

the system will be in a position to give the utmost protection to the business center of the city.

The cement-lined mains in use continue to give good service, there having been but few leaks of any account.

The meter system continues to meet the approval of consumers, 145 being set this year. That the use of meters certainly checks a great waste of water can be seen by examining the records of notices sent from this office for leaky fixtures. Without the number of meters that we have, it would be difficult to tell what would be the stage of the water at the lake after this dry spell.

The height of the water in the lake has been watched very carefully and the shore also has received a great deal of attention. Many stumps have been removed and disposed of.

On account of the low water this summer it was considered advisable to issue notices to consumers to adhere strictly to rules regarding the use of hose and it was very gratifying to note their willingness to co-operate with the board to conserve the water.

The small pine seedlings planted four years ago have made marked growth and next year a large number will be ready to transplant in suitable locations around the lake.

All the buildings of the Water Department are in good condition, the cottage at the lake has been thoroughly overhauled and repaired and put in good condition.

The pumping station machinery and grounds show the results of the excellent care placed upon them by the engineer, Mr. Rowell.

We have lost by death this year one of the members of the board, Mr. H. E. Conant, who served as a member for fifteen years. He was always ready and willing to give the department at all times the benefit of his knowledge and experience, and his loss will be a personal one to all

who were associated with him in the management of the water-works.

I wish to take this opportunity to thank each member of the board for his advice and assistance during the year and also to express to the different departments and to all the employees of this department my appreciation of their co-operation with us to carry on the work of the year.

Respectfully submitted,

P. R. SANDERS,  
*Superintendent.*

**REPORT OF THE ENGINEER OF THE PUMPING  
STATION.**

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PUMPING STATION, CONCORD WATER-WORKS.

P. R. SANDERS, *Superintendent*:

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

Pump No. 1, with nineteen years' service, is in fairly good order.

Pump No. 2 is in first-class working order and is giving good results.

The boilers are in good order, as reported by the insurance inspector.

In September a Ford & Kimball shaking grate was installed under Boiler No. 2, which is a great improvement over the old grate.

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.

114 tons 245 pounds Pocahontas coal.  
121 tons 1,946 pounds New River coal.  
92 gallons of oil.  
38 pounds of waste.  
11 pounds of grease.  
14 cords of slabs.

## ENGINE RECORD.

MONTHS.	No. days pumping engine No. 1.		No. days pumping engine No. 2.		Total days pumping.	Total hours pumping.	Average time pumping.	Total water pumped.	Daily average pumped.	Total coal consumed*.	Daily average coal consumed.	Total pounds of wood consumed.	Gallons pumped per pound of coal.
	No. 1.	No. 2.	No. 1.	No. 2.									
January.....	26	26	26	26	279:30	H. M.	25,228,526	813,823	46,431	1,497	2,172	543	
February.....	24	23	24	23	262:	H. M.	24,510,336	875,387	44,527	1,590	2,190	550	
March.....	25	27	25	27	272:30	H. M.	24,698,361	793,172	45,010	1,452	2,197	548	
April.....	23	24	23	24	230:	H. M.	20,489,878	682,995	37,097	1,285	2,112	530	
May.....	26	26	26	26	301:	H. M.	27,103,984	874,483	49,601	1,500	2,586	548	
June.....	22	26	22	26	277:30	H. M.	25,594,444	853,148	47,206	1,573	1,787	542	
July.....	28	31	28	31	314:	H. M.	28,097,845	906,382	51,021	1,645	482	550	
August.....	1	26	1	27	262:	H. M.	21,819,328	703,849	41,402	1,335	1,805	527	
September....	22	24	22	26	243:30	H. M.	21,133,942	704,464	38,800	1,293	1,778	544	
October.....	26	26	26	26	274:	H. M.	23,927,485	771,854	44,500	1,435	2,461	537	
November....	23	25	23	25	241:30	H. M.	20,901,714	696,723	39,209	1,306	1,702	533	
December....	2	25	2	26	274:	H. M.	23,182,802	747,832	43,787	1,412	2,965	533	
Total.....	28	298	313	3,231:30	.....	.....	286,584,145	785,162	528,591	1,448	24,237	542	
Daily aver'ge.....	.....	.....	.....	.....	.....	8:51	785,162	.....	1,448	.....	.....	.....	

\* Amount of coal consumed includes that used for starting fires, banking fires and heating buildings.

Amount of coal consumed per thousand gallons pumped, 1.83 pounds.

HENRY A. ROWELL,  
*Engineer.*

**CITY TREASURER'S CONDENSED STATEMENT OF  
WATER-WORKS ACCOUNT.**

—————

W. F. Thayer, Treasurer, in account with Concord  
Water-Works:

RECEIPTS.

Balance on hand January 1, 1911,	\$27,380.13	
P. R. Sanders, superintendent,	71,881.34	
	\$99,261.47	

EXPENDITURES.

Interest on bonds,	\$22,212.50	
Bonds paid,	22,000.00	
Interest,	516.53	
Orders paid,	24,914.60	
Cash on hand,	29,617.84	
	\$99,261.47	

AUDITOR'S STATEMENT.

I hereby certify that I have examined the books showing the receipts of the Concord Water-Works from January 1, 1911, to December 31, 1911, and find the same correct; and that the total amounts given therein correspond with the amount of receipts given by Percy R. Sanders, superintendent, in his report for the year and also with the receipts reported by William F. Thayer, city treasurer.

HENRY E. CHAMBERLIN.

CONCORD, N. H., March 6, 1912.



APPENDIX.

## A.

RECEIPTS FOR EACH YEAR SINCE THE CONSTRUCTION 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
“ “ “ 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
“ “ “ 1896,	56,557.81
“ “ “ 1897,	55,156.42
“ “ “ 1898,	59,147.54
“ “ “ 1899,	*53,953.13
“ “ “ 1900,	*57,003.71
“ “ “ 1901,	62,253.61
“ “ “ 1902,	63,430.85
“ “ “ 1903,	65,088.45
“ “ “ 1904,	68,570.48

WATER DEPARTMENT.

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For the year ending December 31, 1905,	\$71,076.44
“ “ “ 1906,	73,063.45
“ “ “ 1907,	73,782.64
“ “ “ 1908,	71,362.67
“ “ “ 1909,	†67,307.84
“ “ “ 1910,	68,673.71
“ “ “ 1911,	71,881.34
<hr/>	
Total receipts for 39 years,	\$1,769,220.29

\* No hydrant rental this year.

† No hydrant rental after 1908.

**B.**

MEAN HEIGHT OF WATER EACH YEAR.

1873,	175.86	1893,	173.38
1874,	179.50	1894,	172.81
1875,	180.00	1895,	171.15
1876,	180.28	1896,	178.96
1877,	176.46	1897,	183.33
1878,	179.50	1898,	184.31
1879,	179.74	1899,	183.49
1880,	175.30	1900,	183.09
1881,	174.70	1901,	183.86
1882,	179.15	1902,	184.98
1883,	176.40	1903,	184.75
1884,	178.18	1904,	184.40
1885,	176.80	1905,	183.37
1886,	178.10	1906,	183.94
1887,	179.04	1907,	183.59
1888,	181.96	1908,	183.41
1889,	180.91	1909,	181.40
1890,	181.90	1910,	180.22
1891,	180.00	1911,	177.60
1892,	174.32		











WATER DEPARTMENT.

	2220	11391	15340	11567	1732	13586	14039	1357	522	28795	1963	2788	19783	14568	43368	21843	108242	31732	6	22	12	4	32	34	79	57	606	130
PENACOOK.																												
Penacook, high ser-																												
vico main		13110	1221			628							10584		225	8					1		5	1	1	2		
Canal, East						422																						
Canal, West						479									247													
Centre						1777																						
Charles																												
Church																												
Church																												
Crescent																												
Cross						734																						
Electric Avenue																												
Electric Avenue																												
Elliot																												
High																												
Main																												
Main, West																												
Maple																												
Merrimack																												
Penacook																												
Pine																												
Pine																												
Rolie																												
Spring																												
Spring																												
Stark																												
Summer																												
Union																												
Washington																												
Washington																												
Winter																												
Winter																												
Hydrant branches																												
Hydrant branches																												
Blow-offs																												
Totals	2220	11391	15340	11567	1732	13586	14039	1357	522	28795	1963	2788	19783	14568	43368	21843	108242	31732	6	22	12	4	32	34	79	57	606	130

D  
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		
	Northeast 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		
East side South Main, near West . . . . .		1		
Northeast corner South Main and Gas . . . . .		1		
West side South Main, opposite Holt Bros. Mfg. Co . . . . .		1		
Southwest corner South Main and South State . . . . .		1		
Northwest corner South Main and Pillsbury . . . . .		1		
East side South Main, opposite Pillsbury . . . . .		1		
West side South Main, opposite Langdon . . . . .		1		
West side South Main, at J. H. Lamprey's . . . . .		1		
West side South Main, at W. J. Sawyer's . . . . .		1	20	
Water . . . . .	Water, near Capt. James Thompson's . . . . .	1	1	
Hall . . . . .	West side Hall, opposite Rolfe and Rumford Asylum . . . . .	1		
	West side Hall, near E. W. Robinson's . . . . .	1		
	West side Hall, near F. H. George's . . . . .	1		
	West side Hall, opposite Hammond . . . . .	1		
	West side Hall, below Hammond . . . . .	1		
	East side Hall, opposite W. H. Page's . . . . .	1		
	East side Hall, near Rumford Field . . . . .	1	7	
Hammond . . . . .	North side Hammond, near Bridge . . . . .	1	1	
Railroad . . . . .	East side Railroad, opposite Ford & Kimball's . . . . .	1	1	
Fiske . . . . .	West side Fiske, near North State . . . . .	1	1	
Summer . . . . .	Northeast corner Summer and Pitman . . . . .	1	1	
Durgin . . . . .	East side Durgin, opposite Toof's laundry . . . . .	1	1	

FIRE-HYDRANTS.—Continued.

STREETS.	LOCATIONS.	Number.	Total.	
North State...	Southwest corner North State and Penacook.....	1	13	
	Northwest corner North State and Walker.....	1		
	Northwest corner North State and Church.....	1		
	Northeast corner North State and Franklin.....	1		
	Northwest corner North State and Tremont.....	1		
	Northeast corner North State and Washington.....	1		
	West side North State, opposite Court.....	1		
	Southwest corner North State and Maple.....	1		
	Southeast corner North State and Centre.....	1		
	Southeast corner North State and Park.....	1		
	Southwest corner North State and School.....	1		
	Southeast corner North State and Warren.....	1		
	Northwest corner North State and Pleasant.....	1		
	East side South State, opposite Wall.....	1		
South State...	Northwest corner South State and Thompson.....	1		
	Southwest corner South State and Monroe.....	1		
	East side South State, opposite Laurel.....	1		
	Northeast corner South State and Downing.....	1		
Mills.....	Northeast corner South State and West.....	1		
	Southwest corner South State and Harrison.....	1		
Dakin.....	West side Mills, near Levi Call's.....	1	7	
	corner Mills and Allison.....	1		
Dunklee.....	West side Dakin, near C. E. Harriman's.....	1	2	
	Dunklee, 150 feet south of West.....	1		
Broadway....	Northwest corner Dunklee and Allison.....	1	3	
	Northwest corner Dunklee and Pillsbury.....	1		
	West side Broadway at H. H. Metcalf's.....	1		
	Northwest corner Broadway and Allison.....	1		
	Northwest corner Broadway and Carter.....	1		
Donovan.....	Northwest corner Broadway and Stone.....	1	7	
	West side Broadway, at Rollins Park.....	1		
	West side Broadway, opposite McKinley.....	1		
	West side Broadway, between McKinley and Rockingham	1		
	Northeast corner Donovan and Wiggin.....	1		
	Green.....	Northwest corner Green and Prince.....		1
	East side Green, opposite Prince.....	1		
South.....	Northwest corner Green and Warren.....	1	3	
	West side South, opposite Wall.....	1		
	Northwest corner South and Fayette.....	1		
	Northwest corner South and Thompson.....	1		
	West side South, opposite Monroe.....	1		
	West side South, opposite Laurel.....	1		
	West side South, below N. H. Memorial Hospital.....	1		
	West side South, opposite Downing.....	1		
	West side South, opposite Allison.....	1		
	West side South, opposite Pillsbury.....	1		
	West side South, near Abbot farm.....	1		
	West side South, opposite I. W. Bushey's.....	1		
	Northwest corner South and Iron Works Road.....	1		
	East side South, at Quint's.....	1		
Bradley.....	West side South, near Bow line.....	1	14	
	Southwest corner Bradley and Penacook.....	1		
	Northwest corner Bradley and Walker.....	1		
	East side Bradley, opposite Highland.....	1		
Union.....	Northwest corner Bradley and Franklin.....	1	4	
	Northwest corner Union and Maple.....	1		
Jackson.....	Northeast corner Jackson and Church.....	1	1	
Lyndon.....	Southwest corner Lyndon and Tremont.....	1	2	
	East side Lyndon, opposite Abbott.....	1		
North Spring..	Northeast corner North Spring and Maple.....	1	3	
	Southwest corner North Spring and Centre.....	1		
	East side North Spring, opposite High School.....	1		

## FIRE-HYDRANTS.—Continued.

STREETS.	LOCATIONS.	Number.	Total.
South Spring..	Southwest corner South Spring and Oak.....	1	
	West side South Spring, opposite Thompson.....	1	
	West side South Spring, opposite Concord.....	1	
Academy.....	West side So. Spring, opp. Perley proposed extension..	1	4
	East side Academy, at William E. Dow's.....	1	
Hanover.....	West side Hanover, at No. 10.....	1	1
Rumford.....	West side Rumford, south of cemetery gate.....	1	
	West side Rumford, opposite Perkins.....	1	
	Northeast corner Rumford and Albin.....	1	
	Northeast corner Rumford and Franklin.....	1	
	Northwest corner Rumford and Beacon.....	1	
	Northeast corner Rumford and Abbott.....	1	
	Northeast corner Rumford and Cambridge.....	1	
	Northwest corner Rumford and Centre.....	1	
	Northeast corner Rumford and School.....	1	9
	West side Huntington, at head of Short.....	1	1
Huntington...	Northwest corner Tahanto and School.....	1	1
Tahanto.....	Southwest corner Pine and Centre.....	1	2
	Southwest corner Pine and Warren.....	1	
Pine.....	East side Holt, at Nason's.....	1	1
Holt.....	Northwest corner High and Auburn.....	1	
High.....	Northwest corner High and Valley.....	1	
	East side High, opposite Forest.....	1	
	Southwest corner High and Franklin.....	1	4
Valley.....	Northeast corner Valley and Forest.....	1	1
Auburn.....	Northeast corner Auburn and Chestnut.....	1	
	Northeast corner Auburn and Forest.....	1	
	North side Auburn, between Centre and Forest.....	1	3
Ridge Road...	West side Ridge Road, opposite J. B. Campbell's.....	1	1
Westbourne Rd	North side Westbourne Road, north of Mrs. F. P. Hallett's	1	1
Giles.....	Southeast corner Giles and School.....	1	1
Dartmouth...	Southwest corner Dartmouth and Clinton.....	1	1
Princeton...	Southwest corner Princeton and Clinton.....	1	
	Northwest corner Princeton and Noyes.....	1	2
Fruit.....	Northeast corner Fruit and Woodman.....	1	
	West side Fruit, near H. T. Gilman's.....	1	
	East side Fruit, opposite W. W. Critchett's.....	1	
	East side Fruit, opposite Kilburn's.....	1	4
Minot.....	West side Minot, north of Odd Fellows' Home.....	1	
	West side Minot, south of Odd Fellows' Home.....	1	
Penacook....	Northwest corner Minot and Pleasant.....	1	3
	South side Penacook, near Concord Lumber Co.....	1	
	South side Penacook, east of P. B. Co.'s storehouse.....	1	
	South side Penacook, near P. B. Co.'s.....	1	
	South side Penacook, near P. B. Co.'s office.....	1	
	Southeast corner Penacook and North Main.....	1	
	Southwest corner Penacook and Rumford.....	1	
	North side Penacook, opposite T. Hannigan's.....	1	
Walker.....	Southeast corner Penacook and Columbus Avenue.....	1	8
Albin.....	Southwest corner Walker and Martin.....	1	1
	North side Albin, near D. Weathers'.....	1	1
Highland.....	North side Highland, between Bradley and Rumford...	1	
	Northeast corner Highland and Rumford.....	1	2
Church.....	South side Church, east of Bradley.....	1	
	North side Church, opposite Lyndon.....	1	
Franklin....	Northeast corner Church and Rumford.....	1	3
	Northwest corner Franklin and Jackson.....	1	
	Northeast corner Franklin and Lyndon.....	1	
	Southwest corner Franklin and Rumford.....	1	
	South side Franklin, opposite W. J. Ahern's.....	1	
	North side Franklin, between High and Auburn.....	1	
	Northeast corner Franklin and Auburn.....	1	6

FIRE-HYDRANTS.—Continued.

STREETS.	LOCATIONS.	Number.	Total.
Chestnut.....	Northwest corner Chestnut and High.....	1	1
Tremont.....	North side Tremont, east of Harrod.....	1	
	Southwest corner Tremont and Jackson.....	1	2
Pearl.....	North side Pearl, at Kimball Flanders'.....	1	1
Beacon.....	North side Beacon, opposite Merrimack School.....	1	
	Northwest corner Beacon and Jackson.....	1	
	Southwest corner Beacon and Lyndon.....	1	
	North side Beacon, opposite White.....	1	
	South side Beacon, opposite Charles.....	1	5
Rowell.....	Northeast corner Rowell and White.....	1	1
Blanchard.....	Northwest corner Blanchard and Essex.....	1	1
Ferry.....	North side Ferry, opposite Ford's foundry.....	1	
	North side Ferry, near N. E. Granite Works.....	1	
	North side Ferry, east of C. & M. R. R.....	1	
	Northwest corner Ferry and Huntoon Avenue.....	1	4
Washington..	North side Washington, opposite Rollins.....	1	
	Southwest corner Washington and Union.....	1	
	Northeast corner Washington and Lyndon.....	1	
	Northwest corner Washington and Rumford.....	1	
	Northwest corner Washington and North Essex.....	1	
	North side Washington, opposite Perry Avenue.....	1	6
Chapel.....	South side Chapel, near Methodist Church.....	1	1
Montgomery..	South side Montgomery, opposite Mrs. George Minot's.....	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	
	South side Centre, opposite Essex.....	1	
	Southwest corner Centre and Summit Avenue.....	1	
	Northeast corner Centre and Ridge Road.....	1	7
Bridge.....	South side Bridge, near easterly barn.....	1	
	North side Bridge, opposite Concord Coal Co.'s.....	1	
	North side Bridge, opposite Concord Shoe Factory.....	1	3
Park.....	North side Park, at St. Paul's Church.....	1	1
Capitol.....	Northeast corner Capitol and North State.....	1	1
Garden.....	Northeast corner Garden and Huntington.....	1	1
School.....	Northwest corner School and Green.....	1	
	Northwest corner School and North Spring.....	1	
	Northwest corner School and Rumford.....	1	
	Northwest corner School and Merrimack.....	1	
	Northwest corner School and Pine.....	1	
	Northeast corner School and Liberty.....	1	
	North side School, opposite E. B. Woodworth's.....	1	7
Warren.....	Southeast corner Warren and Fremont.....	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 Liberty.....	1	
	Northeast corner Warren and Giles.....	1	
	Junction of Warren and Pleasant, near Fruit.....	1	8
Depot.....	South side Depot, at north end of train shed.....	1	
	Northwest corner Depot and Railroad Square.....	1	2
Blake.....	South side Blake, at John B. McLeod's.....	1	1
Orchard.....	South side Orchard, opposite Sherburne's.....	1	1
Pleasant.....	Northwest corner Pleasant and Railroad Square.....	1	
	South side Pleasant, at South Congregational Church.....	1	
	Southeast corner Pleasant and South.....	1	
	Northeast corner Pleasant and Fremont.....	1	
	Southwest corner Pleasant and Spring.....	1	
	South side Pleasant, opposite Rumford.....	1	
	South side Pleasant, opposite Merrimack.....	1	

## FIRE-HYDRANTS.—Continued.

STREETS.	LOCATIONS.	Number.	Total.	
Pleasant....	South side Pleasant, opposite Pine.....	1	20	
	South side Pleasant, opposite Liberty.....	1		
	North side Pleasant, near city stable.....	1		
	South side Pleasant, near Gale.....	1		
	South side Pleasant, opposite Mrs. Aiken's.....	1		
	South side Pleasant, near Mrs. Eddy's cottage.....	1		
	North side Pleasant, near James Lane's.....	1		
	North side Pleasant, near J. McC. Hammond's.....	1		
	South side Pleasant, opposite Fiske Road.....	1		
	Southwest corner Pleasant and School Avenue.....	1		
	North side Pleasant, opposite infirmary.....	1		
	South side Pleasant, in field near gasometer.....	1		
	South side Pleasant, near new Upper School.....	1		
	East side Mill Road, near laboratory.....	1		
St. P. School..	North side Mill Road, at Orphans' Home.....	1	3	
	South side Mill Road, at tenement No. 7.....	1		
Old Hopkint'n Road ..	Junction old and new Hopkinton roads.....	1	11	
Wall.....	Northeast corner Wall and Elm.....	1		
Marshall....	North side Marshall, opposite Fuller.....	1		
Freight.....	North side Freight, at southwest corner passenger station	1		
Hill's Avenue.	Southwest corner Hill's Avenue and Railroad Square..	1		
	Northeast corner Hill's Avenue and South Main.....	1		
Fayette.....	Northwest corner Fayette and Elm.....	1		
Thompson....	North side Thompson, opposite Jefferson.....	1		
Chandler....	South side Chandler, opposite Railroad.....	1		
Concord....	Southwest corner Concord and South State.....	1		
	Northwest corner Concord and Jefferson.....	1		
	Northeast corner Concord and South.....	1		
Monroe.....	North side Monroe, opposite Grove.....	1		2
	South side Monroe, at Rumford School.....	1		
Thorndike....	Southwest corner Thorndike and South State.....	1	4	
	Northeast corner Thorndike and Grove.....	1		
	North side Thorndike, opposite Pierce.....	1		
Laurel.....	Northeast corner Thorndike and South Spring.....	1	2	
	Northwest corner Laurel and Grove.....	1		
Perley.....	Northwest corner Laurel and Pierce.....	1	4	
	Southwest corner Perley and South State.....	1		
	Northwest corner Perley and Grove.....	1		
Downing.....	Northeast corner Perley and Pierce.....	1	3	
	South side Downing, near old brook.....	1		
	South side Downing, opposite Grove.....	1		
Clinton.....	Southeast corner Downing and Mills.....	1	5	
	Southwest corner Downing and Redwood Avenue.....	1		
	North side Clinton, opposite Harvard.....	1		
	North side Clinton, opposite Avon.....	1		
West.....	Northeast corner Clinton and Fruit.....	1	5	
	North side Clinton, near Snell's.....	1		
	North side Clinton, at State Fair grounds.....	1		
	North side West, near South Main.....	1		
	North side West, near Badger.....	1		
Avon.....	Northeast corner West and Mills.....	1	11	
	North side West, opposite Dakin.....	1		
	Northeast corner West and Broadway.....	1		
	Northwest corner Avon and South.....	1		
	Northwest corner Harrison and Morton.....	1		
Harrison....	North side Humphrey, near Kimball.....	1	1	
Humphrey....	Northeast corner Allison and Badger.....	1		
Allison....	North side Pillsbury, opposite Foster Ward.....	1		
Pillsbury....	Northeast corner Pillsbury and Broadway.....	1	3	
	Northwest corner Pillsbury and Kimball.....	1		
Carter.....	Northeast corner Carter and Eastman.....	1	1	

FIRE-HYDRANTS.—Continued.

STREETS.	LOCATIONS.	Number.	Total.
Stone . . . . .	North side Stone, 300 feet from Bow . . . . .	1	1
Holly . . . . .	North side Holly, west of South Main . . . . .	1	1
McKinley . . . . .	North side, at Dunklee Street proposed extension . . . . .	1	1
Rockingham . . . . .	Northeast corner Rockingham and Broadway . . . . .	1	1
	North side Rockingham, at Donovan . . . . .	1	2
Iron Works Rd	South side Iron Works Road, at Brown's . . . . .	1	1
Prospect . . . . .	Northwest corner Prospect and Granite Avenue . . . . .	1	1
	East side Prospect, north of Granite Avenue . . . . .	1	2
Curtice Ave. . . . .	North side Curtice Avenue, near John C. Kenney's . . . . .	1	1
North State . . . . .	West side North State, at Water-Works storehouse . . . . .	1	1
	Northeast corner North State and Foster . . . . .	1	1
	East side North State, at Tahanto School . . . . .	1	1
	Northeast corner North State and Curtice Avenue . . . . .	1	1
	East side North State, near W. H. Perry's . . . . .	1	1
	East side North State, near north entrance Blossom Hill Cemetery . . . . .	1	1
	West side North State, near Calvary Cemetery . . . . .	1	1
	East side North State, near A. L. Colburn's . . . . .	1	1
	East side North State, near Thomas Fox's house . . . . .	1	1
	West side North State, at south line of prison wall . . . . .	1	1
	West side North State, at north line of prison wall . . . . .	1	1
	East side North State, near Asa L. Gay's . . . . .	1	1
	Northwest corner North State and Palm . . . . .	1	1
	West side North State, near Concord Woodworking Co. . . . .	1	1
	East side North State, near C. H. Farnum's . . . . .	1	1
	East side North State, near Cyrus R. Farnum's . . . . .	1	1
	East side North State, near M. H. Farnum's . . . . .	1	1
	East side North State, opposite Dolan . . . . .	1	1
	East side North State, opposite John H. Flood's . . . . .	1	1
	West side North State, opposite S. Abbott's . . . . .	1	20
Palm . . . . .	North side of Palm, west of Fairbanks . . . . .	1	1
WEST CONCORD.			
North State . . . . .	Southeast corner North State and K. . . . .	1	1
	Northeast corner North State and Peabody . . . . .	1	1
	East side North State, at George Partridge's . . . . .	1	1
	East side North State, near engine house . . . . .	1	1
	East side North State, opposite D. Holden's . . . . .	1	1
	West side North State, near west mill . . . . .	1	1
	East side North State, opposite Simeon Partridge's . . . . .	1	1
	East side North State, near Mr. Harrington's . . . . .	1	1
	East side North State, opposite A. Hollis' . . . . .	1	1
	East side North State, near Sewall's Falls Road . . . . .	1	10
Fisher . . . . .	Southwest corner Fisher and Engel . . . . .	1	1
View . . . . .	Northeast corner View and K. . . . .	1	1
Electric . . . . .	Northeast corner of Electric and North State . . . . .	1	1
	North side Electric, near power station . . . . .	1	2
Clarke . . . . .	Northeast corner Clarke and Fisher . . . . .	1	1
Lake . . . . .	East side Lake, near S. W. Kellom's . . . . .	1	1
	West side Lake, near H. C. Holden's . . . . .	1	1
	West side Lake, near Mrs. C. H. Besse's . . . . .	1	1
	East side Lake, near Mrs. H. C. Holden's . . . . .	1	1
	South side Lake, near Quaker . . . . .	1	5
Knight . . . . .	South side Knight, opposite railroad station . . . . .	1	1
Hutchins . . . . .	North side Hutchins, near B. T. Putney's . . . . .	1	1
	North side Hutchins, near C. & C. Railroad . . . . .	1	1
	North side Hutchins, at Turcotte's . . . . .	1	3
Second . . . . .	North side Second, near A. H. Knight's . . . . .	1	1
Penacook Rd. . . . .	West side Penacook Road, opposite Frost's . . . . .	1	1
	West side Penacook Road, opposite Blanchard's . . . . .	1	1
	West side Penacook Road, near Warner Road . . . . .	1	3

## FIRE-HYDRANTS.—Continued.

STREETS.	LOCATIONS.	Number.	Total.
PENACOOK.			
Main.....	West side Main, at Annis's.....	1	
	West side Main, at Garvin's.....	1	
	West side Main, south of Willow Hollow.....	1	
	West side Main, near Mr. Currier's.....	1	
	West side Main, at south end of Woodlawn Cemetery..	1	
	West side Main, at north end of Woodlawn cemetery..	1	
	West side Main, opposite Stark.....	1	
	West side Main, near Hoyt's garage.....	1	
	West side Main, near 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	14
West Main...	West side West Main, opposite cemetery.....	1	
	West side West Main, at Pine.....	1	2
High.....	Northwest corner High and Stark.....	1	
	East side High, opposite Summit.....	1	
	Northwest corner High and Maple.....	1	
Washington..	Northwest corner High and Spring.....	1	4
	Southeast corner Washington and Union.....	1	
	South side Washington, opposite John Whitaker's.....	1	
Elliott.....	South side Washington, opposite Charles.....	1	
	South side Washington, near Contoocook bridge.....	1	4
	Northeast corner Elliott and Electric Avenue.....	1	1
Charles.....	Southwest corner Charles and Warren.....	1	
	North side Charles, near George 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	
Crescent....	North side East Canal, near Crescent.....	1	2
	West side Crescent, north 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	
	South side Merrimack, opposite Symonds' factory.....	1	
	North side Merrimack, near road to Island.....	1	
	Northwest corner Merrimack and Penacook.....	1	7
Summer.....	North side Summer, opposite High.....	1	
	Northeast corner Summer and Centre.....	1	
	North side Summer, opposite Church.....	1	3
Spring.....	Northeast corner Spring and Church.....	1	1
Maple.....	Northeast corner Maple and Pleasant.....	1	1
Winter.....	North side Winter, near Pleasant.....	1	1
Centre.....	Northwest corner Centre and Spring.....	1	
	West side Centre, at Corbett's.....	1	2
Cross.....	Southwest corner Cross and Summer.....	1	1
Rolfe.....	North side Rolfe, near James Corbett's.....	1	
Penacook....	Northwest corner Rolfe and Penacook.....	1	2
	West side Penacook, opposite A. W. Rolfe's.....	1	
	West side Penacook, at E. L. Davis'.....	1	
	East side Penacook, at John Chadwick's.....	1	3
Whole number public hydrants.....			417

FIRE-HYDRANTS.—*Concluded.*

LOCATIONS.	Number.	Total.
PRIVATE HYDRANTS.		
Concord Shoe Factory.....	1	
Boston & Maine Railroad, upper yard.....	4	
Boston & Maine Railroad, new shops.....	15	
State Prison.....	6	
Abbot-Downing Co.'s yard .....	6	
Page Belting Co.'s yard.....	10	
W. P. Ford & Co.'s yard.....	1	
N. H. State Hospital yard.....	10	
Concord Gas Light Co.'s yard.....	1	
St. Paul's School .....	1	
Water Works Pumping Station grounds.....	1	
Wm. B. Durgin Co. ....	1	
N. H. Spinning Mill .....	4	
Crescent Worsted Co. ....	2	
Whole number private hydrants .....		63

E.

**SUMMARY OF STATISTICS.**

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FOR THE YEAR ENDING DECEMBER 31, 1911.

In form recommended by the New England Water-Works Association.

## CONCORD WATER-WORKS.

CITY OF CONCORD, COUNTY OF MERRIMACK, STATE OF NEW HAMPSHIRE.

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## GENERAL STATISTICS.

Population by census of 1910—21,497.

Date of construction—1872.

By whom owned—City of Concord.

Source of supply—Penacook Lake.

Mode of supply—Gravity, also pumping to reservoir for high service and fire protection.

## PUMPING STATISTICS.

1. Builders of pumping machinery—Henry R. Worthington, Harrison, N. J.
2. Description of fuel used—*a.* Kind—bituminous.  
*b.* Brand of coal—New River.  
*c.* Average price of coal per gross ton delivered, \$4.531.  
*d.* Percentage ash, 10%.
3. Coal consumed for the year—236 tons.

4. (Pounds of wood consumed)  $\div$  3 = equivalent amount of coal—8,079.

5. Total equivalent coal consumed for the year for pumping purposes—239.58.

6. Total pumpage for the year without allowance for slip—286,584,145 gallons.

7. Average static head against which pump works—199.30 feet.

8. Average dynamic head against which pump works—200.46 feet.

9. Number of gallons pumped per pound of equivalent coal—534.

10. Duty = 
$$\frac{86,584,145 \text{ gallons pumped,} \times 8.34 \text{ (lbs.)} \times 100 \times \text{dynamic head, } 200.46}{\text{Total fuel consumed, } 536,670 \text{ pounds.}} = 89,278,550$$

Cost of pumping figured on pumping station expenses, \$3,340.53.

11. Per million gallons pumped—\$11.65.

12. Per million gallons raised one foot (dynamic)—\$0.058.

#### STATISTICS RELATING TO DISTRIBUTION SYSTEM.

##### MAINS.

1. Kind of pipe—cast iron and cement-lined.
2. Sizes—from two-inch to twenty-four-inch.
3. Extended—3,633 feet during year.
4. Renewed—3,963 feet during year.
5. Discontinued—614 feet during year.
6. Total now in use—68.54 miles.
7. Number of leaks per mile for year—
8. Length of pipes two inches and less diameter—3.23 miles.

9. Number of hydrants added during year—public, 13; private, none.
10. Number of hydrants now in use—public, 417; private, 63.
11. Number of stop gates added during year—22.
12. Number of stop gates now in use—982.
13. Number of stop gates smaller than four inch—none.
14. Number of blow-off gates—82.
15. Range of pressure on mains at center of city—88 pounds high service and 48 pounds low service.

## SERVICES.

16. Kind of pipe—cement-lined.
17. Sizes—three-fourths-inch to ten-inch.
18. Extended—941 feet.
19. Discontinued—119 feet.
20. Total now in use—87,099 feet.
21. Number of service taps added during year—38.
22. Number now in use—3,738.
23. Average length of service—23.3 feet.
24. Average cost of service for the year—
25. Number of meters added during year—145.
26. Number now in use—2,153.
27. Percentage of services metered—57.59.
28. Percentage of receipts from metered water—77.2.
29. Number of elevators added—none.
30. Number now in use—10.
31. Number of standpipes for street watering—42.

## REPORT OF THE BOARD OF PUBLIC WORKS.

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*To the Board of Aldermen:*

In compliance with the city charter, the Board of Public Works herewith submits its first annual report for the year ending December 31, 1911.

The board has held forty-eight meetings, nine of which were hearings held in various parts of the city on the premises covered by the petitions considered.

One hundred and ten petitions have been presented to the board and disposed of as follows: eighty-five were granted; in nine cases the petitioners were given leave to withdraw; two were referred to the mayor with full power and fourteen are still on the table for further consideration.

Nine petitions for street lights have been considered. Five were granted, one given leave to withdraw and three are still on the table for consideration. The petitions granted were for lights in the following locations: one arc light on Bridge Street at the alley between Stickney Block and Orr & Rolfe Block; five incandescent lights on South Pembroke Road, from "Lower Bridge" to top of Black Hill; one incandescent light at junction of Fruit and Woodman Streets; two Wellsbach gas-lights on Downing Street, one opposite No. 74, on south side of street, and one opposite No. 62, on north side of street. In the East Concord lighting precinct one incandescent light was located on Eastman Street near Boston & Maine Railroad station.

Mr. Alfred Clark, commissioner of highways under the old charter, was retained as superintendent of streets under the new charter.

For a detailed account of work on streets and highways, garbage and sprinkling precincts, including receipts and expenditures, see report of superintendent of streets, herewith appended.

For report of the work in the several sewer precincts, see report of the city engineer, herewith appended.

Respectfully submitted,

CHARLES J. FRENCH, *Mayor*,  
OLA ANDERSON,  
ELMER H. FARRAR,  
R. A. BROWN,

*Board of Public Works.*

**REPORT OF THE HIGHWAY DEPARTMENT.**

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OFFICE OF SUPERINTENDENT OF STREETS.

*To the Board of Public Works:*

GENTLEMEN,—The superintendent of streets herewith submits the annual report relating to the operations and expenditures of the highway department for the year ending December 31, 1911.

PERMANENT IMPROVEMENTS.

The first work taken up at the beginning of the season was the macadamizing of North Main Street from Church to Pearl. The macadam with Tarvia binder, which was put in the season before on the section of North Main from Church Street north, proved very satisfactory and the same kind of macadam was built this year except for a slight difference in the surface treatment. It was expected that clay might be found in the excavating and that considerable filling would be necessary, but such did not prove to be the case and therefore a balance was left on the appropriation. The gutters were paved, sidewalk bankings graded and the street much improved in general appearance. A section of this street should be macadamized each year until Center Street is reached as it is in bad shape.

A section of the Hopkinton road was macadamized next. This was a continuation of the water-bound macadam put in two years ago. Both pieces will need surface treatment of tar or asphalt next season or they will not stand the traffic. Such treatment would be in the way of economy.

South Street was graveled for 2,100 feet in length, which

completes a good gravel road from Bow line to Carter Street. South Street from Carter to Pleasant is in very bad condition, and if a section of macadam could be built each year, as has been done on others, we should soon have a fine road all the way to Bow line.

Another section of the Loudon road was graveled this year and the same amount of work done another year would complete work on that road. The Pittsfield road from the Loudon road to the Soucook River bridge should be graveled, for at the present time that is the worst piece of road which we have in Concord.

South Main Street from Thorndike to Perley has been in very bad condition for several years, but work on it has been put off from year to year on account of the sewer work which might have to be done there. If nothing is to be done on the sewer soon this street should be reconstructed.

Capitol Street from State to Green has been laid twenty-two years, and from State to Main twenty years, and no great amount has been expended on it for repairs. It now needs resurfacing badly.

#### RECONSTRUCTION AND RESURFACING.

This year it was necessary to resurface that portion of Pleasant Street called the "Eddy Road." The two and a half inch trap rock surface was completely worn away and the road was reconstructed with Tarvia X as a binder. The remainder of the road as far as St. Paul's School has been laid over eight years and should be resurfaced the coming season. The daily automobile traffic over this road is heavy and the road has withstood it exceedingly well but it needs some surface treatment immediately. The same applies to the Penacook road. Several sections of that have been in a long time and one piece about two thou-

sand feet in length was built fifteen years ago and is completely worn out and will have to be reconstructed. Tarvia B was used on a portion of the Penacook road this year and more should be used next. The same surface treatment was used on the South Pembroke road and I should advise further use of it there another year. The use of tar or asphalt on macadam roads, while aiding in the laying of dust, is used more to bind the macadam together that it may withstand the traffic. The same material could not be used on an unimproved street but there are several streets where some dust layer should be used which would help to preserve the road as well as lay the dust. The road through West Concord from the railroad crossing to the macadam on the Penacook road is very dusty, owing to the constant automobile traffic, and I would recommend the use of some dust layer there. There are other streets through which the street cars run where the sprinkling with water is hardly a sufficient dust layer under all weather conditions and I think some oil could be used to good advantage.

#### BRIDGES.

The Federal, Horse Hill, and a number of smaller bridges have been repaired and replanked this year. The Pembroke and the Main Street bridge, Penacook, should be replanked next season.

#### CATCH BASINS.

Hardly the usual number of catch basins were built this year, but there are a number of new ones which should be put in and several old ones to be reconstructed next summer.

## CONCRETE WALKS.

Less than an average number of petitions for concrete walks and edgestone were granted this year, but all were put in excepting two small pieces in Penacook and the edgestone around the Historical Building on Park, Green and Centre. It was so late when the contractors completed their work there that it was thought best to wait until spring before putting in the edgestone. The usual amount of concrete walks were repaired.

## TREES.

To properly care for the trees in Concord is becoming a problem. We have a great many, some of them quite old, which require trimming and a number should be removed. A few years ago the brown-tail moth arrived in Concord and brought unlimited work to the department in the effort to exterminate them. We may feel that the effort has been fairly successful for only a few trees have been lost on account of them and this year there seem to be fewer nests than last. But a new pest, the elm-tree beetle, threatens to do more harm as they are harder to exterminate. Last summer the elms in different parts of the city began to show the ravages of the pest. The amount of time in which any work is effective in destroying the beetle is short, as the spraying should be done as soon as the leaves appear. It is impossible to spray the number of elms which we have in Concord at the proper time with only one sprayer and if we are to preserve them, it is a matter to which the board should give their immediate attention. I also find that the gypsy moth is becoming numerous in the city and the extermination of them will require considerable expenditure of time and money. Possibly the state moth agent may aid us in the work against this pest. Beside the work

of extermination of the various moth pests, the trimming and removing of old trees, something should be done in setting out new trees to take the place of the old ones. But I would call your attention to the planting of poplar trees in Concord. A few years ago these rapid growing trees were set out quite extensively. They are now trees of considerable size and we are beginning to have trouble with the sewers which have become filled with the roots. In many western cities they have an ordinance prohibiting the planting of poplar trees. While such measures may not be necessary in Concord, I think it would be well to discourage the planting of poplars. When everything is taken into consideration I think you can easily see that the business of caring for the trees in Concord requires a great deal of time and attention and the work necessary is increasing each year.

#### SPRINKLING.

The street sprinkling has been done the past season in the usual manner. Several petitions to have the precinct enlarged are now in the hands of the board and if these are granted, unless some other dust layer should be used on some of the streets, it will be necessary to purchase more sprinklers. A new sprinkling precinct was established in Penacook instead of doing the work by subscription as formerly. I think it would be advisable for that precinct to own the sprinkling cart the same as is done in the city proper.

#### GARBAGE.

The amount of garbage collected was some three hundred loads more than last year. The method of collecting the garbage and paper has proved satisfactory, but it is becoming a problem to dispose of it. It becomes necessary each

year to haul it farther, which increases the expense. Fire destroyed the crematory on the river bank early in the season, which made it necessary to build a new one.

#### GENERAL MAINTENANCE.

From the appropriation for general maintenance come the general repairing and grading of all streets and sidewalks, the care of bridges, drinking fountains and watering-troughs, care of ice and snow, maintenance of the city stable where we have thirteen horses, and all the miscellaneous expenses of the department. Many years December is an expensive month on account of heavy storms, and never feeling sure what it may be, it is necessary to exercise considerable economy in the expenditure of this appropriation throughout the year. There are always a number of repairs which should be made, but the appropriation will not allow the expenditure. This year there was a small balance which could have been used to good advantage in repairs, as the expense for caring for ice and snow in December was not heavy. There should be a new shed and store-room built at the city stable lot, as we have not sufficient suitable room to store all the equipment of the department.

#### ROAD CONVENTIONS.

Being a member of the Massachusetts Highway Association, it has been my fortune to attend several interesting meetings of that society and also to attend the American Road Builders' Convention, at Rochester, N. Y. Both of these societies help to keep one up to date in all matters pertaining to road-building. The road convention held in Concord, December 13 and 14, was interesting and instructive and I hope this first successful meeting may be followed by one annually. Such conventions are helpful and

deal with a subject which is becoming of the greatest importance to the people.

For the interest which the Board of Public Works has taken in the work of the highway department and for the manner in which they have dealt with various problems brought before them, I wish to express my appreciation.

Respectfully submitted,

ALFRED CLARK,  
*Superintendent of Streets.*

## WARD ONE.

STREET.	Work.	Expense.
Borough Road .....	General repairs .....	\$18.75
Bye .....	" .....	25.88
Centre .....	" .....	55.40
	Repairing concrete walks.....	9.80
Charles .....	" .....	1.23
	General repairs .....	115.67
Church .....	" .....	1.89
Crescent .....	" .....	2.21
Cross .....	" .....	12.45
	New concrete walks .....	41.19
East Canal .....	General repairs .....	35.58
Elliott .....	" .....	12.45
Elm .....	" .....	82.08
	Building sidewalks.....	120.65
Fowler .....	General repairs .....	37.13
High .....	" .....	40.05
Horse Hill Road .....	" .....	125.44
Horse Hill Road (Horse Hill) .....	" .....	154.34
Main .....	" .....	135.29
	Repairing concrete walks.....	32.42
Maple .....	General repairs .....	1.43
Merrimack Avenue .....	" .....	1.38
Merrimack .....	" .....	44.55
Penacook .....	" .....	43.54
Pleasant .....	" .....	9.13
River Road .....	" .....	593.47
River Hill Road .....	" .....	11.33
Rolfe .....	" .....	19.39
Runnells .....	" .....	35.02
Sawyer Road .....	" .....	46.38
Scales .....	" .....	41.70
Spring .....	" .....	31.39
	Repairing concrete walks .....	31.38
Summer .....	" .....	2.83
	General repairs .....	51.14
Summit .....	" .....	2.60
Sweatt's Hill Road .....	" .....	15.00
Union .....	" .....	13.78
Walnut .....	" .....	91.27
	Repairing concrete walks.....	2.56
Warner Road .....	General repairs .....	8.83
Warren .....	" .....	14.83
Washington .....	" .....	70.28
Webster .....	" .....	2.21
Webster Road .....	" .....	30.06
West Canal .....	" .....	6.96
West Main .....	" .....	41.65
Winter .....	" .....	3.57

## WARD TWO.

STREET.	Work.	Expense.
Canterbury Road .....	General repairs .....	\$15.42
Cemetery Road .....	" .....	2.33
Curtis Road .....	" .....	15.07
Eastman .....	" .....	27.97
East Penacook .....	" .....	2.94
Flaghole Road .....	" .....	9.33

WARD TWO.—*Concluded.*

STREET.	Work.	Expense.
Graham Road .....	General repairs .....	\$48.49
Haywood Road .....	" " .....	11.67
Hot Hole Pond Road.....	" " .....	48.08
Intervale Road.....	" " .....	54.80
Kearsarge Road.....	" " .....	7.08
Kilburn Road.....	" " .....	4.30
Larkin Road.....	" " .....	3.66
Loudon Road .....	" " .....	27.11
" " Hoit District .....	" " .....	9.33
" " Sanborn District.....	" " .....	21.00
" " Virgin District .....	" " .....	7.00
Mooney Road .....	" " .....	7.06
Mountain Road .....	" " .....	8.77
Pecker.....	" " .....	4.67
Pembroke .....	" " .....	74.81
Penacook.....	" " .....	278.89
Penacook Road.....	" " .....	122.54
" " Hoit District.....	" " .....	84.68
Portsmouth.....	" " .....	17.52
Potter.....	" " .....	65.55
Sanborn .....	" " .....	11.67
Sewall's Falls Road .....	" " .....	4.67
Shaker Road .....	" " .....	77.63
" " Virgin District .....	" " .....	12.10
Shawmut.....	" " .....	50.80
Snows Pond Road .....	" " .....	10.68
Turnpike.....	" " .....	1.04
Tyargo.....	" " .....	9.33
Virgin .....	" " .....	61.45

## WARD THREE.

STREET.	Work.	Expense.
Beech Hill Road .....	General repairs .....	\$9.50
Bog Road .....	" " .....	35 14
Carter Hill Road.....	" " .....	63 05
Clark.....	" " .....	10.53
" " Dugway".....	" " .....	9.47
Engel .....	" " .....	13 00
Highland Road .....	" " .....	5.78
Hutchins.....	" " .....	48.84
K.....	" " .....	.44
Knight .....	" " .....	3 80
Lake .....	" " .....	7.28
Long Pond Road.....	" " .....	47.30
North State.....	" " .....	186.81
Number Four Road .....	Repairing concrete walks .....	66.07
Number Five Road .....	General repairs .....	66.61
Penacook .....	" " .....	44.48
Penacook .....	" " .....	2.00
Pine Hill Road.....	" " .....	13.36
Quaker.....	" " .....	1.13
River Road .....	" " .....	49.44
River Hill Road.....	" " .....	23.90
Saltmarsh Road.....	" " .....	43.40
Sand Hill Road .....	" " .....	.22
Sewall's Falls Road.....	" " .....	29.81
View .....	" " .....	.44
West Parish Road.....	" " .....	16.81

## WARD FOUR.

STREET.	Work.	Expense.
Abbott .....	General repairs .....	\$3.64
Academy .....	Repairing concrete walks .....	3.38
Auburn .....	General repairs .....	22.52
Beacon .....	General repairs .....	12.74
Blanchard .....	Repairing concrete walks .....	22.12
Bradley .....	Repairing concrete walks .....	4.13
Cambridge .....	General repairs .....	29.17
Center .....	General repairs .....	9.57
Chapel .....	Repairing concrete walks .....	.76
Church .....	Repairing concrete walks .....	8.24
Court .....	General repairs .....	37.43
East Penacook .....	General repairs .....	21.25
Fiske .....	New concrete walks .....	6.65
Forrest .....	General repairs .....	52.63
Franklin .....	Repairing concrete walks .....	3.68
Granite .....	General repairs .....	19.09
Harrod .....	General repairs .....	42.17
High .....	Repairing concrete walks .....	5.36
Highland .....	Repairing concrete walks .....	21.06
Holt .....	General repairs .....	20.12
Jackson .....	New concrete walks .....	5.66
Lyndon .....	General repairs .....	27.88
Maple .....	Repairing concrete walks .....	44.08
Montgomery .....	General repairs .....	3.45
North Essex .....	Repairing concrete walks .....	.79
North Main .....	Repairing concrete walks .....	6.00
North Spring .....	General repairs .....	1.08
North State .....	General repairs .....	27.47
Park Ridge .....	New concrete walks .....	180.63
Pearl .....	General repairs .....	6.92
Penacook .....	Repairing concrete walks .....	151.05
Pitman .....	General repairs .....	91.04
Ridge Road .....	Repairing concrete walks .....	13.14
Rowell .....	General repairs .....	5.03
Rumford .....	Repairing concrete walks .....	32.68
Summer .....	General repairs .....	117.78
Tremont .....	Macadamizing .....	2,220.30
Union .....	Repairing concrete walks .....	117.39
Vernon .....	Repairing concrete walks .....	35.75
Walker .....	General repairs .....	.79
Washington .....	Repairing concrete walks .....	30.77
White .....	Repairing concrete walks .....	71.38
Winter .....	General repairs .....	6.56
Westbourne Road .....	General repairs .....	1.19
	Repairing concrete walks .....	2.35
	General repairs .....	94.79
	General repairs .....	2.87
	Repairing concrete walks .....	52.98
	General repairs .....	2.98
	Repairing concrete walks .....	9.05
	Repairing concrete walks .....	34.27
	General repairs .....	16.44
	Repairing concrete walks .....	7.35
	Repairing concrete walks .....	62.54
	General repairs .....	49.16
	General repairs .....	15.58
	General repairs .....	.79
	General repairs .....	41.41
	General repairs .....	48.64
	Repairing concrete walks .....	101.65
	General repairs .....	7.81
	General repairs .....	12.86
	General repairs .....	1.19

## WARD FIVE.

STREET.	Work.	Expense.
Center.....	General repairs.....	\$11.57
Durgin.....	.....	2.83
Fremont.....	Repairing concrete walks.....	47.74
Giles.....	General repairs.....	.22
Green.....	.....	18.74
.....	Repairing concrete walks.....	6.66
Liberty.....	.....	35.73
.....	General repairs.....	5.83
Merrimack.....	.....	7.10
.....	Repairing concrete walks.....	29.42
North Main.....	.....	18.45
.....	“ “ roadway.....	63.52
.....	General repairs.....	1.21
North Spring.....	.....	23.03
.....	Repairing concrete walks.....	8.16
North State.....	.....	8.78
.....	“ “ roadway.....	21.75
Odd Fellows' Avenue..	.....	25.20
Park.....	General repairs.....	.54
Pine.....	.....	11.20
.....	Repairing concrete walks.....	105.23
Pleasant.....	.....	5.81
.....	General repairs.....	35.26
Prince.....	.....	72.57
.....	Repairing concrete walks.....	14.66
.....	“ “ roadway.....	22.10
School.....	General repairs.....	90.14
Warren.....	.....	43.03
.....	Repairing concrete walks.....	215.95
.....	“ “ roadway.....	26.11
West Washington..	General repairs.....	1.09
Woodman.....	.....	

## WARD SIX.

STREET.	Work.	Expense.
Clinton.....	General repairs.....	\$21.30
Concord.....	.....	38.21
.....	Repairing concrete walks.....	9.79
.....	New concrete walks.....	18.22
Downing.....	General repairs.....	24.84
.....	Repairing concrete walks.....	2.09
Elm.....	.....	18.00
.....	General repairs.....	10.82
Fayette.....	.....	12.14
.....	Repairing concrete walks.....	51.40
Fruit.....	General repairs.....	25.12
Grove.....	.....	30.70
.....	Repairing concrete walks.....	33.22
Laurel.....	.....	131.32
.....	General repairs.....	22.47
Marshall.....	.....	4.28
Monroe.....	“ “ .....	59.51
Oak.....	“ “ .....	2.78
Perley.....	“ “ .....	35.51
Pierce.....	“ “ .....	2.45
Pleasant.....	.....	11.19
.....	Repairing concrete walks.....	6.86

WARD SIX.—*Concluded.*

STREET.	Work.	Expense.
South.....	Repairing concrete walks.....	\$95.30
	General repairs.....	158.87
South Main.....	" ".....	70.31
South Spring.....	" ".....	60.06
South State.....	" ".....	115.06
	Repairing concrete walks.....	99.68
	New concrete walks.....	115.56
Thompson.....	General repairs.....	20.86
	Repairing concrete walks.....	16.62
Thorndike.....	" ".....	29.18
	General repairs.....	52.80
Wall.....	" ".....	5.81
	Repairing concrete walks.....	24.34

## WARD SEVEN.

STREET.	Work.	Expense.
Allison.....	General repairs.....	\$49.99
Birch.....	" ".....	11.33
Bog Road.....	" ".....	167.31
Broadway.....	" ".....	90.13
	New concrete walks.....	223.41
Clinton.....	General repairs.....	33.82
Downing.....	" ".....	21.15
Dunklee.....	" ".....	20.16
Dunbarton Road.....	" ".....	16.95
	New concrete walks.....	82.94
Fiske Road.....	General repairs.....	74.72
Glen.....	" ".....	4.64
Hall.....	" ".....	77.66
Hopkinton Road.....	" ".....	196.82
	Macadamizing.....	2,028.85
Hopkinton New Road.....	General repairs.....	126.97
Hopkinton Old Road.....	" ".....	109.06
Humphrey.....	" ".....	7.62
Iron Works Road.....	" ".....	220.59
Kensington Road.....	" ".....	50.44
Kimball.....	" ".....	2.09
Long Pond Road.....	" ".....	75.75
Mills.....	" ".....	7.86
Minot.....	" ".....	7.69
Morton.....	" ".....	2.58
Mose Brown Road.....	" ".....	2.56
North Fruit.....	" ".....	18.54
Noyes.....	" ".....	11.92
Pillsbury.....	" ".....	19.51
Pleasant.....	" ".....	221.94
	Re-surfacing.....	1,532.07
Rockingham.....	General repairs.....	23.39
South.....	" ".....	221.11
	Graveling.....	1,270.39
South Main.....	General repairs.....	298.19
South State.....	" ".....	27.74
Stickney Hill Road.....	" ".....	72.13
Stone.....	" ".....	67.96
Tuttle.....	" ".....	15.20
Water.....	" ".....	10.20
West.....	" ".....	68.73
Woodman.....	" ".....	13.00
Yale.....	" ".....	146.80

WARD EIGHT.

STREET.	Work.	Expense.
Bridge.....	General repairs.....	\$270.30
Chandler.....	" ".....	9.10
Clough's Mill Road.....	" ".....	8.10
Depot.....	" ".....	15.53
	Repairing concrete walks.....	1.76
Fayette.....	General repairs.....	28.08
Garvin's Falls Road.....	" ".....	41.61
Hill's Avenue.....	" ".....	4.49
Loudon Road.....	" ".....	257.47
	Building sidewalks.....	439.79
	Graveling.....	1,467.47
North Main.....	Repairing concrete walks.....	172.91
	roadway.....	43.90
North Pembroke Road.....	General repairs.....	214.87
Pittsfield Road.....	" ".....	88.63
Pleasant Extension.....	Repairing concrete walks.....	68.95
Sheep Road.....	General repairs.....	28.59
South Main.....	" ".....	48.60
	Repairing concrete walks.....	30.74
South Pembroke Road.....	General repairs.....	102.70
Stickney Avenue.....	" ".....	8.35
Sugar Bowl Road.....	" ".....	23.84
Thompson Road.....	" ".....	80.17

WARD NINE.

STREET.	Work.	Expense.
Albin Road.....	General repairs.....	\$2.28
Auburn.....	" ".....	27.52
Bradley.....	" ".....	3.78
Charles.....	" ".....	2.88
	Repairing concrete walks.....	47.57
Church.....	General repairs.....	10.84
Curtice Avenue.....	" ".....	6.31
Franklin.....	" ".....	18.27
Granite.....	" ".....	71.58
High.....	" ".....	160.27
Highland.....	" ".....	39.69
Little Pond Road.....	" ".....	110.08
Long Pond Road.....	" ".....	24.52
North State.....	" ".....	105.69
Penacook.....	" ".....	38.97
Perkins.....	" ".....	2.28
Rumford.....	" ".....	35.48
	New concrete walks.....	20.97
Walker.....	Repairing concrete walks.....	69.69
	General repairs.....	43.75

**FINANCIAL REPORT OF THE HIGHWAY  
DEPARTMENT.**

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GENERAL MAINTENANCE.

Appropriation, \$27,000.00

EXPENDITURES.

CENTRAL DISTRICT.

GENERAL REPAIRS.

Labor pay-rolls,	\$8,688.50
Acme Road Machinery Co., tar tank,	230.00
A. H. Britton & Co., supplies,	98.36
A. C. Taylor, gravel,	5.00
N. E. T. & T. Co., telephone service,	39.41
Holt Bros. Mfg. Co., repairs,	13.10
Samuel Holt estate, labor,	2.00
Herbert A. Stuart, axle grease,	.25
George L. Theobald, repairs,	.75
Tenney Coal Co., coal,	12.78
C. H. Martin & Co., supplies,	.25
Perley Badger, gravel,	4.20
Concord Fire Department, horses,	300.00
Marl Chase, gravel,	5.70
Caleb Brunel, overtime,	16.89
N. P. Richardson, gravel,	1.50
Alfred Clark, superintendent, expense to convention,	39.25
N. H. Patriot Co., advertising,	1.80
Monitor & Statesman Co., advertising,	2.10

C. H. Dudley, tallow,	\$0.28
Jeremiah Colby, gravel,	2.10
George H. Cilley, gravel,	17.80
A. B. Stearns, gravel,	6.40
Mark M. Blanchard, oil,	1.65
Ford Foundry Co., repairs, etc.,	.90
Robert Crowley, gravel,	2.30
John Jordan, gravel,	1.30
B. F. Griffin, gravel,	1.50
G. H. Baker, gravel,	.70
Concord Water-Works, water,	24.00
W. L. Jenks & Co., supplies,	72.66
Concord Electric Co., lights,	258.97
Concord Hardware Co., supplies,	37.04
Thompson & Hoague Co., supplies,	25.08
G. S. Milton & Co., repairs, etc.,	6.32
B. & M. R. R., freight,	16.74
Hutchinson Bldg. Co., stakes, etc.,	7.44
C. H. Swain & Co., repairs,	10.45
Star Stamp Co., stamps,	1.00
C. F. Nichols & Son, supplies,	5.90
E. C. Eastman, supplies,	2.50
Ira C. Evans Co., supplies,	107.19
Alfred Clark, superintendent, cash paid out,	24.15
George L. Theobald, horses,	275.00
Rumford Printing Co., books,	32.00
A. R. Andrews, supplies,	6.75
C. C. Martin, shoeing,	57.40
Norman Nicholson, shoeing,	31.60
Ross W. Cate, shoeing,	61.50
W. S. Dole, grain, etc.,	818.70
J. T. Walker, hay,	594.45
F. W. Page, hay,	442.96
W. A. Sleeper, repairs,	11.30

R. J. Macguire, veterinary services,	\$54.45	
C. Pelissier & Co., repairs, etc.,	52.19	
Thomas Robinson, oil,	3.00	
Ford & Kimball, repairs,	6.12	
George D. Huntley, repairs,	92.40	
Concord Foundry & Machine Co., re- pairs,	8.50	
Mrs. H. W. Lakin, laundry,	6.00	
Tenney Coal Co., coal,	15.00	
Robert Crowley, coal,	24.50	
Charles Millar & Sons Co., pipe,	124.38	
George F. Tandy, repairs concrete roadway,	406.75	
A. B. Black Road Machinery Co., re- pairs,	215.25	
Page Belting Co., repairs,	78.13	
	<hr/>	\$13,514.54

## CULVERTS.

Labor pay-rolls,		50.51
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## SIDEWALKS AND CROSSINGS.

Labor pay-rolls, repairing,	\$152.90	
Labor pay-rolls, building,	572.36	
	<hr/>	725.26

## SIGNS.

Labor pay-rolls,	\$2.15	
George Prescott, lettering signs,	5.20	
Fletcher-Prescott Co., lettering signs,	4.00	
	<hr/>	11.35

## WATERING TROUGHS, AND DRINKING FOUNTAINS.

Labor pay-rolls,	\$61.49	
Concord Water-Works, water,	180.00	
George B. Quimby, use watering trough,	3.00	
Frank Bourdeau, use watering trough,	3.00	
M. E. Prescott, labor on trough,	41.00	
G. S. Milton & Co., repairs,	9.72	
W. L. Jenks & Co., repairs,	.63	
A. H. Britton & Co., supplies,	3.61	
Orr & Rolfe, repairs,	5.64	
	<hr/>	\$308.09

## GUTTERS.

Labor pay-rolls, repairing,	\$4.47	
paving,	20.60	
cleaning,	2,108.23	
	<hr/>	2,133.30

## BRIDGES.

Labor pay-rolls,	\$71.96	
Concord Electric Co., lights,	40.01	
Concord Lumber Co., lumber,	477.45	
W. L. Jenks & Co., supplies,	11.25	
	<hr/>	600.67

## MACADAM.

Labor pay-rolls, resurfacing,	\$471.83	
Labor pay-rolls, repairing,	124.53	
George F. Tandy, tar,	72.00	
Barrett Mfg. Co., tarvia,	645.95	
B. & M. R. R., freight,	155.86	
	<hr/>	1,470.17

## FENCES.

Labor pay-rolls,	\$25.67	
Orr & Rolfe, supplies, etc.,	8.15	
Ford & Kimball, posts,	2.66	
Concord Hardware Co., paint,	4.30	
	<hr/>	\$40.78

## WINTER EXPENSE.

Labor pay-rolls, breaking roads,	\$23.11	
plowing walks,	195.60	
shoveling walks and		
crossings,	27.75	
sanding walks,	518.38	
leveling snow,	363.50	
rolling snow,	24.00	
snowing bridges,	11.79	
draining gutters,	452.40	
J. N. Abbott, sand,	9.20	
Alice G. Hutchinson, rent of land,	12.00	
A. B. Black Road Machinery Co., plow,	55.00	
George L. Theobald, repairs,	.50	
	<hr/>	1,693.23

## PENACOOK DISTRICT.

## GENERAL REPAIRS.

Labor pay-rolls,	\$1,166.13
Edward Ordway, gravel,	3.00
Edward H. French, gravel,	6.70
D. F. Dudley, gravel,	23.40
Edward Bacon, agent, gravel,	23.10
H. H. Chase, gravel,	16.80
D. Warren Fox, supplies,	10.15

## BOARD OF PUBLIC WORKS.

395

C. M. & A. W. Rolfe, lumber,	\$2.24	
J. E. Brown, repairing tools,	13.65	
Sanborn Bros., fuse,	.15	
Foote, Brown & Co., supplies,	1.79	
George Neller estate, pipe,	5.64	
W. H. Meserve, cement,	.52	
	<hr/>	\$1,273.27

## CULVERTS.

Labor pay-rolls,	\$132.72	
Foote, Brown & Co., supplies,	.66	
C. H. Barnett, brick,	.40	
	<hr/>	133.78

## SIDEWALKS AND CROSSINGS.

Labor pay-rolls, repairing,	\$298.41	
Labor pay-rolls, building,	82.83	
Sanborn Bros., powder and fuse,	2.80	
	<hr/>	384.04

## FENCES.

Labor pay-rolls,	\$19.02	
D. Warren Fox, supplies,	.44	
Foote, Brown & Co., supplies,	2.40	
C. M. & A. W. Rolfe, lumber,	8.67	
	<hr/>	30.53

## WATERING TROUGHS AND DRINKING FOUNTAINS.

Labor pay-rolls,	\$8.18	
Concord Water-Works, water,	40.00	
C. M. & A. W. Rolfe, use watering trough,	3.00	

T. S. Holland, use watering trough,	\$3.00	
E. E. Babb, repairs,	1.00	
	<hr/>	\$55.18

## GUTTERS.

Labor pay-rolls, cleaning,	\$356.74	
Labor pay-rolls, repairing,	32.74	
	<hr/>	389.48

## BRIDGES.

Labor pay-rolls,	\$58.90	
Penacook Electric Light Co., lights,	50.00	
C. M. & A. W. Rolfe, lumber,	107.09	
Foote, Brown & Co., supplies,	1.66	
D. Warren Fox, supplies,	1.80	
	<hr/>	219.45

## MACADAM.

Labor pay-rolls, repairing,	\$9.65	
Labor pay-rolls, oiling,	20.75	
	<hr/>	30.40

## WINTER EXPENSE.

Labor pay-rolls, sanding walks,	\$149.80	
plowing walks,	83.65	
draining gutters,	144.84	
snowing bridges,	11.78	
rolling snow,	11.99	
leveling snow,	10.17	
breaking roads,	13.86	
shoveling walks and crossings,	17.66	
B. & M. R. R., car boards,	1.60	
	<hr/>	445.35

## WEST CONCORD DISTRICT.

Labor pay-rolls, general repairs,	\$404.74	
sanding walks,	44.91	
plowing walks,	61.56	
draining gutters,	67.48	
snowing bridges,	11.55	
leveling snow,	3.81	
repairing sidewalks,	37.87	
watering troughs,	6.66	
fences,	7.03	
culverts,	22.41	
cleaning gutters,	167.54	
J. M. Crossman, repairing tools,	7.80	
Concord Water-Works, water,	40.00	
G. S. Milton & Co., repairs,	3.20	
Concord Electric Co., light,	16.00	
		\$902.56

## EAST CONCORD DISTRICT.

Labor pay-rolls, general repairs,	\$790.19
sanding walks,	16.74
plowing walks,	17.50
leveling snow,	1.41
breaking roads,	2.27
draining gutters,	17.14
cleaning gutters,	15.67
bridges,	2.67
culverts,	2.89
W. L. Jenks & Co., pipe,	3.09
Concord Hardware Co., pipe,	1.16
Frank Fanny, use watering trough,	3.00
J. C. Farrand estate, gravel,	10.50
Concord Electric Co., gravel,	15.70

## CITY OF CONCORD.

Mary F. Robinson, water for trough,	\$10.00	
Harry B. Sanborn, posts and rails,	1.00	
M. J. Lacroix, repairs,	3.00	
	<hr/>	\$913.93

## PENACOOK INTERVALE DISTRICT.

Labor pay-rolls, general repairs,	\$34.75	
Ai J. Smith, use watering trough,	3.00	
	<hr/>	37.75

## HOIT DISTRICT.

Labor pay-rolls, general repairs,	\$155.81	
W. L. Jenks & Co., pipe,	7.70	
Fred Mayo, use watering trough,	3.00	
Luther Nutting, gravel,	1.50	
	<hr/>	168.01

## VIRGIN DISTRICT.

Labor pay-rolls, breaking roads,	\$4.89	
general repairs,	91.26	
W. L. Jenks & Co., pipe,	24.64	
F. P. Virgin, use watering trough,	3.00	
	<hr/>	123.79

## SANBORN DISTRICT.

Labor pay-rolls, general repairs,		51.35
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## POTTER STREET DISTRICT.

Labor pay-rolls, general repairs,	\$69.25	
John T. Tenney, use watering trough,	3.00	
	<hr/>	72.25