

ditches put back in as good condition as found, but this is seldom the case; and it seems that the matter of licensing drain-layers should be confined to a few competent and responsible men.

The amount of loose paper thrown around on our main streets has reached large proportions. Up to the present time one man has collected it in baskets, but the department has found it necessary to purchase a hand-cart for collecting. Barrels are to be placed at different places for collection, and we hope to keep the streets free of loose paper.

The appearance of the maple tree borer on many of our shade trees was brought to my attention during the summer. The matter of some method of destroying the pest was investigated, but no satisfactory one found. As a consequence many dead trees will have to be removed next season.

During the year the Pembroke bridge was replanked by laying a new course over the old. Federal bridge at East Concord has had new plank throughout. The iron bridge at Penacook will have to have an entire new floor in the roadway. The Twin bridge, at the same place, is in a very bad condition and a new one will be needed before very long. Some repairs were made on it this year but the structure seems almost beyond repair. The grading of the approaches at the Horse Hill bridge was completed this year and railings put up.

The large shed on the city lot on School street has been re-shingled during the year. At the present time we are so crowded for storage room that something ought to be done at once. The new shed might be extended and the old ones taken down, as they are useless on account of leaking badly.

In my last report I recommended the separation of fire and highway departments. Since April the fire department teams have been hired and paid the same as others. The separation has been, as I believe, satisfactory to both departments.

At the close of the last administration an ordinance was passed putting the matter of fighting brush fires on this department. As that did not seem to be in our line of business it was transferred back to the fire department.

Usually, considerable sprinkling is done during October, but

owing to the low condition of water in Penacook lake none was done this season. This left on hand a small amount of the appropriation.

New street signs have been put up on all streets in West Concord and on most streets in Penacook.

The month of December having been very favorable for this department, a small sum of money remains unexpended.

In conclusion, I sincerely thank His Honor Mayor Robinson, members of the city council, and the committee on roads and bridges, for their support and many courtesies shown the department.

Respectfully submitted,

ALFRED CLARK,  
*Commissioner of Highways.*

EXPENSE OF LABOR ON STREETS.

Repairing lower Soucook bridge . . . . .	\$33.00
Relaying floor in East Concord bridge . . . . .	446.89
Laying plank in Pembroke bridge . . . . .	304.49
Filling sand house on School street . . . . .	33.43
"    "    Bridge street . . . . .	46.20
Removing limbs and trees on Green and Rumford streets . . . . .	8.00
Removing trees on South State, Grove, and West streets . . . . .	9.75
"    "    South Spring and School streets . . . . .	6.00
"    tree on Washington street . . . . .	31.00
"    "    Pleasant " . . . . .	3.50
"    "    North State " . . . . .	3.25
"    "    North Spring " . . . . .	3.50
"    "    Centre " . . . . .	3.00
"    "    Elm " . . . . .	2.00
Building gravel crossing on West street at Morton . . . . .	3.70
Building crossing on Park street near State, 30 feet by 8 feet wide . . . . .	116.98
Repairing crossing on Main street, opposite state house . . . . .	5.25
"    "    "    at Bridge street . . . . .	2.25
"    "    "    at Freight " . . . . .	2.25

Repairing crossings on Main street . . . . .	\$7.16
Paving gutter on east side of Auburn street, from Centre, north, 20 feet by 4 feet wide . . . . .	7.50
Paving gutter on west side of Auburn street, from Centre, north, 380 feet by 4 feet wide . . . . .	49.44
Paving gutter on Fayette street, from State, east, 75 feet by 4 feet wide . . . . .	9.06
Paving gutter on School street, from west of Tahanto to west of Summit avenue, 172 feet by 4 feet wide . . . . .	19.80
Paving gutter on north side of Centre street, at junction of Washington, 285 feet by 4 feet wide . . . . .	27.25
Paving gutter on south side of School street, from Tahanto to Summit avenue, 183 feet by 4 feet wide . . . . .	17.50
Paving gutters on Main and Pleasant streets . . . . .	21.65
Paving Main street, at junction of Pleasant, with block paving . . . . .	24.50
Relaying gutter on east side of Main street, from Freight to opposite J. R. Hill estate . . . . .	19.60
Relaying gutter on west side of Main street opposite Freight street . . . . .	14.80
Relaying gutter on Garden street, from Rumford, west, 112 feet by 3 feet wide . . . . .	7.41
Relaying gutter on Hill's avenue . . . . .	12.70
Relaying gutters on North Main street, at Phenix block . . . . .	9.30
Cutting gutters on School street, opposite city shed . . . . .	6.10
Cutting gutters and putting in drive boxes on South street, from Bow line to M. T. Ladd's . . . . .	32.85
Cutting gutters and patching Broadway . . . . .	27.08
“ on Broadway, from West to Downing . . . . .	9.80
“ Gully hill . . . . .	15.78
Cutting gutters on South street from Humphrey to Pillsbury . . . . .	62.07
Cleaning gutters on North State street . . . . .	58.45
“ “ Rumford “ . . . . .	4.00
“ “ South Spring “ . . . . .	5.00
“ “ Warren “ . . . . .	16.50
“ “ South Main “ . . . . .	12.00

Cleaning gutters on Church street . . . . .	\$15.00
“ “ Gully hill . . . . .	2.75
Grading and tearing down barn on Rollins court . . . . .	22.75
“ Tim Chase road . . . . .	18.25
“ Granite street . . . . .	7.35
“ Sugar Bowl hill . . . . .	16.15
“ East Concord road . . . . .	137.25
Grading North State street with stone chips, 726 feet by 20 feet wide . . . . .	128.65
Grading Allison street with hardpan, from South street to Broadway . . . . .	164.86
Grading Eastman street, from junction of South and Allison to Pillsbury street . . . . .	53.92
Grading Turnpike street, south of hospital . . . . .	118.70
“ Pleasant street, opposite I. O. O. F. Home . . . . .	29.00
“ Holt street . . . . .	33.50
“ Woodman street . . . . .	25.50
“ Second street . . . . .	454.16
“ Giles street, north of School . . . . .	11.12
Grading Pleasant street, from Blanchard's store, east, 200 feet by 18 feet wide . . . . .	35.20
Grading West Washington street, from Liberty to junction of Warren, with gravel . . . . .	19.75
Grading Broadway, from West street, north, with gravel . . . . .	37.40
Grading Curtis avenue with stone chips, from State street, east, 180 feet by 18 feet wide . . . . .	15.11
Grading Church street hill . . . . .	10.00
“ Gully hill . . . . .	77.05
“ Tuttle street . . . . .	57.55
Grading with gravel and rolling with steam roller on Hill's avenue, from Main to Railroad street . . . . .	32.06
Grading Penacook street with stone chips . . . . .	30.00
“ Bridge street . . . . .	197.30
“ approaches to Lower bridge . . . . .	20.00
Grading North State street at West Concord, from Hutchins street, north, 1,177 feet by 20 feet wide . . . . .	186.14

## HIGHWAY DEPARTMENT.

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Grading Peabody, View, and K streets . . . . .	\$190.10
“ Pembroke road . . . . .	407.20
“ Hammond, Hall, and Water streets . . . . .	4,345.61
Macadamizing State street, from Park to Franklin . . . . .	1,028.52
“ North Main street, from Church to Pearl . . . . .	267.51
“ State street, from Park to Thompson . . . . .	881.25
Building gravel walk on Valley street . . . . .	23.71
Building gravel walk on Concord street, from new concrete to South street, 229 feet by 4 feet 6 inches wide . . . . .	9.45
Building gravel walk on Auburn street . . . . .	51.00
“ “ “ Rumford street . . . . .	10.00
Building gravel walk on West street and Broadway, opposite school lot . . . . .	16.65
Building gravel walk on Ferry street . . . . .	15.60
“ “ “ Allison street . . . . .	18.20
Building gravel walk on south side of Penacook street, from railroad east to Page Belting Co. . . . .	20.97
Building gravel walk on Charles street . . . . .	6.00
“ “ “ School street . . . . .	32.10
Grading walk on Jackson street with crushed stone . . . . .	2.75
Repairing sidewalk on Charles street . . . . .	4.50
“ “ “ Rumford street . . . . .	2.90
“ “ “ Noyes street . . . . .	3.25
“ “ “ Court street at Foster's . . . . .	10.25
“ “ “ Main street, opposite Bridge street . . . . .	23.67
Repairing sidewalk on Pleasant street, from Blanchard's to point near Liberty, with gravel and crushed stone . . . . .	37.35
Repairing sidewalk opposite Reed's store at Fosterville . . . . .	3.55
“ “ at Fosterville with gravel . . . . .	7.00
“ “ on Auburn street . . . . .	4.85
“ “ on Harvard street . . . . .	3.90
“ “ on North Main street . . . . .	4.38
“ “ on Tremont street . . . . .	3.47
Grading for concrete walk on south side of Church street, from Bradley to Jackson, 226 feet by 5 feet wide . . . . .	9.70

Grading for concrete walk on Beacon street . . .	\$6.50
Grading for concrete walk on south side of Washington street, from Rumford to Essex, 201 feet by 5 feet wide . . . . .	6.25
Grading for concrete walk on South Spring street, from Thompson to Lincoln, 138 feet by 6 feet 6 inches wide, and relaying curbing on east side . . . .	50.68
Grading for concrete walk on Downing street . . .	2.50
Grading for concrete walk on south side of Thorndike street, from Main, west, 96 feet by 5 feet wide . .	3.50
Grading for concrete walk on Franklin street . . .	2.00
“ “ “ Valley street . . . . .	9.75
“ “ “ Tremont street . . . . .	9.40
Grading for concrete walk on west side of Auburn street, from Centre street to north line of Mandigo's lot . . . . .	118.82
Grading for concrete walk on School street, from Pine to Gustavus Walker's, 200 feet by 6 feet wide, and setting 57 feet 5 inches curbing . . . . .	33.53
Grading for concrete walk on south side of Concord street, west, from J. Barry's west line, 68 feet by 4 feet 6 inches wide . . . . .	2.00
Grading for concrete on south side of Garden street, from Hoyt's east line past Shaw's new house . . .	2.75
Grading for concrete walk on Pleasant street, past Old Ladies' Home, 180 feet by 6 feet 6 inches wide . .	11.98
Grading for concrete walk on Tahanto street, from Yeaton's lot past Frank Adams's, 123 feet by 5 feet wide . . . . .	5.50
Grading for concrete walk on Holt street, from Warren, north, to old concrete . . . . .	10.27
Grading for concrete walk on Concord street, from South street, east, past C. G. Brown's lot . . .	4.25
Grading for concrete walk on Elm street, opposite Mrs. Sinotte's, 40 feet by 4 feet wide . . . . .	2.25
Grading for concrete walk and setting 106 feet of edge-stone on Pleasant street, at Mrs. Eddy's . . . .	62.90

Grading for concrete and setting curbing on School street, from Giles, east, to east line of C. E. Palmer's lot . . . . .	\$78.70
Resetting curbing, relaying gutter, and grading on Warren street, from J. D. Perkins's, east, to Dadmun's store . . . . .	37.66
Drawing and setting curbing on North Main street, opposite Phenix block . . . . .	14.45
Drawing and setting 60 feet of edgestone on Hill's avenue . . . . .	21.50
Drawing and setting 68 feet of edgestone on Fayette street . . . . .	10.80
Setting curbing on School street, from Holt street, east, to old curbing . . . . .	7.51
Setting curbing on Fremont street, from Pleasant to Warren . . . . .	324.05
Repairing curbing on Centre street, opposite Tahanto street . . . . .	3.75
Laying plank walk on South street . . . . .	6.00
“ two plank driveways on Centre street . . . . .	2.25
Repairing stand-pipes . . . . .	33.56
Rebuilding furnace at crematory . . . . .	71.91
Cutting High street . . . . .	212.10
“ Auburn street hill . . . . .	90.15
“ Centre “ “ . . . . .	354.30
Reshingling city shed and other repairs . . . . .	177.86
Attending brush fires . . . . .	133.32
Relaying foundation of watering-trough at city hall . . . . .	18.04
Repairing watering-trough on Washington street . . . . .	5.83
Righting up hitching posts at city hall . . . . .	1.50
Building stone culvert on Penacook street . . . . .	25.49
“ “ “ Noyes “ . . . . .	12.70
“ culvert on Gully hill . . . . .	10.25
Laying over culvert on East Concord road . . . . .	5.50
Working road machine on North Main street . . . . .	2.56
“ “ “ Auburn “ . . . . .	2.56
“ “ “ “ and Penacook streets . . . . .	14.75

Working road machine on South Pembroke road . . . . .	\$12.30
Repairing brick-yard road . . . . .	23.75
“ Silver Hill “ . . . . .	18.00
“ Shaker “ . . . . .	20.00
“ School street . . . . .	40.25
“ Turnpike street . . . . .	3.40
“ Rockingham street . . . . .	1.70
“ Sugar Bowl road . . . . .	1.50
“ Holt street . . . . .	10.00
“ Ferry street with ashes . . . . .	14.00
Repairing North State street at Fosterville with gravel and crushed stone . . . . .	38.45
Turnpiking and graveling Loudon road from Prescott’s water tower east to East Concord road, 1,240 feet by 20 feet wide . . . . .	645.34
Cutting bushes, plowing, and grading on Turnpike street from Bow line past Holt’s brick-yard . . . . .	41.94
Filling sewer ditch on Perley street . . . . .	1.13
Putting up railing on Pleasant street . . . . .	18.95
“ “ culvert on Iron Works road . . . . .	4.28
Putting up railing on Bog road . . . . .	34.10
Building fence on Jackson West Court . . . . .	12.97
“ “ at “dump” . . . . .	12.60
Repairing bank wall on Hall street . . . . .	49.00
Moving rock and grading at St. Paul’s School . . . . .	79.75
Cleaning streets in spring and fall . . . . .	1,632.25
Drawing and crushing stone on hand . . . . .	243.15

## EXPENSE ON CATCH BASINS.

One on State street, at corner of Washington, No. 16	\$14.57
One on State street, at corner of Beacon, No. 16 . . . . .	12.26
One on State street, at corner of Tremont, No. 16 . . . . .	12.85
One on Broadway, at corner of West street, No. 18 . . . . .	16.69
Two on South street, corner of Allison, Nos. 16 and 18 . . . . .	39.16
Two on Hall street, at corner of Hammond, No. 16 . . . . .	25.27
One on Perley street, near Patrick Hackett’s, No. 16 . . . . .	12.75
Two on Valley street, at corner of Forest, No. 16 . . . . .	38.53

## HIGHWAY DEPARTMENT.

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One on Pine street, at corner of Centre, No. 16 . . .	\$14.08
One on Downing street, at corner of Pierce, No. 16 . .	13.39
One on Holt street, at corner of Warren, No. 16 . . .	13.09
One on Broadway, at corner of West street, No. 16 . .	16.15
One on Green street, at corner of Centre, relaying pipe	3.69
One on North State street, at corner of Foster, relaying pipe . . . . .	4.93
One on Union street, at corner of Centre, relaying pipe	4.19
One on Main street, at corner of Freight, relaying pipe	9.74
One on Main street, at corner of Court, rebuilt . . .	5.73
One on Charles street, at corner of Beacon, rebuilt . .	9.75
One on North Main street, at John George's, new cast- ings, No. 16 . . . . .	4.00
One on South street, at corner of Pleasant, repairing .	1.67
One on Rollins court, No. 16 . . . . .	13.12
Four on North State street, No. 16 . . . . .	29.50
Three on Auburn street, No. 16 . . . . .	25.90
One on Valley street, No. 16 . . . . .	10.57
Cleaning out catch basins in spring and fall . . . .	513.11

## COST OF PATCHING STREETS WITH GRAVEL.

Academy . . . . .	\$12.07	Elm . . . . .	\$6.93
Beacon . . . . .	28.60	Franklin . . . . .	4.51
Bradley . . . . .	6.10	Fiske . . . . .	.90
Bridge . . . . .	39.20	Ferry . . . . .	9.00
Broadway . . . . .	6.10	Glover hill . . . . .	5.50
Chandler . . . . .	1.60	Green . . . . .	1.30
Chapel . . . . .	6.23	Harrod court . . . . .	3.30
Cambridge . . . . .	2.15	Hanover . . . . .	6.18
Centre . . . . .	49.65	Jackson . . . . .	15.58
Church . . . . .	10.45	Lyndon . . . . .	17.59
Clinton . . . . .	3.60	Liberty . . . . .	6.83
City hall driveway . . . . .	4.40	Long Pond road . . . . .	51.00
Concord . . . . .	12.00	Maple . . . . .	4.68
Downing . . . . .	7.35	Merrimack . . . . .	10.00
Depot . . . . .	11.30	Montgomery . . . . .	1.22
Essex . . . . .	1.35	North State . . . . .	25.65

North Main . . .	\$23.40	Spring . . .	\$66.70
North Spring . . .	21.62	South . . .	50.93
Noyes . . .	5.75	South State . . .	57.85
Pleasant . . .	59.05	Tremont . . .	15.13
Perley . . .	7.70	Turnpike . . .	11.08
Pine . . .	11.00	Union . . .	22.96
Penacook . . .	4.18	Warren . . .	89.60
Pitman . . .	3.30	West . . .	82.40
Rumford . . .	49.29	Washington . . .	34.64
South Main . . .	27.45	Walker . . .	3.40
Summit avenue . . .	2.08	Wall . . .	3.97
School . . .	5.00		

## COST OF PATCHING STREETS WITH CRUSHED STONE.

Bridge . . .	\$5.65	Pleasant . . .	\$1.00
Fiske . . .	2.00	Railroad . . .	1.25
Green . . .	2.40	South Main . . .	5.30
North Main . . .	9.46	Valley . . .	1.00
North State . . .	2.27	Warren . . .	1.20

## COST OF PATCHING STREETS WITH CINDERS.

Glover hill . . .	\$43.05	Pembroke road . . .	\$11.00
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## COST OF PATCHING STREETS WITH CINDERS AND LIME.

Gas . . .	\$1.00	Rockingham . . .	\$1.00
Pembroke road . . .	26.25		

## COST OF PATCHING STREETS WITH BRICKBATS.

Broadway . . .	\$2.35	Turnpike . . .	\$4.95
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## COST OF PATCHING STREETS WITH COAL ASHES.

Stickney avenue . . .			\$2.75
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There has been paid to the city treasurer the sum of \$1,540.17, collected of abutters for their proportions of concrete sidewalks, as follows :

John C. Dean . . . . .	\$7.86
Charles B. Foster . . . . .	35.89
Arthur Booth . . . . .	7.66
Lyster Brothers . . . . .	19.88
James H. Lyster . . . . .	5.47
I. S. Ring . . . . .	26.41
E. B. Woodworth . . . . .	55.70
Capital Fire Insurance Co. . . . .	41.99
J. G. Sargent . . . . .	21.68
Obadiah Morrill . . . . .	13.85
State library . . . . .	185.82
Frank Dóloff . . . . .	8.75
Frank W. Yeaton . . . . .	6.56
Frank Tallant . . . . .	20.00
Mary R. Cummings . . . . .	39.60
Augustus Woodbury . . . . .	14.83
James C. Bowen . . . . .	57.37
A. Planchette . . . . .	7.05
Mary P. Ducey . . . . .	9.79
F. A. Tenney . . . . .	25.20
F. E. Brown . . . . .	9.45
Henry C. Brown . . . . .	16.75
J. W. Ferrin . . . . .	11.17
F. H. Smith . . . . .	4.64
John Y. Lane . . . . .	20.14
J. H. Albin . . . . .	14.60
Mrs. Mary B. G. Eddy . . . . .	183.59
Mrs. D. D. Stanyan . . . . .	11.09
L. A. Lane . . . . .	7.43
Mrs. Grace Ray . . . . .	11.48
Fred Reed . . . . .	13.48
E. J. Blodgett . . . . .	16.91
Home for the Aged . . . . .	31.05
V. Baker . . . . .	20.74

C. W. Wilcox . . . . .	\$10.39
M. W. Favor . . . . .	16.07
E. C. Woods . . . . .	12.29
Mrs. L. A. Walker . . . . .	12.55
Hill Associates . . . . .	32.71
Peter W. Webster . . . . .	12.13
Charles E. Palmer . . . . .	27.91
George L. Lincoln . . . . .	15.59
C. R. Dame . . . . .	16.32
E. M. Nason . . . . .	6.77
Mrs. Sinotte . . . . .	5.01
C. E. Otis . . . . .	27.24
Gustavus Walker . . . . .	39.30
C. G. Brown . . . . .	14.93
D. L. Mandigo . . . . .	8.27
A. B. Woodworth . . . . .	23.64
Frank E. Shepard . . . . .	35.24
C. G. Green . . . . .	7.00
W. C. Davis . . . . .	9.86
W. R. Heath . . . . .	8.30
Daniel Woodman . . . . .	8.95
Charles Fairbanks . . . . .	31.43
Charles A. Kendall . . . . .	11.00
David Hazelton . . . . .	17.85
E. E. Lane . . . . .	15.30
J. H. Chase heirs . . . . .	40.63
F. H. Locke . . . . .	32.55
J. C. Keenan . . . . .	20.93
M. B. Smith . . . . .	14.96
Frank Adams . . . . .	21.17
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	\$1,540.17

## CONCRETE BILLS REMAINING UNPAID.

A. O. Mansur . . . . .	\$10.39
T. Murphy . . . . .	18.22
Howard Trevette . . . . .	21.11
Mrs. C. G. Blanchard estate . . . . .	149.72

## HIGHWAY DEPARTMENT.

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Frank Tallant . . . . .	\$4.17
John Haley . . . . .	7.60
W. G. Shaw . . . . .	12.18
D. W. Chellis . . . . .	11.51
F. C. Coats . . . . .	8.33
Daniel Wyman . . . . .	47.99
James Burbeck . . . . .	11.48
Julia Halpin . . . . .	8.01
C. S. Woods . . . . .	6.77
Jackman & Hall . . . . .	47.96
James Coleman . . . . .	16.96
Frank Adams . . . . .	28.73
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	\$411.13

## INVENTORY OF PROPERTY OF CONCORD HIGHWAY DEPARTMENT.

2 street plows . . . . .	\$20.00
2 side-hill plows, No. 2 . . . . .	10.00
1 land-side plow, No. 6 . . . . .	2.00
2 iron scrapers . . . . .	8.00
1 two-wheeled hand-cart . . . . .	35.00
1 A harrow . . . . .	2.00
4 catch-basin spoons . . . . .	5.00
2 long-handled dippers . . . . .	2.50
2 short-handled dippers . . . . .	.50
17 street hoes . . . . .	3.50
7 street rakes . . . . .	2.75
2 fork hoes . . . . .	1.00
16 iron snow shovels . . . . .	13.00
8 iron bars . . . . .	8.00
40 picks . . . . .	27.50
20 small shovels . . . . .	12.00
5 stone pickers . . . . .	2.00
2 water pails . . . . .	.50
1 water dipper . . . . .	.15
28 pick handles . . . . .	4.50
1 wheelbarrow . . . . .	2.50
1 mason trowel . . . . .	.25

1 nail cutter . . . . .	\$0.50
1 bit brace . . . . .	.75
10 bits . . . . .	2.00
2 nail hammers . . . . .	1.00
1 putty knife . . . . .	.25
1 large monkey-wrench . . . . .	.40
1 small monkey-wrench . . . . .	.30
2 planes . . . . .	.75
1 iron vice . . . . .	2.00
1 bench vice . . . . .	.75
1 scythe and snath . . . . .	1.25
4 scythes and 2 snaths (bush) . . . . .	2.00
2 bridge bits, 10 feet long . . . . .	1.50
31 lanterns . . . . .	15.50
2 three-gallon oil cans . . . . .	1.50
1 two-gallon oil can . . . . .	.50
1 one-gallon oil can . . . . .	.40
1 diaphragm pump and two lengths hose . . . . .	50.00
1 jack-screw . . . . .	5.00
50 pounds spikes . . . . .	1.50
1 Clapp's patent drinking fountain . . . . .	75.00
1 boom derrick . . . . .	100.00
1 tamp bar . . . . .	1.25
2 iron mauls . . . . .	2.50
1 spike hammer . . . . .	.50
1 water-gate key . . . . .	1.00
1 grab derrick . . . . .	20.00
1 pair snow-plow shafts . . . . .	5.00
2 branding stamps . . . . .	1.50
1 steel stamp . . . . .	.75
1 snatch block . . . . .	4.50
1 set large pulley blocks and rope . . . . .	8.00
1 set small pulley blocks and rope . . . . .	1.50
4 long guy ropes for derrick . . . . .	25.00
2 wire cables . . . . .	20.00
1 barrel soft coal . . . . .	1.50
1 bag salt . . . . .	.70

## HIGHWAY DEPARTMENT.

215

1 square harrow . . . . .	\$7.00
5 axes . . . . .	3.75
2 grub hoes . . . . .	1.50
14 large drills . . . . .	2.50
26 small drills . . . . .	4.00
3 hand hammers . . . . .	4.00
3 striking hammers . . . . .	4.50
4 sledge hammers . . . . .	5.00
4 hammer handles . . . . .	.60
20 points . . . . .	2.00
17 chisels . . . . .	2.00
2 cement pails . . . . .	.25
2 cross-cut saws . . . . .	7.00
2 wood saws . . . . .	1.00
3 hand saws . . . . .	1.50
1 key-hole saw . . . . .	.25
2 spirit levels . . . . .	2.00
1 shave . . . . .	.75
1 hand-screw . . . . .	.40
2 squares . . . . .	2.00
2 augurs . . . . .	1.00
1 mortising chisel . . . . .	.90
13 catch-basin chisels . . . . .	3.25
1 grindstone and frame . . . . .	5.00
7 large chains . . . . .	7.00
1 stake chain . . . . .	.25
1 box stove . . . . .	2.00
1 galvanized water-tank . . . . .	4.00
3 pairs rubber boots . . . . .	6.00
5 tool boxes . . . . .	15.00
3 two-horse carts . . . . .	375.00
1 stone wagon . . . . .	75.00
1 stake wagon . . . . .	50.00
1 one-horse cart . . . . .	40.00
9 street sprinklers . . . . .	2,725.00
2 two-horse sleds . . . . .	150.00
1 one-horse sled . . . . .	15.00

1 street sweeper . . . . .	\$300.00
2 road machines . . . . .	200.00
2 stone road rollers . . . . .	100.00
1 steam road roller . . . . .	2,750.00
2 snow rollers . . . . .	170.00
3 drags . . . . .	15.00
Stone posts, flagging, etc. . . . .	75.00
1 hand-car . . . . .	10.00
Chestnut plank . . . . .	22.00
Spruce and pine lumber . . . . .	35.00
18 pine rails . . . . .	5.40
4 wing snow plows . . . . .	160.00
6 common snow plows . . . . .	30.00
4 spreaders for carts and sleds . . . . .	12.00
9 spreaders for sprinklers . . . . .	54.00
29 whiffletrees . . . . .	43.50
2 M bricks . . . . .	12.00
1 anvil . . . . .	11.70
2 pairs smith tongs . . . . .	.80
2 pairs smith hammers . . . . .	.65
1 cutter . . . . .	.50
2 chisels . . . . .	.25
2 paving hammers . . . . .	1.00
125 feet spruce boards . . . . .	2.00
8 pairs heel chains . . . . .	12.00
45 chestnut posts . . . . .	4.50
1 horse at fire station . . . . .	150.00
5 horses at city shed . . . . .	500.00
1 pair harnesses at fire station . . . . .	75.00
3 pairs harnesses at city shed . . . . .	158.00
1 single harness at city shed . . . . .	15.00
1 tip-cart . . . . .	15.00
2 pairs street blankets . . . . .	25.00
7 stable blankets . . . . .	9.25
2 pairs feed bags . . . . .	2.80
3 water pails . . . . .	.50
1 pair leather fly-nets . . . . .	3.00

## HIGHWAY DEPARTMENT.

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3 forks . . . . .	\$1.30
1 shovel . . . . .	.60
1 rake . . . . .	.50
2 curry-combs . . . . .	.50
3 brushes . . . . .	1.50
3 cards . . . . .	.40
2 lamps . . . . .	2.40
1 grain chest . . . . .	4.00
6 head halters . . . . .	3.00
2 stake chains . . . . .	1.50
1 stationary crusher and boiler . . . . .	1,500.00
1 large monkey-wrench . . . . .	.75
1 small monkey-wrench . . . . .	.40
1 Stilson wrench . . . . .	.75
2 forks . . . . .	1.50
2 pairs pipe tongs . . . . .	1.50
1 belt punch . . . . .	.15
1 belt needle . . . . .	.15
1 hank flax . . . . .	.15
3 leather belts . . . . .	12.00
2 oil cans . . . . .	.50
1 gallon can . . . . .	.40
3 hammer handles . . . . .	.45
3 chisels . . . . .	.50
$\frac{1}{2}$ bunch belt lacing . . . . .	.60
50 feet garden hose . . . . .	4.00
10 pounds tallow . . . . .	.40
3 files . . . . .	.85
Waste . . . . .	.75
	<hr/> \$10,567.95

## INVENTORY OF PROPERTY OF PENACOOK HIGHWAY DEPARTMENT.

4 snow plows . . . . .	\$20.00
2 iron bars . . . . .	2.00
4 lanterns . . . . .	2.00
1 sledge hammer . . . . .	1.25
1 pair rubber boots . . . . .	2.75
1 bush scythe . . . . .	1.00

1 dung fork . . . . .	\$0.60
1 grub hoe . . . . .	.60
1 axe . . . . .	.75
1 water pail . . . . .	.25
1 dipper . . . . .	.15
1 wheelbarrow . . . . .	2.00
10 short-handled shovels . . . . .	7.00
1 street hoe . . . . .	.50
6 common hoes . . . . .	2.00
5 iron rakes . . . . .	2.50
3 spoons . . . . .	2.50
5 steel snow shovels . . . . .	3.75
1 wood snow shovel . . . . .	.40
3 long-handled shovels . . . . .	1.80
8 picks . . . . .	6.00
2 pick handles . . . . .	.40
6 street signs . . . . .	4.50
	<hr/>
	\$64.70

INVENTORY OF PROPERTY OF WEST CONCORD HIGHWAY DEPARTMENT.

1 tool house . . . . .	\$20.00
2 snow plows . . . . .	10.00
1 iron scraper . . . . .	5.00
7 spades . . . . .	3.50
2 whiffletrees . . . . .	2.00
1 iron bar . . . . .	1.00
2 hoes . . . . .	.75
1 large hoe . . . . .	.50
1 nigger-head hoe . . . . .	.40
1 stone picker . . . . .	.40
1 iron rake . . . . .	.50
3 wooden shovels . . . . .	.75
1 axe . . . . .	.75
1 bush scythe and snath . . . . .	1.25
2 grub hoes . . . . .	1.00
2 picks . . . . .	1.50
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	\$49.30

# SEWERS AND DRAINS.

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## REPORT OF THE COMMITTEE ON SEWERS AND DRAINS.

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*To the City Council :*

The committee on sewers and drains held regular meetings as usual throughout the year.

Work on the sewerage system of the city has been progressive, but the amount of money expended in the department during the last twelve months is much smaller than the average annual expenditure during the last several years, and yet all necessary repairs have been promptly made.

It is felt that the system is in first-class condition in all respects. The large appropriations of former years were necessary in its building, including the considerable item of outlets into the river, but now that the principal streets, and many others, have been supplied with suitable sewers, the future work may be expected to be at a less cost. However, demands for sewers are anticipated from several localities, and in one or two instances a considerable distance should be covered within the next few years.

The largest item of expense during the year has been the East Concord system. A sewer has been built there, at an expense of \$2,370.85, the greater part of which is to be met by sinking-fund bonds issued in payment.

### CONTRACTS AWARDED AND WORK DONE.

The records of the committee for the year show the following :

Bids for furnishing cement for the season of 1895 were as follows :

Frank Coffin . . . . .	\$1.29 per cask.
Woodworth & Co. . . . .	1.27 “
Dickerman & Co. . . . .	1.20 “

Contract awarded to Dickerman & Co.

## Bids for pipe :

Scribner &amp; Britton,

Portland pipe, 2-in. to 24-in. . . . 67 per cent. off list.

Portland pipe, 2-in. to 24-in., deep and  
wide socket . . . . . 59 “ “

Portland pipe, 30-in., double strength . . . . 49 “ “

Humphrey &amp; Dodge,

Akron pipe, 8-in. to 24-in. . . . . 67 “ “

30-in. . . . . 49 “ “

Isaac Baty,

Akron pipe, 8-in. to 24-in. . . . . 64 $\frac{1}{4}$  “ “

Lee Brothers,

Akron pipe, no limit on size . . . . . 67 “ “

Akron pipe, no limit on size, breakage  
not allowed . . . . . 68 “ “

Thompson &amp; Hoague,

Akron pipe, up to and including 24-in. . . . 67 “ “

Akron pipe, up to and including 24-in.,  
double strength . . . . . 54 “ “

Akron pipe, 30-in. . . . . 49 “ “

This contract was divided between Lee Brothers and Humphrey  
& Dodge.

## Castings :

Ford &amp; Kimball . . . . . \$0.017 per pound.

Concord Foundry . . . . . .014 “

Contract awarded to Ford &amp; Kimball.

## PETITIONS PRESENTED AND ACTION TAKEN.

Fred S. Fisher, and others, for sewer in View street, West  
Concord. Granted and built.C. G. Blanchard, and others, for sewer in Eastman street.  
Granted and built.D. T. Slack, and others, for sewer in Hall street. Granted  
and built.J. E. McShane, and others, for sewer in Odd Fellows avenue.  
Granted and built.

Mary R. Cummings, for extension of sewer in Fremont street. Granted and built.

Frank H. Smith, for sewer in Forest street. Granted and built.

L. W. Bean, and others, for extension of sewer in Jackson street. Granted and built.

C. H. Alexander, and others, for sewer in Penacook street, East Concord. Granted and built.

Daniel Higgins, for sewer in Ferry street. Granted and built.

Further time asked on the following :

W. H. Sargent, and others, for sewer in Chestnut avenue.

Frank Mayo, and others, for sewer in White street.

Weston Cofran, for sewer to his residence.

J. W. Edgerly, and others, for sewer in Jackson West court.

R. G. Sargent, and others, for sewer in Cross street, Penacook.

Charles E. Foote, and others, for sewer in Summit street, Penacook.

Upon petition of D. T. Slack, and others, for sewer in Hammond street, the petitioners were given leave to withdraw.

A few other petitions, action upon which is temporarily postponed, remain in the hands of the committee.

#### RECEIPTS AND EXPENDITURES.

For rent of pumps . . . . .	\$29.00
sale of pipe . . . . .	24.10
pipe to East Concord precinct . . . . .	292.33
“ Penacook precinct . . . . .	25.33
“ West Concord precinct . . . . .	68.17
	<hr/>
	\$438.93
Appropriations . . . . .	\$6,500.00
Other receipts . . . . .	438.93
	<hr/>
	\$6,938.93
Total expenditure . . . . .	5,974.29
	<hr/>
Balance . . . . .	\$964.64

## WEST CONCORD PRECINCT.

Balance on hand January 1, 1895 . . . . .	\$1,428.35
Received for rent of pump . . . . .	3.00
	<hr/>
	\$1,431.35
Amount expended, 1895 . . . . .	240.09
	<hr/>
Balance . . . . .	\$1,191.26

## EAST CONCORD PRECINCT.

Appropriation . . . . .	\$2,500.00
Premium and interest . . . . .	72.01
	<hr/>
	\$2,572.01
Amount expended, 1895 . . . . .	2,370.85
	<hr/>
Balance, January 1, 1896 . . . . .	\$201.16

## PENACOOK PRECINCT.

Balance on hand January 1, 1895 . . . . .	\$112.66
Sinking fund . . . . .	500.00
Repairs . . . . .	100.00
Payment of interest on bonds . . . . .	960.00
Rent of pump . . . . .	3.00
	<hr/>
	\$1,675.66
Amount expended . . . . .	1,614.35
	<hr/>
Balance . . . . .	\$61.31

The clerk of the committee holds receipts of the city treasurer for the following amounts:

Rent of pumps . . . . .	\$29.00
Sale of pipe . . . . .	409.93
	<hr/>
	\$438.93
For rent of pumps at West Concord . . . . .	\$3.00

Number of permits issued (new book, 34 ; old book, 67), 101.

City Engineer Howe has been of invaluable assistance to the committee, and reference is made to his report for further details of the sewer work.

CONCORD, December 31, 1895.

HENRY ROBINSON,  
W. A. LEE,  
HOWARD A. DODGE,  
LOUIS A. ENGEL,  
EDDIE C. DURGIN,

*Committee on Sewers and Drains.*

# CITY ENGINEER.

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## REPORT OF CITY ENGINEER.

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OFFICE OF THE CITY ENGINEER,  
CONCORD, N. H., December 31, 1895.

*To the City Council :*

In accordance with the ordinance creating this department, I herewith submit for your consideration its third annual report, and a statement of the work done under its supervision for the year ending December 31, 1895.

The cost of all sewers constructed during the past season, the repairs made and cost of the same, the amount expended for flushing and the amount expended to complete Horse Hill bridge, will be found upon the following pages.

The flood of April last caused considerable extra work upon the sewers, more especially upon the North End sewer where it crosses the line of the Concord & Montreal Railroad; a statement of the expenses attending these repairs is submitted herewith.

There has been made by this department such plans as were needed for the work on hand, together with a full set of sewer plans for the city clerk's office, complete plans of the West Concord sewers, plans of the East Concord sewers, changes and new sheets in the plans of the sewers in the city precinct, and plans for the cemetery commissioners.

There has been added to the assets of this department (for which our thanks are extended to the mayor) a systematic plan case, as large as could be built in our present quarters, which enables us to preserve the rapidly accumulating plans, in much better condition than formerly and also saves much time in finding the plans wanted.

The time not necessarily spent upon work of immediate importance has been spent on a general survey of the city. We hope to complete this winter a plan of that portion of the city embraced between Bow line on the south, the railroad crossing near the state prison on the north, the Merrimack river on the east, and a line parallel with Main street, including the property of Mrs. Mary B. G. Eddy and the Capital City Driving Park on the west.

The demands upon this office for information concerning street lines and grades have steadily increased, and the necessity for saying that the lines of some streets are indefinite, is at times somewhat embarrassing.

At the time when many of our streets were laid out the value of the land taken was very small, and in many cases the land was given for the street by the owners. To-day the values are different, and each abuttor, probably honestly, claims more land than the old records indicate. In many cases the old lines are described as "starting at a pair of bars and ending near an old apple tree." Both the bars and the apple tree have long since disappeared, and the "oldest inhabitant" has no knowledge of them.

In view of these facts I would respectfully recommend that a little work be done each year in establishing and permanently marking the lines of some of these streets; this would greatly assist the heads of all departments in their work upon the streets.

Considerable time was spent on a survey to Long pond in Webster, for the water board, and the result of such survey has been placed in their hands.

A survey of Rollins park was made for the park commissioners, showing the present condition and location of the various walks and drives. The plan has been placed in the hands of a competent forester, who will prepare a working plan for the contemplated improvements, so that all work done there may have the same end in view.

The employés of this department for the past year have been, — Frank E. Sampson, Frank W. Brown, assistant engi-

neers; Clifford J. Pattee, transitman; Fred W. Lang, J. W. L. Wilcox, rodmen, who have cheerfully attended to the duties entrusted to them.

I wish to express to the mayor and the members of the city council my appreciation for their support and coöperation in the work of the past season.

The expenses of this department for 1895 are as follows:

Paid for salaries . . . . .	\$2,483.75
car fares and livery . . . . .	147.35
repairs . . . . .	31.51
rent and gas . . . . .	207.60
supplies . . . . .	139.55
plan case and shellacking same . . . . .	17.43
stakes . . . . .	17.25
express . . . . .	4.80
postage . . . . .	3.34
wash tray for blue prints . . . . .	3.00
	<hr/>
	\$3,055.58
Appropriation . . . . .	3,000.00
	<hr/>
Overdrawn . . . . .	\$55.58

#### HORSE HILL BRIDGE.

Work on this bridge was continued and the erection completed February 14. One coat of paint was applied at the time of completion; the second coat was put on in the month of June, and the final payment made to the bridge company.

The amount reserved from the masonry contractors, for pointing one abutment, was paid June 28.

There has been expended on this bridge the following amounts:

Wrought Iron Bridge Co. . . . .	\$3,685.00
Connors & Co., balance due . . . . .	100.00
John E. Cheney, consulting engineer, plans . . . . .	92.12
The Osborn Co., inspection of materials and shop work . . . . .	51.79
M. J. Welch, inspector . . . . .	99.12

E. B. Hutchinson Building Co., timber . . . . .	\$22.19
N. A. Dunklee, livery . . . . .	22.00
W. B. Howe, cash paid out . . . . .	19.86
Highway department, labor on approaches :	
R. W. Hoit, pay-rolls . . . . .	\$97.15
E. C. Abbott, lighting lanterns . . . . .	15.00
	<hr/>
	112.15
Total expended, 1895 . . . . .	\$4,204.23
Total expended, 1894. . . . .	6,764.58
	<hr/>
Total cost of bridge and approaches . . . . .	\$10,968.81
Appropriation and timber sold . . . . .	10,515.00
	<hr/>
Overdrawn . . . . .	\$453.81

## COST OF SEWERS LAID IN 1895.

## RUMFORD STREET, NORTH FROM SHORT STREET.

92 feet of 10-inch.

Paid for labor . . . . .	\$44.08
pipe . . . . .	20.45
brick . . . . .	6.75
cement . . . . .	2.40
castings . . . . .	5.25
trucking . . . . .	7.00
	<hr/>
	\$85.93

Average cost per foot,  $93\frac{3}{10}$  cents.

Materials excavated, sand, clay, and gravel.

## RUMFORD STREET, REPAIRS.

Paid for labor . . . . .	\$12.99
brick . . . . .	8.10
cement . . . . .	2.40
castings . . . . .	4.23
trucking . . . . .	.75
sand . . . . .	1.10
	<hr/>
	\$29.57



## CITY ENGINEER.

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Paid for trucking . . . . .	\$5.50
oil . . . . .	.45
	<hr/>
	\$64.73

Average cost per foot,  $64\frac{7}{10}$  cents.

Material excavated, sand.

## EASTMAN STREET.

400 feet of 10-inch.

Paid for labor . . . . .	\$144.61
pipe . . . . .	62.31
brick . . . . .	4.05
cement . . . . .	3.69
castings . . . . .	4.13
trucking . . . . .	10.00
oil . . . . .	.45
	<hr/>
	\$229.24

Average cost per foot,  $57\frac{3}{10}$  cents.

Material excavated, sand.

## JACKSON STREET.

Between Highland and Church streets (extension) 78 feet of 10-inch.

Paid for labor . . . . .	\$36.55
pipe . . . . .	22.59
cement . . . . .	.40
trucking . . . . .	2.50
	<hr/>
	\$62.04

Average cost per foot,  $79\frac{6}{10}$  cents.

Material excavated, sand.

## ODD FELLOWS' AVENUE.

282 feet of 10-inch.

Paid for labor . . . . .	\$202.33
pipe . . . . .	48.10
brick . . . . .	27.00

Paid for cement . . . . .	\$11.60
castings . . . . .	16.49
trucking . . . . .	18.25
blacksmith . . . . .	.71
oil . . . . .	.45
	<hr/>
	\$324.93

Average cost per foot,  $\$1.15\frac{2}{10}$ .

Material excavated, sand.

FERRY STREET.

West from north end sewer, 134 feet of 10-inch.

Paid for labor . . . . .	\$30.25
pipe . . . . .	28.74
cement . . . . .	1.20
castings . . . . .	.61
trucking . . . . .	2.25
oil . . . . .	.40
	<hr/>
	\$63.45

Average cost per foot,  $47\frac{3}{10}$  cents.

Material excavated, sand.

FERRY STREET, REPAIRS.

Paid for labor . . . . .	\$33.75
pipe . . . . .	2.14
trucking . . . . .	2.75
	<hr/>
	\$38.64

CURTICE AVENUE (EXTENSION).

96 feet of 10-inch.

Paid for labor . . . . .	\$31.33
pipe . . . . .	22.11
castings . . . . .	.94
	<hr/>
	\$54.38

Average cost per foot,  $56\frac{6}{10}$  cents.

Materials excavated, sand and clay.

## HALL STREET.

1028 feet of 10-inch.

Paid for labor . . . . .	\$687.35
pipe . . . . .	220.50
cement . . . . .	14.40
brick . . . . .	20.25
castings . . . . .	13.72
drill steel . . . . .	22.28
dynamite . . . . .	30.75
coal . . . . .	1.62
blacksmith . . . . .	2.20
use of battery . . . . .	1.50
wires for battery . . . . .	1.90
trucking . . . . .	27.60
oil . . . . .	2.10
	<hr/>
	\$1,046.17

Average cost per foot,  $\$1.01\frac{7}{10}$ .

Materials excavated, sand, gravel, clay, boulders, and ledge.

## CHANDLER STREET (EXTENDING TO THE RIVER).

190 feet of 18-inch.

Paid for labor . . . . .	\$84.82
pipe . . . . .	145.35
brick . . . . .	16.87
cement . . . . .	6.00
castings . . . . .	4.22
hardware . . . . .	.28
trucking . . . . .	22.50
flushing . . . . .	.75
	<hr/>
	\$280.79

Average cost per foot,  $\$1.47\frac{2}{10}$ .

Material excavated, sand.

The above cost per foot includes the expense of protecting the outlet at the river.

## REPAIRS.

South end sewer at outlet . . . . .	\$0.75
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## BRADLEY STREET.

Paid for labor . . . . .	\$15.75
trucking . . . . .	3.25
	<hr/>
	\$19.00

## SUMMIT STREET.

Paid for labor . . . . .	\$1.96
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## THOMPSON STREET.

Paid for labor . . . . .	\$0.50
trucking . . . . .	.50
	<hr/>
	\$1.00

## NORTH END SEWER.

Damage caused by flood in April.

Paid for labor . . . . .	\$259.87
brick . . . . .	83.70
cement . . . . .	52.80
castings . . . . .	7.21
trucking . . . . .	54.50
gravel and crushed stone . . . . .	22.70
Concord & Montreal R. R., supporting tracks	93.66
	<hr/>
	\$574.44

The portion of this sewer rebuilt was put on a concrete foundation.

## WATER STREET.

Damage caused by flood in April.

Paid for labor . . . . .	\$6.62
castings . . . . .	15.26
trucking . . . . .	.75
	<hr/>
	\$22.63

## CITY ENGINEER.

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## HILL'S AVENUE.

Paid for labor . . . . .	\$8.07
brick . . . . .	1.35
castings . . . . .	4.18
	<hr/>
	\$13.60

## OUTLET THIRD DIVISION.

Paid for labor . . . . .	\$39.34
brick . . . . .	16.88
cement . . . . .	4.80
castings . . . . .	4.00
trucking . . . . .	4.00
	<hr/>
	\$69.02

Wall street . . . . .	\$2.76
Blake street . . . . .	1.25
Walker street, repairs to concrete walks . . . . .	6.50
Montgomery street . . . . .	3.80
Court street . . . . .	2.65
Pine street . . . . .	1.58

## NEW WORK.

Rumford street . . . . .	\$85.93
Forest " . . . . .	114.97
North State street . . . . .	1,679.96
Fremont " . . . . .	64.73
Eastman " . . . . .	229.24
Jackson " . . . . .	62.04
Odd Fellows' avenue . . . . .	324.93
Ferry street . . . . .	63.45
Curtice avenue . . . . .	54.38
Hall street . . . . .	1,046.17
Chandler street . . . . .	280.79
	<hr/>
	\$4,006.59

## REPAIRS.

South end sewer . . . . .	\$0.75
Bradley street . . . . .	19.00

Summit street . . . . .	\$1.96
Thompson street . . . . .	1.00
North end sewer . . . . .	574.44
Water street . . . . .	22.63
Hill's avenue . . . . .	13.60
Outlet third division . . . . .	69.02
Wall street . . . . .	2.76
Blake street . . . . .	1.25
Walker street . . . . .	6.50
Montgomery street . . . . .	3.80
Court " . . . . .	2.65
Pine " . . . . .	1.58
Ferry " . . . . .	38.64
Rumford " . . . . .	29.57
	<hr/>
	\$789.15
Paid for flushing . . . . .	\$181.66
pipe . . . . .	442.77
freight . . . . .	60.35
hose . . . . .	225.00
tools . . . . .	173.68
printing . . . . .	78.00
blue print paper . . . . .	17.09
	<hr/>
	\$5,974.29
Appropriations, \$3,000 and \$3,500 . . . . .	\$6,500.00
Credits, rent of pumps, and pipe sold . . . . .	438.93
	<hr/>
	\$6,938.93
Total expenditure . . . . .	5,974.29
	<hr/>
Balance . . . . .	\$964.64

*Total Length of Sewers built in City Precinct, 1895.*

8-inch pipe . . . . .	160 feet.
10- " . . . . .	3,710 "
18- " . . . . .	190 "
	<hr/>
	4,060 feet.

*Sewers built in City Precinct to December 31, 1895.*

8-inch pipe . . . . .	15,716 feet.
10- " . . . . .	40,356 "
12- " . . . . .	35,133 "
15- " . . . . .	9,934 "
18- " . . . . .	4,622 "
20- " . . . . .	3,434 "
24- " . . . . .	1,749 "
30- " . . . . .	969 "
Brick, 12 x 14-inch . . . . .	2,758 "
" 16 x 24- " . . . . .	1,848 "
" 14 x 22- " . . . . .	350 "
" 20 x 32- " . . . . .	2,977 "
" 24 x 36- " . . . . .	17,487 "
" 28 x 48- " . . . . .	883 "
" 30-inch circular . . . . .	86 "
" 38- " " . . . . .	4,080 "
Total . . . . .	142,382 feet.
Total miles in city precinct to date . . . . .	26.966

## FLUSHING.

All small laterals have been thoroughly flushed this fall, and several new lamp-holes built, where we failed to find those indicated on the plans. The expense attending this work amounts to \$181.66.

## WEST CONCORD PRECINCT.

One new sewer has been built in this precinct this season and a small amount expended in flushing and clearing the outlets.

View street, 570 feet of 10-inch.

Paid for labor . . . . .	\$107.84
pipe . . . . .	70.38
brick . . . . .	15.50
cement . . . . .	8.60
castings . . . . .	12.58

Paid for hardware . . . . .	\$1.12
trucking . . . . .	8.60
oil . . . . .	.55
	<hr/>
	\$225.17
Average cost per foot, 39½ cents. Material excavated, sand.	
Paid for flushing and repairs . . . . .	\$12.17
binding for plans . . . . .	2.75
	<hr/>
Total . . . . .	\$240.09
Balance on hand January 1, 1895 . . . . .	\$1,428.35
Credit for rent of pump . . . . .	3.00
	<hr/>
	\$1,431.35
Expended, 1895 . . . . .	240.09
	<hr/>
Balance January 1, 1896 . . . . .	\$1,191.26

Sewers built in this precinct to December 31, 1895 :

10-inch pipe . . . . .	5,633 feet.
12-inch pipe . . . . .	6,544 "
15-inch pipe . . . . .	2,164 "
	<hr/>
Total . . . . .	14,341 feet.

Length in miles, 2.716.

EAST CONCORD PRECINCT.

Penacook street, 1,766 feet of 10-inch.

Paid for labor . . . . .	\$1,765.06
pipe . . . . .	328.33
brick . . . . .	54.00
cement . . . . .	32.40
castings . . . . .	25.40
lumber . . . . .	32.42
tools . . . . .	8.59
blacksmith . . . . .	8.25
oil . . . . .	3.25
trucking . . . . .	50.50

## CITY ENGINEER.

237

Paid for dynamite . . . . .	\$17.75
freight . . . . .	4.00
hardware . . . . .	14.31
	<hr/>
	\$2,343.66
Frank P. Curtis . . . . .	25.00
Blue prints . . . . .	2.19
	<hr/>
Total . . . . .	\$2,370.85

Average cost per foot, \$1.327.

Materials excavated, sand, quick-sand, gravel, and ledge.

Appropriation . . . . .	\$2,500.00
Expended, 1895 . . . . .	2,370.85
	<hr/>
Balance January 1, 1896 . . . . .	\$129.15

## STREETS LAID OUT.

Stickney avenue, Knight street, West Concord, and North Pembroke street.

## GRADES ESTABLISHED.

South sidewalk, Washington street from Rumford to Essex street.  
South sidewalk, Garden street from Rumford street west, 119.4 feet.

South sidewalk, Concord street from South State to Beaver street.

South sidewalk, Thorndike street from South Main street, 265 feet west.

Harvard street.

South sidewalk, Clinton street from Avon to Harvard street.

East sidewalk, South Spring street from Thompson to Lincoln street.

East sidewalk, Centre street (Penacook) from Spring street north.

North sidewalk, Spring street (Penacook) from Centre street east.

North sidewalk, Allison street from Badger to Mills street.

South sidewalk, Concord street from Beaver to South street.

South sidewalk, Franklin street from Lyndon street west.  
South sidewalk, School street from Pine street east.  
North sidewalk, Beacon street from Rumford street west.  
North sidewalk, Downing street from Pierce to Grove street.  
South sidewalk, Centre street from Pine to Tahanto street.  
East sidewalk, Broadway from West street, 200 feet south.  
South sidewalk, West street from Broadway, 150 feet east.  
South sidewalk, Church street from Jackson to Bradley street.  
North sidewalk, School street from C. E. Palmer's east line to  
Giles street.  
East sidewalk, Giles street from Centre to School street.  
South sidewalk, Hill's avenue from L. A. Smith's east line to  
Woodworth's west line.  
K street, West Concord.  
North and south sidewalks, K street, West Concord.  
View street, West Concord.  
East and west sidewalks, View street, West Concord.  
West sidewalk, Elm street from Wall street north.  
North sidewalk, Concord street from South street east.  
Peabody street, West Concord.  
North and south sidewalks, Peabody street, West Concord.  
East sidewalk, Mills street from West to Allison street.  
North sidewalk, Warren street, petition of F. J. Batchelder.  
East sidewalk, West State street, West Concord, from K to  
Peabody street.

Respectfully submitted,

W. B. HOWE,  
*City Engineer.*

# PUBLIC LIBRARY.

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## REPORT OF THE TRUSTEES.

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*To the City Council:*

The trustees of the Public Library herewith transmit the reports of the librarian and the treasurer.

The year has been marked by many improvements in library management, and the beneficial influence of the institution has sensibly increased. The efforts of the librarian and her assistants in this direction deserve special mention and commendation. By reason of the increase of patronage and the labor of preparing a card catalogue, to which reference is made in the librarian's report, their work has been very exacting, but the wants of the public have received most careful attention.

In former years much inconvenience has been experienced from lack of funds during the period from the close of the financial year to the time of the next appropriation. To obviate this difficulty in the future unusual economy has been practiced, in order to make the annual appropriation last until the next appropriation is available. For this reason, among others, fewer books have been purchased, and those have been selected with great discrimination.

We think that an appropriation equal to the one last granted will be sufficient for the needs of the next year. We

have no doubt that you will continue the same liberal and enlightened policy in regard to the library that has been pursued in the past.

Very respectfully,

CHARLES H. SANDERS,	WARD 1.
JOHN E. FRYE,	“ 2.
PAUL R. HOLDEN,	“ 3.
WILLIAM L. FOSTER,	“ 4.
AMOS J. SHURTLEFF,	“ 5.
JAMES S. NORRIS,	“ 6.
WILLIAM W. FLINT,	“ 7.
EDSON J. HILL,	“ 8.
MOSES H. BRADLEY,	“ 9.

CONCORD, February 1, 1896.

## LIBRARIAN'S REPORT.

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*To the Trustees of the Public Library:*

The thirty-ninth annual report, and my first report, is herewith presented.

The year 1895 early brought a loss to the library, for in January occurred the death of Mr. Daniel F. Secomb, for fourteen years its librarian. Under him the institution grew from being helpful to a few to being a source of pleasure and benefit to the entire city; and he left an example of faithfulness, good sense, and wisdom which it will be well to always pattern after. The library is intangibly richer for the memory of this man's devoted service.

It is, too, sensibly richer for a bequest of money, the largest of the four that have been made in the forty years of its existence. President Franklin Pierce gave the library \$1,000; Mr. Gardner B. Lyon, a book dealer, \$1,000; Rev. Mr. Valpey, of St. Paul's School, \$500; but it was left for ex-Mayor P. B. Cogswell, an early trustee, to make the generous bequest of \$5,000, the income of which is to be expended in the purchase of books of a biographic, historical, and scientific nature. The bequest is characteristic. These are the books Mr. Cogswell best knew and enjoyed; and as new scientific works are especially expensive, a fund for their purchase is of the greatest help. The proof that Mr. Cogswell believed in the good a library, the "people's college," can do the community, is the most precious part of the legacy; and in return the Cogswell collection should be made to reflect further honor upon his honorable name.

July 1 was begun the first card catalogue of the entire library; when completed, it shall be fully described and explained to everyone. Its main object is to group the

material of the library under subjects for the good of all wanting information on any topic. It is also the only catalogue yet approved which can keep an up-to-date record of books added from day to day. Furthermore, this sorting of the material in a library is a necessary preliminary to steps which will be taken as soon as possible, such as the giving of student's or non-fiction cards, the publishing of lists for local class work, etc., etc.

We were most fortunate in securing the services of Mr. George W. C. Stockwell, of the State Library School at Albany, to superintend the making of the catalogue, and his suggestions as to the best library usages in general are also most valuable.

The already large circulation has been increased by 1,200, making the number of books given out this past year 87,122; of which over 8,000 were sent to the Penacook branch, and March again led as the heaviest month. On Saturdays it averages that every minute of the eleven hours a book is received, discharged, put away on the shelf, and another selected and charged. The number of new borrowers who have applied for cards is large, embracing both the book-worm, wanting one special book for an hour, and the child who comes on his tenth birthday to say, "Please may I take out lib'ries?"

The reference room is the only department that has been completely catalogued, and it is now a little model of what the whole library will be when rearranged according to the Dewey classification and Cutter author-numbers. The attendance upon the reference room shows no decrease in its yearly patronage of over 2,000 inquirers. On leisure days, when the space in the stack-rooms is not needed by busy assistants, permission will gladly be given to anyone to have access to any of the book shelves in the library.

The reading room will contain more matter than ever this coming year, and its popularity, attested by 10,000 yearly readers, should increase till it allures the Main street loafer who was heard to say, "Well, I guess I'll kill an hour and

then go home." This library takes an unusually large number of periodicals for circulation, remembering what a fine lecturer himself says, that the place of the old lyceum has been filled by magazines.

April 1 the permanent slip system of charging books was adopted and is well liked. It makes a record of the number of times each book is taken out, and thus speaks more forcibly than words as to the demand for certain works.

The books bought this last year have necessarily been few and chiefly fiction. But when, by the new card catalogue's subject divisions, it is ascertained what departments are weak, they can be strengthened in due proportion; for with the state library to provide legal and congressional documents and the historical society to furnish antiquarian matter, our public library seems exceptionally fortunate in having no call to be anything but a good all-round collection; making, as it were, a *subway* of what would spoil its being what a library has been well called, a "literary common."

But a public library should secure all publications connected with the city in which it is located, and any work by or about a Concord person will be gratefully received here.

In the account book on the table before you will be found a memorandum of all the bills approved, paid, and receipted during 1895.

I wish to express my indebtedness to the trustees for their permission to experiment; to the local press for their insertion of lists and notices; and above all to the assistants, who have all joined heartily and pleasantly in the greatly increased work of the year.

Respectfully submitted,

GRACE BLANCHARD,  
*Librarian.*

## REPORT OF THE TREASURER.

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*To the City Council :*

The balance received from the former treasurer as of January 1, 1895, was \$221.79; receipts from the library, \$236.20, to which has been added the city appropriation of \$6,000, making a total of \$6,457.99 as available funds for the purpose of the library. Of this sum \$4,439 has been expended, per itemized account, leaving a balance in the hands of the treasurer in general account, \$2,018.99, and in trust account, \$192.50.

### BALANCE SHEET.

#### DR.

Cash received from former treasurer	
as of January 1, 1895 . . . .	\$221.79
Received from the library . . . .	236.20
City appropriation . . . . .	6,000.00
	\$6,457.99

#### CR.

Paid by order of the chairman finance committee as follows :	
For salaries and labor . . . . .	\$2,418.41
books and periodicals . . . . .	503.08
binding . . . . .	406.90
printing . . . . .	88.40
fuel and light . . . . .	218.95
cataloguing, labor, etc. . . . .	601.10
incidentals . . . . .	202.16
Cash on hand as of January 1, 1896 . . . . .	2,018.99
	\$6,457.99

PUBLIC LIBRARY.

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TRUST ACCOUNT.

DR.

Cash received from former treasurer as of January 1, 1895 . . . .	\$97.50	
Cash received from Lyon fund . . . .	60.00	
Pierce fund . . . .	35.00	
	<hr/>	\$192.50

CR.

Cash on hand as of January 1, 1896 . . . .	\$192.50
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Respectfully submitted,

H. H. DUDLEY,  
*Treasurer.*

February 1, 1896.

# SANITARY DEPARTMENT.

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## REPORT OF BOARD OF HEALTH.

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*To His Honor the Mayor and the City Council:*

The Board of Health herewith transmits the detailed report of the work of its executive officer, Sanitary Officer Charles E. Palmer, for the year 1895. In transmitting this report, the board desires to again take occasion to express its satisfaction with the faithful, intelligent, and impartial manner in which Officer Palmer has performed the duties of his position, — a position, it may be added, which is growing each year of greater importance to our city and which long since became an indispensable factor of the municipal organization.

Year by year our citizens have become better acquainted with the scope and purpose of the sanitary regulations under which the executive officer acts, and have more clearly understood the public benefits which his well-directed efforts have secured, the result being that a more general and hearty co-operation has been extended, with correspondingly more satisfactory results. Especially is this true with respect to the attention given to the regulations governing the care of cases of contagious diseases, and compliance with the suggestions of the health officer. Included in the great amount of work which devolved upon the health officer during the past year were no less than 1,149 visits made to persons ill with contagious diseases, and yet their mere enumeration tells but indifferently the importance of this feature of the sanitary supervision of the city, and of the discomforts attending the sacrifice of rest and sleep that no attention should be withheld

which could the better guard the public against the dangers of contagion or lessen the inconvenience of suffering in an afflicted household. The total number of houses placarded during the year has been 236, and the same number of placards has been removed. The health officer has fumigated during the year 296 rooms and two school-houses, and has burned 53 pieces of infected bedding. The funerals of 15 persons who died from contagious diseases were attended.

By act of the last legislature the issuance of burial permits was made a part of the duties of the board of health, the law being as follows :

AN ACT in amendment of chapter 173 of the Public Statutes relating to the registration of Births, Marriages, and Deaths.

*Be it enacted by the Senate and House of Representatives in General Court convened :*

SECTION 1. Boards of health in cities shall have charge of the granting of permits for the burial of the dead; and no interment, disinterment, or removal from the city, of the dead body of any human being, nor deposition thereof in any tomb or vault, shall be made without a permit from said boards or their duly appointed agent, nor otherwise than in accordance with said permit. No such permit shall be issued until there has been delivered to the board a satisfactory written statement containing the facts required by section 1, chapter 173, of the Public Statutes, together with the certificate of the attending physician, as required by said chapter 173, or, in absence thereof, such other evidence as may be required by law. Upon the receipt of such statement and certificate, the board shall forthwith countersign the same and transmit it to the city clerk for registration.

Approved March 21, 1895.

Since this law became operative the number issued by the health officer acting as the agent of the board has been 218. The work of sanitary inspection has been carried on during the year as opportunity offered, although the pressure of other duties of the office for the past two seasons has pre-

vented so thorough and systematic an inspection from house to house as the sanitary regulations contemplate and the best interests of the public demand. While attention to contagious diseases is of the greatest consequence, and other branches of the work must be made secondary, it is the opinion of this board that such provision should be made, by the employment of an assistant inspector during certain seasons of the year, or otherwise as may seem best to your honorable body, that every building in the compact portions of the city might have careful sanitary inspection at least once each year. The number of complaints attended to and inspections made during the past year was 524; number of letters written and orders given to abate nuisances, 518; number of sewers inspected, 104.

CITY OF CONCORD.—BOARD OF HEALTH.

RULES AND REGULATIONS CONCERNING CONTAGIOUS DISEASES, QUARANTINE, AND DISINFECTION.

Adopted by the Board of Health and approved by the Board of Mayor and Aldermen, 1895.

In every case of small-pox, diphtheria, scarlet fever, or measles reported to this board, the house or tenement shall be placarded in a conspicuous manner, said placard to remain in the case of small-pox, not less than six weeks; diphtheria, not less than three weeks; scarlet fever, not less than four weeks; measles, not less than two weeks; said periods to be extended at the discretion of the attending physician or the board of health. Thorough isolation of the patient shall be maintained throughout the aforesaid periods and until the premises have been fumigated under the direction of the board of health.

No person shall remove from one building to another, any patient ill with an infectious or contagious disease, nor move household effects from premises where contagious disease exists, except by permission of the board of health.

Any carriage used in conveying a person sick with small-pox, scarlet fever, or diphtheria, or in transporting the body of a person deceased from either of the said diseases, shall be immediately disinfected under the direction of the board of health.

No book shall be taken from a public, Sunday-school, or other circulating library and carried into a family where there exists a case of any contagious disease.

REGULATIONS PERTAINING TO CONTAGIOUS DISEASES IN  
PUBLIC SCHOOLS.

“No child shall attend any public school unless he has been vaccinated or has had the small-pox.”— *Public Statutes, chapter 93, section 2.*

“The prudential committees or boards of education shall not admit any scholar into the public schools without satisfactory evidence that such scholar has been vaccinated; and the city physician shall at all times be prepared to vaccinate, at the expense of the city, any scholar who is unable to pay therefor.”— *Ordinance, Concord, chapter 13, section 11.*

A certificate from the board of health or a reputable physician that a pupil bears physical evidence of having had vaccination or variola, will be regarded as satisfactory proof that the pupil has been vaccinated or had the small-pox within the meaning of the foregoing requirements. A record of the fact must be entered on the school record and upon orders for promotion or transfer.

PERIODS AFTER WHICH PUPILS WHO HAVE HAD CONTAGIOUS  
DISEASES MAY SAFELY RETURN TO SCHOOL.

SCARLET FEVER. — No less than six weeks from date of rash if scaling of the skin has completely ceased, and there is no sore throat, ears, eyes, nostrils, or lips.

DIPHThERIA. — Not less than three weeks, if convalescence is completed, or if a microscopical examination shows the absence of diphtheritic bacilli, and there is no longer any form of sore throat nor any kind of discharge from the throat, nose, eyes, or ears.

MEASLES. — Not less than three weeks if all scaling of the skin and the cough have ceased.

GERMAN MEASLES. — In two or three weeks, according to the nature of the attack.

WHOOPING-COUGH. — In six weeks after commencement of whooping, or whenever the characteristic spasmodic cough and the whooping have ceased.

MUMPS. — In two or three weeks, or when all traces of swelling have disappeared.

SMALL-POX. — At least eight weeks; and longer if any scabs or crusts remain upon the skin.

OPHTHALMIA. — One month after there has been complete absence of discharge, or until the inner surfaces of the eyelids are free from granulations.

Scholars affected with any contagious disease must be excluded from the schools until the apartments, clothing, and bodies of such scholars have been disinfected under direction of the board of health, and a certificate of the board of health is given for their readmission.

If a child having a contagious disease should attend school, the school-rooms must be disinfected by the board of health before they are used again.

When a child is sick and suspected of having a contagious disease, other children in the family must not attend the schools until they produce a certificate from a respectable physician that there will be no danger of their communicating the disease to other pupils.

Children in tenements using the same halls and outside doors with families whose tenements are carded, must be excluded from the schools until a certificate is given by the board of health that their attendance will not endanger the health of other pupils.

Children having a contagious disease without seeing a physician must be admitted by a certificate from the board of health.

Pupils exposed to the following diseases, or living in a family where such diseases exist, may be excluded from the schools according to the following schedule of maximum periods of incubation. No deviation of any sort or shortening of time can be allowed in dealing with the first three mentioned diseases.

MAXIMUM PERIODS OF INCUBATION.

Diphtheria	.	.	.	.	.	12 days.
Scarlet fever	.	.	.	.	.	14 "
Small-pox	.	.	.	.	.	18 "
Measles	.	.	.	.	.	16 "
Whooping-cough	.	.	.	.	.	21 "
German measles	.	.	.	.	.	6 "
Mumps	.	.	.	.	.	24 "
Chicken-pox	.	.	.	.	.	13 "