

PUBLIC LIBRARY.

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Pay-roll, ward officers — supervisors	\$240.00	
“ “ inspectors	220.00	
David F. Dudley, overseer of poor, Ward 1	30.00	
Frank P. Curtis, overseer of poor, Ward 2	10.00	
Edward H. Dixon, care of clocks	63.75	
	<hr/>	\$9,696.11

WHITE PARK.

Appropriation	\$3,000.00
Paid William P. Fiske, treasurer	\$3,000.00

ROLLINS PARK.

Appropriation	\$1,000.00
Paid as follows :	
W. H. Richardson, labor	\$25.00
William P. Fiske, treasurer	975.00
	<hr/>
	\$1,000.00

PENACOOK PARK.

Appropriation	\$100.00
Received of O. F. Richardson, rent of park	16.00
	<hr/>
	\$116.00
Balance carried to transfer account	16.00
	<hr/>
	\$100.00
Paid William P. Fiske, treasurer	\$100.00

PUBLIC LIBRARY AND REPAIRS.

Appropriation	\$6,000.00
Paid Harry H. Dudley, treasurer	\$6,000.00

MEMORIAL DAY.

Appropriation	\$345.00
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Paid as follows:

Alvin C. Powell, for Davis Post, No. 44	\$50.00	
D. Arthur Brown, for W. I. Brown Post, No. 31	75.00	
Frank Battles, for E. E. Sturtevant Post, No. 2	220.00	
	<hr/>	\$345.00

MARGARET PILLSBURY GENERAL HOSPITAL.

Appropriation	\$2,000.00
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Paid William F. Thayer, treasurer	\$2,000.00
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ENGINEERING DEPARTMENT.

Appropriation	\$3,000.00	
Deficiency brought from transfer account	55.58	
	<hr/>	\$3,055.58

Paid as follows:

W. B. Howe, city engineer, pay-rolls .	\$2,483.75
J. S. Dutton, rent of office	204.00
Buff & Berger, repairs	4.80
“ “ instruments	10.20
Concord Light and Power Co., gas	3.60
W. B. Howe, cash paid	73.90
“ “ car fares	27.55
Wardsworth-Howland Co., paper	27.00
J. G. Chase, office supplies	11.22
W. J. Fernald, furniture	2.50
E. G. Soltmann, supplies	40.63
The Technical Book Co.	8.00
Stockbridge & Sanders, supplies	7.45
Silby & Sons, supplies	20.90
N. A. Dunklee, livery	55.50

OLD NORTH CEMETERY.

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Thompson & Hoague, supplies	\$4.75	
E. B. Hutchinson Building Co., supplies	17.25	
E. B. Hutchinson Building Co., plan case	15.00	
G. W. Wilson, repairs	2.50	
Pleasant Street stable, livery	9.00	
J. E. Moody & Co., repairing transit	9.50	
A. H. Britton & Co., wash tray for plans	3.00	
George Abbott, Jr., painting	2.43	
Kenfil & Esser Co., supplies	11.15	
	<hr/>	\$3,055.58

HORSE HILL BRIDGE.

Received from W. B. Howe, sale of lumber	\$15.00	
Brought from transfer account, 1894	4,189.23	
	<hr/>	\$4,204.23

Paid as follows :

Connors & Co., contractors	\$100.00	
Wrought Iron Bridge Co., contractors	3,685.00	
John E. Cheney, inspector	92.12	
Michael J. Welch, "	99.12	
E. B. Hutchinson Building Co., lumber	22.19	
R. W. Hoit, pay-roll	97.15	
The Osborn Co., inspecting material	51.79	
E. C. Abbott, lighting lanterns	15.00	
N. A. Dunklee, livery	22.00	
W. B. Howe, expense	19.86	
	<hr/>	\$4,204.23

BLOSSOM HILL CEMETERY.

Appropriation	\$1,800.00
Paid Frank P. Andrews, treasurer	\$1,800.00

OLD NORTH CEMETERY.

Appropriation	\$350.00
Paid Frank P. Andrews, treasurer	\$350.00

PINE GROVE CEMETERY.

Appropriation	\$300.00	
Balance carried to transfer account	12.60	
	<u> </u>	\$287.40
Paid A. H. C. Knowles, treasurer cemetery committee		\$287.40

WEST CONCORD CEMETERY.

Appropriation	\$100.00	
Paid G. R. Parmenter, treasurer cemetery committee		\$100.00

MILLVILLE CEMETERY.

Appropriation	\$200.00	
Balance carried to transfer account	100.00	
	<u> </u>	\$100.00
Paid I. N. Abbott, treasurer cemetery committee		\$100.00

OPEN AIR CONCERTS.

Appropriation	\$300.00	
Paid F. A. Piper, treasurer Third Regiment Band		\$300.00

PENACOOK SEWERAGE PRECINCT.

Appropriation for sinking fund	\$500.00	
“ “ interest on bonds	960.00	
“ “ repairs	100.00	
Unexpended balance of 1894	112.66	
Received for rent of pump	3.00	
	<u> </u>	\$1,675.66

Paid as follows :

Henry Morrill, labor on sewer	\$102.96
City precinct, sewer pipe	25.32
Dickerman & Co., cement	1.20
Penacook Electric Light Co.	32.37
Contocook Manufacturing Co., labor	9.38

WEST CONCORD SEWERAGE PRECINCT.

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Adams & Tasker, sewer pipe . . .	\$4.55	
C. H. Sanders, rubber boots . . .	3.50	
W. B. Cunningham, express . . .	1.85	
Boston & Maine R. R., freight . . .	.32	
N. S. Gale & Co., shovels . . .	2.90	
W. F. Thayer, city treasurer, sinking fund	500.00	
Interest on precinct bonds . . .	930.00	
		<u>\$1,614.35</u>
Unexpended balance		\$61.31

WEST CONCORD SEWERAGE PRECINCT.

Appropriation for sinking fund . . .	\$500.00	
“ “ interest on bonds . . .	680.00	
Unexpended balance of 1894 . . .	1,428.35	
Received for rent of pump . . .	3.00	
		<u>\$2,611.35</u>
Paid as follows :		
W. B. Howe, pay-rolls	\$120.01	
A. H. Britton & Co., supplies . . .	1.12	
Dickerman & Co., cement	8.60	
Eastman & Co., oil . . . . .	.55	
Samuel Holt, brick	15.50	
Ford & Kimball, castings	12.58	
G. L. Theobald, teaming	4.00	
Engel & Fisher, “	4.60	
City precinct, sewer pipe	68.17	
Thompson & Hoague, sewer pipe, etc. .	2.21	
Stockbridge & Sanders, portfolio for plans	2.75	
W. F. Thayer, city treasurer, sinking fund	500.00	
Interest on precinct bonds	680.00	
		<u>\$1,420.09</u>
Unexpended balance		\$1,191.26

EAST CONCORD SEWERAGE PRECINCT.

Appropriation (bonds issued)	\$2,000.00	
Premium on bonds	40.00	
Interest on bonds	32.01	
Special appropriation	500.00	
		\$2,572.01

Paid as follows :

W. B. Howe, pay-rolls	\$1,765.06	
City precinct, sewer pipe	292.33	
G. L. Theobald, teaming	27.00	
Concord & Montreal R. R., freight	4.00	
N. A. Dunklee, livery	11.00	
Dickerman & Co., cement	32.40	
E. A. Cushing, trucking	3.50	
Humphrey-Dodge Co., supplies	50.31	
Holt Brothers, mauls	5.56	
Ford & Kimball, castings	25.40	
Samuel Holt, brick	27.00	
F. W. Scott & Co., lumber	32.42	
A. L. Proctor, trucking	9.00	
Fred S. Farnum, repairs . . . . .	.50	
E. E. Fisher, dynamite	17.15	
Henry Morin, brick	27.00	
F. V. Osgood, repairs	8.25	
E. B. Hutchinson Building Co., supplies	1.50	
Thompson & Hoague, supplies	1.03	
A. B. Young, oil	3.25	
F. P. Curtis, labor and services	25.00	
C. Irving Swan, prints	2.19	
		\$2,370.85
Unexpended balance		\$201.16

LIGHTING STREETS, PENACOOK.

Appropriation	\$1,300.00
Paid Andrew Linehan, treasurer	\$1,300.00

RESERVOIRS AND FIRE EXTINGUISHER, EAST CONCORD. 157

CHEMICAL ENGINE.

Amount brought from transfer account	\$1,550.00
Paid Charles T. Holloway	\$1,550.00

ELECTRICAL DEPARTMENT.

Appropriation	\$500.00	
Balance carried to transfer account	252.87	
		<u>\$247.13</u>

Paid as follows :

N. E. Gamewell Co., repairs	\$87.90	
Electric Gas Light Co., supplies	23.70	
N. B. Burleigh, electrical engineer	127.17	
N. B. Burleigh, cash paid out	3.29	
Northern Electrical Supply Co., sup- plies	4.67	
A. H. Britton & Co., supplies . . . . .	.40	
		<u>\$247.13</u>

REPAIRS OF HOUSE FOR CHIEF ENGINEER OF
FIRE DEPARTMENT.

Appropriation (special)	\$450.00	
Balance carried to transfer account	44.88	
		<u>\$405.12</u>

Paid as follows :

F. W. Scott & Co., repairs	\$34.80	
Clifford & Hood, plumbing	124.12	
Rowell & Plummer, mason work	16.20	
Fred W. Rollins, repairs	150.00	
Frank H. George, furnace	80.00	
		<u>\$405.12</u>

RESERVOIRS AND FIRE EXTINGUISHER, EAST
CONCORD.

Brought from transfer account	\$75.00
Paid Charles T. Holloway, fire extinguisher	\$75.00

RECAPITULATION.

State tax	\$31,650.00
County tax	32,260.03
Interest	5,601.17
City poor	1,024.15
Aid to dependent soldiers and families	723.75
Fire department	22,097.63
Incidentals and land damages	7,200.38
Highway department	37,289.82
Street sprinkling	3,906.24
Police and watch	13,376.67
Printing and stationery	2,257.29
Legal expenses	124.90
Board of health	1,246.61
Committee service	1,410.00
Schools	54,009.74
School-house taxes	1,550.00
Precinct	18,305.12
Water precinct	6,000.00
Salaries	9,696.11
White park	3,000.00
Rollins park	1,000.00
Penacook park	100.00
Public library	6,000.00
Memorial Day	345.00
Margaret Pillsbury General hospital	2,000.00
Engineering department	3,055.58
Horse Hill bridge	4,204.24
Blossom Hill cemetery	1,800.00
Old North cemetery	350.00
Pine Grove cemetery	287.40
West Concord cemetery	100.00
Millville cemetery	100.00
Open-air concerts	300.00
Penacook sewerage precinct	1,614.35
West Concord sewerage precinct	1,420.09
East Concord sewerage precinct	2,370.85

TRANSFER ACCOUNT.

159

Lighting streets, Penacook . . .	\$1,300.00	
Chemical engine	1,550.00	
Electrical department	247.13	
Repairs on chief engineer's house	405.12	
Reservoirs and fire extinguisher at East Concord	75.00	
		\$281,354.37

TRANSFER ACCOUNT.

ACCOUNTS KEPT BY THE CLERK FOR CONVENIENCE OF REFERENCE,
BUT NOT INVOLVING EXPENSE TO THE CITY.

TRANSFER ACCOUNT.

Made up from unexpended balances of appropriations, and drawn upon, as allowed by city ordinance, to meet deficiencies by transfer to other appropriations.

Dr.

Balance brought from transfer account of 1894	\$16,822.03
To amount brought from city poor ac- count	285.49
To amount brought from roads and bridges account	4,752.05
To amount brought from legal expenses account	175.10
To amount brought forward from police and watch account	2,271.63
To amount brought forward from depen- dent soldiers account	76.25
To amount brought forward from re- pairs, house of chief engineer, ac- count	44.88
To amount brought forward from Pine Grove cemetery account	12.60
To amount brought forward from Mill- ville cemetery account	100.00

To amount brought forward from salaries account	\$303.89	
To amount brought forward from electrical department account	252.87	
To amount brought forward from Penacook park account	16.00	
		<u>\$25,112.79</u>

Cr.

By amount carried to fire department account	\$292.16	
By amount carried to incidental and land damages account	897.68	
By amount carried to printing and stationery account	557.29	
By amount carried to board of health account	46.61	
By amount carried to chemical engine account	1,550.00	
By amount carried to reservoir and extinguisher account (East Concord)	75.00	
By amount carried to Horse Hill bridge account	4,189.23	
By amount carried to engineering department account	55.58	
By amount not raised on chemical engine account	250.00	
By amount not raised on repairs at Central fire station	1,500.00	
		<u>\$9,413.55</u>
Balance carried to transfer account, 1896		\$15,699.24

SCHOOL DISTRICT NO. 20.

Appropriation for payment of bond	\$500.00	
Appropriation for payment of interest	120.00	
		<u>\$620.00</u>

LIQUOR AGENCY.

161

Bond paid	\$500.00	
Interest paid :	100.00	
		<u>\$600.00</u>
Balance unexpended		\$20.00

DOG LICENSES.

Received from dog licenses		\$1,347.18
Paid as follows :		
Frank P. Curtis, appraiser :	\$1.00	
John C. Kilburn, appraiser	2.00	
George M. Sanborn, sheep killed	32.00	
S. F. Bartlett, hens killed	9.00	
Balance carried to school fund	1,303.18	
		<u>\$1,347.18</u>

STONE QUARRIES.

Received of Crowley & Quinn	\$75.00	
“ C. A. Giles	75.00	
“ Geo. Waters, rent of land	25.00	
		<u>\$175.00</u>

LIQUOR AGENCY.

Received from sale of liquors	\$2,175.00	
Deficiency	296.72	
		<u>\$2,471.72</u>
Paid as follows :		
M. S. Brown, liquors purchased	\$1,512.83	
Moses Ladd, agent	600.00	
Moses Ladd, cash paid out	19.55	
Concord Light and Power Co., gas	11.34	
Joseph Stickney, rent	282.00	
Concord Coal Co., coal	21.00	
S. H. Conner, deputy collector, license	25.00	
		<u>\$2,471.72</u>

DEPARTMENT REPORTS.

CITY OF CONCORD, N. H.

WATER DEPARTMENT.

1895.

BOARD OF WATER COMMISSIONERS.

HENRY ROBINSON, MAYOR, *ex officio*.

WILLIAM M. MASON to March 31, 1899.
EDSON J. HILL to March 31, 1899.
WILLIAM P. FISKE to March 31, 1898.
WILLIAM E. HOOD to March 31, 1898.
SOLON A. CARTER to March 31, 1897.
FRANK D. ABBOT to March 31, 1897.
JOHN WHITAKER to March 31, 1896.
EBENEZER B. HUTCHINSON . . to March 31, 1896.

ARTHUR H. CHASE, CLERK.

OFFICERS.

WILLIAM P. FISKE, PRESIDENT.

V. C. HASTINGS, SUPERINTENDENT.

CONCORD WATER BOARD.

Date of election and length of service of members.

Abraham G. Jones, *ex officio* . 1872—three months.
John M. Hill . . . 1872—1878.
Benjamin A. Kimball . . 1872—1878.
Josiah Minot * . . . 1872. Resigned Jan. 10, 1874.
David A. Warde * . . . 1872—1874.
Edward L. Knowlton * . . 1872. Resigned Sept. 25, 1875.
Benjamin S. Warren * . . 1872—1873.
John Kimball, *ex officio* . . 1872—1876.
John Abbott * . . . 1873—1876.
John S. Russ * . . . 1874—1877.
Abel B. Holt * . . . 1874—1877.
Samuel S. Kimball . . . 1875. Resigned July 1, 1891.
George A. Pillsbury, *ex officio* 1876—1878.
Luther P. Durgin . . . 1876—1885.
John Kimball . . . 1877. Resigned July 1, 1891.
William M. Chase . . . 1877. Resigned July 1, 1891.
Horace A. Brown, *ex officio* . 1878—1880.
James L. Mason . . . 1878—1893.
James R. Hill * . . . 1878. Died 1884.
George A. Cummings, *ex officio* 1880—1883.
Edgar H. Woodman, *ex officio* * 1883—1887.
Joseph H. Abbot . . . 1884—1893.
George A. Young . . . 1885—1894.
John E. Robertson, *ex officio* . 1887—1889.
Stillman Humphrey, *ex officio* * 1889—1891.
Henry W. Clapp, *ex officio* * . 1891—1893.
Willis D. Thompson . . . 1891—1895.

* Deceased.

William P. Fiske . . . 1891. Now in office.
 James H. Chase * . . . 1891. Died 1893.
 John Whitaker . . . 1892. Now in office.
 Henry E. Conant . . . 1892. Resigned Jan. 8, 1895.
 Parsons B. Cogswell, *ex officio* * 1893-1895.
 Solon A. Carter . . . 1893. Now in office. .
 Frank D. Abbot . . . 1893. Now in office.
 William M. Mason . . . 1893. Now in office.
 William E. Hood . . . 1894. Now in office.
 Ebenezer B. Hutchinson . 1895. Now in office.
 Edson J. Hill . . . 1895. Now in office.

PRESIDENTS OF THE BOARD.

Josiah Minot * . . . 1872. Resigned Jan. 10, 1874.
 Benjamin A. Kimball . . . 1874-1875.
 Edward L. Knowlton * . . . 1875. Resigned Sept. 25, 1875.
 John Kimball . . . 1875-1876.
 Benjamin A. Kimball . . . 1876-1878.
 John Kimball . . . 1878. Resigned July 1, 1891.
 William P. Fiske . . . 1891. Now in office.

* Deceased.

SUMMARY OF STATISTICS.

CONCORD, NEW HAMPSHIRE, WATER-WORKS.

Population of the city by census of 1890 17,004
Population of that portion of the city included within
the water precinct, estimated 15,000

Date of construction, 1872; additions since.

Works are owned by the city.

Source of supply, Penacook lake, a natural body of water containing 265 acres, situated about three miles and a half from the state house, and about 125 feet higher than Main street in front of the state house.

Mode of supply, gravity and pumping to reservoir.

FINANCIAL.

MAINTENANCE.

Receipts.	Expenditures.
From consumers (mostly for domestic uses and at fixed rates) . . . \$55,239.77	For management and repairs . . . \$3,445.85
From rents . . . 165.00	For new distribution pipes . . . 4,561.78
From pipe sold, etc. . . 165.76	For new service pipes . . . 1,598.28
	For maintenance of pumping station . . . 2,135.45
	For inspection . . . 600.00
	For reservoir grounds . . . 232.30
	For meter account . . . 2,362.86
	For land around Pen- acook lake . . . 6,175.00
	For work around Pen- acook lake . . . 324.44
	For laying pipe and making connection with the Penacook and Boscawen water- works . . . 1,756.81
	For incidentals . . . 1,003.98
	For abatements . . . 227.34
	<u>\$24,424.09</u>
	Amount required to pay interest on bonded indebtedness 27,150.00
	Balance . . . 3,996.44
<u>\$55,570.53</u>	<u>\$55,570.53</u>

CONSTRUCTION.

Cost of land damages, flowage, and water rights :

Paid B. F. & D. Holden, for water rights \$60,000.00	\$60,000.00
Concord Manufacturing Co., for water rights 83,000.00	83,000.00

Paid W. P. Cooledge, for mill privilege and land	\$5,500.00
Humphrey & Farnum, for kit- shop privilege	5,000.00
Flowage rights around Penacook lake'	4,375.61
W. P. Cooledge, Hutchins house and lot	2,250.00
Mary C. Rowell, for land	1,500.00
Moses H. Bradley, for land	5,000.00
Joseph B. Walker, "	2,214.00
John G. Hook, "	370.00
A. S. Ranney, "	1,350.00
Alfred Roberts, "	1,275.00
Charles E. Ballard, "	2,500.00
Mary G. Carter, "	1,250.00
Elizabeth Widmer, "	1,564.50
A. L. Proctor, "	450.00
Robert Crowley, "	3,000.00
Miles Hodgdon, "	2,200.00
Coffin & Little, "	800.00
O. F. Richardson, "	100.00
C. H. Amsden, water and flowage rights	5,000.00
Cost of property and rights of Torrent Aqueduct Association	20,000.00
dam, gate-house, and appur- tenances	30,756.17
conduit and gate-houses	29,484.05
mains (one from the dam to Rumford street, one from the dam to Penacook street, one from the pump to the reser- voir, fire-main through North and South Main and Turn- pike streets, and one from near the dam to Stark street)	154,960.92
distribution pipe	279,247.68
service pipe	40,789.95
reservoir	42,460.09

Cost of pumping station, shop, stable, and storehouse	\$22,000.00
pumping machinery	10,215.00
engineering and superintend- ence	14,913.12
incidentals	6,531.19
Cost of the works, January 1, 1896	\$840,057.28

Bonds of the city have been issued to pay a part of said cost as follows :

When due.	Rate.	Amount.
Nov. 1, 1896,	4,	\$10,000.00
Nov. 1, 1897,	4,	10,000.00
Nov. 1, 1898,	4,	10,000.00
Nov. 1, 1899,	4,	10,000.00
Nov. 1, 1900,	3½,	15,000.00
Jan. 1, 1901,	4,	10,000.00
Jan. 1, 1902,	4,	10,000.00
Jan. 1, 1903,	4,	10,000.00
Jan. 1, 1904,	4,	10,000.00
Jan. 1, 1905,	4,	10,000.00
Jan. 1, 1906,	4,	10,000.00
Jan. 1, 1907,	4,	10,000.00
Jan. 1, 1908,	4,	10,000.00
Jan. 1, 1909,	4,	10,000.00
Jan. 1, 1910,	4,	5,000.00
Jan. 1, 1911,	4,	5,000.00
Oct. 1, 1912,	4,	45,000.00
Jan. 1, 1913,	4,	10,000.00
Jan. 1, 1914,	4,	10,000.00
Jan. 1, 1915,	4,	10,000.00
Jan. 1, 1916,	4,	10,000.00
Jan. 1, 1917,	4,	10,000.00
Jan. 1, 1918,	4,	10,000.00
Jan. 1, 1919,	4,	10,000.00
Mar. 1, 1922,	3½,	20,000.00
Jan. 1, 1923,	4,	400,000.00
		<hr/>
		\$690,000.00

REPORT OF WATER COMMISSIONERS.

To the City Council :

The Board of Water Commissioners respectfully submit their report for the year ending December 31, 1895.

We respectfully refer you to the report of the superintendent, which enters into the detail of the work, and is made a part of this report.

All departments have been kept up to the high standard maintained in past years. The earnings have been fully sustained.

The commissioners still believe that meters should come into general use, and will follow up the plan already begun in placing them throughout the city as fast as possible. The consumption of water from the high service system has fallen below last year, with a consequent reduction in the cost of maintaining the plant. The pumping engine maintains its high standard of duty, and is in every way economically and carefully managed.

In the appendix to the report of the superintendent will be found a schedule giving the mean height of water in Penacook lake from and including the year 1873. It will be seen from this schedule that the mean height of the water was lower during the year 1895 than in any previous year since the construction of the works. This fact was the cause of much anxiety on the part of the commissioners, and plainly showed that if the prevailing conditions continued it would be necessary to provide more water.

In order to protect our supply from the seeming shortage through the winter months, a proposition was entertained which had been made several times by the commissioners of the Boscawen and Penacook water-works, and a special committee of the board was chosen to consider the matter. After careful investigation by the committee and upon their recommendation,

a contract for one year was entered into to take water from Walker pond. The superintendent was instructed to make the connections, and water was turned on in December and is now supplying a part of our system.

The late rains, however, have given an increase in our own supply, so that Penacook lake is at a higher point than at any time during the same period for the last three years, and with the prospect that the severe drought is at an end.

We have, as in former years, sought to protect the purity of our supply by purchasing land around Penacook lake, and now own and control a very large proportion of the shores of said lake.

With the laws passed at the last session of the legislature, the city has enlarged powers in the matter of protecting their water supply.

The note of \$15,000 has been funded into three and a half per cent. bonds, running five years.

It is confidently expected that the bonds maturing in 1896 will be retired when due.

Some discussion has been raised lately in regard to electrolysis or the action on water and gas pipes from the electric current in a street railway system. This matter has been under consideration by both water-works officials and electricians throughout the country for some time. As yet we have not discovered any trouble from this cause on our works, and, with many other cities much larger than ourselves, prefer to await the investigations and experiments of those municipalities that have suffered actual damage from action of street railway currents. Moreover, in some cities where corrosion of pipes has been discovered, the officials frankly state that, if the electrolytic action was not now so actively under discussion, the destruction of the pipe would have been easily traced to some other cause. Probably no other city has suffered more from electrolysis or tried more preventive measures on the authority of experts than Brooklyn, N. Y. As a partial explanation of the stand which we, with other cities, have taken in regard to the whole matter, we quote the following from the report of the commissioners of electrical subways of Brooklyn, just issued:

“The board has sought to avail itself of the result of experience with electric car lines in other American cities. Letters have been addressed to the municipal authorities of sixty-six cities of the United States. Replies were received from forty-five. Corrosion difficulties have been experienced in only ten. All attempts to prevent injury to underground pipes are yet in the experimental stage. The usual way of ameliorating the difficulty is by improving the conductivity at the rail joints. It is easily made good enough temporarily, but after a few months it deteriorates rapidly. To prevent the water and gas pipes from becoming conductors of a portion of the trolley current, there is probably no way except in the use of the double trolley system.”

The works have been ably managed by the superintendent and his assistants.

The term of Mr. Willis D. Thompson, who has served the board ably since 1891, expired during the year, and Edson J. Hill was elected to fill his place.

Mr. Henry E. Conant resigned during the year, and his place was filled by the election of Ebenezer B. Hutchinson.

Respectfully submitted,

WILLIAM M. MASON,
EDSON J. HILL,
WILLIAM P. FISKE,
WILLIAM E. HOOD,
SOLON A. CARTER,
FRANK D. ABBOT,
JOHN WHITAKER,
EBENEZER B. HUTCHINSON,
HENRY ROBINSON, *ex officio*,

Water Commissioners.

REPORT OF THE SUPERINTENDENT.

To the Board of Water Commissioners :

I herewith present to you the twenty-fourth annual report of the operations of this department, showing the receipts, expenditures and abatements, together with a statement of extensions and improvements made during the year ending December 31, 1895.

RECEIPTS.

For water from consumers by fixed rates	\$40,278.60
For water from consumers by meter rates	14,718.72
From delinquents	58.81
For water used for building purposes	183.64
For rents	165.00
For pipe and stock sold, etc.	165.76
	\$55,570.53
Deduct abatements	227.34
	\$55,343.19
Total receipts for 1895	

EXPENDITURES.

GENERAL EXPENSES.

Paid pay-rolls, salaries and labor	\$5,688.65
Nathaniel White, Jr., rent of office and heating	350.00
S. G. Sanborn, rent of shop in Penacook, and labor	38.05
N. H. Democratic Press Co., printing	74.50
Republican Press Asso., printing	53.45
Ira C. Evans, printing	33.25
Silby & Son, stationery, etc.	21.40

Paid Stockbridge & Sanders, stationery, etc.	\$18.88
Arthur H. Chase, clerk of water board and auditor	21.00
Concord Light and Power Co., gas	15.12
N. E. Telephone and Telegraph Co., telephones	137.50
J. M. Stewart & Sons Co., sup- plies	10.93
Humphrey-Dodge Co., hardware .	21.76
Thompson & Hoague, "	60.16
N. S. Gale & Co., "	1.46
Batchelder & Co., grain, oil, etc. .	74.78
A. C. Sanborn, grain, etc.	27.69
C. R. Dame, "	13.72
C. H. Martin & Co., lead, oil, etc.	13.13
H. O. Marsh & Co., wood	8.38
Geo. W. Chesley, wood and chest- nut plank	99.92
R. S. Emery, posts	29.62
John C. Thorne, rubber boots . .	16.00
W. A. Thompson, "	4.00
Shady Hill Nursery Co., spruce trees	52.00
G. H. Folsom, trees	2.50
Stoughton Rubber Co., hose, etc. .	3.28
Patrick Hackett, dressing	8.25
Woodworth & Co., cement	29.65
E. E. Fisher, dynamite	38.00
R. W. Neff, paint	3.50
R. D. Wood & Co., cast-iron pipe	3,698.69
Sewer department, pipe	12.90
Davis & Farnum Manufacturing Co., castings	32.24
Builders Iron Foundry, castings .	8.63
Ford & Kimball, castings	2.18
Ludlow Valve Mfg. Co., valves . .	225.64

Paid Chapman Valve Manufacturing Co., hydrants	\$178.35
Chadwick Lead Works, pig lead	333.08
Walworth Manufacturing Co., pipe, brass goods, etc.	549.43
Gilchrist & Taylor, fittings, etc.	35.50
Goodhue & Milton, fittings	3.18
E. H. Randall, fittings	5.00
C. M. Kemp Mfg. Co., tools	14.40
Perrin, Seamans & Co., "	8.75
National Meter Co., meters	1,837.60
Union Meter Co., "	60.00
Neptune Meter Co., "	12.54
Abbot-Downing Co., repairs	67.25
J. D. Johnson & Son, "	29.65
Chandler Eastman & Sons, repairs	20.40
W. S. Davis & Son, repairs	18.30
P. H. Coleman, "	13.25
J. H. Rowell & Co., repairing concrete	37.76
Highway department, labor	23.15
E. B. Hanchay, smith-work	93.50
E. Isabelle, "	23.65
R. W. Cate, "	6.80
Rowell & Plummer, mason work	23.04
George Abbott, Jr., painting	40.19
Benjamin Bilsborough, "	14.44
E. B. Hutchinson Building Co., lumber and labor	25.66
Mead, Mason & Co., lumber and labor	4.30
Geo. L. Theobald, team work	189.11
E. L. Davis, "	32.15
O. F. Richardson, "	12.25
Cavis G. Brown, "	6.00
W. B. Cunningham, "	1.85

Paid N. A. Dunklee, team work	\$20.00
Boston & Maine Railroad, freight	94.60
Concord & Montreal Railroad, freight	20.10
American Bank Note Co., bond- plate	55.00
Concord Street Railway	55.00
E. R. Angell, water analyses	6.00
D. Arthur Brown	11.75
Engineering News	5.00
Littlefield Directory Publishing Co.	2.00
Ezra S. Stearns, engrossing bill	3.75
Eastman & Merrill, insurance	32.50
Jackman & Lang, "	25.00
Morrill & Danforth, "	2.50
J. Herbert Shedd, engineering on account of high service exten- sion	472.56
Robert Crowley, land	3,000.00
Miles Hodgdon, "	2,200.00
Coffin & Little, "	800.00
O. F. Richardson, "	100.00
D. W. Hobbs, water rights	75.00
incidentals	330.38
V. C. Hastings, cash paid out	78.82
	<hr/> \$22,061.30

PUMPING STATION EXPENSES.

Paid pay-rolls, engineer and fireman	\$1,369.50
H. O. Marsh & Co., coal	499.80
E. A. Boutwell & Son, wood	52.60
H. H. Amsden & Son, "	24.00
Vacuum Oil Co., oil	56.75
Humphrey-Dodge Co., hardware and packing	8.36
Thompson & Hoague, hardware	4.20

Paid A. W. Chesterton & Co., packing	\$4.68	
Walworth Mfg. Co., fittings . . .	2.20	
E. H. Randall, fittings	3.62	
Gilchrist & Taylor, pipe	3.55	
E. Hodge & Co., castings	22.75	
Concord Foundry Co., castings . . .	3.20	
Stoughton Rubber Co., hose	11.75	
Rowell & Plummer, mason work . . .	42.75	
O. F. Richardson, team work	5.00	
Concord & Montreal Railroad, freight	1.12	
Concord Light and Power Co., gas	19.62	
		<u>\$2,135.45</u>
Total expenditures for 1895		\$24,196.75

The expenses are divided as follows :

General Expenses.

For management and repairs	\$3,445.85	
new service pipes	1,598.28	
new distribution pipes	4,561.78	
inspection	600.00	
reservoir grounds	232.30	
meter account	2,362.86	
land around Penacook lake	6,175.00	
work around Penacook lake	324.44	
laying pipe and making connection with the Penacook and Boscawen water-works	1,756.81	
incidentals	1,003.98	
		<u>\$22,061.30</u>

Pumping Station Expenses.

For salaries, engineer and fireman . . .	\$1,369.50	
fuel used	576.40	
oil, packing, and other supplies	189.55	
		<u>\$2,135.45</u>

EXTENSIONS AND IMPROVEMENTS.

Main and distribution pipes have been laid and hydrants set during the year, as follows :

In Freight street,

east from South Main street, 438 feet 10-inch pipe and 1 hydrant.

In South street,

south from Smith's farm to near Wheeler's corner, 1,760 feet 6-inch pipe and 1 hydrant.

In Holt street,

south from School street to Warren street, 646 feet 6-inch pipe.

In Pillsbury street,

east from near Eastman street to Broadway, 600 feet 6-inch pipe.

In Depot street,

east from North Main street to train-shed at passenger station, 387 feet 6-inch pipe and 1 hydrant.

In Rockingham street,

west from Broadway, 209 feet 6-inch pipe.

In View street, West Concord,

extended south to K street, 73 feet 6-inch pipe.

In Glen street,

extended south, 36 feet 6-inch pipe.

In Hall street,

extended south from Hammond street, 306 feet 4-inch pipe.

In Pierce street,

south from Laurel street to Perley street, 300 feet 4-inch pipe.

In Warren street,

west from Pine street to Liberty street, 452 feet 8-inch cast-iron pipe, relaid in place of 6-inch cement-lined pipe.

In North Main street,
38 feet 6-inch cast-iron pipe, relaid in place of 6-inch
cement-lined pipe.

On hydrant branches,
112 feet 6-inch pipe.

IN PENACOOK.

In Centre street,
north from Merrimack street to East Canal street, 247 feet
10-inch pipe.

In East Canal street,
east from Centre street to Crescent street, 225 feet 10-inch
pipe.

In Crescent street,
north from East Canal street to near Concord Axle Works,
635 feet 10-inch pipe and 1 hydrant.

In Centre street,
south from Spring street, 369 feet 6-inch pipe.

In Merrimack street,
37 feet 8-inch cast-iron pipe, relaid in place of 8-inch cement-
lined pipe.

In East Canal street,
8 feet 8-inch cast-iron pipe, relaid in place of 8-inch cement-
lined pipe.

On hydrant branches,
7 feet 6-inch pipe.
22 feet 6-inch cast-iron pipe, relaid in place of 6-inch cement-
lined pipe.

On blow-off,
8 feet 4-inch pipe.

Summary of the Foregoing.

<i>Pipes.</i>	<i>Hydrants.</i>	<i>Stop-Gates.</i>
1-in., 1,883 feet.	South street, at	4-in., 2
4-in., 614 "	Rockingham, 1	6-in., 13
6-in., 4,259 "	Depot street, at	10-in., 4
8-in., 497 "	train shed, 1	
10-in., 1,545 "	Freight street, at	
	passenger sta-	
	tion, 1	
8,798 feet,	Crescent street,	
equal to 1.66 miles.	Penacook, east	
	of canal, 1	
	4	19
Total length of main and distribution pipes now in use, 297,468 feet, equal to 56.33 miles.	Total number of hy- drants now in use, 243.	Total number of gates now in use, 682.

SERVICE PIPE.

There have been laid during the year, and connected with the main pipe, 91 service pipes, consisting of—

89 1-inch,	2,128 feet.
1 2-inch,	44 "
1 6-inch,	13 "
91	2,185 feet.

Whole number of service pipes, 3,061; number discontinued, 6; number in use at the present time, 3,055.

Total length of service pipes, 71,577 feet, or 13.55 miles.

The following table shows the height of water in Penacook lake on the first day of each month:

January . . .	170.05	July . . .	172.30
February . . .	169.70	August . . .	171.70
March . . .	169.05	September . . .	171.00
April . . .	170.00	October . . .	170.70
May . . .	173.25	November . . .	170.55
June . . .	173.00	December . . .	172.55

The lowest point reached was March 1, being 169.05; the highest was May 1, 173.25; mean height, 171.15, which was 1.66 feet lower than the mean height for the year 1894.

We have been compelled to shut off one service for non-payment of water rent, during the year; on payment of the fine and bill, the water has been turned on again.

The principal extensions have been the continuation of the South street pipe to near Wheeler's corner, 1,760 feet of 6-inch pipe; and the extension of the high service system through Freight and Depot streets, for fire service at the railroad. The distribution pipe account appears to be larger than for previous years according to the pipe laid. But considerable more pipe was purchased than was used this year, so that we have now on hand, left from this year's purchase and charged to this account, 619 feet of 4-inch, 1,874 feet of 6-inch, and 119 feet of 8-inch pipe.

The general work has been continued as in past years. The number of new service pipes laid is smaller than since 1886. Two house-to-house inspections have been made during the year. We have set 147 meters, placing them on services as directed by you, making the total number of meters now in use, 271.

You will notice by the engineer's report that the amount of water consumed on the high service system has decreased very much during this year; the daily average of gallons pumped was 114,585 less than last year, more than 25 per cent., making a total decrease for the year of 42,823,550 gallons, and a saving of over 38 tons of coal.

A road has been built around the reservoir, so that the delightful view from the east side can be more easily enjoyed.

Work has been continued at intervals around the shore of Penacook lake, and a fence has been built at the southerly end of the lake, between the land purchased of Mr. Crowley and the highway.

According to your instructions a connection was made with the Penacook and Boscawen water-works; a 10-inch pipe was laid in Centre street from Merrimack to East Canal street, and through East Canal and Crescent streets to near the Concord Axle Works. The work was quite expensive on account of the unusual amount of blasting, crossing the canal, and making the connection.

Respectfully submitted,

V. C. HASTINGS,

Superintendent.

REPORT OF THE ENGINEER OF THE PUMPING STATION.

PUMPING STATION, CONCORD WATER-WORKS.

V. C. HASTINGS, *Superintendent* :

SIR, — I would report that the machinery at the pumping station is in good working condition.

Following will be found a statement of coal and other supplies used at the pumping station during the year, with a table showing the work for each month.

Statement.

105 tons, 588 lbs. Pocahontas coal.

46 gals. of oil.

26 lbs. of waste.

ENGINE RECORD.

DATE.	Pumping time. <i>h. m.</i>	Water pumped.	Daily average pumped.	*Total coal burned.	Daily average coal burned.	*Gallons pumped per pound of coal.
January.....	116:30	10,013,920	323,029	22,761	734	439
February.....	114:45	10,018,085	357,788	21,715	775	461
March.....	105:00	9,503,585	306,567	19,863	640	479
April.....	94:45	8,120,210	270,673	16,138	520	503
May.....	104:45	9,514,435	306,917	18,860	608	504
June.....	111:30	10,345,090	344,836	20,469	682	505
July.....	106:45	9,546,775	307,960	18,949	611	503
August.....	92:45	7,952,315	256,526	15,707	506	506
September.....	115:00	9,758,595	325,286	20,165	672	483
October.....	113:15	8,827,700	284,764	18,416	594	479
November.....	106:30	9,040,850	301,361	19,960	665	452
December.....	109:45	9,676,170	312,134	22,785	735	424
Total.....	1,291:15	112,317,730	307,719	235,788	645	476
Daily average	3:32	307,719	.....	645	.....	.....

* Amount of coal consumed includes that used for heating the building.

Amount of coal consumed per thousand gallons pumped, 2.09 pounds.

HENRY A. ROWELL,
Engineer.

AUDITOR'S REPORT.

CONCORD, N. H., January 6, 1896.

To the Board of Water Commissioners :

I hereby certify that I have examined the books showing the receipts of the Concord Water-works from January 1, 1895, to December 31, 1895, and find the same correct, and that the total amounts given therein correspond with the amounts of receipts given by the superintendent, V. C. Hastings, in his report for the year.

ARTHUR H. CHASE,
Auditor.

TREASURER'S REPORT.

W. F. THAYER, *Treasurer,*

In account with CONCORD WATER-WORKS.

RECEIPTS.

Balance on hand January 1, 1895	. \$12,912.06
Bonds . . . . .	. 35,000.00
“ premium . . . . .	. 597.50
“ interest . . . . .	. 136.22
Income of water-works . . . . .	. 55,343.19
	<u> </u> \$103,988.97

EXPENDITURES.

Interest on water-works bonds . . . . .	. \$26,963.06
“ “ notes . . . . .	. 491.56
Maintenance and extension . . . . .	. 24,196.75
Notes . . . . .	. 15,000.00
Bonds . . . . .	. 23,000.00
Balance on hand January 1, 1896 . . . . .	. 14,337.60
	<u> </u> \$103,988.97

APPENDIX.

A.

Receipts for each Year since the Completion of the
Works.

For the year ending January 31, 1874	. . .	\$4,431.10
For fifteen months ending April 1, 1875	. . .	17,535.00
For the year ending April 1, 1876	. . .	16,921.24
“ “ 1877	. . .	19,001.07
“ “ 1878	. . .	20,763.03
“ “ 1879	. . .	21,869.86
“ “ 1880	. . .	22,451.53
“ “ 1881	. . .	26,744.58
For nine months ending December 31, 1881	. . .	25,534.01
For the year “ “ 1882	. . .	27,243.06
“ “ “ 1883	. . .	28,255.48
“ “ “ 1884	. . .	28,915.65
“ “ “ 1885	. . .	30,222.54
“ “ “ 1886	. . .	30,862.64
“ “ “ 1887	. . .	34,047.52
“ “ “ 1888	. . .	38,441.32
“ “ “ 1889	. . .	40,237.53
“ “ “ 1890	. . .	42,133.41
“ “ “ 1891	. . .	46,075.16
“ “ “ 1892	. . .	48,351.52
“ “ “ 1893	. . .	52,299.66
“ “ “ 1894	. . .	53,230.10
“ “ “ 1895	. . .	55,343.19
Total receipts for 23 years	. . .	\$730,910.20

B.

Mean Height of the Water Each Year.

1873	. . .	175.86	1885	. . .	176.80
1874	. . .	179.50	1886	. . .	178.10
1875	. . .	180.00	1887	. . .	179.04
1876	. . .	180.28	1888	. . .	181.96
1877	. . .	176.46	1889	. . .	180.91
1878	. . .	179.50	1890	. . .	181.90
1879	. . .	179.74	1891	. . .	180.00
1880	. . .	175.30	1892	. . .	174.32
1881	. . .	174.70	1893	. . .	173.38
1882	. . .	179.15	1894	. . .	172.81
1883	. . .	176.40	1895	. . .	171.15
1884	. . .	178.18			

FIRE-HYDRANTS.

STREETS.	LOCATIONS.	Number.	Total.
North Main.	Southwest corner North Main and Penacook.	1	
"	East side North Main, near J. B. Walker's.	1	
"	Junction North Main and Fiske.	1	
"	East side North Main, near Larkin's store.	1	
"	Northwest corner North Main and Franklin.	1	
"	East side North Main, opposite Pearl.	1	
"	Northwest corner North Main and Washington.	1	
"	West side North Main, opp. Historical Society rooms.	1	
"	East side North Main, opposite Chapel.	1	
"	Northwest corner North Main and Court.	1	
"	Northwest corner North Main and Pitman.	1	
"	Northwest corner North Main and Montgomery.	1	
"	East side North Main, opposite Montgomery.	1	
"	Northwest corner North Main and Centre.	1	
"	Southeast corner North Main and Bridge.	1	
"	Southwest corner North Main and Park.	1	
"	East side North Main, opposite Park.	1	
"	Northwest corner North Main and Capitol.	1	
"	Northwest corner North Main and School.	1	
"	West side North Main, at Centennial block.	1	
"	East side North Main, opposite Centennial block.	1	
"	East side North Main, in rear Eagle Hotel.	1	
"	East side North Main, in rear Woodward block.	1	
"	Northwest corner North Main and Warren.	1	
"	West side North Main, at Central block.	1	
"	Southeast corner North Main and Depot.	1	
"	Northwest corner North Main and Pleasant.	1	27
South Main.	Southeast corner South Main and Pleasant.	1	
"	Northeast corner South Main and Freight.	1	
"	East side South Main, opposite Fayette.	1	
"	East side South Main, opposite Thompson.	1	
"	Southeast corner South Main and Chandler.	1	
"	Northwest corner South Main and Wentworth avenue.	1	
"	Northwest corner South Main and Thorndike.	1	
"	East side South Main, opposite St. John's church.	1	
"	Northwest corner South Main and Perley.	1	
"	West side South Main, near Abbot-Downing Co.'s.	1	
"	East side South Main, opposite Abbot-Downing Co.'s.	1	
"	Northwest corner South Main and West.	1	12
Turnpike.	East side Turnpike, near West.	1	
"	West side Turnpike, opposite Gas.	1	
"	West side Turnpike, near J. B. Weeks's.	1	
"	West side Turnpike, at J. H. Lamprey's.	1	
"	West side Turnpike, at W. J. Sawyer's.	1	5
Water.	West side Water, near Capt. James Thompson's.	1	1
Hall.	West side Hall, below Rolfe and Rumford Asylum.	1	1
Hammond.	North side Hammond, near bridge.	1	1
Fiske.	West side Fiske, near North State.	1	1
Summer.	Northeast corner Summer and Pitman.	1	1
Durgin.	West side Durgin, near Toof's laundry.	1	1
North State.	Southwest corner North State and Penacook.	1	
"	Northwest corner North State and Walker.	1	
"	Northwest corner North State and Church.	1	
"	Northwest corner North State and Tremont.	1	
"	Northeast corner North State and Washington.	1	
"	West side North State, opposite Court.	1	
"	Northwest corner North State and Maple.	1	
"	Northeast corner North State and Centre.	1	
"	East side North State, opposite government building.	1	
"	Southwest corner North State and School.	1	
"	Northwest corner North State and Warren.	1	
"	Northwest corner North State and Pleasant.	1	12
South State.	East side South State, opposite Wall.	1	1

FIRE-HYDRANTS. — *Continued.*

STREETS.	LOCATIONS.	Number.	Total.
South State.	Northwest corner South State and Thompson	1	
"	Southwest corner South State and Monroe.. ..	1	
"	East side South State, opposite Laurel	1	
"	Southeast corner South State and Downing.....	1	
"	Northeast corner South State and West.....	1	
"	Junction of South State and Turnpike	1	7
Mills.	Southeast corner Mills and Downing.....	1	
"	West side Mills, near Levi Call's.	1	2
Dakin.	West side Dakin, near C. E. Harriman's	1	1
Dunklee.	Northwest corner Dunklee and Pillsbury.	1	1
Broadway.	West side Broadway, near precinct line.....	1	1
Green.	Northwest corner Green and Prince.....	1	
"	East side Green, opposite Prince.	1	2
South.	West side South, opposite Wall	1	
"	Northwest corner South and Thompson.....	1	
"	West side South, opposite Monroe	1	
"	West side South, opposite Laurel	1	
"	West side South, opposite Downing.	1	
"	West side South, opposite Allison.....	1	
"	West side South, near Abbot farm.	1	
"	West side South, opposite Smith farm.....	1	
"	Northwest corner South and Rockingham.....	1	9
Bradley.	Southwest corner Bradley and Penacook	1	
"	West side Bradley, opposite Walker	1	
"	East side Bradley, opposite Highland	1	3
Union.	Northwest corner Union and Maple	1	1
Lyndon.	Southwest corner Lyndon and Tremont.....	1	1
No. Spring.	Southwest corner North Spring and Centre	1	1
So. Spring.	Southwest corner South Spring and Oak	1	
"	West side South Spring, opposite Concord.....	1	
"	West side South Spring, opp. Perley proposed extens'n	1	3
Rumford.	West side Rumford, opposite Perkins	1	
"	Northeast corner Rumford and Franklin.....	1	
"	West side Rumford, opposite Beacon	1	
"	Northeast corner Rumford and Abbot	1	
"	Northeast corner Rumford and Cambridge.....	1	
"	Northeast corner Rumford and School.....	1	6
Tahanto.	Northwest corner Tahanto and School	1	1
Pine.	Southwest corner Pine and Centre	1	1
High.	Northwest corner High and Auburn.....	1	
"	East side High, opposite Forest.....	1	
"	Southwest corner High and Franklin	1	3
Giles.	Southeast corner Giles and School.	1	1
Fruit.	Northeast corner Fruit and Clinton	1	
"	East side Fruit, opposite Wm. W. Critchett's.....	1	
"	Northwest corner Fruit and Woodman	1	3
Minot.	West side Minot, near Odd Fellows' Home.....	1	1
Penacook.	South side Penacook, near P. B. Co.'s bark house.....	1	
"	South side Penacook, near P. B. Co.'s office	1	
"	Southeast corner Penacook and North Main.....	1	
"	Southwest corner Penacook and Rumford.....	1	
"	Southeast corner Penacook and Columbus avenue. .	1	5
Highland.	Northeast corner Highland and Rumford.....	1	1
Church.	North side Church, opposite Lyndon	1	
"	Northeast corner Church and Rumford.....	1	2
Franklin.	Northwest corner Franklin and Jackson.....	1	
"	Southwest corner Franklin and Rumford.....	1	
"	South side Franklin, opposite W. J. Ahern's.....	1	
"	Northeast corner Franklin and Auburn.....	1	4
Beacon.	Northwest corner Beacon and Jackson.....	1	1
Blanchard.	Northwest corner Blanchard and Essex.....	1	1
Ferry.	North side Ferry, east of C. & M. Railroad.....	1	1
Washington.	Southwest corner Washington and Union.....	1	

FIRE-HYDRANTS. — *Continued.*

STREETS.	LOCATIONS.	Number.	Total.
Washington.	Northwest corner Washington and Rumford.	1	
	North side Washington, opposite Perry avenue.....	1	3
Valley.	North side Valley, opposite Forest	1	1
Auburn.	Northwest corner Auburn and Forest.	1	1
Centre.	Northeast corner Centre and North State.	1	
"	Southwest corner Centre and Green.....	1	
"	Northwest corner Centre and Union.	1	
"	Northwest corner Centre and North Spring.....	1	
"	Northwest corner Centre and Rumford.....	1	
"	South side Centre, opposite Essex.....	1	
"	Southwest corner Centre and Summit avenue.....	1	7
Bridge.	South side Bridge, near easterly barn ...	1	1
Capitol.	Northeast corner Capitol and North State.....	1	1
School.	Northwest corner School and Green.....	1	
"	Northwest corner School and North Spring	1	
"	Northwest corner School and Merrimack.	1	
"	North side School, near city storehouse.....	1	
"	North side School, opposite E. B. Woodworth's	1	5
Depot.	Northwest corner Depot and Railroad square.....	1	
"	South side Depot, at end of train shed.....	1	2
Warren.	Northwest corner Warren and Green.....	1	
"	Northwest corner Warren and North Spring	1	
"	Northwest corner Warren and Rumford.....	1	
"	Southwest corner Warren and Merrimack.....	1	
"	Northwest corner Warren and Tahanto.....	1	
"	Northeast corner Warren and High.....	1	
"	Junction Warren and Pleasant, near Fruit.....	1	7
Pleasant.	Northwest corner Pleasant and Railroad square.....	1	
"	Northwest corner Pleasant and Green.....	1	
"	Northwest corner Pleasant and Rumford	1	
"	South side Pleasant, opposite Pine.....	1	
"	South side Pleasant, opposite Liberty.....	1	
"	North side Pleasant, near Salem.....	1	
"	South side Pleasant, near Mrs. Eddy's	1	
"	North side Pleasant, near Mrs. Lane's.....	1	
"	North side Pleasant, near J. McC. Hammond's	1	
"	South side Pleasant, opposite Pond road.....	1	
"	South side Pleasant, near J. Milnor Coit's.....	1	
"	North side Pleasant, opposite infirmary.....	1	
"	South side Pleasant, near the mill.	1	13
Mill road.	East side Mill road, near Upper School cottage.....	1	
St. P. School.	North side Mill road, at Orphans' Home ...	1	2
Marshall.	North side Marshall, opposite Fuller.....	1	1
Freight.	North side Freight, at southwest corner pass'r station	1	1
Hill's ave.	Northeast corner Hill's avenue and South Main	1	
"	Southwest corner Hill's avenue and Railroad square..	1	2
Fayette.	Northwest corner Fayette and Elm.....	1	1
Chandler.	South side Chandler, opposite railroad	1	1
Concord.	South side Concord, opposite Jefferson.....	1	1
Thorndike.	Northeast corner Thorndike and Grove.....	1	1
Laurel.	Northeast corner Laurel and Pierce.....	1	1
Perley.	Northwest corner Perley and Grove.....	1	
"	South side Perley, near old brook.....	1	2
West.	North side West, near Badger	1	
"	North side West, opposite Dakin.....	1	
"	North side West, at intersection Broadway	1	3
Harrison.	Northwest corner Harrison and Morton.....	1	1
Allison.	Northwest corner Allison and Mills.....	1	1
Rockingham.	Northeast corner Rockingham and Broadway	1	1
Prospect.	Northwest corner Prospect and Granite avenue.....	1	1
Curtice ave.	North side Curtice avenue, near John C. Kenney's....	1	1
On main line.	West side West Concord road, at water wk's storehouse	1	
"	Northeast corner West Concord road and Foster.....	1	

FIRE-HYDRANTS. — *Continued.*

STREETS.	LOCATIONS.	Number.	Total.
On main line.	East side West Concord road, near cemetery gate	1	
"	West side West Concord road, near Calvary cemetery.	1	
"	East side West Concord road, near C. R. Farnum's.	1	5
WEST CONCORD.			
Main.	East side Main, near old city farm.	1	
"	East side Main, near engine house.	1	
"	East side Main, opposite D. Holden's	1	
"	West side Main, near north mill	1	
"	East side Main, opposite Geo. W. Brown's	1	
"	East side Main, near Mr. Harrington's	1	
"	East side Main, opposite A. Hollis's	1	7
Electric.	Northeast corner of Electric and Main	1	
"	North side Electric, near power station.	1	2
Lake.	East side Lake, near S. W. Kellom's.	1	
"	East side Lake, near Mrs. G. E. Holden's.	1	2
Knight.	South side Knight, opposite railroad station.	1	1
Hutchins.	North side Hutchins, near B. T. Putney's.	1	
"	North side Hutchins, near C. & C. Railroad.	1	2
Penac'k road.	West side Penacook road, near Warner road.	1	
"	West side Penacook road, near Mr. Currier's	1	2
PENACOOK.			
Main.	West side Main, opposite Stark	1	
"	West side Main, near Mr. Prescott's.	1	
"	Southwest corner Main and Union	1	
"	Washington square, opposite Washington	1	
"	Northwest corner Main and Charles.	1	
"	North side Main, opposite East Canal	1	
"	North side Main, near iron bridge	1	7
West Main.	West side West Main, opposite cemetery.	1	1
High	East side High, opposite Summit	1	
"	Northwest corner High and Maple	1	
"	Northwest corner High and Spring.	1	3
Washington.	Southeast corner Washington and Union.	1	
"	South side Washington, opposite John Whitaker's	1	
"	South side Washington, opposite Charles	1	
"	South side Washington, near Contoocook bridge.	1	4
Charles.	Southwest corner Charles and Warren	1	
"	North side Charles, near Geo. W. Corey's	1	2
West Canal.	Southeast corner West Canal and Warren.	1	1
East Canal.	North side East Canal, near Contoocook Mfg. Co	1	
"	North side East Canal, near Crescent	1	2
Crescent.	North side Crescent, east of canal.	1	1
Merrimack.	South side Merrimack, opposite Merrimack avenue.	1	
"	North side Merrimack, opposite D. W. Fox's.	1	
"	North side Merrimack, opposite Cross.	1	
"	South side Merrimack, opposite Rolfe's shop	1	
"	North side Merrimack, near road to island	1	
"	Northwest corner Merrimack and Penacook.	1	6
Summer.	North side Summer, opposite High	1	
"	Northeast corner Summer and Centre	1	2
Spring.	Northeast corner Spring and Church.	1	1
Centre.	Northwest corner Centre and Spring	1	1
"	Southwest corner Cross and Summer.	1	1
"	North side Rolfe, near James Corbett's	1	
"	Northwest corner Rolfe and Penacook	1	2
Penacook.	West side Penacook, opposite A. W. Rolfe's.	1	1
Whole number of public hydrants.			243

FIRE-HYDRANTS. — *Continued.*

	LOCATIONS.	Number.	Total.
PRIVATE HYDRANTS.			
	Concord Railroad yard, 3 post and 3 flush hydrants ...	6	
	Northern Railroad yard, 4 post hydrants ...	4	
	New state prison	3	
	Abbot-Downing Co.'s yard.....	6	
	Page Belting Co.'s yard.....	6	
	W. P. Ford & Co.'s yard.....	1	
	N. H. Asylum for Insane yard.....	1	
	Concord Gas Light Co.'s yard.....	1	
	St. Paul's school	1	
	Water-works pumping station grounds	1	30
	Whole number private hydrants ..	.....	30

HIGHWAY DEPARTMENT.

REPORT OF COMMISSIONER OF HIGHWAYS.

To the City Council :

GENTLEMEN,— I herewith submit the annual report of the Highway Department, showing the work done and money expended during the year ending December 31, 1895.

In the early spring the general cleaning and repairing of streets was delayed by the heavy damage caused by the freshet. The greatest amount of damage was at the south end of the city. Water street, from the Railroad bridge to the Pembroke bridge, was washed quite badly, as were Hall and Hammond streets and the Pembroke road. Altogether 4,472 loads of grade were required to make the roads at the south end passable. At the north end the damage was less. Bridge and Ferry streets and the East Concord road were considerably washed. Here 229 loads of grade were required. The furnace on the city lot across the river, for burning rubbish collected in the city, was damaged to such an extent that it had to be rebuilt. The total expense of repairing roads washed by the freshet and rebuilding furnace at the crematory was about \$5,180.

But little work has been done on new streets this year. Peabody, View, and K streets at West Concord were laid out at an expense of \$190.10. Considerable grading and repairing was done on Second street, amounting to \$454.16. Rollins court has been extended, and Harvard street cut to grade. \$259.97 was expended on Auburn street in cutting and laying sidewalk. Centre street hill, from High street west, was cut to grade at an expense of \$354.30. High street, from Valley street to Gilman Taylor's west line, was also cut to grade; expense, \$212.10.

In my last report I recommended the purchase of a steam road roller, which was bought this year. After seeing the working of different rollers, it was decided that bids be called for, for a roller of fifteen tons' weight. Sealed proposals were received from The Pitts Agricultural Works, Buffalo, N. Y.; Harrisburg Foundry and Machine Works, Harrisburg, Pa.; Aveling & Porter, Rochester, Eng.; The O. S. Kelly Co., Springfield, Ohio; and the last named bidder being the lowest, their bid was accepted. The roller was received early in June and work commenced immediately. State street, from Thompson to Franklin, was picked up and rolled. 1,064 loads of crushed stone were used, and when finished made one of the best streets in the city. It seems to show that the roller is capable of doing excellent work, and now that we have it, work can be commenced earlier in the spring and more accomplished.

Main street, from Church to Franklin, was also macadamized, and from Franklin to Pearl west of the street railway track. 137 loads of crushed stone were used here.

The last, of September, just as we were to commence the work of macadamizing South Main street from Pleasant to Fayette, the crusher broke. It was a little over a month before repairs could be finished, as an entire new frame had to be cast. By that time the ground was liable to freeze, and work had to be postponed. The crusher, however, after repairs were completed, was put to work, and we now have about 500 tons of stone crushed, ready for work as early in the spring as possible.

The matter of purchasing a portable stone crusher was brought before your honorable body, but it was put over until later. I can only recommend the advisability of purchasing one, for with our steam roller and a portable crusher considerable work could be done at a little expense. On many streets and at the gravel banks there is a sufficient quantity of stone which could be crushed, and streets well repaired for a small sum, as the portable crusher would save the cost of carting the stone.

Again would I recommend the appropriation of a certain sum each year for permanent work, such as paving. Main street, from Centre to Pitman, west of the street railway track, is

always muddy. The gutter on the west side is considerably higher than the railway track, and in no better way can it seem to be remedied than by paving. It could then be swept and kept in a much better condition.

Quite a number of concrete walks have been laid this year, and there are still a few to be put in. I hope the matter of laying a concrete walk from Waverly street to Blossom Hill cemetery can be adjusted and the walk laid next season, as it was granted five years ago.

The ordinance in regard to removing snow from sidewalks and dumping ashes in the streets has been enforced this winter. All requests to remove snow have been complied with thus far, and I hope that all citizens will consider the matter on the right side and keep all concrete walks free of snow. Nothing mars the looks of our streets more than piles of ashes dumped alongside of them. Every spring and fall the department cleans the streets, and at that time any ashes put in barrels or boxes at the side of the street will be removed by the department teams. An ordinance, passed in September, 1895, by the city council required this to be done. Several days before commencing the fall cleaning, notice was put in the papers when and at what place the work would begin. A large amount of garbage was put out for collection. 1,464 loads were removed, at an expense of \$903. This was considerably more than the cost of the spring cleaning, which was \$729.25; and without doubt the next general cleaning will be much larger.

Each spring and fall all catch basins in the city are cleaned out. As the number increases each year, the expense is growing more every year. When cleaning out catch basins on our main streets, all dirty water and mud has to be put in the gutters. This gives the street a very dirty appearance. If we had some kind of a closed dump-cart in which this dirty water and mud could be removed, it certainly would be a great improvement.

During the summer season the streets are continually being dug up for sewers, water and gas pipes, and in many cases the ditches are left in a very bad condition, especially where private sewer connections are made. The city ordinances require the