. ....                      | Grenshaw to Twelfth .....                         | Spaulding and Homan avenue .....               | 2,997 11    |
| 20183             | C. G. and P. ....                      | Forty-fourth to Forty-fifth .....                 | Greenwood and Sidney avenues .....             | 1,114 65    |
| 20184             | C. F. and P. ....                      | Larabee to Willow .....                           | Howe and Center .....                          | 4,876 98    |
| 20185             | C. G. and P. ....                      | Running south from Myrtle place and west to ..... | Halsted, Block 2, School Section addition..... | 493 08      |
| 20186             | C. G. and P. ....                      | Block 28, School Section addition.....            |                                                | 831 58      |
| 20187             | C. G. and P. ....                      | Block 40, Carpenter's addition.....               |                                                | 341 64      |
| 20188             | G. and P. (H., E. and W.) .....        | Block 80, Carpenter's addition.....               |                                                | 919 44      |
| 20189             | G. and P. (H. and S.) .....            | Block 48, Carpenter's addition.....               |                                                | 710 91      |
| 20240             | C. G. and P. ....                      | Henry to Newberry avenue.....                     | West Fourteenth and Halsted.....               | 985 19      |
| 20245             | G. F. and P. ....                      | Hamilton to West Jackson .....                    | Leavitt and West Adams .....                   | 1,528 15    |
| 20248             | C. G. and P. ....                      | Canal to Clinton .....                            | Randolph and Washington .....                  | 596 04      |
| 20249             | G. and P. (H., E. and W. and S.) ..... | Block 29, Carpenter's addition.....               | Fortieth and Dearborn .....                    | 963 67      |
| 20270             | C. G. and P. ....                      | Thirty-ninth to Armour avenue.....                | Milwaukee avenue and Wilmot.....               | 1,251 99    |
| 20391             | C. G. and P. ....                      | Oakley avenue to Western avenue.....              | Dayton and Halsted .....                       | 2,028 29    |
| 20400             | C. G. and P. ....                      | North avenue to 475 ft. north .....               | Franklin and Market.....                       | 1,408 65    |
| 20401             | C. F. and P. ....                      | Locust to Pearson .....                           | Goethe and 411 ft. north .....                 | 2,874 18    |
| 20402             | C. G. and P. ....                      | State to Dearborn.....                            | Webster and Garfield avenue.....               | 1,922 84    |
| 20403             | C. G. and P. ....                      | Seminary to Clifton .....                         | Sheffield and Bissell .....                    | 1,993 28    |
| 20414             | C. G. and P. ....                      | Willow to Clay .....                              | Wentworth and Fifth avenues .....              | 205 16      |
| 20417             | C. F. and P. ....                      | Twenty-eighth place to Swift place .....          | Adams and Quincy .....                         | 1,431 52    |
| 20489             | C. G. and P. ....                      | First east of Halsted.....                        | Etc .....                                      | 383 10      |
| 20517             | C. G. and P. ....                      | Saugamon to Morgan.....                           |                                                | 432 55      |
| 20535             | C. F. and P. ....                      | White House place to Thirty-first .....           |                                                | 1,518 37    |
| 20584             | C. F. and P. ....                      | St. Louis avenue to Homan avenue .....            | Monroe and Adams .....                         | 1,987 21    |
| 20585             | C. F. and P. ....                      | St. Louis avenue to Central Park avenue.....      | Madison and Monroe .....                       | 2,827 04    |
| 20595             | C. F. and P. ....                      | Willow to Orchard .....                           | North avenue and Burling.....                  | 4,527 29    |
| 20596             | C. G. and P. ....                      | Western avenue to Campbell avenue.....            | Harrison and Flournoy.....                     | 1,603 44    |



## ALLEYS—WOODEN BLOCK PAVEMENT—CONTINUED.

| No. of War't. | IMPROVEMENT  | FROM                                   | BETWEEN                            | AMOUNT.      |
|---------------|--------------|----------------------------------------|------------------------------------|--------------|
| 20778         | C. G. and P. | Forty-fourth to Forty-fifth            | Union and Sherman                  | \$ 81 25     |
| 20794         | C. G. and P. | West Madison to West Washington        | May and Ann                        | 548 11       |
| 20804         | C. F. and P. | Vine to Orchard                        | Willow and North avenue            | 1,340 00     |
| 20830         | C. G. and P. | Division to Scott                      | State and Astor                    | 685 56       |
| 20848         | C. G. and P. | Forty-fourth to Forty-fifth            | Berkeley and Greenwood avenues     | 1,845 70     |
| 20849         | C. F. and P. | Forty-fifth to Forty-sixth             | Indiana and Prairie avenues        | 1,618 88     |
| 20851         | Paving       | N. from Randolph to E. and N. terminus | Market and Franklin                | 520 81       |
| 20853         | C. G. and P. | Oakley to 100 ft. west                 | Adams and Jackson                  | 267 89       |
| 20868         | C. G. and P. | Forty-first to Forty-second            | Grand boulevard and Calumet avenue | 226 56       |
| 20906         | C. G. and P. | Seminary avenue to Osgood              | Garfield avenue and Center         | 1,882 90     |
| 20965         | C. G. and P. | West Jackson to West Van Buren         | Lincoln and Honore                 | 1,055 39     |
| 21006         | C. G. and P. | Western avenue to Campbell avenue      | Flournoy and West Polk             | 8,171 57     |
| 21021         | C. G. and P. | Sheffield avenue to Osgood             | Center and Garfield avenues        | 1,859 98     |
| 21032         | C. G. and P. | Wrightwood avenue to Seminary place    | Racine and Seminary avenues        | 1,545 60     |
| 21038         | C. G. and P. | Noble to Elizabeth                     | Austin and Grand avenues           | 2,639 56     |
| 21068         | C. G. and P. | North avenue to Seminary place         | North Clark and LaSalle avenue     | 717 75       |
| 21193         | C. G. and P. | Franklin to Market                     | Superior and Huron                 | 968 33       |
| 21211         | C. G. and P. | Sixteenth to Eighteenth                | Michigan and Indiana avenues       | 2,046 42     |
| 21235         | C. F. and P. | St. Louis avenue to Homan avenue       | Madison and Monroe                 | 2,120 10     |
| 21282         | C. F. and P. | West Polk to Harvard                   | Kedzie and Albany avenues          | 1,641 17     |
| 21319         | C. F. and P. | Flournoy to Taylor                     | Oakley and Claremont avenues       | 8,088 96     |
|               | Total        |                                        |                                    | \$ 74,579 81 |

## ALLEYS—GRANITE BLOCK AND VITRIFIED BRICK PAVEMENTS.

| No. of War't. | IMPROVEMENT   | FROM                                                                                             | BETWEEN                                                         | AMOUNT.     |
|---------------|---------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------|
| 20892         | *G. and P.    | Dearborn to State                                                                                | Lake and South Water                                            | \$ 1,175 94 |
| 20896         | †Paving       | Michigan avenue to Central avenue                                                                | Lake and South Water                                            | 549 09      |
| 20861         | †C. G. and P. | A point 100 ft. W. of W. lot line of LaSalle to a point 80 ft. E. of E. lot line of Fifth avenue | Randolph and Washington                                         | 505 00      |
| 21880         | *C. G. and P. | First north of Fifty-third                                                                       | From E. line of Lake avenue to W. line of I. C. R. right of way | 429 87      |
|               | Total         |                                                                                                  |                                                                 | \$ 2,658 40 |

\* Granite Block.

† Vitrified Brick.

## OPENING AND WIDENING.

| No. of<br>Warr't. | IMPROVEMENT.         | NAME OF STREET.                 | FROM                                                                     | TO                  | AMOUNT.       |
|-------------------|----------------------|---------------------------------|--------------------------------------------------------------------------|---------------------|---------------|
| 19965             | Opening              | Ninety first                    | State                                                                    | Canal               | \$ 10,188 45  |
| 19976             | Opening              | Kenmore avenue                  | Lawrence avenue                                                          | Sulzer              | 208 80        |
| 19983             | Opening              | Alley between Sacramento avenue | Lawrence, Francisco, Lexington and                                       | Flournoy            | 2,905 00      |
| 19084             | Opening and widening | Indiana avenue                  | Ninety ninth                                                             | 115th               | 37,583 00     |
| 20105             | Opening              | Owasco                          | H. and S. center line of lot 12, blk. 6, Rockwell's addition to Chicago. | Stanley avenue      | 2,088 50      |
| 20124             | Opening              | Eightieth                       | E. line of Sec. 81, T. 38, R. 15.                                        | Lake Michigan       | 8,744 99      |
| 20173             | Opening              | Sixty-fifth court               | Stewart avenue                                                           | Honore              | 15,384 85     |
| 20792             | Opening              | Alley                           | N. ½ lot 8, blk. 1, of Rockwell's                                        | addition to Chicago | 773 75        |
| 21850             | Opening              | Prairie avenue                  | Garfield boulevard                                                       | Sixty-first         | 78,567 00     |
|                   | Total                |                                 |                                                                          |                     | \$ 156,843 84 |

## STREETS—CURBING AND FILLING.

| No. of<br>Warr't. | NAME OF STREET. | FROM             | TO             | AMOUNT.     |
|-------------------|-----------------|------------------|----------------|-------------|
| 20575             | Grace           | Southport avenue | Ashland avenue | \$ 2,696 90 |
| 20701             | Arch            | Archer avenue    | Lyman          | 7,081 06    |
|                   | Total           |                  |                | \$ 9,727 96 |

## WATER SUPPLY PIPES.

| No. of<br>Warr't. | NAME OF STREET.                   | FROM                   | TO                              | AMOUNT.   |
|-------------------|-----------------------------------|------------------------|---------------------------------|-----------|
| 19966             | Douglas Park boulevard (N. S.)    | Sawyer avenue          | Troy                            | \$ 108 00 |
| 19967             | Fillmore                          | Douglas Park boulevard | Crawford avenue                 | 40 50     |
| 19970             | Central Park blvd. (E. and S. S.) | West Kinzie            | Kedzie avenue                   | 5,429 15  |
| 19981             | Diversey avenue                   | Humboldt avenue        | Maplewood avenue                | 46 80     |
| 19994             | Bonney avenue                     | Douglas Park boulevard | 150 ft. south of West Sixteenth | 2,181 48  |
| 20001             | Kellogg avenue                    | West Twenty-second     | C., B. & Q. R. R.               | 2,236 46  |
| 20002             | Hawley avenue                     | West Twenty-second     | C., B. & Q. R. R.               | 2,509 02  |

## WATER SUPPLY PIPES—CONTINUED.

| No. of<br>W'r'nt. | NAME OF STREET.                   | FROM                             | TO                                  | AMOUNT.     |
|-------------------|-----------------------------------|----------------------------------|-------------------------------------|-------------|
| 20003             | West Forty-fourth                 | West Twenty-second               | C., B. & Q. R. R.                   | \$ 2,992 38 |
| 20004             | West Forty-third                  | West Twenty-second               | C., B. & Q. R. R.                   | 2,227 06    |
| 20005             | Ogden avenue                      | West Forty-second                | West Forty-fourth.                  | 1,980 08    |
| 20008             | West Fiftyeth                     | Charlotte                        | Armitage avenue.                    | 3,676 08    |
| 20009             | 118th                             | Stewart avenue                   | Canal                               | 389 63      |
| 20010             | Canal                             | 115th                            | 119th                               | 3,701 53    |
| 20011             | West Forty-eighth (Jefferson av.) | Humboldt avenue.                 | Charlotte avenue                    | 1,652 64    |
| 20012             | Charlotte avenue.                 | West Forty-eighth                | West Fiftyeth                       | 1,799 88    |
| 20054             | Alley south of Garfield boulevard | Center avenue.                   | Loomis                              | 1,486 34    |
| 20055             | Ada                               | Garfield boulevard               | Fifty-seventh                       | 1,598 06    |
| 20056             | Ninety-third                      | Luella avenue                    | Stoney Island avenue.               | 7,012 96    |
| 20173             | West Fiftyfifth place             | Humboldt avenue.                 | Armitage avenue                     | 1,769 14    |
| 20197             | Trumbull avenue                   | 300 ft. south of West Sixteenth. | Douglas Park boulevard              | 2,370 16    |
| 20198             | West Twenty-second                | West Fortyeth                    | West Forty-fourth                   | 3,710 00    |
| 20209             | Flournoy                          | Albany avenue                    | Kedzie avenue                       | 734 58      |
| 20203             | Theodosia                         | Milwaukee avenue                 | Central avenue                      | 3,243 60    |
| 20204             | Spaulding avenue.                 | 100 ft. south of Twenty-fourth   | West Twenty-sixth.                  | 1,543 36    |
| 20205             | Sawyer avenue                     | 250 ft. south of Twenty-fourth   | West Twenty-sixth.                  | 1,870 58    |
| 20206             | Flournoy                          | 325 ft. west of Kedzie avenue.   | Central Park avenue                 | 3,134 42    |
| 20207             | Thirty-eighth                     | St. Louis avenue.                | Central Park avenue                 | 880 86      |
| 20271             | Clinton                           | 118th                            | 119th                               | 827 86      |
| 20272             | 100th                             | Michigan avenue.                 | State                               | 1,469 16    |
| 20278             | Ninety-ninth place                | Michigan avenue                  | State                               | 1,338 78    |
| 20274             | Ninety-ninth                      | Indiana avenue                   | State                               | 3,004 00    |
| 20275             | Elizabeth avenue                  | Eighty-first.                    | Eighty-third                        | 1,875 14    |
| 20276             | Eighty-third                      | Anthony avenue                   | Elizabeth avenue.                   | 1,991 20    |
| 20277             | Carmen avenue.                    | East Ravenswood Park             | 510 ft. west of Ashland avenue.     | 980 36      |
| 20313             | Grace                             | Albany avenue.                   | Sacramento avenue.                  | 988 68      |
| 20314             | Albany avenue                     | Grace.                           | Elston avenue                       | 3,088 84    |
| 20351             | Loomis                            | Ninetieth                        | Ninety-fifth                        | 4,407 48    |
| 20353             | Hilliard avenue.                  | 104th                            | 107th                               | 2,783 42    |
| 20353             | Pine.                             | 40 ft. west of Wright.           | Alley east of East Ravenswood Park. | 570 38      |
| 20354             | North Fifty-ninth.                | Ashland avenue.                  | Clark                               | 412 03      |
| 20355             | Center                            | North Clark.                     | Southport avenue.                   | 1,209 28    |
| 20356             | Sixty-seventh                     | Halsted                          | Peoria                              | 770 62      |
| 20357             | Champlain avenue                  | Sixty-seventh                    | Sixth-eighth                        | 1,013 86    |

|       |                            |                                        |                           |          |
|-------|----------------------------|----------------------------------------|---------------------------|----------|
| 20358 | Park avenue.....           | 75 ft. west of West Forty-fifth        | West Forty-sixth.....     | 721 86   |
| 20359 | St. Louis avenue.....      | 200 ft. south of West Twenty-fourth    | West Twenty-sixth.....    | 2,520 68 |
| 20360 | Avenue L.....              | 104th.....                             | 105th.....                | 941 28   |
| 20361 | Avenue L.....              | 101st.....                             | 108d.....                 | 2,057 46 |
| 20362 | Avenue L.....              | Ninety-eighth.....                     | 100th.....                | 1,796 70 |
| 20363 | Avenue L.....              | Ninety-fifth.....                      | Ninety-seventh.....       | 1,965 22 |
| 20364 | Ewing avenue.....          | Ninety-fifth.....                      | Ninety-eighth.....        | 1,965 22 |
| 20365 | Eighty-ninth.....          | Muskegon avenue.....                   | Manistee avenue.....      | 2,788 74 |
| 20366 | Homan avenue.....          | Fifty-first.....                       | North 600 feet.....       | 588 00   |
| 20367 | Emerald avenue.....        | Eightieth.....                         | Eighty-first.....         | 1,159 64 |
| 20368 | Walnut.....                | West Ravenswood Park.....              | Robey.....                | 1,020 78 |
| 20369 | Balmoral avenue.....       | West Ravenswood Park.....              | Robey.....                | 1,689 64 |
| 20370 | Summerdale avenue.....     | West Ravenswood Park.....              | Robey.....                | 1,689 64 |
| 20371 | Wolcott.....               | Walnut.....                            | Balmoral avenue.....      | 862 84   |
| 20372 | Pine.....                  | West Ravenswood Park.....              | Robey.....                | 1,689 64 |
| 20373 | State.....                 | Seventieth.....                        | Seventy-fifth.....        | 5,258 66 |
| 20374 | Walnut.....                | Ninety-seventh.....                    | Ninety-ninth.....         | 1,975 84 |
| 20375 | Sixty-seventh.....         | Morgan.....                            | May.....                  | 1,120 42 |
| 20376 | Sixty-seventh.....         | Center avenue.....                     | Loomis.....               | 1,612 26 |
| 20377 | Sixty-eighth.....          | LaFayette avenue.....                  | Perry avenue.....         | 480 86   |
| 20384 | Forty-second court.....    | West Twenty-sixth.....                 | West Twenty-eighth.....   | 914 98   |
| 20385 | Robey.....                 | Fifty-third.....                       | Fifty-fourth.....         | 1,159 64 |
| 20386 | 118th.....                 | South Canal.....                       | Jefferson.....            | 925 88   |
| 20387 | Seeley avenue.....         | Fifty-fourth.....                      | 130 ft. north.....        | 284 08   |
| 20388 | Fifty-fourth.....          | Robey.....                             | Seeley avenue.....        | 402 80   |
| 20389 | Jeffrey avenue.....        | Seventy-ninth.....                     | Eighty-third.....         | 4,560 12 |
| 20390 | Central avenue.....        | Seventy-ninth.....                     | Eighty-third.....         | 4,105 88 |
| 20413 | Wabash avenue.....         | Sixty-ninth.....                       | Seventy-first.....        | 1,864 54 |
| 20416 | North Fifty-ninth.....     | Robey.....                             | East Ravenswood Park..... | 1,880 63 |
| 20423 | Elizabeth.....             | Alley south of Garfield boulevard..... | Fifty seventh.....        | 1,481 88 |
| 20425 | Rice.....                  | Washington avenue.....                 | Rockwell.....             | 1,034 56 |
| 20424 | Iowa.....                  | Rockwell.....                          | Washtenaw avenue.....     | 941 25   |
| 20425 | Dreyer.....                | Fifty first.....                       | Fifty-third.....          | 1,848 64 |
| 20426 | Congress Park (W. S.)..... | Van Buren.....                         | Harrison.....             | 708 08   |
| 20427 | Congress Park (E. S.)..... | Congress.....                          | Harrison.....             | 882 53   |
| 20429 | Collins.....               | Kedzie avenue.....                     | Albany avenue.....        | 726 10   |
| 20430 | Poplar.....                | 650 ft. north of Stearns.....          | Archer avenue.....        | 848 00   |
| 20439 | Linden avenue.....         | Lawrence avenue.....                   | Argyle.....               | 1,552 96 |
| 20438 | Thirty-seventh.....        | Gage.....                              | Laurel.....               | 450 50   |
| 20434 | Vernon avenue.....         | Sixty-third.....                       | Sixty-seventh.....        | 3,972 88 |
| 20435 | West Fortieth place.....   | West Twenty-sixth.....                 | West Thirty-first.....    | 3,840 38 |
| 20436 | Belden avenue.....         | West Forty-eighth.....                 | West Forty-ninth.....     | 914 79   |

## WATER SUPPLY PIPES—CONTINUED.

| No. of<br>Ward. | NAME OF STREET.                | FROM                           | TO                                      | AMOUNT.     |
|-----------------|--------------------------------|--------------------------------|-----------------------------------------|-------------|
| 20437           | Rockwell .....                 | West Twenty-second             | Alley south of Parmelee..               | \$ 1,862 10 |
| 20438           | West Erie .....                | West Forty-eighth              | West Fiftyth .....                      | 1,882 56    |
| 20439           | Avers avenue .....             | West Sixteenth                 | West Nineteenth .....                   | 1,900 68    |
| 20440           | Hamlin avenue .....            | Prince avenue .....            | Frederick .....                         | 1,008 06    |
| 20455           | Greenwood avenue .....         | Irving Park boulevard          | 400 ft. north of Everett.               | 1,198 86    |
| 20468           | Wood .....                     | Sixty-second                   | Sixty-third .....                       | 1,185 26    |
| 20469           | South Forty-second avenue      | Harrison .....                 | Greshaw .....                           | 3,221 84    |
| 20470           | Archer avenue .....            | Lawndale avenue .....          | Hamlin avenue .....                     | 1,296 88    |
| 20471           | Hamlin avenue .....            | Forty-seventh                  | Forty-ninth .....                       | 2,028 84    |
| 20472           | South Ridgeway avenue .....    | Forty-seventh                  | Forty-ninth .....                       | 1,687 70    |
| 20473           | Lawndale avenue .....          | Forty-seventh                  | Forty-ninth .....                       | 1,687 70    |
| 20474           | North Forty-first avenue ..... | Belle Plaine avenue .....      | Irving Park avenue .....                | 1,081 20    |
| 20490           | Ashland avenue .....           | Bryn Mawr avenue .....         | 125 ft. north of Edgewater avenue.      | 1,178 40    |
| 20491           | Edgewater avenue .....         | Ashland avenue .....           | Hamilton .....                          | 1,182 96    |
| 20492           | Hollywood avenue .....         | Ashland avenue .....           | Hamilton .....                          | 1,182 96    |
| 20493           | Bryn Mawr avenue .....         | Clark .....                    | Hamilton .....                          | 1,657 84    |
| 20494           | Olive avenue .....             | Ashland avenue .....           | Hamilton .....                          | 1,182 96    |
| 20504           | West Eighteenth .....          | Western avenue .....           | 100 ft. west of Rockwell .....          | 1,047 38    |
| 20506           | Carpenter road .....           | North branch Chicago river     | Carpenter court .....                   | 6,760 68    |
| 20514           | West Adams .....               | South Forty-sixth avenue ..... | South Forty-seventh avenue .....        | 1,620 78    |
| 20520           | Diversity avenue .....         | Milwaukee avenue .....         | Hamlin avenue .....                     | 4,184 88    |
| 20525           | North Harding avenue .....     | Bloomingtondale road .....     | 425 ft. north of North avenue .....     | 1,262 46    |
| 20539           | Ridgeway avenue .....          | Milwaukee avenue .....         | George .....                            | 1,317 58    |
| 20541           | Balmoral avenue .....          | Southport avenue .....         | North Clark .....                       | 1,378 00    |
| 20546           | Mara .....                     | Addison .....                  | Nellie .....                            | 914 78      |
| 20547           | Muskegon avenue .....          | 103d .....                     | 104th .....                             | 1,808 00    |
| 20548           | 103d .....                     | Muskegon avenue .....          | Notre Dame avenue .....                 | 788 64      |
| 20549           | West Taylor .....              | Campbell avenue .....          | Rockwell .....                          | 893 58      |
| 20550           | Forty-eighth .....             | St. Lawrence avenue .....      | Vincennes avenue .....                  | 707 10      |
| 20551           | Luella avenue .....            | Seventy-fifth .....            | Seventy-seventh .....                   | 1,708 42    |
| 20555           | Laurel avenue .....            | Diversity avenue .....         | Garden avenue .....                     | 1,779 74    |
| 20556           | Berteau avenue .....           | Lincoln avenue .....           | Robey .....                             | 986 86      |
| 20557           | Washington avenue .....        | Sixty-second .....             | Sixty-third .....                       | 1,262 46    |
| 20558           | Le Moynes .....                | North Spaulding avenue .....   | Kedzie avenue .....                     | 750 48      |
| 20559           | Trumbull avenue .....          | West Twenty-seventh            | West Thirtieth .....                    | 3,901 63    |
| 20560           | North Homan avenue .....       | Costello avenue .....          | 435 ft. north of Fullerton avenue ..... | 3,341 12    |

|       |                               |                                          |                                  |          |
|-------|-------------------------------|------------------------------------------|----------------------------------|----------|
| 20561 | Flournoy.....                 | California avenue.....                   | Washtenaw avenue.....            | 821 50   |
| 20563 | South Fortieth avenue.....    | West Twenty sixth.....                   | West Twenty-seventh.....         | 940 36   |
| 20568 | Millard avenue.....           | West Sixteenth.....                      | Douglas Park boulevard.....      | 1,773 88 |
| 20564 | Troy.....                     | West Nineteenth.....                     | West Twenty-first.....           | 914 78   |
| 20566 | Sixty-third place.....        | Jackson avenue.....                      | 800 ft. east.....                | 416 58   |
| 20566 | Sixty-third.....              | Ashland avenue.....                      | 110 ft. east of Lafin.....       | 1,099 18 |
| 20567 | Sixty-third.....              | Bishop.....                              | Elizabeth.....                   | 8,002 98 |
| 20568 | North Fortieth avenue.....    | West Byron.....                          | West Grace.....                  | 832 10   |
| 20569 | North Fortieth avenue.....    | Center.....                              | Irving Park avenue.....          | 1,521 10 |
| 20570 | North Forty-third court.....  | 200 ft. north of Irving Park avenue..... | 300 ft. south of West Byron..... | 1,907 80 |
| 20571 | Saginaw avenue.....           | Seventy-ninth.....                       | Eighty first.....                | 2,044 74 |
| 20572 | South Forty-fourth court..... | West Fifteenth.....                      | West Sixteenth.....              | 914 78   |
| 20573 | West Sixteenth.....           | South Forty-fourth avenue.....           | South Forty-fourth court.....    | 487 60   |
| 20594 | Fifty-ninth.....              | Stony Island avenue.....                 | Rosalie court.....               | 988 08   |
| 20613 | Moore.....                    | Robey.....                               | Lincoln.....                     | 983 08   |
| 20630 | Grand avenue.....             | Robinson avenue.....                     | Austin avenue.....               | 8,068 86 |
| 20631 | Vail.....                     | Sixty-third.....                         | Sixty-seventh.....               | 4,550 78 |
| 20632 | Selwyn avenue (Division)..... | Linden avenue.....                       | St. Charles avenue.....          | 2,237 00 |
| 20662 | West Congress.....            | Central Park avenue.....                 | Homan avenue.....                | 1,550 78 |
| 20663 | Springfield avenue.....       | West Sixteenth.....                      | West Nineteenth.....             | 1,988 56 |
| 20664 | St. Lawrence avenue.....      | Sixty-fifth.....                         | Sixty-seventh.....               | 1,935 56 |
| 20665 | McAuley avenue.....           | Dickens avenue.....                      | Armitage avenue.....             | 827 86   |
| 20668 | North Forty-eighth court..... | Cortland avenue.....                     | Armitage avenue.....             | 941 28   |
| 20687 | South Robey.....              | 200 ft. north of Ninety-fourth.....      | Ninety-fifth.....                | 1,217 94 |
| 20688 | Springfield avenue.....       | 100 ft. north of Grand avenue.....       | West North avenue.....           | 2,577 92 |
| 20727 | West Eddy.....                | North Fortieth avenue.....               | Avondale avenue.....             | 8,299 78 |
| 20734 | Paulina.....                  | West Fifty-ninth.....                    | West Sixty-third.....            | 3,595 52 |
| 20785 | North Forty-eighth court..... | Armitage avenue.....                     | Dickens avenue.....              | 801 36   |
| 20786 | Argyle.....                   | 575 ft. east of Clark.....               | Evanson avenue.....              | 2,577 92 |
| 20787 | North Sawyer avenue.....      | Central Park boulevard.....              | West Kinzie.....                 | 699 60   |
| 20743 | Dunning.....                  | Southport avenue.....                    | High.....                        | 487 60   |
| 20744 | Pine Grove avenue.....        | Durham avenue.....                       | 160 ft. east.....                | 400 68   |
| 20745 | Irving Park avenue.....       | Irving Park avenue.....                  | 180 ft. north of Byron.....      | 510 92   |
| 20746 | West Harrison.....            | Lake Michigan.....                       | Haisted.....                     | 1,137 88 |
| 20747 | Talman avenue.....            | South Forty-third avenue.....            | South Forty-fourth avenue.....   | 920 08   |
| 20758 | Artesian avenue.....          | Eighty-first.....                        | Eighty-third.....                | 1,991 74 |
| 20781 | Colorado avenue.....          | Eighty-first.....                        | Eighty-third.....                | 1,991 74 |
| 20784 | Eighty-second.....            | South Fortieth avenue.....               | South Forty-third avenue.....    | 8,315 64 |
| 20785 | Eighty-second place.....      | Maplewood avenue.....                    | Talman avenue.....               | 636 00   |
| 20786 | Campbell avenue.....          | Maplewood avenue.....                    | Talman avenue.....               | 636 00   |
| 20767 | California avenue.....        | Eighty-first.....                        | Eighty-third.....                | 1,991 74 |
|       |                               |                                          |                                  | 2,394 90 |

## WATER SUPPLY PIPES—CONTINUED.

| No. of<br>W'nt. | NAME OF STREET.           | FROM                           | TO                              | AMOUNT.     |
|-----------------|---------------------------|--------------------------------|---------------------------------|-------------|
| 20768           | Fairfield avenue          | Eighty first.                  | Eighty-third.                   | \$ 1,991 74 |
| 20769           | Washenaw avenue.          | Eighty first.                  | Eighty-third.                   | 1,991 74    |
| 20770           | Michigan avenue.          | 50 ft. south of Seventy-first. | Seventy-fifth.                  | 3,519 20    |
| 20780           | Greenwood avenue.         | Irving Park boulevard.         | 400 ft. north of Everett.       | 1,198 86    |
| 20782           | Eighty first.             | Western avenue.                | California avenue.              | 1,864 84    |
| 20783           | Eighty-first place        | Talman avenue.                 | Maplewood avenue.               | 638 00      |
| 20837           | West Forty-third          | Rockwell.                      | California avenue.              | 2,028 72    |
| 20838           | Washenaw avenue.          | West Forty-third.              | West Forty-fourth.              | 872 88      |
| 20839           | Aberdeen                  | West Seventy-third.            | West Seventy-fourth.            | 864 96      |
| 20840           | Fiftieth                  | Grand boulevard.               | 220 ft. east                    | 315 88      |
| 20841           | Fiftieth.                 | Vincennes avenue.              | Champlain avenue.               | 1,074 84    |
| 20842           | North Forty fifth avenue. | Lawrence avenue.               | 310 ft. north of Leland avenue. | 438 84      |
| 20843           | 109th.                    | Bensley avenue.                | Calhoun avenue.                 | 464 28      |
| 20844           | Colfax avenue             | Seventy-ninth                  | Eighty-first.                   | 1,920 72    |
| 20845           | Seventy-ninth.            | Colfax avenue                  | Marquette avenue.               | 1,287 90    |
| 20846           | Homan avenue              | Irving Park avenue.            | Montrose avenue.                | 8,896 34    |
| 20847           | Strong                    | North Fiftieth avenue.         | North Fifty-third avenue.       | 2,607 60    |
| 20860           | Western avenue.           | Seventy-first.                 | Eighty-third.                   | 12,322 50   |
| 20927           | Charles                   | Hough.                         | 108d.                           | 197 50      |
| 20928           | Paulina                   | West Fifty-second.             | West Fifty-fourth               | 2,655 04    |
| 20929           | Hoyle avenue.             | West Forty-eighth.             | West Forty-ninth                | 1,335 72    |
| 20930           | South Forty-first court.  | West Twenty-sixth.             | West Twenty-eighth.             | 1,498 12    |
| 20931           | West Twenty-sixth         | South Fortieth avenue.         | South Forty-second avenue.      | 2,566 94    |
| 20932           | North Forty third avenue. | Hirsch                         | North avenue.                   | 2,807 92    |
| 20933           | South Talman avenue       | West Forty-third               | West Forty-fourth.              | 1,018 36    |
| 20934           | Hamlin avenue.            | Hirsch                         | Potomac avenue                  | 1,580 26    |
| 20935           | Wabash avenue.            | Seventy-first.                 | Seventy-third.                  | 2,827 68    |
| 20936           | Turner avenue.            | West Twenty-fifth              | West Twenty-sixth               | 1,218 40    |
| 20938           | Fleetwood avenue.         | 190 ft. north of Blanche       | West North avenue.              | 666 36      |
| 20990           | West 104th place          | Wood.                          | Prospect avenue.                | 2,371 88    |
| 20991           | Michigan avenue.          | Ninety-ninth                   | 50 ft. north of 100th place     | 1,954 84    |
| 20992           | West Division             | Grand avenue.                  | Hamlin avenue.                  | 8,177 47    |
| 21005           | Troy                      | Irving Park avenue.            | West Grace.                     | 2,608 54    |
| 21007           | LaSalle                   | West 118th.                    | West 119th.                     | 1,890 60    |
| 21008           | Ada                       | West Fifty-seventh.            | West Fifty-ninth.               | 2,359 32    |
| 21009           | North Sawyer avenue       | West Ohio                      | West Huron.                     | 1,085 00    |

|       |                           |                                 |                                       |          |
|-------|---------------------------|---------------------------------|---------------------------------------|----------|
| 21010 | North Sawyer avenue       | West Chicago avenue             | 280 ft. north of West Huron           | 482 00   |
| 21011 | West Huron                | Trumbull avenue                 | St. Louis avenue                      | 569 50   |
| 21012 | Ashland avenue            | Foster avenue                   | 75 ft. north of Winona avenue         | 449 92   |
| 21013 | West Twenty-fifth         | South Fortieth avenue           | South Fortieth court                  | 1,018 16 |
| 21014 | Monticello avenue         | North avenue                    | LeMoine                               | 1,172 80 |
| 21015 | Carroll avenue            | North Albany avenue             | 180 ft. W. of North Sacramento avenue | 645 56   |
| 11048 | South Forty-first avenue  | West Twenty-sixth               | West Thirtieth                        | 2,715 72 |
| 21049 | South Forty-second avenue | West Twenty-ninth               | West Thirty-first                     | 2,786 92 |
| 21050 | South Forty-second avenue | West Sixteenth                  | West Eighteenth                       | 898 88   |
| 21053 | Central Park avenue       | Milwaukee avenue                | Diversey avenue                       | 1,638 76 |
| 21184 | North Robey               | Winnemac avenue                 | Foster avenue                         | 1,372 70 |
| 21185 | West Huron                | North Sawyer avenue             | North Homan avenue                    | 1,285 78 |
| 21186 | Goodspeed                 | West Fifty-ninth                | West Sixty-third                      | 8,531 92 |
| 21187 | Wood                      | West Fifty-ninth                | West Sixty-second                     | 8,058 10 |
| 21188 | West Grace                | Kedzie avenue                   | Troy                                  | 898 00   |
| 21160 | Spaulding avenue          | West Twenty-sixth               | West Thirtieth                        | 2,706 18 |
| 21163 | Albany avenue             | West Chicago avenue             | West Huron                            | 829 28   |
| 21164 | Champlain avenue          | Burnside avenue                 | Ninety-fifth                          | 928 19   |
| 21165 | Kenmore avenue            | Lawrence avenue                 | Evanston avenue                       | 2,584 28 |
| 21166 | La Salle                  | Ninety-ninth                    | 108d                                  | 3,482 10 |
| 21167 | Escanaba avenue           | Ninety-sixth                    | Ninety-seventh                        | 793 23   |
| 21168 | Montrose avenue           | Fortieth avenue                 | Central Park avenue                   | 3,379 28 |
| 21169 | North Fortieth avenue     | West Berteau avenue             | Montrose avenue                       | 1,646 18 |
| 21202 | Seventy-third             | St. Lawrence avenue             | Rhodes avenue                         | 481 14   |
| 21203 | St. Lawrence avenue       | 230 ft. south of Seventy-fourth | Seventy-fifth                         | 604 74   |
| 21204 | Ingleside avenue          | 200 ft. north of Seventy-fourth | P. Ft. W. & C. Ry                     | 290 89   |
| 21205 | Seventy-fourth            | Drexel avenue                   | Ellis avenue                          | 885 46   |
| 21206 | Ellis avenue              | Seventy-fourth                  | Seventy-fifth                         | 867 89   |
| 21207 | Justine                   | West Sixty-first                | West Sixty-third                      | 1,763 84 |
| 21208 | Jeffrey avenue            | Seventieth                      | Seventy-first                         | 1,050 73 |
| 21209 | Jeffrey avenue            | Seventy-fifth                   | Seventy-ninth                         | 4,172 16 |
| 21210 | Evans avenue              | Forty-ninth                     | Fiftieth                              | 1,035 28 |
| 21212 | North Troy                | West Roscoe                     | Elston avenue                         | 890 05   |
| 21213 | Costello avenue           | North Fortieth avenue           | C., M. & St. P. Ry                    | 442 00   |
| 21214 | North Fortieth avenue     | 75 ft. south of Cortland        | 75 ft. south of Bloomingdale road     | 1,492 06 |
| 21215 | North Fifty-eighth avenue | Fullerton avenue                | Grand avenue                          | 2,445 56 |
| 21216 | Hamlin avenue             | West Chicago avenue             | 300 ft. south of Iowa                 | 472 80   |
| 21217 | Lawndale avenue           | West Ohio                       | West Indiana                          | 761 80   |
| 21218 | Hirsch                    | Kedzie avenue                   | Westward 175 ft.                      | 898 74   |
| 21219 | Le Moine                  | Kedzie avenue                   | North Spaulding avenue                | 730 84   |
| 21220 | West Wilson avenue        | North Forty-seventh avenue      | North Forty-seventh court             | 503 80   |
| 21224 | North Fifty-seventh court | Armitage avenue                 | Grand avenue                          | 1,282 80 |



## WATER SUPPLY PIPES—CONTINUED.

| No. of<br>Warr't. | NAME OF STREET.                 | FROM                                       | TO                                          | AMOUNT.       |
|-------------------|---------------------------------|--------------------------------------------|---------------------------------------------|---------------|
| 21225             | North Fifty-seventh avenue..... | Armitage avenue.....                       | Grand avenue.....                           | \$ 1,126 78   |
| 21226             | North Fifty-sixth court.....    | Armitage avenue.....                       | Grand avenue.....                           | 1,047 28      |
| 21227             | North Forty-fourth avenue.....  | Cortland avenue.....                       | Armitage avenue.....                        | 916 83        |
| 21228             | North Forty-seventh court.....  | West Sunnyside avenue.....                 | West Wilson avenue.....                     | 914 77        |
| 21229             | Cortland avenue.....            | Lawdale avenue.....                        | C., M. & St. P. Ry.....                     | 1,630 28      |
| 21230             | North Spaulding avenue.....     | Grand avenue.....                          | Hirsch.....                                 | 8,403 66      |
| 21231             | North Fifty-ninth avenue.....   | Fullerton avenue.....                      | Grand avenue.....                           | 1,963 06      |
| 21232             | North Fifty-eighth court.....   | Fullerton avenue.....                      | Grand avenue.....                           | 2,063 76      |
| 21233             | North Fifty-seventh avenue..... | Fullerton avenue.....                      | Grand avenue.....                           | 2,338 86      |
| 21234             | North Fifty-seventh court.....  | Fullerton avenue.....                      | Grand avenue.....                           | 2,258 86      |
| 21244             | Emerald avenue.....             | 120 ft. southwest of Eighty-ninth.....     | West Ninetieth.....                         | 664 48        |
| 21245             | Sixty-first.....                | State.....                                 | South Park avenue.....                      | 2,960 08      |
| 21246             | Sacramento avenue.....          | Diversey avenue.....                       | West Wellington.....                        | 1,918 60      |
| 21247             | Elizabeth avenue.....           | Seventy-ninth.....                         | Eighty-first.....                           | 1,912 24      |
| 21250             | North Forty-fourth court.....   | Lawrence avenue.....                       | 825 ft. north of West Sunnyside avenue..... | 2,177 24      |
| 21257             | North Fifty-sixth avenue.....   | Armitage avenue.....                       | West Wrightwood avenue.....                 | 6,366 36      |
| 21258             | West Wrightwood avenue.....     | North Fifty-fourth avenue.....             | North Fifty-sixth avenue.....               | 1,948 28      |
| 21259             | Fullerton avenue.....           | North Fifty-fourth avenue.....             | North Fifty-sixth avenue.....               | 1,948 28      |
| 21270             | North Fifty-ninth court.....    | Fullerton avenue.....                      | Grand avenue.....                           | 1,861 36      |
| 21271             | North Sixtieth avenue.....      | Fullerton avenue.....                      | Grand avenue.....                           | 1,910 12      |
| 21274             | Irving Park avenue.....         | Fullerton avenue.....                      | North Forty-fifth court.....                | 400 80        |
| 21275             | North Fifty-sixth court.....    | Fullerton avenue.....                      | Grand avenue.....                           | 2,444 36      |
| 21276             | West Addison.....               | 185 ft. west of North Fortieth avenue..... | North Forty-first court.....                | 1,465 98      |
| 21278             | North Lawdale avenue.....       | Division.....                              | Augusta.....                                | 1,787 34      |
| 21284             | South Seely avenue.....         | West Forty-eighth.....                     | West Forty-ninth.....                       | 939 19        |
| 21285             | Seventy-second avenue.....      | Seventy-third.....                         | Seventy-fifth.....                          | 1,718 26      |
| 21286             | Greenwood avenue.....           | Woodlawn avenue.....                       | Ill. Cent. R. R.....                        | 606 80        |
| 21308             | North Fifty-second avenue.....  | Fullerton avenue.....                      | Grand avenue.....                           | 4,217 74      |
| 21309             | North Fifty-fifth avenue.....   | Fullerton avenue.....                      | West Wrightwood avenue.....                 | 1,939 94      |
| 21310             | North Fifty-fourth court.....   | Fullerton avenue.....                      | West Wrightwood avenue.....                 | 1,939 94      |
| 21317             | Trumbull avenue.....            | Governor's Park way.....                   | Central Park boulevard.....                 | 684 05        |
| 21318             | Beach avenue.....               | North Homan avenue.....                    | Spaulding avenue.....                       | 908 44        |
| 21327             | Evergreen avenue.....           | North Kedzie avenue.....                   | North Homan avenue.....                     | 1,744 76      |
| 21328             | West Ohio.....                  | Central Park boulevard.....                | Albany avenue.....                          | 601 65        |
| 21339             | Woodlawn avenue.....            | Seventy-fourth.....                        | South Chicago avenue.....                   | 797 35        |
| 21341             | Prairie avenue.....             | Sixty-first.....                           | Sixty-third.....                            | 1,461 36      |
| Total.....        |                                 |                                            |                                             | \$ 441,977 03 |

## WATER SERVICE PIPES.

| No. of<br>Warrant | NAME OF STREET.              | FROM                                | TO                        | AMOUNT.     |
|-------------------|------------------------------|-------------------------------------|---------------------------|-------------|
| 19069             | Escanaba avenue .....        | Eighty-seventh .....                | Ninety-first .....        | \$ 1,984 50 |
| 19071             | Forty-third .....            | Goodspeed .....                     | Western avenue .....      | 5,368 00    |
| 19076             | Wallace avenue .....         | Belmont avenue .....                | Humboldt boulevard .....  | 2,685 00    |
| 19088             | Western avenue .....         | West Chicago avenue .....           | North avenue .....        | 511 25      |
| 19096             | North Fifty-ninth .....      | Clark .....                         | Robey .....               | 680 00      |
| 20022             | West Congress .....          | West Fortieth .....                 | West Forty-sixth .....    | 8,196 00    |
| 20023             | Wolcott .....                | Webster avenue .....                | North Fifty-ninth .....   | 604 50      |
| 20024             | Palmer .....                 | Webster avenue .....                | North Fifty-ninth .....   | 448 50      |
| 20025             | Francis .....                | Charlton .....                      | Southport avenue .....    | 595 00      |
| 20026             | Vernon avenue .....          | Irving Park boulevard .....         | Everett avenue .....      | 630 00      |
| 20027             | Mead .....                   | Fullerton avenue .....              | Logan avenue .....        | 1,190 00    |
| 20032             | Flournoy .....               | Kedzie avenue .....                 | Central Park avenue ..... | 2,873 00    |
| 20033             | Kedzie avenue .....          | Milwaukee avenue .....              | Belmont avenue .....      | 8,553 00    |
| 20034             | Congress .....               | Homan avenue .....                  | Central Park avenue ..... | 805 00      |
| 20035             | Carroll avenue .....         | 950 ft. west of Kedzie avenue ..... | Homan avenue .....        | 192 50      |
| 20080             | West Forty-second .....      | Lake .....                          | West Twelfth .....        | 2,040 00    |
| 20081             | Carlisle place .....         | Kedzie avenue .....                 | Albany avenue .....       | 455 00      |
| 20082             | Carroll avenue .....         | Francisco .....                     | Sacramento avenue .....   | 612 50      |
| 20083             | Fairfield avenue .....       | West Sixteenth .....                | West Twenty second .....  | 1,697 50    |
| 20084             | Sixty-eighth .....           | Halsted .....                       | Sangamon .....            | 192 50      |
| 20085             | Green .....                  | Sixty-seventh .....                 | Sixty-ninth .....         | 612 50      |
| 20085             | Evans avenue .....           | Sixty-third .....                   | Sixty-ninth .....         | 3,872 00    |
| 20086             | Fillmore .....               | Crawford avenue (Fortieth) .....    | Douglas boulevard .....   | 1,822 50    |
| 20097             | Bishop .....                 | Forty-ninth .....                   | Sixty-third .....         | 7,568 00    |
| 20102             | Seventy-third .....          | Stony Island avenue .....           | Ill. Cent. R. R. .....    | 1,872 00    |
| 20103             | Collins .....                | Kedzie avenue .....                 | Albany avenue .....       | 542 50      |
| 20104             | West Sixteenth .....         | Kedzie avenue .....                 | Albany avenue .....       | 455 00      |
| 20123             | Campbell avenue .....        | Twelfth .....                       | Viaduct .....             | 922 50      |
| 20194             | Vernon avenue .....          | Sixty-ninth .....                   | Seventy-third .....       | 2,720 00    |
| 20219             | Douglas Park boulevard ..... | Colorado avenue .....               | Albany avenue .....       | 195 75      |
| 20250             | Elias .....                  | Archer avenue .....                 | Lyman .....               | 227 50      |
| 20251             | May .....                    | Sixty-eighth .....                  | Sixty-ninth .....         | 680 00      |
| 20252             | Sixty-seventh .....          | Halsted .....                       | Sangamon .....            | 815 00      |
| 20253             | Clara place .....            | Western avenue .....                | Perry avenue .....        | 245 00      |
| 20254             | Bradley place .....          | Rokeby .....                        | Halsted .....             | 227 50      |
| 20255             | Attica .....                 | Laurel avenue .....                 | Auburn avenue .....       | 227 50      |

## WATER SERVICE PIPES—CONTINUED.

| No. of<br>Ward. | NAME OF STREET.  | FROM                   | TO                     | AMOUNT.   |
|-----------------|------------------|------------------------|------------------------|-----------|
| 20256           | James avenue     | Laurel avenue          | Auburn avenue          | \$ 297 50 |
| 20257           | Francisco        | Van Buren              | West Twelfth           | 315 00    |
| 20258           | Flournoy         | Albany avenue          | Central Park avenue    | 630 00    |
| 20259           | Spaulding avenue | Madison                | Jackson boulevard      | 385 00    |
| 20260           | Fifty-first      | Lincoln                | Leavitt                | 1,870 00  |
| 20261           | Twenty-fifth     | Rockwell               | Lawndale avenue        | 822 50    |
| 20262           | West Fortieth    | Lake                   | Chicago avenue         | 787 50    |
| 20267           | Hinman           | Western avenue         | Pan Handle Ry.         | 227 50    |
| 20287           | Arch             | Lyman                  | Archer avenue          | 350 00    |
| 20288           | Adams            | Seventy-third          | Seventy-fifth          | 1,037 00  |
| 20290           | Fairfield avenue | Chicago avenue         | Augusta                | 507 50    |
| 20291           | Evergreen avenue | Rockwell               | California avenue      | 490 00    |
| 20292           | Green            | Sixty-sixth            | Sixty-seventh          | 297 50    |
| 20293           | Sixty-seventh    | Morgan                 | Loomis                 | 1,993 25  |
| 20294           | Evanston avenue  | Montrose boulevard     | North Fifty-ninth      | 7,203 00  |
| 20300           | West Van Buren   | West Fortieth          | West Forty-sixth       | 3,774 00  |
| 20301           | Halsted          | Montrose boulevard     | Windett avenue         | 1,690 00  |
| 20302           | Hamlin avenue    | Douglas Park boulevard | West Sixteenth         | 1,380 00  |
| 20303           | Trumbull avenue  | Ohio                   | Central Park boulevard | 490 00    |
| 20304           | Congress         | Van Buren              | Harrison               | 840 00    |
| 20305           | Kimball avenue   | Armitage avenue        | Milwaukee avenue       | 4,454 00  |
| 20307           | Rockwell         | West Twelfth           | West Twenty second     | 1,795 00  |
| 20479           | Taylor           | California avenue      | Kedzie avenue          | 753 50    |
| 20480           | Taylor           | Campbell avenue        | California avenue      | 682 50    |
| 20481           | West Twentieth   | Rockwell               | Washtenaw avenue       | 297 50    |
| 20482           | Sawyer avenue    | Twenty-second          | Twenty-fourth          | 392 50    |
| 20483           | Nutt avenue      | Seventieth             | Seventy-fifth          | 887 50    |
| 20484           | Vernon avenue    | Everett                | Center                 | 1,645 00  |
| 20485           | Jefferson avenue | Seventy-first          | Seventy-fifth          | 1,032 50  |
| 20486           | Forty-eighth     | Robey                  | Leavitt                | 822 50    |
| 20487           | Hickling avenue  | Halsted                | Center                 | 455 00    |
| 20496           | West Fortieth    | Pennock boulevard      | Fullerton avenue       | 1,380 00  |
| 20497           | Seventy-fifth    | Stony Island avenue    | Ill. Cent. R. R.       | 1,578 50  |
| 20498           | Twelfth          | West Fortieth          | West Forty-sixth       | 4,352 00  |
| 20508           | State            | Sixty-eighth           | Seventy-fifth          | 6,051 25  |
| 20521           | 120th            | Halsted                | Clinton                | 770 00    |

|            |                                   |                            |                                           |               |
|------------|-----------------------------------|----------------------------|-------------------------------------------|---------------|
| 20610      | St. Louis avenue.....             | Ogden avenue.....          | Twenty-sixth.....                         | 3,587 00      |
| 20718      | Irving Park boulevard.....        | Halsted.....               | Lake shore.....                           | 1,082 50      |
| 20719      | Fifty-seventh.....                | State.....                 | South Park avenue.....                    | 245 00        |
| 20720      | Forty-eighth.....                 | Grand boulevard.....       | St. Lawrence avenue.....                  | 350 00        |
| 20721      | Atlantic.....                     | Forty-third.....           | Goshen.....                               | 1,172 50      |
| 20722      | Sixty-third place.....            | Maryland avenue.....       | First alley east of Drexel boulevard..... | 180 00        |
| 20723      | Pine Grove avenue.....            | Irving Park boulevard..... | 180 ft. north of Byron avenue.....        | 451 00        |
| 20856      | Eighty-ninth.....                 | South Chicago avenue.....  | Erie avenue.....                          | 180 00        |
| 20 888     | LaSalle.....                      | Sixty-first.....           | Sixty-third.....                          | 507 50        |
| 20889      | Fiftieth.....                     | Ashland avenue.....        | Morgan.....                               | 234 00        |
| 21016      | Maryland (Jackson) avenue.....    | Sixty-third.....           | 639 ft. south.....                        | 324 00        |
| 21017      | Monticello (Franklin) avenue..... | Frederick avenue.....      | West North avenue.....                    | 1,172 50      |
| 21020      | West Superior.....                | Washtenaw avenue.....      | California avenue.....                    | 576 00        |
| 21170      | Ninety-first.....                 | Commercial.....            | Green Bay avenue.....                     | 1,053 00      |
| 21171      | Carroll avenue.....               | North Albany avenue.....   | North Sacramento avenue.....              | 792 00        |
| 21237      | Thomas.....                       | North Leavitt.....         | North Wood.....                           | 342 00        |
| 21238      | Rhine.....                        | Milwaukee avenue.....      | Myrtle avenue.....                        | 153 00        |
| 21239      | Kenmore avenue.....               | Lawrence avenue.....       | Evanston avenue.....                      | 1,207 50      |
| 21240      | St. Lawrence avenue.....          | Seventy-third.....         | Seventy-fifth.....                        | 1,470 00      |
| 21241      | Indiana avenue.....               | Sixty-second.....          | Sixty-third.....                          | 700 00        |
| 21242      | Shell avenue.....                 | Seventy-third.....         | Seventy-fifth.....                        | 1,015 00      |
| 21243      | Berlin.....                       | California avenue.....     | Myrtle avenue.....                        | 702 00        |
| 21248      | Cromwell.....                     | Milwaukee avenue.....      | Fullerton avenue.....                     | 171 00        |
| 21280      | High.....                         | Fullerton avenue.....      | Dunning.....                              | 450 00        |
| 21281      | Jackson avenue.....               | Seventy-second.....        | Seventy-fifth.....                        | 910 00        |
| 21307      | North Ashland avenue.....         | Balmoral avenue.....       | Winnemac avenue.....                      | 1,887 00      |
| 21321      | Drexel avenue.....                | Seventy-third.....         | Seventy-fifth.....                        | 1,172 50      |
| Total..... |                                   |                            |                                           | \$ 127,901 50 |

## SEWERS.

| No. of<br>Warr't. | IMPROVEMENT.        | NAME OF STREET.             | FROM                     | TO                          | AMOUNT.   |
|-------------------|---------------------|-----------------------------|--------------------------|-----------------------------|-----------|
| 19063             | V. T. P.....        | Carroll avenue.....         | St. Louis avenue.....    | Eastern terminus.....       | \$ 481 61 |
| 20098             | V. T. P.....        | West Taylor.....            | Central Park avenue..... | Lawndale avenue.....        | 1,505 98  |
| 20100             | V. T. P.....        | Douglas Park boulevard..... | Twelfth.....             | Alley west of Harrison..... | 1,108 08  |
| 20126             | B. and V. T. P..... | Washington avenue.....      | 101st.....               | 107th.....                  | 11,603 17 |
| 20127             | V. T. P.....        | Harding avenue.....         | Grand avenue.....        | Division.....               | 1,519 50  |

## SEWERS—CONTINUED.

| No. of<br>Ward. | IMPROVEMENT.    | NAME OF STREET.                   | FROM                                          | TO                                                                                            | AMOUNT.     |
|-----------------|-----------------|-----------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------|-------------|
| 20150           | B. and V. T. P. | North Water.                      | St. Clair.                                    | A point opp. center of lots 11 & 36, C. D. & C. Co., Sub. of original Water lots 35 & 42 etc. | \$ 3,866 36 |
| 20177           | Sewer system.   | Wentworth avenue.                 | Ninety-ninth, Halsted, 103d, Armitage avenue. | Fullerton avenue.                                                                             | 111,818 65  |
| 20179           | V. T. P.        | Crawford avenue.                  | Douglas Park boulevard.                       | West Harrison.                                                                                | 5,214 18    |
| 20180           | V. T. P.        | Colorado avenue.                  | West Fourteenth, West Sixteen.                | nth, etc.                                                                                     | 1,733 50    |
| 20181           | Sewer system.   | Hamlin avenue.                    | Central Park avenue.                          | Alley east of St. Louis avenue.                                                               | 16,469 95   |
| 20192           | V. T. P.        | West Congress.                    | Thirty-third.                                 | Bross avenue.                                                                                 | 1,812 58    |
| 20193           | V. T. P.        | Champlain.                        | avenue, etc.                                  |                                                                                               | 1,364 24    |
| 20208           | Sewer system.   | Forty-seventh, Burtis, Hoyne.     | etc.                                          |                                                                                               | 11,717 30   |
| 20209           | Sewer system.   | Hoard, Fifteenth, Van Osdel,      | Fifty-first.                                  | Grand Trunk Ry. junction.                                                                     | 7,057 10    |
| 20210           | V. T. P.        | Paulina.                          | Montrose boulevard.                           | Irving Park boulevard.                                                                        | 1,811 51    |
| 20212           | Brick.          | Western avenue.                   | Forty-fifth.                                  | 380 ft. north.                                                                                | 6,220 29    |
| 20223           | V. T. P.        | Alley west of Grand boulevard.    | Seventy-third.                                | Seventy-fifth.                                                                                | 70 14       |
| 20224           | V. T. P.        | Brooks avenue.                    | Forty-eighth place.                           | Forty-ninth.                                                                                  | 275 52      |
| 20226           | V. T. P.        | Alley east of Grand boulevard.    | Charlton.                                     | Southport avenue.                                                                             | 442 12      |
| 20228           | V. T. P.        | Ridge avenue.                     | Irving Park boulevard.                        | Northern terminus.                                                                            | 1,505 98    |
| 20247           | V. T. P.        | Geraldine avenue.                 | Western avenue.                               | 50 ft. west of Leavitt.                                                                       | 2,102 97    |
| 20263           | Sewer system.   | Sixty-fifth, Justine, Lafin, etc. |                                               |                                                                                               | 24,318 70   |
| 20315           | V. T. P.        | Montrose boulevard.               |                                               |                                                                                               | 2,749 40    |
| 20320           | Sewer system.   | Greenwood avenue, etc.            |                                               |                                                                                               | 385 00      |
| 20381           | V. T. P.        | Sixty-fifth.                      | Langley avenue.                               | 190 ft. west of west line of Langley avenue.                                                  | 352 67      |
| 20382           | V. T. P.        | Leavitt.                          | Irving Park avenue.                           | Belle Plaine avenue.                                                                          | 951 72      |
| 20383           | V. T. P.        | Oakley avenue.                    | Irving Park avenue.                           | Belle Plaine avenue.                                                                          | 1,049 05    |
| 20419           | V. T. P.        | Carroll avenue.                   | Francisco.                                    | Sacramento avenue.                                                                            | 382 50      |
| 20466           | V. T. P.        | West Taylor.                      | Campbell avenue.                              | W. line S. E. ¼, etc. Sec. 13, T. 39, R. 13.                                                  | 1,099 55    |
| 20457           | V. T. P.        | Fifty-fourth place.               | Greenwood avenue.                             | Ellis avenue.                                                                                 | 584 82      |
| 20458           | V. T. P.        | Fifty-fifth.                      | Cornell avenue.                               | Ill. Cent. R. R.                                                                              | 571 08      |
| 20459           | V. T. P.        | Weage avenue.                     | Kedzie avenue.                                | Sheridan.                                                                                     | 967 94      |
| 20460           | V. T. P.        | Kies place.                       | Oakley avenue.                                | Northern terminus.                                                                            | 399 07      |
| 20461           | V. T. P.        | Sixty-third place.                | Maryland avenue.                              | East 281 ft.                                                                                  | 485 54      |
| 20462           | Brick.          | Leavitt.                          | Archer avenue.                                | Thirty-seventh.                                                                               | 1,706 60    |
| 20463           | V. T. P.        | Cosgrove avenue.                  | Western avenue.                               | Leavitt, etc.                                                                                 | 2,956 92    |
| 20464           | V. T. P.        | East Ravenswood Park.             | Irving Park avenue.                           | Addison.                                                                                      | 4,677 50    |
| 20467           | V. T. P.        | Herndon.                          | Wrightwood avenue.                            | 123 ft. south of Marianna.                                                                    | 567 90      |
| 20483           | V. T. P.        | Ogden avenue.                     | Hamlin avenue.                                | 590 ft. & W. of W. line of Hamlin av.                                                         | 776 20      |
| 20502           | Main sewer.     | West Ninety-fifth.                | Charles.                                      | South Robey, etc.                                                                             | 25,500 00   |

|       |                                             |                                |                                  |                                             |           |
|-------|---------------------------------------------|--------------------------------|----------------------------------|---------------------------------------------|-----------|
| 20505 | Main sewer                                  | Ninety-fifth                   | Halsted                          | P., C., C. & St. L. Ry.                     | 80,206 80 |
| 20518 | V. T. P.                                    | North Clark                    | Grand avenue                     | Church road                                 | 649 77    |
| 20578 | V. T. P.                                    | North Sawyer avenue            | West Ohio                        | Alley north of Central Park boulevard       | 534 53    |
| 20579 | V. T. P.                                    | Central Park boulevard (S. S.) | Homan avenue                     | Trumbull avenue, etc                        | 997 19    |
| 20580 | V. T. P.                                    | Wellington avenue              | Clybourn avenue                  | Oakley avenue                               | 787 68    |
| 20581 | V. T. P.                                    | Ridgeway avenue                | North avenue                     | Hirsch                                      | 1,794 23  |
| 20582 | V. T. P.                                    | Thirty-seventh place           | Laurel avenue                    | Gage                                        | 486 57    |
| 20591 | V. T. P.                                    | West 111th                     | Wentworth avenue                 | State                                       | 2,586 11  |
| 20592 | V. T. P.                                    | Congress Park (W. S.)          | West Van Buren                   | West Harrison                               | 498 35    |
| 20593 | V. T. P.                                    | Congress Park (E. S.)          | West Van Buren                   | West Harrison                               | 498 35    |
| 20598 | V. T. P.                                    | Stony Island avenue            | Seventy-third                    | Seventy-fifth                               | 2,651 84  |
| 20600 | B. and V. T. P.                             | Prairie avenue                 | Sixty-second                     | Seventy-first                               | 5,454 53  |
| 20625 | V. T. P.                                    | Irving avenue                  | Irving Park avenue               | Seymour                                     | 677 95    |
| 20628 | Sewer system                                | Sixty-first                    | Ashland avenue                   | Belle Plain avenue                          | 1,049 05  |
| 20729 | V. T. P.                                    | Byron                          | Commercial avenue                | Center, etc                                 | 29,898 13 |
| 20730 | V. T. P.                                    | Carpenter                      | Sixty-ninth                      | 12 ft. E. of East Kansased Park             | 227 12    |
| 20731 | V. T. P.                                    | Fifty second                   | Halsted                          | 15 ft. of Seventieth                        | 688 84    |
| 20763 | V. T. P.                                    | South Oakley avenue            | Archer avenue                    | Morgan                                      | 2,141 93  |
| 20790 | Brick                                       | Wilson avenue                  | Sheridan road                    | Right of way of C., A. & St. L. E. R.       | 828 23    |
| 20833 | V. T. P.                                    | North Sawyer avenue            | Central Park boulevard           | Evanston avenue                             | 2,187 87  |
| 20834 | V. T. P.                                    | Fiftieth                       | Vincennes avenue                 | West Kinzie                                 | 918 87    |
| 20835 | V. T. P.                                    | Fiftieth                       | Cottage Grove avenue             | St. Lawrence avenue                         | 888 70    |
| 20836 | V. T. P.                                    | Central Park boulevard         | Kedzie avenue                    | 191 ft. west of Evans avenue                | 696 28    |
| 20854 | V. T. P.                                    | South Forty-fourth avenue      | West Fourteenth                  | Spaulding avenue                            | 804 64    |
| 20948 | V. T. P.                                    | Alley                          | W. Madison and W. Monroe         | 100 ft. N. of West Sixteenth                | 1,632 86  |
| 20949 | V. T. P.                                    | Dreyer                         | Forty-fifth                      | Between 10th E. line of alley E. of Leavitt | 774 35    |
| 20950 | V. T. P.                                    | South Hermitage avenue         | Forty-fifth                      | Forty-sixth                                 | 1,071 23  |
| 20951 | V. T. P.                                    | Elizabeth                      | Fifty-fifth                      | Forty-sixth                                 | 1,089 10  |
| 20952 | V. T. P.                                    | Elizabeth                      | Sixty-ninth                      | Seventy-eighth                              | 889 07    |
| 20953 | V. T. P.                                    | Francisco                      | West Twenty-fifth                | Seventieth                                  | 889 00    |
| 20978 | V. T. P.                                    | North Harding avenue           | West Twenty-fifth                | Douglas Park boulevard                      | 651 06    |
| 20979 | V. T. P.                                    | North Whipple                  | North Twenty-fifth               | Wabasha avenue                              | 1,172 35  |
| 20980 | V. T. P.                                    | Avenue M.                      | Diversey                         | Franklin                                    | 984 90    |
| 20981 | V. T. P.                                    | Shades place                   | 100th                            | 102d                                        | 2,263 03  |
| 20982 | V. T. P.                                    | Dunning                        | Orchard                          | 14 ft. west of west line of Vine            | 581 31    |
| 20983 | V. T. P.                                    | Francisco                      | Southport avenue                 | High                                        | 530 93    |
| 20984 | V. T. P.                                    | Pine Grove avenue              | West Polk                        | North 118 ft.                               | 183 89    |
| 20985 | V. T. P.                                    | School                         | Irving Park avenue               | South 897 ft.                               | 569 95    |
| 21035 | V. T. P.                                    | Cregier avenue                 | Oakley avenue                    | 123 ft. west of Leavitt                     | 720 28    |
| 21051 | V. T. P. (W. S.)                            | Evanston avenue                | Seventieth                       | Seventy-first                               | 781 60    |
| 21052 | V. T. P. (W. S.) and across Evanston avenue | across Evanston avenue         | 190 ft. N. W. of Wilson avenue   | Western avenue                              | 2,073 18  |
|       |                                             |                                | 875 ft. S. E. of Lawrence avenue | C., M. & St. P. Ry.                         | 795 66    |

## SEWERS—CONTINUED.

| No. of<br>Warrant. | IMPROVEMENT.        | NAME OF STREET.                | FROM                           | TO                              | AMOUNT.       |
|--------------------|---------------------|--------------------------------|--------------------------------|---------------------------------|---------------|
| 21072              | B. and V. T. P.     | West Sixty-ninth.              | Ashland avenue.                | Loomis.                         | \$ 3,908 65   |
| 21073              | B. and V. T. P.     | Wood                           | West 101st                     | West 108d.                      | 8,332 88      |
| 21074              | V. T. P.            | Iowa                           | North Western avenue.          | Campbell avenue.                | 882 50        |
| 21075              | V. T. P.            | Seipp avenue.                  | Seventy-first.                 | Northern terminus.              | 2,377 25      |
| 21109              | V. T. P. (E. S.)    | Evanston avenue.               | Sunnyside avenue.              | Montrose avenue.                | 827 13        |
| 21110              | V. T. P. (E. S.)    | Evanston avenue.               | C., M. & St. P. Ry.            | 420 ft. S. E. of Wilson avenue. | 1,106 59      |
| 21111              | V. T. P.            | Evanston avenue.               | Lawrence avenue.               | Southeasterly 695 ft.           | 789 18        |
| 21112              | V. T. P.            | Wright court.                  | Grant avenue.                  | North 230 ft.                   | 311 93        |
| 21113              | V. T. P.            | North Oakley avenue.           | Clybourn avenue.               | Oakdale avenue.                 | 1,561 68      |
| 21114              | V. T. P.            | East Ravenswood Park           | Lawrence avenue.               | Winnemac avenue.                | 2,484 42      |
| 21115              | V. T. P.            | North Fairfield avenue.        | Diversey avenue.               | C. & N. W. Ry.                  | 688 88        |
| 21116              | V. T. P.            | Emmet.                         | Kedzie avenue.                 | Northwest 38½ ft.               | 556 58        |
| 21117              | V. T. P.            | Wolfgram                       | Drake avenue.                  | East 367 ft.                    | 518 00        |
| 21118              | V. T. P.            | Drake avenue.                  | Diversey avenue.               | 303 ft. north of Wolfram.       | 999 25        |
| 21119              | V. T. P.            | Carmen avenue                  | Southport avenue               | Alley east of North Clark.      | 1,003 88      |
| 21161              | V. T. P.            | Union avenue                   | West Sixty-first               | North 287 ft.                   | 447 10        |
| 21162              | Sewer               | Berteau avenue                 | Western avenue.                | Leavitt                         | 2,661 74      |
| 21260              | Brick               | West Thirty-first              | South Fortieth avenue.         | South Forty second avenue.      | 5,747 10      |
| 21261              | V. T. P.            | West Superior                  | North California avenue        | North Washenaw avenue           | 985 50        |
| 21262              | V. T. P.            | Carroll avenue                 | Albany avenue.                 | Sacramento avenue.              | 939 80        |
| 21267              | V. T. P.            | Alley west of Grand boulevard. | Forty-sixth                    | Forty seventh                   | 773 35        |
| 21268              | V. T. P.            | South Forty-second avenue      | West Twenty-eighth.            | West Thirty-first               | 3,290 85      |
| 21269              | V. T. P.            | Berlin                         | North Talmán avenue            | North California avenue.        | 1,247 19      |
| 21272              | V. T. P.            | Butler                         | West 118th                     | West 119th.                     | 1,263 20      |
| 21332              | V. T. P.            | Parnell avenue                 | West 118th                     | West 119th                      | 1,227 50      |
| 21333              | V. T. P.            | Eggleston avenue               | West 118th                     | West 119th                      | 1,227 50      |
| 21334              | V. T. P.            | West Huron                     | Kedzie avenue                  | North Spaulding avenue          | 797 55        |
| 21339              | V. T. P.            | Alley W. of Drexel boulevard.  | Forty-third                    | Forty-fourth                    | 799 77        |
| 21255              | V. T. P.            | West Noble avenue.             | Elston avenue                  | North California avenue.        | 690 45        |
| 21342              | Sewer system.       | West Twenty-seventh.           | Crawford avenue.               | Hamlin avenue                   | 38,511 78     |
| 21343              | Eng. well and sewer | Indiana avenue                 | 103d, 105th and 107th          | 111th, 113th, 115th, etc.       | 232,000 00    |
| 21347              | Main sewer.         | Montrose boulevard             | North branch of Chicago river. | Milwaukee avenue.               | 93,000 00     |
| Total.             |                     |                                |                                |                                 | \$ 771,682 06 |

## DRAINS.

| No. of<br>Ward. | NAME OF STREET.                   | FROM                 | TO                   | AMOUNT.  |
|-----------------|-----------------------------------|----------------------|----------------------|----------|
|                 |                                   |                      |                      | \$       |
| 19964           | Shields avenue                    | Fifty-fifth          | Fifty-eighth         | 60 00    |
| 19973           | Harvard                           | Crawford avenue      | Douglas boulevard    | 1,276 00 |
| 19982           | Langley avenue                    | Sixty-third          | Sixty-ninth          | 4,707 00 |
| 19991           | Gladys avenue                     | Fortieth             | Forty-sixth          | 246 81   |
| 20006           | Vincennes                         | Sixty-third          | South Chicago avenue | 8,628 00 |
| 20036           | Tracey avenue                     | Forty-third          | Forty-fifth          | 729 00   |
| 20038           | Balmoral avenue                   | East Ravenswood Park | Clark                | 935 00   |
| 20039           | Kedzie avenue                     | Milwaukee avenue     | Belmont avenue       | 8,472 00 |
| 20040           | Palmer                            | Webster avenue       | North Fifty-ninth    | 906 50   |
| 20041           | Webster avenue                    | Clark                | Robey                | 1,054 50 |
| 20042           | Bryn Mawr avenue                  | Clark                | Evanson avenue       | 1,702 00 |
| 20043           | Sixty-seventh                     | Stony Island avenue  | Ill. Cent. R. R.     | 1,551 00 |
| 20044           | Sixty-seventh                     | Morgan               | Loomis               | 1,950 00 |
| 20045           | Elias                             | Archer avenue        | Lyman                | 841 50   |
| 20046           | Swift                             | Francis              | Ridge avenue         | 481 00   |
| 20047           | Sixty-seventh                     | Halsted              | Sangamon             | 396 00   |
| 20048           | Sangamon                          | Sixty-seventh        | Sixty-ninth          | 511 50   |
| 20049           | East Ravenswood Park              | North Fifty-ninth    | Balmoral avenue      | 610 50   |
| 20050           | Bradley place                     | Robey                | Halsted              | 429 00   |
| 20051           | Emerald avenue                    | Sixty-fourth         | Sixty-fifth          | 478 50   |
| 20052           | Alice place (B. S. Holstein Park) | Powell avenue        | Perry avenue         | 181 50   |
| 20053           | Oakley avenue                     | Hamburg              | Ems                  | 480 50   |
| 20057           | Evans avenue                      | Sixty-third          | Sixty-ninth          | 4,880 00 |
| 20058           | Mead                              | Fullerton avenue     | Logan avenue         | 1,072 50 |
| 20059           | Adams avenue                      | Seventy-third        | Seventy-fifth        | 1,572 50 |
| 20066           | James avenue                      | Laurel avenue        | Auburn avenue        | 248 00   |
| 20067           | Clara place                       | Perry avenue         | Western avenue       | 264 00   |
| 20068           | Sawyer avenue                     | Twenty-second        | Twenty-fourth        | 420 50   |
| 20069           | West Twentieth                    | Rockwell             | Washtenaw avenue     | 372 00   |
| 20070           | Carroll avenue                    | Sacramento avenue    | Francisco            | 472 50   |
| 20071           | Hinman                            | Western avenue       | Pan Handle Ry.       | 232 00   |
| 20072           | Jefferson avenue                  | Sixty-eighth         | Seventy-first        | 1,050 00 |
| 20073           | Taylor                            | California avenue    | Kedzie avenue        | 790 50   |
| 20074           | Seventy-third                     | Stony Island avenue  | Ill. Cent. R. R.     | 2,014 00 |
| 20075           | Cornelia                          | Halsted              | Sheffield avenue     | 825 00   |
| 20076           | Paulina                           | Grand Trunk Ry.      | Fifty-second         | 1,965 00 |



## DRAINS—CONTINUED.

| No. of<br>Warr't. | NAME OF STREET.       | FROM                   | TO                                       | AMOUNT.   |
|-------------------|-----------------------|------------------------|------------------------------------------|-----------|
| 20077             | West Twenty-fifth     | Rockwell               | California avenue                        | \$ 887 00 |
| 20078             | Fairfield avenue      | Sixteenth              | Twenty-second                            | 1,808 00  |
| 20079             | Ninety-first          | Green Bay avenue.      | Commercial avenue                        | 527 00    |
| 20080             | Victor                | Evansston avenue       | Swift                                    | 418 50    |
| 20081             | West Sixteenth        | Albany avenue.         | Kedzie avenue.                           | 418 50    |
| 20082             | Wilton avenue.        | Grace                  | Byron                                    | 214 50    |
| 20083             | Homan avenue          | Twenty third           | Twenty-sixth                             | 1,770 00  |
| 20084             | Carlisle              | Albany avenue.         | Kedzie avenue.                           | 872 00    |
| 20085             | Collins               | Albany avenue.         | Kedzie avenue.                           | 465 00    |
| 20086             | Park avenue.          | Kedzie avenue.         | Lot 27, block 21, Belmont addition       | 170 50    |
| 20088             | Fillmore              | Crawford avenue        | Douglas boulevard                        | 1,498 50  |
| 20184             | Attica                | Auburn                 | Laurel                                   | 856 50    |
| 20185             | Crawford avenue.      | Center avenue          | Everett avenue                           | 1,470 00  |
| 20186             | Walcott               | Webster avenue         | Norty Fifty-ninth                        | 368 00    |
| 20187             | West Fortieth         | Kinzie                 | Chicago avenue.                          | 1,159 00  |
| 20188             | LaSalle               | Sixty first            | Sixty-third                              | 318 50    |
| 20189             | Flournoy              | Washtenaw avenue.      | California avenue.                       | 542 50    |
| 20140             | Peoria                | Sixty-seventh          | Sixty ninth.                             | 609 00    |
| 20141             | Rockwell              | Twelfth                | Twenty second                            | 882 50    |
| 20142             | Harding avenue        | Grand avenue.          | North avenue                             | 1,567 50  |
| 20143             | Bremen                | Western avenue.        | Hoffman avenue                           | 247 50    |
| 20145             | Sixty-third           | Maryland avenue        | Alley west of Drexel boulevard           | 222 00    |
| 20149             | Forty-seventh         | Cottage Grove avenue.  | Drexel boulevard                         | 247 50    |
| 20158             | West Fortieth         | North avenue           | Armitage avenue.                         | 8,185 00  |
| 20161             | West Forty second     | Harrison               | West Twelfth.                            | 1,755 00  |
| 20180             | Vernon avenue         | Sixty-ninth.           | Seventy-third.                           | 3,060 00  |
| 20200             | West Van Buren        | West Fortieth.         | West Forty sixth                         | 4,104 00  |
| 20213             | Madison avenue        | Sixty-seventh.         | Seventy-fifth                            | 8,884 00  |
| 20214             | Seventy-first         | Ill. Cent. R. R.       | Stony Island avenue.                     | 708 00    |
| 20215             | Hamlin avenue         | Douglas Park boulevard | West Sixteenth                           | 1,879 50  |
| 20230             | Western avenue.       | Belmont avenue.        | Roscoe                                   | 406 00    |
| 20269             | Ewing avenue          | 101st                  | 102d.                                    | 282 00    |
| 20289             | Irving Park boulevard | Lincoln avenue         | Chicago River                            | 5,320 00  |
| 20306             | Washington            | Albany avenue.         | E. line lot 15, block 2, Howard's subdn. | 528 00    |
| 20309             | Page                  | Grand Trunk Ry         | Fifty-second                             | 1,890 00  |
| 20810             | Goodspeed             | Grand Trunk Ry         | Fifty-first                              | 1,426 00  |

|       |                            |                           |                        |               |
|-------|----------------------------|---------------------------|------------------------|---------------|
| 20311 | McChesney avenue           | Sixty-third               | Chicago avenue         | 2,448 00      |
| 20312 | Ewing avenue               | Ninety-second             | 108d.                  | 4,494 00      |
| 20410 | Francis                    | Southport avenue          | Charlton               | 633 50        |
| 20478 | Diversey                   | Kedzie avenue             | Milwaukee avenue       | 942 50        |
| 20499 | Fairfield avenue           | West Chicago avenue       | Augusta                | 435 00        |
| 20500 | North Paulina              | Foster avenue             | Catalpa avenue         | 1,078 00      |
| 20601 | St. Lawrence avenue        | Sixty-third               | Seventy-third          | 8,316 00      |
| 20602 | Seventy-second             | Ill. Cent. R. R.          | Stony Island avenue    | 1,831 50      |
| 20732 | Fiftieth                   | Vincennes avenue          | Grand boulevard        | 144 00        |
| 20771 | Leland avenue              | Pemberton (Racine avenue) | Sheridan road          | 1,276 50      |
| 20855 | East Ravenswood Park       | Balmoral avenue           | Catalpa                | 98 00         |
| 21004 | Elston avenue              | Hammond avenue            | North Kedzie avenue    | 196 28        |
| 20986 | Nutt avenue                | Seventy-third             | Seventy-fifth          | 986 00        |
| 20987 | Brooks avenue              | Seventy-third             | Seventy-fifth          | 1,116 50      |
| 21108 | Mead (North Sawyer avenue) | Fullerton avenue          | West Wrightwood avenue | 942 50        |
| 21178 | Congress Park (B. S.)      | West Van Buren            | West Harrison          | 567 00        |
| 21201 | South Chicago avenue       | Manistee avenue           | Ninety-second          | 825 75        |
| 21306 | South Throop               | Forty seventh             | Fifty-first            | 280 00        |
| 21322 | Carpenter                  | Sixty-third               | Sixty-seventh          | 1,416 00      |
| 21323 | May                        | Sixty-third               |                        | 1,200 00      |
| Total |                            |                           |                        | \$ 115,150 84 |

## PLANK SIDEWALKS.

| No. of<br>Warr't. | SIDE OF STREET. | NAME OF STREET. | FROM               | TO                | AMOUNT.   |
|-------------------|-----------------|-----------------|--------------------|-------------------|-----------|
| 19959             | South           | Thirty-fifth    | Western avenue     | California avenue | \$ 351 12 |
| 19977             | Both            | West Elm        | West Circle        | Myrtle avenue     | 843 00    |
| 20087             | West            | Wright          | Seventy-first      | Seventy-second    | 189 60    |
| 20088             | North           | DeKalb          | Flournoy           | Polk              | 109 60    |
| 20118             | West            | State           | Forty-seventh      | Fifty-fifth       | 116 15    |
| 20171             | South           | Walnut          | East Circle avenue | Cedar             | 212 10    |
| 20195             | Both            | Sixty-seventh   | Page               | Leavitt           | 194 25    |
| 20196             | Both            | Sixty-sixth     | Wood               | Leavitt           | 680 10    |
| 20199             | Both            | Sixty-fourth    | Wood               | Leavitt           | 882 59    |
| 20201             | Both            | Lincoln place   | Norwood avenue     | Evergreen avenue  | 255 00    |
| 20217             | Both            | Ogden avenue    | Albany avenue      | Homan avenue      | 414 60    |
| 20218             | West            | Desplaines      | Diana              | 116th             | 114 80    |

## PLANK SIDEWALKS—CONTINUED.

| No. of<br>Warrant. | SIDE OF STREET. | NAME OF STREET.     | FROM                 | TO                     | AMOUNT.   |
|--------------------|-----------------|---------------------|----------------------|------------------------|-----------|
| 20222              | North           | Elm                 | Chestnut             | Cedar                  | \$ 238 59 |
| 20226              | Both            | Wentworth avenue    | Forty-seventh        | Sixty-third            | 8,152 80  |
| 20232              | Both            | Sawyer avenue       | Ogden avenue         | Sixteenth              | 1,160 00  |
| 20264              | South           | Tuttle avenue       | East Ravenswood Park | Commercial avenue      | 114 10    |
| 20278              | Both            | Seminary avenue     | Webster avenue       | Fullerton avenue       | 219 45    |
| 20279              | Both            | Webster avenue      | Ward                 | Lewis                  | 194 45    |
| 20280              | Both            | Thirty-fifth        | Archer avenue        | Western avenue         | 344 40    |
| 20286              | Both            | Lewis               | Clybourn             | Belden avenue          | 571 20    |
| 20278              | North           | Eighty-sixth        | Mackinaw avenue      | Buffalo avenue         | 98 00     |
| 20279              | North           | Seventy-first       | Stony Island avenue  | Madison avenue         | 191 45    |
| 20393              | Both            | Ninetieth           | Carpenter            | Vincennes              | 829 70    |
| 20394              | South           | Ninety-fifth        | Robey                | Leavitt                | 372 40    |
| 20395              | North           | Eighty-third        | Central avenue       | South Chicago avenue   | 118 00    |
| 20396              | South           | Fullerton avenue    | Herndon              | Halsted                | 640 64    |
| 20407              | Both            | Milwaukee avenue    | Logan square         | Jefferson avenue       | 4,291 20  |
| 20408              | Northeast       | Milwaukee avenue    | Jefferson avenue     | North Fifty-ninth      | 955 02    |
| 20465              | West            | Sangamon            | Van Buren            | Congress               | 42 40     |
| 20466              | West            | Springfield avenue  | Eighteenth           | Nineteenth             | 49 20     |
| 20476              | Both            | Fairfield avenue    | North avenue         | Courtland avenue       | 148 15    |
| 20509              | West            | Wright              | Sixty-seventh        | Sixty-eighth           | 39 60     |
| 20576              | West            | Stony Island avenue | Sixty-eighth         | Seventy-first          | 358 75    |
| 20586              | West            | Clark               | Newport avenue       | Lawrence avenue        | 2,098 43  |
| 20590              | South           | Fifty-fifth         | State                | South Park avenue      | 454 65    |
| 20599              | Both            | Sealey avenue       | Sixty-third          | Sixty-seventh          | 566 80    |
| 20603              | Both            | Ashland avenue      | Sixteenth            | Twenty-second          | 1,399 20  |
| 20605              | Both            | Atlantic            | Gordon               | Forty-fourth court     | 875 60    |
| 20616              | Both            | Escanaba avenue     | Ninety-third         | Ninety-fifth           | 948 98    |
| 20620              | East            | Ashland avenue      | Cosgrove             | Graceland avenue       | 384 60    |
| 20631              | Both            | Turner avenue       | Ogden avenue         | Douglas Park boulevard | 236 25    |
| 20633              | Both            | Talman avenue       | North avenue         | Hirsch                 | 196 80    |
| 20634              | Both            | Erie                | Oakley avenue        | Campbell avenue        | 807 20    |
| 20635              | North           | Chicago avenue      | Glenwood avenue      | Lincoln                | 98 00     |
| 20636              | North           | Chicago avenue      | Lincoln              | Wood                   | 114 10    |
| 20637              | Both            | Robey               | Graceland avenue     | Belle Plaine avenue    | 151 50    |
| 20638              | Both            | Superior            | Hoyle avenue         | Leavitt                | 43 70     |
| 20639              | North           | Parmelee            | Rockwell             | Washienaw avenue       | 193 20    |

|       |       |                    |                        |                       |          |
|-------|-------|--------------------|------------------------|-----------------------|----------|
| 20640 | East  | Chauncey avenue.   | South Chicago avenue.  | P. Ft. W. & C. Ry.    | 84 00    |
| 20641 | East  | Muskegon avenue.   | Ninetyth.              | Ninety-first.         | 181 12   |
| 20642 | West  | Avenue J.          | Ninety-fifth           | Ninety-sixth.         | 93 10    |
| 20643 | West  | Ewing avenue.      | Ninety-sixth           | Ninety-seventh.       | 178 88   |
| 20644 | East  | Ewing avenue.      | Ninety-sixth           | Ninety-sixth.         | 192 96   |
| 20645 | Both  | Fifty-third.       | Ashtland avenue.       | Marshfield avenue.    | 145 25   |
| 20646 | West  | Dobson avenue.     | Seventy-fifth.         | Seventy-sixth.        | 334 80   |
| 20647 | North | 106th.             | Hoxie avenue.          | Calhoun avenue.       | 92 40    |
| 20648 | West  | Torrence avenue.   | 106th.                 | 108th.                | 366 80   |
| 20649 | Both  | Anthony avenue.    | Commercial avenue.     | Escanaba avenue.      | 318 95   |
| 20650 | Both  | Commercial avenue. | Eighty-seventh.        | B. & O. R.            | 1,030 08 |
| 20651 | Both  | Ninety-third.      | Stony Island avenue.   | Anthony avenue.       | 583 12   |
| 20658 | North | Sixty-seventh.     | Yale.                  | Harvard.              | 65 45    |
| 20659 | North | Twenty-ninth.      | Dearborn.              | Wentworth avenue.     | 131 60   |
| 20660 | Both  | Plinney avenue.    | Jackson boulevard.     | Van Buren.            | 142 45   |
| 20661 | North | Seventy-third.     | Yates avenue.          | A point 374 ft. east. | 130 50   |
| 20671 | Both  | North.             | East Ravenswood Park.  | Ashtland avenue.      | 777 35   |
| 20678 | Both  | Walnut.            | Ninety-fifth.          | Ninety-ninth.         | 830 90   |
| 20679 | Both  | Loomis.            | Forty-seventh.         | Fifty-fifth.          | 734 65   |
| 20680 | South | Graceland avenue.  | Evanston avenue.       | Clark.                | 980 00   |
| 20681 | North | Graceland avenue.  | Evanston avenue.       | C., M. & St. P. Ry.   | 221 90   |
| 20682 | Both  | Fillmore.          | Lawndale avenue.       | Kedzie avenue.        | 834 05   |
| 20683 | Both  | Perry.             | Belmont avenue.        | Wellington.           | 489 72   |
| 20685 | Both  | Albany avenue.     | Harrison.              | Twelfth.              | 340 56   |
| 20686 | West  | Seipp avenue.      | Sixty-ninth.           | Seventy-first.        | 281 05   |
| 20687 | Both  | Vernon avenue.     | Irving Park boulevard. | C. & N.-W. Ry.        | 259 35   |
| 20688 | Both  | Jefferson avenue.  | Seventieth.            | Seventy-first.        | 859 45   |
| 20689 | Both  | 103d.              | Notre Dame avenue.     | Muskegon avenue.      | 280 90   |
| 20690 | Both  | Oak place.         | School.                | Belmont avenue.       | 78 75    |
| 20691 | Both  | Oakdale avenue.    | Kacine avenue.         | Herndon.              | 59 50    |
| 20692 | Both  | Bryn Mawr avenue.  | Clark.                 | Ashtland avenue.      | 207 20   |
| 20693 | South | Ridge avenue.      | Clark.                 | Evanston avenue.      | 863 45   |
| 20694 | Both  | Ashtland avenue.   | Lawrence avenue.       | Tuttle avenue.        | 172 20   |
| 20695 | Both  | Robey.             | Armitage avenue.       | Fullerton avenue.     | 597 76   |
| 20696 | Both  | Perry avenue.      | Wilson avenue.         | Sunnyside avenue.     | 162 75   |
| 20697 | Both  | Perry avenue.      | Montrose boulevard.    | Sunnyside avenue.     | 87 50    |
| 20699 | Both  | Coulter.           | Hoyle avenue.          | Robey.                | 42 00    |
| 20702 | East  | Daley.             | Thirtieth.             | Thirtieth.            | 44 80    |
| 20703 | Both  | Utica.             | Twelfth.               | Fillmore.             | 136 15   |
| 20704 | South | Moore.             | Rockwell.              | Washenaw avenue.      | 210 35   |
| 20705 | Both  | West Fortieth.     | Lake.                  | Kinzie.               | 478 50   |
| 20706 | Both  | Potomac avenue.    | California avenue.     | Western avenue.       | 842 30   |

## PLANK SIDEWALKS—CONTINUED.

| No. of<br>Warrant. | SIDE OF STREET. | NAME OF STREET.                 | FROM                       | TO                         | AMOUNT.   |
|--------------------|-----------------|---------------------------------|----------------------------|----------------------------|-----------|
| 20707              | West            | Daley                           | Thirty-fifth               | Thirty-sixth               | \$ 107 45 |
| 20709              | West            | Kedzie avenue.                  | Nineteenth                 | C., B. & Q. R. R.          | 70 00     |
| 20710              | West            | Railroad avenue                 | Lunt avenue                | Pratt avenue               | 196 00    |
| 20711              | North           | Chicago avenue                  | Leavitt                    | Hoyle avenue               | 70 00     |
| 20712              | South           | Diversey avenue                 | Herdon                     | Diversey place.            | 132 00    |
| 20713              | East            | Adams avenue                    | 75 ft. south of Seventieth | Seventy-first              | 178 95    |
| 20714              | West            | Bishop                          | Forty-sixth                | Forty-seventh              | 77 00     |
| 20715              | North           | Forty-seventh                   | Ashland avenue             | Loomis                     | 590 10    |
| 20716              | South           | Forty-sixth                     | Ashland avenue             | Bishop                     | 231 00    |
| 20717              | Both            | Butler                          | Thirty-seventh             | Thirty-ninth               | 469 70    |
| 20726              | Both            | Spaulding avenue                | Madison                    | Van Buren                  | 313 25    |
| 20740              | Both            | Byron                           | Ashland avenue.            | Commercial avenue          | 471 45    |
| 20741              | Both            | Flournoy                        | Leavitt                    | Oakley avenue.             | 297 50    |
| 20760              | Both            | Leavitt                         | Armitage avenue.           | Fullerton avenue.          | 210 88    |
| 20787              | Both            | Ashland avenue.                 | Armitage avenue.           | Graceland avenue.          | 1,078 08  |
| 20795              | Both            | Lincoln                         | Armitage avenue.           | Webster avenue             | 68 15     |
| 20796              | Both            | West Fortieth (Crawford avenue) | Colorado avenue.           | Lexington                  | 172 48    |
| 20798              | Both            | Sixth avenue                    | Ninety-eighth.             | Ninety-ninth               | 131 25    |
| 20799              | Both            | Seventieth                      | Cregier avenue             | Seipp avenue               | 250 60    |
| 20805              | Both            | Eighty-sixth                    | Superior avenue.           | Green Bay avenue           | 184 10    |
| 20807              | East            | Bissell                         | Clay                       | Center                     | 84 85     |
| 20808              | Both            | Belmont avenue                  | Racine avenue.             | Perry avenue               | 570 15    |
| 20809              | North           | Belmont avenue                  | Western avenue.            | North branch Chicago river | 403 90    |
| 20814              | North           | Lake                            | Homan avenue.              | Central Park avenue.       | 122 85    |
| 20815              | Both            | Flournoy                        | Oakley avenue.             | Western avenue.            | 131 30    |
| 20816              | North           | Forty-ninth                     | Wabash avenue              | Michigan avenue.           | 69 30     |
| 20817              | North           | Berteau avenue                  | Perry                      | Clark                      | 264 95    |
| 20818              | North           | Forty-first                     | Lake avenue.               | Ellis avenue               | 67 55     |
| 20819              | East            | Farrell                         | Lyman                      | Thirty-first               | 97 80     |
| 20820              | Both            | Carroll avenue                  | Sacramento avenue.         | Francisco                  | 186 20    |
| 20821              | Both            | Clark                           | School                     | Newport avenue.            | 317 80    |
| 20822              | West            | Kedzie avenue.                  | Thirty-ninth               | Joseph                     | 92 40     |
| 20823              | Both            | Lafayette                       | Forty-fifth                | Forty-seventh              | 677 25    |
| 20824              | North           | Forty-sixth                     | Loomis                     | Ashland                    | 250 95    |
| 20825              | Both            | Gross avenue                    | Ashland avenue.            | Loomis                     | 590 50    |
| 20826              | East            | West Forty-first.               | Colorado avenue            | Lexington                  | 52 15     |

|       |       |                   |                      |                      |          |
|-------|-------|-------------------|----------------------|----------------------|----------|
| 20827 | South | Fifty-eighth      | Michigan avenue      | Indiana avenue       | 53 85    |
| 20828 | Both  | Eighty-seventh    | Vincennes avenue     | Elizabeth            | 65 10    |
| 20829 | Both  | Wentworth avenue  | Thirty-ninth         | Forty-seventh        | 2,990 68 |
| 20857 | Both  | Sixty-third       | State                | Cottage Grove avenue | 1,786 84 |
| 20859 | South | Lawrence avenue   | Holcomb avenue       | Elston avenue        | 525 91   |
| 20874 | Both  | Pearl             | Delaware avenue      | West Fortieth        | 114 24   |
| 20875 | Both  | Seventh avenue    | Ninety-ninth         | 100th                | 114 24   |
| 20876 | Both  | Thirty-second     | Ashland avenue       | Paulina              | 183 05   |
| 20886 | Both  | James avenue      | Laurel               | Benson               | 282 80   |
| 20887 | North | Sixteenth         | Forty-second         | Forty-fourth         | 410 52   |
| 20888 | Both  | Webster           | Western avenue       | Lincoln avenue       | 842 30   |
| 20889 | Both  | Wilson avenue     | Clark                | Ashland avenue       | 411 60   |
| 20894 | Both  | Polk              | California avenue    | Kedzie avenue        | 238 55   |
| 20905 | Both  | Seventy-fourth    | May                  | Aberdeen             | 112 35   |
| 20907 | East  | Madison avenue    | Sixty-seventh        | Sixty-ninth          | 434 70   |
| 20908 | East  | Seipp avenue      | Sixty-ninth          | Seventieth           | 137 40   |
| 20909 | Both  | Washington        | Albany avenue        | Park avenue          | 288 40   |
| 20910 | East  | Sherman           | Sixty-third          | Sixty-seventh        | 455 70   |
| 20911 | South | Forty-fifth       | Ashland avenue       | Loomis               | 343 86   |
| 20912 | North | Thirty-ninth      | Stewart avenue       | Wallace              | 243 88   |
| 20913 | South | Sixty-fifth       | Perry avenue         | LaFayette avenue     | 46 90    |
| 20954 | Both  | Curtis            | Stanwood avenue      | 113th                | 277 55   |
| 20955 | North | Fifty-ninth       | State                | Prairie avenue       | 287 70   |
| 20956 | North | Lake              | West Forty-eighth    | West Fifty-second    | 301 35   |
| 20957 | Both  | Marshfield avenue | Thirty-fourth        | Thirty-seventh       | 677 45   |
| 20958 | East  | Linden avenue     | Sixty-ninth          | Seventieth           | 20 00    |
| 20959 | Both  | Racine avenue     | Clybourn avenue      | Fullerton avenue     | 585 42   |
| 20960 | Both  | Mitchell avenue   | Selwyn avenue        | Crawford avenue      | 372 57   |
| 20961 | Both  | Linden avenue     | Humboldt boulevard   | Fullerton avenue     | 368 61   |
| 20962 | Both  | Lawrence avenue   | Commercial avenue    | Clark                | 641 19   |
| 20963 | Both  | Noble             | Division             | Sloan                | 125 10   |
| 20964 | Both  | Bingham           | Cornelia             | Armitage avenue      | 489 65   |
| 20965 | Both  | Fullerton avenue  | Western avenue       | C. & N. W. Ry        | 390 40   |
| 20966 | Both  | Forrest avenue    | Fullerton avenue     | Elston avenue        | 238 35   |
| 20967 | Both  | Hoxie avenue      | 104th                | 109th                | 682 11   |
| 20968 | Both  | Eighty-ninth      | Cottage Grove avenue | Dauphin avenue       | 337 38   |
| 20969 | East  | Avers avenue      | Armitage avenue      | Dickens avenue       | 285 75   |
| 20970 | Both  | Eighty-second     | Ontario avenue       | Commercial avenue    | 226 80   |
| 20971 | Both  | Avenue J          | Ninety-sixth         | 106th                | 483 65   |
| 20996 | Both  | Kedzie avenue     | Grand avenue         | Division             | 389 55   |
| 20997 | Both  | Luther            | Rockwell             | Washtenaw avenue     | 308 05   |
| 20999 | Both  | VanBuren          | Kedzie avenue        | Central Park avenue  | 308 10   |

## PLANK SIDEWALKS—CONTINUED.

| No. of<br>Warr't. | SIDE OF STREET. | NAME OF STREET.      | FROM                   | TO                  | AMOUNT.   |
|-------------------|-----------------|----------------------|------------------------|---------------------|-----------|
| 21000             | Both            | Noble                | Milwaukee avenue       | Division            | \$ 357 85 |
| 21001             | Both            | Ninety-fifth         | Cottage Grove avenue   | St. Lawrence avenue | 100 80    |
| 21002             | Both            | Union avenue         | Twenty-sixth           | Twenty-eighth       | 285 60    |
| 21003             | Both            | Ninety-third         | Anthony avenue         | Yates avenue        | 306 95    |
| 21025             | Both            | Kedzie avenue        | Lake                   | Congress            | 241 80    |
| 21026             | Both            | Harrison             | Rockwell               | Crawford avenue     | 2,584 70  |
| 21027             | Both            | East Ravenswood Park | Webster avenue         | Wilson avenue       | 685 12    |
| 21054             | Both            | West Twenty-fourth   | Whipple                | Southwest boulevard | 343 35    |
| 21055             | West            | Grant avenue         | Wabansia avenue        | North 250 ft.       | 81 20     |
| 21056             | Both            | Sheridan             | Beach                  | Augusta             | 557 04    |
| 21086             | Both            | Fulton               | Fiftieth               | Fifty second        | 152 00    |
| 21087             | Both            | Vincennes avenue     | Sixty-fifth            | Seventieth          | 374 15    |
| 21088             | Both            | West Thirtieth       | Wood                   | Ogden avenue        | 928 37    |
| 21089             | East            | Sheffield avenue     | Belmont avenue         | Fletcher            | 115 60    |
| 21090             | Both            | McChesney avenue     | Sixty-third            | Sixty-fifth         | 169 25    |
| 21091             | Both            | Seventy-first        | St. Lawrence avenue    | Langley avenue      | 180 95    |
| 21092             | Both            | Seventy-fifth        | Cottage Grove avenue   | Langley avenue      | 158 90    |
| 21093             | West            | St. Lawrence avenue  | Seventieth             | Seventy-first       | 136 50    |
| 21094             | Both            | Huron                | Irving Park boulevard  | Elston avenue       | 440 55    |
| 21095             | Both            | Seventieth           | Stony Island avenue    | Ill. Cent. R. R.    | 366 80    |
| 21096             | Both            | Sheridan avenue      | Central Park boulevard | Chicago avenue      | 557 76    |
| 21097             | Both            | Webster avenue       | Leavitt                | Robey               | 134 80    |
| 21098             | Both            | Sacramento avenue    | Williams               | Thirty-ninth        | 231 75    |
| 21099             | Both            | West Twelfth         | West Fortieth          | West Forty-sixth    | 508 20    |
| 21100             | West            | Washtenaw avenue     | West Twenty-second     | Moore               | 200 20    |
| 21101             | Both            | Rebecca              | California avenue      | Rockwell            | 252 35    |
| 21124             | West            | Front                | 115th                  | Kensington avenue   | 328 80    |
| 21125             | West            | Woodlawn avenue      | South Chicago avenue   | Seventy-fourth      | 199 50    |
| 21126             | Both            | Cottage Grove avenue | Eighty-ninth           | Eighty-ninth place  | 215 60    |
| 21127             | Both            | Ashland avenue       | Julian                 | Brigham             | 151 20    |
| 21129             | East            | California avenue    | C. & N.-W. Ry          | Garden avenue       | 86 40     |
| 21140             | South           | Thirty-sixth         | Halsted                | Auburn avenue       | 67 50     |
| 21141             | Both            | Thirty-third court   | Auburn avenue          | Laurel              | 124 00    |
| 21142             | Both            | Thirty-second        | Hoyle avenue           | Lundy's Lane        | 210 70    |
| 21143             | Both            | Wabash avenue        | Fifty-sixth            | Sixty-third         | 1,139 60  |
| 21144             | Both            | Fifty-eighth         | Ellis avenue           | Ingleside avenue    | 284 40    |

|       |       |                     |                        |                        |              |
|-------|-------|---------------------|------------------------|------------------------|--------------|
| 21145 | Both  | Fifty-sixth         | Wabash avenue          | Indiana avenue         | 300 80       |
| 21146 | Both  | Francis             | California avenue      | Point                  | 284 90       |
| 21147 | North | West Fourteenth     | Wood                   | Robey                  | 88 40        |
| 21148 | Both  | Keith               | Huron                  | Chicago avenue         | 98 60        |
| 21149 | Both  | Ward                | Clybourn avenue        | Fullerton avenue       | 388 45       |
| 21150 | North | Thirty-sixth        | Western avenue         | California avenue      | 225 40       |
| 21151 | Both  | Thomas              | Western avenue         | California avenue      | 90 00        |
| 21152 | Both  | West Twenty-second  | Wood                   | Pan Handle Ry          | 508 10       |
| 21153 | East  | Crawford avenue     | Kinzie                 | Lake                   | 239 75       |
| 21154 | East  | Kedzie avenue       | West Twenty-second     | C., B. & Q. R. R.      | 70 80        |
| 21155 | Both  | Dudley              | Armitage avenue        | Hervey                 | 48 00        |
| 21156 | Both  | Central Park avenue | Grand avenue           | Chicago avenue         | 112 80       |
| 21187 | South | Thirty-sixth        | Western avenue         | Albany avenue          | 673 75       |
| 21188 | East  | Marquette avenue    | Ninety-second          | Ninety-third           | 134 00       |
| 21249 | Both  | Cologne             | Deering                | Fuller                 | 183 00       |
| 21250 | Both  | Thirty-fourth       | Union avenue           | Emerald avenue         | 228 20       |
| 21251 | Both  | Campbell avenue     | Division               | Jane                   | 56 80        |
| 21252 | Both  | California avenue   | Ogden avenue           | C., B. & Q. R. R.      | 238 35       |
| 21253 | East  | Ontario avenue      | Eighty-ninth           | Ninetieth              | 123 00       |
| 21264 | West  | Leavitt             | Archer avenue          | Thirty-seventh         | 247 80       |
| 21263 | Both  | Cortland            | California avenue      | Kedzie avenue          | 228 90       |
| 21264 | South | Thirty-ninth        | Butler                 | C. & W. I. Ry          | 188 75       |
| 21265 | Both  | Cleaver             | Division               | Milwaukee avenue       | 219 00       |
| 21287 | East  | Yorktown            | Thirty-fourth          | Thirty-fifth           | 84 40        |
| 21288 | Both  | Haynes court        | Archer avenue          | Lyman                  | 94 00        |
| 21289 | Both  | Thirty-fourth       | Ashland avenue         | Wood                   | 872 05       |
| 21290 | Both  | Thirty-fourth       | Wood                   | Archer avenue          | 406 85       |
| 21291 | North | Thirty-seventh      | Ashland avenue         | Wood                   | 255 00       |
| 21292 | South | Thirty-first        | Wood                   | Hoynes avenue          | 540 80       |
| 21298 | Both  | Kedzie avenue       | Douglas Park boulevard | Nineteenth             | 355 52       |
| 21294 | West  | Kedzie avenue       | West Twelfth           | Douglas Park boulevard | 146 80       |
| 21295 | North | Chicago avenue      | Milwaukee avenue       | Carpenter              | 158 40       |
| 21296 | Both  | Thirty-fourth       | Emerald avenue         | Halsted                | 99 20        |
| 21297 | North | Thirty-eighth       | Kedzie avenue          | Central Park avenue    | 404 91       |
| 21298 | Both  | Atwell              | Milwaukee avenue       | State                  | 217 00       |
| 21299 | Both  | Rockwell            | Parmelee               | West Twenty-second     | 538 88       |
| 21300 | Both  | Butler              | Thirty-seventh         | Thirty-eighth          | 115 50       |
| 21311 | Both  | California avenue   | C., B. & Q. R. R.      | Twenty-second          | 670 50       |
| 21312 | North | Twentieth           | Oakley avenue          | Western avenue         | 74 00        |
| 21071 | Both  | Colorado avenue     | California avenue      | West Fortieth          | 2,341 43     |
| Total |       |                     |                        |                        | \$ 95,638 99 |



## CEMENT SIDEWALKS.

| No. of<br>Warrant. | SIDE OF STREET. | NAME OF STREET.    | FROM                            | TO                            | AMOUNT.   |
|--------------------|-----------------|--------------------|---------------------------------|-------------------------------|-----------|
| 19960              | North           | Twenty-sixth       | State                           | Ill. Cent. R. R.              | \$ 522 60 |
| 19962              | Both            | Dearborn           | Twenty-sixth                    | Twenty-ninth                  | 1,432 60  |
| 19978              | Both            | Wright             | Fifty-fifth                     | Sixty-third                   | 9,703 00  |
| 20089              | Both            | Lexington avenue   | Sixty-fifth                     | Sixty-seventh                 | 2,690 80  |
| 20090              | Both            | Fifty-fourth       | Woodlawn avenue                 | Drexel avenue                 | 3,172 50  |
| 20108              | Both            | Monroe avenue      | Fifty-third                     | Fifty-fifth                   | 2,388 60  |
| 20109              | East            | Ellis avenue       | Bowen avenue                    | Forty-second                  | 680 00    |
| 20131              | Both            | Thirty-seventh     | Ellis avenue                    | Ill. Cent. R. R. right of way | 336 00    |
| 20132              | Both            | La Salle           | Division                        | North Clark                   | 819 20    |
| 20144              | Both            | Jackson            | Clark                           | C. M. & St. P. Ry.            | 4,903 60  |
| 20145              | Both            | Adams              | Francisco                       | Sacramento avenue             | 570 80    |
| 20146              | North           | Fifty-third        | Woodlawn avenue                 | Alley west                    | 213 20    |
| 20147              | North           | Congress           | Washtenaw avenue                | California avenue             | 225 00    |
| 20151              | Both            | York place         | North Clark                     | Evanston avenue               | 845 00    |
| 20152              | Both            | Farwell avenue     | Clark                           | Grand avenue                  | 1,308 90  |
| 20153              | South           | Jackson            | Clark                           | Forest avenue                 | 156 00    |
| 20154              | West            | Waubun avenue      | Oakdale avenue                  | Wellington avenue             | 379 60    |
| 20155              | East            | Waubun avenue      | Oakdale avenue                  | 150 feet north                | 195 00    |
| 20156              | East            | Calumet avenue     | Nineteenth                      | Twentieth                     | 424 20    |
| 20159              | Both            | Eda                | State                           | Indiana avenue                | 2,373 40  |
| 20162              | North           | Greenleaf avenue   | Railway avenue                  | Central                       | 348 60    |
| 20170              | Both            | Englewood avenue   | Wentworth avenue                | Halsted                       | 7,682 60  |
| 20211              | Both            | Spaulding avenue   | Ogden avenue                    | Twenty-first                  | 1,185 40  |
| 20265              | South           | Twelfth            | Michigan avenue                 | Indiana avenue                | 300 00    |
| 20266              | South           | Berteaue           | Perry                           | Ashland avenue                | 278 60    |
| 20267              | Both            | Waveland avenue    | Block 6 & 7, Hundley's subdivn. | Sheffield avenue              | 1,216 80  |
| 20281              | Both            | Forestville avenue | Forty-fifth                     | Forty-sixth                   | 1,147 50  |
| 20282              | Both            | Hope avenue        | Sixty-third                     | Sixty-third                   | 2,825 20  |
| 20283              | Both            | Forty-eighth       | Vincennes avenue                | Grand boulevard               | 951 60    |
| 20284              | Both            | Robertson avenue   | Starr avenue                    | Grace avenue                  | 807 30    |
| 20285              | South           | Thirty-ninth       | Grand boulevard                 | Vincennes avenue              | 1,852 00  |
| 20289              | South           | Fifty-third        | Woodlawn avenue                 | Lexington avenue              | 475 80    |
| 20295              | Both            | Palmer avenue      | Leland avenue                   | Wilson avenue                 | 1,425 20  |
| 20296              | Both            | Thirty-seventh     | State                           | Grand boulevard               | 8,617 75  |
| 20890              | Both            | Belmont avenue     | Sheffield avenue                | Lake View avenue              | 4,067 80  |
| 20397              | East            | Forest avenue      | Touhy avenue                    | Morse avenue                  | 1,076 80  |

|       |       |                       |                   |                        |          |
|-------|-------|-----------------------|-------------------|------------------------|----------|
| 20898 | Both  | Claremont avenue.     | Flournoy          | Polk                   | 1,075 20 |
| 20899 | West  | Claremont avenue.     | Van Buren         | Harrison               | 417 20   |
| 20475 | Both  | Adams                 | Homan avenue.     | Central Park avenue.   | 2,558 40 |
| 20477 | North | Sunnyside avenue.     | Clark             | Beacon avenue.         | 586 30   |
| 20503 | West  | Kimberk avenue        | Fifty-fifth       | Fifty-eighth.          | 1,066 00 |
| 20511 | Both  | Lincoln               | Lake              | Van Buren              | 5,085 00 |
| 20528 | Both  | Maple                 | Wentworth avenue  | Wallace                | 2,548 00 |
| 20524 | Both  | Thirty-eighth         | State             | Wabash avenue          | 515 20   |
| 20537 | West  | Kimberk avenue        | Fifty-second      | Fifty-third            | 418 60   |
| 20574 | Both  | Perry avenue          | Sixty-eighth      | Sixty-ninth            | 474 50   |
| 20597 | Both  | Cottage Grove avenue  | Twenty-second     | Twenty-sixth           | 2,865 25 |
| 20106 | Both  | Sixty-first           | Wentworth avenue  | Halsted                | 2,393 00 |
| 20618 | Both  | Forty-third           | Grand boulevard   | Indiana avenue         | 1,516 05 |
| 20619 | Both  | Wilson avenue         | Sheridan road.    | Pemberton              | 3,951 00 |
| 20622 | West  | Twentieth.            | State             | Ill. Cent. R. R.       | 1,492 40 |
| 20623 | Both  | Indiana avenue        | Twelfth           | Thirteenth             | 741 00   |
| 20628 | Both  | Yale                  | Sixty-third       | Sixty-seventh          | 1,829 90 |
| 20627 | Both  | Wabash avenue         | Fifty-first       | Fifty-fifth            | 8,118 75 |
| 20628 | North | Sixty-first           | Wentworth avenue  | Princeton avenue.      | 460 00   |
| 20658 | Both  | Perry avenue          | Milwaukee avenue  | Fullerton avenue.      | 4,854 20 |
| 20654 | North | Fletcher.             | Clark             | Sheffield avenue.      | 1,263 60 |
| 20655 | Both  | Stewart avenue        | Sixty-first       | Sixty-third            | 1,164 80 |
| 20656 | Both  | Melrose.              | Lincoln           | Wood                   | 1,120 40 |
| 20657 | West  | Grand avenue          | Morse avenue.     | Pratt.                 | 950 80   |
| 20669 | Both  | Diversey place.       | Wrightwood avenue | Diversey               | 795 60   |
| 20670 | West  | Evans avenue.         | Forty-fifth       | Forty-sixth            | 431 60   |
| 20684 | North | Chase street (avenue) | Clark             | East to Forest avenue  | 812 50   |
| 20728 | Both  | Raleigh court.        | Thirteenth        | Northern Pacific R. R. | 152 60   |
| 20786 | Both  | Ford avenue           | Seventy-fifth.    | Seventy-seventh        | 3,261 60 |
| 20806 | West  | Grand avenue          | Touhy avenue.     | Morse avenue           | 1,972 10 |
| 20858 | South | Greenleaf avenue.     | Clark             | C. M. & St. P. Ry.     | 1,697 80 |
| 20861 | Both  | Sixtieth              | Wentworth avenue  | Halsted.               | 5,170 10 |
| 20862 | Both  | Wentworth avenue      | Sixty fifth       | Sixty-ninth            | 2,872 90 |
| 20864 | Both  | La Salle.             | Fifty-fifth       | Sixty first            | 6,267 45 |
| 20877 | South | Lunt avenue.          | Clark             | C. M. & St. P. Ry.     | 2,169 70 |
| 20840 | Both  | Leavitt               | Madison           | Taylor                 | 5,404 60 |
| 20873 | Both  | Vernon avenue.        | Sixtieth          | Sixty-first            | 698 10   |
| 20878 | Both  | Lexington.            | Rockwell          | Western avenue         | 422 50   |
| 20974 | North | Noble avenue.         | Clark             | Sheffield avenue       | 291 20   |
| 20975 | North | Cornelia              | Halsted           | Alley west of Rheta    | 868 20   |
| 20976 | North | Pratt avenue.         | Clark             | C. & N. W. Ry          | 680 40   |
| 20977 | Both  | Dakin                 | Sheridan avenue   | Evanston avenue.       | 1,151 25 |

## CEMENT SIDEWALKS—CONTINUED.

| No. of<br>Warr't. | SIDE OF STREET. | NAME OF STREET.     | FROM                 | TO                   | AMOUNT.       |
|-------------------|-----------------|---------------------|----------------------|----------------------|---------------|
| 20998             | Both            | Adams               | Halsted              | Center avenue        | \$ 1,193 75   |
| 21084             | Both            | Hampden court       | Deming court         | North End            | 720 72        |
| 21085             | Both            | Leland avenue       | Robey                | West Ravenswood Park | 1,206 35      |
| 21105             | Both            | Wrightwood avenue   | Clark                | Lake View avenue     | 980 20        |
| 21106             | South           | Maple               | Dearborn avenue      | East 150 feet        | 223 50        |
| 21107             | West            | Indiana avenue      | Twenty-third         | Twenty-fourth        | 292 10        |
| 21120             | North           | Fullerton avenue    | Lincoln avenue       | Sheffield avenue     | 669 50        |
| 21121             | Both            | Park avenue         | Homan avenue         | Kedzie avenue        | 2,713 50      |
| 21122             | Both            | Noble avenue        | Racine avenue        | Sheffield avenue     | 790 40        |
| 21123             | Both            | Montrose avenue     | Evanston avenue      | C., M. & St. P. Ry.  | 598 00        |
| 21128             | Both            | Fifty third         | Woodlawn avenue      | Kimberly avenue      | 535 60        |
| 21139             | North           | Wellington          | Sheffield avenue     | Halsted              | 720 20        |
| 21180             | Both            | Wilson avenue       | West Ravenswood Park | Winchester avenue    | 327 60        |
| 21277             | West            | Stony Island avenue | Seventy-third        | Seventy-fifth        | 1,620 68      |
| 21278             | Both            | Seventy second      | Stony Island avenue  | Ill. Cent. R. R.     | 2,095 00      |
| 21279             | Both            | Carpenter           | Washington           | Madison              | 626 35        |
| 21302             | Both            | Seventy first place | Ill. Cent. R. R.     | Stony Island avenue  | 968 75        |
| 21303             | East            | May (Fremont)       | Wellington           | Diversey avenue      | 860 60        |
| 21304             | West            | Stony Island avenue | Seventy-first        | Seventy-third        | 1,127 50      |
| 21305             | West            | Linden (Magnolia)   | Argyle               | Lawrence avenue      | 1,607 04      |
| 21324             | Both            | Emerald avenue      | Sixty-seventh        | Sixty-ninth          | 406 70        |
| 21325             | Both            | Shields avenue      | Fifty-fifth          | Fifty seventh        | 1,158 96      |
| 21326             | North           | Division            | Clark                | Lake Shore drive     | 419 90        |
| 21335             | Both            | Surf                | Evanston avenue      | Lake View avenue     | 1,325 00      |
| 21337             | West            | Lake View avenue    | Fullerton avenue     | Wrightwood avenue    | 423 80        |
| 21388             | Both            | Deming court        | North Clark          | Lake View avenue     | 757 50        |
| Total             |                 |                     |                      |                      | \$ 162,720 80 |

## STONE SIDEWALKS.

| No. of<br>Warr't. | SIDE OF STREET. | NAME OF STREET. | FROM          | TO               | AMOUNT.      |
|-------------------|-----------------|-----------------|---------------|------------------|--------------|
| 20091             | West            | Sherman         | Jackson       | Van Buren        | \$ 1,728 00  |
| 20157             | East            | Market          | Washington    | Randolph         | 5,900 00     |
| 20160             | Both            | Dearborn        | Jackson       | Polk             | 18,020 00    |
| 20235             | Both            | Egleston avenue | Seventy-first | Seventy-second   | 1,470 00     |
| 20268             | Both            | Walton place    | North State   | Rush             | 418 60       |
| 20867             | South           | Chicago avenue  | Clark         | 60 feet east     | 1,250 00     |
| 20872             | Both            | Oak             | Clark         | Eastern terminus | 2,528 40     |
| Total             |                 |                 |               |                  | \$ 31,305 00 |

## GAS LAMP POSTS.

| No. of<br>Warr't. | No. of<br>Posts. | NAME OF STREET.   | FROM                   | TO                     | AMOUNT.   |
|-------------------|------------------|-------------------|------------------------|------------------------|-----------|
| 19961             | 6                | Main              | Archer avenue          | Chicago river          | \$ 192 00 |
| 19979             | 38               | Bonney avenue     | Ogden avenue           | Douglas Park boulevard | 1,111 50  |
| 19999             | 11 & conn.       | Sheridan          | Bloomingtondale road   | Armitage avenue        | 197 00    |
| 20007             | 17               | Greshaw           | Douglas Park boulevard | Crawford avenue        | 544 00    |
| 20013             | 12               | Sheldon           | Grace                  | Graceland avenue       | 384 00    |
| 20014             | 6                | Clarence avenue   | Grace                  | Byron                  | 192 00    |
| 20015             | 31               | Troy              | Twenty-second          | Twenty-sixth           | 961 00    |
| 20016             | 12               | Center            | Southport avenue       | Evansston avenue       | 384 00    |
| 20017             | 5                | Thirty-sixth      | State                  | Armour avenue          | 160 00    |
| 20021             | 20               | West Twelfth      | West Fortieth          | Douglas Park boulevard | 640 00    |
| 20028             | 27               | Carpenter         | Fifty-fifth            | Fifty-ninth            | 887 00    |
| 20029             | 14               | Seventy-ninth     | Wendell avenue         | Railroad avenue        | 448 00    |
| 20030             | 8                | Ontario avenue    | Ninetieth              | Ninety-second          | 256 00    |
| 20031             | 6                | Washburne avenue  | Lincoln                | Robey                  | 192 00    |
| 20101             | 3                | Phinney avenue    | Scott                  | Van Buren              | 101 00    |
| 20111             | 7                | West Fifteenth    | Wood                   | Lincoln                | 28 48     |
| 20113             | 14               | Fleetwood         | North avenue           | Blackhawk              | 101 37    |
| 20113             | 68               | Sixty-third       | State                  | Drexel avenue          | 33 40     |
| 20114             | 40               | Commercial avenue | Seventy-ninth          | Eighty-seventh         | 194 77    |
| 20116             | 80               | Laughton          | Western avenue         | California avenue      | 17 76     |

## GAS LAMP POSTS—CONTINUED.

| No. of<br>Warrt. | No. of<br>Posts. | NAME OF STREET.            | FROM               | TO                      | AMOUNT.     |
|------------------|------------------|----------------------------|--------------------|-------------------------|-------------|
| 20119            | 53               | Armour avenue .....        | Forty-seventh      | Fifty fifth             | \$ 1,590 00 |
| 20120            | 32               | Railroad avenue .....      | Seventy-first      | Seventy-fifth           | 960 00      |
| 20121            | 12               | Melrose .....              | Laurel avenue      | Elston road             | 384 00      |
| 20122            | 26               | West Fourteenth .....      | Wood               | Leavitt                 | 806 00      |
| 20129            | 33               | Rockwell .....             | West Twelfth       | West Eighteenth         | 990 00      |
| 20164            | 24               | Madison avenue .....       | Sixty-ninth        | Seventy third           | 748 00      |
| 20165            | 42               | Kinzie .....               | Paulina            | Oakley avenue           | 1,802 00    |
| 20168            | 6                | Maple .....                | Wallace            | Wright                  | 192 00      |
| 20169            | 6                | Rosenmerkel .....          | Wallace            | Wright                  | 192 00      |
| 20216            | 13               | Fiftieth .....             | Woodlawn avenue    | Madison avenue          | 455 00      |
| 20233            | 9                | Seventy-first .....        | Emerald avenue     | Wallace                 | 288 00      |
| 20234            | 26               | St. Louis avenue .....     | Twenty-second      | Twenty-sixth            | 868 00      |
| 20235            | 18               | Humboldt .....             | Byron avenue       | Palmer avenue           | 416 00      |
| 20236            | 12               | Seventy-second place ..... | Nutt avenue        | Jefferson avenue        | 884 00      |
| 20238            | 5                | Olga .....                 | Waveland avenue    | Grace                   | 160 00      |
| 20239            | 7                | Grace .....                | Southport avenue   | Ashland avenue          | 224 00      |
| 20321            | 13               | Green .....                | Sixty-first        | Sixty-third             | 416 00      |
| 20322            | 2                | Diversey avenue .....      | Western avenue     | 250 feet west           | 69 00       |
| 20323            | 35               | Paulina .....              | Graceland avenue   | Roscoe                  | 1,085 00    |
| 20328            | 38               | North Fifty-ninth .....    | Sheridan avenue    | Ashland avenue          | 1,178 00    |
| 20329            | 5                | Seminary avenue .....      | Center             | Maud avenue             | 160 00      |
| 20330            | 5                | Oak Grove avenue .....     | Racine avenue      | Clark                   | 160 00      |
| 20332            | 15               | Turner avenue .....        | Twelfth            | Douglas Park boulevard  | 480 00      |
| 20333            | 10               | Byron avenue .....         | California avenue  | Humboldt Park boulevard | 820 00      |
| 20334            | 8                | Pleasant place .....       | Western avenue     | Perry avenue            | 256 00      |
| 20335            | 19               | Mozart .....               | Armitage avenue    | Palmer avenue           | 608 00      |
| 20337            | 30               | Trumbull avenue .....      | West Twenty-second | West Twenty-sixth       | 930 00      |
| 20338            | 15               | Grand avenue .....         | Clark              | East Ravenswood Park    | 480 00      |
| 20339            | 3                | Lawrence avenue .....      | Robey              | Lyman                   | 69 00       |
| 20340            | 8                | Prairie avenue .....       | Fifty-ninth        | Sixtieth                | 256 00      |
| 20341            | 7                | Twenty-seventh .....       | Halsted            | Leo                     | 224 00      |
| 20342            | 8                | Calumet avenue .....       | Fifty-ninth        | Sixtieth                | 256 00      |
| 20343            | 7                | Augusta .....              | Western avenue     | Campbell avenue         | 224 00      |
| 20344            | 12               | Ward .....                 | Clybourn avenue    | Fullerton avenue        | 884 00      |
| 20349            | 14               | Fifty-first court .....    | Halsted            | Morgan                  | 448 00      |
| 20350            | 12               | West Van Buren .....       | Homan avenue       | Central Park avenue     | 884 00      |

|       |                                  |                                   |                                  |          |
|-------|----------------------------------|-----------------------------------|----------------------------------|----------|
| 20441 | Atlantic .....                   | Forty-seventh .....               | Fifty-first .....                | 775 00   |
| 20442 | Newport avenue .....             | Racine avenue .....               | C., M. & St. P. Ry. ....         | 69 00    |
| 20443 | Kimbark avenue .....             | Forty-seventh .....               | Forty-ninth .....                | 192 00   |
| 20444 | Forty-fourth .....               | Sidney court .....                | Lake avenue .....                | 37 00    |
| 20445 | Orchard .....                    | Lake avenue .....                 | Oakenwald avenue .....           | 69 00    |
| 20446 | Fifty-fourth court .....         | Halsted .....                     | Wallace .....                    | 448 00   |
| 20447 | Union avenue .....               | Fifty-seventh .....               | Sixtieth .....                   | 640 00   |
| 20448 | School .....                     | Clark .....                       | Lincoln .....                    | 961 00   |
| 20449 | Homer .....                      | Western avenue .....              | Washtenaw avenue .....           | 544 00   |
| 20450 | Cloud court .....                | State .....                       | Wentworth avenue .....           | 324 00   |
| 20451 | Aberdeen .....                   | Fifty-first .....                 | Fifty-fourth court .....         | 640 00   |
| 20501 | Wood .....                       | Thirty-eighth .....               | Archer avenue .....              | 1,144 65 |
| 20502 | Fifty-fourth .....               | Kimbark avenue .....              | Lake avenue .....                | 841 00   |
| 20503 | Bristol avenue .....             | Wentworth avenue .....            | Tracey avenue .....              | 217 00   |
| 20504 | Lincoln avenue .....             | Addison .....                     | Montrose boulevard .....         | 1,891 00 |
| 20505 | Atlantic .....                   | Fifty-fifth .....                 | Fifty-eighth .....               | 578 00   |
| 20506 | Princeton avenue .....           | Bristol .....                     | Goshen .....                     | 192 00   |
| 20507 | Raleigh court .....              | Thirteenth .....                  | Northern Pacific R. R. ....      | 192 00   |
| 20508 | Sixty-sixth .....                | State .....                       | Wabash avenue .....              | 101 00   |
| 20509 | Drummond avenue, east side ..... | Augusta .....                     | Division .....                   | 480 00   |
| 20510 | Homer .....                      | Roller .....                      | Gross Park avenue .....          | 384 00   |
| 20511 | Belle Plaine avenue .....        | Southport avenue .....            | Perry avenue .....               | 256 00   |
| 20512 | Ontario avenue .....             | Seventy-ninth .....               | Eighty-first .....               | 512 00   |
| 20513 | Fortieth .....                   | Vincennes avenue .....            | Langley avenue .....             | 224 00   |
| 20514 | Avers avenue .....               | Kinzie .....                      | Chicago avenue .....             | 980 00   |
| 20515 | Springfield avenue .....         | Kinzie .....                      | Chicago avenue .....             | 858 00   |
| 20516 | Forest avenue .....              | Grand avenue .....                | Weber avenue .....               | 69 00    |
| 20517 | La Salle .....                   | Fifty-fourth .....                | Garfield boulevard .....         | 175 00   |
| 20518 | North Leavitt .....              | Belmont avenue .....              | Clybourn avenue .....            | 480 00   |
| 20519 | Hamlin avenue .....              | Kinzie .....                      | Chicago avenue .....             | 1,038 00 |
| 20520 | Fifty-third .....                | Ellis avenue .....                | Ingleside avenue .....           | 101 00   |
| 20521 | Sixty-seventh .....              | Alley east of Wabash avenue ..... | West side of Wabash avenue ..... | 180 50   |
| 20522 | Fifty-sixth .....                | Stewart avenue .....              | Wallace .....                    | 285 00   |
| 20523 | Evans avenue .....               | Sixty-seventh .....               | Sixty-eighth .....               | 224 00   |
| 20524 | Forty-first .....                | Halsted .....                     | Union avenue .....               | 224 00   |
| 20525 | South Fortieth avenue .....      | West Sixteenth .....              | Harrison .....                   | 1,614 25 |
| 20526 | Flournoy .....                   | Francisco .....                   | Sacramento avenue .....          | 188 50   |
| 20527 | West Fortieth .....              | Colorado avenue .....             | Lexington .....                  | 193 00   |
| 20528 | Emerald avenue .....             | Fifty-second .....                | Fifty-fourth .....               | 884 00   |
| 20529 | St. Lawrence avenue .....        | Sixty-sixth .....                 | Sixth-seventh .....              | 256 00   |
| 20530 | Edgewater place .....            | Clark .....                       | Southport avenue .....           | 480 00   |
| 20531 | Vilas place .....                | Leavitt .....                     | Hamilton avenue .....            | 180 50   |

## GAS LAMP POSTS—CONTINUED.

| No. of<br>W'ar'nt. | No. of<br>Posts. | NAME OF STREET.            | FROM                      | TO                          | AMOUNT.   |
|--------------------|------------------|----------------------------|---------------------------|-----------------------------|-----------|
| 20879              | 13               | North Hermitage avenue.    | Irving Park avenue        | Berteau avenue              | \$ 416 00 |
| 20880              | 7                | Berenice avenue.           | Lincoln avenue            | C. & N.-W. Ry.              | 224 00    |
| 20881              | 5                | Lynan avenue.              | Sunnyside avenue.         | Montrose avenue.            | 160 00    |
| 20882              | 11               | North Hamilton avenue      | Montrose boulevard.       | Wilson avenue.              | 852 00    |
| 20883              | 27               | Melrose.                   | Robey                     | Western avenue.             | 864 00    |
| 20884              | 20               | Otto.                      | Ashland avenue            | C. E. & L. S. R. R.         | 640 00    |
| 20885              | 57               | Ashland avenue.            | Archer avenue.            | Thirty-fifth.               | 887 00    |
| 20890              | 26               | North Clark.               | Devon (Church st.) avenue | Ester (Jackson) avenue.     | 1,648 80  |
| 20891              | 24               | Farwell avenue.            | North Clark.              | Southport avenue.           | 708 40    |
| 20892              | 14               | Ester (Jackson) avenue     | North Clark.              | Arnold (Grand) avenue.      | 424 90    |
| 20893              | 7                | Arnold (Grand) avenue.     | Pratt avenue              | North Shore (North) avenue. | 212 45    |
| 20894              | 7                | Perry (Maple) avenue.      | Pratt avenue              | North Shore (North) avenue. | 212 45    |
| 20895              | 12               | Lunt avenue.               | North Clark.              | Arnold (Grand) avenue.      | 864 20    |
| 20896              | 7                | Newgarth (Lincoln) avenue. | Pratt avenue              | North Shore (North) avenue. | 212 45    |
| 20897              | 4                | Fay avenue.                | Pratt avenue              | North Shore (North) avenue. | 138 90    |
| 20898              | 7                | Calumet avenue             | Sixty-eighth.             | Sixty-ninth.                | 212 45    |
| 20899              | 14               | North Shore (North) avenue | Fay avenue                | Southport avenue.           | 424 90    |
| 20900              | 7                | Southport                  | Pratt avenue              | North Shore (North) avenue. | 212 45    |
| 20901              | 25               | Morse avenue               | North Clark.              | Southport avenue.           | 783 75    |
| 20902              | 10               | Pratt avenue               | North Clark               | Arnold (Grand) avenue.      | 803 50    |
| 20914              | 4                | West Forty-sixth.          | Wallace.                  | Union                       | 128 90    |
| 20915              | 6                | Herndon                    | Addison avenue            | Waveland (Nellie)           | 182 10    |
| 20916              | 13               | Yorktown                   | Thirty-third              | Thirty-fifth.               | 394 55    |
| 20917              | 7                | Byron                      | North Clark               | Southport avenue.           | 212 45    |
| 20918              | 5                | Ward (Haugan).             | Grace.                    | Byron                       | 151 75    |
| 20919              | 5                | Herndon                    | Grace.                    | Byron                       | 151 75    |
| 20920              | 9                | Leavitt                    | Thirty-sixth              | Thirty-seventh.             | 278 15    |
| 20921              | 8                | Victor                     | Wayne avenue.             | Evanson avenue              | 242 80    |
| 20922              | 6                | Wilton avenue.             | Grace                     | Sheridan road               | 182 10    |
| 20923              | 9                | Francis.                   | Southport avenue          | Magnolia (Charlton) avenue. | 278 15    |
| 20924              | 8                | Swift                      | Ridge avenue              | Francis.                    | 242 80    |
| 20925              | 6                | Wilson avenue              | Lincoln avenue            | North Leavitt               | 182 10    |
| 20926              | 18               | Oakley avenue              | Thirty-third              | Thirty-fifth                | 894 55    |
| 21029              | 20               | Greenleaf avenue           | North Clark               | Perry (Maple) avenue.       | 607 00    |
| 21080              | 14               | Pratt avenue               | Arnold (Grand) avenue.    | Southport avenue            | 434 90    |
| 21083              | 5                | Emerald avenue             | Sixty-fourth              | South 875 feet.             | 151 75    |

|       |       |                                 |                                         |                                   |              |
|-------|-------|---------------------------------|-----------------------------------------|-----------------------------------|--------------|
| 10    | 21084 | Paulina .....                   | Thirty-third .....                      | Thirty-fifth .....                | 308 50       |
| 70    | 21088 | Lincoln avenue.....             | Montrose avenue.....                    | Berwyn avenue.....                | 2,064 50     |
| 2     | 21089 | Almond .....                    | West Taylor.....                        | Ashtand .....                     | 65 70        |
| 92    | 21040 | South Fortieth avenue.....      | West Twenty-second.....                 | West Sixteenth.....               | 989 20       |
| 21042 | 10    | Sumnerdale avenue.....          | Clark .....                             | Southport avenue.....             | 308 50       |
| 21048 | 8     | Seventy-ninth place.....        | Commercial (Railroad) avenue.....       | Coles (Arthur) avenue.....        | 242 80       |
| 21044 | 10    | Balmoral avenue.....            | Clark .....                             | Southport avenue.....             | 308 50       |
| 21045 | 10    | Farragut .....                  | Clark .....                             | Southport avenue.....             | 308 50       |
| 21046 | 11    | Berwyn avenue.....              | Clark .....                             | Southport avenue.....             | 383 85       |
| 21047 | 12    | Southport avenue.....           | Clark .....                             | Foster avenue.....                | 384 20       |
| 21057 | 3     | North Forty-seventh avenue..... | Lake .....                              | Fulton .....                      | 99 50        |
| 21058 | 21    | Lake .....                      | North Forty-fourth avenue.....          | North Forty-sixth avenue.....     | 656 50       |
| 21059 | 3     | North Forty-fourth avenue.....  | Lake .....                              | Fulton .....                      | 68 00        |
| 21060 | 3     | St. George's court.....         | Milwaukee avenue.....                   | Stave.....                        | 99 50        |
| 21061 | 3     | Prindville .....                | Milwaukee avenue.....                   | Stave.....                        | 128 50       |
| 21062 | 4     | Atrill .....                    | Milwaukee avenue.....                   | Stave.....                        | 99 50        |
| 21063 | 4     | Point .....                     | Cornelia .....                          | Stave.....                        | 99 50        |
| 21064 | 40    | Lake .....                      | North Fortieth avenue.....              | Armitage avenue.....              | 128 50       |
| 21065 | 17    | West Forty-eighth.....          | Honore (Goodspeed).....                 | North Forty-fourth avenue.....    | 1,220 00     |
| 21078 | 13    | Lawrence avenue.....            | Sheridan Road .....                     | Marshfield (Dryer) avenue.....    | 535 50       |
| 21079 | 18    | Frankfort .....                 | Hoyle avenue.....                       | Lake Michigan .....               | 409 50       |
| 21080 | 4     | Rhine .....                     | North Campbell avenue.....              | Western avenue.....               | 567 00       |
| 21081 | 6     | Catalpa place.....              | Edgewood avenue.....                    | North Maplewood avenue.....       | 138 50       |
| 21082 | 13    | Western avenue.....             | Roscoe .....                            | West Fullerton avenue.....        | 189 00       |
| 21088 | 14    | North Hoyle (Huck) avenue.....  | Lawrence avenue.....                    | Belmont avenue.....               | 409 50       |
| 21103 | 3     | Mechanic (Arthur).....          | West Sixteenth.....                     | Clay avenue.....                  | 441 00       |
| 21104 | 5     | Burling (Hall).....             | 500 feet north of Diversity street..... | West Seventeenth.....             | 96 00        |
| 21172 | 4     | East Ravenswood Park .....      | Lawrence avenue.....                    | Northern terminus.....            | 151 75       |
| 21194 | 19    | Greenleaf avenue.....           | North Robey (Grove).....                | Ainslee (Tuttle avenue).....      | 128 50       |
| 21195 | 4     | Exchange avenue.....            | Eighty eighth.....                      | North Clark (Chicago avenue)..... | 598 50       |
| 21196 | 2     | Ninety-sixth.....               | Commercial avenue.....                  | Eighty-ninth.....                 | 128 50       |
| 21197 | 3     | Seventy-fourth.....             | Lake avenue.....                        | Exchange avenue.....              | 68 00        |
| 21198 | 10    | Arnold (Grand) avenue.....      | Pratt avenue.....                       | Bond avenue.....                  | 99 50        |
| 21199 | 21    | Lunt .....                      | North Clark (Chicago avenue).....       | Greenleaf avenue.....             | 315 00       |
| 21200 | 14    | South Paulina .....             | West Thirty-fifth.....                  | North Robey (Grove).....          | 680 00       |
| 21206 | 5     | Eighty-eighth.....              | Escanaba avenue.....                    | West Thirty-seventh.....          | 441 00       |
| 21820 | 27    | May .....                       | West Fifty-ninth.....                   | Commercial avenue.....            | 157 50       |
|       |       |                                 |                                         | West Sixty-third.....             | 938 50       |
|       |       | Total .....                     |                                         |                                   | \$ 71,650 93 |



## BOULEVARD LAMP POSTS.

| No. of<br>Ward. | No. of<br>Posts. | NAME OF STREET.          | FROM                        | TO                       | AMOUNT.<br>\$ |
|-----------------|------------------|--------------------------|-----------------------------|--------------------------|---------------|
| 20000           | 8                | Prairie avenue.....      | Fifty-first.....            | Fifty-second.....        | 280 00        |
| 20018           | 12               | Perry avenue.....        | Graceland.....              | Berteau avenue.....      | 430 00        |
| 20019           | 8                | Catalpa.....             | Southport avenue.....       | Perry avenue.....        | 280 00        |
| 20020           | 8                | Mayfair avenue.....      | Southport avenue.....       | Perry avenue.....        | 280 00        |
| 20110           | 6                | Sixty-third.....         | Star avenue.....            | Grace avenue.....        | 81 53         |
| 20115           | 18               | Michigan avenue.....     | Fortieth.....               | Forty-first.....         | 40 06         |
| 20117           | 33               | West Harrison.....       | Central Park boulevard..... | Crawford avenue.....     | 353 87        |
| 20125           | 14 on S. Side.   | Sixtieth.....            | Cottage grove avenue.....   | Rhodes avenue.....       | 490 00        |
| 20163           | 49               | West Adams.....          | Fortieth.....               | Forty-sixth.....         | 1,568 00      |
| 20166           | 5                | Ione place.....          | Grand boulevard.....        | Vincennes avenue.....    | 165 00        |
| 20167           | 40               | Stony Island avenue..... | Sixty-seventh.....          | Sixty-first.....         | 1,440 00      |
| 20237           | 6                | Vincennes avenue.....    | Sixtieth.....               | Sixty-first.....         | 210 00        |
| 20324           | 2                | Montrose boulevard.....  | Halsted.....                | Lake Michigan.....       | 71 00         |
| 20325           | 30               | La Salle avenue.....     | Division.....               | North Clark.....         | 300 00        |
| 20326           | 18               | De Kalb.....             | Flournoy.....               | Leavitt.....             | 180 00        |
| 20327           | 4                | Princeton avenue.....    | Sixty-second.....           | Sixty-third.....         | 142 00        |
| 20331           | 46               | West Congress.....       | West Fortieth.....          | West Forty-sixth.....    | 1,564 00      |
| 20336           | 49               | Gladys avenue.....       | West Fortieth.....          | West Forty-sixth.....    | 1,666 00      |
| 20345           | 4                | Seventieth.....          | Rhodes avenue.....          | St. Lawrence avenue..... | 142 00        |
| 20346           | 13               | Vernon avenue.....       | Sixty-ninth.....            | Seventy-first.....       | 455 00        |
| 20347           | 13               | South Park avenue.....   | Sixty-eighth.....           | Seventieth.....          | 455 00        |
| 20348           | 7                | Rhodes avenue.....       | Seventieth.....             | Seventy-first.....       | 245 00        |
| 20409           | 4                | Fiftieth.....            | Prairie avenue.....         | Calumet avenue.....      | 143 00        |
| 20431           | 8                | Fifty-eighth.....        | Stewart avenue.....         | Wentworth avenue.....    | 288 00        |
| 20432           | 7                | Rhodes avenue.....       | Sixtieth.....               | Sixty-first.....         | 245 00        |
| 20443           | 5                | Eggleston avenue.....    | Seventy-fourth.....         | Seventy-fifth.....       | 175 00        |
| 20451           | 29               | St. Lawrence avenue..... | Sixty-seventh.....          | Seventy-first.....       | 986 00        |
| 20452           | 15               | Anthony avenue.....      | South Park avenue.....      | Seventieth.....          | 595 00        |
| 20518           | 31               | Seventy-third.....       | Ellington avenue.....       | Bond avenue.....         | 1,240 00      |
| 20527           | 8                | Wright.....              | Seventy-third.....          | Seventy-fourth.....      | 880 00        |
| 20532           | 26               | Calumet avenue.....      | Fifty-first.....            | Fifty-fifth.....         | 853 00        |
| 20544           | 5                | Stewart avenue.....      | Hawthorne avenue.....       | Seventy-eighth.....      | 175 00        |
| 20558           | 7                | Calumet avenue.....      | Forty-first.....            | Forty-second.....        | 245 00        |
| 20564           | 21               | La Salle avenue.....     | Chicago avenue.....         | Division.....            | 210 00        |
| 20673           | 3                | Fifty-fourth.....        | Kimberk avenue.....         | Woodlawn avenue.....     | 75 00         |
| 20745           | 9                | Harding avenue.....      | Kinzie.....                 | Chicago avenue.....      | 600 00        |

|       |                                                        |                                  |                                       |                                 |              |
|-------|--------------------------------------------------------|----------------------------------|---------------------------------------|---------------------------------|--------------|
| 20753 | 5                                                      | Vincennes avenue                 | Fiftieth                              | Fifty-first                     | 175 00       |
| 20756 | 16                                                     | Fillmore                         | Garfield boulevard                    | West Fortieth                   | 560 00       |
| 20757 | 10                                                     | West Ohio                        | Avers avenue                          | West Fortieth                   | 410 00       |
| 20758 | 16                                                     | West Polk                        | Garfield boulevard                    | West Fortieth                   | 560 00       |
| 20759 | 6                                                      | Union avenue                     | Seventy fifth                         | Seventy-sixth                   | 210 00       |
| 20776 | 24                                                     | Fifty-first                      | Cottage Grove avenue                  | Grand boulevard                 | 772 00       |
| 20800 | 7                                                      | Boulevard place                  | Vincennes avenue                      | St. Lawrence avenue             | 245 00       |
| 20802 | 5                                                      | Lexington avenue                 | Fifty-fourth                          | Fifty-fourth place              | 175 00       |
| 20810 | 2                                                      | Sixtieth                         | Vincennes avenue                      | Rhodes avenue                   | 75 00        |
| 20811 | 22 & 20th                                              | West Ohio                        | Central Park avenue                   | Avers avenue                    | 808 00       |
| 20812 | 28                                                     | West Ohio                        | Kedzie avenue                         | St. Louis avenue                | 952 00       |
| 20903 | 43                                                     | Chase                            | North Clark                           | Lake Michigan                   | 1,871 70     |
| 21031 | 8                                                      | Arnold avenue                    | Chase                                 | Estes avenue                    | 263 20       |
| 21032 | 20                                                     | May                              | Fifty-first                           | Fifty-fourth                    | 658 00       |
| 21036 | 3                                                      | Sixty-fifth (Court) place        | Bulter (Wright)                       | Harrell (Honore) avenue         | 101 20       |
| 21037 | 3                                                      | Clarkson court                   | Lake                                  | Walnut                          | 101 20       |
| 21066 | 10                                                     | North Winchester (Palmer) avenue | Foster avenue (North Fifty-sixth st.) | Winnemac (Webster) avenue       | 342 50       |
| 21067 | 20                                                     | North Paulina                    | Foster avenue                         | Catalpa avenue                  | 685 00       |
| 21070 | 13                                                     | Rascher avenue                   | East Ravenswood Park                  | North Ashland avenue            | 445 25       |
| 21076 | 15 lamp posts<br>if removed to<br>new site<br>22 lamps | Ellis avenue                     | Forty first                           | Forty-sixth                     | 816 25       |
| 21077 | 3                                                      | Pine Grove avenue                | Irving Park (Graceland) avenue        | 180 feet north of Sheridan road | 101 20       |
| 21102 | 20                                                     | Armour avenue                    | 606.7 ft. south of Garfield boulevard | West Fifty-ninth                | 239 97       |
| 21301 | 7                                                      | Carpenter                        | Fifty-fourth                          | Fifty-fifth                     | 248 50       |
|       |                                                        | Total                            |                                       |                                 | \$ 27,252 43 |

## GASOLINE LAMP POSTS.

| No. of<br>Warrant | No. of<br>Posts. | NAME OF STREET. | FROM             | TO             | AMOUNT.   |
|-------------------|------------------|-----------------|------------------|----------------|-----------|
| 20198             | 15               | Ferdinand       |                  | Hoynes avenue  | \$ 225 00 |
| 21024             | 33               | Austin avenue   | Paulina          | Hawkins avenue | 458 75    |
|                   |                  | Total           | West Forty-sixth |                | \$ 678 75 |

**TOTAL ASSESSMENTS FOR YEAR ENDING  
DECEMBER 31, 1895.**

**RECAPITULATION.**

|                                                           |                        |
|-----------------------------------------------------------|------------------------|
| 101 Streets, wooden block pavement.....                   | \$ 1,396,679 15        |
| 19 Streets, sheet asphalt pavement.....                   | 438,123 27             |
| 25 Streets, macadam pavement.....                         | 257,029 35             |
| 7 Streets, vitrified brick pavement.....                  | 114,339 06             |
| 5 Streets, granite block pavement.....                    | 51,795 98              |
| 50 Alleys, wooden block pavement.....                     | 74,579 31              |
| 4 Alleys, granite block and vitrified brick pavement..... | 2,653 40               |
| 9 Opening and widening.....                               | 156,343 34             |
| 2 Curbing and filling.....                                | 9,727 96               |
| 277 Water supply pipes.....                               | 481,977 32             |
| 99 Water service pipes.....                               | 127,901 50             |
| 114 Sewers.....                                           | 771,682 06             |
| 92 Drains.....                                            | 115,150 84             |
| 244 Sidewalks, plank.....                                 | 95,623 99              |
| 104 Sidewalks, cement.....                                | 162,720 80             |
| 7 Sidewalks, stone.....                                   | 31,305 00              |
| 2,465 Lamp posts, gas.....                                | 71,650 93              |
| 884 Lamp posts, boulevard.....                            | 27,252 43              |
| 48 Lamp posts, gasoline.....                              | 678 75                 |
| <b>Total.....</b>                                         | <b>\$ 4,387,214 44</b> |

**SUMMARY.**

**STREETS.**

**Wooden Block Pavement:**

|                     |                 |
|---------------------|-----------------|
| North Division..... | \$ 231,496 97   |
| South Division..... | 528,006 78      |
| West Division.....  | 637,175 40      |
|                     | <hr/>           |
|                     | \$ 1,396,679 15 |

**Sheet Asphalt Pavement:**

|                     |              |
|---------------------|--------------|
| South Division..... | \$ 99,890 25 |
| West Division.....  | 338,233 02   |
|                     | <hr/>        |
|                     | 438,123 27   |

**Macadamized Pavement:**

|                     |               |
|---------------------|---------------|
| North Division..... | \$ 106,304 61 |
| South Division..... | 144,724 74    |
| West Division.....  | 6,000 00      |
|                     | <hr/>         |
|                     | 257,029 35    |

**Vitrified Brick Pavement :**

|                     |    |        |    |               |
|---------------------|----|--------|----|---------------|
| North Division..... | \$ | 16,368 | 42 |               |
| South Division..... |    | 47,088 | 69 |               |
| West Division.....  |    | 50,881 | 95 |               |
|                     |    |        |    | \$ 114,339 06 |

**Granite Block Pavement :**

|                     |    |        |    |           |
|---------------------|----|--------|----|-----------|
| North Division..... | \$ | 20,896 | 80 |           |
| South Division..... |    | 7,520  | 40 |           |
| West Division.....  |    | 23,378 | 78 |           |
|                     |    |        |    | 51,795 98 |

**ALLEYS.****Wooden Block Pavement :**

|                     |    |        |    |           |
|---------------------|----|--------|----|-----------|
| North Division..... | \$ | 26,158 | 50 |           |
| South Division..... |    | 11,091 | 15 |           |
| West Division.....  |    | 37,329 | 66 |           |
|                     |    |        |    | 74,579 31 |

**Granite Block Pavement :**

|                     |    |       |    |          |
|---------------------|----|-------|----|----------|
| South Division..... | \$ | 1,054 | 59 |          |
|                     |    |       |    | 1,054 59 |

**Vitrified Brick Pavement :**

|                     |    |       |    |          |
|---------------------|----|-------|----|----------|
| South Division..... | \$ | 1,598 | 81 |          |
|                     |    |       |    | 1,598 81 |

**Opening and Widening :**

|                      |    |         |    |            |
|----------------------|----|---------|----|------------|
| North Division ..... | \$ | 208     | 30 |            |
| South Division.....  |    | 150,417 | 79 |            |
| West Division.....   |    | 5,717   | 25 |            |
|                      |    |         |    | 156,343 34 |

**Curbing and Filling :**

|                     |    |       |    |          |
|---------------------|----|-------|----|----------|
| North Division..... | \$ | 2,696 | 90 |          |
| South Division..... |    | 7,031 | 06 |          |
|                     |    |       |    | 9,727 96 |

**Water Supply Pipes :**

|                     |    |         |    |            |
|---------------------|----|---------|----|------------|
| North Division..... | \$ | 31,878  | 96 |            |
| South Division..... |    | 201,805 | 08 |            |
| West Division.....  |    | 248,293 | 28 |            |
|                     |    |         |    | 481,977 32 |

**Water Service Pipes :**

|                     |    |        |    |            |
|---------------------|----|--------|----|------------|
| North Division..... | \$ | 16,416 | 50 |            |
| South Division..... |    | 53,186 | 50 |            |
| West Division.....  |    | 58,298 | 50 |            |
|                     |    |        |    | 127,901 50 |

## Sewers:

|                     |    |         |    |               |
|---------------------|----|---------|----|---------------|
| North Division..... | \$ | 30,175  | 06 |               |
| South Division..... |    | 529,177 | 18 |               |
| West Division.....  |    | 212,329 | 82 |               |
|                     |    |         |    | \$ 771,682 06 |

## Drains:

|                     |    |        |    |            |
|---------------------|----|--------|----|------------|
| North Division..... | \$ | 16,726 | 50 |            |
| South Division..... |    | 62,000 | 25 |            |
| West Division.....  |    | 36,424 | 09 |            |
|                     |    |        |    | 115,150 84 |

## Plank Sidewalks:

|                     |    |        |    |           |
|---------------------|----|--------|----|-----------|
| North Division..... | \$ | 16,659 | 59 |           |
| South Division..... |    | 44,181 | 75 |           |
| West Division.....  |    | 34,782 | 65 |           |
|                     |    |        |    | 95,623 99 |

## Cement Sidewalks:

|                     |    |        |    |            |
|---------------------|----|--------|----|------------|
| North Division..... | \$ | 46,130 | 56 |            |
| South Division..... |    | 89,395 | 14 |            |
| West Division.....  |    | 27,195 | 10 |            |
|                     |    |        |    | 162,720 80 |

## Stone Sidewalks:

|                     |    |        |    |           |
|---------------------|----|--------|----|-----------|
| North Division..... | \$ | 4,197  | 00 |           |
| South Division..... |    | 27,108 | 00 |           |
|                     |    |        |    | 31,305 00 |

## Gas Lamp Posts:

|                     |    |        |    |           |
|---------------------|----|--------|----|-----------|
| North Division..... | \$ | 27,061 | 52 |           |
| South Division..... |    | 21,829 | 47 |           |
| West Division.....  |    | 22,759 | 94 |           |
|                     |    |        |    | 71,650 93 |

## Boulevard Lamp Posts:

|                     |    |        |    |           |
|---------------------|----|--------|----|-----------|
| North Division..... | \$ | 4,769  | 85 |           |
| South Division..... |    | 13,109 | 51 |           |
| West Division.....  |    | 9,373  | 07 |           |
|                     |    |        |    | 27,252 43 |

## Gasoline Lamp Posts:

|                    |    |     |    |        |
|--------------------|----|-----|----|--------|
| West Division..... | \$ | 678 | 75 |        |
|                    |    |     |    | 678 75 |

|             |    |           |    |  |
|-------------|----|-----------|----|--|
| TOTAL ..... | \$ | 4,387,214 | 44 |  |
|-------------|----|-----------|----|--|

## LIST OF ASSESSMENTS FOR EACH YEAR SINCE 1861.

|                                                   |                 |
|---------------------------------------------------|-----------------|
| For the year ending April 1, 1862.....            | \$ 42,635 49    |
| For the year ending April 1, 1863.....            | 46,493 67       |
| For the year ending April 1, 1864.....            | 889,169 81      |
| For the year ending April 1, 1865.....            | 103,576 35      |
| For the year ending April 1, 1866.....            | 802,574 56      |
| For the year ending April 1, 1867.....            | 317,206 18      |
| For the year ending April 1, 1868.....            | 1,854,486 48    |
| For the year ending April 1, 1869.....            | 2,895,683 03    |
| For the year ending April 1, 1870.....            | 2,836,852 48    |
| For the year ending April 1, 1871.....            | 2,359,835 89    |
| For the year ending April 1, 1872.....            | 62,222 25       |
| For the year ending April 1, 1873.....            | .....           |
| For the year ending April 1, 1874.....            | 749,480 27      |
| For the year ending April 1, 1875.....            | 723,254 42      |
| For the nine months ending December 31, 1875..... | 60,585 72       |
| For the year ending December 31, 1876.....        | 1,516,081 07    |
| For the year ending December 31, 1877.....        | 124,498 48      |
| For the year ending December 31, 1878.....        | 284,900 45      |
| For the year ending December 31, 1879.....        | 588,963 44      |
| For the year ending December 31, 1880.....        | 980,895 50      |
| For the year ending December 31, 1881.....        | 1,227,169 71    |
| For the year ending December 31, 1882.....        | 1,395,872 98    |
| For the year ending December 31, 1883.....        | 2,282,757 04    |
| For the year ending December 31, 1884.....        | 2,857,905 28    |
| For the year ending December 31, 1885.....        | 2,889,544 80    |
| For the year ending December 31, 1886.....        | 3,307,567 99    |
| For the year ending December 31, 1887.....        | 3,160,474 67    |
| For the year ending December 31, 1888.....        | 3,655,956 78    |
| For the year ending December 31, 1889.....        | 4,220,869 93    |
| For the year ending December 31, 1890.....        | 6,987,155 48    |
| For the year ending December 31, 1891.....        | 8,790,448 29    |
| For the year ending December 31, 1892.....        | 14,505,701 79   |
| For the year ending December 31, 1893.....        | 6,001,445 65    |
| For the year ending December 31, 1894.....        | 2,903 814 16    |
| For the year ending December 31, 1895.....        | 4,887,214 44    |
| Total for thirty-five years.....                  | \$84,262,719 03 |



# Book-keeper's Statement





# BOOK-KEEPER'S STATEMENT.

HON. W. D. KENT,

*Commissioner of Public Works.*

DEAR SIR:—I herewith respectfully submit statement in detail of the Receipts and Expenditures of your Department for the year 1895.

## WATER FUND.

|                                            |              |
|--------------------------------------------|--------------|
| Balance to credit, Jan. 1st,<br>1895 ..... | \$203,155 95 |
|--------------------------------------------|--------------|

### RECEIPTS.

|                                                                               |                |
|-------------------------------------------------------------------------------|----------------|
| Amount collected during the<br>year for current water rents<br>assessed ..... | \$2,071,874 09 |
|-------------------------------------------------------------------------------|----------------|

|                                                                                               |              |
|-----------------------------------------------------------------------------------------------|--------------|
| Amount collected during the<br>year for current water<br>rents, meter measure-<br>ments ..... | 1,004,203 48 |
|-----------------------------------------------------------------------------------------------|--------------|

### *Acc't Water Service Cocks.*

|                                                                                                            |           |
|------------------------------------------------------------------------------------------------------------|-----------|
| Amount received for taps and<br>permits, also plumbers'<br>licenses and special assess-<br>ment work ..... | 76,679 15 |
|------------------------------------------------------------------------------------------------------------|-----------|

### *Acc't Meters and Private Work.*

|                                                                                                                                                                                                                                           |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Amount received for labor<br>and material used in laying<br>and repairing water supply<br>pipes for elevators and gen-<br>eral supply of water, also<br>for changing location of<br>hydrants and stop cocks<br>and repairing meters ..... | 109,617 18 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|

|                       |                |
|-----------------------|----------------|
| Carried forward ..... | \$3,262,373 90 |
|-----------------------|----------------|

|                                                                                 |                       |
|---------------------------------------------------------------------------------|-----------------------|
| Brought forward. . . .                                                          | \$3,262,373 90        |
| <i>Acc't West Pump. Works.</i>                                                  |                       |
| Amount received for scrap<br>iron, empty barrels, etc. . .                      | 396 37                |
| <i>Acc't Central Pump. Works.</i>                                               |                       |
| Amount received for scrap<br>iron. . . . .                                      | 57 86                 |
| <i>Acc't North Pump. Works.</i>                                                 |                       |
| Amount received for scrap<br>iron, etc. . . . .                                 | 46 78                 |
| <i>Acc't Water Pipe and Special<br/>Castings.</i>                               |                       |
| Amount received from King<br>& Andrews acc't forfeiture<br>of contract. . . . . | 500 00                |
| <i>Acc't Hydrant Wrenches.</i>                                                  |                       |
| Amount received as de-<br>posit for loan of hydrant<br>wrenches. . . . .        | 642 00                |
| <i>Acc't Water Pipe Extension.</i>                                              |                       |
| Amount received for lower-<br>ing and repairing water<br>pipe. . . . .          | 18,470 16             |
| <i>Acc't Water Works Shop.</i>                                                  |                       |
| Amount received for brass<br>borings, lead dross, scrap<br>iron, etc. . . . .   | 1,298 05              |
| <i>Acc't South Pump. Works.</i>                                                 |                       |
| Scrap iron sold. . . . .                                                        | 58 14                 |
| Carried forward. . . .                                                          | <u>\$3,283,843 86</u> |

|                                               |                       |
|-----------------------------------------------|-----------------------|
| Brought forward.....                          | \$3,283,843 86        |
| <i>Acc't Sixth-eighth St. Pump Works.</i>     |                       |
| Scrap iron sold .....                         | 25 18                 |
| <i>Acc't Lake View Pump Works.</i>            |                       |
| Scrap iron sold .....                         | 38 70                 |
| <i>Acc't Wash. Heights Pump Works.</i>        |                       |
| Scrap iron sold .....                         | 6 32                  |
| <i>Acc't Repair and Maintenance.</i>          |                       |
| Correction on pay rolls ....                  | 69 75                 |
| From private parties to lay water mains ..... | 71,208 18             |
| Rent of Rookery Lot .....                     | 35,000 04             |
| From Sale of Water Certificates .....         | 699,185 00            |
| Interest on Certificates sold                 | 4,937 14              |
| W. A. Prendergast.....                        | 100 00                |
| Total receipts.....                           | <u>\$4,094,414 17</u> |

## EXPENDITURES.

|                                                                        |                      |
|------------------------------------------------------------------------|----------------------|
| <i>Acc't Water Pipe Extension and Water Pipe and Special Castings.</i> |                      |
| Labor.....                                                             | \$ 335,992 56        |
| Water pipe and special castings .....                                  | 161,629 16           |
| Cost of labor and material furnished by Water Works Shop .....         | 31,699 62            |
| Teaming .....                                                          | 29,871 38            |
| Hydrant rings, covers, stop-cocks, chambers, etc.....                  | 7,728 87             |
| Carried forward.....                                                   | <u>\$ 566,921 59</u> |

|                                                                                                                                   |               |                 |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|
| Brought forward.....                                                                                                              | \$ 566,921 59 |                 |
| Lead .....                                                                                                                        | 10,606 11     |                 |
| Ferrules .....                                                                                                                    | 4,197 79      |                 |
| Brick .....                                                                                                                       | 11,044 18     |                 |
| Transfers to Special Assess-<br>ments.....                                                                                        | 1,053 24      |                 |
| Branches of valves .....                                                                                                          | 1,586 09      |                 |
| Plumbing.....                                                                                                                     | 237 75        |                 |
| Cement .....                                                                                                                      | 5,508 00      |                 |
| Lumber .....                                                                                                                      | 5,876 91      |                 |
| Payment of Note No. 3<br>Metropolitan National<br>Bank .....                                                                      | 4,636 52      |                 |
| Sundries—car fare, hard-<br>ware, coal, packing, sta-<br>tionery, advertising, oil,<br>use of pump, blacksmith-<br>ing, etc ..... | 8,258 97      | \$ 619,927 15   |
| <i>Water Works Repairs.</i>                                                                                                       |               |                 |
| Labor.....                                                                                                                        | \$ 344,516 81 |                 |
| Cost of labor and material<br>furnished by Water Works<br>Shop.....                                                               | 23,817 11     |                 |
| Teaming .....                                                                                                                     | 7,952 30      |                 |
| Lumber .....                                                                                                                      | 4,524 70      |                 |
| Hydrant chambers, castings,<br>etc .....                                                                                          | 2,247 83      |                 |
| Sundries .....                                                                                                                    | 3,586 75      |                 |
| Amount Department.....                                                                                                            | 2,930 57      |                 |
| Water supply furnished by<br>Rogers Park Pump .....                                                                               | 6,803 56      | 396,379 63      |
| <i>Acc't North Pump. Works.</i>                                                                                                   |               |                 |
| Labor .....                                                                                                                       | \$ 49,717 83  |                 |
| Coal .....                                                                                                                        | 98,998 89     |                 |
| Repairing engines, boilers,<br>buildings, etc.....                                                                                | 6,419 90      |                 |
| Gas .....                                                                                                                         | 907 60        |                 |
| Waste, packing and sundry<br>supplies.....                                                                                        | 4,105 83      | 160,150 05      |
| Carried forward.....                                                                                                              |               | \$1,176,456 83. |

|                                                    |    |                |                |
|----------------------------------------------------|----|----------------|----------------|
| Brought forward.....                               |    | \$1,176,456 83 |                |
| <i>Acc't West Pump. Works.</i>                     |    |                |                |
| Labor.....                                         | \$ | 40,278 00      |                |
| Coal.....                                          |    | 44,035 92      |                |
| Oil and Packing.....                               |    | 2,736 65       |                |
| Repairing engines, boilers,<br>buildings, etc..... |    | 18,550 06      |                |
| Gas.....                                           |    | 468 00         |                |
| Electric Light Service .....                       |    | 228 87         |                |
| Cement, sand, brick, etc....                       |    | 894 00         |                |
| Waste and sundry supplies..                        |    | 2,403 77       |                |
| Construction. ....                                 |    | 4,351 26       |                |
|                                                    |    | <hr/>          | 113,946 53     |
| <i>Acc't Central Pump. Works.</i>                  |    |                |                |
| Labor .....                                        | \$ | 27,090 07      |                |
| Coal .....                                         |    | 17,769 25      |                |
| Oil and packing .....                              |    | 1,430 39       |                |
| Repairing engines, boilers,<br>buildings, etc..... |    | 8,275 64       |                |
| Sand, brick and clay.....                          |    | 294 40         |                |
| Gas.....                                           |    | 1,189 80       |                |
| Waste and sundry supplies..                        |    | 1,719 78       |                |
|                                                    |    | <hr/>          | 57,769 33      |
| <i>Acc't South Pump. Works.</i>                    |    |                |                |
| Labor .....                                        | \$ | 45,354 05      |                |
| Coal.....                                          |    | 27,725 82      |                |
| Oil and packing.....                               |    | 778 07         |                |
| Repairing engines, boilers,<br>buildings, etc..... |    | 5,434 75       |                |
| Gas.....                                           |    | 574 20         |                |
| Waste and sundry supplies..                        |    | 2,219 86       |                |
|                                                    |    | <hr/>          | 82,116 75      |
| <i>Acc't Washington Heights<br/>Pump. Works.</i>   |    |                |                |
| Labor .....                                        | \$ | 3,148 75       |                |
| Coal .....                                         |    | 1,666 99       |                |
| Repairing engines, boilers,<br>buildings, etc..... |    | 487 34         |                |
| Gas.....                                           |    | 11 80          |                |
| Sundries .....                                     |    | 78 20          |                |
|                                                    |    | <hr/>          | 5,393 08       |
| Carried forward.....                               |    |                | \$1,435,682 52 |

|                                                     |    |                |                |
|-----------------------------------------------------|----|----------------|----------------|
| Brought forward . . . .                             |    | \$1,435,682 52 |                |
| <i>Acc't Sixty-eighth Street Pump. Works.</i>       |    |                |                |
| Labor . . . . .                                     | \$ | 35,571 38      |                |
| Coal, fuel oil. . . . .                             |    | 35,051 55      |                |
| Repairing engines, boilers, buildings, etc. . . . . |    | 10,991 42      |                |
| Oil and packing. . . . .                            |    | 835 28         |                |
| Electric light service. . . . .                     |    | 1,303 68       |                |
| Waste and sundry supplies. . . . .                  |    | 3,619 23       |                |
| Construction . . . . .                              |    | 527 60         |                |
|                                                     |    |                | 87,900 23      |
| <i>Acc't Lake View Pump. Works.</i>                 |    |                |                |
| Labor . . . . .                                     | \$ | 23,870 68      |                |
| Coal . . . . .                                      |    | 26,900 96      |                |
| Oil and packing. . . . .                            |    | 911 40         |                |
| Repairing engines, boilers, buildings, etc. . . . . |    | 8,709 46       |                |
| Gas . . . . .                                       |    | 25 20          |                |
| Telephone service. . . . .                          |    | 62 50          |                |
| Construction. . . . .                               |    | 898 45         |                |
| Waste and sundry supplies. . . . .                  |    | 2,477 60       |                |
|                                                     |    |                | 63,856 25      |
| <i>Acc't Norwood Park Pump. Works.</i>              |    |                |                |
| Labor . . . . .                                     | \$ | 1,366 97       |                |
| Coal . . . . .                                      |    | 378 54         |                |
| Repairing engines, boilers, buildings, etc. . . . . |    | 312 52         |                |
| Waste, packing and sundry supplies . . . . .        |    | 203 63         |                |
|                                                     |    |                | 2,261 66       |
| <i>Acc't Lake View Tunnel.</i>                      |    |                |                |
| Labor . . . . .                                     | \$ | 5,897 12       |                |
| Contractor. . . . .                                 |    | 96,197 90      |                |
| Tug service. . . . .                                |    | 458 00         |                |
| Board for Inspectors . . . . .                      |    | 346 67         |                |
| Sundries. . . . .                                   |    | 166 44         |                |
|                                                     |    |                | 103,066 13     |
| Carried forward. . . . .                            |    |                | \$1,692,766 79 |

Brought forward..... \$1,692,766 79

*Acc't Sixty-eighth Street  
Tunnel Extension.*

|                  |             |           |
|------------------|-------------|-----------|
| Labor.....       | \$ 3,912 04 |           |
| Contractor ..... | 78,180 82   |           |
| Tug service..... | 280 93      |           |
| Coal .....       | 1,026 43    |           |
| Boilers.....     | 400 00      |           |
| Sundries .....   | 423 52      |           |
|                  | <hr/>       | 84,223 74 |

*Acc't Two-Mile Crib.*

|                  |              |           |
|------------------|--------------|-----------|
| Labor.....       | \$ 10,267 03 |           |
| Tug service..... | 2,865 52     |           |
| Coal.....        | 510 30       |           |
| Sundries.....    | 381 39       |           |
|                  | <hr/>        | 14,024 24 |

*Acc't Four-Mile Crib.*

|                  |             |           |
|------------------|-------------|-----------|
| Labor .....      | \$ 5,326 07 |           |
| Contractor.....  | 4,343 27    |           |
| Tug service..... | 2,932 29    |           |
| Coal .....       | 170 00      |           |
| Cash items ..... | 265 28      |           |
| Sundries .....   | 397 86      |           |
|                  | <hr/>       | 13,434 77 |

*Acc't Lake View Crib.*

|                           |             |          |
|---------------------------|-------------|----------|
| Labor.....                | \$ 2,006 41 |          |
| Construction.....         | 100 00      |          |
| Board for inspectors..... | 60 00       |          |
| Tug service.....          | 1,726 39    |          |
| Sundries .....            | 14 35       |          |
|                           | <hr/>       | 3,907 15 |

*Acc't Northwest Land Tunnel.*

|                   |              |           |
|-------------------|--------------|-----------|
| Labor.....        | \$ 23,248 41 |           |
| Contractors ..... | 22,619 89    |           |
| Lumber.....       | 80 37        |           |
| Real estate ..... | 14,000 00    |           |
| Cash items .....  | 576 62       |           |
| Sundries.....     | 29 96        |           |
|                   | <hr/>        | 60,555 25 |

Carried forward..... \$1,868,911 94



|                                                                             |               |                |
|-----------------------------------------------------------------------------|---------------|----------------|
| Brought forward.....                                                        |               | \$1,868,911 94 |
| <i>Acc't Water Works Shops.</i>                                             |               |                |
| Sundries acc't, construction,                                               |               | 1,688 85       |
| <i>Acc't Water Service Cocks.</i>                                           |               |                |
| Labor.....                                                                  | \$ 54,159 77  |                |
| Sundries .....                                                              | 207 16        |                |
|                                                                             | <hr/>         | 54,366 93      |
| <i>Acc't Water Meter and Private Works.</i>                                 |               |                |
| Labor.....                                                                  | \$ 66,034 14  |                |
| Meters, counters, covers and fittings .....                                 | 22,401 69     |                |
| Rebates on deposits.....                                                    | 9,433 04      |                |
| Lumber .....                                                                | 425 07        |                |
| Sundries .....                                                              | 1,623 87      |                |
|                                                                             | <hr/>         | 99,917 81      |
| <i>Acc't Water Office Expense.</i>                                          |               |                |
| Rent.....                                                                   | \$ 1,278 32   |                |
| Cash Items .....                                                            | 871 11        |                |
| Telephone Service .....                                                     | 67 33         |                |
| Stationery, advertising, postage, car fare, etc .....                       | 12,737 57     |                |
|                                                                             | <hr/>         | 14,954 33      |
| <i>Acc't Water Office Salaries.</i>                                         |               |                |
| Collecting water rents assessed, inspectors, assessors and draughtsmen..... |               | 221,351 88     |
| <i>Acc't Four-Mile Tunnel.</i>                                              |               |                |
| Judgment and Interest .....                                                 | \$ 100,000 00 |                |
| A. Onderdonk.....                                                           | 11,617 83     |                |
|                                                                             | <hr/>         | 111,617 83     |
| Carried forward.....                                                        |               | \$2,372,809 07 |

Brought forward.... \$2,372,809 07

*Acc't Western Ave. Tunnel.*

|                      |              |           |
|----------------------|--------------|-----------|
| Labor.....           | \$ 25,155 46 |           |
| Powder .....         | 1,323 56     |           |
| Repairing tools..... | 317 80       |           |
| Sundries ....        | 582 41       |           |
|                      | <hr/>        | 27,379 23 |

*Acc't North Shore Inlet Extension.*

|                  |           |           |
|------------------|-----------|-----------|
| Labor.....       | \$ 788 00 |           |
| Contractor ..... | 20,305 09 |           |
|                  | <hr/>     | 21,093 09 |

*Acc't Water Fund Proportion of Office Salaries and Expense.*

|                                              |              |           |
|----------------------------------------------|--------------|-----------|
| Labor.....                                   | \$ 32,810 02 |           |
| Stationery, postage, annual report, etc..... | 10,813 79    |           |
| Cash items .....                             | 2,805 98     |           |
| Telephone service .....                      | 96 39        |           |
|                                              | <hr/>        | 46,526 18 |

*Other Expenses.*

|                                                       |              |              |
|-------------------------------------------------------|--------------|--------------|
| Water loan interest .....                             | \$ 74,256 93 |              |
| Water loan certificates.....                          | 1,168,185 00 |              |
| Hyde Park bonds.....                                  | 320,000 00   |              |
| Lake View bonds.....                                  | 69,000 00    |              |
| Refunding advances to lay water pipe.....             | 60,560 40    |              |
| Refund for hydrant wrenches,                          | 442 00       |              |
| Refunding duplicate payments of water tax, etc. .     | 4,018 39     |              |
| Balance to credit of water fund, January 1, 1896 .... | 133,299 83   |              |
|                                                       | <hr/>        | 1,829,762 55 |

|                     |       |                       |
|---------------------|-------|-----------------------|
| Total expenses..... | <hr/> | <u>\$4,297,570 12</u> |
|---------------------|-------|-----------------------|

## SEWER FUND.

## RECEIPTS.

|                                                                                 |               |            |
|---------------------------------------------------------------------------------|---------------|------------|
| Amount received from house drain permits .....                                  | \$ 34,828 75  |            |
| Amount received from drain layers' licenses .....                               | 2,095 00      |            |
| Amount appropriated by City Council for cleaning sewers and catch-basins .....  | \$ 115,000 00 |            |
| Amount appropriated by City Council for repairing sewers and catch-basins ..... | 20,000 00     |            |
| Amount appropriated for sewer office salaries .....                             | 27,810 00     |            |
| Amount appropriated for extension of Fifty-sixth street sewer outlet .....      | 4,445 03      |            |
| Amount appropriated for extension of Fifty first street sewer outlet .....      | 498 00        |            |
| Amount appropriated for Sixty-ninth street sewer pump .....                     | 9,400 00      |            |
| Amount appropriated for Woodlawn sewer pump...                                  | 8,500 00      |            |
| Amount appropriated for Seventieth street sewer pump .....                      | 8,500 00      |            |
| Amount appropriated for Seventy-third street sewer pump .....                   | 8,500 00      |            |
| Amount appropriated for Ninety-fourth street sewer pump .....                   | 4,000 00      |            |
|                                                                                 | <hr/>         | 206,653 03 |
| Carried forward ....                                                            | \$ 243,576 78 |            |

|                                                                       |               |                      |
|-----------------------------------------------------------------------|---------------|----------------------|
| Brought forward . . . .                                               | \$ 243,576 78 |                      |
| Amount received from private parties for labor and material . . . . . | 7,404 96      |                      |
| Received from special assessment for work and inspection . . . . .    | 130,796 38    |                      |
| Total receipts . . . . .                                              |               | <u>\$ 381,778 12</u> |

## EXPENSES.

|                                                          |             |
|----------------------------------------------------------|-------------|
| Sewers North Division . . . .                            | \$ 2,386 16 |
| Sewers South Division . . . .                            | 10,032 46   |
| Sewers West Division . . . .                             | 4,533 37    |
| House drains . . . . .                                   | 31,225 47   |
| Cleaning sewers and catch-basins . . . . .               | 134,424 44  |
| Repairing sewers and catch-basins . . . . .              | 49,777 02   |
| Intersections . . . . .                                  | 38,616 05   |
| Sewer office expense . . . . .                           | 760 46      |
| Sewer office salaries . . . . .                          | 27,819 28   |
| Fifty-first and Fifty-sixth streets outlet . . . . .     | 4,944 78    |
| Sewer stock account . . . . .                            | 358 72      |
| Salaries of inspectors (special assessment work) . . . . | 41,423 49   |

## OTHER EXPENSES.

|                                              |                      |
|----------------------------------------------|----------------------|
| Sixty-ninth street sewer pump                | 7,851 12             |
| Seventieth street sewer pump                 | 6,966 56             |
| Seventy-third street sewer pump . . . . .    | 6,326 62             |
| Ninety-fifth street sewer pump . . . . .     | 5,277 42             |
| Woodlawn sewer pump . . . .                  | 9,026 24             |
| Amount transferred to General Fund . . . . . | 28 46                |
| Total expenses . . . . .                     | <u>\$ 381,778 12</u> |

## APPROPRIATION FUND.

## RECEIPTS.

*Acc't Improved Streets.*

Amount appropriated by City

|                      |               |               |
|----------------------|---------------|---------------|
| Council .....        | \$ 200,000 00 |               |
| Other receipts ..... | 28,198 66     |               |
|                      | <hr/>         | \$ 228,198 66 |

*Acc't Unimproved Streets.*

Amount appropriated by City

|                      |               |            |
|----------------------|---------------|------------|
| Council.....         | \$ 150,000 00 |            |
| Other receipts ..... | 124 00        |            |
|                      | <hr/>         | 150,124 00 |

*Acc't Scavenger Service.*

Amount appropriated by City

|                      |               |            |
|----------------------|---------------|------------|
| Council .....        | \$ 335,000 00 |            |
| Other receipts ..... | 5,628 30      |            |
|                      | <hr/>         | 340,628 30 |

*Acc't Cleaning Improved and  
Macadam Streets.*

Amount appropriated by City

|                             |               |            |
|-----------------------------|---------------|------------|
| Council.....                | \$ 250,000 00 |            |
| Amount appropriated by City |               |            |
| Council .....               | 50,000 00     |            |
| Other receipts .....        | 37,012 88     |            |
|                             | <hr/>         | 337,012 88 |

*Acc't Ward Inspectors.*

Amount appropriated by City

|              |           |
|--------------|-----------|
| Council..... | 34,000 00 |
|--------------|-----------|

*Acc't Removal Dead Animals.*

Amount appropriated by City

|              |           |
|--------------|-----------|
| Council..... | 37,500 00 |
|--------------|-----------|

Carried forward...

---

\$1,127,463 84

|                                                          |    |                |           |
|----------------------------------------------------------|----|----------------|-----------|
| Brought forward.....                                     |    | \$1,127,463 84 |           |
| <i>Acc't Street and Alley Cleaning, Office Salaries.</i> |    |                |           |
| Amount appropriated by City Council .....                |    | 9,400 00       |           |
| <i>Acc't Sidewalk Repairs.</i>                           |    |                |           |
| Amount appropriated by City Council .....                | \$ | 75,000 00      |           |
| Other receipts .....                                     |    | 1,473 39       |           |
|                                                          |    | <hr/>          | 76,473 39 |
| <i>Acc't Public Buildings.</i>                           |    |                |           |
| Amount appropriated by City Council.....                 | \$ | 37,500 00      |           |
| Receipts from Public Library, etc.....                   |    | 4,005 20       |           |
|                                                          |    | <hr/>          | 41,505 20 |
| <i>Acc't Janitors' Salaries.</i>                         |    |                |           |
| Amount appropriated by City Council.....                 | \$ | 45,383 20      |           |
| Other receipts .....                                     |    | 1,710 00       |           |
|                                                          |    | <hr/>          | 47,093 20 |
| <i>Acc't Bridge Telephone Operators' Salary.</i>         |    |                |           |
| Amount appropriated by City Council .....                |    | 8,400 00       |           |
| <i>Acc't Public Parks.</i>                               |    |                |           |
| Amount appropriated by City Council.....                 | \$ | 10,500 00      |           |
| Other receipts .....                                     |    | 20 00          |           |
|                                                          |    | <hr/>          | 10,520 00 |
| <i>Acc't House Moving Permits.</i>                       |    |                |           |
| Amount received from permits. ....                       |    | 2,636 00       |           |
|                                                          |    | <hr/>          |           |
| Carried forward.....                                     |    | \$1,323,491 63 |           |

|                                                                                                                                              |              |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|
| Brought forward.....                                                                                                                         |              | \$1,323,491 63       |
| <i>Acc't Street Permits.</i>                                                                                                                 |              |                      |
| Amount received for work<br>on permits.....                                                                                                  |              | 72,997 70            |
| <i>Acc't Special Assessments.</i>                                                                                                            |              |                      |
| Amount received from special<br>assessment fund for<br>cost of making and collecting<br>special assessments,<br>salaries and office expenses |              | 238,833 45           |
| <i>Acc't Street Lamp Repairs.</i>                                                                                                            |              |                      |
| Amount appropriated by City<br>Council .....                                                                                                 | \$ 50,000 00 |                      |
| Amount received from special<br>assessments, gas company,<br>judgments, etc.....                                                             | 11,937 48    |                      |
|                                                                                                                                              | <hr/>        | 61,937 48            |
| <i>Acc't Street Department Office<br/>Expense.</i>                                                                                           |              |                      |
| Amount appropriated by City<br>Council .....                                                                                                 |              | 1,500 00             |
| <i>Acc't City Engineer's Office<br/>Expense.</i>                                                                                             |              |                      |
| Amount appropriated by City<br>Council .....                                                                                                 |              | 750 00               |
| <i>Acc't Map Office Expense.</i>                                                                                                             |              |                      |
| Amount appropriated by City<br>Council .....                                                                                                 | \$ 800 00    |                      |
| Other receipts .....                                                                                                                         | 45 00        |                      |
|                                                                                                                                              | <hr/>        | 845 00               |
| Carried forward.....                                                                                                                         |              | <hr/> \$1,700,355 26 |

|                                                                   |    |                |                |
|-------------------------------------------------------------------|----|----------------|----------------|
| Brought forward . . . .                                           |    | \$1,700,355 26 |                |
| <i>Acc't Proportional Office Salaries.</i>                        |    |                |                |
| Amount appropriated by City                                       |    |                |                |
| Council . . . . .                                                 | \$ | 13,930 00      |                |
| Other receipts . . . . .                                          |    | 4 60           |                |
|                                                                   |    | <hr/>          | 13,934 60      |
| <i>Acc't Street Office Salaries.</i>                              |    |                |                |
| Amount appropriated by City                                       |    |                |                |
| Council . . . . .                                                 |    |                | 15,630 00      |
| <i>Acc't City Engineer's Office Salaries.</i>                     |    |                |                |
| Amount appropriated by City                                       |    |                |                |
| Council . . . . .                                                 |    |                | 12,400 00      |
| <i>Acc't Proportional Office Expense.</i>                         |    |                |                |
| Amount appropriated by City                                       |    |                |                |
| Council . . . . .                                                 |    |                | 1,750 00       |
| <i>Acc't Chicago Harbor.</i>                                      |    |                |                |
| Amount appropriated by City                                       |    |                |                |
| Council . . . . .                                                 | \$ | 48,390 00      |                |
| Other receipts . . . . .                                          |    | 86 40          |                |
|                                                                   |    | <hr/>          | 48,476 40      |
| <i>Acc't Street Opening and Obstruction Inspectors' Salaries.</i> |    |                |                |
| Amount appropriated by City                                       |    |                |                |
| Council . . . . .                                                 |    |                | 7,200 00       |
| <i>Acc't Bridge Repairs.</i>                                      |    |                |                |
| Amount appropriated by City                                       |    |                |                |
| Council . . . . .                                                 | \$ | 115,000 00     |                |
| Other Receipts . . . . .                                          |    | 31,805 32      |                |
|                                                                   |    | <hr/>          | 146,805 32     |
| Carried forward . . . . .                                         |    |                | \$1,946,551 58 |



|                                                   |    |                |                |
|---------------------------------------------------|----|----------------|----------------|
| Brought forward .....                             |    | \$1,946,551 58 |                |
| <i>Acc't Vessel Despatcher's Salary.</i>          |    |                |                |
| Amount appropriated by City Council .....         |    | 2,250 00       |                |
| <i>Acc't Steam Roller Engineer's Salary.</i>      |    |                |                |
| Amount appropriated by City Council .....         | \$ | 1,800 00       |                |
| Amount received for use of steam roller .....     |    | 510 25         |                |
|                                                   |    | <hr/>          | 2,310 25       |
| <i>Acc't Bridge Tenders' Salaries.</i>            |    |                |                |
| Amount appropriated by City Council .....         |    | 88,080 00      |                |
| <i>Fullerton Avenue Conduit.</i>                  |    |                |                |
| Amount appropriated by City Council .....         | \$ | 14,755 00      |                |
| Other receipts .....                              |    | 74 99          |                |
|                                                   |    | <hr/>          | 14,829 99      |
| <i>Acc't Canal Pump. Station.</i>                 |    |                |                |
| Amount appropriated by City Council .....         | \$ | 62,880 00      |                |
| Other receipts .....                              |    | 451 88         |                |
|                                                   |    | <hr/>          | 63,331 88      |
| <i>Acc't Van Buren Street Bridge and Viaduct.</i> |    |                |                |
| Amount appropriated by City Council .....         | \$ | 35,477 30      |                |
| Other receipts .....                              |    | 11,524 18      |                |
|                                                   |    | <hr/>          | 47,001 48      |
| <i>Acc't Fullerton Ave. Bridge.</i>               |    |                |                |
| Amount appropriated by City Council .....         | \$ | 10,000 00      |                |
| Other receipts .....                              |    | 18,000 00      |                |
|                                                   |    | <hr/>          | 28,000 00      |
| Carried forward .....                             |    | <hr/>          | \$2,192,355 18 |

|                                           |                       |
|-------------------------------------------|-----------------------|
| Brought forward ....                      | \$2,192,355 18        |
| <i>Acc't Special Deposits.</i>            |                       |
| Amount received for inspection.....       | 3,780 05              |
| <i>Acc't North Halsted Street Bridge.</i> |                       |
| Receipts.....                             | 1,000 00              |
| <i>Acc't South Halsted Street Bridge.</i> |                       |
| Amount appropriated by City Council.....  | 50,000 00             |
| <i>Acc't Bridgeport Locks.</i>            |                       |
| Amount appropriated by City Council.....  | 12,800 00             |
| <i>Acc't Public Library.</i>              |                       |
| Receipts for extras.....                  | 889 50                |
| <i>Acc't Street Privileges.</i>           |                       |
| Receipts from Street Privileges.....      | 2,986 00              |
| <i>Acc't Diversey Ave. Bridge.</i>        |                       |
| Amount appropriated by City Council ..... | 15,000 00             |
| <i>Acc't Street Intersections.</i>        |                       |
| Amount appropriated by City Council ..... | 1,000 00              |
| <i>Acc't Map Dept. Salary.</i>            |                       |
| Amount appropriated by City Council ....  | 15,840 00             |
| Total Receipts.....                       | <u>\$2,295,650 73</u> |

## EXPENSES.

*Acc't. Improved Streets.*

|                             |               |               |
|-----------------------------|---------------|---------------|
| Salaries .....              | \$ 214,340 60 |               |
| Labor and material.....     | 1,506 63      |               |
| Lumber and blocks .....     | 20,180 14     |               |
| Crushed stone and gravel... | 17,938 54     |               |
| Macadam .....               | 2,696 93      |               |
| Rent.....                   | 3,800 55      |               |
| Electric light service..... | 859 37        |               |
| Other expenses.....         | 6,349 13      |               |
|                             | <hr/>         | \$ 267,671 89 |

*Acc't Unimproved Streets.*

|                             |               |            |
|-----------------------------|---------------|------------|
| Salaries .....              | \$ 127,239 81 |            |
| Labor and material.....     | 9,052 25      |            |
| Lumber .....                | 2,569 07      |            |
| Crushed stone and gravel... | 1,905 00      |            |
| Electric light service..... | 1,443 78      |            |
| Other expenses .....        | 1,486 48      |            |
|                             | <hr/>         | 143,696 39 |

*Acc't Street Cleaning.*

|                                                    |               |            |
|----------------------------------------------------|---------------|------------|
| Street cleaning by contract..                      | \$ 113,442 00 |            |
| Street cleaning by bureau...                       | 150,757 43    |            |
| Rent.....                                          | 2,192 00      |            |
| Cash items .....                                   | 282 83        |            |
| Stationery, horseshoeing, car<br>tickets, etc..... | 4,609 51      |            |
|                                                    | <hr/>         | 271,283 77 |

*Acc't Garbage.*

|                                        |              |            |
|----------------------------------------|--------------|------------|
| Salaries .....                         | \$ 80,815 51 |            |
| Removal of garbage, ashes,<br>etc..... | 305,733 78   |            |
|                                        | <hr/>        | 386,549 29 |

*Acc't Street and Alley Clean-  
ing, Office Salary.*

|                      |       |                |
|----------------------|-------|----------------|
| Office salaries..... | <hr/> | 9,452 68       |
| Carried forward..... |       | \$1,078,654 02 |

|                                                    |    |                |            |
|----------------------------------------------------|----|----------------|------------|
| Brought forward.....                               |    | \$1,078,654 02 |            |
| <i>Acc't Ward Inspectors.</i>                      |    |                |            |
| Ward inspectors.....                               |    | 33,991 63      |            |
| <i>Acc't Removal Dead Animals.</i>                 |    |                |            |
| Removal Dead Animals ....                          |    | 57,291 67      |            |
| <i>Acc't Sidewalk Repairs.</i>                     |    |                |            |
| Salaries .....                                     | \$ | 80,728 96      |            |
| Labor and material.....                            |    | 10,838 03      |            |
| Lumber .....                                       |    | 14,159 87      |            |
| Other expenses .....                               |    | 484 25         |            |
|                                                    |    | <hr/>          | 106,211 11 |
| <i>Acc't City Hall.</i>                            |    |                |            |
| Coal.....                                          | \$ | 21,935 36      |            |
| Repairing engines, boilers,<br>etc.....            |    | 939 40         |            |
| Labor and material.....                            |    | 3,333 05       |            |
| Repairing elevators.....                           |    | 744 61         |            |
| Plumbing .....                                     |    | 196 46         |            |
| Decorating and cleaning ...                        |    | 4,334 20       |            |
| Oil and packing.....                               |    | 574 72         |            |
| Electric light service.....                        |    | 826 67         |            |
| Other expenses.....                                |    | 4,966 44       |            |
|                                                    |    | <hr/>          | 37,250 91  |
| <i>Acc't Special Assessments.</i>                  |    |                |            |
| Salaries of clerks, engineers,<br>rodmen, etc..... | \$ | 133,203 57     |            |
| Services as Commissioners..                        |    | 18,286 84      |            |
| Clerk of County Court .....                        |    | 19,154 05      |            |
| Real estate expert .....                           |    | 11,665 16      |            |
| Advertising .....                                  |    | 3,397 87       |            |
| Legal services .....                               |    | 14,468 16      |            |
| Printing, stationery, car-fare,<br>etc .....       |    | 2,950 00       |            |
| Collecting special assess-<br>ments.....           |    | 32,623 28      |            |
| Other expenses.....                                |    | 3,084 52       |            |
|                                                    |    | <hr/>          | 238,833 45 |
| Carried forward.....                               |    | \$1,552,232 79 |            |

|                                        |              |                |
|----------------------------------------|--------------|----------------|
| Brought forward.....                   |              | \$1,552,232 79 |
| <i>Acc't Chicago Harbor.</i>           |              |                |
| Salaries .....                         | \$ 13,158 32 |                |
| Dredging .....                         | 46,478 54    |                |
| Other expenses.....                    | 135 27       |                |
|                                        | <hr/>        | 59,772 13      |
| <i>Acc't Bridge Repairs.</i>           |              |                |
| Salaries .....                         | \$ 86,798 21 |                |
| Labor and material.....                | 16,339 98    |                |
| Lumber .....                           | 22,274 43    |                |
| Coal .....                             | 7,003 22     |                |
| Machine-work.....                      | 3,115 01     |                |
| Steel rollers and castings ...         | 1,886 89     |                |
| Repairing boilers.....                 | 527 26       |                |
| Electric light service .....           | 1,059 37     |                |
| Blocks ..                              | 2,139 20     |                |
| Oil and paint .....                    | 1,788 46     |                |
| Teaming .....                          | 335 51       |                |
| Other expenses.....                    | 5,668 74     |                |
|                                        | <hr/>        | 148,936 28     |
| <i>Acc't Canal Pump. Works.</i>        |              |                |
| Labor.....                             | \$ 29,101 67 |                |
| Coal .....                             | 34,561 48    |                |
| Engine and boiler repairs...           | 7,301 03     |                |
| Oil and packing.....                   | 2,075 59     |                |
| Smokeless furnace.....                 | 750 00       |                |
| Brick .....                            | 492 47       |                |
| Repairing tools.....                   | 365 94       |                |
| Other expenses .....                   | 3,705 42     |                |
|                                        | <hr/>        | 78,353 60      |
| <i>Acc't Fullerton Avenue Conduit.</i> |              |                |
| Salaries.....                          | \$ 8,247 33  |                |
| Labor and material.....                | 3,687 15     |                |
| Coal.....                              | 3,690 16     |                |
| Brick .....                            | 316 15       |                |
| Gas.....                               | 216 20       |                |
| Blocks .....                           | 243 50       |                |
| Other expenses.....                    | 653 76       |                |
|                                        | <hr/>        | 17,054 25      |
| Carried forward .....                  |              | \$1,856,349 05 |

|                                            |    |                |                |
|--------------------------------------------|----|----------------|----------------|
| Brought forward.....                       |    | \$1,856,349 05 |                |
| <i>Acc't Public Parks—Washington Park.</i> |    |                |                |
| Labor.....                                 | \$ | 3,027 64       |                |
| Trees .....                                |    | 96 00          |                |
| Other expenses .....                       |    | 98 48          |                |
|                                            |    | <hr/>          | 3,222 12       |
| <i>Acc't Aldine Square.</i>                |    |                |                |
| Labor.....                                 | \$ | 866 18         |                |
| Plants .....                               |    | 49 90          |                |
| Other expenses .....                       |    | 30 05          |                |
|                                            |    | <hr/>          | 946 13         |
| <i>Acc't Douglas Monument Park.</i>        |    |                |                |
| Labor.....                                 | \$ | 938 00         |                |
| Other expenses .....                       |    | 60 50          |                |
|                                            |    | <hr/>          | 998 50         |
| <i>Acc't Ellis Park.</i>                   |    |                |                |
| Labor.....                                 | \$ | 893 50         |                |
| Other expenses.....                        |    | 27 25          |                |
|                                            |    | <hr/>          | 920 75         |
| <i>Acc't Bickerdike Park.</i>              |    |                |                |
| Labor, etc .....                           |    |                | 810 65         |
| <i>Acc't Jefferson Park.</i>               |    |                |                |
| Labor, etc .....                           |    |                | 168 70         |
| <i>Acc't Green Bay Park.</i>               |    |                |                |
| Labor, etc. ....                           |    |                | 422 80         |
| <i>Acc't Oak Park.</i>                     |    |                |                |
| Labor, etc.....                            |    |                | 486 50         |
| <i>Acc't Gross Park.</i>                   |    |                |                |
| Labor, etc.....                            |    |                | 436 25         |
| <i>Acc't Shedd's Park.</i>                 |    |                |                |
| Labor, etc.....                            |    |                | 146 07         |
| Carried forward .....                      |    | <hr/>          | \$1,864,907 52 |

|                                            |    |                      |
|--------------------------------------------|----|----------------------|
| Brought forward.....                       |    | \$1,864,907 52       |
| <i>Acc't Lakewood Park.</i>                |    |                      |
| Labor.....                                 | \$ | 111 25               |
| Plants.....                                |    | 45 00                |
|                                            |    | <hr/> 156 25         |
| <i>Acc't Congress Park.</i>                |    |                      |
| Labor.....                                 | \$ | 51 50                |
| Filling .....                              |    | 499 00               |
|                                            |    | <hr/> 550 50         |
| <i>Acc't South Halsted Street Bridge.</i>  |    |                      |
| Construction.....                          | \$ | 475 00               |
| Labor.....                                 |    | 1,148 97             |
| Coal .....                                 |    | 270 19               |
| Gas.....                                   |    | 136 60               |
| Repairs .....                              |    | 199 90               |
| Sundries .....                             |    | 423 16               |
|                                            |    | <hr/> 2,653 82       |
| <i>Acc't North Halsted Street Bridge.</i>  |    |                      |
| Engineer services and other expenses ..... |    | 843 75               |
| <i>Acc't Van Buren Street Bridge.</i>      |    |                      |
| Construction.....                          | \$ | 23,637 47            |
| Salaries .....                             |    | 4,123 65             |
| Electric conduit.....                      |    | 5,107 44             |
| Machine work .....                         |    | 1,073 99             |
| Copper cable .....                         |    | 1,760 00             |
| Lumber .....                               |    | 356 26               |
| Services real estate expert ..             |    | 300 00               |
| Sundries .....                             |    | 442 59               |
|                                            |    | <hr/> 36,801 40      |
| <i>Acc't Street Lamp Repairs.</i>          |    |                      |
| Labor .....                                | \$ | 29,839 90            |
| Repairing street lamps.....                |    | 16,474 68            |
| Glass and lamp fittings .....              |    | 13,875 11            |
| Other expenses.....                        |    | 3,207 55             |
|                                            |    | <hr/> 63,397 24      |
| Carried forward .....                      |    | <hr/> \$1,969,310 48 |

|                                     |    |                |                |
|-------------------------------------|----|----------------|----------------|
| Brought forward.....                |    | \$1,969,310 48 |                |
| <i>Acc't Steam Roller.</i>          |    |                |                |
| Labor.....                          | \$ | 1,604 14       |                |
| Repairing steam roller.....         |    | 155 22         |                |
| Sundries.....                       |    | 45 25          |                |
|                                     |    | <hr/>          | 1,804 61       |
| <i>Acc't Bridgeport Lock.</i>       |    |                |                |
| Salaries.....                       | \$ | 9,298 28       |                |
| Labor and Material.....             |    | 2,855 06       |                |
| Dredging.....                       |    | 2,000 00       |                |
| Lumber.....                         |    | 376 57         |                |
| Pile Driving.....                   |    | 135 46         |                |
| Sundries.....                       |    | 162 28         |                |
|                                     |    | <hr/>          | 14,827 65      |
| <i>Acc't Fullerton Ave. Bridge.</i> |    |                |                |
| Construction.....                   | \$ | 25,752 67      |                |
| Labor.....                          |    | 744 00         |                |
|                                     |    | <hr/>          | 26,496 67      |
| <i>Acc't Diversey Ave. Bridge.</i>  |    |                |                |
| Labor, etc.....                     |    |                | 1,433 99       |
| <i>Acc't Street Permits.</i>        |    |                |                |
| Street Permits.....                 | \$ | 32,520 94      |                |
| Transferred.....                    |    | 3,490 56       |                |
|                                     |    | <hr/>          | 29,030 38      |
| <i>Acc't Street Privileges.</i>     |    |                |                |
| Services, etc.....                  |    |                | 400 84         |
| <i>Acc't Salaries.</i>              |    |                |                |
| Janitors' salaries.....             | \$ | 47,918 46      |                |
| Bridge Telephone Operators          |    | 6,311 32       |                |
| Vessel Despatchers.....             |    | 3,082 78       |                |
| House-moving Clerks.....            |    | 1,907 07       |                |
| Street office salary....            |    | 15,825 22      |                |
| City Engineer's office salary.      |    | 12,172 80      |                |
| Map Department salary....           |    | 15,513 46      |                |
| Proportional office salary...       |    | 13,932 05      |                |
| Bridge Tenders' salary....          |    | 86,457 77      |                |
| Public Library.....                 |    | 889 50         |                |
| Street opening and obstruc-         |    |                |                |
| tion inspectors' salary....         |    | 7,128 77       |                |
| Deposit for inspection.....         |    | 2,694 50       |                |
|                                     |    | <hr/>          | 213,833 70     |
| Carried forward.....                |    |                | \$2,257,138 32 |



|                                                                |             |                       |
|----------------------------------------------------------------|-------------|-----------------------|
| Brought forward.....                                           |             | \$2,257,138 32        |
| <i>Acc't Miscellaneous Expenses.</i>                           |             |                       |
| Street Department, office expense .....                        | \$ 784 10   |                       |
| Map Department expense ..                                      | 793 82      |                       |
| Proportional office expense.                                   | 1,772 35    |                       |
| City Engineer's office expense .....                           | 723 93      |                       |
|                                                                | <hr/>       | 4,074 20              |
| Balance to credit, Public Parks, carried forward ...           | \$ 1,264 78 |                       |
| Balance to credit, Fullerton Ave. Bridge, carried forward..... | 1,503 33    |                       |
| Balance to credit, Diversey Ave. Bridge, carried forward.....  | 15,566 05   |                       |
| Balance to credit, South Halsted St. Bridge.....               | 156 25      |                       |
| Balance to credit, unpaid pay rolls .....                      | 15,947 '80  |                       |
|                                                                | <hr/>       | 34,438 21             |
| Total.....                                                     |             | <u>\$2,295,650 73</u> |

## SPECIAL DEPOSIT FUND.

|                                         |              |                     |
|-----------------------------------------|--------------|---------------------|
| Balance carried forward from 1894 ..... | \$ 66,964 85 |                     |
| RECEIPTS.                               |              |                     |
| Suspense account.....                   | \$ 7,100 85  |                     |
| Street permit depositors....            | 138,435 17   |                     |
| Corporation account.....                | 70,076 01    |                     |
|                                         | <hr/>        |                     |
| Total receipts.....                     |              | \$ 282,576 88       |
| EXPENSES.                               |              |                     |
| Hydrant wrenches. ....                  | \$ 228 76    |                     |
| Suspense account.....                   | 4,268 33     |                     |
| Street Engineer's permit....            | 3 00         |                     |
| Street permit depositors....            | 149,705 77   |                     |
| Corporation account.....                | 52,199 19    |                     |
|                                         | <hr/>        |                     |
| Total expenses.....                     |              | 206,405 05          |
| Balance carried forward                 |              | <u>\$ 76,171 83</u> |

## TRIAL BALANCE.

LEDGER, DEPARTMENT OF PUBLIC WORKS, CHICAGO,  
DECEMBER 31, 1895.

|                                                  | <i>Dr.</i>       | <i>Cr.</i>       |
|--------------------------------------------------|------------------|------------------|
| Water fund .....                                 | \$ 133,299 83    |                  |
| Water Works .....                                | 23,912,837 85    |                  |
| Water Works, income.....                         |                  | \$38,952,654 69  |
| Water fund, general taxes.....                   |                  | 2,713,878 53     |
| Annexed territory.....                           |                  | 197,525 48       |
| Water loan bonds, 6 per cent.....                |                  | 132,000 00       |
| Water loan bonds, 4 per cent.....                |                  | 3,191,500 00     |
| Water loan bonds, $3\frac{5}{8}\%$ per cent..... |                  | 332,000 00       |
| Water loan bonds, $3\frac{1}{2}\%$ per cent..... |                  | 333,500 00       |
| Water loan bonds, canceled.....                  |                  | 1,516,900 00     |
| Water loan certificates, 5 per cent.....         |                  | 198,000 00       |
| Water loan, interest .....                       | 7,665,458 92     |                  |
| Water loan bonds, Hyde Park 5 per cent.          |                  | 50,000 00        |
| Water loan bonds, Hyde Park 7 per cent.          |                  | 9,000 00         |
| Water loan bonds, Town of Lake 5 per cent .....  |                  | 105,000 00       |
| Water Works, expense and repair acc't.           | 16,500,262 81    |                  |
| Water loan bonds, Lake View 4 per cent.          |                  | 50,000 00        |
| Water loan bonds, Lake View 5 per cent.          |                  | 23,000 00        |
| J. W. Lyons, cashier water office .....          | 2,000 00         |                  |
| Meter Department, stock account. ....            | 8,113 50         |                  |
| Water Works shop, stock account .....            | 16,699 50        |                  |
| Tapping Department, stock account....            | 4,079 08         |                  |
| Advances to lay water pipe .....                 |                  | 435,620 92       |
| Hydrant wrenches.....                            |                  | 2,171 82         |
| Annexed territory, sewers .....                  |                  | 2,614,224 75     |
| Sewers constructed by Special Assessments .....  |                  | 6,030,367 08     |
| Sewers, North Division.....                      | 2,728,914 28     |                  |
| Sewers, South Division.....                      | 6,866,778 16     |                  |
| Sewers, West Division .....                      | 6,991,482 18     |                  |
| Carried forward.. .....                          | \$ 64,829,926 06 | \$ 56,887,343 27 |

|                                                     |                  |                  |
|-----------------------------------------------------|------------------|------------------|
| Brought forward.....                                | \$ 64,829,926 06 | \$ 56,867,343 27 |
| Sewerage loan bonds, 4 per cent.....                |                  | 2,117,500 00     |
| Sewerage loan bonds, 7 per cent.....                |                  | 13,000 00        |
| Sewerage loan bonds, 4½ per cent.....               |                  | 489,500 00       |
| Sewerage loan bonds canceled.....                   |                  | 380,000 00       |
| Sewerage fund, general taxes and construction ..... |                  | 4,933,532 48     |
| Sewerage maintenance account.....                   |                  | 16,167 89        |
| Sewer stock account .....                           | 7,117 58         |                  |
| Appropriation fund.....                             | 30,938 17        |                  |
| Public parks .....                                  |                  | 1,264 78         |
| Diversey Ave. bridge.....                           |                  | 13,566 01        |
| Fullerton Ave. bridge.....                          |                  | 1,503 33         |
| E. P. Fassett, cashier.....                         | 1,500 00         |                  |
| North Halsted street bridge.....                    |                  | 156 25           |
| Unpaid pay rolls .....                              |                  | 15,947 80        |
| Street lamp fund .....                              |                  | 94,049 13        |
| Gas street lamps .....                              | 16,864 67        |                  |
| Gasoline street lamps.....                          | 77,184 46        |                  |
| Special deposit fund.....                           | 76,171 83        |                  |
| Suspense account .....                              |                  | 7,133 42         |
| Street Engineers .....                              |                  | 134 00           |
| Street permit depositors.....                       |                  | 33,896 83        |
| Corporation account .....                           |                  | 22,576 21        |
| Advances to construct sewers.....                   |                  | 12,431 37        |
|                                                     | <hr/>            | <hr/>            |
|                                                     | \$ 65,039,702 77 | \$ 65,039,702 77 |
|                                                     | <hr/>            | <hr/>            |

Respectfully submitted,

LOUIS E. GOSSELIN,  
*Book-keeper Dept. of Public Works.*

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