

Report of the Superintendent.

To the Board of Water Commissioners :

I herewith present to you the annual statement of my accounts as Superintendent for the year ending December 31, 1888 :

RECEIPTS.

For water from consumers,	\$31,782.25
From the city precinct for hydrants,	6,360.00
From delinquents,	44.48
For use of meters,	59.00
rent of Cooledge house,	100.00
rent of Cooledge lot,	10.00
rent of stable at Penacook lake,	40.00
rent of office,	50.00
pipe and stock sold,	20.66
	\$38,466.39
Deduct abatements,	\$25.07
	\$38,441.32

EXPENDITURES.

Paid V. C. Hastings, superintendent,	\$1,500.00
E. M. Byrnes, labor,	600.00
Nathaniel White, Jr., rent,	300.00
Republican Press Asso., printing,	23.60
N. H. Democratic Press Co., printing,	25.25
Silsby & Son,	16.26
Crawford & Stockbridge, books,	21.50
Concord Gas Light Co., gas,	15.00
Ranlet & Marsh, coal,	24.25

Paid Pilsbury & Day, coal,	\$24.00
Telephone Exchange,	108.00
E. L. Gove, trucking,	54.95
W. B. Cunningham, trucking,	3.80
George L. Theobald, teaming,	12.60
Abbott & Brown, "	20.00
E. H. Runnells, "	8.00
Henry Morrill, "	8.90
E. B. Hanchay, smith-work,	14.50
W. S. Davis, "	2.50
S. G. Sanborn, "	3.10
J. M. Crossman, "	2.10
N. P. Stevens, machine work,	1.00
Humphrey, Dodge & Smith, hardware,	21.14
W. D. Thompson, hardware and drain- pipe,	24.19
N. S. Gale & Co., hardware,	7.03
Stevens & Duncklee, tin-work,	4.90
James H. Rowell & Co., concrete,	2.00
Woodworth & Co., cement,	24.00
Dickerman & Leavitt, cement,	3.20
Frank Coffin, cement,	6.40
Batchelder & Co., oil,	6.50
John C. Linehan, oil,	1.60
John C. Thorne, rubber boots,	3.00
Morrill & Danforth, insurance,	10.00
R. P. Staniels, insurance,	15.00
J. B. Edson, charts,	5.00
J. M. Stewart & Sons, repairing chair,	1.75
A. R. Ayers, room paper,	5.76
W. A. Huntress, labor,	4.40
B. T. Putney, labor on overflow,	3.00
C. H. Martin & Co., lead and oil,	9.40
I. C. Bailey, painting,	162.65
E. B. Hutchinson, labor and lumber,	16.46
Geo. W. Chesley, chestnut plank,	56.39
Sewall & Day, Manila cord,	21.56
Edson Mfg. Co., pump and hose,	71.72
Crosby & Co., gauge,	7.00

Paid National Meter Co., meter, . . .	\$32.00
H. R. Worthington, meter, . . .	41.10
Richardson & Bean, old lead, . . .	14.00
Foss & Merrill, engineering, . . .	18.91
Geo. Goodhue, labor and fittings, . . .	18.47
Boston Lead Co., lead pipe, . . .	84.54
Peck Brothers & Co., brass goods, . . .	141.27
Gilchrist & Gorham, pipe, . . .	194.32
R. D. Wood & Co., pipe, . . .	347.19
Concord Railroad, freight, . . .	16.37
V. C. Hastings, cash paid out, . . .	60.01
J. H. Rolfe, labor, . . .	15.20
Pay-roll, labor, . . .	842.28
Walworth Mfg. Co., valves, gate-curbs, and tools, . . .	171.28
Davis & Farnum Mfg. Co., castings, . . .	39.20
Chapman Valve Co., hydrants and valves, . . .	440.46
Goodhue & Birnie, contract, . . .	3,947.80
Incidentals, . . .	35.50
	<hr/>
	\$9,745.76

The expenses are divided as follows :

For care and maintenance, . . .	\$3,172.22
new service pipes, . . .	1,271.00
High street extension, . . .	486.00
Main street extension, in Penacook, . . .	180.36
Charles street extension, “ . . .	1,148.43
Washington st. extension, “ . . .	213.40
East Canal st. extension, “ . . .	496.30
Merrimack st. extension, “ . . .	1,895.76
Summer street extension, “ . . .	167.29
all other extensions, . . .	715.00
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	\$9,745.76

EXTENSIONS AND IMPROVEMENTS.

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

In Chandler street,

east from Railroad street, 681 feet 1-in. pipe, to the wood and coal yard of Ranlet & Marsh.

In Perley street,

west from Pierce street, 375 feet 4-in. pipe, to take the place of a 1-in. pipe.

In Short street,

east from Rumford street, 223 feet 4-in. pipe, to take the place of a $\frac{3}{4}$ -in. pipe.

In High street,

south from Chestnut street, 502 feet 6-in. pipe, 1 hydrant.

Extensions in Penacook :

In Washington street,

from John Whitaker's house to Charles street, 150 feet 8-in. pipe, 1 hydrant.

In Charles street,

from Warren to the intersection with Washington street, 1,306 feet 6-in. pipe, 1 hydrant.

In Main street,

from East Canal street under the canal to near the south end of the iron bridge, 150 feet 6-in. pipe, 1 hydrant.

In East Canal street,

from near Contoocook Co. Mill to Crescent street, 383 feet 8-in. pipe, 1 hydrant.

In Merrimack street,

from Cross to Penacook, 2,023 feet 6-in. pipe, 3 hydrants.

In Summer street,

east from Cross street, 276 feet 4-in. pipe.

On hydrant branches, 150 feet 6-in. pipe.

SUMMARY OF THE FOREGOING.

<i>Pipes.</i>	<i>Hydrants.</i>	<i>Stop Gates.</i>
$\frac{3}{4}$ -in., 180 feet.	Bradley street, 1	4 in., 8
1-in., 1,202 feet.	High street, 1	6-in., 15
4-in., 899 feet.	School street, 1	8-in., 1
6-in., 4,130 feet.	Mill street, 1	
8-in., 533 feet.	Penacook, 7	
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6,944 feet.	11	24
—equal to 1.31 miles.	Whole number hydrants now in use, 170	Whole number gates now in use, 371

SERVICE PIPE.

There have been laid during the year, and connected with the main pipe, 127 service pipes, consisting of,—

2,761 feet $\frac{3}{4}$ -inch pipe.

100 feet 1-inch pipe.

44 feet 2-inch pipe.

9 feet 3-inch pipe.

109 feet 4-inch pipe.

Whole number of service pipes, 2,166.

Whole number of feet, 50,312, equal to $9\frac{52}{100}$ miles.

There have been repaired during the year 11 leaks.

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

	Feet.		Feet.
January, . . .	179.50	July, . . .	184
February, . . .	178.70	August, . . .	182.50
March, . . .	179	September, . . .	181.65
April, . . .	183.30	October, . . .	182.60
May, . . .	184	November, . . .	183.20
June, . . .	184.70	December, . . .	183.40

The lowest point reached was February 1, being 178.70 ; the highest was May 20, 184.85 ;—mean height, 181.96, being 2.92 feet higher than during the year 1887.

Respectfully submitted,

V. C. HASTINGS, *Supt.*

REPORT OF WATER COMMISSIONERS.

To the City Council:

The receipts and expenditures on account of the Water-Works during the past fiscal year, appear in the foregoing report of the superintendent.

The receipts exceed those of the previous year by the sum of \$4,393.80.

This excess is accounted for as follows:

Received for use of hydrants in excess of what was received the previous year,	\$1,420.00
Received for water upon the extension to Millville,	364.50
Received for water upon the extension to Penacook,	1,007.94
Nearly all the balance has resulted from an increased consumption in the com- pact part of the city,	1,601.36
	<hr/> \$4,393.80

Although ten miles of main and distribution pipes, and nearly two hundred service pipes, have been added to the works within the past two years, and the number of families which patronize the works has increased from 2,304 to 2,675, the expenses of management and repairs have increased but slightly. The increase over the preceding year is \$285.42, and over the average of the five preceding years, \$352.39. These expenses certainly have not increased in proportion to the increase of the works and the number of persons whom they serve.

The smallness of the expenses for repairs attests to the thoroughness with which the works were originally constructed, and the good character of the pipe and other appliances in use.

Only eleven leaks have occurred during the year. These were all in the distribution pipes except one, which was on the 14-in. main in High street, in West Concord village. Considering the fact that we have forty-two miles of pipe, and that the works have been in use sixteen years, we regard this as a very small number of leaks. Leaks will occur, whatever kind of pipe is used.

There is no present necessity for further extensions of any considerable magnitude. Slight changes and extensions will be required from year to year, to perfect the works. We see no reason why the ordinary income will not be sufficient to pay for these additions, and also pay the temporary indebtedness now outstanding, growing out of the recent extensions. This indebtedness amounts to the sum of \$7,000, and is represented by the notes of the city. The permanent indebtedness of the city was increased \$40,000 by the extensions to Millville and Penacook and the incidents thereto, and it is represented by bonds of the city bearing 4 per cent. interest, and maturing in the years 1896, '7, '8, and '9.

It affords us pleasure to bear witness to the faithful, intelligent, prompt, and efficient manner in which the superintendent performs the duties assigned to him. We also tender our acknowledgments to the city council for the confidence that has been imposed in us, and the cordial coöperation and aid we have had from them in all the official duties we have been required to perform. Without this confidence, coöperation, and aid, the Water-Works could not have been brought to their present state of usefulness.

Respectfully submitted,

JOHN KIMBALL,
WILLIAM M. CHASE,
JAMES L. MASON,
JOSEPH H. ABBOT,
SAMUEL S. KIMBALL,
GEORGE A. YOUNG,
JOHN E. ROBERTSON,
Water Commissioners.

TREASURER'S REPORT.

W. F. THAYER, *Treasurer,*

In account with CONCORD WATER-WORKS.

RECEIPTS.

Income of Water-Works,	\$38,441.32
Water-Works 4 per cent. bonds sold, . .	40,000.00
Premium on same,	206.68
Interest on same,	26.67
Water-Works notes,	10,000.00
	\$88,674.67

EXPENDITURES.

Balance due Treasurer, January 1, 1888,	\$457.66
Interest on Water-Works bonds,	23,510.00
Notes paid,	53,000.00
Interest on Water-Works notes,	1,468.76
Maintenance and extension,	9,745.76
Balance in hands of Treasurer,	492.49
	\$88,674.67

W. F. THAYER, *Treasurer.*

Examined by the Committee on Finance, and found correct.

JOHN E. ROBERTSON,
JOHN C. ORDWAY,
JOHN H. ROLFE,
CHARLES S. PARKER,
JOSIAH E. DWIGHT,
Committee on Finance.

APPENDIX.

I.

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 ending December 31, 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
Total receipts for sixteen years,	<u>\$389,239.63</u>

II.

Mean Height of the Water Each Year.

1873,	175.86	1881,	174.70
1874,	179.50	1882,	179.15
1875,	180.00	1883,	176.40
1876,	180.28	1884,	178.18
1877,	176.46	1885,	176.80
1878,	179.50	1886,	178.10
1879,	179.74	1887,	179.04
1880,	175.30	1888,	181.96

III.

Main and Distribution Pipes Laid and now in Use.

30-inch main,	1,950 feet.
18-inch “	11,681 “
16-inch “	151 “
14-inch “	26,491 “
12-inch “	1,351 “

14-inch distribution,	. . . . .	3,704 feet.
12-inch “	. . . . .	11,977 “
10-inch “	. . . . .	4,765 “
8-inch “	. . . . .	23,170 “
6-inch “	. . . . .	58,967 “
4-inch “	. . . . .	54,021 “
1½-inch “	. . . . .	93 “
1-inch “	. . . . .	14,968 “
¾-inch “	. . . . .	10,224 “
Total,	. . . . .	223,513 “

—equal to 42.33 miles.

IV.

Water Is Now Supplied for the Following Uses:

2,675 families,	4 billiard halls,
1,151 water-closets,	2 undertakers,
332 bath-tubs,	30 meters,
577 wash-bowls,	1 tannery,
141 heating apparatus,	2 bakeries,
9 water motors,	94 offices,
3 elevators,	108 stores,
59 urinals,	12 markets,
679 yard hydrants,	5 restaurants,
170 fire hydrants,	4 greenhouses,
22 private fire hydrants,	9 fountains,
3 drinking-fountains,	10 barber shops,
9 public watering-troughs,	28 mechanic shops,
5 street sprinklers,	5 plumber shops,
14 churches,	26 stationary engines,
1 library,	6 printing establishments,
10 public schools,	1 organ and piano manufactory,
3 private schools,	4 carriage manufactories,
8 city buildings,	2 book-binderies,
1 state-house,	3 photographers,
1 state prison,	2 coal-yards,
1 post-office,	1 brick-yard,
1 Masonic hall,	1 dye-house,
1 Odd Fellows hall,	4 laundries,
4 banks,	10 livery stables,
5 hotels,	675 horses,
3 railroads,	143 cattle,
1 gas works,	5 saloons,
3 foundries,	1 jail,
1 Electric Light Co.,	5 cemeteries.

FIRE-HYDRANTS.

STREETS.	LOCATIONS.	Number.	Total.
Main.	South-west corner North Main and Penacook.....	1	
"	East side North Main, near J. B. Walker's.....	1	
"	Junction North Main and Fisk.....	1	
"	North-west corner North Main and Franklin.....	1	
"	" " Washington.....	1	
"	East side North Main, opposite Chapel.....	1	
"	North-west corner North Main and Court.....	1	
"	East side North Main, opposite Montgomery.....	1	
"	South-east corner North Main and Bridge.....	1	
"	South-west corner North Main and Park.....	1	
"	North-west corner North Main and Capitol.....	1	
"	" " School.....	1	
"	East side North Main, opposite Phenix Hotel building.....	1	
"	East side North Main, in rear Eagle Hotel.....	1	
"	East side North Main, in rear Woodward block.....	1	
"	North-west corner North Main and Warren.....	1	
"	South-east corner North Main and Depot.....	1	
"	North-west corner North Main and Pleasant.....	1	
"	North-east corner South Main and Freight.....	1	
"	North-west corner South Main and Fayette.....	1	
"	East side South Main, opposite Thompson.....	1	
"	North-west corner South Main and Cross.....	1	
"	" " Thorndike.....	1	
"	" " Perley.....	1	
"	East side South Main, opposite Abbot-Downing Co.'s.....	1	
"	North-west corner South Main and West.....	1	26
Turnpike.	West side Turnpike, opposite Gas.....	1	
"	" " near J. B. Weeks's.....	1	2
Water.	West side Water, near Capt. James Thompson's.....	1	1
Hall.	West side Hall, below Rolfe and Rumford Asylum.....	1	1
State.	North-west corner North State and Penacook.....	1	
"	" " Walker.....	1	
"	" " Church.....	1	
"	" " Tremont.....	1	
"	North-east corner North State and Washington.....	1	
"	West side North State, opposite Court.....	1	
"	North-west corner North State and Maple.....	1	
"	North-east corner North State and Centre.....	1	
"	East side North State, opposite state-house.....	1	
"	South-west corner North State and School.....	1	
"	North-west corner North State and Warren.....	1	
"	" " Pleasant.....	1	
"	East side South State, opposite Wall.....	1	
"	North-west corner South State and Thompson.....	1	
"	South-west corner South State and Monroe.....	1	
"	East side South State, opposite Laurel.....	1	
"	South-east corner South State and Downing.....	1	
"	North-east corner South State and West.....	1	
"	Junction of South State and Turnpike.....	1	19
Green.	East side Green, opposite Prince.....	1	1
South.	West side South, opposite Wall.....	1	
"	North-west corner South and Fulton.....	1	
"	West side South, opposite Monroe.....	1	
"	" " Laurel.....	1	
"	" " Downing.....	1	
"	" " Allison.....	1	
"	" " Abbot farm.....	1	
"	" " Smith farm.....	1	8
Spring.	South-west corner South Spring and Oak.....	1	
"	West side South Spring, opposite Cross.....	1	
"	" " Perley proposed extension.....	1	3
Bradley.	East side Bradley, opposite Highland.....	1	1
"	West side Bradley, opposite Walker.....	1	2
Rumford.	West side Rumford, opposite Perkins.....	1	
"	North-east corner Rumford and Franklin.....	1	

FIRE-HYDRANTS—Continued.

STREETS.	LOCATIONS.	Number.	Total.
Rumford.	West side Rumford, opposite Beacon.....	1	
"	North-east corner Rumford and Abbot.....	1	
"	North-east corner Rumford and Cambridge.....	1	
"	North-east corner Rumford and School.....	1	6
Church.	North side Church, opposite Lyndon.....	1	1
Franklin.	North-west corner Franklin and Jackson.....	1	1
Centre.	" Centre and North Spring.....	1	
"	" Centre and Rumford.....	1	
"	South-west corner Centre and Pine.....	1	3
Washington.	" Washington and Union.....	1	
"	North-west corner Washington and Rumford.....	1	2
School.	North-west corner School and Green.....	1	
"	" School and North Spring.....	1	
"	" School and Merrimack.....	1	
"	North side, near City storehouse.....	1	
"	North side, near W. S. Brooks's.....	1	
"	South-east corner School and Giles.....	1	5
Warren.	North-west corner Warren and Green.....	1	
"	" Warren and North Spring.....	1	
"	" Warren and Rumford.....	1	
"	South-west corner Warren and Merrimack.....	1	
"	North-west corner Warren and Tabanto.....	1	
"	South-east corner Warren and Liberty.....	1	
"	Junction Warren and Pleasant, near Fruit.....	1	7
Minot.	West side Minot, near Odd Fellows' Home.....	1	1
Jackson.	North-west corner Jackson and Beacon.....	1	1
Pleasant.	" Pleasant and Green.....	1	
"	" Pleasant and Rumford.....	1	
"	South side Pleasant, opposite Pine.....	1	
"	" " Liberty.....	1	
"	North side Pleasant, near Salem.....	1	
"	South " " Kilburn's.....	1	
"	North " " Mrs. Lane's.....	1	
"	North " " J. M. Hammond's.....	1	
"	South " " opposite Pond road.....	1	
"	South " " near J. Milnor Coit's.....	1	
"	North " " opposite Hospital.....	1	
"	South " " near the Mill.....	1	12
West.	North side West, near Badger.....	1	
"	" opposite Dakin.....	1	
"	" at intersection Broadway.....	1	3
Mill	South-east corner Mill and Downing.....	1	1
Railroad sq.	North-west corner Railroad square and Depot.....	1	
"	South-west corner Railroad square and Hill's avenue.....	1	2
Summer.	North-east corner Summer and Pitman.....	1	1
Chandler.	South side Chandler, opposite Railroad.....	1	1
Perley.	North-west corner Perley and Grove.....	1	1
Laurel.	North-east corner Laurel and Pierce.....	1	1
Thorndike.	" Thorndike and Grove.....	1	1
Cross.	South side Cross, opposite Jefferson.....	1	1
Fayette.	North-west corner Fayette and Elm.....	1	1
Union.	" Union and Maple.....	1	1
Allison.	" Allison and Mills.....	1	1
Fruit.	North-east corner Clinton and Fruit.....	1	
"	East side Fruit, opposite Wm. W. Critchett's house.....	1	2
High.	North-west corner High and Auburn.....	1	
"	East side High opposite Forest.....	1	
"	South-west corner High and Franklin.....	1	3
Valley.	North side Valley, opposite Forest.....	1	1
Bridge.	South side Bridge, near easterly barn.....	1	1
Marshall.	North side Marshall, opposite Fuller.....	1	1
On main line	East side West Concord road, at Fosterville.....	1	
"	West side West Concord road, at cemetery gate.....	1	
"	East side West Concord road, near C. R. Farnum's.....	1	
"	East side West Concord road, near old city farm buildings.....	1	

FIRE HYDRANTS—*Concluded.*

STREETS.	LOCATIONS.	Number.	Total.
High.	East side High street, West Concord, near S. W. Kellom's...	1	
	" " " " Mrs. G. E. Holden's	1	6
Hutchins.	North side Hutchins, near B. T. Putney's.....	1	
	" " " " C. & C. Railroad	1	2
Main.	East side West Concord road, near Engine house	1	
	" " " " opposite D. Holden's.....	1	
	" West side " " near north mill	1	
	" East side " " opposite Geo. W. Brown's...	1	
	" " " " near Mr. Harrington's.....	1	
	" " " " opposite A. Hollis.....	1	6
Pen'c'k Road	West side Penacook road, near Warner road.....	1	
" "	" " " " near Mr. Currier's.....	1	2
PENACOOK			
Main.	West side Main (Penacook) opposite Stark street.....	1	
	" " " " near Mr. Prescott's.....	1	
	" South-west corner Main and Union.....	1	
	" Washington Square, opposite Washington.....	1	
	" North-west corner Main and Charles.....	1	
	" North side Main, opposite East Canal.....	1	
	" North side near iron bridge.....	1	7
High.	East side High, opposite Summit.....	1	
	" North-west corner High and Maple.....	1	
	" North-west corner High and Spring.....	1	3
Washington.	South-east corner Washington and Union.....	1	
	" South side Washington, opposite John Whitaker's.....	1	
	" South side Washington opposite Charles.....	1	3
Charles.	South-west corner Charles and Warren.....	1	
	" North side Charles near Geo. W. Corey's.....	1	2
West Canal.	South-east 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
Merrimack.	South side Merrimack, opposite Merrimack avenue.....	1	
	" North side " " D. W. Fox's.....	1	
	" North side " " Cross.....	1	
	" South side Merrimack opposite Rolfe's shop.....	1	
	" North side Merrimack near road to Island.....	1	
	" North-west corner Merrimack and Penacook.....	1	6
Summer.	North-east corner Summer and Centre.....	1	1
Spring.	North-east corner Spring and Church.....	1	1
Centre.	North-west corner Centre and Spring.....	1	1
Cross.	South-west corner Cross and Summer.....	1	1
Whole number of public hydrants.....			170
PRIVATE HYDRANTS.			
	Concord Railroad yard, 3 post and 3 flush hydrants.....	6	
	Northern Railroad yard, 4 post hydrants.....	4	
	New state prison.....	3	
	Old state prison yard.....	2	
	Abbot-Downing Co.'s yard.....	2	
	Page Belting Co.'s yard.....	2	
	W. P. Ford & Co.'s yard.....	1	
	N. H. Asylum for Insane yard.....	1	
	Concord Gas-Light Co.'s yard.....	1	
Whole number of private hydrants.....			22

STREET DEPARTMENT.

REPORT OF THE COMMISSIONER OF HIGHWAYS.

To the City Council:

The Commissioner of Highways herewith submits his annual report, covering the year 1888, from January 1st to December 31st.

The receipts and disbursements are as follows :

Receipts,	\$26,876.16
Expenditures,	28,284.06
	\$1,407.90
Expenditures in excess of receipts,	

It will be seen that the total amount expended during the year aggregates \$28,284.06, an increase over last year of \$7,085.29.

This is an apparent increase above the ordinary requirements of the department of a very considerable sum, which, without explanation, would indicate an enlargement beyond the natural increase of a single year, though the amount overdrawn is less by nearly \$300 than was turned back into the treasury from the appropriation of last year.

An examination of the account in detail will show that a large part of this sum arises from extraordinary circumstances, the increase being practically distributed in the accounts, somewhat as follows :

The sum of \$2,146.37 was expended in building the massive stone wall and culvert near the entrance to Blossom Hill Cemetery, and was rendered imperatively necessary by the change of

location in the highway at that point. The expense, of course, is no larger than if a separate appropriation had been made for that purpose, but it was deemed best to have the work proceed under the direction of the commissioner, and the items included in his account, though it will readily be understood that it is outside of the purpose of the general appropriation.

The amount expended for the construction of new sidewalks shows an increase of \$1,153.48, which is largely accounted for by the necessity of concreting, in a single season, the sidewalks of the entire square occupied by the government building.

Another very considerable increase is in the item of "Winter Expense," which shows a total expenditure in the "Central District" alone of nearly \$1,400.00 more than in the previous year. The additional expense caused in the outside districts, owing to the severity of the storms of January and March, 1888, will account for all the increase beyond the ordinary requirements of growth. The items in detail, which vary from the preceding year, can be seen by comparison, as the system of subdivisions has been continued as heretofore. The only changes of moment in this regard consist in the merging of what has heretofore been known as "East Sewall's Falls District" with the "North Concord District," and the detailed expenditures are given under the heading of the latter district; and a similar consolidation has been made of the "Borough District" with the "Penacook District."

Both of these changes were brought about by circumstances which seemed to render such consolidations desirable, though they need not be considered as permanent if it should be hereafter thought proper to divide them as before.

The expenses of the "Central District" have been subdivided under the same headings as last year, the expense attending the building of the bank wall above referred to only being added.

The expenditures for "Bridges and Culverts" amount to \$547.33, and include all the repairs which could properly be chargeable to the bridges and culverts in the "Central District," and also the lighting of Free bridge and the Lower bridge. In this connection it seems proper that I should call your attention to the necessity of providing a new bridge to replace the Free bridge, which cannot longer be repaired with economy.

Although there seems to be no question of its present safety, yet the passage of years is beginning to show its effect. Each year shows a slight settling of the structure upon its bearings, necessitating constant watchfulness to provide for the replacing of old timber with new, at the least sign of weakness. The erection of a new bridge, whether of wood or iron, would require a considerable time, and it would undoubtedly be a wise foresight to place the matter in charge of a committee at once, in order that if action is decided upon for the present season such appropriation as may be necessary can be provided. In the outside districts, such repairs as have seemed to be needed have been made in different sections, the expenses of the same being included in the amounts given under the headings of the several districts. The largest amounts expended for this purpose have been in the Horse Hill district, the North Concord district, and the Penacook Intervale district, where considerable sums were required. The Horse Hill bridge is an open bridge, and consequently decays more rapidly than if it were possible to protect it from the alternations of wet and drouth. The ends of the chords were so badly affected that they required to be entirely replaced by new timber, as did also the wall plates, and much of the planking. Even now its condition is not such that it can be expected to remain secure for a long period, and considerable repairs in other parts of the bridge will be needed in the near future. In the Penacook Intervale district the bridge had become so impaired by age and decay that it was deemed best to rebuild the entire structure. Owing to the scarcity of stone in that section, the abutments, as well as the bridge itself, were made entirely of chestnut lumber, and the result proves very satisfactory. It is now a substantial and well built bridge, and may be considered sufficient for the requirements of that locality for many years to come.

The bridge in the North Concord district, near Farnum's mill, was also thoroughly repaired early in the season, its condition demanding almost the entire rebuilding of the same. This is now, as well as most of the bridges in the outside districts, in excellent condition, and no large expenditure will probably be required upon them during the coming year. The Twin bridge and the Borough bridge should soon be shingled, and it would

undoubtedly be good economy to have the same attended to during the next season.

The amount paid out for "Fences and Signs" aggregates \$128.56, a slight increase from last year. Most of this outlay has been for the keeping in good repair, and well painted, the fences heretofore erected, and the procuring of guideboards for such points as had not been before provided for. The principal new work under this heading was the erection of the substantial fence along the abutment wall opposite the cemetery entrance.

The "Macadamizing" account shows an expenditure of \$1,611.80—an increase of some \$600 over last year. This is accounted for by the additional amount of work done by this method, the actual cost per square yard being about in proportion to that recently done heretofore. The west side of North Main street, from Centre street to Washington street, has been fully completed, in doing which nearly one thousand two-horse loads of broken stone from the crusher have been used. The material excavated for the purpose of Macadamizing has been fully utilized, and if its value were to be computed on a basis of cost of material obtained elsewhere, it would considerably reduce the amount charged to Macadamizing. Enough of this excavated material has been obtained to re-gravel Maple street its full length, Prince street from Green to Spring street, Rumford street between School and Warren, Perley street from Main to State street, and Main street from Perley to West street, besides a long piece on Bridge street and Gully hill.

A large amount of work similar in character to Macadamizing has been accomplished by the use of stone chips from the various stone-sheds in the outskirts of the city. Although not so well adapted for a smooth and permanent street as the more uniform angular pieces supplied by the stone-crusher, yet from motives of economy they have been extensively used in some localities, and have given good satisfaction. That part of Bridge street lying between Main street and the railroad bridge has been entirely rebuilt with this material, as has also South State street between Laurel and Perley streets; and at various points on the West Concord road, it has been found to be more durable than gravel, so that it has been extensively used at sundry points on

that thoroughfare, much to the satisfaction of travellers after it has become thoroughly compacted by a few months' use. In this connection it seems proper that I should repeat my recommendation of last year, that the present block stone paving on Main street should be continued northerly as far as Centre street, where the Macadamizing of the present season began. Continued observation the more fully confirms my belief that such a course would be wiser than to attempt to provide any substitute paving for that square. The heavy teaming through Bridge street to Main street requires something as an improvement in the street at that point, and though block paving may at first be expensive, it is the most durable and satisfactory of anything which can be furnished to meet the requirements of travel in that locality. If it should be decided to attempt such work, a special appropriation for the purpose should be provided, as the sum required would probably be much in excess of what could be spared from the general appropriation for that purpose. The city has no granite blocks for paving now on hand, and such paving as has been called for has been laid with "cobble" paving. Quite an amount of this has been laid under the railroad tracks on Chandler street, covering an area of some five hundred square yards. The gutter paving has been kept in good condition, and new gutters have been laid on both sides of Rumford street between Short street and Washington street. Gutter paving upon the hillsides is almost an absolute necessity for the protection of the streets during the melting snows of spring and the heavy showers of summer, and but few localities in the compact part of the city are now unprovided.

The amount for "Sidewalks and Crossings" aggregates \$3,289.41—an increase of some eleven hundred dollars from last year. This increase is explained, as indicated in my report for last year, by the construction of a larger amount of concrete walk than usual, the square around the government building alone making an addition to this account of nearly \$1,200.

The full amount of the expense of constructing sidewalks is included in the sum above given, the item of collections from abutters of one half the expense is given in the receipts, so that the actual expense to the city for sidewalks and crossings would be reduced by the amount received for collections from concrete.

The crossings which are constructed each year are a considerable item of the expenses included in this account, as it has been the intention of the commissioner to construct crossings at the junctions of all streets as soon as the concrete walks are completed upon both sides of the street, and also at such other points as seem best to serve the wants of public foot travel.

The expense of cleaning the streets is practically represented, under the heading of "Cleaning and Sprinkling Streets," by the amounts of the labor pay-rolls, with the addition of the amount attending the repairs of the street sweeper. This machine has for the first time been provided with a metallic brush in place of the rattan formerly used, and the change seems to give good satisfaction. The greater permanency of the brush thus provided, over the kind formerly used, can scarcely be doubted.

The sprinkling account includes a new sprinkler, besides the various sums entered under that heading, an explanation of each of which is shown in the account. The suggestion which I have before made, that it may be desirable to include the compact part of the city in a "sprinkling precinct," occurs more forcibly with each succeeding year. The subscriptions for sprinkling are not in fair proportion to the cost, and if no other than the city teams were used for the purpose, the expenses for this work could not possibly be met from the limited amounts at command. My experience in connection with this subject leads me to believe that if a reasonable plan can be provided, which will secure to all citizens the advantages afforded by the sprinklers, so that the expense of the same can be equitably divided, it will meet with general and hearty approval.

The "winter expense" shows a large increase, as both the heavy snow-storms of January 25 and March 12 had to be cared for from the appropriation for the current year. The total amount expended as properly chargeable to winter expense for the Central district was \$3,759.75, being more than \$1,400 in excess of the previous year. The amounts annually to be required for this purpose are very uncertain, being entirely dependent upon the weather, though it will readily be seen that any excess above the ordinary sums required for this purpose reduces in so much the amount available for the ordinary and permanent work of this department.

The foregoing remarks indicate in a general way the amounts which have been applied for the various works undertaken as a part of the routine duties of this department. Other items, not properly falling under either of the above classifications, are included under the term "General Repairs." Most of the items found in this account will explain themselves, the largest part of the sum being the aggregate of the labor pay-rolls, which include the labor attendant upon caring for all the highways within the limits of the Central district. It would hardly be possible to refer in detail to the labor thus applied in various localities. It has been the intention of the commissioner to attend immediately to any work suggested as being necessary to render the highways passable and safe.

In many sections it is impossible to construct good, permanent roads, from lack of suitable material; but improvements have been attempted wherever it could be done in a reasonably economical manner. Gravel suitable for making good roads is becoming scarce, and requires to be drawn from longer distances than formerly. But with our present system of road-building, a large amount of gravel is annually required, and it will be many years before the Macadamizing of streets will become so general as to allow of its discontinuance in any marked degree. As showing the amounts required in a single locality, it may be mentioned that one thousand and fifty-eight loads of gravel have been used on the Millville road, from the jail to the Long Pond road beyond St. Paul's school. This thoroughfare has needed more care of recent years, from the fact that it is very largely used for pleasure travel, in addition to the business travel which would naturally belong to it. Possibly this has been somewhat increased since the West Concord road has been avoided by timid horsemen, on account of the use of the steam-motor in that highway. An accurate counting of the teams passing over the Millville road in summer, at a time when St. Paul's school was not in session, shows an average during the past season of more than six hundred and fifty teams a day, for a full week when the count was made. Roads in other sections have been regravelled in short pieces to an amount which would make a large aggregate, though singly they would seem unimportant. One piece, however, on the East Concord road, extending from

the railroad crossing to the tannery, used four hundred loads of gravel, all of which was procured from the banks in the cemetery.

The road machines belonging to the city have been used with effect, as in previous years, and their continued use in the country districts is of great advantage and in the direction of true economy. The commissioner was authorized to procure an additional machine; but the heavy drafts upon the appropriations, caused by the extraordinary demands upon the department in other directions, as herein referred to, made it seem judicious to defer for a season the purchase. The need exists, however, and, if the appropriation will allow, it should be procured early in the coming season. When the suggestion for its purchase was first made, it was in direct reference to the requirements of the highways in the northerly section of the city, particularly in and about the village of Penacook. The digging up of the streets in that village, for the introduction of the water and sewerage system, has rendered extensive repairs necessary, and a considerable outlay must be made before they can be restored to a reasonably satisfactory condition.

A large number of catch-basins will be required at Penacook, the possibility of which was suggested in my report for last year. Three such catch-basins have been constructed there already, and as those necessary appendages to the sewer system are provided for the removal of surface-water, they are properly chargeable to the highway department.

I have thus referred in a general way to the work performed by this department, in order that your honorable body may be fully informed as to the duties and requirements of this important branch of the public service.

I acknowledge with thanks the many courtesies received from the members of the city council, and, in declining a reelection to the position of commissioner of highways, it is with a gratifying appreciation of your friendly confidence heretofore. I have labored zealously for what I have believed to be for the best interests of the city, and trust that my acts have justified your confidence and met your approval.

Respectfully submitted,

JAMES H. ROWELL,

Commissioner of Highways.

As supplementary to the report, and properly to be considered in connection therewith, there is appended a list of the property belonging to the city, and under the control of this department, which varies somewhat from year to year, according to the requirements of the time.

Its present condition and approximate value may be stated in round numbers as follows :

Lumber, stone, etc., at city storehouse,	\$150.00	
Three horses,	600.00	
Two stone-rollers,	250.00	
Five street sprinklers,	1,100.00	
Stone-crusher, engine, and building,	2,000.00	
Street sweeper,	300.00	
Horse-cart and wagon,	50.00	
Road machines,	225.00	
Large horse-sled,	50.00	
Small horse-sled,	15.00	
Two-horse dump-cart,	100.00	
One new derrick,	\$100.00	
Picks, shovels, and small tools,	350.00	
	<hr/>	\$5,290.00

The items which make up the "Receipts" as indicated in the report are given in detail in the following lists.

There has been paid to the city treasurer, for collections on highway account, the sum of \$154, made up from the following

RECEIPTS.

From George L. Lovejoy, labor,	\$1.50	
W. C. White, crushed stone,	51.00	
Mark Upton, posts,	1.10	
W. H. Hammond, posts,	5.00	
A. J. Shurtleff, chopping-block,	1.00	
Giles Wheeler, "	1.00	
Lyman Jackman, "	1.00	
Concord Gas-Light Company, one half expense of drain for surface-water,	85.40	
Miles F. Farmer, street-sweepings,	3.00	
Brown & Abbott, use of cart,	4.00	
	<hr/>	\$154.00

There has also been paid to the city treasurer the sum of \$1,237.16 for amounts collected of abutters for their proportions of concrete sidewalks, as follows :

RECEIPTS.

From Howard M. Cook,	\$2.76
Mitchell Gilmore,	13.50
Frank Rollins,	4.11
John F. Jones,	45.37
H. W. Piper,	10.01
U. S. Government,	566.10
G. S. Kilburn,	12.60
Franklin Moseley,	15.98
N. E. Martin,	2.24
I. M. Savage,	14.96
L. S. Richardson,	1.72
Frank B. Tucker,	9.63
Rev. John E. Barry,	21.89
Frank K. Jones,	5.63
C. C. Danforth,	10.10
G. A. Foster,	8.00
N. C. Nelson,	11.68
Mrs. A. J. Lund,	24.55
R. M. Ordway's estate,	5.25
I. A. Watson,	14.29
John L. Gibbs,	7.00
J. B. Rand,	2.22
Foot, Brown & Co.,	14.85
C. B. Lawrence,	20.70
Joseph Martin,	15.00
James E. Randlett,	10.53
L. V. Eastman,	13.12
G. S. Little,	13.24
C. H. Abbott,	9.99
J. Dooley,	13.48
Cyrus Knowles,	8.45
John Farrar,	9.27
N. P. Stevens,	17.75
J. H. Hill,	4.47

C. W. Batchelder,	\$10.33
A. B. Woodworth,	2.74
Alexander Hubert,	17.48
H. D. Hammond,	10.35
N. S. Phaney,	15.13
F. W. Fellows,	20.72
P. F. Stevens,	26.42
Concord Railroad,	26.78
Mead, Mason & Co.,	41.38
Geo. F. Durgin,	15.95
I. L. Pickering,	2.55
Frank A. Fowler,	5.20
Cornelius Lewis, "by H. G. McIn- tire,"	40.63
John F. Scott,	23.00
Mrs. J. A. Gove,	18.06
	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/> \$1,237.16

There has also been paid for concrete since the accounts were made up, the bill of J. H. Morey, \$4.69, which sum will be found in the treasurer's accounts for the ensuing year.

The concrete bills remaining unpaid are those of Charles Hadley, \$6.75; Walter Bates, \$39.45; Miles Buzzell, \$11.86, which I shall turn over to my successor in office.

SPRINKLING THE STREETS.

The following account of the receipts and expenditures for sprinkling the streets, for the season of 1888, is inserted for the information of the public.

RECEIPTS.

From Persons on the East Side of Main Street.

L. B. Hoit, \$5.00	W. A. Thompson, \$2.00
G. B. Whittredge, 3.00	F. E. Colburn, 2.00
J. Sexton, 2.00	Fred. Reed & Co., 5.00
W. H. Mills, 2.00	G. A. Young, 2.00
W. W. Cloud, 1.00	W. D. Thompson, 5.00
Miss C. I. Wyatt, 2.00	Phenix Hotel, 7.00
George Clough, 5.00	H. S. Gorham, 3.00
A. D. Ayling, 3.00	Eagle Clothing House, 3.00
H. B. Tebbetts, 5.00	R. H. Ayer, 3.00
H. O. Marsh, 3.00	H. D. Hammond & Co., 5.00
D. J. Murphy, 1.00	M. Wolfe, 5.00
I. L. Pickering, 2.00	S. G. Noyes, 3.00
J. E. Dwight, 3.00	Thurston & Downing, 5.00
L. A. Smith, 3.00	Woodman & Robinson, 2.00
Mrs. J. R. Hill, 5.00	G. K. Mellen, 3.00
Cummings Bros., 3.00	C. N. Towle, 1.00
E. G. Cummings, 1.00	E. B. Crapo, 3.00
S. C. Morrill, 3.00	C. W. Woodward, 5.00
Merrick & Martin, 5.00	Cash, 2.00
G. B. Emmons, 5.00	Dow & Wheeler, 1.00
Moseley & Co., 2.00	D. R. Bean & Co., 3.00
N. H. Dem. Press Co., 3.00	R. P. Staniels & Co., 1.00
W. F. Danforth, 2.00	R. E. Walker, 1.00
Scribner & Britton, 2.00	D. E. Murphy, 1.00
Batchelder & Co., 5.00	T. W. & J. H. Stewart, 5.00
D. H. Aldrich, 3.00	Leach & Stevens, 1.00
J. E. Pecker, 1.00	F. P. Mace, 2.00
Rep. Press Association, 5.00	J. C. Estes, 1.00
A. P. Fitch, 3.00	E. B. Davis, 1.00
E. H. Rollins & Son, 3.00	Sleeper & Hood, 5.00
D. B. Donovan, 1.00	J. J. Dooning, 2.00

Shaw & Jackson, . . . \$5.00	W. K. McFarland, . . . 2.50
Humphrey, Dodge & Smith, 10.00	T. M. Lang, . . . 2.00
Eagle Hotel, . . . 5.00	J. F. Morrill, . . . 2.00
W. U. Tel. Co., . . . 3.00	Mrs. M. C. H. Seavey, . . . 3.00
N. H. Savings Bank, . . . 5.00	F. S. Streeter, . . . 3.00
J. M. Stewart & Sons, . . . 5.00	Mrs. J. Abbott, . . . 2.00
W. P. Underhill & Co., . . . 3.00	W. G. Carter, . . . 5.00
F. E. Nelson, . . . 3.00	P. H. Larkin, . . . 2.00
J. C. Thorne, . . . 5.00	J. F. Healey, . . . 1.00
G. W. Wadleigh, . . . 1.50	S. S. Kimball, . . . 7.00
S. Wardner, . . . 2.00	C. T. Page, . . . 3.00
F. H. George, . . . 2.00	J. B. Walker, . . . 7.50
E. E. Fisher, . . . 2.00	B. S. Warren, . . . 2.00
H. W. Brickett, . . . 3.00	W. H. Pitman, . . . 2.00
A. C. Sanborn, . . . 2.00	C. S. Parker, . . . 2.00
E. H. Randall, . . . 1.00	Smith & Jenkins, . . . 3.00
T. Hiland, . . . 3.00	W. L. Hood, . . . 1.00
Mrs. O. Stearns, . . . 5.00	
W. W. Niles, . . . 1.50	
Mrs. A. McFarland, . . . 2.50	
	\$301.50

West Side of Main Street.

F. H. Smith, . . . \$3.00	C. H. Martin & Co., . . . \$3.00
Walter Gage, . . . 1.00	Clarke and Moore, . . . 3.00
Abbot-Downing Co., . . . 5.00	Silsby & Son, . . . 5.00
Miss M. A. Downing, . . . 10.00	W. K. Day, . . . 1.50
J. Benson, . . . 2.00	C. M. Boynton, . . . 3.00
J. E. Barry, . . . 5.00	A. W. Gale, . . . 3.00
J. H. Goodrich, . . . 2.00	State Capital Bank, . . . 5.00
Mrs. J. A. Eames, . . . 5.00	A. G. Harris, . . . 3.00
C. H. Thorndike, . . . 3.00	Stevens & Duncklee, . . . 3.00
A. F. Holt, . . . 2.00	First National Bank, . . . 5.00
A. F. Holt, . . . 8.00	Morrill Brothers, . . . 3.00
J. M. Hill, . . . 3.00	T. A. Heath, . . . 3.00
B. A. Kimball, . . . 5.00	F. Pearson & Co., . . . 3.00
S. A. Carter, . . . 3.00	J. R. Hill & Co., . . . 5.00
Mrs. C. C. Lund, . . . 3.00	A. P. Sherburne, . . . 2.00
St. Mary's School, . . . 3.00	J. Hazelton & Son, . . . 3.00
J. H. Abbot, . . . 5.00	Chase & Streeter, . . . 2.00
F. Evans, . . . 2.00	Morrill & Danforth, . . . 2.00
J. S. Norris, . . . 2.00	H. C. Bailey, . . . 2.00
J. C. Norris & Co., . . . 3.00	H. N. Newell, . . . 5.00
Pilsbury & Day, . . . 3.00	Underhill & Kittredge, . . . 3.00
I. M. Savage, . . . 3.00	R. F. Robinson, . . . 2.00
W. J. Fernald, . . . 2.00	A. R. Ayers, . . . 3.00
J. F. Hoit, . . . 3.00	W. S. Baker, . . . 2.00
G. W. Dudley, . . . 3.00	J. S. Hubbard, . . . 1.50

STREET DEPARTMENT.

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Jacobs Brothers, . . .	\$1.00	M. J. Pratt, . . .	\$1.00
J. B. Sanborn, . . .	5.00	H. J. Crippen, . . .	3.00
F. E. Heath, . . .	2.00	A. P. Carpenter, . . .	3.00
G. L. Hooper, . . .	2.00	G. F. Page, . . .	2.00
A. K. Knapp, . . .	1.00	H. McFarland, . . .	5.00
J. Corrigati, . . .	1.00	M. R. Holt, . . .	2.00
Singer Mfg. Co., . . .	2.00	W. P. Fiske, . . .	3.00
Reed & Mudgett, . . .	2.00	E. Gerrish, . . .	5.00
E. S. Nutter, . . .	2.00	Mrs. C. Blanchard, . . .	1.00
W. P. Ford & Co., . . .	4.00	F. P. Hoben, . . .	2.00
G. H. Marston, . . .	3.00	J. P. George, . . .	3.00
H. Robinson, . . .	3.00	D. W. Sullivan & Co., . . .	3.00
Haley Manufacturing Co., . . .	3.00		
W. F. Carr, . . .	2.00		\$231.00

East Side of State Street.

Mrs. H. Kenna, . . .	\$1.00	John Kimball, . . .	\$5.00
John J. McNulty, . . .	1.00	N. White, Jr., . . .	4.00
N. Bourque, . . .	1.00	G. Walker, . . .	3.00
N. E. Elkins, . . .	2.00	B. E. Badger, . . .	2.00
Lawrence & Fletcher, . . .	2.00	Mrs. R. Kittredge, . . .	1.50
L. K. Peacock, . . .	1.00	P. Kittredge, . . .	3.00
W. Burbank, . . .	1.00	W. L. Foster, . . .	3.00
J. L. Mason, . . .	1.00	Mrs. I. Hamilton, . . .	2.00
Ira Foster, . . .	1.00	G. T. Comins, . . .	3.00
C. Abbot, . . .	1.00	Mrs. J. B. Stanley, . . .	1.00
J. L. French, . . .	1.00	Mrs. O. Pillsbury, . . .	3.00
J. H. Upton, . . .	3.00	B. F. Virgin, . . .	3.00
C. W. Woodward, . . .	2.00	C. R. Sanborn, . . .	1.00
C. P. Virgin, . . .	1.00	A. J. Batchelder, . . .	1.00
D. D. Brainerd, . . .	2.00	P. C. Bean, . . .	2.00
J. Minot, . . .	3.00	Mrs. L. B. Morrill, . . .	2.00
D. D. Taylor, . . .	1.00	H. E. Abbott, . . .	2.00
G. E. Todd, . . .	3.00		
A. P. Chesley, . . .	1.00		\$71.50
H. L. Rand, . . .	1.00		

West Side of State Street.

S. Holt, . . .	\$2.00	O. Ballou, . . .	\$1.00
T. Sargent, . . .	2.00	F. Webster, . . .	2.00
W. H. Alexander, . . .	2.00	G. H. Emery, . . .	3.00
H. C. Sturtevant, . . .	1.00	P. Flanders, . . .	1.00
H. Rolfe, . . .	1.00	Mrs. E. C. Bixby, . . .	1.00
C. Nutting, . . .	1.00	Mrs. C. Parker, . . .	1.00
F. A. Fowler, . . .	1.00	T. H. Ford, . . .	5.00
H. W. Clapp, . . .	2.00	R. T. Crowell, . . .	2.00

CITY OF CONCORD.

C. Burnside, . . .	\$2.00	Mrs. G. Jones, . . .	\$1.00
E. Morrill, . . .	2.00	A. Folger, . . .	2.00
N. T. Clark, . . .	1.50	J. E. Robertson, . . .	3.00
H. A. Kendall, . . .	1.00	J. A. Dadmun, . . .	1.00
Mrs. C. Howe, . . .	3.00	D. C. Roberts, . . .	3.00
Mrs. A. C. Pierce, . . .	3.00	H. H. Dunbar, . . .	2.00
M. W. Russell, . . .	2.00	J. C. Ordway, . . .	2.00
J. H. Gallinger, . . .	2.00	Mrs. O. C. Baker, . . .	1.00
Miss M. E. Flanders, . . .	1.00	J. W. Merrill, . . .	2.00
G. L. Nutter, . . .	1.00		
G. L. Williams, . . .	1.00		\$64.50

Green Street.

T. W. Young, . . .	\$2.00	W. A. Bean, . . .	\$2.00
J. A. Cochran, . . .	2.00	C. C. Danforth, . . .	2.00
P. F. Stevens, . . .	2.00	G. Bullock, . . .	2.00
S. N. Clark, . . .	2.00	H. W. Clough, . . .	2.00
C. H. Duncklee, . . .	2.00	J. S. Packard, . . .	1.50
Mrs. M. S. Osgood, . . .	2.00	H. A. Kittredge, . . .	1.00
J. W. Drew, . . .	2.00	H. O. Adams, . . .	1.00
J. M. Jones, . . .	2.00		
M. Bateman, . . .	2.00		\$31.50
Geo. Abbott, . . .	2.00		

Pleasant Street.

Morrison & Searles, . . .	\$2.00	D. E. Willard, . . .	\$2.00
Spencer & Nason, . . .	2.00	Mrs. C. B. Bartlett, . . .	2.00
Waldo Russell, . . .	3.00	G. H. H. Silsby, . . .	3.00
Mrs. R. N. Corning, . . .	5.00	F. A. Stillings, . . .	3.00
L. Downing, . . .	5.00	Jerome Ford, . . .	3.00
G. L. Lovejoy, . . .	4.00	H. E. Chamberlain, . . .	3.00
G. L. Stratton, . . .	5.00		
G. A. Foster, . . .	2.00		\$46.00
Mrs. J. A. Gove, . . .	2.00		

Warren Street.

J. Minot, . . .	\$5.00	Mrs. A. Fletcher, . . .	\$2.00
W. A. Clough, . . .	2.00	T. Kerley, . . .	1.00
T. Stuart, . . .	2.00	J. A. Dadmun, . . .	1.00
Ordway & Ferrin, . . .	2.00	H. C. Sturtevant & Son, . . .	2.00
Richardson & Bean, . . .	2.00	N. C. Young, . . .	1.00
W. G. C. Kimball, . . .	2.00	G. W. Jackson, . . .	1.00
Mrs. W. H. Buntin, . . .	1.00	H. A. Kendall, . . .	1.00
W. Ladd, . . .	2.00		
Mrs. W. B. Parsons, . . .	1.00		\$28.00

School Street.

Mechanicks Nat'l Bank, .	\$5.00	Mrs. L. M. Morrill, .	\$2.00
Munns & Paige, . . .	2.00	L. R. Fellows, . . .	2.00
J. H. Rowell,	3.00	J. Woods,	2.00
W. B. Durgin,	2.00	D. W. Waldron, . . .	2.00
Mrs. N. White,	3.00	G. W. Carter,	1.00
J. D. Perkins,	1.00	N. C. Nelson,	1.00
E. W. Abbott,	1.00		
Mrs. P. Pillsbury, . .	2.00		<u>\$29.00</u>

Capitol Street.

Concord Gas Light Co., .	\$3.00	Mrs. N. White,	\$5.00
George Goodhue, . . .	2.00		<u>\$13.00</u>
I. C. Evans,	2.00		
J. R. Bartlett,	1.00		

Park Street.

C. R. Walker,	\$2.00	Miss N. S. Haynes, . .	\$1.00
Mrs. W. Walker,	2.00		<u>\$7.00</u>
Mrs. A. L. Drew,	1.00		
E. A. Stockbridge, . .	1.00		

South Street.

H. W. Ranlet,	\$5.00	J. P. Nutter,	\$3.00
Mrs. W. Harriman, . . .	5.00	W. Hart,	2.00
J. F. Jones,	5.00	Mrs. E. Hutchins, . . .	2.00
Mrs. A. Downing,	5.00	J. K. Ewer,	1.00
G. C. Hopkinson,	5.00		<u>\$37.00</u>
Mrs. J. W. Little,	4.00		

Depot Street.

Smith & Walker,	\$5.00	Mrs. C. Hart,	\$1.00
H. E. Conant,	2.00		<u>\$8.00</u>

Freight Street.

Ranlet & Marsh,	\$3.00	W. S. Davis & Son, . .	\$2.00
			<u>\$5.00</u>

Bridge Street.

Dickerman, Leavitt & Co.,	\$5.00	F. S. Johnson,	\$1.00
O. H. Phelps & Co., . . .	3.00		<u>\$11.00</u>
A. C. Sanborn,	2.00		

North Spring Street.

H. F. Patterson, . . .	\$2.00	H. H. Metcalf, . . .	\$2.00
L. C. Merrill, . . .	2.00	Mrs. Gage, . . .	1.00
Miss E. H. Osgood, . . .	2.00	Mrs. A. C. Heath, . . .	2.00
Mrs. Reed, . . .	1.00	A. Wilson, . . .	2.00
Mrs. Osgood, . . .	1.00	T. A. Heath, . . .	1.00
Mrs. Fowler, . . .	2.00	G. H. Russ, . . .	1.00
F. H. Burleigh, . . .	2.00	F. H. Dustin, . . .	2.00
Mrs. Huntington, . . .	1.00		
G. W. Hill, . . .	1.00		<u>\$25.00</u>

South Spring Street.

N. B. Walker, . . .	\$2.00	C. H. Sawyer, . . .	\$1.00
Mrs. A. Wood, . . .	2.00	A. B. Cross, . . .	1.00
J. E. Rand, . . .	2.00	F. E. Child, . . .	1.00
R. N. Philbrick, . . .	1.00		
J. Y. Lane, . . .	1.00		<u>\$11.00</u>

Fiske Street.

W. P. Fiske, . . .	\$5.00	I. W. Hammond, . . .	\$5.00
V. C. Hastings, . . .	5.00	J. O. Hall, . . .	3.00
F. S. Dodge, . . .	5.00	A. A. Currier, . . .	2.00
S. S. Kimball, . . .	5.00		
L. J. Rundlett, . . .	10.00		<u>\$45.00</u>
A. C. Hardy, . . .	5.00		

Fayette Street.

St. Mary's School, . . .	\$2.00	W. K. Day, . . .	\$1.50
J. E. Dwight, . . .	2.00	M. B. Smith, . . .	1.00
Mrs. J. S. Lund, . . .	2.00		
C. G. Remick, . . .	1.50		<u>\$10.00</u>

Washington Street.

H. W. Brickett, . . .	\$2.00	G. S. Foster, . . .	\$1.00
First Cong. Society, . . .	3.00	J. F. Harriman . . .	1.00
C. H. Day, . . .	1.00		
J. R. Howe, . . .	1.00		<u>\$10.00</u>
S. M. Griffin, . . .	1.00		

RECAPITULATION.

From east side Main street,	. . . . .	\$301.50
west side Main street,	. . . . .	231.00
east side State street,	. . . . .	71.50
west side State street,	. . . . .	64.50
Green street,	. . . . .	31.50
Pleasant street,	. . . . .	46.00
Warren street,	. . . . .	28.00
School street,	. . . . .	29.00
Capitol street,	. . . . .	13.00
Park street,	. . . . .	7.00
South street,	. . . . .	37.00
Depot street,	. . . . .	8.00
Freight street,	. . . . .	5.00
Bridge street,	. . . . .	11.00
North Spring street,	. . . . .	25.00
South Spring street,	. . . . .	11.00
Fiske street,	. . . . .	45.00
Fayette street,	. . . . .	10.00
Washington street,	. . . . .	10.00
		<hr/>
		\$985.00

The collection of subscriptions for the street sprinkling has been attended to as heretofore by Mr. Howard M. Cook, and the results are as satisfactory as could be expected under the present system.

The full account of individual subscriptions is presented for the information of the public.

All which is respectfully submitted as supplementary to the report, by

JAMES H. ROWELL,
Commissioner of Highways.

REPORT OF THE COMMITTEE ON SEWERS AND DRAINS.

To the City Council:

The committee herewith submit the following report in relation to sewers and drains for the year 1888:

Amount appropriated,	\$3,070.00
Amount expended,	4,521.22

Excess of expenditures over appropriation,	\$1,451.22

a detailed account of which will be found in the precinct department of expenditures.

It was expected by the committee that a larger appropriation would be required for the purpose of extending the sewer upon the east side of South Main street, at an estimated expense of \$1,200, and the appropriation was increased \$840 over 1887 for that purpose; but the demands for sewers have been much larger than anticipated, and it has been impossible for the committee to keep the expenditures within the appropriation without denying that which seemed an actual necessity.

Our city is gradually increasing in size and population, and many new buildings are being erected upon streets that have no sewer connections; and it is expected and demanded by those citizens, who so build and occupy new houses, that they should be accommodated and supplied with such improvements, in order to comply with the requirements of the board of health.

We regret that the lack of funds has prevented some changes and repairs that could have been made advantageously to the system; also, as quite a difference of opinion existed between the committee and citizens in the neighborhood as to what was most expedient to do, it was thought best to defer action for the pres-

FIRE HYDRANTS—*Concluded.*

STREETS.	LOCATIONS.	Number.	Total.
High.	East side High street, West Concord, near S. W. Kellom's...	1	
"	" " " " Mrs. G. E. Holden's	1	
Hutchins.	North side Hutchins, near B. T. Putney's.....	1	6
"	" " " " C. & C. Railroad	1	
Main.	East side West Concord road, near Engine house	1	2
"	West side " " " opposite D. Holden's.....	1	
"	" " " " near north mill.....	1	
"	East side " " " opposite Geo. W. Brown's...	1	
"	" " " " near Mr. Harrington's.....	1	
Pen'c'k Road	West side Penacook road, near Warner road.....	1	6
"	" " " " near Mr. Currier's.....	1	
PENACOOK			2
Main.	West side Main (Penacook) opposite Stark street.....	1	
"	" " " " near Mr. Prescott's.....	1	
"	South-west corner Main and Union.....	1	
"	Washington Square, opposite Washington.....	1	
"	North-west corner Main and Charles.....	1	
"	North side Main, opposite East Canal.....	1	
"	North side near iron bridge.....	1	7
High.	East side High, opposite Summit.....	1	
"	North-west corner High and Maple.....	1	
"	North-west corner High and Spring.....	1	3
Washington.	South-east corner Washington and Union.....	1	
"	South side Washington, opposite John Whitaker's.....	1	
Charles.	South side Washington opposite Charles.....	1	3
"	South-west corner Charles and Warren.....	1	
West Canal.	North side Charles near Geo. W. Corey's.....	1	2
East Canal.	South-east corner West Canal and Warren.....	1	1
"	North side East Canal, near Contoocook Mfg. Co.....	1	
Merrimack.	North side East Canal near Crescent.....	1	2
"	South side Merrimack, opposite Merrimack avenue.....	1	
"	North side " " D. W. Fox's.....	1	
"	North side " " Cross.....	1	
"	South side Merrimack opposite Rolfe's shop.....	1	
"	North side Merrimack near road to Island.....	1	
"	North-west corner Merrimack and Penacook.....	1	6
Summer.	North-east corner Summer and Centre.....	1	1
Spring.	North-east corner Spring and Church.....	1	1
Centre.	North-west corner Centre and Spring.....	1	1
Cross.	South-west corner Cross and Summer.....	1	1
	Whole number of public hydrants.....		170
	PRIVATE HYDRANTS.		
	Concord Railroad yard, 3 post and 3 flush hydrants.....	6	
	Northern Railroad yard, 4 post hydrants.....	4	
	New state prison.....	3	
	Old state prison yard.....	2	
	Abbot-Downing Co.'s yard.....	2	
	Page Belting Co.'s yard.....	2	
	W. P. Ford & Co.'s yard.....	1	
	N. H. Asylum for Insane yard.....	1	
	Concord Gas-Light Co.'s yard.....	1	
	Whole number of private hydrants.....		22

Centre street (and connecting Washington street), 273 feet 8-inch pipe,	\$209.11
Washington street (near Pine street), 243 feet 10- inch pipe,	580.30
Pine street (near Washington), 244 feet 10-inch pipe, Rear of South Main street (Chandler street to Wood- ruff avenue), 600 feet 12-inch pipe, 565 feet 10- inch pipe,	587.05
Rear of North Main street (near S. S. Kimball's), 150 feet 8-inch pipe,	1,071.65
Water street. Preparations were made and work commenced for 550 feet 15-inch pipe; and the pipe was procured for the purpose at a cost of	67.23
By a change in the plan, none of the new pipe on Water street was laid, but remains on hand, though repairs were made on the old sewer, and expense made in preparing for the new sewer to the amount of	378.13
	96.80

Making a total amount, as thus sub-divided, of \$4,354.83

The difference between this amount, which has been applied to each separate piece, and the total amount expended being \$166.39, is represented to the amount of \$100.85 for work done for Union School District on the Spring Street lot, payment for which has been made to the city treasurer, as will appear from his report. The balance of \$65.59 is represented by the expenditures for carting, for blacksmithing, and for various tools required in the general progress of the work, which could not properly be charged to any particular piece; and as various articles still remain on hand, it has not been deemed necessary to make the exact sub-division.

All petitions for sewers during the year have been granted and constructed, with one exception, where it was practicable. There have been one hundred and twenty permits granted to individuals to connect their drains with the public sewers.

Respectfully submitted,

JOHN E. ROBERTSON,
LELAND A. SMITH,
JOHN H. ROLFE,
Committee on Sewers and Drains.

REPORT OF PENACOOK SEWER PRE- CINCT.

To the City Council of Concord :

The idea of a system of sewerage for the village of Penacook, a want long felt, and made more necessary by the introduction of Long Pond water, took definite shape at a meeting of the citizens of District No. 20, where the subject was fully discussed, and the matter was referred to a committee, with instructions to examine the different plans, estimate the cost, and report to an adjourned meeting. After a full and searching investigation, the committee reported that surveys had been made, and that they would recommend the overflow system, as suggested by the engineers, Messrs. Foss & Merrill. After full and free discussion of the matter, it was unanimously voted to instruct the aldermen from Ward 1 to secure, at the earliest moment, the construction of a system of sewerage that would meet the wants of the precinct, and that the precinct should be bonded to pay for the same.

That action was taken, as your honorable body well know. A precinct was formed. A loan was placed upon what we consider to be very easy terms for the precinct to meet; and the Committee on Sewers and Drains commenced the system. Owing to the large amount of rainy weather during the fall months, and the change of location of the main outlet, made necessary by the objection of the authorities of the Northern Railroad to the original plan, the cost of construction has been somewhat larger than it otherwise would have been, but the estimates have been exceeded but little, if any. We would recommend that an additional appropriation be made the coming year of \$3,000, and that the work be continued in places not included in the estimates for the year 1888.

For the cost of construction, I would refer you to the item, Penacook Sewerage Precinct, in the City Report.

To the mayor and members of the city government I am under obligations for many acts of courtesy, and also to Dr. I. A. Watson, of the State Board of Health, for many timely suggestions. All of which is respectfully submitted,

J. H. ROLFE,
Superintendent.

Below is given the amount of pipe laid on the several streets in the precinct.

Main outlet,	435 ft. 18-inch pipe.
Merrimack street, east end,	1,550 12 "
Bye street,	585 8 "
Walnut street, overflow,	400 18 "
" main,	670 24 "
East Canal street, main,	620 10 "
Main street, overflow,	100 24 "
Main street, main,	430 18 "
Brook sewer,	630 18 "
West Canal street,	425 12 "
Warren street,	200 10 "
" 	200 8 "
Merrimack avenue,	350 8 "
Centre street,	500 15 "
" 	480 12 "
" 	775 10 "
High street,	350 8 "
" 	500 10 "
Summer street,	300 8 "
" 	660 10 "
Church street,	400 8 "
Spring street,	400 8 "
" 	310 12 "
Merrimack street, west end,	450 10 "

With the necessary man-holes and lantern-holes for entering the sewers at all necessary places.

EDUCATIONAL DEPARTMENT.

The school reports are not prepared until the close of the school year in March, and are consequently omitted from this volume.

PUBLIC LIBRARY.

REPORT OF THE TRUSTEES.

To the City Council:

An examination of the Librarian's report makes it manifest that an immediate increase of books is imperative. The patronage of the library exceeds the expectation of its trustees, and renders their office of greater importance than heretofore. They are looked upon to supply the literary wants of our citizens, and to maintain the well-being of the library. In order to do so, the trustees respectfully request that an appropriation sufficiently large be made to meet the necessities of the library.

ABIAL ROLFE,
JOSEPH T. CLOUGH,
PAUL R. HOLDEN,
WILLIAM L. FOSTER,
CHARLES R. CORNING,
JAMES S. NORRIS,
WILLIAM W. FLINT,

Trustees.

LIBRARIAN'S REPORT.

To the Board of Trustees :

During the past year the library has been open for the delivery of books 266 days, in which time 51,234 volumes have been given out, a gain of 8,893 volumes over the number given out in 1887.

Nine hundred and seventy volumes have been added to the library, of which 821 were purchased ; the remainder were received as donations.

The charge of twenty-five cents for each card was abandoned on the sixteenth day of March last, since which time the library has been, as required by the law of the state, free for the use of all the inhabitants of the city.

The effect of this change was soon apparent in the increased call for cards and books. Between the first day of May and the twentieth day of October 23,302 volumes were given out, a gain of 6,953 volumes over the number given out in the corresponding time the preceding year.

Eighteen hundred and thirty cards were issued between the sixteenth day of March and the first day of January of the present year.

Agreeably to a vote of the City Council, a box of books has been sent to Penacook twice a week since the commencement of the summer season. At present about 180 volumes per week are required to meet the demands of patrons in that part of the city, and the demand for cards and books is still increasing.

In order to enable the owners of the Board of Trade Building to make some desirable changes in their property, the delivery-room of the library was given up on the tenth day of August. This change made it necessary to move about three fourths of the books and fit up the remaining rooms for the changed condition of the library.

The removal of the books to the Fowler Library Building

commenced on the twenty-second day of October, and the rooms in the Board of Trade Building were given up on the first day of November.

Some time was necessarily spent in arranging the books of the circulating library in their new quarters, and the rooms were opened for their delivery on the twelfth day of November.

Owing to the difficulty in procuring workmen to finish the needed carpenter work in the new building, the reference library has not yet been arranged.

The reading-room has been furnished with a supply of the leading magazines and newspapers published in the country, and is now in successful operation. The Sunday attendance as yet is small, but slowly increasing.

More books are much needed in the circulating library. The number in this department should be doubled at once to meet the reasonable demands of the patrons.

Respectfully submitted,

D. F. SECOMB,

Librarian.

January 1, 1889.

TREASURER'S REPORT.

To the City Council:

The balance in the hands of the Treasurer January 1, 1888, was \$38.56, to which has been added city appropriation \$3,000, and library receipts of \$117.87, making a total of \$3,156.43 as available funds for the purposes of the library. Of this sum \$3,000 has been expended as per itemized account in the expenses of the city, and \$156.43 from the funds in the hands of the Treasurer in addition to the appropriation, leaving a balance of \$48.85 in the Treasurer's hands to be carried to next year.

BALANCE SHEET.

DR.		
Cash on hand Jan. 1, 1888,	. . . .	\$38.56
Received from city,	. . . .	3,000.00
Receipts of library,	. . . .	117.87
		\$3,156.43
CR.		
Paid as per city account,	. . . .	\$3,000.00
Paid Edson C. Eastman,	. . . .	107.58
Cash on hand,	. . . .	48.85
		\$3,156.43

TRUST ACCOUNT.

DR.		
Received interest from Pierce fund,	. . . .	\$60.00
Received interest from Lyon fund,	. . . .	60.00
		\$120.00
CR.		
By cash on hand,	. . . .	\$120.00

Respectfully submitted,

W. P. FISKE,
Treasurer.

HEALTH DEPARTMENT.

REPORT OF THE BOARD OF HEALTH.

To the City Council:

In submitting to your notice an abstract of our work during the past year, we would take this occasion to thank the Honorable Council for their cordial support, and would congratulate the public that so little disease of an epidemic character has prevailed.

The climatic changes of the past season were unusually varied, yet the health of our citizens did not seem to suffer as might have been reasonably expected. The mortality rates of some other large towns and cities seemed to show the effects of prolonged moisture, and we believe that our immunity was largely due to the fact that we have a system of sewers and a good water-supply.

The introduction of a water-supply and a partial system of sewers into Ward 1 has already been of great benefit to the citizens of that enterprising precinct, and, when the system is fully developed and carried out, it will richly repay its cost in the increase of the comfort and happiness of every individual; for it is a broad general principle that must always hold good in civilized communities, that whatever has a tendency to avert, destroy, or diminish discomfort, pain, sickness, death, vice, or crime, is a matter of vital importance, and of vital interest to every class of persons. In the introduction of pure water, and in devising a system for the safe and rapid removal of the sewage of that ward, you have done a sanitary work that will eventually prevent disease, prolong life, and improve the mental and physical conditions of the residents of this important suburban

ward of our city. It is to be hoped that every family in Penacook will very soon have a sufficient supply of pure water from the public water service, and that the system of sewers will be extended as fast as possible, until all are enabled to do away with cesspools, surface drains, and privies.

It is true there is some expense attending improvements such as this system contemplates, yet how often, after all has been done, does the sanitarian hear expressions like this: "I do not see how we could get along without it, or realize how we used to suffer; nor could we think of returning to the old way of cesspools," etc. This would at once lead one to infer that the increased expense was fully met in the increased comfort and happiness, to say nothing about the enhanced value of the property.

We would respectfully call your attention to the report of the health officer and inspector, Mr. Cook.

It is very evident from his report that you have made no mistake in constructing new sewers in the compact part of the city during the past summer. Large sections have been accommodated, and the alacrity with which all concerned availed themselves of those new sewers showed very conclusively that they were duly appreciated. Not only were a large number of families enabled to do away with surface drainage and cesspools that had become a local nuisance to themselves and also to their neighbors, but it will bring new lots for building purposes into the market, as they can utilize these sewers for drainage. Therefore a public sewer, like a public street, serves in its way to open up sections of land for public and private enterprise.

While the matter of sewers and drains is under consideration, we would respectfully call your attention, as we did last year, to the necessity for a more rigid municipal supervision of our sewerage system, and to reiterate our opinion of last year, that "No good business man would affirm that business principles would prompt any man, or a syndicate of men, to put one or two hundred thousand dollars into a commercial enterprise, and then leave it to take care of itself." It would not be considered good management to leave our system of water-works to be tapped at any place or in any way that best suited the person or family desiring a water-supply. We all are ready to admit

that such a course would in a short period destroy the whole system.

The same reasoning obtains regarding our system of sewers, except "out of sight out of mind," and therefore but very few ever take the trouble to investigate or even think of what may occur, unless some better system of permanent supervision is evolved.

One year since there was a consultation regarding sanitary matters and improvements in our city, and the honorable mayor recommended an increased appropriation of two hundred and fifty dollars for the purpose of paying the expenses of a committee from the council and board of health, that they might visit other cities and learn from observation the sanitary conditions that promised the best results. Unfortunately for the best interests of our city, members of this council, as well as the board of health, have business or professional relations that demand all their time, and it is no easy task to arrange for a few days' absence, that would be necessary to investigate how others are disposing of garbage and the accumulating waste and effete matter incident to every large town or city.

Therefore no part of the additional appropriation has been expended; yet it is the opinion of this board that some such investigation should be commenced and prosecuted, until a committee might be able intelligently to report to this council what has been accomplished in other cities having the same or similar conditions; for it is better to profit by the experience of others than to be obliged to learn through the expensive experience of our own failures. This is especially true regarding the ultimate disposal of garbage, kitchen waste, etc.

The intelligence of the people will ultimately reach a conviction that it is unnatural as well as unsanitary for any town or city to pollute natural water-supplies with the waste products of a population calling themselves civilized, thereby rendering the water unwholesome and unfit for immediate use. The growing necessity for public water-supplies in all large places only serves to render people more and more watchful of what neighboring towns and cities are doing with their sewage and waste matter. Constant vigilance is the price of safety. The drainage area of a water-supply must be kept under the closest sup-

ervision by the sanitary authorities of a community; for it is not enough that we obtain a supply free from pollution—it must be kept so.

A commission, appointed in Massachusetts to exercise a jealous guard over the public water-supply, reported over one year since, and upon their recommendation the state board of health “is invested with the general supervision of the water-supplies. No sewage, drainage, excrement, or other refuse or polluting matter of such kind or amount as, either by itself or in connection with other matter, will corrupt or impair the purity of a water used for domestic purposes, is permitted to be delivered into a water-course, or any of its feeders, within twenty miles above the point where a water-supply is taken. Upon the application of a city or town to the supreme court, alleging the pollution of its water-supply in violation of law, an injunction may be issued, or the polluting substances required to be so cleansed or purified that they shall no longer be deleterious. The limit of twenty miles in this law is a defect; but sanitary legislation is a thing of slow progress, and our friends in Massachusetts undoubtedly secured as much as was possible for them to obtain at the time.”

Now it may be some time before the people of New Hampshire demand that laws shall be specially enacted to protect themselves from the contaminating influences of the pollution of running water; yet in common law the same individual rights obtain, and communities as well as individuals are law-breakers, and trample upon the inherent rights of every individual to pure air, a clean soil, and pure water, when they allow our lakes, brooks, and rivers to be polluted, as these are the natural water-supply of New Hampshire.

Reasoning from analogy, your council cannot be too strict in the exercise of your power to protect the water-supply of our city. In fact, the law would hold the municipal council and water commissioners to be criminally culpable should any epidemic or infectious disease be developed on account of the pollution of the water from any cause that ordinary human foresight might have averted. Because our water-supply is communal instead of individual is no excuse for its not being absolutely protected; indeed, it should be made more imperative,

for the larger the number supplied from a common reservoir, the greater the danger from unhealthful influences.

In this connection we would respectfully call your attention to the city physician's report on this subject.

It has been said, by a distinguished writer on sanitation, that the condition of the streets of a city was a good index of the general intelligence and sanitary knowledge of its inhabitants. This may not be wholly true; yet it is quite certain that ordinary foresight should prevent the necessity of promiscuous digging up of our streets to construct sewers and water service within a few days after expensive work has been done in paving or Macadamizing.

It would seem but reasonable that whenever a section of our streets was to be improved by being paved or covered with broken stone, due notice should be publicly given, and all those along the line having house drains or water service requiring renewal or new work, should understand that all such work should be done before or while the reconstruction of the street was in progress. Our ordinances require all residing along the line of our public sewers to be connected therewith, and no better time can be found than while the street is being repaired; then, nothing but extraordinary occasions should require the highway to be disturbed. We would also call the attention of the public to the ordinance requiring the replacing of the earth and paving when they have been disturbed; and the fact that so little regard is paid to its provisions is only another evidence that we need further municipal supervision. Individual rights should not be infringed upon, yet the public have rights that should be respected, and the promiscuous digging up of our streets and the destruction of shade-trees should not be permitted. Such matters may not be directly injurious to the public health, yet they are productive of discomfort to the public as well as to those directly interested; and improvements made by private enterprise, which directly or indirectly add to the beauty of our streets and thoroughfares, and to the comfort of those who traverse them, should not be allowed to be sacrificed without good and sufficient reasons.

The board desire to call attention to the unsanitary condition of the lobby on Warren street. In their opinion it is not a fit

place for human beings to occupy, and its use for the detention of law-breakers, or for lodgings for the unfortunate, is a violation of the laws of health. It has one door in front, a small window opposite and two others in the attic, and a small ventilating cupola, beneath which is an opening about eighteen inches square in the ceiling. The only possible means of ventilation are furnished by the door, windows, and trap-door. The use of the door for that purpose is out of the question at all times, and during cold weather the windows are also unavailable for this purpose, limiting the source of a fresh air-supply to the eighteen-inch aperture.

There is more than an ordinary necessity for sufficient ventilation, for one corner is occupied by a privy which is connected with the sewer, but is not supplied with running water to admit of its being properly flushed. Another fruitful source of foul and disease-laden air is located beneath the floor with its many cracks. For years the building has been cleansed of the filth which drunkenness and deviltry make plentiful, by flooding it with water, and then getting rid of it by allowing it to run off upon the ground under the building, through a small opening in the floor. The deposits remain upon the ground to send back their poisonous effluvia, especially in warm weather.

The lobby is not provided with a padded cell, which is oftentimes imperatively needed, nor with any conveniences for the sick. The cells are alike, in that all have no furniture save a bare bunk of plank. There is no means of distinguishing in the accommodations between the poor unfortunate who is obliged to seek shelter, and the criminal who has transgressed the laws; nor is there any provision for separating such females as it may be necessary to confine there from the low and vile of the opposite sex, save by the grated doors and walls of the cells opening out of a common corridor.

These, briefly stated, appear to the board to be sufficient reasons, from the stand-point of health and morality, why action should be taken without delay to remedy an evil which has gone unnoticed far too long.

While those who break the laws are not usually entitled to particular sympathy, yet they have a right to demand, as a matter of humanity, that while in confinement their sanitary

surroundings shall not be such as to endanger or destroy health.

In concluding this report, the board desire to call the attention of all our citizens to the provisions of section seven of the ordinance passed March 31, 1887 :

“SEC. 7. No person shall place or leave, or cause to be placed or left, in or near any highway, street, alley, or public place, or in any private lot or enclosure, or in any pond or other body of water where the current will not remove the same, any rubbish, dirt, soot, ashes, hay, sherds, oyster, clam, or lobster shells, tin cans, decaying fruit or vegetables, waste water, or any refuse animal or vegetable matter whatsoever, nor keep in or about any dwelling-house, barn, shed, store, shop, or cellar, any of the aforesaid substances in any manner liable to become putrid or offensive, or injurious to the public health.”

The report of the health officer serves to show that a great many use back alleys, and drive-ways in the rear of blocks, for dumping all forms of rubbish, and complaints are frequently made that slops and refuse of all kinds are thrown from the back windows of tenement-house blocks, making a local nuisance near the windows of the basement or lower floors. Ashes are not only thrown upon the surface in these localities, but any one having occasion to go about the city with teams, during the winter months, finds that a great many violate this section in throwing their daily accumulation of ashes into the street.

No prosecutions have yet been made by the health officer for violations of this section, and the board sincerely hope none will be necessary.

If our citizens will assist our health officer by having a system of home inspection, he would find far less reason to leave orders for cleaning up back yards ; and, as owners of blocks and tenements are held equally responsible, under the law, with occupants, we append the regulation adopted by this board, and approved by the council April 30, 1887 :

“ The board of health ask the people carefully to read the ordinance, and especially to note that it devolves upon them to execute the provisions thereof, for no money has been appropriated to carry away garbage, or to clean up back yards or alleys ; on the contrary, sections 15 and 25 expressly provide

penalties for the neglect or violation of 'any or either of the sections of this chapter,' etc. Therefore we call upon all our citizens to clean out back yards and vacant lots, to prohibit and prevent the throwing of garbage and all waste matter into back yards and alleys, as well as the dumping of ashes and perishable materials into the street, or alley-way, or vacant lots, unless the same had been specified as a dumping-ground by the health officer, in which case people so using such dumping-grounds must comply with the rules and regulations concerning the manner in which such places shall be kept, as well as the material to be dumped, for no animal or decaying vegetable material shall be left above ground; and all owners of private ways or vacant lots allowing or inciting the filling in with ashes or other material, will be held responsible for the condition such grounds are found to be in."

The legislature in 1883 enacted a stringent law, the provisions of which were intended to protect the public against loss of life by fire. While Concord has not in the past been so unfortunate in this respect as some cities in New Hampshire, yet there are a good many buildings within our limits that are not "so erected as to afford ample facility for entrance and exit on all occasions; suitably provided with means of escape in case of fire; and also that they be erected with reference to the health and safety of the persons who may reside in or visit them."

The board of health desire to call attention of the council to section three of said act:

"The board of engineers of every city and the fire-wards of every town shall, for the purposes of this act, be deemed inspectors of buildings, unless otherwise provided by such cities or towns; and every building by them designated as requiring examination shall be examined within ten days by such board of mayor and aldermen, or said selectmen, as provided in section two."—*Laws of 1883, ch. 94, sec. 4.*

According to this section, the board of engineers are to be deemed the inspectors of buildings, but the ordinance establishing and maintaining our fire department fails to make this a part of their duties.

Their duties of collecting fines from absent members, to see that members of the department "wear some suitable badge,"