## FORTY-SIXTH ANNUAL REPORT

OF THE

RECEIPTS AND EXPENDITURES

OF THE

## CITY OF MANCHESTER

#### NEW HAMPSHIRE

FOR THE FISCAL YEAR ENDING

## DECEMBER 31, 1891

TOGETHER WITH

OTHER ANNUAL REPORTS AND PAPERS RELATING TO THE AFFAIRS OF THE CITY



MANCHESTER: PRINTED EV THE JOHN E. CLARKE CO. 1892.

1. 1-1-62 vé .l

#### CITY OF MANCHESTER.

IN BOARD OF COMMON COUNCIL.

AN ORDER to print the Forty-sixth Annual Report of the Receipts and Expenditures of the City of Manchester.

ORDERED, If the Board of Mayor and Aldermen concur, that the joint standing committee on finance be, and they hereby are, authorized to procure, for the use of the inhabitants of said city, the printing of the Forty-sixth Annual Report of the Receipts and Expenditures of the City of Manchester, including the reports of the joint standing committee on finance, the city auditor, the school board, and superintendent of schools, superintendent of water-works, water commissioners, engineer of fire department, city marshal, overseers of the poor, trustees, librarian, and treasurer of the city library, committee on cemeteries, joint standing committee on city farm, city physician, city solicitor, city engineer, and such other matters relating to city affairs as said finance committee may direct, the expense thereof to be charged to the appropriation for printing and stationery.

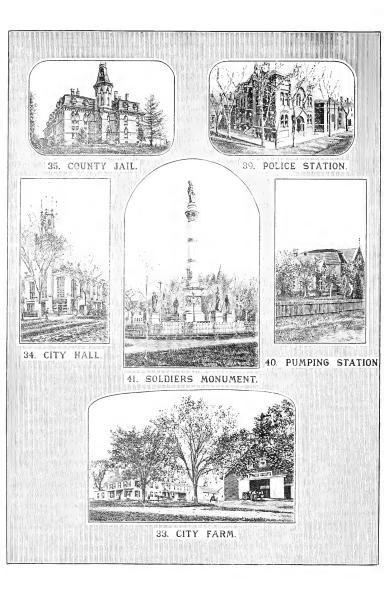
IN BOARD OF COMMON COUNCIL. February 2, 1892. Passed.

EDSON S. HEATH, President.

IN BOARD OF MAYOR AND ALDERMEN. February 2, 1892. Passed in concurrence.

E. J. KNOWLTON, Mayor.

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## MANCHESTER CITY GOVERNMENT.

#### 1891.

#### Mayor.

EDGAR J. KNOWLTON . . . Office, City Hall

Chosen at biennial election in November, 1890. Salary, \$1,800 per annum, payable quarterly. (Act of June, 1848, section 1. General Laws, chapter 44, section 3. Chapter 223, Laws of 1883.) Residence, 533 Lake avenue. Telephone at house and office.

#### Aldermen.

Act of June, 1848, section 1. General Laws, chapter 44, section 3.

Ward 1. John L. Sanborn, 25 Amoskeag Corporation, Market street.

Ward 2. Oliver B. Green, 749 Pine street.

Ward 3. William Corey, 488 Maple street.

Ward 4. W. Byron Stearns, 320 Manchester street.

Ward 5. John J. Holland, 218 Central street.

Ward 6. Byron Worthen, 524 Lake avenue.

Ward 7. Andrew J. Dickey, 9 Manchester Corporation, West Merrimack street.

Ward 8. Walter M. Fulton, 664 Main street, West Manchester.

#### MANCHESTER CITY GOVERNMENT.

#### President of the Common Council.

Edson S. Heath, 13 Amoskeag Corporation, Middle street.

#### Members of the Common Council.

Act of June, 1848, section 1. General Laws, chapter 44, section 3.

#### WARD 1.

John P. Mullen, Amoskeag Corporation, 12 Whitney street. Oliver J. Butman, 26 Amoskeag Corporation, Stark street. Thomas Wilkinson, Amoskeag Corporation, 3 Boyden street.

#### WARD 2.

Alfred D. Maxwell, Goffstown road near Front street. Kirk C. Bartlett, 91 Harrison street. Fred T. Dunlap, 220 Prospect street.

#### WARD 3.

George W. Reed, 490 Chestnut street. George M. Clark, 88 Ash street. Alfred Nerbonne, 280 East High street.

#### WARD 4.

Charles E. Cox, 475 Hanover street. John P. Cronin, 126 Manchester street. Evangeliste V. Turcotte, 229 Merrimack street.

#### WARD 5.

Richard J. Barry, 195 Central street. Daniel J. Ahern, 21 Spruce street. William G. Cotter, 72 Spruce street.

#### WARD 6.

Thomas Walker, Jr., Goffe's Falls.

George M. Bean, Candia road near Massabesic.

Albert J. Peaslee, Cohas Avenue near water-works.

WARD 7.

Edson S. Heath, 13 Amoskeag corporation, Middle street. Charles C. Chapman, 78 Amoskeag Corporation, West Merrimack street.

Levi K. Snow, 86 Amoskeag Corporation, Canal street.

#### WARD 8.

John H. Schimmel, 266 Douglas street, West Manchester. Francois X. Robitaille, 51 Lake Avenue. Christian L. Wolff, 36 Clinton street, West Manchester.

#### Clerk of Common Council.

George L. Stearns, 58 Myrtle street.

Salary, \$200. (General Laws, chapter 46, sections 7–9. City Laws and Ordinances, page 23, chapter 14, section 11, as amended December 13, 1887.)

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#### City Clerk.

Nathan P. Kidder . . . . Office, City Hall

Salary, \$900. The city clerk, in addition to his salary, is in receipt of fees as registrar of births, marriages, and deaths, and as a recording officer for record of mortgages on personal property, of attachments of real estate, of partnerships and assignments, and for recording various other legal papers. He also receives fees for issuing dog licenses, billiard and bowling alley licenses, for certifying records, and for various other matters.

These fees are established by the state legislature under various laws, and are estimated to be between \$2,100 and \$2,500 per annum. Chosen in conven-

#### MANCHESTER CITY GOVERNMENT.

tion of City Councils in January, annually. (Charter, section 22. General Laws, chapter 47, sections 1-6, Act of 1849. City Laws and Ordinances, pages 24, 25, 86, 87, 88, 112, 113.) Residence. 313 Manchester street.

#### City Auditor.

James B. Straw . Office, City Hall Salary, \$1,000. Appointed by Mayor, and approved by Board of Aldermen, in January, annually. (Laws of 1889, chapter 287. City Ordinance of January 7, 1890.) Residence, 593 Union street.

#### Auditor's Clerk.

Allan E. Herrick . . . Auditor's Office, City Hall Salary, \$650. Residence, 534 Maple street.

#### City Treasurer.

Sylvanus B. Putnam . . . . Office, City Hall

Salary, \$1,200. Elected in convention of City Councils, in January, annually. (Charter, section 23. Act of 1856, section 4. General Laws, chapter 48, sections 3, 4. Act of 1859, section 4. City Laws and Ordinances, pages 27– 86.) Residence, 437 Amherst street.

#### Collector of Taxes.

George E. Morrill . . . . . Office, City Hall

Salary, \$1,550 and fees. Elected by Mayor and Aldermen before May 1, annually. (Act of July, 1851. Act of June, 1859, section 6. General Laws, chapter 42, sections 7-9. City Laws and Ordinances, chapter 28.) Residence, 13 Harrison street.

#### Deputy Collector of Taxes.

Edwin C. Paul . . . Collector's Office, City Hall

Paid by collector. Appointed by tax collector with approval of Mayor and Aldermen. (City Laws and Ordinances, chapter 28, section 3.) Residence 416 Central street.

#### City Solicitor.

Edwin F. Jones . . Office, Patten's Block, 936 Elm street

Salary, \$800. Elected in convention of City Councils in January, annually. (City Laws and Ordinances, chapters 13, 14, pages 86, 87.) Residence, 15 High street.

#### City Messenger.

John A. Barker . . . . . Office, City Hall

Salary, \$700. Elected in convention of City Councils in January, annually (City Laws and Ordinances, chapter 13, section 1. Chapter 14, section 7.) Residence, 49 Appleton street.

#### Joint Standing Committees.

*On Finance.* — The Mayor and Alderman Stearns; Councilmen Walker, Jr., Cox, and Dunlap.

On Accounts. — Aldermen Worthen and Stearns; Councilmen Reed, Turcotte, and Wolff. (Meet Wednesday succeeding the twenty-fourth of each month. All bills must be left at the city auditor's office, properly approved, not later than the twentieth of each month.)

On Claims. — Aldermen Stearns and Green; Councilmen Chapman, Reed, and Barry. (Meet third Friday of each month.)

On Streets. — Aldermen Corey and Green; Councilmen Maxwell, Clark, and Walker, Jr.

On Sewers and Drains. - Aldermen Holland and Dickey; Councilmen Maxwell, Clark, and Peaslee.

On Lighting Streets. — Aldermen Green and Sanborn; Councilmen Cox, Bartlett, and Snow.

On Lands and Buildings. — Aldermen Worthen and Fulton; Councilmen Cronin, Wilkinson, and Chapman.

*On Fire Department.* — Aldermen Dickey and Corey ; Councilmen Butman, Cronin, and Nerbonne.

On Commons and Cemeteries. — Aldermen Sanborn and Holland; Councilmen Bean, Snow, and Wolff.

On Public Instruction. — Aldermen Stearns and Sanborn; Councilmen Schimmel, Ahern, and Robitaille.

On Water-Works. — Aldermen Holland and Sanborn; Councilmen Mullen, Barry, and Nerbonne.

On City Farm. — Aldermen Fulton and Worthen; Councilmen Peaslee, Butman, and Ahern.

On House of Correction. - Aldermen Sanborn and Dickey; Councilmen Mullen, Ahern, and Wolff.

On Military Affairs. — Aldermen Fulton and Stearns; Councilmen Turcotte, Cotter, and Schimmel.

#### Standing Committees.

BOARD OF ALDERMEN.

On Enrollment. - Aldermen Green and Holland.

On Bills on Second Reading. - Aldermen Holland and Fulton.

On Market. - Aldermen Fulton and Green.

On Marshal's Accounts. - Aldermen Dickey and Worthen.

On Licenses. - Aldermen Corey and Sanborn.

On Setting Trees. - Aldermen Stearns and Corey.

On Special Police. - Aldermen Worthen and Dickey.

#### COMMON COUNCIL.

On Election Returns. -- Councilmen Cox, Bartlett, and Walker, Jr.

On Bills on Second Reading. - Councilmen Clark, Dunlap, and Snow.

On Enrollment. -- Councilmen Chapman, Wilkinson, and Barry.

#### City Physician.

FREDERICK PERKINS . . . Office, 895 Elm street.

Salary, \$200. Elected by City Councils in convention, in January, annually. (Laws of 1870, chapter 99. City Ordinances, chapter 13 and chapter 14, section 28, as amended by City Councils, September 1, 1885.) May be allowed such further compensation, for unusual and extraordinary medical or surgical services, as shall from time to time be deemed reasonable. Residence, 490 Lake avenue.

#### City Engineer.

WINFRED H. BENNETT . . . Office, City Hall

Salary, \$1,200. Chosen by City Councils in convention, in January, annually. (City Ordinances, chapter 14, sections 30, 31, and amendments March 4, 1890.)

#### Water Commissioners.

(Chapter 70, Laws of 1871. City Ordinances, chapter 30, also amendment to section 12, chapter 30, passed January 2, 1891, and amendment to section 22, chapter 30, passed March 3, 1891, and Laws of 1891, act approved March 31, 1891.) One commissioner elected annually by Mayor and Aldermen, in the month of September, for a term of six years. Office at Court House, corner Franklin and West Merrimack streets. Telephone at office and at pumping station.

Edgar J. Knowlton, ex-officio. Charles H. Manning, term expires January, 1895. Andrew C. Wallace, term expires January, 1894. Alpheus Gay. term expires January, 1893. Henry Chandler, term expires January, 1898. James A. Weston, term expires January, 1897. Joseph F. Kennard, term expires January, 1896. Alpheus Gay, *Chairman*. James A. Weston, *Clerk*. Salary \$100. Chosen by the board

of commissioners.

#### Superintendent of Water-Works.

Charles K. Walker . Office, Court House, Franklin street.

Salary, \$1,600. Chosen annually by water commissioners. Residence, 68 South Main street, West Manchester.

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#### Clerk of the Water-Works.

Arthur E. Stearns . . Office, Court House, Franklin street

Salary, \$1,200. Chosen by the water commissioners annually. Residence, 421 Hanover street.

#### Engineer at Pumping Station.

\* Charles C. Cole. Salary, \$800, rent, fuel, and use of land. Josiah Laselle. Salary, \$700, rent, fuel, and use of land.

Chosen by water commissioners annually.

\* Deceased.

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#### Justice of the Police Court.

Nathan P. Hunt, Court room at Police Station, corner Manchester and Chestnut streets,

Salary, \$1,500. Appointed by Governor, with the advice of the Council. (General Laws, chapter 215; chapter 163, sections 17, 18, 19 of the Laws of 1878, as amended by chapter 236, Laws of 1881.) Residence, 747 Union street.

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#### Associate Justice of the Police Court.

Isaac L. Heath . . . Salary, \$2 per day of actual service

Appointed by the Governor, with advice of the Council. (Chapter 215, General Laws, sections 2-14.) Residence, 16 High street.

#### Clerk of the Police Court.

John C. Bickford . . . . . . . Salary, \$600

Appointed by the justice of the police court. (Chapter 163, sections 17-19, General Laws, amended by chapter 236, Laws of 1881.) Residence, 15 Ash street.

#### POLICE.

The members of the police force are appointed by the Mayor and Aldermen, in January of alternate years, for a term of two years, unless sooner removed for cause. They are by virtue of their appointment constables and conservators of the peace, and their jurisdiction extends throughout the city. The term of any officer elected to fill a vacancy or to increase the number of officers, expires at the time of the next regular election. (Chapter 253, section 5, General Laws; Chapter 303, Laws of 1887; City Ordinances, chapter 5, as amended by Ordinance dated March 5, 1889.) Police Station at the corner of Chestnut and Manchester streets.

#### MANCHESTER CITY GOVERNMENT.

#### City Marshal.

Horatio W. Longa . . . Office at Police Station

Salary, \$900. Residence, River Road, north, near West Webster street. Telephone at house and office.

#### Assistant Marshal.

John F. Cassidy . . . Office at Police Station Salary, \$800. Residence, 415 Manchester street.

#### Captain of the Watch.

Lafayette Tebbetts. Salary, \$2.50 per day. Residence, 222 Laurel street.

Day Police.

SALARY, \$2.25 PER DAY.

Randall W. Bean, 73 Ash street. Edgar Farrar, 341 Chestnut street. Ira P. Fellows, 82 A street, West Manchester. Edwin A. Hutchins, 11 Mill street, Amoskeag. John T. O'Dowd, 528 Granite street, West Manchester. Florence Sullivan, 213 Cedar street. Bartlett N. Wilson, 51 C street, West Manchester.

#### Night Patrol.

#### SALARY, \$2.25 PER DAY.

Michael J. Healy (Sergeant), 551 Granite street, West Manchester.

Francois E. Bourrassa, 556 Lincoln street. Henry A. Burns, 505 Maple street. William M. Caldwell, 467 Central street. George W. Cheney, 1400 Elm street. Norbert Decoteau, 302 Cartier street, West Manchester. James F. Dunn. 237 Elm street. Edward C. Emerson, 300 Lake avenue. George E. Flanders, 655 Chestnut street. Jonathan E. Floyd, 823 Union street. Lowell O. Fowler, 1417 Elm street. Edward H. Holmes, 541 Chestnut street. Benjamin F. Lake, 772 Elm street. George A. Lovejov, 99 Orange street. Andrew J. Mayhew, 554 Chestnut street. Samuel L. Mitchell, 414 Merrimack street. John F. O'Malley, 130 Merrimack street. Francis Reuville, 44 Beauport street, West Manchester. Philip Reischer, 292 Main street, West Manchester. Olof Ring, 8 Dean street, room 18. Gilbert A. Sackett, 1420 Elm street. Timothy P. Shea, 213 Auburn street. Charles W. Stevens, 12 Russell street. George E. Varnum, 211 Massabesic street, East Manchester. John C. Colburn, deceased. \* William Bourrassa, 1449 Elm street.

#### Janitor of Station.

Peter Larabee. \$1.75 per day. Residence 124 Willow street.

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#### Matron.

Miss A. B. Brown. \$1 per day. Residence, 329 Chestnut street.

\* Elected to fill vacancy.

#### MANCHESTER CITY GOVERNMENT.

#### School Committee.

Chosen at the biennial election in November, 1890; Mayor and president of the Common Council members *ex efficie*. The board of school committee choose the clerk of the board, the superintendent of public instruction, the truant officer, and the teachers in the public schools, and determine their salaries. They have charge of the repairs of schoolhouses, to a limited extent, and the purchase of free text-books and other supplies, and are limited by the appropriations of the City Councils. The salary of the committee is \$10 each.

#### WARD 1.

Charles H. Manning, 17 Mechanic street. Charles D. Sumner, 22 Amoskeag Corporation, Stark street.

#### WARD 2.

William H. Morrison, 82 Prospect street. George H. Stearns, 1034 Elm street.

#### WARD 3.

George D. Towne, 170 Lowell street. Louis E. Phelps, 103 Walnut street.

#### WARD 4.

Stephen B. Stearns, 464 Amherst street. Edwin L. Richardson, 304 Manchester street.

#### WARD 5.

James P. Slattery, 217 Central street. William J. Sughrue, 61 Spruce street.

#### WARD 6.

F. T. E. Richardson, 481 Lincoln street. George W. Dearborn, 131 Massabesic street.

#### WARD 7.

Marshall P. Hall, 26 Amoskeag Corporation, Market street.

Edward B. Woodbury, 1 Manchester Corporation, Pleasant street.

#### WARD 8.

Luther C. Baldwin, 157 Milford street. William K. Robbins, 290 McGregor street.

Edson S. Heath, ex officio, 13 Amoskeag Corporation, Middle street.

Edgar J. Knowlton, chairman, 533 Lake avenue. Office, City Hall.

Edward B. Woodbury, clerk, salary \$100, 1 Manchester Corporation, Pleasant street.

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Superintendent of Public Instruction.

William E. Buck . . . . Office, City Hall Salary, \$2,000. Residence, 324 Myrtle street.

#### Truant Officer.

Samuel Brooks . . . . Office, City Hall Salary, \$750. Residence, 413 Beech street.

#### Assessors.

One assessor from each ward chosen at the biennial election in November. Paid §2.50 each, for each day while employed in the assessment and abatement of taxes. Office, City Hall. (Charter, section 25. General Laws, chapter 47, sections 9–12. City Ordinances, chapter 14, section 25.) Assistant assessors, not exceeding six, chosen by the City Councils.

#### 16 MANCHESTER CITY GOVERNMENT.

- Ward 1. Henry Lewis, 32 Amoskeag Corporation.
- Ward 2. John E. Stearns, 58 Myrtle street.
- Ward 3. David O. Furnald, 384 Lowell street.
- Ward 4. Harrison D. Lord, 387 Hanover street.
- Ward 5. John Ryan, 228 Chestnut street.
- Ward 6. George H, Dudley, 159 Laurel street.
- Ward 7. William T. Rowell, 14 Manchester Corporation.
- Ward 8. Frank T. Provost, 21 Amory street, West Manchester.

CHAIRMAN OF ASSESSORS.

David O. Furnald . . . . . Office, City Hall

CLERK OF ASSESSORS.

George H. Dudley . . . . Office, City Hall

#### Inspectors of Check-Lists.

One in each ward, chosen at the biennial election in November. Compensation, \$2.25 per day for each day actually employed. Office, City Hall. (Laws of 1878, chapter 163, sections 5, 6, 7, 9, 10, 11, 12, 13, 14, 16, and City Ordinances, chapter 14, section 9.)

- Ward 1. George C. Kemp, 40 Machine Shop block.
- Ward 2. Benjamin L. Hartshorn, 28 Blodget street.
- Ward 3. David O. Furnald, 384 Lowell street.
- Ward 4. Harrison D. Lord, 387 Hanover street.
- Ward 5. Patrick E. Daly, 80 Auburn street.
- Ward 6. Isaac Whittemore, River road, south.
- Ward 7. Joseph A. Foster, 42 Amoskeag Corporation.
- Ward 8. Charles C. Tinkham, 9 Parker avenue.

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#### Overseers of the Poor.

One in each ward, chosen at biennial election in November. The Mayor is a member *ex officio*. Compensation, \$25 per annum, each; clerk of the board, \$75 per annum, determined by City Ordinance, chapter 14, section 18, as amended by Ordinance of August 5, 1890. Meet third Wednesday of each month in City Hall building.

Ward 1. William H. Maxwell, clerk, 20 Amoskeag Corporation, Stark street.

Ward 2. Thomas L. Quimby, railroad station, foot West Salmon street.

Ward 3. Benjamin F. Garland, 28 Linden street.

Ward 4. George S. Holmes, 296 Hanover street.

Ward 5. Patrick Costello, 106 East Spruce street.

Ward 6. Charles Francis, Candia road, East Manchester.

Ward 7. William Marshall, 72 Amoskeag Corporation, West Merrimack street.

Ward 8. William Weber, 187 Second street, West Manchester.

Edgar J. Knowlton, ex officio, office, City Hall.

#### Board of Health.

(City Ordinances, chapter 14, section 10, as amended. Laws of 1885, chapter 165; Laws of 1887, chapter 227.) One member appointed by the Mayor in January of each year, to hold office for a term of three years. Salary, \$200 each per annum.

George C. Hoitt, M. D., 1179 Elm street. Term expires first Monday in February, 1893.

Joseph B. Sawyer, clerk, civil engineer, 356 Hanover street. Term expires first Monday in February, 1892.

Cornelius F. Starr, M. D., 49 Manchester street. Term expires first Monday in February, 1894.

Russell White, sanitary inspector, 575 Union street. Office, 936 Elm street.

Melvin J. Jenkins, sanitary inspector, 31 Nashua street. Office 936 Elm street.

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#### MANCHESTER CITY GOVERNMENT.

#### Fire Department.

The chief engineer and four assistant engineers are chosen annually in the month of January, by a majority vote of the City Councils in convention. The salary of the chief engineer is \$1,000 per annum; the assistant engineers, They exercise the powers and perform the duties of each \$125 per annum firewards. The said engineers constitute the board of engineers, and elect a clerk whose compensation is \$25 a year. The annual compensation of the members of the several hook and ladder, hose, steam fire engine, and chemical engine companies is as follows : Foremen, each \$115; assistant foremen, each \$110; clerks, each \$110; engineers, each \$135; assistant engineers, each \$105; all other members, each \$100; payable in equal semi-annual payments, on the first of January and July. (Laws of 1870, chapter 99. General Laws chapter 106. City Ordinances, chapter 8, and chapter 14, sections 22, 23, as amended by ordinance of December 31, 1886, and December 13, 1887.) Nineteen members are steadily employed as teamsters and engineers, etc.; Two at \$52.50 per month, each; eleven at \$55 per month, each; four at \$50 per month, each; two at \$45 per month, each. Members of the companies are appointed by Board of Mayor and Aldermen, in the month of February, annually, on list presented by the board of engineers. Each company has the election of its officers subject to the approval of the board of engineers.

#### Chief Engineer.

Thomas W. Lane . . Office, Central Station, Vine street

Residence, 1937 Elm street. Telephone at house and office.

Fred S. Bean, clerk, 102 Orange street. Ruel G. Manning, 52 Douglas street, West Manchester. Eugene S. Whitney, River road, north, corner West street. Clarence R. Merrill, 414 Merrimack street. For further information see chief engineer's report.

#### Trustees of City Library.

(Laws of 1854, chapter 1588. See contract with Manchester Atheneum, printed on pages 107, 108 of City Report for fiscal year ending January 31, 1855.) Board of seven trustees, one of whom is elected by Aldermen and

board of trustees, in joint convention in September annually. Term of service, six years; no salary. Two additional trustees, Mayor, and president of Common Council, *ex officio*.

Lucien B. Clough, term expires October 1, 1895, 181 Walnut street.

Nathan P. Hunt, term expires October 1, 1894, 747 Union street.

Herman F. Straw, term expires October 1, 1893, 607 Chestnut street.

Walter M. Parker, term expires October 1, 1892, West Webster street, corner Elm.

Isaac W. Smith, term expires October 1, 1898, 1855 Elm street. Moody Currier, term expires October 1, 1897, Ash street, corner Myrtle.

Benjamin C. Dean, term expires October 1, 1896, Ash street, corner Myrtle.

Edgar J. Knowlton, ex officio, 533 Lake avenue.

Edson S. Heath, *ex officio*, 13 Amoskeag Corporation, Middle street.

#### Highway Surveyors.

Elected annually in joint convention of City Councils in January.

District No. 1. Raymond P. Campbell, Union street, north. Salary, \$2 per day.

Districts Nos. 2 and 3.3. William Sanborn, 89 Pennacook street. Salary, \$1,200 per annum.

District No. 4. Cassius C. Webster, River road, south. Salary, \$2 per day.

District No. 5. Mark E. Harvey, Nutt road, south. Salary, \$2 per day.

District No. 6. Greenleaf C. Coleman, Island Poud road. Salary, \$2 per day.

District No. 7. Charles Francis, Candia road, East Manchester. Salary, \$2 per day.

District No. 8. Harrison M. Clough, Hanover street, Candia road. Salary, \$2 per day.

District No. 9. Alphonso Boyce, Mammoth road. Salary, \$2 per day.

District No. 10. Charles O. Phelps, 341 South Main street. Salary, \$2.50 per day.

District No. 11. Frank D. Hanscom, Goffstown road. Salary, \$2 per day.

District No. 12. Leroy M. Streeter, Mammoth rord, city farm. Salary, \$2 per day.

District No. 13. Eben Carr, Union street, north. Salary, \$2 per day.

Telephone at house and office of superintendent in District No. 2.

#### City Weigher.

Elected annually in convention of City Councils. Salary, \$400 per annum, all fees for weighing returned monthly to city treasurer with sworn statement. Stationed at city scales on Franklin street.

William Bailey . . . . . Office, city scales Residence, 74 Main street, West Manchester.

#### Sealer of Weights and Measures.

Albert T. Barr, 257 Merrimack street.

Elected annually in January by City Councils in convention. Paid by fees. (Section 12, chapter 40, General Laws, and chapter 121 General Laws.)

Fish and Game Wardens.

(General Laws, chapter 176.) Elected by City Councils in convention.

John C. Higgins, 143 Orange street. George A. Clark, 304 Central street. Samuel S. James, 184 Laurel street. William C. Clarke, 711 Pine, corner North street.

#### Trustees of Cemeteries.

(City Ordinances, chapter 40, sections 1, 2, 3, 4.) Two trustees elected by City Councils in convention in January, annually, for the term of four years. Sub-trustees appointed by board of trustees.

For four years, George W. Bacon, 65 Stark Corporation, Canal street.

For four years, William H. Huse, Mammoth road.

For three years, Nathan P. Hunt, Union street, near Blodget.

For three years, Bushrod W. Hill, 299 Hanover street.

For two years, John M. Kendall, 311 Central street.

For two years, Hiram Stearns, east side of Front street, Amoskeag.

For one year, Charles H. Bartlett, 60 Walnut street.

For one year, John P. Young, 346 Merrimack street.

S. B. Putnam, clerk and treasurer, 437 Amherst street.

#### Sub-Trustees of Cemeteries.

VALLEY CEMETERY.

Alderman John J. Holland, 218 Central street.

Councilman Levi K. Snow, 86 Amoskeag Corporation.

Nathan P. Hunt, 747 Union street.

Bushrod W. Hill, 299 Hanover street.

John M. Kendall, 311 Central street.

PINE GROVE CEMETERY.

Alderman John L. Sanborn, 25 Market street. Councilman George M. Bean, Candia road, Massabesic street. George W. Bacon, 66 Stark Corporation, Canal street. John P. Young, 346 Merrimack street. Charles H. Bartlett, 60 Walnut street.

#### AMOSKEAG CEMETERY.

Councilman Chris. L. Wolff, 36 Clinton street, West Manchester. Hiram Stearns, east side Front street, Amoskeag. William H. Huse, Mammoth road, East Manchester.

SUPERINTENDENT OF PINE GROVE CEMETERY.

Byron A. Stearns. Office at the cemetery; residence, 254 Taylor street. Telephone at house and cemetery.

SUPERINTENDENT OF VALLEY CEMETERY.

Charles H. G. Foss. Office at the cemetery; residence, 267 Lake avenue.

TRUSTEES OF CEMETERY FUNDS.

James A. Weston, *chairman*, 621 Maple street. Person C. Cheney, Harrison street, corner Elm. Edgar J. Knowlton (*cx-officio*), 533 Lake avenue.

#### Inspector of Milk.

H. F. W. Little . . . Office rear of 13 Lowell street Residence, 385 Lowell street. Term expires February 1, 1892. (General Laws, chapter 271, chapter 122. Laws of 1881, chapter 81. Laws of 1883, chapter 42. Laws of 1885, chapter 52.) Appointed by Mayor and Aldermen. Salary, \$150 per annum.

#### Inspector of Buildings.

Thomas W. Lane . . Office at Central Fire Station.

Residence, 1937 Elm street. Appointed by Board of Mayor and Aldermen, biennially, in February. Salary, \$1co per annum. (City Ordinances, chapter 39, Moore's Compilation. Laws of 1883, chapter 94.) Telephone at house and office.

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#### Inspectors of Oil.

(General Laws, chapter 122, sections 30, 31, 32, 33, 34, 35, 36, 37, 38. City Ordinances, chapter 22, Moore's Compilation.) Paid by fees, 1/4 of 1 per cent per gallon.

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#### Moderators.

Elected biennially. (General Laws, chapter 31, section 3, section 9; chapter 36, section 9; chapter 44, section 7. City Ordinances, chapter 14, section 21.)

Ward 1. Abial W. Eastman, 24 Amoskeag Corporation, Stark street.

Ward 2. Nicholas Nichols, 587 Chestnut street.

Ward 3. Lyman W. Colby, Chestnut street, north.

Ward 4. Joshua B. Estey, 254 Myrtle street.

Ward 5. William Howe, 64 Auburn street.

Ward 6. Henry B. Fairbanks, 303 Central street.

Ward 7. Joseph W. Bean, 10 Manchester Corporation, West Merrimack street.

Ward 8. Charles G. Ranno, 63 Parker street, West Manchester.

#### Ward Clerks.

Elected biennially. (General Laws, chapter 44, sections 10, 12. City Ordinances, page 11, sections 5, 6, 8, 10, 11.)

Ward 1. Frank X. Foster, 1382 Elm street.

Ward 2. Daniel C. Smith, 1855 Elm street. (Removed to Lawrence.)

Ward 3. Samuel C. Kennard, 609 Beech street.

Ward 4. Harrie M. Young, 33 Dutton street.

Ward 5. Timothy F. Lynch, 25 Spruce street.

Ward 6. George B. Rogers, 277 Laurel street.

Ward 7. James E. Arthur, 38 Amoskeag Corporation, West Merrimack street.

Ward 8. Frank O. Clement, 47 Dover street.

#### Selectmen.

Elected biennially. (General Laws, chapter 1, section 27; chapter 12, section 6; chapter 40, sections 2, 3; chapter 109, section 27; chapter 213, section 1. City Ordinances, page 11, section 5; page 92, section 20.)

#### WARD 1.

John H. Wales, Jr., 19 Machine Shop block, Water street. Joseph Tait. John F. Reardon, 12 Arkwright street.

#### WARD 2.

Daniel G. Andrews, 777 Union street. Robert R. Chase, 841 Union street. Harry P. Ray, State Industrial School.

#### WARD 3.

David Thayer, 102 Walnut street. John Cronin, 284 Bridge street. Charles C. Clifford, 99 Lowell street.

#### WARD 4.

John K. Currier, 43 Ashland street. Jeff. T. Perry, 166 Merrimack street. Charles H. Bodwell, 257 Merrimack street.

#### WARD 5.

Laurence F. Mahoney, 104 Auburn street. John B. Laforest, 242 Lake Avenue. Arthur Allen, 74 Auburn street.

#### LIST OF OFFICERS.

#### WARD 6.

George F. Sargent, Mammoth road, East Manchester. John T. Gott, 301 East Spruce street. Peter D. St. Germain, 306 Auburn street.

#### WARD 7.

Willie D. Wheeler, 25 Manchester Corporation, Grove street. William J. Welch (deceased).

John F. Mellady, 53 Amoskeag Corporation, West Merrimack street.

#### WARD 8.

George E. Fellows, 316 Milford street. Frank St. John, 5 Barr street, West Manchester. Odilon Doucet, 126 McGregor street.

#### OTHER CITY OFFICERS.

City Ordinances, chapter 13, election of city officers, section 1 : "The City Councils in convention shall, in the month of January, annually, elect corders and measurers of wood, bark, and manure, weighers of hay, straw, coal, and other articles, surveyors of lumber, fence-viewers, sealer of weights and measures, pound keeper, cullers of brick, measurers of stone, measurers of brick and plastering, measurers of painting, cullers of hoops and staves, sealers and measurers of leather, measurers of coal."

## Weighers of Hay, Straw, Corders and Measurers of Wood, etc.

W. W. Dickey, Harvey road, sworn in January 25, 1891.

Charles E. Bartlett, timekeeper Amoskeag Corporation, sworn in January 20, 1891.

George L. Stearns, clerk P. C. Cheney Paper Co., sworn in January 29, 1891.

William Bailey, city scales, Franklin street, sworn in February 2, 1891.

Benjamin S. Nichols, 27 Pennacook street, sworn in February 3, 1891.

Benjamin F. Kinsley, foot of Franklin street, sworn in February 3, 1891.

Robert Leggett, Amoskeag Corporation, sworn in February 3, 1891.

J. F. Wyman, 85 South Main street, West Manchester, sworn in February 3, 1891.

I. W. Wakefield, 62 Amoskeag Corporation, sworn in February 3, 1891.

C. W. Quimby, 134 Milford street, sworn in February 3, 1891.

George H. Butterfield, North Bedford road, West Manchester, sworn in February 3, 1891.

J. W. Dickey, Amoskeag Corporation, sworn in February 3, 1891.

W. H. Gilmore, Taylor street, East Manchester, sworn in February 3, 1891.

James A. Doe, 485 Elm street, sworn in February 3, 1891.

F. B. Balch, L. B. Bodwell Co., Elm street, sworn in February 4, 1891.

George A. Stokes, 34 Machine Shop block, sworn in February 5, 1891.

John S. Lovering, E. P. Johnson Co., Elm street, sworn in February 5, 1891.

James Benson, Candia road, Massabesic, sworn in February 6, 1891.

J. M. Moore, 1308 Elm street, sworn in February 10, 1891.

Dexter L. Wilson, 64 Granite street, sworn in February 10,1891.

Joseph A. Brown, Young street above Beech, sworn in February 14, 1891.

Horatio Fradd, 3 South Main street, West Manchester, sworn in February 16, 1891.

Edgar W. Poore, 690 Elm street, sworn in February 17, 1891.

Charles S. Kidder, Union above Clarke street, sworn in February 21, 1891. H. I. Dodge, Devonshire Mills, sworn in February 21, 1891.

Alvin G. Bean, 181 Massabesic street, East Manchester, sworn in February 27, 1891.

D. A. Holland, 1158 Elm street, sworn in March 16, 1891.

D. M. Poore, 1139 Elm street, sworn in March 27, 1891.

C. A. Blood, 295 South Main street, West Manchester, sworn in March 31, 1891.

F. G. Putney, P. C. Cheney Paper Co., Amoskeag, sworn in April 3, 1891.

Jason P. Simmons, sworn in May 1, 1891.

Frank P. Colby, Windsor Hotel, sworn in August 5, 1891.

T. M. Hall, 69 Amherst street, sworn in August 22, 1891.

#### Constables.

James A. Broderick, 26 Pembroke building, sworn in January 7, 1891.

John M. Crawford, 30 Manchester street, sworn in June 24, 1891.

#### Fish and Game Warden.

J. C. Higgins, Amory Manufacturing Co., sworn in January 24, 1891.

#### Sealer of Weights and Measures.

Albert T. Barr, 257 Merrimack street, sworn in February 3, 1891.

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Cullers of Brick, Measurers of Stone, Stonework, Plastering, Painting, etc.

T. Frank Dickey, 78 Concord street, sworn in February 3, 1891.

Joseph E. Bennett, 554 Beech street, sworn in February 3, 1891.

Joel Daniels, 1094 Elm street, sworn in February 3, 1891. Jeremiah Choate, 1330 Elm street, sworn in February 3, 1891. John P. Young, 852 Elm street, sworn in February 4, 1891. George H. Allen, 924 Elm street, sworn in February 7, 1891. Anson Minard, 453 Pine street, sworn in February 11, 1891.

#### Inspector of Petroleum.

Edward J. Powers. Concord & Montreal freight depot, sworn in March 7, 1891.

#### Surveyors of Lumber.

Chandler H. Clough, Concord & Montreal Railroad, sworn in February 3, 1891.

Jerome J. Lovering, 300 Pine street, sworn in February 4, 1891.

Charles Jacobs, 61 C street, West Manchester, sworn in February 5, 1891.

F. A. Senter, Manchester Print Works, sworn in February 7, 1891.

A. C. Wallace, 168 South Main street, West Manchester, sworn in February 7, 1891.

Edwin L. Tinkham. 346 Granite street, West Manchester, sworn in February 10, 1891.

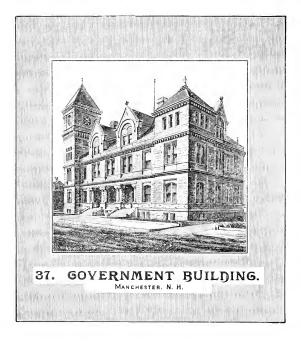
J. L. Smith, S. C. Forsaith Machine Co., sworn in February 12, 1891.

George P. Tarr, S. C. Forsaith Machine Co., sworn in February 18, 1891.

C. W. Piper, 16 Orange street, sworn in March 7, 1891.

John H. Proctor, Candia road, sworn in March 26, 1891.

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# MAYOR KNOWLTON'S INAUGURAL ADDRESS.

### MAYOR KNOWLTON'S INAUGURAL AD-DRESS.

#### Gentlemen of the City Councils :

Having been selected to assume the direction of city affairs for the two years ensuing, through confidence in our ability and integrity to serve the public weal, we have assembled here in the early dawn of a new year to accept the trust confided to our keeping. Great responsibilities are before us, and it is only by reliance on Him whose blessing and kindly guidance have been invoked, and the unselfish consecration of our best energies to the work before us, that we can hope to give to our city a satisfactory administration of affairs.

I am free to say that my only purpose is to serve our growing and prosperous city honorably and faithfully, and to give to the people the full fruitage to which they are entitled in return for the heavy burdens of taxation which are laid upon them. It is incumbent upon us that we do not allow ourselves to be cramped within party lines, or permit party spirit to dominate our actions. Good men of all parties should come together for united action when matters of local government are to be considered, and sweep from the municipal field political parties and politicians alike, for they can have nothing in common with the interests of the people.

It is admitted on all sides that one of the most disturbing problems of the day is that of municipal government. The statement has been made, and reiterated again and again, that the people of our American cities are misgoverned to a greater degree than those of any other country. The reason for this, it seems to me, is that our business men do not, as a rule, concern themselves with municipal affairs, and there is lacking that individual and persistent effort which is the foundation of every success in business life. The result has been that the interests of the people have suffered, and there is an all-pervading and wellgrounded behef that our cities are receiving but a fractional part of what they pay for. In almost every department men are foisted upon the pay-rolls, not because of any special fitness for the positions they are presumed to fill, or ability to serve the city and give an honest day's work for their pay, but because they are either serviceable as party men or are indebted to some merchant politician, who seeks by forcing the city to employ these men to secure the money due him for merchandise.

There appears to exist a misconception, in the minds of many, that cities are rich and well able to support all manner of extravagances, and they are therefore pounced upon, vulture-like, by men in all the walks of life, who seem to regard a municipality as common prey. The result has been a veritable scramble to determine who would secure the largest share of spoils, thereby displaying a selfish greed and lack of conscience which are the greatest enemies to both private rights and the public welfare. Faster even than the rapid growth of our city has been the ratio of increase in expenses. Some of these have been legitimate while others have not been. The pay of men has been increased in several departments when there were scores of applicants seeking the positions of those in employment at the old rate of payment. The time to increase wages would seem to be when capable men are not to be had for the amount being paid. If we can but bring people to a true understanding of this subject, that cities, states, and nations are not wealthy, but on the contrary are the veriest mendicants, -- eternally seeking alms, which are wrung from the people by one form of taxation or another, - we may be able to correct some of the abuses which we have seen grow up around us.

#### FINANCE.

Of all the manifold duties which beset us none are more important, and none call for a display of intelligence and wisdom to a greater degree, than does the management of the financial affairs of our city. Good judgment here, supported by executive ability elsewhere, will insure an administration that will be satisfactory in the main to all our citizens and tax-payers.

The financial condition of the city on the first day of January was reported to be as follows :

Amount of funded debt, January 1,

1890 .						\$94	5,950	.00	
Cemetery	bonds	issue	d dui	ing	the				
year .	•	•					2,900	.00	
Amou Interest du Bills outsta	e, estii	nated		•	•	\$2	20,000	.00	\$948,850.00 \$75,042.97
Total	indebt	ednes	s, Jan	uary	1, 18	891		\$	1,023,892.97
Cash in tre	asury,	Janua	ry 1,	1891		•	•	•	134,594.99
Net indebt Net indebt		-							\$889,297.98 886,100.67

Increase of net indebtedness during the year \$3,197.31 Although the figures given above indicate a somewhat heavy indebtedness, the fact is that our superior system of water-works, owned by the city, can readily be sold for an amount largely in excess of the city debt, and leave our municipality not only free from moneyed obligations but with a handsome surplus in its treasury.

Of the bonded debt \$520,000 bears six per cent interest, and \$415,000 four per cent. No part of the city's bonded indebtedness will become due the present year, but an amount aggregating \$100.000, bearing six per cent interest, will have to be provided for January 1, 1892, and this, I trust, we may be able to cancel in part, and refund the balance for four or a less per cent.

The excellent financial status of our city is a source of great gratification, and yet I am earnestly of the opinion that the pol-3

icy heretofore followed in matters of finance should undergo a radical change. I believe that all expenditures in the line of permanent improvements should be done by loan, and whenever this is done accompany the act by a provision for the laving aside annually of a sufficient amount of money, which, when the loan shall mature, will be sufficient to entirely meet the obligation. This sinking-fund I would have sacred and inviolate, and in charge of a board of trustees. This, it seems to me, is the only perfect financial policy which a growing city can devise, and nothing could be better. This is a system which will mete out justice to ourselves and to those who come after us. For what we enjoy and derive benefits from we shall help to pay for. and so, in like measure, will our children and those who succeed them. Why should we continue what to us is a ruinous policy. and submit to grievous burdens of taxation for the creation of enduring improvements, when we can experience but a fractional part of the advantages and blessings to be received therefrom? Why not permit those who are to reap the ripened harvest of our endeavors to assist in meeting the obligations thereby assumed, as where all help there is an equal distribution of the burden, and taxation is at no time excessive?

The most serious obstacle in the pathway of Manchester's prosperity to-day is her excessive tax-rate. A decreased rate will add materially to the valuation of the city, and no other agency can be so potent for its good. It will be an invitation for a multiplicity of industries to make their homes in our beautiful city, and lead local capitalists to invest their money, for their own and the city's good, at home, instead of placing it in doubtful schemes at remote points in the West and South.

In making the appropriations for the current year we cannot be too careful and considerate. An examination should be made into the needs of every department, the same computed in dollars and cents so far as may be, and the apportionment of money then made commensurate with a judicious and discreet administration of affairs. We should impress upon those who are to have the expenditure of money that economy is the first duty which they owe the city. We should not, unless in cases of the greatest emergency, permit appropriations to be overdrawn, and every official who allows this to be done without proper authority should be held personally accountable for all that is expended in excess of the appropriation.

#### VALUATION.

The information is obtained from the assessors that only the legitimate, natural increase in valuation can be expected this year, which means that we can derive added revenue only from new buildings, or from property situated in some exceptional localities, where increased value has been given the same by reason of the erection of new public buildings and industries. The assessors' valuation last year was \$2.4,173,240, which is an advance of \$1,210,450 over the previous year. This substantial increase was the result of the expiration of the ten years' exemption on the Amory Mill, and the increase in the valuation of property on Elm street to the extent of \$200,000.

The industrial property at present exempt from taxation includes the Jefferson Mill, Everett Knitting Works, the new Stark Mill, the Manchester Shoe Manufacturing Company's shop, the West Side Company's shop and equipment, A. P. Olzendam & Son's hosiery mill, and the W. W. Hubbard shop.

## DISCOUNT ON TAXES.

For the past year the city paid the considerable sum of \$11,-265.25 as discount on taxes. I believe that we should follow the custom of most other cities and abolish this practice.

#### WATER-WORKS.

The foresight of those who some twenty years ago planned our excellent system of water-works receives daily demonstration in the blessings which we enjoy from a pure and abundant water supply, and also in the revenue derived from its use. The policy of the water commissioners in buying up the flowage land about Lake Massabesic is commendable, and the time may not be remote when it will be necessary, as a matter of protection to the health of thousands of consumers, for the city to possess the entire area which is flowed by the lake.

One of the important matters which will command our early attention is the proposition for the establishment of a highpressure service on Oak Hill. The report of the engineer engaged to make surveys has been published, and of the eight different estimates presented the lowest sum for which the object desired can be secured is placed at \$82,218.56, and from this up to \$184,297.16. We should not take action in this matter until we are entirely satisfied as to what is the true policy of the city. If it is deemed advisable to authorize the construction of this addition to our water-works system, allow me to suggest it should be done gradually, and that the expense should be met from the income derived from the works, in order not to increase the burdens of the people by further taxation.

It has been the practice since the construction of the waterworks for the city to raise by taxation and pay over to this department a large sum of money for hydrant service, sprinkling the streets, use of water in city buildings, etc., which sum for the past year amounted to practically  $\$_{25,000}$ . This was well enough at the inception of the water-works, but now that they are more than self-supporting I seriously question the advisability of longer continuing this severe strain upon the tax-payers and would recommend that in lieu thereof the amount to be paid the water-works for the use of water by the city be limited to  $\$_{5,000}$ per annum.

#### CITY AUDITOR.

The experience of the past year has justified in ample measure the wisdom of creating the office of city auditor. The auditor has materially lessened the work in several departments and is rapidly reducing the affairs of the city, so far as can be done by book-keeping, to a business basis.

#### SEWERS AND DRAINS,

This is a subject of the utmost importance and merits prompt consideration. There is urgent necessity of the introduction of

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a system of sewerage at Amoskeag village, and for the extension of the sewerage system throughout the southern section of the city and that portion of McGregorville which has not yet been reached. There is a demand also for the enlargement of the main sewer running from Granite street through South Main street and having for its outlet Piscataquog river. The present sewer is deemed too small to afford adequate drainage for the territory tributary to it.

Nothing should be allowed to stand in the way of giving to our city as perfect a system of sewerage and drainage as it is possible to have, as the protection of the public health is of the weightiest consequence. Our city has been fortunate in not having experienced the ravages of terrible epidemics within the last few years, and let us not invite their visitation by neglect of duty where prompt action our part may avert calamity. By the affordance to our city of proper sewerage and drainage facilities and the maintenance of an active and vigilant board of health we shall have done our duty.

In the construction of sewers we should have resort to machinery in order to facilitate their building, and I believe it would be for the interest of the city to contract much of the work in this and also in other departments of the city.

## HIGHWAYS, SIDEWALKS, AND BRIDGES.

Compared with other cities Manchester has but little to boast of when it comes to the consideration of well-made and attractive streets. This is not because we are lacking in conditions, for there is not a city in New England which is more abundantly favored with beauty of surroundings, or where nature has been more lavish in the bestowal of her diversified gifts of river and mountain scenery, and where field and forest mingle more pleasantly in the perspective, and yet despite all that nature has done for us there is a woeful lack of beautiful drives, which are so fascinating to people who have the leisure and means for their enjoyment, and which are a recommendation in the eyes of visitors for any city possessing them. To the rapid growth of the city, with its incessant calls for new streets, repairs and improvements, the present unsatisfactory condition of our highways is largely due. The showing which has been made in our city by the experimental stretches of concrete leads me to recommend that we continue this method of street building on a more liberal scale than has hitherto been the practice. The concrete street is far more durable than a macadamized highway, costs no more, and it affords a delightful surface to drive over.

In the suburbs there is room for improvement in every direction, and I deem it imperative that there be a more liberal expenditure of money upon the highways leading in and out of our city in order that they may be put in the best possible condition. I would recommend that the portable stone crusher be taken into all of the outlying districts in order that stone may be delivered and crushed near the locality where it will be needed, and by this method a substantial saving in expense can be made.

In the matter of new streets there is a demand for more enterprise than has heretofore been shown. The street should be the pioneer to lead the way for house building, rather than to await the time when its construction can no longer be averted, and when localities have been built upon for which the grade has not been established.

Sidewalk construction needs to be pushed forward more rapidly, as there is no one thing which contributes more abundantly to the comfort and convenience of the public. Investigation and observation both lead me to the conclusion that the city should take charge of the establishment of sidewalks and assess one half of the expense of their construction to the abutters. By this practice, they will be made uniform and their extension more vigorously promoted. There is an advantage to the abutters, also, in that the city will have the ownership and care of the walks for all time, and will be accountable for their condition.

The bridges are generally in good condition, but there is need of a new and wider bridge to take the place of the present narrow crossing which spans the Piscataquog river on South Main street. This bridge is wholly inadequate to properly care for the uses demanded of it by the public.

#### PUBLIC SCHOOLS.

The largest single item of municipal expenditure arises from the maintenance of our system of public education.

For this heavy outlay, however, we have the recompense which a study of the facts implies, that of all the various uses to which the money of the tax-payers is put, none give better, if as good, returns as do the schools of our city. The burden which their fostering entails is borne cheerfully by an enlightened and progressive citizenship, as throughout the changing current of events it becomes more and more apparent that the public school is one of the foundation stones of the republic. The fidelity and loyalty of our people to this beneficent institution find eloquent expression in our school-crowned hills, and the schools in return shed luster on the fair fame of our city, as in competitive trials with those of other cities and states the laurel wreath has been allotted to the pupils of the Manchester public schools.

The continued and rapid growth of the city calls for increased school accommodations, and in several directions the demand is imperative. By the completion of that magnificent temple of learning, dedicated a few days ago, and which bears the name of our honored retiring chief magistrate, the wants of the West Side have been provided for and anticipated for some years to come. In the eastern section of the city, the situation is the reverse, however, and immediate provision should be made to accommodate the flood of incoming pupils. At the East Manchester school there are but sixty-eight sittings to accommodate an enrolled membership of seventy-seven, and there is good reason to believe that nearly one hundred pupils will seek admission to this school at the spring term. A new schoolhouse, and one which will provide for not only the immediate but the future needs of this rapidly growing section, is a necessity which I trust you will not long permit to go unsupplied.

The Wilson Hill school is also very much overcrowded, and the pressure upon the Ash and Lincoln street grammar schools is so great that in the case of the former it has been found necessary to fit up a classroom in the hall on the third floor. It has been suggested that the proper thing to do to relieve all three of these schools is to build a new high-school house, and to utilize the present structure for grammar, middle, and primary schools. This is a matter which should command our most considerate and painstaking attention, and if new schoolhouses are to be reared let us have buildings which shall be constructed with a view to utility rather than to display.

There are other matters, the importance of which I desire to emphasize at this time. One of these is the great need of the introduction of manual training into our schools in order that children may be educated industrially as well as intellectually. New Hampshire being a manufacturing state and peopled by an industrious population, it is eminently desirable that the young men and women who must look to their own hands and brains for a livelihood should be properly equipped by our schools for the battle of life, and I believe we shall not have done our duty by them until we have combined with the culture of the brain the training of the hands.

Another much-needed innovation is a gymnasium, and if this cannot be supplied for all the schools of grammar grade, it should at least be given a place at the high school.

#### CITY LIBRARY.

The usefulness of our excellent and well-managed free public library is one of the proud boasts of our citizens. Its shelves are constantly receiving valuable acquisitions, and the number of volumes of which they are now the repository aggregates more than thirty-three thousand. Their stores of knowledge are free to all classes, and they provide the means for both entertainment and instruction. The great need of the library is suitable reading-room accommodations, but it is doubtful if the city should go to the expense of building an extension for this purpose on the present site, as the time cannot be remote when a new building, and one adapted and properly equipped to meet the requirements of such an institution, will be called for in another locality.

The enterprise of preparing a new catalogue has progressed

during the past year, and the patrons of the library have the promise of a new and complete index in the near future.

The custom, inaugurated some years ago, of presenting to the library portraits of our eminent citizens who have been prominent in their fostering care for the best interests of the city is a happy one, and deserves to be encouraged. The acquisitions to the library's portrait gallery the past year included portraits of the late Dr. Josiah Crosby, Hon. Samuel N. Bell, and ex-Mayor John Hosley. The latter, by the provisions of his will, set aside the generous sum of \$5,000 for the purchase of non-sectarian newspapers and magazines for a free public reading-room in connection with the library. This sum is held in trust, the income going to the daughter of the deceased during her life.

The settlement of the estate of the late Mrs. Eliza A. Eaton, now nearly if not quite consummated, will give to the library a fund amounting to about \$2,500.

I would reinforce the suggestion which has repeatedly been made by some of our citizens that the library be open to the public for both reading purposes and the delivery of books for a few hours on Sundays. I believe the influence resulting from such an innovation could not be otherwise than elevating, and I also believe that the tendency would be to further popularize the institution.

#### FIRE DEPARTMENT.

Our citizens are proud of their fire department, and the department in return justifies the feeling. For intrepidity, vigor, and promptness of movement it has long taken high rank. It costs a great deal of money to maintain it, but the compensation comes in keeping our losses from fire at the minimum. We should not withhold from this arm of the municipal service anything that is needed to give additional security to our city in case of fire, or that would add to the efficiency of the department, as neglect, no matter how slight, might lead to the most disastrous consequences.

The citizens of South Manchester have for several years pressed their claims for a hose-house, and as they are located fully a mile from any fire apparatus it would seem that with the continued growth in that direction the time has come when their petition should be granted. This could be done without great expense, as the hose carriage at the Fire King house, recently displaced by a combination hose carriage and hook and ladder truck, could be transferred to South Manchester, and the enterprising citizens of that locality have made known their willingness to organize a volunteer company to man the same. The citizens of McGregorville have also asked for a hose-house. An urgent need, it seems to me, is an aerial ladder truck, as the department at the present time is deficient in apparatus of this character, which would insure the best results in case of fire in the upper story of some of our highest buildings.

## POLICE DEPARTMENT.

There is no department of the public service which calls for greater manliness and more absolute integrity that that of the police, but the highest ideal of a police department can never be secured in a community where political considerations are allowed a controlling influence in the make-up of the force, and we shall never see our department elevated to the standard of efficiency desirable until it is divorced from political influences and placed in charge of a commission, the officers to serve continuously unless removed for cause.

There is a feeling that we have too many officers at present for a law-abiding community, such as is ours, and an investigation of the manner in which the force is distributed seems to justify this theory. One of the most forceful reasons given why the city should assume the great expense of an all-night electric-lighting service at the time of its introduction was that the system would do away with the necessity of employing as many officers as had been the custom, and while this, I am told, has been the fact in other cities, the reverse has been true with us. Instead of diminishing the force it has been greatly and I believe unnecessarily augmented, until to-day we have an officer for nearly every thousand of our population and the force has attained to the limit allowed by law. If, upon investigation, we find that the force cannot be reduced and the interests of property holders properly protected, we should, I think, arrange to have the city patrolled at hours of the day and night when there is not now any guardianship whatsoever exercised.

#### CITY FARM.

One of the constant complaints coming from the great body of our tax-payers is that this farm, naturally productive, and abundantly supplied with all the appliances and stock needful for its successful cultivation, is not managed so as to be somewhere near self-supporting. In room of this a large sum of money has been wrung from the tax-payers for its maintenance. For the ten years ending with January 1, 1800, the sum of \$29,000 was appropriated by the city councils and devoted to this farm, and in addition to this the receipts of the farm for the same period, amounting to \$17,266.78, were also applied for the same purpose, the appropriations and receipts together making a total of \$46,266.78. But even this large sum was not sufficient, as the total expenses for the ten years aggregated \$67,882.94, an excess of \$21,616.16 above both appropriations and receipts, which had to be met by transfers from the reserved fund or some other appropriation.

It will be well for us to give this subject our serious attention at once, for it would seem that we should be able to devise some means to stop this excessive draft upon the city treasury. The able-bodied men and women who are maintained at the farm, whether as paupers or as transgressors, should be set to work and thereby lighten the burdens of the industrious and toiling masses who are supporting this institution.

#### COMMONS AND PARKS.

The progress which has been made in recent years in beautifying our commons is most gratifying, and we should pursue a line of policy which will continue to add to their attractiveness.

By popular vote our citizens have overwhelmingly declared themselves in favor of the creation of Derryfield park in the

northeastern section of the city, composed of sixty-seven acres of land which has heretofore been a portion of the city farm, and with equal unanimity they have expressed themselves favorable to the establishment of a park, consisting of twenty-five acres of land situated in the northern section of the city, in which rest the ashes of the hero of the North, General John Stark. He was one of the central figures of the Revolution, as you all know, and it seems eminently proper that our city, where the greater part of his life was spent, should recognize his exalted patriotism and conspicuous achievements, and thereby discharge a duty which has long slumbered, while we at the same time point a lesson of lovalty to country and devotion to duty which will not be without its effect upon succeeding generations. The national government can undoubtedly be relied upon to assist in this matter, as an appropriation of \$50,000 has once passed the senate for an equestrian statue at the hero's grave, and the effort to get the bill through both houses of congress is to be renewed. The city should therefore see to it that the grounds, having been purchased, are made, as rapidly as possible, to conserve the purposes of a public park. The outlay upon the city parks need not be heavy in any one year, but by the expenditure of a small sum annually they will soon assume proportions of great beauty.

#### STREET LIGHTING.

Manchester deserves the reputation which she enjoys of being one of the best lighted of cities, and I very much doubt if the people would ever consent to a backward step in this direction. The electric-lighting service has been extended until now there are 252 lights, besides 83 gas lights and 65 oil lamps. The present three years' contract for street lighting by electricity expires December 26 of the present year, and with the progress which has been made in the methods for producing such light the people will expect us to make a contract more favorable to the city. The total sum expended for street lighting the past year exceeded \$41,000.

#### CEMETERIES.

The management of our cemeteries has been commendable to a high degree, and the introduction of modern appliances to increase their beauty and attractiveness has been rapid and productive of the best results. The Valley and Pine Grove cemeteries are beautiful, sacred spots, where, after "life's fitful fever" has ended, have been gathered the remains of thousands of our population. It is a religious and hallowed duty to make as attractive as possible the resting places of the dead. The only suggestion I have to offer at the present time is that the outlying cemeteries, other than the two named above, should also be the objects of our thoughtful care and solicitude.

## CITY ENGINEER.

This office is one of increasing importance as the city expands. Excellent progress has been made in procuring maps of streets and sewers, but the need is now felt for a larger map of the city, showing all the streets, together with the frontage and area of every plot of land. This should be made as early as practicable, and arrangements likewise entered upon the present year to have all the outlying roads marked by stone bounds, and the same system of marking also applied to streets wherever necessary. In order to carry forward all the work demanded of this department there is necessity for an increase in the appropriation.

#### GRANITE-STREET CROSSING.

The grade crossing at Granite street, aside from being dangerous, is a source of great annoyance to the business interests of the city, as the delay occasioned by the unavoidable passing to and fro of trains is a matter which concerns a large number of people. Various plans have been suggested for doing away with both the danger and annoyance of this crossing, among them that of tunneling beneath the tracks. This, however, practical engineers do not consider would be satisfactory, and the only plan remaining which promises relief is that of an overhead crossing north of the passenger depot, which would take all of the light travel. It is deeply to be regretted that Manchester, with a population noted for their character and enterprise, and affording a vast business for the railroads, has not before this time been provided with a new depot and train-shed in keeping with the advancement which has been made in other directions.

#### PUBLIC PLAYGROUND.

As the encouragement of legitimate sport and recreation tends to a happy manhood and the prolongation of life, I would suggest that the city provide a public playground for its youth. A section of the proposed Derryfield park could be set aside for this purpose, and the same fitted up for base ball, foot ball, and kindred sports at a trifling expense. I am in favor of pursuing a liberal policy towards the youth of our city, as I believe that a little attention shown them, and a regard manifest for their enjoyment, will be the means of keeping them from harmful influences in a large measure, and whatever we do in this direction we do for posterity.

#### PUBLIC BATH-HOUSES.

Our city seems to be behind other municipalities of equal population in the direction of providing free public bath-houses. I believe we should regard with favor a movement calling for a reasonable outlay for such a purpose.

#### RAILROAD EXTENSION.

At the session of the legislature which convenes to-morrow an attempt will be made to procure such legislation as will bring about the relaying of the rails on the Manchester & North Weare Railroad between Weare and Henniker. This is a movement which intimately concerns the material interests of the city, and we should lend encouragement to the effort in every manner possible. Not only is this extension needed, but the time is at hand when the business interests will demand another and direct route to the West, and one which will bring us into intimate relationship with the flourising city of Fitchburg and the large railroad interests centering at that point.

#### SUPERINTENDENT OF BUILDINGS.

The large number of public buildings now owned by the city, and the considerable expense required to keep them in repair, lead me to recommend the creation of the office of superintendent of public buildings. The duties of this official would be to pass upon all repairs demanded and superintend whatever work was deemed necessary. This would centralize a great deal of work which is now scattered through various committees.

#### CITY REPAIR SHOP.

I believe that a substantial saving of both time and money can be made for the city by the establishment of a city repair shop. This could be done by an addition to the city stable building.

#### BOARD OF TRADE.

This organization of our business men, formed in the early part of the preceding year, has demonstrated that there is an ample field here for its labors, and that it can be made a powerful agency in the upbuilding of our city. I trust that our citizens generally will become members of the organization, and by so doing assure its continuance and activity.

#### THE LIQUOR TRAFFIC.

This much-mooted subject, although a matter of agitation for nearly half a century, still remains unsettled. We shall, undoubtedly, find it a vexatious problem, as have those who have preceded us in authority, but when our course is once determined upon we should stand to it unflinchingly.

That intemperance is an evil of gigantic proportions there are but few, if any, in this day of enlightened thought and widely distributed knowledge, who will attempt to deny. For a long period of time, people of all classes have assented to this view of the question, and laws have been enacted and spread upon our statute books seeking the abolition of the liquor traffic. But while people have agreed with practical unanimity as to the evil of this business, they have widely differed, and do to-day, as to the methods for its suppression and the limitation of its powers. The prohibitory laws have not been enforced, and almost every attempt to carry out their intent and purpose has resulted in ignoble failure. The great weakness of the law is that there is very little of active public sentiment behind it, and the attempt to found a third party on the principle of prohibition has as yet made but little progress, as the casting of but 1,363 votes in a total poll of 86,240 at the late election in this state is conclusive evidence.

I have entertained the opinion for some years that the most practical way to deal with this question, and one which would give the best results, would be by the enactment of a judicious license law with a local option clause. It seems clear, after so many years of prohibitory legislation, that it is only by a license law that we can circumscribe and restrict the scope of the liquor traffic and bring the evil within control. Certain it is that under a license law the traffic in the sale of intoxicating liquors could not have greater freedom than it enjoys to-day under our prohibitory legislation, and at the same time the city has nothing to show for the prevalence of this unbridled evil but the poverty, vice, and ignorance which ever follow in the train of intemperance. Enact a license law and not only will the operations of the liquor business be curtailed, as I believe, but the city will derive a revenue which will materially lessen the burdens of taxation and assist in the creation of a moral sentiment, by means of educational influences, which must eventually drive the occupation of selling liquor for other than the best purposes from the field. When it is known that our sister cities, like Lowell and Lawrence, annually derive a fund of more than \$100,000 from liquor licenses, we can comprehend something of the disadvantages under which we labor as a municipality as compared with those cities. Within a few weeks two thirds of the cities of Massachusetts have placed themselves on record in favor of license by an overwhelming declaration of public opinion, and this, too, in instances where license did not prevail

during the preceding year. Public sentiment is progressive, and if we may judge by what has taken place in Massachusetts, license, as long as the conditions which govern society remain as they are, is the basis upon which we shall eventually arrive.

But to return to matters as we find them, we are admonished that there is no license law in New Hampshire, and we cannot, therefore, deal with this question from that standpoint. It is our duty, under the circumstances, to see to the impartial enforcement of the laws as we find them.

#### POWERS OF THE MAYOR.

I would briefly remind you that our city charter is so drawn as to deprive the mayor of almost every semblance of power save that exercised in the veto. While ostensibly the chief executive of the city he is practically without authority. I do not refer to this subject in any personal sense but because I believe the interests of the city would be better advanced if additional powers were conferred upon the mayor, and he then held accountable for the exercise of authority granted him. The tendency in most cities at the present time is to invest the office of mayor with increased responsibilities.

#### CONCLUSION.

In conclusion, gentlemen, I assure you of my hearty and active co-operation in all matters destined to promote the public good, and I have no doubt but that our official intercourse will prove pleasant to ourselves and profitable to our city. The more we study into the duties, the performance of which we have undertaken, the greater need we shall find for the exercise of an individual interest and the utmost vigilance and faithfulness over the affairs which we hold in trust for the people. We have in our midst potent examples of what we may accomplish for our city by well-directed and consecrated effort, in the manner in which our great manufacturing corporations are managed. Their annual expenditures largely exceed those of the city; they employ a larger number of men and have as great interests at stake, and yet there is never a rumor of mismanagement there. With these examples before us, and inspired by a determination to do our duty regardless of besetting influences, we cannot fail to make honorable history for ourselves and for our city, which is worthy of our most exalted endeavors.

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EDGAR J. KNOWLTON, Mayor.

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# BOARD OF WATER COMMISSIONERS.

OF THE

# REPORT

# BOARD OF WATER COMMISSIONERS. 1891.

E. J. KNOWLTON, MAYOR, ex-officio.

ALPHEUS GAY, *President*, term expires January, 1893.
JAMES A. WESTON, *Clerk*, term expires, January, 1897.
HENRY CHANDLER, term expires January, 1898.
A. C. WALLACE, term expires January, 1894.
CHARLES H. MANNING, term expires January, 1895.
JOSEPH F. KENNARD, term expires January, 1896.

## Officers.

CHARLES K. WALKER, Superintendent. ARTHUR E. STEARNS, Registrar. JOSIAH LASELLE, Engineer at Pumping-Station.

# REPORT

#### OF THE

# BOARD OF WATER COMMISSIONERS.

To the City Councils of the City of Manchester :

GENTLEMEN, — The Board of Water Commissioners have the honor to submit herewith their twentieth annual report for the year ending December 31, 1891, together with the report of the superintendent covering the same period of time, to which reference is made for the details of the service connected with this department.

The receipts and expenditures for the year have been as follows :

Balance unexpended 1	Decei	mber <sub>(</sub>	31, 1	890	•		\$60,648.89
Receipts from all sour	ces i	n 189	I		·		76,605.23
Total							\$137,254.12
Interest on water bon	ds			\$3	2,168	.00	
Current expenses .					4,962	.85	
Repairs and renewals				2	1,995	.06	
Construction .				2	2,667	•74	
Total expenditure	es	•			•		\$81,793.65
Balance unexpended							\$55,460.47

The decrease in gross receipts over the year 1890 is \$13,858.14 and the deficiency for the past year is \$5,188.42.

This exceptional result arises in consequence of a change made in the ordinance relating to water-works about one year ago, by which the rental of the hydrants for the whole city was reduced to \$5,000, and the water for all other city purposes made free.

It is probable that the entire earnings of this department will be needed the coming year to meet the ordinary expenses, to keep up the renewal of pipes, and to make such outlay for construction as the necessities of our growing population demand.

The subject of a high-service system, to which reference was made in the last annual report to your honorable body, continues to be an interesting theme for discussion, and in connection therewith some method by which the present system can be made secure and serviceable beyond contingency, has received considerable attention.

In December last your commissioners received a communication from the joint standing committee on water-works, to which a reply was returned and is here inserted to emphasize the opinions therein expressed, believing the maintenance of the present system is of paramount importance.

"The board of water commissioners beg to acknowledge the receipt of your communication of the 18th ult, relating to a highservice system of water-works, in which you desire to have a plan submitted that under all the circumstances will be best for the city to adopt.

<sup>44</sup> In reply the commissioners have the honor to say that the subject of a high-service system of water-works to supply water to the more elevated portions of the city has received very careful consideration. In connection therewith attention has also been given respecting the desirability of adopting some method of duplicating the present pumping plant by an entirely separate and distinct system that may be used in connection with either the high or low service, as occasion requires. To accomplish both objects the commissioners unanimously recommend the construction of a pumping station of sufficient capacity for both purposes, near the mouth of Slager brook, which is about one third of a mile northerly of Fletcher's Island, or at Proctor's grove, still further north. In either case the force main would be

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laid on the most advantageous route to the Candia road; thence it would follow the Candia road to its junction with the Mammoth road, where a connection is proposed with the present system of water-works. From this point the pipe would follow the most desirable location to the proposed high-service reservoir on the south slope of Oak Hill, just north of Derryfield park, — the construction of the reservoir and the plan of distribution for the high service to be substantially as described in Mr. Tidd's report.

"It will readily be observed that a considerable portion of the cost of this scheme is to supplement the present system, a subject which has claimed the attention of the commissioners for years, and which in their opinion cannot be delayed any longer with prudence.

"The cost of what is now proposed, as estimated by Mr. Tidd on pages 14 and 15 of his report, 'exclusive of water rights and land damages,' is \$154,021.80. When this work is fully and properly constructed, including land damages, distribution pipes, which were not estimated, with some other necessary changes and additions, it is believed the total cost will be considerably in excess of the above sum."

As further expressing the views of your commissioners upon this subject, liberal quotations are here inserted from a comprehensive and well considered article which recently appeared in a local paper over the signature of J. B. Sawyer, civil engineer. He says:

"The question of the best plan for building and equiping a high-pressure water service is controlled by the larger and more important question of enlarging and reinforcing the present works. If we were sure of being able to keep an abundant supply of water in the reservoir for the next ten or twenty years with our present pumping apparatus, or with any enlargement of that apparatus which could be run by water power, the question would be easily answered. The best arrangement would be to build a small steam pumping station at some point on the Portsmouth Railroad in East Manchester, taking the water from the present pipes and delivering it to the reservoir to be built on Oak Hill.

" But our present works, originally designed for a population of thirty thousand, have now been running about eighteen years. In that time the population of the city has grown from twentyseven thousand to forty-six thousand, and the works, with only the addition of a new set of pumps in 1886, the substitution of new and more powerful water wheels in 1887, and a large yearly increase of the length of distribution pipes, have continued to serve us, practically without an hour's interruption. From the earnings they have paid the interest on their cost, amounting to thirty-six thousand dollars per annum, made the improvements and extensions above mentioned, and paid for a large number of lots of land purchased for the protection of the lake, or to extinguish claims for damages, and one year ago they had accumulated a surplus or reserve of sixty thousand dollars to help in meeting such an emergency as is now before us. This is a record to be proud of.

"But eighteen years is a large part of the lifetime of such a plant. The canal needs repairs and cleaning out; the forebay and the wooden penstock six hundred feet long, are getting old and are eighteen years nearer their day of failure than they were when new. How soon that day will come, no man can tell. Thorough examination and repairs or renewals cannot be made in the few brief hours in which the pumps can be stopped. These considerations show that the pumping works ought to be duplicated immediately.

"The present low water in the lake admonishes us that the limit of pumping by water-power has nearly been reached, and that if we would secure ourselves against an occasional water famine, we must have steam power ready for an emergency, although it would not be necessary for ordinary use.

\* \* \* \* \* \* \* \* \* "It being admitted that a steam plant auxiliary to the present works is a necessity, and that a high service is desirable, economy dictates that the pumping plant for both purposes should be in the same building, and should be identical and interchangeable to the fullest practical extent. The best location for such a plant is probably the one recommended by the commissioners, on the

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westerly shore of the lake, northward of Fletcher's Island. The situation with regard to both reservoirs is the best practicable; it is near the railroad, so that coal can be handled cheaply; and the water there taken will undoubtedly be as good as from any other part of the lake.

"This work cannot be commenced too soon. If begun the coming spring, by the time it is completed and in running order the present works will be about twenty years old, and our population will be fifty thousand."

In conclusion, it is a source of gratification to be able to state that nothing has occurred during the past year to impair the efficiency of the water service, and that the advantages and comforts of an abundant supply of good water have been enjoyed by our citizens without serious interruption.

Respectfully submitted.

ALPHEUS GAY, E. J. KNOWLTON, A. C. WALLACE, HENRY CHANDLER, JOSEPH F. KENNARD, C. H. MANNING, JAMES A. WESTON, *Water Commissioners*.

JANUARY 2, 1892.

# SUPERINTENDENT'S REPORT.

To the Honorable Board of Water Commissioners of the City of Manchester:

I herewith submit my annual report for the year ending December 31, 1891.

#### MASSABESIC LAKE.

The water in the lake has been lower this year than it has been since 1886. That year, on the 17th of November, the lowest point reached was  $23J_2'$  inches below the dam. This season it was  $18J_2'$  inches below, December 20. January 1, 1892, it was 16 inches below. Low water occasionally should have its advantages, for if the water takers would take a look at the outlet of the lake at such times they would not persist in wasting it.

Let us look at it from another standpoint. Property owners around the lake shore have claimed that the city is responsible for the height of the water, and the washing out of the banks where they were sandy. They did not find any fault this season, and if they will look at it as it is they will find that the rainfall has something to do with the height of the water, and not altogether the city. There is just as much fault found with low water as high, and this management has failed to satisfy the people that live on the borders of the lake in this regard.

The following table shows the amount of rainfall, kindly furnished us by Sergeant J. H. Melton, which includes melted snow and sleet for the year 1891:

January				6.10 incl	ies.
February				3.26 '	6
March				3.94 '	4
April				1.63 '	4
May				1.90 '	6
June				3.58 '	•
July				3.14 "	
August				2.01 '	í.
September	• •			1.61 '	6
October				2.16 '	
November	•			1.74 '	
December	•			3.27 "	
1891				34.34 inch	nes.
1890		•		45.70 '	6
1889				36.94 '	6
1888				46.81 *	(

Total rainfall in 1880 was but 27.76 inches.

The old dam at the outlet is in bad condition, having been partly torn down to let boats run down the brook to the Island Pond road. This dam should be rebuilt. It played an important part when the channel was lowered, in holding back the water, and if the pond at any time should have to be drawn off to repair the gates at the head of the canal, this dam would be a necessity. When rebuilt, it should be about 150 feet long, and average about 5 feet in height, with a raceway 10 feet wide.

A few repairs have been made at the new dam in repointing the stone work and the piers under the road bridge.

## PUMPING STATION.

C. C. Cole, the superintendent of the pumping station, died suddenly October 12, after having had charge of the station from the first. He was an able, trusty man. No accident happened in the eighteen years he had charge, caused by any neglect or carelessness on his part, and in his death the city lost a faithful servant. Josiah Laselle was elected to fill his place, and took charge November 1. A few repairs of an ordinary nature have been made on the machinery. Blinds have been put on the house and barn. The tin on the roof and the coping have been repainted.

The following table shows the amount of water pumped each month, during the year 1891, by each pump.

ријју алегаде.	2,106,271 2,106,271 2,06,208 2,06,100 1,0201 1,0201 1,0201 2,001,208 2,000,208 2,000,0	2,109,206
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MONTILS.	Jannary Jannary February March	Totals

RECORD OF PUMPING IN 1891.

BOARD OF WATER COMMISSIONERS.

The force and supply main hold good and few repairs have been made on these two lines. Nothing has been done about the reservoir, but the banks need top-dressing very much.

#### DISTRIBUTION PIPES.

Pipes have been extended in the following-named streets :

Auburn, Amory, Adams, Bismark, Beech, Colby, River Crossing, Chestnut, Conant, Concord, Cleveland, Cartier, Goffe, Dartmouth, Franklin, Grove, Gore, Highland, Jewett, Lake avenue, Milford, Morrison, Mast road, Manchester, Orange, Pearl, Prospect, Salmon, Sullivan, Third, Union, Vine, Walnut, Wilkins, Young.

The whole length, 15,910 feet, equals a little over 3 miles. The number of feet laid on each street varies from 25 to 1,400 feet, as required by the water takers, and all under the 6 per cent rule, excepting on Beech street, Franklin street, and the line laid across Piscataquog river at the west end of Riddle's island. These three lines were laid for a better fire protection, and in order that people living in South Manchester and south of Piscataquog river could have water when repairs were being made on Elm below Valley and Main street south of Ferry, by giving these sections two sources of supply. The city is growing, new streets are laid out and they call for water before they are graded. The pipes have been laid as soon as practicable, and sometimes before. It is not best to have to lower the pipe after grading the streets, or to dig an extra depth before.

During the past year 9,973 feet of cement pipe, equal to 1.89 miles, have been laid over with cast iron at an expense of about \$8,500. The length and size of the pipe are as follows: 1,707 feet 4-inch; 4,927 feet 6-inch; 1,191 feet 8-inch; 909 feet 10-inch; 539 feet 12-inch; 700 feet 14-inch.

Pipe taken out was from the streets where the pipes caused the most trouble. Your honorable board voted two years ago to lay new pipe east from Elm to Pine street, beginning on Auburn street and taking all the streets north to Pearl excepting Lowell, the size to be 8 inches in place of the old 6-inch cement pipe. This has been done with the exception of Central, Amherst, and Bridge streets. These three streets have not given us much trouble, and we have laid over the pipe in some other streets where bursts were more frequent. The 14-inch on Elm street east of Blood's foundry was so deeply covered by the raising of the grade it could not be repaired without a great deal of expense, so it was thought best to relay it with cast iron, beginning at a point just below Hutchinson's machine shop, extending south to the corner of Cove street, 700 feet in length, and also 500 feet on Valley street, which would make the pipe all cast iron from Valley street, south, with the exception of 9 feet of 12-inch cement just south of the Lawrence Railroad track. It is evident that we shall have to continue to take out the cement pipe as fast as means will allow.

Eight hundred tons of pipe were bought of the McNeil Pipe & Foundry Co., of Burlington, N. J., at a cost of \$28.50 per ton of 2,240 pounds, delivered on the cars at the pipe vard in this city.

The following places are where cement-lined pipe was taken up and relaid with cast iron :

#### ANNUAL OFFICIAL REPORTS.

							-
STREETS.	L	ENGTI	I OF I	PIPE D	Location.		
	4 in.	6 in.	8 in.	10 in.	12 in.	14 in.	
Amherst		67					Corner Chestnut.
Amherst		31	••••	· · · · ·	••••	• • • • •	Corner Pine.
Bedford			202	· · · · • •	••••••		North of Central.
Cedar		510		·····	<b></b>		East of Pine.
Cedar		530					West of Elm.
Central			109				Railroad crossing.
Chestnut	516						Manchester to Merrimack.
Chestnut	25						Corner Amherst.
Concord		55					Corner Pine.
Elm				l	36	700	South of Valley.
Grove		231					State to Bedford.
Franklin	9						Corner Merrimack.
Main				909			South of Milford.
Manchester		24		l		· · · · · · · ·	Corner Pine.
Merrimack		319	· · · · · · ·				Elm to Franklin.
Merrimack							
Pine		800					Lake avenue to Auburn.
Pine			880				Merrimack to Concord.
Spruce		1.032					Pine to Beech.
-	1	1					
-							Granite to Grove.
Union	319						Lowell to Concord.
Valley		30			503		Willow to Elm.
Vine						1	
							River to Second.
							Valley to Young.
							Willow to Elin.
round roud	-						
Totals	1,707	4,927	1,191	909	539	700	

Total, 9,973 teet, or 1.888 miles.

On Bedford street, 8-inch pipe was taken up, 6-inch laid instead.

On Pine street, south to Auburn from Lake avenue, 8-inch was laid in place of 6-inch.

#### BOARD OF WATER COMMISSIONERS.

# PIPES, GATES, AND HYDRANTS LAID IN 1891.

(Incompany)	Р	ipe laid	in fe	et.	Ga	tess	set.	Hydrants.	T
STREETS.					<i></i>	÷		Ę.	Location.
	4 in.	6 in.	8 in.	12 in .	in	6 in	8 in	L <sub>V</sub>	
						<u> </u>	w.	<u> </u>	
Adams (No.)		252				1			North of Appleton,
Amherst						1			East side of Pine,
Amory Auburn					••••	• • • •			West of Rimmon. East of Maple.
Auburn									East side of Pine.
Beech				928					South of Young.
Bedford						, j			North side Central.
Bismark Blaine		-946			• • • •	$\frac{1}{2}$			North of Milford. East of Second.
Cartier		207				. ĩ			South of Sullivan.
Cedar						1			West side of Elm.
Cedar Chestnut						1		···;·	East side of Pine. South of Salmon.
Chestnut								1 .	South of Samon. South side Amherst.
Cleveland		997				1		1	West of Second.
Colby			253				1		North of W. Hancock.
Conant Conant						····· 1		···;·	West of Main. West of Dubuque.
Concord						- î		î. l	East of Belmont.
Dartmouth		575				1		1	South of W. Hancock.
Franklin	• • • • • •	590 483				2			Granite to Auburn. Main to Dartmouth.
Gore		183							Walnut to Union,
Grove		399				1		1	East of Belmont.
Highland	• • • • • • •	524				1		1	East of Wilkins.
Jewett Lake avenue.		134					••••		South of Valley. Eastward.
Manchester		75							Eastward to Milton.
Manchester						1	••••		East side of Pine.
Mast Milford	•••••	18 558	266	••••		1		···;·	Westward. Westw'd to Bismark.
Morrison		352							South of Pearl.
Orange		1,284						$\frac{2}{1}$	Russell to Hall.
Pearl Pine	• • • • • • •	10		••••	••••				To Morrison. Cor. Lake & Auburn.
Prospect						1			Corner Russell.
Prospect	•• •••	156				• • • •			Eastward.
Rimmon	•••••	044 207				••••		- 11	Amory to Kelly. North of Amory.
Rimmon		070				ï			North of Conant.
Salmon	• • • • • · ·	245						1	West of Union.
Second Second	••••	· 495	•••••			··.1	•••		South to Cleveland. South of W. Hancock.
Silver		96				ĩ			West of Beech.
'Squog river .			477		1		2		
Spruce		144	· • • • • •	••••		1			Eastward. West side of Beech.
Spruce						i			East side of Pine.
Sullivan	69				1				To Cartier.
Third Union	220	· · · · · · · · ·			1	• • •	•		South of Walker. Corner Concord.
Union		275				i			Blodget north,
Vine		39			1	]			To hydrant.
Walnut Willow				••••		1		1	North of Gore.
Wilkins.						· 2		3	Corner Yonng. South of Mast.
Young		220							East of Jewett.
Young road		240							East of Maple.
Totals	289	13,547	1,146	928	7	34	5	17	
					1				

Number miles of pipe laid 1891, 3.013, or 15,910 feet. gates set, 46.

<sup>5</sup> hydrants set, 17.

# ANNUAL OFFICIAL REPORTS.

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SCHEDULE OF PIPES AND FIXTURES LAID TO DECEMBER 31, 1891.

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Dutton Elm East High Flm avenue Foster avenue Gree Grove, cor. El	Frove, M. ( Frove, E. N Freen Jancock Jancock	Hazel Harrison High Hollis Jewett Kidder	ake avenue angdou Laurel Liberty Lowell Manchester Market	Mechanic. Merrimack Morrison Morrison Myrtle Nashua North Rive Urange Penacook Penacook
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Bath		. 517			7
Bedford road	····· ····· ····· ····· ····· ····· ····	. 13N6			-
Beauport	· · · · · · · · · · · · · · · · · · ·	. 3579		····	
Bennington					
Bismark		021			
Blaine		. 1361			
Bowman		. 850	023	-	-
Bridge	990 ···································	÷			
c		8			
Carroll				····	
Cartier		2781		2	:
Cleveland		166			-
Clinton	518	- 45			63 ::
Colby	253			. 1	
Conant.	22	1006			+
Dartmouth		575	···· ···· ····· ····· ·····	· · · · · · · · ·	
Douglas	1534	374			9
Dover	597		25		
Dubuque.		2408			1
Dunbarton road		1210		1	e1 :
Ferry					
Front	1094 2345				**
Goffe		2 2 4			
Guffstown road		. 2276		c1	Ŧ ····
Goffstown lane			506.	1 1	
Granite	2068	0 431		. 1 4	s
Green	260				
Hancock		. 1349		1	•
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Main.	1704 1704 5871				:
Marion					
Mast				····· 6 ····· ·	x :
McGreger	150	0 2152			-1
Müll		586		:	
Milford	112	2138		2	。 …
Monnouth			204		
Old Bedford road.		. 285		1	
Parker			516		
Piscataquog river.	477				· · · · · · · · · · · · · · · · · · ·
Putnam	·····	38		1	N
Quincy					
Riddle		240			T

STREETS         20 In         14 In         2 In         10 In         8 In         6 In         4 In         2 0 In         4 In         2 In         1 In <th1 in<="" th=""></th1>	Length and size of cast-iron pipe laid.	Gates set.	.səvlı
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	196		
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SCHEDULE OF PIPES AND FIXTURES LAID TO DECEMBER 31, 1891. — Continued.

#### BOARD OF WATER COMMISSIONERS.

#### LOCATION OF HYDRANTS SET, 1891.

Auburn, corner Maple; Chestnut, corner Salmon; Cleveland, corner Second; Conant, corner Rimmon; Dartmouth, corner O'Neil; Grove (East Manchester); Highland (West Manchester); Milford, corner Bismark; Orange, corner Linden; Orange, corner Hall; Pearl, corner Morrison; Salmon, corner Union; Vine; Walnut, corner Sagamore; Wilkins, corner Highland; Wilkins, corner Mast; Wilkins, opposite Tirrell residence.

One hydrant on Pine, corner Hanover, was taken out.

DISTRIBUTION PIPES	5 AND	GATES	LAID TO	DECEMBER 31.	, 1891.
--------------------	-------	-------	---------	--------------	---------

SIZE.	Cement-lined pip	e.	Cast-iron	pip	æ.	Gates.
20 inch diameter	20,560.00 feet.	1	5,146.00	feet		9
14 inch diameter	6,125.00 "		8,298.00	"		11
12 inch diameter	7,444.00 "		13,176.00	" "		20
10 inch diameter	3,474.75 "		12,103.00			14
8 inch diameter	8,315.00 ''		23,682.00	• •		49
6 inch diameter	65,475.50 ''		115,145.00			829
4 inch diameter	5,067.00 **		11,952.00			47
	116,461.25 feet.		189,502.00	feet		479
Cement-lined pipe					22.0	57 miles
Cast-iron pipe					35.8	
Total pipe 479 gates.	· · ·			•	57.9	47 miles
477 hydrants. 7 air valves.						

#### METERS.

The number of meters set during the year was one hundred and seventy-eight (178).

Total number of meters now in use, thirteen hundred and thirteen (1,313).

The number of applications for water to date has been thirtyseven hundred and eighty-five (3,785).

### SERVICE PIPES.

Two hundred and thirty-four service pipes have been laid this year, as follows:

### SERVICE PIPES RELAID.

I	$\frac{1}{2}$	$\operatorname{inch}$	diameter,	17.4	feet	to	I	inch	diameter,	17.4	feet.
IО	$^{3}_{4}$	• 6	"'	316.3	٤.	to	1		"	300.9	" "
I	I	"	• •	33.0	"	to	I	"	"	28.0	" "

Thirty-six hundred and twenty-six (3,626) service pipes have been laid to date, as follows:

38	12	inch	diameter						827.6 t	eet.
1758	$\frac{3}{4}$	"	"					• 4	6,157.6	"
1733	I	" "	"					• 4	4,319.7	" "
23	$\mathbf{I}\frac{1}{4}$	" "	" "						1,293.5	" "
18	$1\frac{1}{2}$	"	" "	•		•			552.3	"
47	2	" "	"				•		1,904.9	" "
I	$2\frac{1}{2}$	" "	"				•		57.0	"
I	3	"	"	•	•	•	•		16.8	"
7	4	"	"	•		•	•		233.0	"
г	`otal	leng	th of servic	e nin	e			~	= 262 1 f	eet

The income from the sale of water for 1891 has been as follows:

Received	for water by rate .		\$35,178.79
"	for water by meter .		40.479.25
"	for building purposes		494.80
"'	from fines		160.40
"	for labor and pipe sold		200.99
••	of G. G. Griffin (lease)		1.00
"	of Fletcher Brown (lease	e)	1.00

Received of W. G. Brown (rent) . of Mr. Prescott, (rent) . of William Bryant (rent) of B. P. Kimball (grass) of G. W. Reed (grass) . of C. H. Patten (grass) .	. \$21.00 . 50.00 . 8.00 . 2.00 . 5.00 . <u>3.00</u> . <u>3</u> .00 . <u>3</u> .00
Abatements, \$204.44.	
Current expenses for 1891 Repairs for 1891 Construction expenses for 1891 .	. \$4,962.85 . . 21,995.06 . 22.667.74
	. \$49,625.65
Expenditures over receipts .	\$5,188.42
CLASSIFICATION OF ACCOUN Superintendence, repairs, and renewals Stationery and printing Office and incidental expenses Pumping expenses Repairs to dam, canal, and reservoir Repairs to buildings	. \$23,782.77 . 201.66 . 539.83 . 2,139.51 . 106.10
Current expenses for 1891 .	. \$26,958.23
Distribution pipes	
Construction expenses for 1891	. \$22,667.42
Total	\$49,625.65

Land and water rights .		. \$59,799.1	4
Dam, canal, penstock, and race	es	. 101,399.1	6
Pumping machinery, pump hou	ise, an	d	
buildings		. 107,596.5.	4
Distributing reservoir .		. 71,542.3	
Force and supply main .		. 89,769.0	
Distribution pipes		. 383,043.50	
Fire-hydrants and valves .		. 43,109.80	
Tools and fixtures		. 10,649.3	
Boarding and store houses		. 919.3	•
Roads and culverts		. 2,193.4	
Supplies		. 550.30	
Engineering		. 22,176.1	
Livery and traveling expenses		. 2,856.6.	
Legal expenses		. 563.7	
Grading and fencing .		. 13,588.2	
Service pipes		. 49,699.2	
Meters and fixtures		. 28,765.4	
	-		-
Total construction acc	ount t	0	
Dec. 31, 1891 .			\$988,221.82
Current expenses :			
Superintendence, collecting, a	and re	-	
pairs			1
Stationery and printing .			
Office and incidental expenses			
Pumping expenses and repairs			
Repairs to buildings .			·
Repairs to dam, canal, races, a			3
ervoir .	ind it.	. 3.831.2	-
	•	. 3.031.2	-
Total current expenses	to D	ec.	
31, 1891			\$235,695.58
Interest		. \$40,678.5	I
Highway expenditures .			
5 , 1			- \$54,679.04
		,	
Total amount of bills ap	•	đ	
to date	•	•	\$1,278,596.44

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Interest, discount, and labor performed on highways, trans., and tools and	
materials sold \$62,385.34	
Current expenses to Dec. 31, 1891 . 235,695.58	
	\$298,080.92
Total cost, exclusive of interest	
and current expenses	\$980,515.52
Interest and discount to Dec. 31, 1890 \$627,096.51	
Interest for 1891	
Total interest and discount to	
Dec. 31, 1891	\$659,264.51
Amount paid toward interest to Dec.	
31, 1890 \$485,000.00	
Amount paid toward interest, 1891 . 32,168.00	
	\$517,168.00

## Uses for which Water is Supplied.

PUBLIC BUILDINGS.

I	Jail.	4	Cemeteries.
2 I	Churches.	I	Orphanage.
I	Court-house.	I	Post office.
6	Hose companies.	I	City library.
4	Fire-engines.	6	Banks.
ı	Hook-and-ladder.	8	Hotels.
2	Opera-houses.	I	Masonic Hall.
I	Convent.	I	Odd Fellows' Hall.
$^{2}$	City hospitals.	I	Holly Tree Inn.
2	Old Ladies' Homes.	3	Halls.
I	Soldiers' monument.	24	Schoolhouses.
I	Turner Hall.	I	Battery building.
4	Fountains.	I	Skating-rink.

- I Skating-rink.
- 2 Trust companies.

## MANUFACTURING ESTABLISHMENTS.

I	Hosiery mill.	2	Granite works.
I	Silver-plating.	2	Electric light stations.
2	Iron foundries.		Sash and blind shops.
2	Dyehouses.	~	Brewery.
4	Machine-shops.		Shoe-shop.
	Clothing manufactories.		Gas-works.
	Harness-shops.	4	Slaughter-houses.
I	Brush-shop.	I	
9	Carriage-shops.		Needle manufactories.
	Cigar factories.		Beer-bottling.
	Brass and copper foundry.		Book-binderies.
	Locomotive works.	0	Paper-mill.
	Grist-mill.		Box makers.
	MARK	ET	°S.
_	Fish.		Most (wholegale)
-	Meat and fish.	2	Meat (wholesale).
9	Meat and Iish.		
	STAB	LE	s.
10	Livery.	8	53 Private.
- <i>y</i> I	Horse-railroad.	Ϋ.	55
	OFFI	CES	5.
15	Dentists.	14	Printing.
1	a		Gas.
2		0	Coal.
3		,	
0	1		
	SHO	OPS	5.
27	Barber.	2	Currying.
9	Wheelwright.	6	Plumber and gas and water
12	Blacksmith.		pipe.
7	Carpenter.	IС	Paint.
ī	Tinsmith.	I	Gunsmith.

#### STORES.

4	Auction.	86 Grocery.
29	Drug.	5 Meal.
13	Jewelry.	3 Hardware.
I	Fur.	30 Boot and shoe.
2	House-furnishing goods.	8 Stove.
20	Fancy goods.	17 Gents' furnishing goods.
I	Wholesale paper.	7 Book.
5	Wholesale produce.	1 Leather and shoe-finders.
21	Dry goods.	3 Music.
12	Candy.	3 Upholstery.
I	Cloak.	8. Undertakers.
15	Millinery.	5 Sewing-machine.
2	Гea.	1 Feather-cleaner.
9	Furniture.	1 Rubber.

### SALOONS.

- 11 Dining.
- 6 Billiard.

74 Liquor.

## MISCELLANEOUS.

6 Club-rooms.	7 Greenhouses.
2 Bleacheries.	2 Band rooms.
19 Laundries.	18 Bakeries.
3 Icehouses.	2 Waste.
10 Photographers.	1 Business college.

## WATER FIXTURES, SETC.

8,293	Families.	2,126	Sill-cocks.
120	Boarding-houses.	477	Fire-hydrants.
10,370	Faucets.	35	Stand-pipes.
1,648	Wash-bowls.	2 I	Watering-troughs.
3,009	Water-closets.	4	Drinking-fountains.
256	Wash-tubs.	2,035	Horses.
885	Bath-tubs.	99	Cattle.
1 3 2	Urinals.	I	Public urinal.

The following amounts have been paid over to the city treasurer, and credited to the water-works:

, , , , , , , , , , , , , , , , , , , ,		·	•	\$573.61
1873, supplies and materials sold .		•	•	177.07
accrued interest on water bond				193.26
accrued interest on state bonds	s sold			146.00
water rents				1,920.53
1874, supplies and materials sold .				607.89
March 12, highway expenditur	es, tra	ns. f	rom	
water account				14,000.53
March 17, interest and discour	nt trai	ns. f	rom	
water account				12,347.25
September 1, interest and di				
from water account .				22,361.74
water and hydrant rent, etc.				30,233.54
December 29, interest transfer	ed			4,566.25
1875, December 18, one anvil sold				15.00
September 25, engine, crusher,	and	mate	rial	
sold				2,089.45
water and hydrant rent, etc.				27,119.15
1876, May 20, derrick sold				125.00
May 20, rent of derrick .				24.00
water and hydrant rent, etc.				38,879.47
1877, water and hydrant rent, etc.				43,823.30
1878, water and hydrant rent, etc.				48,873.26
old plow sold				1.00
1879, derrick sold				75.00
May 20, water and hydrant rer	nt, etc.			53,068.17
1880, water and hydrant rent, etc.				57,395.25
sale of grass				10.00
level, transit, etc				250.00
1881, water and hydrant rent, etc.				60,154.62
sale of grass				10.00
derrick				50.00
received of G. G. Griffin .				1.00
1882, water and hydrant rent, etc.				67,403.76
received of G. G. Griffin .				1.00

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1882, received of James Baldwin & Co.			\$175.00
received from the sale of grass .			10.00
received from Goodhue & Birnie			24.37
received for old plank			1.00
received for use of derrick .			15.00
1883, received of G. G. Griffin			1.00
received from sale of grass			20.00
water and hydrant rent, etc.			73,437.20
1884, received of G. G. Griffin			1.00
received for stone			5.00
received from sale of grass .			10.00
received from pipe sold and labor			616.20
received for water and hydrant rent			74,947.88
1885, received from G. G. Griffin .			1.00
B. P. Kimball, for grass			10.00
labor and pipe sold			13.45
received for water and hydrant rent			80,379.67
1886, received from G. G. Griffin .			1.00
B. P. Kimball, for grass			5.00
for wood			37.80
labor and pipe			282.43
water and hydrant rent			74,803.76
1887, received for labor and pipe .			768.86
received of G. G. Griffin			. 1.00
received of C. C. Cole			.50
received of B. P. Kimball, for grass			10.00
received of A. J. Crombie, for grass			5.00
received of A. Goodwin, for poles			10.00
received of W. G. Brown			25.00
received of T. H. Risdon & Co., for	fre	ight	15.11
received for water and hydrant rent			79,682.70
1888, received for labor and pipe .			227.33
received of G. G. Griffin	•	•	1.00
received of George P. Clark .			2.00
received of R. D. Wood & Co. (gear)	).		16.29
received for water and hydrant rent			85.397.20
1889, received for labor and pipe .		•	89.77

## ANNUAL OFFICIAL REPORTS.

1889, received of G. G. Griffin	•	. \$1.00
received of B. P. Kimball, for grass		. 2.00
received of W. G. Brown, for rent		. 50.00
received of James Baldwin, for pipe		. 65.00
received of Mr. Clement, for pipe		50
received for water and hydrant rent		. 86,492.19
1890, received of G. G. Griffin (lease)		. I.00
received of Fletcher Brown (lease)		. 1.00
received of George P. Clark (lease)		. 2.00
received of B. P. Kimball, for grass		. 2.00
received of W. G. Brown, for rent		. 36.00
received of N. W. Ellis & Co., for pi	ipe	. 153.00
received of J. H. Dearborn for pipe		. 35.40
received for water and hydrant rent		. 90,232.97
1891, received for water and hydrant rent		. 76,313.24
received for labor and pipe sold .		. 200.99
received of G. G. Griffin (lease) .		. 1.00
received of Fletcher Brown (lease)		. 1.00
received of W. G. Brown (rent) .		. 21.00
received of Mr. Prescott (rent) .		. 50.00
received of William Bryant (rent)		. 8.00
received of B. P. Kimball (grass)		. 2.00
received of G. W. Reed (grass) .		. 5.00
received of C. H. Patten (grass).	•	. 3.00
Total received for water, etc.		. \$1,211,224.91
Amount appropriated to date		. 640,000.00
Amount received to date		. \$1,851,224.91
Amount of bills approved to date .		. 1,278,596.44
* *		
		\$572,628.47
Amount transferred toward interest .	·	. 517,168.00
Balance on hand December 31, 1891		\$55,460.47

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## Material on hand.

## PIPE.

2,500 feet 20 in.	4.680 feet 8 in.
1,800 feet 12 in.	13,000 feet 6 in.
3,300 feet 14 in.	6,000 feet 4 in.
2,900 feet 10 in.	

## GATES.

5 4 in. 1 10 in. 1 Sin.

WHOLE SLEEVES.

I	20 in.	4	14 in.
4	12 in.	II	10 in.
13	6 in.	IО	4 in.

BRANCHES.

1 double 6 on 12.	3 single 6 on 12.
2 double 6 on 10.	2 single 10 on 10.
4 double 4 on 6.	2 single 6 on 10.
7 double 4 on 4.	3 single 8 on 8.
10 double 8 on 8.	7 single 6 on 8.
3 double 4 on 8.	4 single 4 on 6.
4 double 6 on 8.	1 single 4 on 4.
2 single 6 on 14.	1 single 8 on 10.
1 single 12 on 14.	5 single 6 on 6.

#### SERVICE PIPE.

$2\frac{1}{2}$ in.	9 feet.	1¼ in.	300 feet.
2 in.	450 feet.	1 in.	401 feet.
1 ½ in.	200 feet.	3⁄4 in.	590 feet.
6			

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#### ANNUAL OFFICIAL REPORTS.

CLAMP SLEEVES.

3	20 in.	3	14 in.
5	12 in.	19	10 in.
15	8 in.	60	6 in.
10	4 in.		

PLUGS.

1	14 in.	II	8 in.
1	12 in.	2	6 in.
4	10 in.	2	4 in.

REDUCERS.

I	14 to 12.	8 6 to	4.
8	8 to 6.	2 12 to	6.
4	10 to 6.	5 8 to	10.
3	8 to .4.		

BENDS.

I	10 in. 1-8.	4 6 in. 1-4.
I	14 in. 1-8.	9 8 in. 1-4.
I	6 in. 1-8.	1 12 in. 1-8.
3	8 in. 1-8.	

## Report of the Engineer Appointed by the Board of Water Commissioners to Devise a Plan for a Supply of Water to the Higher Parts of the City.

To the Citizens of Manchester:

Some months since, a petition, numerously signed, was presented to the City Councils, asking for the construction of a high-service system of water-works, for the purpose of supplying water to citizens living in the elevated portions of the city which

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cannot be reached by the water-works as now constructed, and for furnishing water for protection against fires in the districts named. The petition was referred to the board of water commissioners, and has received careful attention.

The necessity for such a system in connection with the Manchester water-works at some time in the future has been recognized from the very beginning of the enterprise. In a report on the sources of water supply made by J. T. Fanning, C. E., dated March 1, 1872, and published in connection with the first annual report of the board of water commissioners, he says: "As the city extends back on the hillside, and the high lands are more thickly covered with buildings, a high-service reservoir on Wilson Hill will be found desirable."

This was said in connection with the outline of the plan, which was afterwards adopted, of taking the supply from Lake Massabesic and locating the reservoir on the ridge just south of Manchester Center. In considering this and other plans he goes on to say: "Each of the plans herein suggested contemplates a division of the distribution into high and low services whenever the growth of the city on to high lands shall make it desirable, excepting the Maple Falls gravitation plan, whose reservoir would be nearly on a level with the summit of Wilson Hill."

In his report dated December 31, 1874, he says:

"The complete plan of work includes two reservoirs, one located at the Center, and one on Wilson Hill. The one at the Center, already constructed, has its water service one hundred and fifty-two feet above Elm street at the City Hall, one hundred and eighty-eight feet above the track of the railway station, and two hundred and three feet above State street.

"The lift of water from the surface of the lake to the reservoir is one hundred and thirteen feet. The reservoir on Wilson Hill may be sixty feet higher than that at the Center, and it was proposed to connect the pipes east of Beech street for a high-service system.

"The high service system may not be required for several years unless the number of buildings on the hill shall increase very rapidly. When the high-service reservoir is built, an additional main of twenty-four inches diameter should be laid from the pump-house to the city."

The board of water commissioners, after conferring with the joint standing committee of the City Councils on water-works, employed Mr. M. M. Tidd, a hydraulic engineer of ability and of large experience in this particular line, to make examinations of the various plans suggested, and, by the help of surveys already made by Mr. J. B. Sawyer, of this city, to present a comprehensive report embracing the facts necessary to form correct conclusions, with estimates of the costs of the various plans which have been discussed, and his recommendation as to the one best adapted to meet the requirements of the case. This report was received on the first instant, and is printed herewith.

With reference to the location of the proposed reservoir, it may be said that the growth of the city since Colonel Fanning's report was written has made it evident that when a high service shall be built, it must be planned to supply and protect buildings on other eminences besides Wilson Hill, and that a reservoir for that purpose should be not less than one hundred feet above the present reservoir. The extreme summit of Wilson Hill being only sixty-four feet above that reservoir, a suitable location has been found on Oak Hill, north of and adjoining the proposed Derryfield park. The particular spot which offers the best natural facilities for the construction of a reservoir is at such an elevation that the surface of the water would be, as fixed by Mr. Tidd, one hundred and thirty-nine feet above that of the present reservoir.

The following table gives the height of each reservoir above some of the prominent points in the city, also the pressure at some of them as observed by employés of the water department some years since. It is believed that no important variations. from these pressures would now be found.

### BOARD OF WATER COMMISSIONERS.

Y			Pressure per sq. inch.
	Proposed reservoir		De
	0 A	Present reservoir	
	5	2.2	5
	š	5	
LOCATIONS.	ž	- S	e e
	ru T	<u> </u>	-
	š	f	- H
	<u>o</u>	5	25
	5	s	cs
	ā.	2	1 E
		-	
	Feet.	Feet.	Pounds.
Elm street, corner River road, Bakersville	289	, 150	63
Elm street, corner Valley	305	166	71
Elm street, corner Market	291	152	61
Elm street, corner Bridge	282	143	60
Elm street, corner Brook	265	126	54
Elm street, corner Webster	247	108	
Elm street, near D. Ready's house	200	70	
Elm street, north, highest point in	191	52 181	<u>.</u>
Canal street, corner Brook	320 325	181	72
Canal street, corner Granite	340	201	76 86
Granite street, corner River	353	214	90
Granite street, corner Main	336	197	80
Granite street, corner Quincy	315	176	73
Main street, corner Winter	356	217	
Main street, corner Milford	329	190	78
Milford street, corner Carroll	290	151	
Beech street, corner Park	268	129	53
Beech street, corner Hanover	264	125	51
Beech street, corner Lowell	257	118	50
Beech street, corner Brook	229	90	
Park street, corner Lincolu	260 281	$\frac{121}{142}$	50 51
Park street, corner Pine	$\frac{281}{249}$	110	44
Park street, corner Massabesic	245	67	27
Hanover street, corner Beacon	149	10	
Arlington street, corner Ashland	198	59	
Lowell street, corner Belmont.	151	12	
Amory street, corner McGregor	309	170	
Amory street, corner Main	298	159	
Amory street, corner Dubuque	247	108	
Front street, corner Amoskeag	293	154	
Goffstown road, top Jones's Hill	247	108	
Union street, near H. Willey's house	109	*30	
Summit of Oak Hill	*29	*168	
Summit of Wilson Hill	64	•75	· · ·
Elliot Hospital, first floor	175	36	
Railroad crossing, Massabesic street	212	73	
Young road, corner Taylor street	202	63	
Cilley road, corner Taylor street	162	23	••
Cilley road, corner Jewett street	193 219	$\frac{54}{80}$	
Cilley road, 1,800 feet west of Taylor street			

\* Below.

It would probably be found best to fix the boundary between the high and low service districts somewhat higher than was proposed by Colonel Fanning. There is little or no complaint of lack of pressure below the contour line at one hundred and eighty feet above the city datum. This line is eighty feet below the present reservoir, and two hundred and nineteen feet below the one proposed. A head less than eighty feet will not be satisfactory to our people for a domestic supply, and one hundred and forty feet is necessary for a good hydrant service; but as most of the ground down to the line one hundred feet below the reservoir could be covered with hose of moderate length attached to the high service hydrants, and as the district between Beech and Ashland streets is occupied mainly by detached residences, in which fires rarely occur, and where those that do occur are not likely to become great conflagrations, it will probably be best to make the boundary nearly as above suggested.

This line runs along at the foot of Wilson Hill near Ashland street. To the north of Myrtle street it is nearly coincident with Maple street. Extended south, it runs near the corner of Lake avenue and Beacon street, and includes in the high-service district the grounds of the Elliot Hospital, also most of the territory south of the Portsmouth Railroad. At the north end of the city it crosses Union street about four hundred feet north of Clarke street, and crosses Elm street at the old Clark quarry. It will thus be seen that on the north, the east, and the south, the limit of a satisfactory water service has nearly been reached, and that there are already many buildings beyond that limit.

The report and estimates of Mr. Tidd, together with these statements and suggestions, are submitted to the public for information, with the hope that they will aid in an intelligent settlement in the public mind of the questions whether the time for the construction of a high service system has arrived, and if so, what ought to be its plan, its extent, and its cost.

> ALPHEUS GAY, D. B. VARNEY, A. C. WALLACE, E. H. HOBES, HENRY CHANDLER, JOSEPH F. KENNARD, JAMES A. WESTON, *Water Commissioners*.

MANCHESTER, October 28, 1890.

# ENGINEER'S REPORT.

To Alpheus Gay, Esq., Chairman Board Water Commissioners, Manchester, N. H. :

DEAR SIR, — At your request I have examined into the matter of a high-service water supply for the city of Manchester, and herewith hand you my report :

My attention has been called to six different projects by which it is assumed that the town can be supplied. One of these schemes is based upon a proposition to supply from the present source (Massabesic lake), at the southerly end of land now owned by the city at Proctor's Grove, the water to be taken by a 20inch pipe to the hard land below the Borough road, near the Concord & Portsmouth Railroad, and at that point to be pumped through a 16-inch cast-iron main directly across the Borough road, and the Concord & Portsmouth Railroad, to the corner of the Candia road and Bridge-street extension; thence through new Bridge-street extension to Highland street; thence across Derryfield park in the line of the continuation of Highland street to the reservoir, located upon the land of the Amoskeag Manufacturing Company, on the southerly slope of Oak Hill, northwest of the pest house. The distance by this line from the lake to the corner of old Bridge and Highland streets is 12,800 feet; the distance from there to the proposed reservoir is 800 feet, making in all, 13,600 feet of 16-inch pipe.

This reservoir is proposed to be 248 feet long on the top, and 200 feet long on the bottom, and 158 feet wide on the top, and 110 feet wide on the bottom, to be 17 feet deep from the top of the bank to the bottom, and to carry 14 feet depth of water, and to contain three million gallons; the water level when full to be

at city grade 399, or 139 feet higher than the present reservoir and 252 feet higher than Lake Massabesic.

It is proposed to construct this reservoir of earth and masonry of the materials found upon the ground.

In all the schemes mentioned in this report for high service, this reservoir will be used.

It has been suggested that this plan would be preferable to any of the others, as it would give another connection with the lake, which, in case of an interruption of the present supply, would keep the city supplied with water until the trouble could be removed. There may be some truth in this proposition, but it must be remembered that a portion of the present pipe system is of cement-lined wrought iron, which is now nearly twenty years old, and c unnot be expected to carry the present head much longer; when 139 feet more are added to it, the consequences may not be pleasant.

If the high service is to be connected with that in view, it would be necessary to use pumping apparatus of greater capacity than would be required for the high service alone, and would therefore involve more expense. If you are prepared to put in more cost this might be made available for an additional supply by connecting the old system with the new one by a 16 or 18 inch branch from the new reservoir into the 20-inch iron main in Valley street, by way of Weston and Taylor streets, and from thence pumping into the old reservoir and the entire old system. This would of course be always kept open into the old reservoir when open into the new one, to keep down the pressure to the normal amount.

A serious objection to this plan would be that you would be obliged to pump all the water required for the low service 139 feet higher than was desired into the new system, to be lost in running down again to the low one. In this case the same pumps would be used for either service, of course not at the same time, but using more steam pressure when pumping into the high service than when pumping into the low one; this, however, would involve an expense of two mains, one 16-inch pipe for the high service and a 20-inch pipe for the low. By this plan you could pump to both systems at the same time, if you used two pumps, as shown upon the accompanying plan marked "A."

In this case if we used the pumps of two million gallons capacity, they could be so arranged that either or both could pump into either main at the same time, so that if you were called upon to supply the low service entirely from this source, both pumps could be worked into the old system through the 20-inch main, and thus supply two million gallons in twelve hours, or, if run twenty-four hours continuously, would furnish four million gallons per day. If you run the entire twenty-four hours, it would require two sets of men, which increases the expense, but as this would probably only occur in an emergency, the objections may not be serious.

I think it would be better to use one larger pump, say five million gallons capacity, if you expect to pump to the old service much, but as the cost of the larger apparatus is considerable, it might not pay, or it might be cheaper in the end to run the smaller pumps a longer time. The 2,000,000 gallon pumps are large enough to furnish water for the high service alone for a long time.

If it was proposed to furnish supply enough from this source in case of an emergency for the entire city, the main pipe should be at least twenty inches in diameter from the pumps to the junction of Bald Hill road and new Bridge-street extension, a distance of 11,300 feet. From this point it would leave the street and pass across the country, following the contour of grade 260, to the intersection of Mammoth road and Hanover street, a distance of 2,600 feet; thence 4,200 feet to Massabesic street, where it would connect with the present 20-inch main, and through that with the entire present system, making a total length of 18,100 feet of 20-inch pumping-mains to supply the low service.

At the junction of Bald Hill road and new Bridge-street extension, where the 20-inch main leaves the street, there should be a 16-inch branch extending up to new Bridge street, and through old Bridge street to Highland street, thence to the new reservoir as before mentioned, a distance of 2,300 feet of 16-inch pipe; this to be for the supply for the high service alone. With this arrangement water could be pumped to either reservoir as desired.

It would be better to lay a separate 20-inch main from the new pumping-station to the old reservoir by the way of Bridge street, to a point near the city farm, or to the level of grade 260, thence by the way of the Mammoth road to the old reservoir, keeping the pipe down to that grade. It would be as well to connect with the old 20-inch main at the corner of Mammoth road and Candia road. In that case you could pump directly into the old system, or into that and the old reservoir combined, without danger of increasing the pressure above the normal amount. Then the engines at the new station could pump into either reservoir as may be desired, or into both at the same time. The head to be pumped against in this case would be 258 feet to the new high-service reservoir, including friction, if we used a 16-inch pipe, and 113 feet in pumping to the old reservoir.

The cost of this scheme would be approximately as follows: Cost of entering the lake, including coffer dams and

laying the pipe eight feet below the full po	ond		\$1,000.00
Gate house at pond			800.00
650 feet of 24-inch conduit pipe at \$5 per fo	ot		3,250.00
Pump house, suction well, coal shed, and ch	imn	ey.	16,000.00
Two compound duplex pumping-engines, 16	inc	ches	
by 30 inches, and 14 inches by 24 inches	, of	ca-	
pacity each to pump two million gallons 1	ber d	lay,	
including heater, air pump, feed pump, a	nd c	on-	
denser, 16-inch check valve, and 4-inc	h re	elief	
valve, all set up and connected, three ho	rizo	ntal	
tubular boilers, each 85 horse-power un	der	70	
pounds steam, with all gauges, safety valves	s, ch	eck	
valves, etc			24,625.00
13,600 feet of 16-inch main pipe and pumps	s to	res-	
ervoir at \$2.25			30,600.00
18,100 feet 20-inch pipe at \$2.82			51,042.00
1,582 cubic yards of rock at \$3.50.			5,537.00
Eight tons special 16-inch castings at \$60			.480.00
Ten tons 18-inch special castings at \$60.			600.00

## BOARD OF WATER COMMISSIONERS.

#### ESTIMATE OF COST OF RESERVOIR.

4,968 cubic yards of earth excavation, including	5
loam, at 50 cents	\$2,484.00
784 cubic yards borrowed earth at 60 cents .	470.40
500 cubic yards loam placed on top of bank and	
slope at 25 cents	1 2 5.00
5,372 cubic yards rock excavation at \$1.50 .	8,058.00
1,060 cubic yards retaining-wall laid dry at \$2	2,120.00
1,419 cubic yards concrete at \$5	7,095.00
300 cubic yards rubble masonry at \$4	I,200.00
375 cubic yards broken stone at \$1.50	562.50
1,040 square yards paving at \$1.50	1,560.00
62 cubic yards coping at \$5	310.00
90 feet of 16-inch iron pipe at \$2.50	225.00
170 feet 18-inch vitrified pipe at 75 cents	127.50
100 feet of 18-inch iron pipe at 90 cents	90.00
30 feet 16-inch conduit pipe at \$2	60.00
Gate house complete, with gates, screens, etc.	1,837.00
	\$160,258.40
Add 15 per cent for contingencies	24,038.76
Total cost	\$184,297.16

In this estimate, nothing has been included for land or water damages.

I think in the above mentioned plan it would be cheaper to take the 20-inch main from the pumping-station at Proctor's grove to the junction of new Bridge-street extension and the Candia road; thence through the Candia road to Massabesic street, and by that to the present 20-inch main, where it can connect with the entire present system, at the junction of the Candia and the Mammoth roads; a 16-inch branch can be laid through the latter to old Bridge street, and through that to the proposed high-service reservoir, as in the former plan.

I think the Candia road is a better line on some accounts than that by the way of new Bridge-street extension. There is less ledge in it; probably not over 300 lineal feet in all. This will require 12,168 feet of 20-inch force main from the pumping-station to Massabesic street at the connection with the present 20-inch main, and 7,800 feet of 16-inch pipe from the junction of Candia road and Massabesic streets to the new reservoir on Oak Hill.

This would cost \$28,200 less than the line by the way of new Bridge-street extension, barring what ledge cut there may be in Mammoth road, and would be equally efficient.

Another proposition is to locate the pumping-station at Ashland street, to take the supply from the 10-inch cast-iron main in that street and pump it into the proposed reservoir, located as before. In this case, if we located the pumps at the corner of Ashland and Bridge streets the water would be pumped through Bridge street to the corner of Highland street, thence directly to the reservoir by a continuation of the line of Highland street. The present pipe in Ashland street, from which street the supply in this case would be taken, is of cast iron from the corner of Amherst street to Bridge street, but that is supplied from the 20inch cement-lined pipe in Lake Avenue through Wilson street by cement-lined 10-inch pipe, making the supply pipe 3,100 feet of 10-inch pipe, which is altogether too small to furnish the water required, although it would be furnished under about 70 feet back pressure. I do not think it would be advisable to adopt this plan unless you are prepared to lay a new 16-inch cast-iron pipe from the 20-inch iron main at corner of Valley and Wilson streets through Wilson, Hanover, and Ashland streets to Bridge street, a distance of 3,100 feet, at a cost, including specials, of \$7,095.

This is safer than to take the supply from the 20-inch cement pipe, which I consider hazardous.

A 16-inch pipe with 70 feet back pressure, which it would have then, would furnish an ample supply for the pumps. I am not informed as to the amount of ledge that would be encountered in these streets, and in my estimate of the cost of this I put none in.

In this case the water would be pumped against a head of 214 feet or 92 pounds, and the coal must be carted from the railroad

to that point. The back pressure of 75 feet would, of course, help the pump in just that amount, leaving actually 139 feet head resistance. I am of the opinion that it would be far better to locate the pump at the present pipe yard at the railroad, where the coal would be taken from the cars, and pump through the r6-inch line which I have already suggested. This would not only leave the present ro-inch main for the present service, to furnish the branch lines connected with it, but would add a firstclass high pressure pipe to those treets through which it passes.

If, as has been suggested, instead of taking the water directly from the 10-inch main in Ashland street, we construct a well or reservoir and run the water into it, to be taken by the pump and forced to the reservoir, we should reduce the pressure in the 10inch pipe to such an extent as to render it useless for any purpose, losing the benefit of the 75 feet back pressure on the pumps, and thereby be obliged to pump against 214 feet head, instead of 139 as in the case of the 16-inch main supply pipe.

I do not think it is practicable.

The cost of this scheme may be considered as follows:

Pumping-station								\$10,000.00
Well to contain 50,00	oo ga	allons	, circi	ular,	30 fee	t diar	n-	
eter, 30 feet deep	•		•		•	•		3,300.00
Machinery: two pu	mpir	ng-eng	gines,	10	inches	by 2	0	
inches and 14 incl	nes b	y 18	inche	s, th	ree bo	ilers		15,100.00
3,100 feet of 16-incl	h sup	oply p	ipe a	nd s	pecials		•	7,095.00
4,300 feet of 16-incl								9,675.00
Reservoir as before	•	•	•	•	•	•	٠	26,324.40
								677 10 1 10
A 4 4								\$71,494.40
Add 15 per cent for	cont	ingen	cies	•	·	·	•	10,724.16
Total cost								\$82,218.56

Again, it is proposed to take the supply from the cast-iron 20-inch main at the corner of Belmont and Valley streets, and pump it through Belmont and old Bridge streets to Highland street, thence as before to the reservoir. It seems to me that this plan is the best one for high-service supply, as the pumps can be located near the railroad, where the coal can be had easily, and Belmont street gives a good line to the reservoir; besides it will pipe a street which is now piped only from Valley street to Spruce street with a 6-inch pipe.

In this case the water would be pumped against a practical head of 139 feet, as in the case of Ashland street, where the supply would be taken from the 16-inch main under back pressure. The actual head pumped against would be the difference between the head and back pressure.

The cost of this plan may be estimated thus:

Pumping-station			. \$10,000.00
Machinery as at Ashland street .			. 15,100.00
8,664 feet of 16-inch force main at \$2	2.25		. 19,494.00
5.5 tons of specials at $\$60$			. 330.00
1,400 lineal feet of rock cut at \$2.00		•	. 2,800.00
Reservoir as before	•		. 26,324.40
			\$74,048.40
Add 15 per cent for contingencies .	•		. 11,107.26
Total cost			. \$85,155.66

The city can be supplied by another plan by taking the water from the lake near the mouth of Slager brook, which enters the lake on the west side, north of road leading to Fletcher's island. The pumping-station can be located at the shore of the lake, and a 16-inch pipe laid up the valley of the brook, crossing the Borough road, and entering the Proctor road at a point 1,752 feet from the lake, thence by that road to the Candia road, thence by that road 7,200 feet to the Mammoth road and Massabesic street, where it could be connected with the present 20-inch main, and through that to the present reservoir and the old system whenever desired. At the junction of Mammoth road and Massabesic street a 16-inch branch could be laid through Mammoth road and old Bridge street to the proposed new reservoir for the high service.

By this plan water can be pumped into either reservoir as may be desired, but not at the same time. This may be controlled

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by the gates at the connection with the old system. I think the 16-inch main, however, is not large enough to furnish both systems through for any great length of time. If it was proposed to furnish the low service through this plant for any considerable length of time, I am of the opinion that it would be better to lay a 20-inch main from the pumps to Massabesic street, and a 16-inch one from there to the proposed high-service reservoir, and have one 4,000,000-gallon pump and one 2,000,000 gallon one. This would give you sufficient capacity to furnish the entire city if occasion for it should arise.

The expense of this plant, if 16-inch pipe was used entirely, would be about as follows :

Cost of entering lake	\$1,000.00
	400.00
Pump house, coal shed, chimney, etc	16,000.00
Two compound duplex pumping-engines, 16 inches	
by 30 inches and 14 inches by 24 inches, of capa-	
city to pump 2,000,000 gallons per day, including	
heater, air pump, feed pump, and condenser, 16-	
inch check valve, and 4-inch relief valve, all set up	
and connected, two 85 horse-power boilers, with	
all gauges, check valves, safety-valves, etc	24,625.00
20,000 feet of 16 inch pipe at \$2.25	45,000.00
Six 16-inch stop gates at \$80	480.00
Fifty-two tons special castings at \$60	720.00
1,850 lineal feet of ledge cut at \$2	3,700.00
Reservoir as before	26,324.40
	118,249.40
	17,737.41
	- 1,131.4-
Total cost	139,986.81

If, instead of using two 2,000,000-gallon pumps we use one of that capacity and one of 4,000,000 gallons, with boilers to match, and a 20-inch main to Mammoth road, and a 16-inch one from there to the proposed reservoir, the cost would be as follows:

Cost of entering lake			\$1,000.00
100 feet of 24-inch conduit pipe at \$5.			500.00
Pump house, wells, etc			16,000.00
One 2,000,000-gallon pumping-engine .			I I ,000.00
One 4,500,000-gallon pumping-engine .			18,684.00
Two 85 horse-power boilers			2,400.00
One 95 horse-power boiler			1,350.00
11,700 feet of 20-inch main pipe at \$2.82			32,994.00
8,300 feet of 16-inch main pipe at \$2.25			18,675.00
Twelve tons of special castings at \$60.			720.00
Three 20-inch stop gates at \$115 .	•		345.00
Three 16-inch stop gates at \$80			240.00
1,850 lineal feet of ledge cut at \$2 .			3,700.00
Reservoir		·	26,324.00
		\$	133,932.00
Add 15 per cent for contingencies .		•	20,089.80
Total		. \$	154,021.80

If we should take the new supply from the point in the lake where the present supply is taken, I am of the opinion that on account of the present condition of the canal, and the gate house at the lower end of it, it would be the best policy to take the supply from the lake immediately south of the present dam, and lay a 24-inch pipe from thence along a line south of the present canal to the present pumping-station, a distance of about 2,000 feet, where a new station could be built in which new steam machinery similar to that proposed at Proctor's grove could be located. In this case I would recommend one 2,000,000-gallon pump for the high service, and one of larger capacity, say 4,000,-000 gallons, for the low service.

For the high service there would be required a r6-inch independent main from the 2,000,000-gallon pump to the high service through Cohas street, passing the present reservoir, and through the Mammoth road to Highland, where it would pass to the highservice reservoir across Derryfield park, as in the previous plans.

The force main from the 4,000,000-gallon pump, or the low service one, can be connected with the present one immediately

outside the pump station. This latter pump could easily furnish water for the entire low service in an emergency, connected in this manner.

If you desire to lay a new 20-inch main from the pumpingstation to the present reservoir, then either one or both of the new pumps could pump to the high service or low, as might be desired. This might be done through the present main, if it is strong enough to endure the pressure of  $r_{39}$  feet additional head. As that is the only pipe to supply the city, I do not think it would be advisable to attempt it.

If the four million pump is to be used to pump into the high service at any time, the steam cylinders must be large enough to work against the head of 252 feet, as well as the 113 feet due to the low service head, or a higher pressure of steam must be used in such case. If a 16-inch pipe is laid from the present pumping-station to the proposed new reservoir, it will require 21,925feet of that pipe, which at \$2.25 would cost \$49,321.25, if there was no rock to be cut.

If this new line of 20-inch pipe be laid from the pump station to the old reservoir, and there reduced to a 16-inch pipe laid from there to the new reservoir, it will require about 8,000 feet of 20-inch at an expense of \$2.82 per foot, or \$22,560, and 13,925 feet of 16-inch pipe at \$2.25 per foot, or \$31,331.25, amounting to \$53,981.25 for the whole line, which is \$4,660more than the line would cost if it was all laid in 16-inch pipe. I am informed by Mr. Sawyer that there will probably be 1,550 lineal feet of ledge encountered in this line, which will increase the cost of the whole to \$57,081.25.

There is one advantage in this plan over the others, if you desire to supply both systems from it, which is certainly worth considering; it is that the whole pumping machinery is brought under one management. It is true that all the coal must be carted from the city to the station, which will probably add fifty cents per ton to its cost; but assuming that the consumption of coal for the high service amounts to one hundred tons per year, the additional cost of carting the coal would be only \$50 for the year, while you would dispense with the services of one extra man and possibly two. It is hardly possible to estimate the cost of running this entire plant, on account of uncertainty as to how much the low service portion will be required per year. Should you prefer for the immediate future to put in two 2,000,000 pumps for the high service alone, and lay a 20-inch main to the present reservoir and a 16-inch one from there to the new one, it can be so connected as to pump into the low service at will, but of course not at the same time as into the high service. In this case a check-valve would be placed in the main immediately above the connection with the old reservoir, to hold the pressure from the high service while pumping into the lower system.

The cost of this system would be approximately as follows :

Tapping lake eight feet below surface, including

coffer dams etc				\$2,000.00
Gate-house, screens, etc				1,500.00
19,822 feet of 16-inch pipe, at \$2.25				44,599.50
2,200 feet of 24-inch conduit pipe, a	t \$5			11,000.00
One 24-inch stop-gate				150.00
Ten tons of special castings, at \$60				600.00
Three 16-inch gates, at \$80				240.00
One 16-inch check-valve .				150.00
1,550 lineal feet rock cut, at \$2				3,100.00
Machinery : two pumping-engines, 1	6 inch	nes by	30	
inches and 14 inches by 24 in				
horse-power boilers, feed-pump wi				
tions				24,625.00
Pump house, coal shed, and chimney				
1				12,000.00
Reservoir as before				
Reservoir as before				26,324.40
	•	•	2	26,324.40
Reservoir as before	•	•	2	26,324.40

Should you decide that you would use a plant to supply both systems, and use one larger pump, say of 4,000,000 gallons capacity in twenty-four hours, for low service, and one of 2,000,-000 gallons for high service, and a 20-inch pipe from the pumps

to the old reservoir, and a 16-inch one from there to the proposed new one, then the cost would be about as follows:

Tapping the lake as before .					\$2,000.00
2,200 feet of 24-inch conduit pipe	to p	ump,	at \$5		11,000.00
Gate house, screens, etc			•		1,500.00
Pumping-station, coal sheds, and c	chimr	ey			12,000.00
One 2,000,000-gallon pumping-en	gine	•			11,000.00
One 4,500,000-gallon pumping eng	gine				18,684.00
Two horizontal 85 horse-power bo	ilers		•		2,400.00
One horizontal 95 horse-power boi	iler				1,350.00
11,822 feet of 16-inch pipe, at \$2.	25 lai	id		•	26,599.50
8,000 feet of 20-inch pipe, at \$2.8	32		•		22,560.00
1,550 lineal feet rock cut, at \$2				•	3,100.00
Ten tons of special castings, at \$60	C			•	600.00
Two 20-inch stop-gates	•	•			230.00
One 24-inch stop-gate			•	•	150.00
Reservoir as before	•	•	•	• _	26,324.40
				\$	139,497.90
Add 15.per cent for contingencies		•	•	•	20,924.68
Total cost		•		. \$1	60,422.58

Recapitulation of the estimates of cost of the different plans for additional water supply for Manchester :

#### PLAN A.

Pumping-station at Lake Massabesic and using a 16-inch main to the high-service reservoir and a 20-inch main to the low service reservoir. Total cost, \$184,297.16.

### PLAN A-2.

Pumping-station in same location as above, and using a 20-inch main through Candia road to the junction of Mammoth road, and a 16-inch branch from Candia road through Mammoth road to high-service reservoir. Total cost, \$156,207.16.

#### ANNUAL OFFICIAL REPORTS.

### PLAN B.

Pumping-station at Ashland street, with a brick suction-well for high service alone. Total cost, \$82,218.56.

#### PLAN C.

Pumping-station at the corner of Belmont and Valley streets, taking the water out of the 20-inch iron pipe in Valley street and pumping it to the high-service reservoir. Total cost, \$85,-155.66.

#### PLAN D.

Pumping-station near month of Slager brook, which enters the lake on the west side, using a 16-inch main connecting with a 20-inch cement pipe at Mammoth road, and from there to the high-service reservoir, and two 2.000,000-gallon pumps. Total cost, \$135,986.81.

### PLAN D-2.

Same location of pumping-station, with 20-inch main to the junction of Mammoth road and Massabesic street, and 16-inch branch from there to the high-service reservoir, using one 4,500,000 and one 2,000,000 gallon pump. Total cost, \$154,021.80.

### PLAN E.

With pumping-station at the old station, using two 2,000,000gallon pumps and 16-inch main to the high-service reservoir. Total cost, \$145,232.24.

#### PLAN E-2.

Same location of pumping-station, using one 4,500,000 and one 2,000,000 gallon pump and 20-inch main to low service reservoir and 16-inch main from there to high service reservoir. Total cost, \$160,422.58.

In view of the above comparison of cost of the various plans, it seems to me that if you desire to furnish the high service alone,

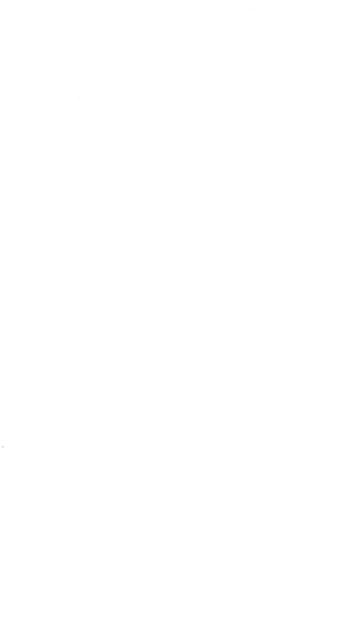
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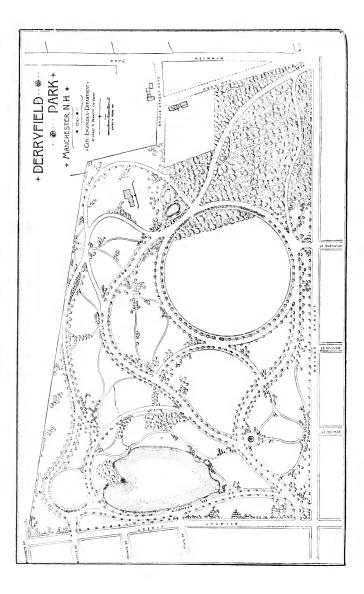
plan C would be the most economical and efficient. Should you decide to arrange the proposed plant to furnish the high service and also the low one to any considerable extent, I am of the opinion that either of the plans E would be preferable. Which one of these two would be advisable depends upon how much you may be called on to furnish the entire city with water from this plant. The prices quoted are based upon the cost of labor and materials at the present time, and are subject to the fluctuations of the market.

Trusting that the above will convey the information that you desire, I remain

Respectfully yours, M. M. TIDD.

BOSTON, October 1, 1890.





# CITY ENGINEER.

OF THE

## REPORT

# CITY ENGINEER'S DEPARTMENT. 1891.

## City Engineer.

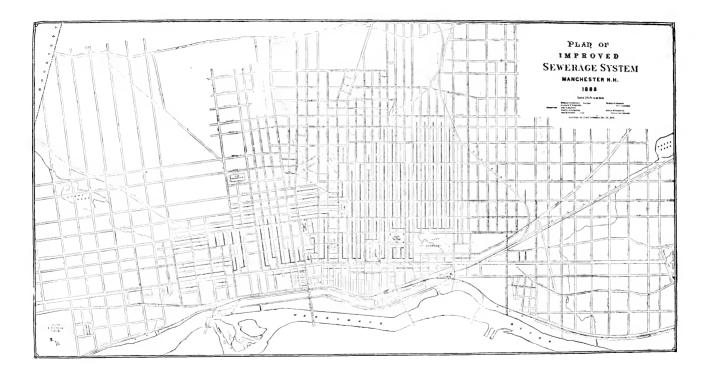
WINFRED H. BENNETT.

Assistants.

HARRIE M. YOUNG.

GEORGE W. WALES.

HARRY J. BRIGGS.



## REPORT OF THE CITY ENGINEER.

## To His Honor the Mayor, and Gentlemen of the City Councils :

SIRS, — I have the honor of presenting my sixth annual report, being the thirteenth annual report of the work in the city engineer's department and the several highway districts of the city of Manchester, for the year ending December 31, 1891.

Expenses of the department for the year 1891:

For salary of city engine	eer				\$1,171.20	
salary of assistants					1,709.25	
supplies for the offi	ce				96.24	
additions to office t	furnit	ure			14.83	
additional horse him	re				353.25	
stakes					37.50	
horse-shoeing and	repa	irs of	wago	эn		
and harness .					44.85	
street-car fares .					5.70	
printing reports					20.85	
express and postage					3.80	
repairing .					7.80	
expenses	•				3.66	
books and folios					14.37	
folio case .					5.00	
Derryfield park, pla	ns an	id prii	nting		5.60	
copying-press and t	ook	•	•		6.00	
Total						A
	·	·	•		• •	
Appropriation .	·	·	·	·	• •	3,500.00
Balance .	•					\$0.10

The items for salary of assistants may be divided as	follows:
For giving lines and grades for the extension and	
construction of streets and sidewalks .	\$258.40
plans and profiles relating to the construction of streets and sidewalks	- (
surveys and levels for the construction of streets	163.34
and sewers	260.14
giving lines and grades for the construction of	•
sewers not mentioned in these items	150.40
plans and profiles relating to the construction of	
sewers as above	59.17
surveys, measurements, and plans for the assign- ment of street numbers	15 5 2
plans, levels, lines, and grades relating to the	47.52
construction of sewers in Granite street section	53.25
making plans for improvements other than those	55 5
mentioned in this account	135.18
surveys, levels, and plans, also lines and grades	
given for improvements in Pine Grove ceme-	0
tery	104.89
given for improvements in Valley cemetery .	5.62
surveys, levels, and plans, also lines and grades	5.02
given for repairing and extending the street	
railway	17.89
collecting data, classifying accounts, and other	
work in relation to office report	44.12
plans, notes, and lines for Derryfield park .	36.30
plan, levels, and notes for Stark park survey of Piscataquog river	40.55
plans for improvements in various city buildings	16.87 24.36
copying records of highways	9.56
indexing plans and notes	29.57
checking notes, figures, etc	16.45
making plans of streets in city clerk's book of	
records	22.28
plotting sewers in sewer book	10.77

For locating street signs	\$3.40
preparing and mounting drawing paper for office use	17.22
locating cesspools, manholes, etc.	
	10.75
office work, preparing notes, data, records, etc office work, information given engineers and	93.87
others regarding lines, grades, sewers, etc.	77.38
	\$1,709.25
The items for salary of city engineer may be divided	as follows :
For information and data given engineers and others	
regarding lines, grades, sewers, etc	\$225.60
new ordinance for sewer committee	1.60
attending meetings of the committee on sewers,	
as clerk	28.80
tabulating sewer notes for the year	9.60
time spent on various sewers, instructing work-	
men regarding the construction, etc	237.60
looking up notes in reference to claims and acci-	
dents	8.80
attending meetings of committee on claims .	1.60
time spent in reference to East Manchester	
schoolhouse	2.00
preparing plans for addition to city farm build-	
ings	7.20
preparing plans of Webster schoolhouse exten-	
sion and supervising construction	18.80
attending meetings of committee on lands and	
buildings	3.60
preparing list of electric lights for committee on	
lighting streets	2.40
time spent on the various streets giving explana-	
tions and instructions regarding work	182.00
attending meetings of committee on streets .	18.40
preparing plans for street hearings	25.20
procuring abutters' names and data for city clerk	36.80
attending meetings of Board of Aldermen .	12.80

For preparing plans, data, etc., for other committees	\$19.20
attending committee meetings not included in	
the above	8.80
preparing data for yearly report	16.40
estimates given for new work	32.40
fixing grades, etc., on plans	51.60
keeping weather record	8.00
plans for improvements in Valley cemetery, and	
suggestions given	17.60
giving lines and grades and preparing plans for	
work in Pine Grove cemetery	46.8o
work on street books and numbers	17.20
time spent in relation to union passenger sta-	
tion, with officials and others	12.00
preparing data for Mayor	4.00
work in Derryfield park	4.80
work in Stark park, not charged to other appro-	
priations	3.60
indexing plans, notes, and records	18.00
preparing census statistics	10.00
preparing plans and notes in reference to Second	
street river bridge	4.00
collecting data and making plans referring to	
city lots sold on Belmont street	9.60
measuring and tabulating concrete work for the	-
year	41.20
preparing notes in reference to perambulation of	
town line, not charged to incidentals	1.60
work not included in the above	21.60
Total amount charged to engineer's depart-	
Amount charged to incidentals for perambulation of	\$1,171.20
town line	4.00
Amount charged to Stark park appropriation .	24.80
incari charged to shark oppropriation .	
Total amount paid city engineer	\$1,200.00

The following bills charged to other appropriations have been approved by this department :

Head & Dowst, putting up street signs	\$4.23
E. T. James, team used in locating street signs .	5.00
Surveys, levels, and plans of Stark park	124.30
A. S. Campbell & Co., printing sewer permits .	4.25
John B. Clarke, printing bills	1.75
Whitten & Fifield, team for perambulation of town	
line	3.00
W. H. Bennett, amount deducted from engineer's	
appropriation for perambulating town line between	
Manchester and Hooksett	4.00

Amount of curbstone furnished the city by Warren Harvey, as measured by this department, 239.84 feet.

Expenses for soldiers' monument :

For water						\$200.00
gas .	•	•			•	.56
Tot	al .					\$200.56

The amount of work done in the office during the year is as follows:

Number of orders for surveys, street lines, and grades	903
Number of orders for sewer and paving grades .	131
Number of orders for street railway grades .	7
Number of orders for profile levels	43
Total number of orders	1,084

Levels for profiles for establishing grades, 44,281 feet, equal to 8.39 miles. These profiles, having three lines of levels on each street, make a total distance actually leveled of 132,843 feet.

Levels for sewer profiles .					\$2,864	feet.
Levels for other center profiles					1,642	"
Levels in Pine Grove cemetery					10,616	"
Other levels		•	•		14,064	" "
Total levels taken					162,029	feet
Equal to 30.69 miles.	·	•	•		102,029	icci.
Surveys of streets and street line					τ14,800	
Surveys in Pine Grove cemetery			•	•	14,880	"
Surveys in Valley cemetery .					200	"
Surveys for street numbers .					18,290	"
Other surveys	•			•	41,979	" "
Total surveys made .					190,149	faat
Equal to 36.01 miles.	•	•	•	·	190,149	icet.
Equal to 30.01 miles.						
Street lines marked on ground					61,280	feet.
Lines of lots and avenues, Pine	Gro	ve cen	netery		8,640	"
Lines of lots and avenues, Valley	y cei	metery			100	"
Lines for street centers .					2,603	" "
Lines for gutters					12,138	" "
Lines for curb					2,895	"
Lines for sewers					18,742	" "
Lines for street railway .					1,370	" "
Lines of land sold					2,866	"
Other lines					7,700	"
						_
Total length of lines mar	ked	on gro	ound	·	118,334	feet.
Equal to 22.41 miles.						
Grades set for sidewalks					27,351	feet.
Grades set for centers					2,603	"
Grades set for gutters					12,138	"
Grades set for curb					2,895	"
Grades set for sewers					18,742	"
Grades set for street railway track	ks				1,370	"
Grades set for building streets					16,413	"
Grades set in Pine Grove cemete	rv				3,632	" "
	,				5,-5=	

Grades set in Valley cemetery . Other grades				\$074 728	feet.
Total length of grades set Equal to 16.28 miles.			•	85,946	feet.
Area leveled for cross section .		. г,	372,	090 sq.	feet.
Profile measurements made Equal to 2.27 miles.			•	12,000	feet.
Perambulation of lines between Man	iches	ter a	nd		
surrounding towns Equal to 7.06 miles.	•	•	•	37,276	feet.
BATTERS SET	r.				
Bowman street, retaining wall. East Manchester, schoolhouse. Spruce street, retaining wall. Webster schoolhouse, addition.					
Old lots relaid in Valley cemetery					6
Old lots relaid in Pine Grove cemeter	у.				56
New lots laid out in Pine Grove ceme	tery				113
Total cemetery lots laid out .					175
Street numbers assigned and put on					289
Street numbers replaced					50
Street numbers assigned, but not put of	on	·	•	•	38
Total				•	377

This year, as in previous years, the city engineer has investigated and made surveys in all cases where suits were liable to be brought against the city. Cases investigated and reported to the committee on claims, 15.

PLANS AND PROFILES MADE FOR SIDEWALK GRADES.

Allen street, from Main to Boynton street. Barr street, from Granite to Conant street. Beauport street, from Conant to Sullivan street.

Belmont street, from Valley to Clay street. Belmont street, from Bridge to Harrison street. Boynton street, from A to north of Allen street. Two plans. Cartier street, from Conant to Sullivan street. Conant street, from Cartier street westerly. Dartmouth street, from Log to Wingate street. Dickey street, from Main to West Hancock street. Douglas street, from Main to Railroad street. Two plans. Ferry street, from River to Main street. Frederick street, from Main to Merrimack river, Granite street, from Main to Winter street. Three plans. Green street, from Granite to Conant street. Grove street, from Belmont to Taylor street. Hall street, from Bridge to Harrison street. Hanover street, from Union to Beech street. Hanover street, from Maple to Wilson street. Two plans. Kelley street extension, from Kelley street to M. & N. W.R.R. McDuffie street, from Boynton to Huntress street. McNeil street, from Dartmouth to West Hancock street. Morrison street, from Arlington to Pearl street. Prince street, from Boynton to Huntress street. Quincy street, from Granite to Conant street. Rimmon street, from Conant to Gates street. Salmon street, from Pine to Walnut street. Second street, from Piscataquog river to Bell street. Two plans. Summer street, from Belmont to Massabesic street. Walnut street, from Gore to Webster street. Two plans. West street, from Parker to Conant street. West Webster street, from River road to Merrimack river.

Wheelock street, from West Hancock to Belknap street.

Young street, from Taylor street to Mammoth road. Two plans.

Total plans and profiles. 42.

#### SEWER PLANS AND PROFILES.

Bath street, from River to Third street.

Belmont street, from Massabesic to Valley street.

Blaine street, from Main street to Merrimack river. Brown avenue, from Elm to Shasta street. Cypress street, from Massabesic street to Young road. Douglas street, from Main to Railroad street. Two plans. East Spruce street, from Belmont to Canton street. Ferry street, from River to Main street. Granite street, from Main to Quincy street. Two plans. Hanover street, from Maple to Lincoln street. Harrison south back street, from Union to Walnut street. Lincoln street, from Hanover to Amherst street. Main street, from Granite to Amory street. Massabesic street, from Cypress street to Mammoth road. Two plans. McGregorville, sewer mains and laterals. Milford street, from Main street to old Bedford road. Myrtle street, from Russell to Belmont street.

Second street, from Piscataquog river to Bell street.

Third street, from Piscataquog river to M. & N. W. R. R.

West Hancock street, from Main street to Merrimack river.

Total sewer plans and profiles, 23.

#### NUMBERING PLANS.

Baker street, Brown avenue to Nutt road. Three plans. Bell street. Main to Second street. Belknap street, Main to Wheelock street. Calef road. Welch avenue to Elm street. Two plans. Colby street, West Hancock to Log street. Dartmouth street, Log street to Harvell land. Dickey street, Main to West Hancock street. Dinsmoor street, West Hancock street to Piscataquog river. Frederick street, Main street to Merrimack river. Gilman street, Second to Wentworth street. Hale street. Frederick street to Harvell land. Harvey street, West Hancock street to Piscataquog river. Hill street, Frederick street to Harvell land. Log street, West Hancock street to Piscataquog river. 8

McNeil street, Dartmouth to West Hancock street.

Morrison street, Arlington to Pearl street.

Second street, M. & N. W. R. R. to Harvell land. Two plans.

Walnut street, Gore to Webster street. Three plans.

Wentworth street, West Hancock street to Harvell land.

Wheelock street, West Hancock to Belknap street.

Wingate street, Wheelock to Hale street.

Woodbury street, Main to Hill street.

Total numbering plans, 28.

#### MISCELLANEOUS PLANS.

Baker street and Calef road, land of Benjamin M. Boyes, copy.

Belmont street, lots sold by city at sand bank.

Blaine and Cleveland streets, land of Lane and Dowst, copy.

Chestnut street, Hanover to Amherst street, proposed widening.

City farm, proposed addition.

Conant street and Amoskeag Company's south line, copy.

Concord street, lots adjoining land of George Porter, copy.

Elm, Union, Central, and Auburn streets, square bounded by, equaling nine plans.

Fuller land, West Manchester, copy.

Government building, plan of grounds, copy.

Mammoth road, plan of J. J. Bell's lots, copy.

McGregorville and Amoskeag, Amoskeag Company's land, copy. Two plans.

Merrimack street, Beacon to Hanover street, location of, equaling four plans.

Milford street extension, land of Brock, Brooks, and Brock, copy.

Pine Grove cemetery, original plan, copy.

Pine Grove cemetery, location of water-pipes.

River road, north, land of A. J. Lane, copy.

South Manchester, sectional map, equaling eight plans.

Summer street, Wilson to Massabesic street, location.

Union street, land of Josiah Carpenter, copy.

Valley cemetery, proposed improvements.

Varney schoolhouse, plan of foundation.

Webster schoolhouse addition, ventilation plan.

Young road, Belmont to Jewett street, location of, equaling seven plans.

Young road, estate of Thomas Johnson, copy.

Total miscellaneous plans, 50.

#### WORKING PLANS,

Belmont street, Bridge to Hanover street. Profile.

Belmont street, city sand bank. Two plans.

Canal and Central south back street. Two sewer profiles. Chestnut street, Merrimack to Hanover street. Two profiles.

Chestnut street, Merrinack to Hanover street. 1 wo promes.

Chestnut east back street, Salmon street northerly. Sewer profile.

Dubuque street, Amory to Kelley street. Profile.

Elm street, Hanover to Amherst street, Profile.

Elm west back street, Dean to Langdon street. Profile.

Granite street, River to Main street. Profile.

Pattern for manhole cover.

Pine Grove cemetery, Chessom avenue. Profile.

Pine Grove cemetery, plan of Chandler lots.

Pine Grove cemetery, Willow avenue, Locust avenue northerly. Profile.

Pine Grove cemetery, Riverside avenue, Elmwood avenue northerly. Profile.

Pine Grove cemetery, Woodside avenue, south to Alder avenue. Profile.

Pine Grove cemetery, Chandler lots. Two plans on deeds.

Prospect street, Union to Linden street. Two profiles.

Rimmon street, Kelley to south of Wayne street. Profile.

River road, plan of Stark park by J. B. Sawyer.

Salmon street, Pine to east of Walnut street. Profile.

Second street, M. & N. W. R. R. to West Hancock street. Two profiles.

South Main street, plan of the Allen land. Spruce street, Elm to Chestnut street. Profile. Union street, Laurel street to Lake avenue. Profile. Walnut street, Orange to Gore street. Profile. West Merrimack street, Elm to Franklin street. Profile. Weston street, Spruce street to Lake avenue. Sewer profile.

Total working plans, 33.

#### TRACINGS.

Belmont street, lots at city sand bank.

Brown avenue and adjacent lots. Two plans.

Cheney place, location of street lines. Three plans.

Conant south back street, Main street to Amoskeag Company's west line.

Concord R. R. yard, location of tracks and buildings.

Elm, Canal, Langdon, and Bridge streets, square bounded by. Hall street, Central to Spruce.

McGregorville and Amoskeag, Amoskeag Company's streets.

Milford and Main streets, section showing lots.

Pine Grove cemetery, section north of tool house, location of lots. Two plans.

Pine Grove cemetery, section north of tool house, for grades.

Pine Grove cemetery, plan of H. H. Huse's lot.

Pine Grove cemetery, plan of Chandler lots.

Pine Grove cemetery, lots on east side. Three plans.

River and Calef roads, proposed addition to Pine Grove cemetery.

River road, plan of Stark park.

Second street extension, location of.

St. James M. E. church, perspective for city auditor.

Stark park, showing contours.

Union passenger station, proposed location.

Union passenger station, ground plan.

Valley, Young, Beech and Maple streets, square bounded by.

Valley cemetery, proposed improvements.

Valley cemetery, plan of ironwork in tomb.

Webster schoolhouse addition, ventilation plan.

Webster schoolhouse addition.

West Webster street, River road to Merrimack river. Total tracings, 32.

#### BLUE PRINTS.

M. & N. W. R. R. bridge, abutments at Second street. N. H. Improvement Company's land.

Union passenger station. Four plans.

Total blue prints, 6.

#### MAPS.

City of Manchester, showing scavenger district.

Stark park, showing contours.

Derryfield park, for photographing for report.

Total maps, 3.

Twenty-one plans of streets laid out have been copied in the city clerk's book of records, and nine tracings made for the same.

Total of all plans made, 246.

Plans made for the establishment of grade on laid out streets, 28,732 feet.

Plans made for the establishment of grade on streets not laid out, 13,969 feet.

Total, 42,701 feet, equal to 8.09 miles.

SEWERS BUILT

STREET.	LOCATION.	Material.
	· · · · · · · · · · · · · · · · · · ·	
Ash east back	North of Harrison	Akron
Barr	Granite northerly Northerly to Douglas	"
Bath	River to Second.	
Bay east back	Webster southerly	"
Beauport	Webster southerly Adams to Schuyler	
Beech east back	From Amherst northerly	"
Belmont	Massabesic to Summer	·· • • • • • • • • • • • • • • • • • •
Belmont	Summer to Grove Grove to C. & P. R. R.	"······
Belmont.	Grove to C. & P. R. R	
Brown avenue	South of Elm	Portland
Canal	Granite to Depot Depot to Central south back	
Central south back	Canal to Elm west back	Akron
Chestnut east back	Salmon to north of North	"
Cypress	From Massabesic southerly	"
Cypress	Southerly to Valley	
Cypress	Southerly to Valley	Portland
Douglas	Green to Railroad	Akron
Douglas	From Green easterly	
Douglas Elm east back	From Barr easterly Cedar to Spruce south back	
Elm east back	Spruce s'th b'k to Lake ave s'th b'k	"
Elm west back.	Pleasant to Merrimack	"
Ferry	Third to Fourth	"
Ferry	Fourth to Main	"
Fourth.	Ferry to School south back	"
Fourth.	At School south back	
Fourth	From Walker southerly	
Front Granite	From Black brook southerly	Brick
Granite.	From Barr easterly Barr to Green	Akron
Green	Granite to Douglas	" ·····
Harrison	From Oak westerly	"
Oak	From Harrison southerly	Portland
Harrison south back	Union to Walnut	Akron
Lake avenue	Weston to Highland	Portland
Lake avenue	At Cass	Iron
Lake avenue	Highland to Canton Highland to Canton	Akron Portland
Lake avenue.	Weston to Beacon	Akron
Lake avenue south back	Elm east back to Chestnut west b'k.	"
Chestnut west back	Lake avenue south back southerly	
Chestnut west back	Lake avenue south back northerly	**
Main,	Schuyler to Sullivan	Brick
Main	From Wayne northerly Belmont to Milton	Portland
Manchester	Belmont to Milton	Akron
Mast	From east of Riddle westerly	"
Mast	From east of Riddle westerly From east of Riddle westerly	Portland
J. Baldwin & Co.'s land	Mast to Piscataguog river	"
Milford	From east of Tilton to Williams	Akron
Milford	Williams to proposed street	"
Milford	Proposed street to west of Carroll.	"
Milford	West of Carroll	
Myrtle Orange	Russell to east of Linden From Russell easterly	Portland
Orange	East of Russell.	Iron
Orange	Easterly to east of Linden	Portland
Orange	Easterly to east of Linden	Akron
Orange	East of Maple	"
Parker	From winter northerly	"
Quincy	From Douglas southerly	"
Amount carried un		
Amount earned up.,	•••••••••••••••••••••••••••••••••••••••	••••

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			72					2.249

#### SEWERS BUILT

STREET.	LOCATION.	Material.
Amount bro't forw'rd Russell. Russell. Second. Second. Spruce. Spruce. Union. Weston.	Myrtle to Prospect. From Myrtle southerly. Prospect to Harrison. 'Squog river to south of McNeil 'Squog river to south of McNeil Belmont to Weston. At brook. Cedar south back to Auburn. Spruce to Lake avenue	Akron " " Portland Akron Akron
Total		

1N	1891	Continued.		

Size in inches.	Length in feet, new.	Length in ft., relaid.	Man- holes.	Lamp- holes.	Y branches.	Total eost.	Cost per foot.
	11,376	3,332	51	19	468	\$34,476.77	
24 10 8	270 215	67	1		9 5	2,340.12	\$4.239
10 10	400		1	1	5 5 5	772.84	1.455
20 20	$975 \\ 17$		3		27	4,703.04	4.740
8 15	111     279	•••••	1	••••	4	$rac{84.41}{437.97}$	$.760 \\ 1.569$
	13,774	3,399	57	21	527	\$42,815.15	

STREET.	LOCATION.	Material		Length in feet
Beech east back	Amherst to Concord	Cement.	12	275
Douglas	From Barr easterly	Akron	12	63
Douglas	Green to Quincy	Akron.	10	275
Elm east back	Cedar to Lake ave. S. back	Akron	12	416
Elm west back	Pleasant to Merrimack	Cement.	12	150
Granite	Barr to Green	Cement.	10	161
Green	Granite to Douglas	Cement.	9	210
Main	From Schuyler southerly	Brick	17x26	21
Main	Schuyler to Sullivan	Akron	15	493
Main	From Wayne northerly	Akron	12	62
Milford	East of Riddle	Akron	12	390
Quiney	From Douglas southerly	Akron	10	70
				2,585

PIPE REMOVED WHERE NEW SEWERS HAVE BEEN BUILT.

SUMMARY.

Total 26 x 39 inches, brick		• .			514	feet.
22 x 33 inches, brick					8	" "
24-inch Portland pipe					1,363	" "
2.4-inch Akron pipe					438	" "
24-inch iron pipe					I 2	"
20-inch Akron pipe					1,110	"
20-inch Portland pipe					335	"
20-inch iron pipe				•	17	" "
18-inch Akron pipe	•				817	"
15-inch Akron pipe					2,037	" "
12-inch Akron pipe					3,207	" "
12-inch Portland pipe					140	" "
12-inch iron pipe	•				I 2	" "
10-inch Akron pipe					5,517	" "
10-inch Portland pipe	•	•			1,244	٤ ٩

Total 8-inch Akron pipe . 20-inch Akron pipe cessp					402	feet.
tions					IO	16
18-inch Akron pipe cessp tions					ъS	"
12-inch Akron pipe cessp- tions					68	"
ro-inch Akron pipe cessp tions				•	484	"
8-inch Akron pipe cessp tions					2,026	"
Total sewers built in 1891					19,779	feet.
Equal to 3.75 miles.						
Following is the total amount of 1892.	sew	erage	in th	e ci	ty Janua	ry 1,
8-inch Akron pipe					6,858	feet.
10-inch Akron pipe					42,418	" "
12-inch Akron pipe					59,710	" "
15-inch Akron pipe					15,507	" "
18-inch Akron pipe					3.652	"
20-inch Akron pipe					6,003	" "
24-inch Akron pipe	•		•		3,548	"
10.000 10.000 1.1					137,696	feet.
Equal to 26.078 miles.						
8-inch Portland pipe, old .				•	90	feet.
12-inch Portland pipe, old .					3,990	" "
18-inch Portland pipe, old .		•	•	·	770	66
Total Portland pipe, old Equal to 0.919 miles.			•		4,850	feet.
10-inch Portland pipe, new					1,244	feet.
1 2-inch Portland pipe, new					1.40	
20-inch Portland pipe, new					335	"
24-inch Portland pipe, new	•				1,363	"
Total Portland pipe, new Equal to 0.583 miles.	•				3,082	feet.

9-inch cement pipe					15,861 feet.
12-inch cement pipe					21,629 ''
15-inch cement pipe			• •		490 ''
18-inch cement pipe					860 ''
24-inch cement pipe					735 ''
16 x 24 inches, cement pipe			•		1,697 ''
Total cement pipe .					41,282 feet.
	·	·	·	·	41,202 leet.
Equal to 7.818 miles.					
10-inch earthen pipe					1,175 feet.
12 inch earthen pipe					2,545 "
Total earthen pipe .	·	·	•	·	3,720 feet.
Equal to 0.704 miles.					
18-inch brick sewers					5,725 feet.
24-inch brick sewers					3,187 "
29-inch brick sewers					1,600 "
36-inch brick sewers					545 ''
42-inch brick sewers					446 ''
44-inch brick sewers					1,195 ''
57-inch brick sewers					1,400 ''
17 x 26 inches, brick sewers					1,506 ''
20 x 30 inches, brick sewers					1,197 ''
22 x 33 inches, brick sewers					3 <sup>8</sup> 7 ''
24 x 36 inches, brick sewers					8,954 ''
26 x 39 inches, brick sewers					514 "
29¼ x 44 inches, brick sewers					4,530 ''
30 x 46 inches, brick sewers					1,360 ''
32 x 48 inches, brick sewers		•	•		3,279 ''
40 x 44 inches, brick sewers		•	·	·	790''
Total brick sewers .					36,615 feet.
Equal to 6.938 miles.					
					12 feet.
12-inch iron pipe		·	·	•	12 leet.
14-inch iron pipe	·	·	·	·	62 "
20-inch iron pipe	·	·	·	•	02

24-inch iron pipe.							12 feet	
36-inch iron pipe.	•	•	•	•	·	·	<sup>277<sup>1</sup>/<sub>2</sub></sup> "	
Total iron pipe	•		•		•		375 <sup>1</sup> / <sub>2</sub> fee	t.
Equal to 0.071 mi	iles.							
48-inch steel pipe						•	312 feet	ż.
Equal to 0.052 m	iles.							
Total in all sewers						. 227	,932½ fee	t.
Equal to the star	ailon							

Equal to 43.169 miles.

The following table shows the amount of concrete laid for the city in 1891, by Charles H. Robie. The measurements relating thereto have been made by this department and rendered as vouchers for the same.

#### STREET CROSSINGS.

		Sq. yd.	Price per yd.	Total cost.
Ash east back, at Concord .		17.70	\$0.75	\$13.27
Barr, at Granite		18.66	•75	13.99
Beacon, at Lake avenue .		28.60	.75	21.45
Beech, south of Amherst .		25.30	·35	8.85
Beech, at Amherst		34.00	•75	25.50
Beech east back, at Harrison .		17.70	·35	6.19
Belmont, at Massabesic .		45.33	·75	34.00
Belmont, at Manchester .		31.00	.75	23.33
Belmont, at Hanover, 2 .		59.08	·75	44.31
Blodget south back, at Chestnut		17.70	·75	13.28
Cedar, at Union, 4		120.88	.50	60.44
Chandler at West Webster .		33.33	·75	25.00
Depot at Elm and Elm west bac	k,			
at Depot		71.10	.75	53.32
Douglas, at Main		26.60	·35	9.31
Elm east back, at Hanover .		20.00	·35	7.00
Elm east back, at Salmon .		17.70	.75	13.28
Granite, at Green		24.88	.75	18.66
Harrison south back, at Pine.		17.70	·35	6.20

			Sq. yd.	Price per yd.	Total cost.
Harrison south back, at U	Inion, 2	÷.	31.00	\$0.75	\$23.24
High east, at Nashua .			42.60	·75	31.95
Laurel south back, at Maj	ple .		17.70	·75	13.28
Lincoln, at Spruce, 2 .			67.60	·75	50.70
Lowell, at Birch	•	•	5.30	·75	3.97
Maple, at East High .	•		35.50	·75	26.62
Massabesic, at Lake avenu	ie.		83.10	·75	62.32
McNeil, at Second .			26.60	·75	19.95
Milford	•		65.70	·75	49.27
Milton, at Hanover .	•	•	47.77	·75	35.83
Nashua		•	29.00	·75	21.75
Pine, at Harrison			33.80	·35	11.83
Pine east back, at North		•	13.30	·75	9.99
Spruce, at Massabesic .			51.55	·75	38.66
Spruce, at Union, 3 .	•	•	90.66	.50	45.33
Spruce south back, at Un	ion.		13.30	.50	6.65
Union, at Amherst .			23.50	·75	17.63
Union, at High			32.00	·75	24.00
Union, at Prospect, 2 .	•		58.60	·75	43.95
West Hancock, 2			65.70	·75	49.28
West Hancock, at Second	L.		38.20	·75	28.65
Totals		і,	499-74	\$	1,012.23

#### SIDEWALKS.

	Sq. yds.	Price per yd.	Total cost.
Bowman, at Varney school	21.77	\$0.45	\$9.79
Chestnut, Hanover to Merrimack .	92.88	•45	41.80
City hall	147.10	.25	36.77
Granite and Green	10.83	·45	4.87
High, east, and Maple	2.00	·45	.90
Lake avenue and Massabesic, at			
True J. Perry's block	147.50	•45	66.37
Lake avenue, at Mrs. L. A. Smyth's	31.40	•45	14.13
Main-street schoolhouse	211.50	•45	95.17
Nashua street	27.30	·45	12.29

	Sq. yds.	Price per yd.	Total cost.
Pearl, at C. C. Hayes's, 1/2 of bil	l 80.00	\$0.25	\$10.00
Sagamore and Elm	. 25.00	·45	11.25
Union, Laurel to Concord .	. 13.31	.45	5.99
Webster, at N. G. Newton's .	. 123.40	·45	55.54
West Central street	. 265.00	. 25	66.25
Totals	1,198.99		\$431.12

#### ROADWAYS.

	Sq. yds.	Price per yd. Total cost.	•
Chestnut, Hanover to Merrimack	2,497.83	\$0.75 \$1,873.37	
Concord, Elm to Vine	99.10	.35 34.68	;
Concord, Elm to Vine	835.40	.75 626.55	į.
Lake avenue, at engine-house .	274.22	.75 205.66	;
Merrimack, south back, 1/2 of bill	349.26	.75 130.97	/
Sagamore and Elm	211.70	.75 158.77	1
Union, Lake avenue to Laurel .	2,283.26	.75 1,712.44	ŀ
Union, Concord to Lowell	1,210.30	·75 907.72	!
Totals	7,761.07	\$5,650.16	;

#### MISCELLANEOUS.

			Sq. yds.	Price per yd.	Total cost.
Hanover square .			80.90	\$0.25	\$20.22
Hanover square .			177.00	•45	79.65
Merrimack square			983.54	.25	245.88
Park square .			742.00	•45	333.90
Pine Grove cemetery,	road	lway	1,392.00	.65	904.80
Webster-street school	yard		124.40	.25	31.10
Webster-street school	yard	•	115.44	•45	5195
Totals .			3,615.28	\$	1,667.50

#### CONCRETE LAID BY GEORGE F. HIGGINS.

Crossings.

	Sq. yds.	Price per yd.	Total cost.
Bowman, at Varney school	12.44	\$0.75	\$9.33
Central, at Kimball Carriage Co.'s	33.30	.75	25.00
Central, at Hall	30.20	·75	22.65
Chestnut west back, at Spruce .	23.10	·75	17.33
Elm east back, at Spruce, 3 .	58.60	·75	43.95
Elm east back, at Washington .	33.80	·75	25.35
Elm east back, at Pearl	17.70	·35	6.20
Ferry south back, at River	17.70	.25	4.42
Lake avenue south back, at Union.	17.70	·75	13.28
McGregor and Amoskeag Co.'s walk	107.50	·75	80.62
Merrimack south back and Union .	17.70	·75	13.28
Prospect and Russell	41.70	•75	31.28
Spruce, west of Chestnut	8.00	.75	6.00
Walker and River	34.60	•75	25.95
Totals	454.04		\$324.64

## Sidewalks.

		Sq. yds.	Price per yd.	Total cost.
Spruce, west of Chestnu	t.	32.00	\$0.45	\$14.40
Varney schoolhouse .		828.22	·45	372.70
Totals		860.22		\$387.10

## Roadways.

			Sq. yds.	Price yer yd.	Total cost
West Merrimack,	Elm to	Franklin	1,620.96	\$0.75 \$	1,215.72

#### SUMMARY.

## Concrete laid by Charles H. Robie.

Crossings	•		1,499.74 sq. yds.	\$1,012.23
Sidewalks			1,198.99 '' ''	431.12

Roadways .		7,761.07 sq. yds.	\$5,650.16
Miscellaneous		3,615.28	1,667.50
Totals		14,075.08 sq. yds.	\$8,761.01

Concrete laid by George F. Higgins.

Crossings				454.04 sq. yds.	\$324.64
Sidewalks				860.22 '' ''	387.10
Roadways				1,620.96 '' ''	1,215.72
Totals				2,935.22 sq. yds.	\$1,927.46
Total con	crete	laid b	y ci	ty, 17,010.30 sq. yds., ;	\$10,688.47.

#### BRIDGES.

The following table gives the dimensions, material, and number of spans of the various bridges within the city limits.

LOCATION.	Length in feet.	Width in feet.	No. of walks.	Width of walks.	Material.	Arch- es or spans
Amoskeag	765.5	20	1	5.5	Wood.	3
Bridge street, at canal	57	22.5	2	7	Iron.	1
Bridge st., McGregor and approaches	1085	24	2	6	"	3
Cohas avenue, at Great Cohas	36	30.5		: <b></b>	Stone.	2
Derry road, at Great Cohas	38	20	••••••••••		Wood.	1
Derry road, near Cohas avenue	20	17	· · · · • •		۰.	1
Derry road, near town line	21	20.5			"	1
Dunbarton road, Black brook	25	17.5			"	1
Elm street, at railroad	89	29 5	1	4.5	"	1
Front street, Black brook	16.5	<b>3</b> 3		••••••	"	1
Granite street, at canal	56.3	37.3	2	6	Iron.	1
Granite street, at river	465.7	26	2	5	Wood.	3
Harvey road, at Great Cohas	32	21			••	1
Island Pond road, outlet to lake	41	16 7				1
Main street, at Piscataquog river	70.5	20.8	1	5	**	1
Mammoth road, at Great Cohas	38	18				1
Mammoth road, near town line	14	20			"	1
Mill road, at "Harvey's mill "	19	20.5				3
River road, at Goffe's Falls	30	30				1
River road, at Little Cohas	16	20	••••			1
River road, below James Cheney's	6	16				1
South road	12	22				1
Webster road, at water-works dam	100	17.5				5
Weston road, east of D. Connor's	6	16			"	1

Stone bridges, I ; iron, 3 ; wood, 20 ; total, 24.

#### ROADS.

As will be seen by referring to the table of new streets laid out, about eight miles, in length, of highways have been added to the large number existing. It is gratifying to note this increase as indicative of the growth and extension of the city.

STREET.	LOCATION.	Laid	out.	Width in feet.	Length in feet.
Adams	Webster to Appleton	June	12	50	230
Allen	Main to Boynton		24	50	700
Amory	Dubuque to Kimball	Nov.	17	50	3.499
Auburn	Beech to Lincoln	July	28	50	1.250
Beauport	Amory to Kelley	May	22	50	700
Belmont	Bridge to old Bridge	Sept.	22	50	225
Belmont	Young to Clay	Sept.	1	50	1,395
Boynton	E. Hartshorn's to Bedford line	July	28	50	2,844
Cheney place	Elm to Brown avenue	Sept.	18	35	381
Conant	Dubuque to Hevey	Aug.	28	50	544
Cypress	M. Prout's line to Young	July	28	50	59
Dartmouth	West Hancock to Dickey	Aug.	28	40	146
Dartmouth	Dickey to Frederick	Aug.	28	50	490
Dickey	Main to West Hancock	Aug.	28 .	40	857
Ela	Baker to Grover	June	12	100	382
Elm	Grover to H. D. Lord's line	Oct.	27	100	81
Frederick	Second easterly	Aug.	28	50	300
Granite	M. & N. W. R. R. to Winter	June	23	40	310
Green	Douglas northerly	July	28 .	40	96
Grove	Belmont easterly	Oct.	27	50	539
Hall	Central to Lake avenue	June	2	40	225
Hall	Bridge to north side Prospect	June	12	50	1,466
Huntress	Albert to north of Prince	Sept.	18		648
Jewett	Cilley to Weston road	Nov.	27	50	3,650
Kelle y	Kelley to M. & N. W. R. R	Juue	23	50	652
Knowlton	Young southerly	Nov.	27	40	487
Maple	Young to Shasta	Nov.	27	50	2,208
Maple	Shasta to Cilley road	Nov.	27	50	358
McDuffie	Boynton to Huntress	Sept.	18	40	455
McNeil	Second to West Hancock	Aug.	28	40	299
Merrimack	Hall to Hanover	July	28	40	2,447
Morrison	Arlington to Pearl	May	22	50	372
Old Ferry road	Belmont to Taylor	July	28	45	570
Prince	Boynton to Huutress	Sept.	18 28	40	520
Quincy	Douglas northerly	July	28	40 50	- 96
Rimmon Rimmon	Amory to Kelly	June	28.	50	700
Rimmon	Amory to south of Wayne Conant to Gates	Aug. Oct.	27.	50	785 488
Sagamore	Union to Walnut	Aug.	28	50	270
Salmon	Pine to Walnut	June	12	50	764
Second	Piscataquog river to Frederick	Aug.	28	50	600
Second	Frederick to Main	Sept.	18	50	4,100
Second	Blaine to south side 'Squog river	Nov.	27	50	\$28
Summer.	Belmont to Massabesic	Sept.	22.	50	610
Walnut	Gore to Salmon	July	28	50	891
Wilson road	Concord to Lowell.	Aug.	28	40	310
Young	Ainsworth's line to Mason	Dec.	15	50	1,170
		2000.			
					40,997

## NEW HIGHWAYS LAID OUT IN 1891.

There is an urgent necessity of establishing and thoroughly defining the boundary lines of all highways leading out of the city as much as those in the city proper, so that the abutters will recognize the city's right of way and respect it. A beginning has been made in this direction, and several of the outlying roads thus marked and defined. With the constantly increasing demands on this department, the work has not progressed as rapidly as could be desired, or in fact as it should for the city's welfare. Each year obliterates some of the marks, which in time will be totally destroyed unless means are taken to preserve them either by surveys at the present time, or by relocation in the future at considerable expense.

The policy of narrowing a four rod right of way to a fifty foot street is folly. If the future growth of the city may be judged by the past, a four rod street will be none too wide for the traffic, with the street cars and other vehicles.

The course pursued in laying out streets twenty-five, thirty, and thirty-five feet wide is hardly in keeping with modern ideas, and should be deprecated. The niggardly, grasping methods of landowners in laying out the greatest possible number of house lots in a given piece regardless of how the street runs, or whether it conforms to the surrounding streets both as to direction and width, is one that calls for the harshest criticism. The idea seems to be to put every foot of land possible into the market regardless of how the streets may come. This may be of advantage to those having land to dispose of, but it is not conducive to the appearance of the city or the usefulness of the streets as means of communication.

It is gratifying to note that the more progressive property owners have recognized the need of wide thoroughfares and divided their property accordingly.

It would seem good policy to appoint a special committee to consider the city's needs in this direction and formulate a plan for laying out streets that should be *strictly adhered to*, no deviation whatever being allowed. Such a plan should show the width, direction, and location of all streets that may be built, as far as practicable. The least that could be done would be to

pass an ordinance defining the minimum width of streets together with their direction as compared to other streets, and compel property owners to conform thereto.

Until something of this nature is done, the city will continue to be cut up by passageways, which, though dignified by the name of streets and avenues, are in reality but lanes and alleys.

In building the streets after they have been accepted and laid out, great care should be exercised. The idea is not to see how many yards can be constructed in a day, rough, uneven, and unstable, but how much can be properly built with a good foundation and a firm, smooth roadbed; one that will be lasting rather than one that will need continual repairing, simply because the first cost is less and a greater showing made.

In many cities property owners desiring streets through their land are required to give the land for the streets and build them to a grade satisfactory to the committee before they will be accepted by the city. The same idea in vogue here would be of incalculable benefit in many ways. The sum annually spent for land damages in purchasing streets, and the cost of building, two important items, would be saved. As it is the property owner who derives the greatest benefit, it seems but just that he should do this.

#### SEWERS.

By a perusal of the various tables it will be seen that a large number of sewers have been constructed this year, and the demand for others is increasing. There are many sections of the city that are in need of these adjuncts to health, perhaps as much so as those that are already supplied. The policy of the committee has been to supply those whose needs seemed most urgent, as under the prevailing system but about so much can be done each year. As will be noticed, the principal item of expense has been for labor, mainly in digging and filling the trenches. This is an important part of the work, and care should be exercised in determining the width of the trench not to remove any superfluous earth other than the actual amount necessary to properly proceed with the pipe laying. At the depth necessary for some of the sewers to be built, the cost of each cubic foot of earth is no inconsiderable amount, and money saved in this direction will be appreciated in the various extensions.

Too much care cannot be taken in making connections from house drains to the city sewers. Nearly all the complaints made regarding sewers becoming clogged are traced directly to these connections made by incompetent workmen. The work should be done by men in the employ of the sewer department, and who thoroughly understand their business, the cost to be assumed by the abutter. In conjunction with this a record should be kept of each connection and properly filed for future reference.

During the year a new set of ordinances was drawn up for the committee on sewers and drains, and so much of it as pertained to the sewer permit and licence was adopted by the city councils.

The following report was prepared by the city engineer, as clerk of the committee on sewers and drains:

#### MANCHESTER, N. H., Dec. 1, 1891.

#### Gentlemen of the City Councils :

Your committee on sewers and drains, to whom has been delegated the important work of the city's business, having completed the work intrusted to them for the season of 1891, make at this time a return to you of their stewardship, its cost, and the amount of work done.

When they began at the first of the year they found that their predecessors had left twenty-four sewers voted in by the city government. Of these, ten have been constructed this season. Your committee has held twenty-one meetings and had fifty petitions referred to them. Of these, thirty-four have been granted by the committee, and their report and an order for building the same have been presented to your honorable board. The total number of orders presented to your board was forty.

The following table shows the different sewers built, their length, cost, and the cost per foot to build the same.

(See table of new sewers built.)

\* \* \* \* \* \*

The average cost per foot being \$2,497.

The above rate is from three to six cents per foot less than the cost in many cities where the betterment plan is used.

In the 17,173 feet of sewers there were built 60 manholes and 19 lampholes; 76 cesspool connections were put in besides the Y branches for 445 house connections.

There have been 91 cesspools built at a cost of \$2,988.44, 66 repaired at a cost of \$474.25 and 5 cesspool manholes costing \$202.62.

In addition to the above the main outlet of the main sewer at the river was completed at a cost of \$395.12.

Month.	Labor.	Castings repairs and black- smithing.	Pipe.	Inci- dentals.	Brick.	Total.
January	\$523-59			\$3.64	·····	\$527.23
February	745.12	\$17.54		55.94	· · · · · · · · · · · · · · · · · · ·	\$21.90
March	619.20	33.96	·····	25.35	· • • • • • • • • • • • • • • • • • • •	648.51
April	1,623.31	36.40	\$300.99	155.47		2,149.17
May	3.893.62	241.05	$1,1^{+9.21}$	1,735.68		7,662.50
June	4,416.54	125.02	4.121.13	663.20	\$455.00	9,750.89
July	3,620.90	341.45	· · · · · · · · · · · · · · · · ·	535.>8	· · · · · · · · · · · · · · ·	4.495.23
August	4,701.63	$2 \pm 6.2 \pm$		199.86	····	5,187.77
september	5,811.15	324.64	· · · · • • • • • • • • • • • • • • • •	543.11	• 546.60	7,224.90
October	5,285.27	421.51	6.643.05	441.40	· · · <b>· · · · · ·</b> ·	12,791.23
November	1,547.73	242.80	215.66	125.10	227.50	2,658.19
	\$33,055.06	\$2,040.98	\$12,469.44	\$4,523.63	\$1,228.50	\$53.350.61

The cost of repairs on sewers has been \$244.53.

From the monthly pay-roll the following shows how the cost has been divided :

Included in the incidentals was a bill of \$986.85 paid for a steam boiler and pump, \$1.062.33 paid for cement, and \$821.04 paid for hardware, tools, and supplies.

The stock on hand is as follows :

Brick in District No.	2	•	. 8,000,	valued at	\$59.20
Brick in District No.	ro		. 53,976,	<i>" "</i>	385.43

Pipe on hand Branches on han	d	• 4 •	.,793 ft 346 p	. value pieces,		\$3,401.91 1,064.04
Total						\$4,910.58

Most of the pipe on hand, which is worth about \$3,000, is for the McGregorville sewer, which was only partly completed this year and which will be the first to start upon next season.

Appropriation for 1891						\$55,000.00
Drafts for 1891 .	•	•	•	•		53,350.61
Balance December	і,	1891				\$1,649.39
Unpaid bills, about					\$300.00	
Unpaid brick bills	•				686.41	
						\$986.41
Leaving a balance	of	about				\$662.98

Respectfully submitted.

John J. Holland, A. J. Dickey, A. D. Maxwell, George M. Clark, A. J. Peaslee,

Committee on Sewers and Drains.

#### PUBLIC PARKS.

Owing to the pressure of office work and the immediate demand for a plan of Stark park, Mr. Joseph B. Sawyer, C. E., was employed to make the survey. The levels for cross-sectioning were taken by this office, and a contour map made, a tracing of which was forwarded to William Doogue, superintendent of public parks, Boston. A plan is to be prepared, under his direction, showing the proposed walks and drives.

A reduced copy of the Derryfield park map was made in India ink for reproduction in the city reports. In this park the lines were given for the circular play-ground.

Mr. John Fullerton has had charge of the work on the public parks and squares, and under his direction the underbrush on both Stark and Derryfield parks has been removed. The various squares have been carefully looked after during the season.

## STREET LINES AND GRADES.

Too much care cannot be exercised in establishing street lines and grades which, once established, should not be changed, except for the most urgent reasons, and then only as a last resort. Grades are established on a street as a whole, and while the grade of parts of a street may not appear to be correct by itself, when the entire street is completed the uniformity will be apparent. Provisions should be made for procuring plans and establishing grades on all projected streets so that orders for grades may receive immediate attention. The appearance of a street is not improved by compelling abutters to build haphazard without grade owing to the inability of this department through lack of time or data to attend to it.

### SUGGESTIONS.

This department is in immediate need of a complete property map of the city drawn to a large scale. Such a map would require being made up in sheets and for the present would include about twenty parts, though to cover the entire city about ten additional parts would be needed. We have made a slight beginning in this direction.

With the present force it is impossible to keep the office open more than a few hours each day during the outside working season, as all are busy attending to the numerous demands for lines, grades, etc. Each year makes it more imperative that an assistant should remain at the office constantly for the purpose of issuing permits, showing plans. and looking up data for the various departments and for others who require them.

There are various minor details that would materially assist the work of this department, but which must be dispensed with owing to the insufficiency of the appropriation, it being barely large enough, with the utmost economy, to last the entire year.

#### COMMITTEE WORK.

At the first meetings held by the committees on streets and sewers and drains, the city engineer was elected clerk and in that capacity has attended each meeting, keeping a complete record of the proceedings which are on file in this office. In addition various other committee meetings have been attended as follows:

City government, 5; Amoskeag cemetery, 2; Valley cemetery, 5; Pine Grove cemetery, 4; city farm, 3; finance, 1; lands and buildings, 9; claims, 4; commons, 3; parks, 1; Board of Aldermen, 9; streets, 11; sewers and drains, 21: joint committee, streets, and sewers and drains, 2, — a total of 80.

In addition to the work before enumerated, many questions have been answered from engineers, boards of trade, and others in various cities throughout this country and Canada.

I would respectfully tender my acknowledgments to His Honor the Mayor and the various committees of the City Council, for the support which they have given.

I wish also to acknowledge the courtesies shown by the various heads of departments, and the co-operation of the assistants of this department.

Respectfully submitted. WINFRED H. BENNETT, City Engineer.

JANUARY 1, 1892.

# REPORTS OF DISTRICT SURVEYORS.

Report of the work done in the various highway districts during the year 1891 :

# District No. 1.

No report.

# District No. 2.\*

# William Sanborn, Superintendent.

## COBBLE GUTTER PAVING.

STREET.	sq. yards.	No. loads.	Cost per load.	Cost of stone.	
Concord, Ash to Maple	67	5	\$1.60	\$8.00	\$14.00
Concord and Hall	117	14	1.60	22.40	20.25
Lake avenue, near Hall	140	21	1.60	33.60	57.00
Lake avenue, east of Beacon	200	24	1.60	38.40	78.75
Maple, Concord to Lowell	50	4	1 60	6.40	6.00
Milton, Hanover to Manchester	200	9	1.60	14.40	33.50
Nashua	667	76	1.60	121.60	128.13
Spruce, Elm to Chestnut	400	43	1.60	68.80	78.00
Union, Concord to Amherst	72	6	1.60	9.60	15.00
Frank S. Bodwell		· · · · · · · · · · · ·		16.00	• • • • • · · · · ·
Head & Dowst Co	· · · · · · · · · ·		· · · · • • • • • • · · ·	129.00	••••
Totals	1,913	202	••••	\$468.20	<b>\$</b> 430.63

\* District No. 3 is now included in this district.

Total cost of the foregoing work, \$898.83, an average cost of \$0.47 per square yard.

EDGE	STONES	SET.
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			Feet.	Cost.
Auburn, between Pine and Union .			35	\$3.53
Blodget and Chestnut			20	3.44
Blodget south back at Chestnut .			24	3.50
Central and Hall			36	3.50
Central, between Elm and Chestnut			282	48.75
Chestnut and Manchester			120	11.28
Concord and Union			292	42.00
Concord, between Ash and Maple .			257	38.00
Elm and Depot			28	12.00
Elm, near Granite			100	10.29
Franklin and West Central			64	8.15
Hanover and Belmont			2 I	2.50
Lake avenue and Massabesic			53	5.00
Lake avenue, east of Lincoln			75	13.50
Lake avenue, at True J. Perry's block			246	62.37
Laurel, at No. 100			25	6.62
Laurel, east of Chestnut			37	7.25
Linden and Bridge			89	10.50
Maple, between Concord and Lowell			206	20.75
Maple and East High			8	1.75
Merrimack			10	3.00
Merrimack, near Union			84	6.87
Orange and Linden			2 I	1.75
Pine and Auburn			16	3.50
Prospect and Union			2 I	3.20
Sagamore and Elm			32	6.75
Spruce, between Chestnut and Elm .			26	3.29
Union, between Concord and Lowell			100	14.60
Union and Lake avenue			142	8.75
Union and Auburn			194	15.62
Union, between Laurel and Lake avenue			460	37.12
Union and Amherst			254	23.30
Totals	·	·	3,378	\$442.43
Average cost per foot so 121				

Average cost per foot, \$0.131.

## REPORT OF THE CITY ENGINEER.

#### EDGE STONES RESET.

					Feet.	Cost.
Canal, near passenger s	tation				229	\$29.28
Central, west of Elm			•		75	10.80
Central, near Pine .		•			33	4.00
Chestnut, between Han	over a	ind M	Ierrit	nack	222	38.63
Depot, between Canal a	and Fi	rankl	in		250	26.75
Elm and Lake avenue	•				262	38.00
Elm, north of Hanover					50	9.00
Hanover, opposite post	office				45	8.00
Hanover, and Hall "					65	9.00
Merrimack, between El	m and	l Fra	nklin		113	30.60
Pearl, between Elm and	l Ches	tnut			39	7.25
Union, near St. Anne's	churc	ch		•	20	4.50
Totals					1,403	\$215.81
Average cost per foot	t, \$0.1	54.				

#### PAVING RELAID.

Canal, at pas	senger	stat	ion				1,225 S	q. yds.
Canal, at frei	ght sta	ation	i .				30	"
Concord and	Elm				•		328	"
Concord and	Maple	е.					1.30	"
Depot, Frank	lin to	Can	al.				1,958	" "
Elm							2,850	"
Granite .							54	"
Hanover .							1,500	<i></i>
Lake avenue,	west o	of Ca	ass				58	" "
Manchester							1,200	"
Total	·		•	•	•	•	9,333 s	q. yds.

In this connection forty-six extra loads of paving were used, costing 73.60; and 120 loads of paving sand, costing 12.

The amount paid for labor of men and teams on the above work was \$1,748.43, making the total cost \$1,834.03, an average cost of \$0.1965 per square yard.

STREET.	Feet.	Square yards.	No. loads stone.	Price per load.	Cost of stone.	Labor of men.	Labor of teams.	Inci. dentals.	Total cost.
Lake avenue, near Hall	1,150 570	787.32 2,604.00 2,084.00	655 005 005 005 005 005 005 005 005 005	\$0.54 0.54 0.61	\$150.00 378.00 219.52	\$450.99 1,300.75 640.35	\$210.00 759.35 300.00	\$59.98 150.00 45.02	\$\$71.63 2,558.10 1,207.89
Totals	1,960	5,471.32	1,320		×14×18	\$2,302.00	\$1,269.35	\$258.00	\$4,667.62
		TOP	TOP DRESSING.	ING.					
STREET.		Square yards.	No. loads stone.	Price per load.		of stone.	Labor of men and teams.	Inci- dentals.	To(al cost.
of Merrimack		91919 852 852 852 852 852 852 852 852 852 852	<u>895</u> 61		\$0.54 10.05 10.00	\$140.85 54.55 55.54 55.54 55.54 55.54	01.822 01.822 18.002 87.00	8788 22 22 22 22 22 22 22 22 22 22 22 22 2	8918-97 198.36 345.66
Deun fijm westerk hun Prospect northery. Pranklin and Petesunt. Attake artenue, east of Beaton Allton West Central, Fijn westerly. West Central, Fijn westerly. General repairing.		$\begin{smallmatrix} & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & $	3부8668889부분				85.52 86.52 86.52 86.53 86.54 86.55	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	8788 8788 8788 8788 8788 8788 8788 878
Totals.		15,51	1,833			\$1,112.94	\$4,010.29	\$370.08	\$5,493.31

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# ANNUAL OFFICIAL REPORTS.

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SPREET.	Length in feet.	Square yards.	Price per yard.	Cost.	Labor of men.	Labor of teams.	Total cost.
Chestnut	606.0	2,497.83	\$0.75	\$1,873.37	\$253.50	\$140.00	\$2,200.87
Concord		99.10	0.35	34.68			
Concord	299-0	835.40	0.75	626.55	44.00	26.00	131.23
Lake avenue	149.0	274.22	67.0	205.06			205.66
Merrimack south back	161.0	174.63	0.75	130.97	15.00	12.00	157.97
Sagamore	42.5	211.70	0.75	158.77			158.77
Union, Laurel to Lake avenue	571.0	2,283.26	0.75	1,712.44	298.86	142.00	2,153.30
Union, Concord to Lowell	311.0	1,210.30	0.75	907.72	160.86	90.00	1,158.58
West Merrimack	357.0	1,620.96	0.75	1,215.72	341.00	200.00	1,756.72
Totals.	2,496.5	9,382.43		\$6,865.88	\$1,113.22	\$610.00	\$8,589.10

#### SUMMARY.

		Sq. yds.	Loads of stone.	Total cost.
Macadamizing .		5.471.32	1,322	\$4,667.62
Top-dressing .		16,741.00	1,263	3.617.60
General repairs .		6,000.00	570	1,875.71
Picking and rolling		2,000.00		21.62
Concreting .		9,382.03		8,589.10
Totals .		39,594.35	5	\$18.771.65

STREETS (	GRADED.
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STREET.	Cut or fill.				Labor of teams.		Total cost.
Adams	Cut	1,388	1,450	\$300.75	\$190.00	\$4.50	\$495.25
Auburn	"	888	950	30.00	10.00	1.00	41.00
Bay	··	710	740	104.32	47.00	2.00	153.82
Beech and Gore	Fill	203	220	42.48	26.40	1.20	70.08
Hall	"	680	710	210.35	88.00	3.00	301.35
Maple *		10,555	10,700	280.75	790.00	8.10	1,078.85
Milton	Cut	293	293	150.49	64.00	5.00	219.49
Morrison	Both.	2,056	2,150	161.20	80.10	3.50	244.80
Orange	Cut	4,333	4,500	520.65	280.00	5.34	\$05.99
Pearl	Both.	1,154	1,200	240.80	120.40	4.00	365.20
Sagamore	"	542	560	160.49	90.00	2.50	252.99
Walnut	Cut	590	750	197.25	\$4.00	4.50	285.75
West Webster t	··	350	370	113.75	87.00	2.25	203.00
Young	"	1,000	1,400	314.75	612.00	10.00	936.75
Totals		24,742	25,993	\$2,828.03	\$2,568.90	\$56.89	\$5,453.82

\*3,626 loads of material came from Fred T. Dunlap's lot, 1,400 loads from Young street, and 5,574 loads from other sources.

<sup>†</sup>The material removed from this street was mostly loam, which was placed in the high school yard.

# REPORT OF THE CITY ENGINEER. 145

# STREETS GRAVELED.

Adams, Webster northerly .				650 feet.
Amherst, East of Hall .				200 ''
Amherst, from Ashland westerly				300 ''
Amherst, from Vine easterly				500 ''
Ash, north of Harrison .				300 ''
Bay, from Sagamore northerly				550 ''
Beech, north of sash and blind sh	юр			ι,000 ·'
Brook, from Elm easterly .				700''
Brown avenue, Elm southerly		•		1,750 ''
Calef road, Elm southerly .				4,675 ''
Chestnut, at North End .	•		•	500 ''
Chestnut, from Central southerly				600 ''
Concord, from Chestnut easterly				300 ''
Hall, north of Amherst .				200 ''
Hanover, from Beacon easterly				2,200 · ''
Harrison, from Elm easterly .				850 ''
Jane, from Nashua southerly				.400 ''
Laurel, from Beech easterly .				450 ''
Lincoln, north of Merrimack				400 ''
Lowell, east of Maple		•		700 ''
Maple, from Myrtle northerly				200 ''
Maple, from Pearl northerly .		•		300 ''
Milton, from Hanover southerly				250 ''
Myrtle, from Oak westerly .				260 ''
Nashua, from Bridge northerly				100 ''
Nutt road, near fair grounds .				4,000 ''
Oak, from Maple southerly .				300''
Orange, from Chestnut easterly				1,200 ''
Pearl, from Ashland westerly				550 ''
Pine, south of Valley cemetery				300 ''
Prospect, from Maple easterly				200 ''
Sagamore, from Pine westerly	•			200 ''
Union, from Concord southerly				1,200 ''
Union, from Sagamore southerly				1,600 ''
10				

Valley, east of Elm		•	•	•	300	feet.					
Wilson, from Laurel northerl	y.				700	"					
Wilson road, from Lowell no	ortherly				500	" "					
Young, from Beech easterly					600	"					
Total		•	•	• 29	,985	feet.					
Loads of gravel used on foregoing streets, 9,785.											
Loads of coal cinders used on foregoing streets, 492.											

STREET.	Length in feet.	Width in feet.	Feet eut.	Feet fill.	Cost.
Ash, north of Harrison	100	8		3	\$22.00
Ashland, north of Lowell	450	8		1.5	54.50
Auburn, east of Pine	150	8	1		10.50
Auburn, West of Maple	75	8	····	10	70.00
Auburn, east of Chestnut	100	8	··· ••••	0 5	6.00
Bay, north of Sagamore	100	8	2		16.00
Bay, north of Sagamore	400	8	1		30.00
Beech and Gore	180	8		3	44.00
Central, west of Hall	175	8		0.5	11.96
Concord, west of Hall	800	8		2	128.00
East High, east of Nashua	100	8		ì	10.00
East High	200	8	<b></b>	1	17.00
Elm, from North northerly	300	15		2	96.00
Gore and Walnut	200	8		3	40.00
Hall, from Central northerly	75	8		0.5	3.04
Lake avenue, east of Beacon	550	8		1	40.00
Lake avenue, east of Beacon	550	8	1.5		63.00
Liberty, north of North	150	8	2		20.00
Linden and Myrtle	300	8		1.5	31.50
Lowell, west of Ashland	100	8		1.5	12.00
Lowell, east of Ashland	100	8		1	6.00
Milton, south of Hanover	440	8	1		36.70
North, east of Liberty	100	8	2.5		24.00
North, west of Elm	150	8		2.5	$28_{-}00$
Pine, north of Salmon	150	8		1.5	20.00
Russell and Prospect	280	s		1	20.00
Sagamore, east of Elm	120	8	1		11.60
Webster, west of Elm	410	8	· • • • • • • • • •	1	$32_{-}80$
Totals	6,805				\$904.60

### GRADING FOR CONCRETE.

Grading for concrete and exc	avating cel	lar, on ac-	-
count of lowering Perry blo	ock, Lake a	venue and	
Massabesic			\$299.89
Labor of men and teams, sand	ing streets,	January 1	
to March 21			2,025.92
Labor of men and teams, draw	ing sand an	d sanding	
streets to December 31 .			220.13
E. Hartshorn, 394 loads of san	d		39.40
Frank S. Bodwell, stone			59.00

## SEWERS AND DRAINS.

24-inch Portland pipe .					785	feet.
24-inch Akron pipe .					270	
24-inch iron pipe					12	"
20-inch Akron pipe .					975	÷ 4.
20-inch Portland pipe .					137	٠.
20-inch iron pipe					17	" "
18-inch Akron pipe					670	" "
18-inch Akron pipe (relaid	l) .				147	" "
15-inch Akron pipe .					860	" "
15-inch Akron pipe (relaid	I) .				269	"
12-inch Akron pipe .	٠.				1,032	"
12-inch Akron pipe (relaid	l) .				637	"
12-inch Portland pipe .					756	، ،
12-inch iron pipe					12	" "
10-inch Akron pipe .					2,047	" "
10-inch Akron pipe (relaid	l) .				409	"
10-inch Portland pipe .					1,133	، د
8-inch Akron pipe .					376	"
						<i>.</i>
Total	•	•	•	•	10,544	feet.

The foregoing sewers were constructed at a cost of \$23,721.64.

# CESSPOOL CONNECTIONS.

12-inch pipe									66 1	feet.
10 inch pipe	•	•							310	"
8-inch pipe		•			•	•	•		1,151	" "
8-inch pipe (	repa	iring)	).	•		•	•	•	50	" "
Total								-	1,577	feet.

# REPORT OF THE CITY ENGINEER.

#### SEWERS REPAIRED.

τ8-inch pipe .					18 feet.
12-inch pipe .					2 ''
8-inch pipe .					48 ''
Total .					68 feet.
Total pipe laid				. 13	2,189 feet.

Equal to 2.308 miles.

# NEW CESSPOOLS.

STREET.	No.	Cost of material.	Cost of labor.
Appleton, corner of Ray	1	\$21.35	\$12.00
Belmont, eorner of Manchester	4	71.06	46.00
Bridge, corner of Linden	1	20.72	15.95
Bridge, corner of Ash.	1	21.29	13.37
Cedar, corner of Chestnut.	2	41.70	25.30
Central, near Cass	1	16.81	18.75
Depot, between Elm and Franklin	1	19.10	17.25
Depot, corner of Canal	1	25/90	14.35
Elm west back, between Depot and Granite	1	16.68	13.50
Front, south of Black brook	2	41.58	40.00
Gore, eorner of Walnut	1	19.48	12.25
Hall, at Amherst and Concord	4	75.43	38.37
Harrison south back, between Union and Walnut	1	17 19	10.50
Lake avenue, corner of Hall	1	36.01	33.00
Lake avenue, at engine-house	23	52 - 39	42.87
Lake avenue, corner of Cass	3	72.96	40.65
Lake avenue, corner of Weston	3	59 19	45 45
Lake avenue south back, west of Chestnut	1	21.69	10.50
Manchester, corner of Chestnut	1	22 98	16.00
Manchester south back, between Pine and Union	1	16.64	10.25
Maple, corner of Cedar	3	73.31	61,00
Nashua, between Concord and Bridge	7	136.35	86.10
North, corner of Chestnut	2	122.85	189.49
Nutt road, near Elm	1	23 90	7.88
Orange, corner of Maple		19.91	18.37
Peari, corner of Russell		17.21	19,00
Pine, corner of Cedar	1	23.00	15.87
Spruce, near Chestnut	1	17.39	9.50
Union, between Merrimack and Central	3	62.50	53.12
Union, between Cedar and Lake avenue	3	59.74	39.25
Union, corner of Auburn	4	57.12	38.88
Union, between Concord and Lowell	1	19.06	15.95
Totals	61	\$1,322.49	\$1,030.72

STREET.	No.	Cost of material.	Cost of labor.
Adams	1	\$2.80	\$3.68
Amherst, corner of Dutton	i	2.80	3.68
Amherst, corner of Hall	l i	.74	2.00
Auburn, corner of Franklin	ĩ	2.80	3.65
Cedar, corner of Union	4	4.45	12.50
Cedar, corner of Maple	4	3.20	7.30
Cedar, corner of Chestnut	î	7.86	5.50
Central, corner of Union	i	2.00	3.50
Chestnut, near Pennacook	î	3.50	4.00
Chestnut, corner of Merrimack	2	4.80	5.18
Chestnut, corner of Amherst	ĩ	2.80	3.68
Church, corner of Washington	î	2.80	3.68
Concord, corner of Elm	î	1.00	2.50
Concord, corner of Vine	1	5.00	6.75
Concord, near Maple	1	5.00	7.50
Concord, corner of Hall	1	1.00	1.75
Concord, corner of Belmont	2	3.00	3.75
Depot, corner of Canal	ĩ	20.27	22.50
Granite south back	5	5.03	12.75
Hall, corner of Central	ĩ	6.35	5.00
Hanover square	÷ 1	3.14	4 00
Harrison, corner of Union	î	1.50	2.75
High, corner of Union		2.00	3.00
Lake avenue, corner of Union	ĩ	5.15	10.25
Lake avenue, corner of Pine	1	4.00	4.50
Lake avenue south back, near Union	i	9.11	4.50
Lincoln west back, near Merrimack	2	1.60	4.00
Lowell	î	5.85	5.50
Lowell, corner of Ashland	i	5.85	6.10
Manchester, corner of Chestnut	i	4.50	6.00
Pearl, corner of Elm	i	4.00	8.50
Pine, corner of Lake avenue	1	2.79	3.67
Pine, north of Brook	i	$\frac{2.49}{9.31}$	10.00
Russell.		2 22	2.00
Spring compared Union	$^{2}_{2}$	$\frac{2}{5}$ $\frac{22}{20}$	
Spruce, corner of Union	1	5 20 6.00	10.25
Spruce	1		5.50
Union between Lengel and Control		1.00	1.50
Union, between Laurel and Central	4	7.44	12.50
Union, corner of Spruce Union and Amherst	1	.50	$\frac{1.00}{2.75}$
Union and Amnerst	1	3.00	2.75
Totals	56	\$173.36	\$230.35

## CESSPOOLS REPAIRED.

#### CENTER CESSPOOLS.

STREET.	No.	Cost of material.	Cost of labor.
Bridge, at Pinc and Maple	2	\$57.72	\$25.50
Elm, at Bridge and Lake avenue	2	57.40	20.00
Massabesic and Spruce	1	34.01	8.00
Totals	5	\$149.13	\$53.50

# REPORT OF THE CITY ENGINEER.

#### REPAIRING SEWERS.\*

STREET.	Cost of material.	Cost of labor.
Beech east back	\$2.43	\$3.75
Canal, near Depot	6.30	13.75
Chestnut and Blodget	3.64	5.50
Elm east back	1.21	5.74
Lincoln and Amherst	2.22	2.63
Lowell at Birch	15.78	107.65
Totals	\$31.58	\$139.02

\* Manholes built, 36; lampholes, 8.

#### PIPE CULVERTS.

STREET.	Size in inches.	Length in feet.	Cost of material.	Cost of labor.
Adams	8	16	\$3.24	\$5.00
Beech and Gore	8	54	10.91	6.00
East High	s	46	9.29	4.00
East High	10	18	6.43	
Hanover and Beacon	8	138	30.25	11.00
Milton	8	12	2 43	3.50
Pine, near Nutt road	10	12	4.29	
Totals		296	\$66.84	\$29.50

#### MAIN SEWER OUTLET.

Paid Head & Dowst Co	. fo	r stone			\$50.00
for labor of men					275.12
for labor of teams			• •		70.00
					\$395.12

# PIPE ON HAND AT CITY YARD.

24-inch .		•							<b>3</b> 98	feet.
20-inch.	•								186	" "
18-inch.									50	" "
15-inch.									72	44
12-inch.									622	÷ :
12-inch, old	i.								300	" "
10-inch									1,654	"
8-inch									120	22
(D) /	<b>,</b> .	,								
	•••	e on l			·	·	·	•	3.402	feet.
43 Y brancl										
26 Y brancl										
4 Y brancl										
24 Y brancl										
82 Y branc										
74 Y brancl	nes, 8	on 10	o inc	hes.						
21 Y branch	ies, 6	on 10	o inc	hes.						
23 Y brancl	ies, 8	on 8	3 incl	hes.						
6 15-inch	quart	er turn	ıs.							
10 12-inch	quart	er turn	ıs.							
6 10-inch a	quarte	er turn	s.							
5 8-inch o	quarte	er turn	S.							
1 6-inch o	quarte	er turn								
11 1-8 bend	s, 15.	inch.								
5 1-8 bend	s, 10-	inch.								
14 24-inch 1	ings.									
93 12-inch 1	ings.									
8 M brick.	0									
			STON	E CR	OSSING	ss.				
Canal and (	antr	al						Feet.		ost.
Elm and Me			•	•	·	•	·	34		.00
Lake avenue				·	·	•	·	200		0.00
Pine and At				•	•	·	·	2 I		.00
Pine and At Pine and Ce		-	•	·	·	·	·	34	•	.00`
i me and Ce	uar	•	·	·	·	·	·	30	3	. 2.4
Total	s							210	¢ 10	
					•	•	·	319	\$43	.24

#### CONCRETE.

(See table.)

## District No. 4.

CASSIUS C. WEBSTER, SURVEYOR.

Turnpiked 40 rods.

Graded and graveled 500 rods, using 350 loads of gravel.

Repaired the road on Derry hill, and also the road near Cohas brook bridge.

Repaired this bridge by putting in new floor, stringers, and rails.

Replanked the bridge south of James Cheney's.

Made general repairs on about one and one half miles of the River road and on other roads in district as needed.

# District No. 5.

MARK E. HARVEY, SURVEYOR.

Graveled						5,450 feet.
Turnpiked		•			,	535 ''

Graded, by cut, on Dickey hill south road, 222 cubic yards, and on Weston road, by cut, 115 cubic yards.

The "Harvey mill" bridge across Cohas brook has been repaired by placing new floor timbers under the east section, new plank upon the west section, and a new railing.

The other bridges in the district are in fair condition.

Sixty-two feet of 12-inch pipe have been laid as a side culvert in front of Libby Bros.' house on Nutt road, and filled over the same.

Bushes have been cut on one half-mile of road.

Have removed stones from road once a month and made general repairs where needed.

Amount of appropriation, \$600. Balance, \$3.39.

# District No. 6.

# GREENLEAF C. COLMAN, SURVEYOR.

Removed stones from roadbed, cut bushes throughout district, and made other necessary repairs.

Amount of appropriation, \$500. Balance, \$1.62.

District No. 7.

CHARLES FRANCIS, SURVEYOR.

#### MACADAMIZING.

Massabesic street, 800 feet long, 22 feet wide, 1,955.5 square yards. Total cost, \$1,379.15. Cost per yard, \$0.705.

#### GUTTERS.

Massabesic street				540 ft.,	3	ft.	wide.	
Massabesic street,	relaid			252 "	3	44	"	\$93.00
Jewett street .		•	•	600"	3	44	4	75.00
Total .				1,392 ft.				\$168.00

### STONE WORK.

East Spruce street. Culvert 77 feet long, 4 feet wide, and 5 feet high, covered with one foot split stone.

Retaining wall, 100 feet long, 5.5 feet high.

Total cost for men, teams, and grading, and including such material as was purchased, \$350.

#### REPORT OF THE CITY ENGINEER.

#### CESSPOOLS.

Massabesic and Taylor .					Material. \$25.40	
East Spruce near Beacon				•	4.62	4.00
Massabesic at Spruce, in t	rack,	built b	y Dis	trict	No. 2.	

## GRADE FOR CONCRETE.

Cypress street								200 feet.
Jewett street								600 "
Massabesic street								100 "
Valley street								200 ''
(D) _ 1								
Total	•	·	·	•	•	•	·	1,100 feet.

Equaling 975 yards and costing \$50.

#### GRAVELING.

Belmont street				20 rods.
Candia road .				45 "
Jewett street .				30 "
Mammoth road				20 ''
Young street .				45 "
Total .				 160 rods.

## GRADING.

Cypress street, cut 1.5 feet			300 feet.
Jewett street, slight fill .			300 ''

Made general repairs throughout the district where most needed.

# District No. 8.

# H. M. CLOUGH, SURVEYOR.

Graveled			480 rods.
Turnpiked and graveled			40 ''
Graded by cut			10,560 cu. ft.

Built one new culvert. Made other repairs in various places to the extent of the appropriation. An increase is needed in this district to carry out the improvements that are urgently demanded.

# District No. 9.

Alphonso N. Boyce, Surveyor.

No report.

# District No. 10.

CHARLES O. PHELPS, SUPERINTENDENT.

# COBBLE PAVING.

						Feet.	Sq. Yards.
Bowman street .						50	17
Granite street (relaid)							100
Main street (relaid) .							400
Main street, north of M	Ionm	outh				225	88
Mast street, near John	Smitl	h's				350	218
West Hancock street, N	Iain	easterly	÷ .	•	•	1,400	544
Totals	•			•		2,025	1,367
	COB	BLE ED	GINC				
West Hancock street, N	Jain	easterl	y.			. 1,4	oo feet.
	EL	GE STO	ONES				
Douglas and Barr street	ts						60 feet.
Dubuque and Amory st	reets						50 ''
Second and West Hand	cock	streets					18 ''
						-	
Total .	•	•	•	·	·	. I	28 feet.

# REPORT OF THE CITY ENGINEER. 157

## STREETS GRAVELED,

SINEETS ON	T . T	SDDD.			
				Feet. 0	Cu. Yards.
Amory street, Main to Dubuque				850	1,073
Beauport street, Putnam to Kelley				1,750	1,296
Bridge street, McGregor easterly				350	147
Conant street, West easterly .				230	75
Dubuque street, Amory to Wayne				500	370
Main street, Milford to Mast .				550	254
Mast street				700	432
McGregor street				1,200	576
Milford street, Main westerly				1,450	805
Putnam street, Main to Cartier				550	339
Shirley Hill road				500	50
West Hancock street, Main easter	ly			1,400	881
Gravel used in patching .					500
				<u> </u>	
Totals	·		•	10,030	6,798

#### STREETS GRADED.

				Feet. C	Cu. Yards.
Amory street, Beauport to Dubuqu	e			350	388
Beauport street, south of Sullivan				200	60
Beauport street, Amory to Kelley				700	3,240
Blaine street, east of Third .				400	448
Cartier street, Sullivan southerly				196	870
Cleveland street, Second westerly				300	162
Dartmouth street				500	277
Dubuque street, Amory to Wayne				500	555
Kelley street, Manchester & North	W	eare R	ail-		
road easterly				1,000	1,100
Main west back street, Amory to V	Na <sub>2</sub>	yne		500	741
Rimmon street, Kelley to Amory				650	2,404
Second street, at Manchester & M	Vor	th We	eare		
Railroad				63	2,204
Second street, south of Manchest	er	& No	orth		
Weare Railroad				250	277
Second street, River southerly				550	1,038
· · · · · · · · · · · · · · · · · · ·					

•

			Feet. Cu. yards.
Third street, Blaine to river bank .			300 463
West Hancock street, Main easterly	•	•	1,650 4,155
Totals			8,109 18,382

### GRADING FOR CONCRETE.

.

				Feet. C	Cu. Yards.
Amory street, west of Main .				200	75
Amory street, west of Beauport				170	20
Blaine street, west of Third .				200	65
Cartier street, south of Amory .			•	430	70
Fourth street, corner of Ferry .				90	46
Frederick street, east of Second			•	100	59
Granite street, west of Green .			•	100	30
Main street, south of Milford .				150	25
Second street, Frederick northerly		•	•	600	355
Varney school yard			•		40
Wayne street, west of Main .				200	118
West Hancock street, both sides	•	•	•	3,300	1,955
Totals				5,540	2,858

Loam used at the North Main street school yard, 218 loads.

# WOODEN RAILING.

Douglas street, a	t Man	chester	&	North	Weare	R.	R.	70 f	eet.
Granite street, at	Man	chester	&	North	Weare	R.	R.	50	" "
New Mast road		•			•			189	" "
Second street, at	river	bank						50	"
Tetal									to a t
Total .	·	•	•	·	·	•	·	359 1	eet.

# SEWERS AND DRAINS.

$_{26}  imes$ 39 inches brick (relaid	d)			514 feet.
22 $ imes$ 33 inches brick $$ .				8 "
24-inch Akron pipe .				168 "
24-inch Portland pipe ·				516 "
24-inch Portland pipe (rela	id)			62 "

			•		135 feet.
					198 ''
					202 "'
					706 ''
					692 "
					230 "
					2,263 "
					425 "
					131 "
					26 "
				-	
·	·	•	•	·	6,276 feet.
	· · · ·	· · · · · · · · · · · · · · ·	.         .         .           .         .         .           .         .         .           .         .         .           .         .         .           .         .         .           .         .         .           .         .         .           .         .         .           .         .         .           .         .         .           .         .         .		

The foregoing sewers were constructed at a cost of \$18,561.36.

# CESSPOOLS AND CONNECTIONS.

20-inch pipe									10 feet.
10-inch pipe	•				•	•		•	30''
8-inch pipe	•	•	•	•	•	•	•		933''
Total	•						•		 973 feet.

Total pipe laid, 7,249 feet, equal to 1.37 miles.

# NEW CESSPOOLS.

	NOOT C					
					No.	Cost.
Barr, corner of Granite .			•		I	\$27.50
Dover, corner of Douglas .				•	I	20.00
Douglas, Barr to Railroad	•				6	157.50
Ferry, at Third and Fourth	•				4	110.00
Fourth, Ferry northerly .					3	82.50
James Baldwin Co.'s land					3	60.00
Mast, Riddle westerly .					5	165.00
Milford, Tilton to Carroll					9	247.50
Main and McGregor west back					I	40.13
Main and West Hancock .					I	25.56
Parker near Winter					I	27.50
Williams near Milford .					2	55.00
Totals	•	•	•	•	37	\$1,018.19

### CESSPOOLS REPAIRED.

D CACIC I					No.	Cost.
Bowman, corner of Milford	·	·			2	\$5.00
Green, corner of Douglas .		·			2	11.00
Main at M. & N. W. R. R.	•	•	·	•	1	5.00
Main at M. & N. W. R. R.	·	•	·	•	1	19.55
Main, corner of Mast .	•	•		•	1	3.00
Main, south of Milford .		•	•		2	7.00
Second, corner of Walker			•		I	20,00
Totals						\$70.55
			·	•	10	\$10.22
Manholes built, 21; lamph	ioles,	13.				
ON HA	ND A	T YA	RD.			
24-inch pipe						930 feet.
15-inch pipe						399 ''
S-inch pipe						138 "
						<u> </u>
Total	·	·	·	·	• 1	1,467 feet.
44 Y branches, 8 on 24 inch 1 Y branch, 10 on 15 inches 2 Y branches, 6 on 16 inche 53,976 bricks. 20 M lumber.						
Distri	ct N	lo. 1	1.			
FRANK D. H.	ANSCO	эм, S	URVE	YOR.		
Graveled						320 rods.
Turnpiked with road-machine						280 "
Rail fence built					•	40 "
FRON	T ST	REET				
Cobble edging					1.05	o feet.

Cobble edging	•	•	•	•	•	•	1,950 feet.
Gutters paved .			•		•		650 sq. yds.
Sidewalks built							975 feet.

 Graveled
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 2.900 loads.

Set fence back on cast side from Hiram Stearns's to Black brook, and cut west side to conform to line established by city government.

A 10-inch Akron pipe sewer 353 feet in length has been laid in this street. Connected with it are 2 cesspools. The work was done by employés of district No. 2 at a cost of \$532.15.

Built two plank culverts, each  $20' \times \tau 2'' \times \tau 5''$ . Cleaned gutters, removed stones from road, filled mudholes, and made general repairs.

District No. 12.

LEROY M. STREETER, SURVEYOR.

No report.

# District No. 13.

#### EBEN CARR, SURVEYOR.

Have used road-machine to good advantage on about 4,300 feet of roadway.

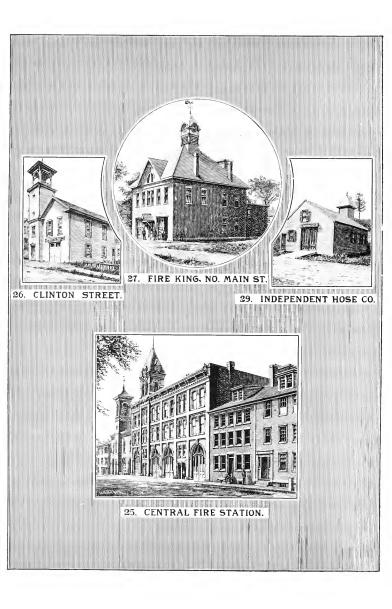
Built one 10-inch Akron pipe culvert 105 feet in length.

Took up, cleaned, and relaid three culverts, total length 54 feet.

Fifteen rods of roadway have been underdrained by building a blind ditch through the center, the roadbed being graded afterwards.

At Mr. Boynton's built blind drain 100 feet long and graded the driveway.

Paid for stone chips, 50 loads			\$8.55
for gravel, 11 loads .			1.10
for tools			6.02
Amount of appropriation .			200.00
Balance			17.00
11			



# CHIEF ENGINEER OF FIRE DEPARTMENT.

OF THE

# REPORT

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# REPORT

## OF THE

# CHIEF ENGINEER OF FIRE DEPARTMENT.

Engineer's Office, Vine Street,

MANCHESTER, N. H., Dec. 31, 1891.

To his Honor the Mayor, and Gentlemen of the City Councils :

In compliance with the laws and ordinances of the city, I herewith submit my thirteenth annual report (it being the fortysixth of this department) giving a complete record of the operations of the department for the year ending December 31, 1891, with a detailed statement of the fires and alarms that have been responded to by a portion or all of the force, together with the cause of such fires as far as the same have been ascertained, with the amount of insurance carried upon the property endangered, the amount of loss, and amount of insurance paid thereon.

The report will also contain a complete list of the working force of the department, giving their rank, occupation, residence, etc., a list of the fire-alarm stations and locations of keys to the same, location of hydrants, etc.

During the past year the department has responded to thirtyfive "bell alarms" and thirty-six "stills," making in all seventyone, an increase of six stills over the year 1890, while the bell alarms are the same number.

The total amount of insurance upon the property thus endangered by fire, as will be seen by the following pages under the

head of "Fires and Alarms," was \$358,420.00; damage resulting therefrom, \$59,542.63; amount of insurance paid, \$43,227.-63; leaving \$16,315 as the net loss over and above insurance.

### THE FORCE

remains the same as last year, and consists of one hundred and twenty-four men, eighteen of whom are permanent, and one hundred and eight call men, divided as follows:

1 chief engineer.

4 assistant engineers.

5 steamer companies of 14 men each.

2 horse hose companies, — 12 men each.

1 hook-and-ladder company, — 20 men.

1 chemical engine company, - 5 men.

In addition to the above there is a volunteer hand-hose company in Amoskeag village of twelve men.

## THE BUILDINGS

are generally in fair condition, and aside from "touching up" some of them with paint inside, and repairing the roof of Central Station, the outlay probably will not be very large upon the present structures.

# THE APPARATUS.

as at present located consists of --

2 steam fire-engines at Central station, with horse hose wagons.

I steam fire-engine with two-horse hose wagon and hook-and-ladder combination, North Main street.

I steam fire-engine and hose carriage, at corner of Lake avenue and Massabesic street.

I steam fire-engine and two-horse hose carriage and hook-andladder combination, at corner of Webster and Chestnut streets.

1 horse hose carriage at Central station.

1 horse hose carriage, corner Maple and East High streets.

I horse hose carriage (spare), at Lake avenue station.

I hook-and-ladder truck at Central station.

1 hook-and-ladder truck (old), at Lake avenue station.

 $\scriptstyle\rm I$  double tank (60 gallons each) chemical engine at Central station.

1 supply wagon at Central fire station.

I steam fire-engine (reserve) at old engine-house, Clinton street, of but little use for fire purposes.

I hand hose carriage at junction of Old Falls road and Front street, Amoskeag.

1 two-wheeled hose carriage, Devonshire Mills, Goffe's Falls.

1 exercise wagon (with pole and shafts) at Central station.

In May last, steamer No. 1 was supplied with a new set of tubes, its running work received a general overhauling and repairing and was repainted, at a cost of \$663.22, by the Manchester Locomotive Works. These repairs, with those upon steamer No. 4 the previous year, place all our steamers in first-class shape.

# THE HORSES.

On the 14th of April, one of the bay horses of Pennacook Hose No. 1 that had been afflicted for a year or more with rheumatism, was sold, and another purchased to replace him.

On the 18th of June a pair of gray horses was purchased for the Hook-and-Ladder Company, and after trial one, not being adapted for fire service, was transferred to District No. 2 of the street department, and was replaced by another that thus far has proved well.

The pair previously used by this company, while the property of the fire department, are now used by District No. 2, and I would recommend that they, with the one used by District No. 10, on the West Side, be either sold or transferred, inasmuch as this department gets no credit for the work performed by them, though it bears the entire expense of the keeping of the one on the West Side.

The horses of Steamer No. 4 are getting pretty well along in years, and a change for a younger and heavier pair would be desirable in the near future.

The gray horses of the combination hose carriage of steamer No. 5, over which there has been so much uncalled for, senseless controversy by outside "interested (?) parties," have shown a decided improvement since the discharge of M. W. Ford, Jr., as driver, which occurred October 29, and now compare favorably with any in the department.

There are now twenty-eight horses owned by the department, including the three mentioned as doing duty in Districts Nos. 2 and 10.

# THE FIRE-ALARM TELEGRAPH.

This important branch of the service has been called into requisition thirty-five times during the year, and satisfactory results have attended its working.

The severe snowstorm of April 3 caused serious damage to the system, breaking every circuit with one exception, and most of them in from one to twenty-five places. With the assistance of additional linemen, the main lines were all in operation before night.

Several times during the year we have been called upon to remove wires and open circuits to accommodate the removal of buildings. I have several times remonstrated against this practice, and am of the firm opinion if it is allowed to continue, serious losses may occur.

The two boxes ordered at the time of my last report have been put into service and located as follows: No. 321 at corner of Beauport and Main streets, and No. 513 at corner of Milford and Carroll streets.

There are now about thirty-one (31) miles of main lines wire and thirty (30) miles of "tapper" lines, that require the services of four hundred and one (401) jars of gravity battery.

#### THE ANNUAL PARADE.

The question of the legality of the appropriation for this parade was settled by the legislature at its January session of this year by the passage of the following act:

# "Chapter 151, Pamphlet Laws, 1891.

# "Be it enacted by the Senate and House of Representatives in Ceneral Court convened:

"SECTION 1. The city council of the city of Manchester is hereby authorized and empowered to appropriate annually to pay the expense of the firemen's parade, when ordered out by the chief engineer, a sum not to exceed five hundred dollars (\$500).

"SECT. 2. This act shall take effect upon its passage.

"Approved February 18, 1891."

The twelfth annual parade occurred on Thursday, October 15, and was observed by a street parade, which was participated in by Hook-and-Ladder Co. of Nashua, together with delegations of firemen from Portsmouth, Concord, and other places.

# THE FIREMEN'S RELIEF ASSOCIATION

organized in 1873, has contributed to the relief of such of its members as have had the misfortune to receive injuries "while going to, working at, or returning from a fire."

The income for the past few years has been by donations from generous citizens, as will be seen by the following list, for which, in behalf of the association, I would return grateful thanks.

The condition of its treasury at the annual meeting, February 10, 1891, was

Cash on hand					\$2,718.83
Interest on deposits .					119.29
Cash for membership					6.00
From George N. Burpee (	balar	ıce	${\rm from}$	as-	
sessments for entertaining	ng vi	sito	rs)		1.64
First Free Baptist Society	•				6.50
A. P. Olzendam & Sons					25.00
Peoples Insurance Co.					25.00
Board of Trade					25.00
Rt. Rev. Bishop Bradley					10.00
Hon. P. C. Cheney .					10.00
Hon. Moody Currier					10.00

Maj. Lewis Simons						\$10.00	
Frank W. Fitts .						10.00	
Cash						10.00	
Chandler Brothers (	Geor	ge B.	and	Hen	ry)	10.00	
Hon. J. F. James		-				5.00	
Hon. D. B. Varney						5.00	
							\$3,007.26
		CO	NTRA	•			
Paid E. E. Hubbell						\$87.00	
H. A. Boone						6.00	
J. E. Merrill,	secre	tary				25.00	
postals and pri						2.25	
							\$120.25
							÷ 5

#### RECOMMENDATIONS.

I desire to repeat my recommendations for the past few years for additional ladder service, and the outlook for an ærial truck seems favorable. I trust one fully equipped will be procured at an early date, that the one now in use may be put into service in some other section of the city.

I would recommend that the engine-house to be built the coming year in the new ward nine be planned so as to accommodate, in the future, in this fast-growing part of the city, a steamer, hose wagon, and light hook-and-ladder truck. To meet the immediate wants, I think a combination chemical and hose wagon would be the most desirable piece of apparatus for the present use.

I would recommend the placing of the spare hose carriage, with proper equipments, in the southerly thickly settled portion of Bakersville, and hope some steps may be taken to secure a lot and erect a proper building thereon for that purpose. I would again recommend permanent engineers for steamers 1 and 4 at central station.

To comply with the foregoing recommendations necessarily requires a considerable outlay of money, but our citizens should

bear in mind that as our city is rapidly growing and extending its limits, its fire department must also be enlarged to meet the exigencies of the occasion.

#### PERSONAL,

In compliance with a resolution passed by your Councils, I attended the National Association of Fire Engineers, at Springfield, Mass., August 11–14. The convention was largely attended by chief engineers, fire underwriters, electrical experts, and manufacturers of fire and life-saving apparatus.

Exhibitions and tests were given of the different appliances, and interesting and valuable papers presented and discussed by the leading firemen of the country. Altogether it was a very interesting and instructive convention.

I desire to return to the City Councils my thanks for this and other courtesies received, to his Honor Mayor Knowlton, to the committee on fire department, who have striven hard for the efficiency of the department, to City Marshal Longa and his police force for their aid rendered at fires and parade, to my associate engineers and officers and members of the several companies, who are entitled to the highest praise for their fidelity and the prompt manner with which they have responded to all calls upon them for duty.

The thanks of the members of the department are again tendered to Mr. Charles Williams for his continued supply of coffee at fires.

> Respectfully submitted. THOMAS W. LANE, Chief Engineer Fire Department.

# List of Fires and Alarms Responded to During 1891, with Losses and Insurance.

Box 62. Saturday, January 17, 9.24 A. M. Cottage house on River road south, in Bakersville, owned by Edwin Kennedy and occupied by John W. Law. The fire originated in partition near the roof from defective chimney, and was confined wholly to the roof. Insured for \$350. Damage, \$40. Insurance paid, \$40.

Box 56. Monday, January 19, 6.15 P. M. Two-story brick dryhouse, situated on Mast road, owned and occupied by the James Baldwin Company. Fire supposed to have caught from a match carelessly dropped by one of the workmen. Damage to building, \$50; to stock, \$250. No insurance.

Box 4. Monday, February 2, 5.49 P.M. Two-and-a-half story wooden tenement house, No. 45 Central street, owned by E. W. Dunbar and occupied by Leander Lavine and others. The fire originated in a bed from some unknown cause. Building insured for \$2,000. Damage to building, \$13.45. Damage to contents, \$10. No insurance.

Box 45. Monday, February 9, 8.39 P. M. Three-story brick building, corner of Canal and Auburn streets, owned and occupied by the S. C. Forsaith Machine Company as a machine-shop. The fire originated under the work bench of the pattern-maker, supposed from a hot bearing. The heat started the automatic sprinklers, and the damage by fire was so slight that no insurance was claimed. Building insured for \$20,000.

STILL. Wednesday, February 11, 11.54 A. M. Ash box on east wall of Music Hall block. Extinguished with "pony" without damage.

Box 8. Thursday, February 12, 11.11 A. M. Four-story brick block, corner of Myrtle and Elm streets, owned by Hoyt & James and occupied for stores and tenements. The cause of the alarm was clothes on line too near the stove in room No. 35, occupied by Mrs. Nelson White. The fire was extinguished without damage before the arrival of the department.

STILL. Saturday, February 14, 4.43 P. M. Burning chimney at No. 190 Chestnut street. Used "pony." No damage.

STILL. Saturday, February 14, 5.56. Burning chimney at No. 69 Amherst street. Used "pony." No damage.

STILL. Sunday, February 15, 5.05 P. M. The cottage house, No. 79 Laurel street, owned by Edward McDonald. The fire originated from an overheated chimney, igniting the woodwork. Building insured for \$1,500. Damage to building, \$23.50. Insurance paid, \$23.50. Damage to contents, \$100. No insurance.

Box 4. Wednesday, February 18, 7.53 P. M. Four-story brick block, corner of West Cedar and Franklin streets, owned and occupied by the Manchester Provision Company. The fire originated in the smokehouse, on the fourth floor, doing but little damage. Building insured for \$39,000; contents for \$52,000. Damage to building, \$25.40. Insurance paid, \$25.40. No damage to contents.

Box 45. Monday, February 23, 8.40 P. M. Three-story brick building, corner of Canal and Auburn streets, owned and occupied by the S. C. Forsaith Machine Company as a machineshop. The fire originated in the flue, or shaft for blowing shavings from planing mill to boiler-room, from some unknown cause. Building insured for \$20,000. Damage, \$204.31. Insurance paid, \$204.31.

Box 23. Thursday, February 26, 8.48 P. M. Two-and-a-halfstory tenement block, No. 411 Beech street, owned by Charles D. Welch and occupied by John Woods and others. The fire originated among some clothes in a closet in the attic from some unknown cause, and burned through into the partition. Building insured for \$6,000. Damage to building, \$130. Insurance paid, \$130. Damage to contents, \$20. Uninsured.

STILL. Saturday, February 28, 6.25 P. M. Burning chimney at No. 107 Cedar street, in house owned by Joseph Hamilton. Chemical called. Used "pony." No damage.

STILL. Sunday, March 1, 10.03 P. M. The chemical was called to a needless alarm for a smoky chimney on Manchester street, opposite the Battery building. No fire.

STILL. Tuesday, March 3, 10 A. M. Burning chimney at No. 112 Myrtle street, in dwelling owned and occupied by Mrs. Adeline Hartshorn. Chemical responded. No damage.

STILL. Tuesday, March 3, 7.15 P. M. Three-story tenement block, corner of Mast and South Main streets, owned by I. R. Dewey. The fire originated in a shoeshop in the basement, by carelessness of the occupant. Fire King Company responded. Damage slight. Box 4. Tuesday, March 3, 10.19 P. M. Three-story tenement block at No. 236 Chestnut street, owned by Dr. Thomas Wheat and occupied by Patrick Casey and others. The fire originated in a closet in Casey's tenement from some unexplained cause, doing but slight damage. Extinguished by chemical engine. Building insured for \$3,000. Damage, \$10. Insurance paid, \$10. Contents damaged, \$5. Uninsured.

STILL. Tuesday, March 10, 9.55 A. M. Cottage house at No. 559 Granite street, owned by Horatio Fradd, and occupied by Robert D. W. McKay. The fire originated from sparks from chimney, igniting the shingles. Fire King Company No. 2 responded with hose wagon. Building insured for \$1,000. Damage, \$22. Insurance paid, \$22. No damage to contents.

STILL. Sunday, March 15, 9.40 A. M. Two-story tenement block, No. 7 Clark's avenue, Pearl street, owned by heirs of Joseph B. Clark. Burning chimney. Used "pony." No damage.

STILL. Tuesday, March 17, 9 A. M. Burning chimney in Kochler & Sons' bakery, corner of South Main and School streets. Fire King Company No. 2 responded. Used "pony." No damage.

STILL. Tuesday, March 17, 6.48 P. M. Burning chimney at No. 69 Bridge street. Chemical responded with "pony." No damage.

STILL. Tuesday, March 17, 9.20 P. M. Four-story brick block, No. 790 Elm street, owned by Brown & Straw and occupied by Frank L. Downs and others. The fire originated in the shoe store of Mr. Downs from an overheated chimney. The damage was mostly from smoke. No damage to building. Stock and fixtures insured for \$3,000. Damage, \$70. Insurance paid, \$70. Chemical engine responded.

STILL. Friday, April 3, 7.45 A. M. Burning chimney in Wyman's block, Douglas street. Responded to by Fire King Company No. 2. No damage.

Box 212. Tuesday, April 14, 10.52 A. M. Farm buildings on the Weston road, about three miles from Central station, owned by Daniel Connor and occupied by Dennis Sullivan. The fire originated in the barn, from a boy playing with matches. The building and contents insured for \$3,000. Damage, \$3,500. Insurance paid, \$2,450.

Box 27. Tuesday, April 14, 3.03 P. M. Burning grass in orchard of Holmes R. Pettee, 448 Amherst street. No damage.

Box 21. Saturday, April 25, 10.27 A. M. Wooden "tenfooters," corner of Manchester and Chestnut streets, owned by Mrs. Abbie M. Head and occupied by E. S. Newton as fish market, John Delorne as fancy goods and confectionery, and Hatch & Titus as steam laundry. The fire originated from the smoke stack of the laundry. Building insured for \$2,700. Damage, \$300. Insurance paid, \$300. E. S. Newton's stock and fixtures insured for \$1,070. Damage, \$50. Insurance paid, \$50. John Delorne's stock and fixtures insured for \$200. Damage, \$15. Insurance paid, \$15.00. Hatch & Titus's stock and fixtures insured for \$1,000. Damage, \$150. Insurance paid, \$100.

STILL. Sunday, April 26, 3 P. M. Burning chimney, corner of West and Granite streets. Fire King Company No. 2 responded. No damage.

STILL. Monday, April 27, 4.20 P. M. Brush fire on McGregor hill. Fire King Company No. 2 responded with hose wagon. No damage.

STILL. Tuesday, April 28, 11.03. Brush fire on McGregor hill. Fire King No. 2 responded with hose wagon.

Box 8. Tuesday, April 28, 12.37 P. M. Two-story wooden tenement block, No. 1,299 Elm street, occupied by John Williamson and others. Sparks from the chimney ignited the shingles, doing but slight damage. Extinguished by chemical engine.

Box 71. Tuesday, April 28, 3.08 P. M. Two-and-a-halfstory dwelling-house and store at No. 135 East Spruce street, owned by Michael Tagney and occupied by Dennis V. O'Leary. The fire originated under the kerosene oil room in rear of store, probably by children playing with matches. Building insured for \$2,000. Damage, \$30. Insurance paid, \$30. No damage to contents.

Box 313. Monday, May 4, 3.46 P. M. Four-story brick picker-house on Bridge street at McGregor bridge, owned and

occupied by Stark Mills. Fire originated from some foreign substance in cotton, and struck from beater in picker. Insured in Manufacturers' Mutual Insurance Company, for "blanket" policy. Damage, \$2,000. Insurance paid, \$2,000.

Box 41. Monday, May 4, 5.25 P. M. Two-story house at No. 112 Lake avenue, owned and occupied by John Morrison. Sparks from chimney ignited the shingles, burning the roof slightly. Building insured for \$1,500. Damage to building, \$33. Insurance paid, \$33. Contents uninjured.

STILL. Wednesday, May 6, 12.20 P. M. The automatic alarm at Crafts & Green's shoe shop rang on account of thermostat out of adjustment.

Box 5. Thursday, May 7, 7.47 P. M. Three-story tenement block, corner of Chestnut and Laurel streets, owned by Mehitable and Etta L. Bartlett, and occupied by George D. Johnson, George M. Hobbs, G. D. Martin, and Mrs. Martha Oshier. The fire originated in a closet in the attic of the tenement of Mr. Johnson, from some unexplained cause, and communicated to the roof before it was discovered. The building was insured for \$4,600. Damage to building, \$1.745.20. Insurance paid, \$1,745.20. George D. Johnson's furniture insured for \$310. Damage, \$310. Insurance paid, \$310. George M. Hobbs's furniture uninsured. Damage, \$150. George D. Martin uninsured. Damage, \$20. Mrs. Martha Oshier uninsured. Damage, \$200.

STILL. Saturday, May 9, 3 P. M. Burning chimney at No. 123 Amherst street. Used "pony." No damage.

STILL. Monday, May 11, 6.30 P. M. An unadjusted thermostat caused false alarm at Crafts & Green's shoe factory. Responded to by Fire King Co. No. 2 with hose wagon. No damage.

STILL. Sunday, May 17, 9.50 P. M. Burning chimney on Douglas street. Responded to by Fire King Co. No. 2 with "pony." No damage.

STILL. Friday, May 22, 4.15 P. M. Tenement block, corner of Barr and Douglas streets, owned by Frank P. Johnson. Fire in woodpile in cellar. Extinguished by Fire King Co. No. 2 with "pony" without damage. Box 315. Monday, May 25, 1.59 P. M. Two-story wooden block on Front street ('Skeag) owned by Mrs. Hannah Stearns, and occupied by Fred Miller and others. The fire of burning brush in rear of house communicated with roof of shed and was nearly extinguished by hydrant stream of Independent Hose Co. No. 5 before the arrival of the department from this side. Damage, \$20. No insurance.

Box 21. Wednesday, May 27, 12.24 P. M. Two-story wooden block No. 126 Manchester street, owned by Timothy Sullivan, and occupied by him and others. Sparks from the chimney caught on the roof. Extinguished with water from line of garden hose. Building insured for \$3,000. Damage, \$12. Insurance paid, \$12.

STILL. Sunday, June 1.4, 12.33 P. M. At No. 26 Print Works Corporation, in tenement occupied by J. Libbey, a kerosene oil stove tipped over. The chemical responded to a telephone call, but their services were not needed.

STILL. Monday, June 15, 3 P. M. Sparks from a locomotive on Concord & Portsmouth R. R., set fire to grass on Stevens's farm on the Hall road. Chemical called, but fire extinguished by railroad employés before the arrival of engine.

STILL. Tuesday, June 16, 2.40 P. M. The overflowing of an oil stove in tenement at No. 190 Manchester street, occupied by Charles Voyer, was the cause for calling chemical engine. Extinguished without damage.

Box 51. Wednesday, June 17, 12.01 A. M. Railroad bridge across the Merrimack river, belonging to the Manchester & North Weare R. R. Supposed to have been caused by a spark from locomotive. Total loss and damage estimated at \$24,000. Insured for \$10,000. Insurance paid, \$10,000.

Box 23. Wednesday, June 17, 9.20 A. M. A barn in rear of No. 232 East Spruce street, owned by Mrs. W. Q. Sargent, and occupied for a woodshed by Mrs. Bridget Buckley and Mrs. Catherine Cronin. The fire originated in the shed from some unknown cause, and communicated with the L of the house south, and a carriage shed and barn west, owned by same party. House insured for \$2,350. Damage, \$75. Insurance paid, \$75. Shed insured for \$150. Damage, \$98. Insurance paid, \$98. Shed and barn west insured for \$400. Damage, \$144. Insurance paid, \$144. Damage to contents, \$20. Uninsured.

STILL. Wednesday, June 24, 1.58 P. M. Brick boiler-house of A. C. Wallace's saw and planing mill. Fire originated in the shavings bin, probably from spark from the boiler. Fire King No. 2 responded with hose wagon.

Box 53. Wednesday, June 24. 3.40 P. M. Rekindling of same fire. Building insured for \$500. Damage, \$66. Insurance paid, \$66.

Box 511. Saturday, July 4, 1.30 A. M. Shed on Douglas street, belonging to James B. Scott, and unoccupied. Caused by fire-crackers. Damage estimated at \$50. No insurance.

Box 8. Thursday, July 16, 7.52 A. M. Two and a half story tenement block on Clark's avenue on Pearl street, owned by the heirs of Joseph B. Clark, and occupied by Telesphore Fortier. Fire in bundle of rags. Extinguished by chemical without damage.

Box 4. Sunday, July 26, 5.06 A. M. Three-story brick block corner of Elm street and Lake avenue, occupied by stores and tenements. Fire originated in the store of Michael H. Lavery, probably from spontaneous combustion. Damage to building, \$28, on which there was no insurance. Lavery's stock and fixtures insured for \$500. Damage, \$90.77. Insurance paid, \$90.77.

Box 15. Wednesday, August 5, 10.30 P. M. Barn in rear of No. 76 Pearl street, owned and occupied by A. J. Austin. The fire originated in some rubbish from some unknown cause. Barn insured for \$200. Damage, \$20. Insurance paid, \$20.

STILL. Thursday, August 6, 12.20 P. M. (Out of town.) In response to telegram from Epping, took steamer No. 4 and hose wagon and proceeded to Epping camp grounds. Owing to "warts" on the railroad for incoming trains, considerable time was consumed in transportation, and on arrival there the fire was under control. Returned without unloading apparatus.

Box 21. Friday, August 21, 5.21 A. M. Saloon at No. 206 Manchester street, kept by James M. Donnegan. Fire in wooden spittoon. Damage very slight. STILL. Monday, August 24. 12.22 P. M. (Out of town.) In response to a telephone message, took steamer No. 1 with hose wagon, horses, and squad of men, and proceeded to Derry Depot for a fire in Pillsbury's kit factory. The twelve-mile run by rail was made in thirteen and a half minutes. Unloaded apparatus and played upon the ruins several hours; returning, left Derry about 6.30 P. M.

Box 23. Saturday, September 19, 8.24 P. M. Needless alarm was given for a burning ash barrel, rear of 257 Merrimack street. No damage.

Box 4. Sunday, October 25, 10.35 A. M. Four-story brick block on corner of Franklin and West Cedar streets, owned and occupied by Manchester Provision Company. The fire originated in the smokchouse on the fourth floor. Building and refrigerator insured for \$38,000. Damage to building \$70.51. Contents insured for \$40,000. Damage, \$270.80. Insurance paid, \$270.80.

Box 5. Wednesday. October 28, 5.58 P. M. Four-story brick block on corner of Elm and Merrimack streets, owned by Brown & Straw, known as Hotel Lamprey, and occupied by John J. Driscoll. The fire originated in the rooms occupied by John P. Emerson, from some unknown cause. Building insured for \$18,000. Damage to building, \$77.70. Insurance paid, \$77.-70. Driscoll's property insured for \$900. Damage, \$105. Insurance paid, \$105. Emerson's damage, \$100. No insurance. Extinguished by chemical engine.

Box 4. Sunday, November 1, 11.01 A. M. Three-story tenement house, No 172 Pine street, owned by Mrs. Martha A. Batchelder, and occupied by Rhoda Carroll and others. The fire originated near the chimney, under the roof, from a defective flue. Building insured for \$2,500. Damage to building, \$71.32. Insurance paid, \$71.32. No damage to contents.

STILL. Monday, November 2, 1.25 P. M. Brush fire on North Union street. Chemical responded. No damage.

STILL. Thursday, November 5, 7.30 A. M. Four-story briek block, No. 895 Elm street, owned by William H. Plumer, and occupied by Plumer & Holton, clothiers, and W. R. Call, photographer. The fire originated in Call's "printing-room," probably by carelessness of one of the workmen in smoking. Building insured for \$15,000. Damage to building, \$8. Insurance paid, \$8. Call's damage, \$25. No insurance.

Box S1. Sunday, November 22, 7.02 A. M. Two-story brick block, 995 Elm street, owned by Chas. F. Duncklee, and occupied by Thomas F. Sullivan as a cigar store. The fire originated in Sullivan's dry-room, from a gas jet. Building insured for \$20,-000. Damage to building, \$131. Insurance paid, \$131. Sullivan's stock and fixtures insured for \$2,000. Damage, \$1,250. Extinguished by chemical engine.

STILL. Thursday, November 26, 4.10 P. M. Burning chimney in Ryan's block, No 120 Central street. Chemical responded. No damage.

STILL. Friday, November 27, 6.05 A. M. Wooden "tenfooter," corner of Pearl and Elm east back streets, owned by George H. Dorr, and occupied by Frank Parker as a saloon. A kerosene lamp set fire to the partition and coving. Damage to building, \$17, on which there was no insurance. Contents uninjured. Extinguished by chemical engine.

Box 313. Friday, November 27, 8.15 A. M. Three-story brick block, corner of McGregor and Marion streets, owned by R. W. Pillsbury, and occupied by Pierre Lemay as a saloon and by several families as tenants. The fire originated in the cellar adjoining Lemay's salocn, probably from carelessness of boys. Building insured for \$15,000. Damage to building, \$32.50. Insurance paid, \$32.50. Lemay's damage to stock and fixtures, \$10. Uninsured.

Box 21. Saturday, December 12, 10.28 P. M. Stable in rear of No. 40 Merrimack street, owned by John D. Murphy, and occupied by Everett L. Carswell as a livery stable. Barn insured for \$200. Damage to barn, \$125. Insurance paid, \$125. Carswell's loss on contents, \$40. Uninsured. Damage to L of building adjoining stable, \$19.12. Insurance paid, \$19.12. Insurance on house and L, \$1,000.

STILL. Thursday, December 17, 6.15 P. M. Burning chim-

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ney in Thorp's block ('Squog). Responded to by Fire King Co. No. 2. Used "pony." No damage.

STILL. Thursday, December 17, 6.42 P. M. Burning chimney at No. 42 Church street. Used "pony." No damage.

STILL. Saturday, December 19, 3.28 P. M. Burning chimney at No. 112 East Spruce street. Used "pony." No damage.

STILL. Saturday, December 19, 8.14 P. M. Burning chimney at No. 304 Pine street. Used "pony." No damage.

Box 7. Tuesday, December 29, 12.21 P. M. Three-story wooden block, Nos. 1055–1063 Elm street, owned by Weston, Hill & Fitts, and occupied by Mrs. L. A. Bennett as a millinery store, Frank P. Kimball as a clothing store, and John Gagnon as a boarding-house. The fire is supposed to have originated from a defective flue in Mrs. Bennett's store. Building insured for \$4,700. Damage to building, \$2,800. Insurance paid, \$2,-800. Mrs. Bennett's stock and fixtures insured for \$2,000. Damage, \$2,000. Insurance paid, \$1,900. Kimball's insurance paid, \$17,954.55. Gagnon's goods insured for \$500. Damage, \$337.50. Insurance paid, \$337.50.

Number of bell alarms	б.						35
Number of still alarm	s .			•			36
Total .							71
Total amount of losse	s for	1891				\$59,5-	42.63
Amount of insurance	paid			·	•	43,22	27.63
Net loss above	insu	rance	paid			\$16,31	15.00

## TABLE

#### SHOWING THE APPARATUS CALLED TO DIFFERENT BOXES ON FIRST, SEC-OND, AND THIRD ALARMS.

	s first	s sec-		_			Hose	No. 2.	ler.	ine.
Boxes.	Steamer on its first run.	Steamer on its second run.	Steamer No. 2.	Steamer No. 3.	Steamer No. 5.	Hose 1.	First run.	Second run.	Hook-and-ladder.	Chemical engine.
$\begin{array}{c} 3 \\ \\ 4 \\ \\ \\ 5 \\ \\ 5 \\$	111112211111111111111211221122111111111	ରାରାରା 1 1 1 କରିଥିବାରା 1 ମହାରା ମହାରା ମହାରା 1 1 1 1 1 ମହାର ଅଭିନ୍ୟ ଅଧିକାର ସହା 1 ମହାରା ଅଭିନ୍ୟ ଅଭିନ୍ୟ ଅଭିନ୍ୟ ଅଭିନ୍ୟ ଅଭିନ୍ୟ ଅଭିନ୍ୟ	3223333333333333333333322111111111111338888833333311388111	$\begin{array}{c} 1 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3$	333211111112333222333311111212333383833838211113322112233		32211112211111111111111122333338821121111232233	3 2 2 2 2 1 1 1 2 2 1 1 1 1 1 1 2 2 2 1 1 1 2 2 2 1 2 2 2 2 2 2 2 3 3 3 3		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

\* On first alarm, the horses of second-run engine will double on engine of first run.

#### Number and Location of Alarm-Boxes and Keys.

No. 3. Blood's lower shop. Keys at offices of E. P. Johnson Co., gas-works, county jail, DeCourcy, Holland & Marshall, and Charles H. Hutchinson's shop.

No. 4. Corner of Spruce and Elm streets. Keys at Hotel Belmont, L. B. Bodwell & Co.'s, Palmer & Garmon's, Horse Railroad stables, and W. C. Blodgett's office.

No. 5. Corner of Merrimack and Elm Streets. Keys at Tebbetts & Soule's and Currier's drug stores, and Manchester House.

No. 6. City Hall. Keys at Holland's and Mead's drug stores, and J. A. Riddle's office.

No. 7. Old City Hotel, corner Lowell and Elm east back streets. Keys at Higgins Bros. Co.'s, Lowell-street stable, and Eames Bros.' drug store.

No. 8. Corner Elm and Hollis streets. Keys at Smith & Co.'s and Colby's drug stores, and Partridge Bros.' grain store.

No. 9. Corner of Elm and Webster streets. Keys at residences of Mrs. H. D. Corliss, J. Freeman Clough, J. B. Jones, and General Stark engine-house.

No. 12. Corner of North and Pine streets. Keys at residences of William C. Clarke, George Emerson, and Walter A. Green.

No. 13. Corner of Brook and Chestnut streets. Keys at residences of Welcome Jencks and Lewis Simons, and No. 1 Senter's block.

No. 14. Corner of Prospect and Union streets. Keys at residences of W. Ireland, Mrs. N. L. Hardy, and D. J. Adams.

No. 15. Corner of Pearl and Chestnut streets. Keys at residences of Willie H. Dodge and Ervin S. Lyford.

No. 16. Corner of Lowell and Union streets. Keys at residences of Rt. Rev. Bishop Bradley and R. H. Hassam.

No. 17. Corner of Amherst and Beech streets. Keys at residences of Mrs. H. P. Watts and Michael Connor.

No. 18. Corner of Manchester and Maple streets. Keys at residences of the late H. E. Stevens, A. N. Baker, and Mrs. William Perkins. No. 21. Corner of Merrimack and Pine streets. Keys at A. D. Smith's drug store, J. McKeon's grocery store, A. L. Walker's office, and residence of James F. Gillis.

No. 23. Corner of Central and Beech streets. Keys at residences of Eben T. James and Mrs. Josiah Stevens.

No. 24. Merrimack Steamer house, corner of Massabesic street and Lake avenue. Keys at residence of D. M. Goodwin and Steamer house.

No. 25. Corner of Hanover and Ashland streets. Keys at residences of George F. Lincoln, A. D. Gooden, Horace Stearns, and the late Horace Gordon.

No. 26. Corner of Bridge and Russell streets. Keys at Mc-Crillis's carriage-shop, George W. Bailey's stable, and residence of John N. Chase.

No. 27. Corner of Belmont and Amherst streets. Keys at residences of H. M. Tarbell, A. G. Fairbanks, William B. Orrill, E. S. Fletcher, William Carr, and George H. Hubbard.

No. 31. Corner of Canal and Hollis streets, Blood's shop. Keys at office and Amory Mills watch-room.

No. 32. Langdon Mills block, corner of Canal and Brook streets. Keys at the Amoskeag Paper Company's mill, Langdon watch-room, and Electric Light station.

No. 34. Jefferson Mill. Keys at watch-room and pumping station.

No. 35. Stark Mills. Keys at watch-room.

No. 36. Amory Mills. Keys at watch-room.

No. 41. Amoskeag Mills. Keys at watch-room.

No. 42. Manchester Mills. Keys at watch-room.

No. 43. Olzendam's Mill. Keys at watch-room.

No. 45. The S. C. Forsaith Co.'s shops. Keys at freight depot and S. C. Forsaith Co.'s office.

No. 51. Corner of Walker and Second streets. Keys at stores of F. Riedel and William Weber.

No. 52. Bart's brick block, 'Squog. Keys at Fradd & Co.'s and A. N. Clapp's stores and Merrimack House.

No. 53. Wallace's steam-mill. Keys at the office and I. R. Dewey's tenement block.

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No. 54. Corner of A and Bowman streets. Keys at residences of Lord sisters and Neil Fullerton.

No. 56. Baldwin's bobbin shop. Keys at Baldwin's office and residences of J. C. Smith and E. P. Littlefield.

No. 61. Corner of River road and Hancock street, Bakersville. Keys at Mary Stack's saloon, Carney, Lynch & Co.'s brewery, and residence of H. F. Dillingham.

No. 62. Gerrish Wool and Leather Co.'s, River road. Keys at tannery and residence of Edwin Kennedy.

No. 71. Corner of Cedar and Pine streets. Keys at the residences of T. Collins, Daniel Sheehan, and Thomas J. Smith.

No. 72. Corner of Park and Lincoln streets. Keys at residences of the late Austin Jenkins, James Briggs, and Clarence D. Palmer.

No. 73. Corner of Beech and Cedar streets. Keys at residences of Rev. J. A. Chevalier and Timothy Carr.

No. 81. Central Fire Station, Vine street. Keys at all the engine-rooms.

No. 112. Corner of Sagamore and Union streets. Keys at residences of Woodbury Davison and W. T. Stevens.

No. 113. Corner of Oak and Prospect streets. Keys at residences of William B. Abbott, W. N. Johnson, and E. M. Topliff.

No. 114. Corner of Pearl and Ash streets. Keys at residences of A. P. Olzendam, G. A. Olzendam, W. S. Shannon, and John J. Bennett.

No. 212. Shoeshop, Hallsville. Keys at the office of shoe factory, and residences of Charles C. Chase, G. W. Dearborn, Mrs. Milton A. Abbott, and M. V. B. Garland.

No. 213. Sash and blind factory, South Beech street, junction of Portsmouth Railroad. Keys at office of Austin, Flint & Day.

No. 312. Corner of Putnani, Main, and McGregor streets. Keys at residences of James Spence (309 Main street), Thomas Bolton, and Amoskeag Co.'s gate.

No. 313. Corner of Amory and Main streets. Keys at residences of Allen Dean and Lawrence M. Connor, Bouthillier & Gingras's drug store, and Amoskeag Co.'s gate. No. 314. P. C. Cheney Company's paper-mill. Keys at office and Independent Hose house.

No. 315. Old Brick Store at 'Skeag. Keys at Flanders's store, Independent Hose house, and Robinson's residence.

No. 321. Corner Beauport and Wayne streets. Keys at Holy Angels Convent, the Brothers' School, and residences of E. H. Doherty and Rev. Father Hévey.

No. 511. Corner of Douglas and Green streets. Keys at residences of Henry Harmon, Amelia Davis, and Charlotte T. Snow.

No. 513. Corner of Milford and Carroll streets.  $K \in ys$  at residences of J. W. Abell, James Ward, and Mrs. Elizabeth Ward.

Also, keys will be found in the hands of all regular police.

The true time from Cambridge Observatory will be given at precisely 12.30 P. M. from Charles A. Trefethen's jewelry store, and will be denoted by one strike of the fire-bells.

#### Telephone Calls.

Central station, Chemical Engine		•	•	•	64-3
Chief Engineer Lane's residence .			•	•	64-4
Assistant Engineer Whitney's residence		•	•	•	34-4
Assistant Engineer Merrill's residence	•	•	•		71-3
Assistant Engineer Merrill's store .		•			55-4
Fire King Steamer No. 2	•				59-3
Merrimack Steamer No. 3	•	•	•	•	56-3
General Stark Steamer No. 5 .		•	•		64-6
Massabesic Hose No. 2 .		•	•	•	116-4

#### Instructions to Key-holders and Citizens.

I. Upon the discovery of a fire, notice should be immediately communicated to the nearest alarm-box, the keys to which are in

the hands of all regular police, and generally of persons at the corner or nearest houses.

2. Key-holders, upon the discovery of a fire, or positive information of a fire, will unlock the box, pull down the hook once as far as it will go (without jerking) and then let go. Shut the door, but do *not* try to remove the key, as it is locked in by a trap-lock, and can only be removed with a release-key, which is carried by each of the engineers, who will, as soon as convenient, release and return it.

3. All persons giving fire alarms are requested to remain by the box a moment, and if no clicking is heard in the box, pull again; if you still hear no clicking, go to the next nearest box, procure another key, and give an alarm from that.

4. Never signal for a fire seen at a distance. Never touch the box except to give an alarm of fire. Give an alarm for no cause other than actual fire. DON'T GIVE AN ALARM FOR A CHIMNEY FIRE.

5. Never let the keys go out of your possession unless called for by the chief engineer. *If you change your residence or place* of business, where the keys are kept, return the keys to the same officer.

6. Owners and occupants of buildings are requested to inform themselves of the location of alarm-boxes near their property, also all places where the keys are kept. Be sure the alarm is promptly and properly given.

7. Alarms will be sounded upon all the fire bells in the city, and the number of the box will be given thus: Box 6, six blows,  $2\frac{1}{2}$  seconds apart, repeated three times. Box 212, two blows, pause of  $6\frac{1}{4}$  seconds, one blow, same pause, and two blows, 2-1-2, repeated three times.

8. The engineers reserve the right to give one stroke of the bells at any time; and, in case of testing the boxes, each test will be preceded by one stroke of the bells.

#### SCHOOL SIGNAL.

Two strokes, with fifteen seconds between them, close the primary schools; and to close all the schools, two immediate strokes, and after a lapse of fifteen seconds two more immediate strokes, — the time of striking the bells being at 7.45 A. M. for closing the schools during the forenoon, and at 11.30 A. M. or 1.15 P. M. for closing them during the afternoon.

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# Rules and Regulations in regard to responding to Fires and Alarms.

The following order has been adopted by the board of engineers, and the fire department will strictly comply until otherwise ordered, and will attend alarms of fire as follows:

I. Pennacook Hose Co. No. 1, Hook-and-Ladder Co. No. 1, and Chemical Engine Co. No. 1 will report for duty to all boxes on *first alarm*.

2. Amoskeag Steamer Co. No. 1 will report for duty, on days of its first run, on *first alarm* to all boxes *except* 9, 12, 51, 54, 56, 315, 513 ; on *second alarm*, to all other boxes.

SECOND RUN. On *first alarm*, to boxes 6, 7, 8, 15, 34, 35, 36, 41, 42, 45, 81; on *second alarm*, to boxes 3, 4, 5, 13, 14, 16, 17, 18, 21, 23, 24, 25, 26, 27, 31, 32, 43, 61, 62, 71, 72, 73, 112, 113, 114, 213, 312, 313, 314, 321, 511; on *third alarm*, to all other boxes.

3. Fire King Steamer Co. No. 2 will report for duty on *first* alarm to boxes 34, 35, 36, 41, 42, 43, 45, 51, 52, 53, 54, 56, 312, 313, 321, 511, 513; on *second alarm*, to boxes 4, 5, 31, 32; on *third alarm*, to all other boxes.

4. Merrimack Steamer Co. No. 3 will report for duty on *first alarm* to boxes 3, 4, 5, 16, 17, 18, 21, 23, 24, 25, 26, 27, 41, 42, 43, 45, 61, 62, 71, 72, 73, 212, 213; on *second alarm*, to boxes 6, 7, 8, 15, 31, 34, 35, 36, 51, 52, 53, 56, 81; on *third alarm*, to all other boxes.

5. N. S. Bean Steamer Co. No. 4 will report for duty, on days of its first run, on *first alarm* to all boxes *except* 9, 12, 51, 54, 56, 315; on *second alarm*, to all other boxes.

SECOND RUN. On *first alarm*, to boxes 6, 7, 8, 15, 34, 35, 36, 41, 42, 45, 81; on *second alarm*, to boxes 3, 4, 5, 13, 14,

16, 17, 18, 21, 23, 24, 25, 26, 27, 31, 32, 43, 61, 62, 71, 72, 73, 112, 113, 114, 213, 312, 313, 314, 321, 511; on *third alarm*, to all other boxes.

6. Gen. Stark Steamer Co. No. 5 will report for duty on *first alarm* to boxes 7, 8, 9, 12, 13, 14, 15, 31, 32, 34, 35, 41, 112, 113, 114, 314, 315; on *second alarm*, to boxes 6, 16, 36, 42, 81, 312, 313, 321; on *third alarm*, to all other boxes.

7. Massabesic Hose Company No. 2 will report for duty, on days of its first run, on *first alarm*, to boxes 6, 7, 8, 13, 14, 15, 16, 17, 18, 21, 23, 24, 25, 26, 27, 31, 32, 34, 35, 36, 41, 42, 72, 81, 112, 113, 114; on *second alarm*, to boxes 4, 5, 9, 12, 43, 45, 71, 73, 212, 312, 313, 314, 321; on *third alarm*, to all other boxes.

SECOND RUN. On *first alarm*, to boxes 7, 8, 13, 14, 15, 16, 17, 18, 25, 26, 34, 112, 113, 114; on *second alarm*, to boxes 4, 5, 6, 9, 12, 21, 23, 24, 27, 31, 32, 35, 36, 41, 42, 43, 45, 71, 72, 73, 81, 212, 312, 313, 314, 321; on *third alarm*, to all other boxes.

8. On the first alarm from boxes 9, 24, 27, 54, 56, 61, 62, 212, 213, 314, 315, 513, the horses of the second run will double on to the engine of its first run, AND ON THE ARRIVAL AT THE FIRE THE SECOND-RUN HORSES WILL RETURN TO THEIR HOUSE, and in case of an alarm from any other box the company will immediately respond with their engine.

9. During the progress of a fire, any of the apparatus not called on that alarm will promptly *respond to an alarm from any other bax*.

10. At any time when an alarm of fire is given, the engine, hose-carriage, or truck that leaves the house first will have the right to lead to the fire. NO RUNNING BY WILL BE ALLOWED, EXCEPT IN CASE OF ACCIDENT, UNDER PENALTY OF DISMISSAL OF THE DRIVER FROM THE DEPARTMENT.

11. The drivers shall not permit persons not connected with the department to ride upon their apparatus, and in muddy weather or heavy wheeling they shall not permit any one to ride upon their apparatus when returning from fires.

12. The companies of the department not called on the first

alarm will prepare for a start, and hold themselves in readiness for a second or third alarm; and, if not needed, one stroke on the bells and gongs by the engineer in charge will be the signal for discharge to all companies remaining at the houses; or in case this one blow is not struck within thirty minutes, companies may consider themselves dismissed; except the drivers, who will remain in the houses with their horses until the two blows to limber up, and the return to quarters of engines on duty at the fire.

13. Two strokes on the bells will be a signal for those at a fire to limber up.

# ESTIMATED VALUE OF PROPERTY.

#### Amoskeag Steam Fire-Engine Company No. 1.

1	extra first-size Amoskeag ste	eamer	•			\$4,000.00
I	one-horse hose-wagon .	•				450.00
I	pair gray horses for steamer	•				800.00
I	black horse for hose-wagon				•	375.00
3	swinging harnesses					150.00
I	pair double harnesses (for st	treet	work)	•		60.00
I	single harness (for street wo	ork)				50.00
2,000	feet fabric hose				•	1,300.00
100	feet three-inch leather hose					50.00
I	double cart					100.00
I	single cart			•		100.00
I	sled				•	.40.00
	Stable fixtures, blankets, etc.					60.00
	Tools, furniture, and fixture	s.				200.00
	Firemen's suits and badges	•	•	·		200.00
	Total amount					\$7,935.00

#### LOCATED ON VINE STREET,

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# Fire King Steam Fire-Engine Company No. 2.

LOCATED AT NORTH MAIN STREET, 'SQUOG.

I	second-size Amoskeag stean	ner				\$4,000.00
I	combination hose-wagon					650.00
I	pair bay horses for steamer					800.00
I	pair gray horses for combin	ation	n.			600.00
3	street harnesses, 2 at \$40, 1	at \$	20			I 00.00
2	pairs swinging harnesses					200.00
I	single cart		•	•		100.00
I	two-horse cart					75.00
I	double sled					75.00
I	single sled					50.00
2,500	feet fabric hose					1,625.00
	Stable fixtures and blanket	s.				60.00
	Furniture, fixtures, carpets,	etc.				466.00
	Firemen's suits and badges	•	•	•	•	150.00
	Total amount		•			\$8.951.00

## Merrimack Steam Fire-Engine Company No. 3.

LOCATED ON LAKE AVENUE, CORNER MASSABESIC STREET.

I	second-size A	mosk	eag st	eame	r				\$3,500.00
I	pair black ho	rses			•				600.00
I	single horse				•		•		250.00
3	street harness	ses, 2 a	at \$50	э, і	at \$4	0			1.40.00
0	swinging har								150.00
I	four-wheeled	Amos	skeag	hose	-carri	age			600.00
	double cart				•	•			162.50
I	single cart	•				•	•	•	.40.00
I	single sled .					•			40.00
2,500	feet fabric ho	ose .					•		1,625.00

Stable fixtures,	blanket	ts, etc				\$50.00
Beds, bedding	, carpets	, hall	furni	ture,	etc.	575.00
Total amour	nt.	•	•			\$7,732.50

# N. S. Bean Steam Fire-Engine Company No. 4.

LOCATED ON VINE STREET.

1	second-size Amoskeag steamer .		\$3,500.00
I	hose-wagon		400.00
1	pair bay horses for steamer		600.00
1	horse for hose-wagon		200.00
I	pair street harnesses		50.00
I	pair swinging harnesses for steamer		100.00
I	single swinging harness for hose-wagor	).	50.00
1,550	feet fabric hose		1,007.50
	Hall furniture, beds, bedding, etc.		275.00
	Stable fixtures and blankets		75.00
	Firemen's suits and badges		150.00
	Total amount		\$6,407.50

# General Stark Steam Fire-Engine Company No. 5.

LOCATED ON WEBSTER STREET, CORNER CHESTNUT.

I	third-size Amoskeag	stean	ner.			. \$	3,600.00
1	combination hose re-	el and	l laddei	r.			1,000.00
I	pair bay horses .						600.00
I	pair gray horses .						.100.00
2	double carts					•	225.00
2	double sleds						150.00
2	pairs swinging harne	esses		•			200.00
2	pairs street harnesses	÷.			•	•	180.00

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#### REPORT OF THE FIRE ENGINEER.

2,500	feet fabric hose				\$1,625.00
	Furniture, fixtures, tools, etc.		•	•	175.00
	Stable fixtures and blankets				80.00
	Firemen's suits, badges, etc.			•	150.00
	Total amount		•		\$8,385.00

# E. W. Harrington Steam Fire-Engine.

LOCATED AT OLD ENGINE-HOUSE, CLINTON STREET.

Old U tank Amoskeag engine . . . \$500.00

# Pennacook Hose Company No. 1.

LOCATED ON VINE STREET.

I	four-wheeled Amo	skeag	g hose	-carri	age			\$600.00
2	horses						·	600.00
2	single harnesses			•		•		70.00
I	single cart .							50.00
I	single sled .	•						40.00
I	hose sled .	•		•	•	•		20.00
2,300	feet fabric hose					•		1,495.00
3,000	feet leather hose							1,500.00
	Furniture and fixtu	ires						200.00
	Stable fixtures and	blar	nkets			•		50.00
	Firemen's suits an	d bao	lges					175.00
	Total amount							\$4,800.00

## Massabesic Hose Company No. 2.

LOCATED ON MAPLE STREET, CORNER EAST HIGH.

I	four-wheele	d An	noske	ag ho	se-car	riage			\$600.00
I	bay horse	•	•	•	•	•	•	•	350.00

I	street harness					\$40.00
I	swinging harness					50.00
I	single cart .					60.00
I	single sled .					40.00
2,000	feet fabric hose					1,200.00
2,000	feet leather hose					1,000.00
	Furniture and fix	tur	es .			100.00
	Firemen's suits ar	nd	badges	•		175.00
	Total amount					\$3,615.00

# Excelsior Hook-and-Ladder Company No. 1.

#### LOCATED ON VINE STREET.

1	hook-and-ladder truck .				\$1,700.00
I	reserve truck at Lake avenue	e stat	tion		300.00
I	pair bay horses				600.00
I	pair exercise harnesses .				30.00
I	pair swinging harnesses .				100.00
2	extra Bangor extension ladd	lers			360.00
7	rubber blanket covers .				168.00
	Furniture and fixtures .				200.00
	Stable fixtures and blankets				50.00
	Firemen's suits and badges				280.00
	Total amount				\$3,788.00

# Chemical Engine Company No. 1.

#### LOCATED ON VINE STREET.

I	double tank (60 gallons	each	) eng	gine	•	•	\$2,250.00
I	pair black horses .	•				•	750.00
I	pair exercise harnesses		•	•			50.00
I	pair swinging harnesses						100.00

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# REPORT OF THE FIRE ENGINEER. 195

Furniture and fixtur	es		•				\$75.00
Stable fixtures and h	olank	ets	•	•		•	50.00
Firemen's suits and	badg	es	•	•	•	•	35.00
Total amount	•			•	•	. \$	3,310.00

# Supply Wagon.

I	supply	wagon,	with	boxes	and	e	engineer'	s	
	lanter	ns .			•	•		•	\$312.00

# Spare Hose.

AT CENTRAL STATION, VINE STREET.

800 feet leather hose				\$400.00
1,000 feet fabric hose				625.00
Total amount				\$1,025.00

# Exercise Wagon.

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#### CENTRAL STATION, VINE STREET.

I	four-wheeled	exercise	wagon,	with	$\operatorname{pole}$	and	shafts	
	and coal b	oxes .	•		•		• •	\$350.00
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	Engineers' Department.											
	fire hats											
5	engineers' white rubber coats	3	•	•	•	•	37.50					
	Furniture and fixtures .	·	•	•	•	•	175.00					
	Total amount .	•			•		\$222.50					

# Independent Hose Company No. 5.

#### LOCATED AT CORNER OF OLD FALLS ROAD AND FRONT STREET.

1 four-wheeled hand hose-c	arria	ge				\$400.00
600 feet leather hose .						300.00
2 hose-pipes, spanners, etc.	•					.40.00
Furniture and fixtures			·	•		10.00
Total amount .	•	·	•	•	•	\$750.00

# Goffe's Falls Hose-Carriage.

#### LOCATED AT DEVONSHIRE MILLS.

1 two-wheeled hose-ca	arriag	ge				•	\$50.00
300 feet fabric hose							150.00
2 hose-pipes .	•		•	•	•	•	10.00
Total amount							\$210.00

#### Sleeping-Hall.

#### AT CENTRAL STATION, VINE STREET.

7 beds, bedding, wardrobes, etc. . . . . . \$275.00

#### Spare Hose-Carriage.

1 four-wheeled Amoskeag hose-carriage . . . \$600.00

# REPORT OF THE FIRE ENGINEER.

# Extra Horses.

1 horse at C	entral	statio	n for	spare	duty	•	•	\$200.00
1 horse at D	istrict	No. 1	o for	street	work			150.00
2 horses at I	District	No. :	2 for s	street	work		•	300.00
To	tal	•	•	•	•		•	\$650.00

# Fire-Alarm Telegraph.

At cost (including additions pre	vious to	1885	).	\$21,625.00
Remodeling in 1885				6,000.00
Additions in 1886				775.00
" in 1887				375.00
" in 1888	•			575.00
" in 1889				430.00
" in 1890				300.00
" in 1891				280.00
"Individual Tapper" system .				3,000.00
Wire, ladders, arms, brackets, et	с			125.00
Total				\$33,485.00

# Recapitulation.

Amoskeag Steam Fire-Engine Co. No. 1		\$7,935.00
Fire King Steam Fire-Engine Co. No. 2		8,951.00
Merrimack Steam Fire-Engine Co. No. 3		7,732.50
N. S. Bean Steam Fire-Engine Co. No. 4	•	6,407.50
Gen. Stark Steam Fire-Engine Co. No. 5		8,385.00
E. W. Harrington Steamer (old)		500.00
Pennacook Hose Co. No. 1		4,800.00
Massabesic Hose Co. No. 2		3,615.00
Excelsior Hook-and-Ladder Co. No. 1		3,788.00

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Chemical Engine Co.	No.	ι.	•	•	•	\$3,310.00
Supply wagon .						312.00
Spare hose	•		•	•		1,025.00
Exercise wagon .			•		•	350.00
Engineers' departmen	t.					222.50
Independent Hose Co	). No.	5	•			750.00
Goffe's Falls Hose-Ca	rriage					210.00
Sleeping-Hall (Centra	ıl Stat	ion)				275.00
Spare carriage .						600.00
Fire-Alarm Telegraph						33,485.00
Extra horses						650.00
Total .						\$93,303.50

# Names and Residences of the Members of the Fire Department.

#### BOARD OF ENGINEERS.

Badge No.	NAME.	Rank	•	Occupation.	Residence.
1	Thomas W. Lane	Chief			1937 E1m.
3	Fred S. Bean	Asst. and	clerk	Machinist	102 Orange.
2	Ruel G. Manning	Assistant		Carpenter	52 Douglas.
4	Eugene S. Whitney	**		Supt. Electric L't	River road, N.
5	Clarence R. Merrill	**		Grain dealer	414 Merrimack.

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# REPORT OF THE FIRE ENGINEER. 199

#### AMOSKEAG STEAM FIRE-ENGINE COMPANY NO. 1.

Budge No.	NAME.	Rank.	Occupation.	Residence.
7	Charles F. McCoy	Foreman	Machinist	5 M. S. B.
8	Frank E. Stearus	Asst. foreman.	Paper-hanger	389 Lake ave.
17	Henry C. Parsons	Clerk	Auctioneer	28 Vine.
6	Charles F. Hall	Engineer	Machinist	146 Orange.
13	Joseph II, Gould	Asst. engineer.	"	1087 Elm.
11	Charles H. Rogers	Driver steamer	Teamster	28 Vine.
12	Artemas C. Barker	Driver of hose.	"	
16	Frank B. Marston	Hoseman	Carpenter	11 M. S. B.
19	Henry A. Boone	**	Machinist	24 M. S. B.
15	Thomas J. Wyatt	"	Carpenter	44 Middle.
18	James L. Brock	"	Tinsmith	21 Market.
-9	Lewis G. Bryant		Carpenter	31 M. S. B.
14	Edgar A. Young	"	Clerk	371 Merrimaek
10	Lucius M. Rollins	"	Molder	174 Concord.

# House No. 28 Vine Street.

#### FIRE KING STEAM FIRE-ENGINE COMPANY NO. 2.

Badge No.	NAME.	Rank.		Occupation.	Residence.
67	David G. Mills	Foreman.		Contractor	607 Granite ex.
71	Charles G. Ranno	Asst. fore	man.	Harness-maker .	63 Parker.
68	John Martin	Clerk	•••••	Machinist	624 N. Main.
120	Thomas F. Dodge	Engineer.		Engineer	Engine house.
119	Stephen Thomes	Asst. engi	ineer.	Carpenter	55 Douglas.
76	Jeremiah Lane	Driver ste	amer	Teamster	Engine house.
69	Arthur W. Whiteomb	Driver of	hose.	··	
72	Samuel A. Hill	Hoseman		Janitor	86 School.
75	Robert J. Ilill	"	•••••	Carpenter	"
77	Daniel B. Emery	"		Machinist	Williams.
73	Charles S. Cousins	"		Harness-maker .	53 Douglas.
74	Thomas C. Foote	**	<b></b> .	Wooi-sorter	56 N. Main.
66	Joseph II. Alsop	"		Wool-waste-s't'r	34 Douglas.
70	Charles M.Tewksbury	66	. <b></b>	Freight-handler.	s6 School.

House on North Main Street, 'Squog.

# REPORT OF THE FIRE ENGINEER. 201

#### MERRIMACK STEAM FIRE-ENGINE COMPANY NO. 3.

Badge No.	NAME.	Rank.	Occupation.	Residence.
86	Frank F. Porter	Foreman	Manufacturer	330 Spruce.
79	Louis N. Dufrain	Asst. foreman	Plumber	373 Hall.
85	Will P. Emerson	Clerk	Carpenter	294 Laurel.
121	George B. Forsaith	Engineer	Engineer	196 Laurel.
122	Edwin E. Weeks	Asst. engineer.	Machinist	510 Wilson.
87	George II. Wheeler	Driver steamer	Teamster	419 Lake Ave
81	William S. McLeod	Driver of hose.		347 Spruce.
78	George Dunnington	Hoseman	Clerk	510 Wilson.
84	Charles H. Colburn	"	Carpenter	294 Laurel.
80	Ernest L. George		Clerk	253 Lake Ave
82	John S. Avery		Janitor	404 Merrimae
83	Ernest E. Hubbell		Yeast agent	428 Central.
88	Fred S. Sloan		Painter	58 Massabesic
89	Parker R. Brown		Clerk	422 Merrimael

House on Lake Avenue, corner Massabesic.

#### N. S. BEAN STEAM FIRE-ENGINE COMPANY NO. 4.

Badge No.	NAME.	Rank.	Occupation.	Residence.
26	Lorenzo J. Chandler	Foreman	Clerk	123 Orange.
23	George A. Caun	Asst. foreman.	Watchman	27 Middle.
20	Lucius B. Snelling	Clerk	Pharmaeist	269 Hanover.
24	Albert Merrill	Engineer	Electrician	River road N.
21	Edgar G. Abbott	Asst. engineer.	Machinist	12 Linden.
31	Frank J. Dustin	Driversteamer	Teamster	20 Vine.
29	Alphonso E. Foster	Driver of hose.	"	20 Vine.
28	Willie H. Dodge	Hoseman	R. R. fireman	530 Chestnut.
33	Henry C. Morrill	"	Machinist	112 Pearl.
32	Benj. R. Richardson	"	"	12 Mechanie,
30	Ellsworth V. Rowe	"	Section-hand	1261 E1m.
22	Walter A. Clarkson	"	Carpenter	98 Sagamore.
25	Frank B Stevens	"	Clerk	310 Central.
27	Edward Sargent	"	Machinist	954 Elm.

#### House on Vine Street.

#### REPORT OF THE FIRE ENGINEER.

#### GENERAL STARK STEAM FIRE-ENGINE COMPANY NO. 5.

#### House No. 44 Webster Street.

Badge No.	NAME.	Rank.	Occupation.	Residence.
49	Charles W. Brown	Foreman	Clerk	16 Hazel.
123	George R. Simmons	Asst. foreman.	Maehinist	82 Pennacook.
46	Woodbury Davison	Clerk	Carpenter	785 Union.
42	Daniel W. Morse	Engineer	Engineer	1419 Elm.
102	Walter Morse	Asst. engineer.	Machinist	831 Union.
125	Emil H. Smith	Driversteamer	Teamster	44 Webster.
124	Henry S. Reed	Driver hose	"	44 Webster.
41	Arthur A. Smith	Hoseman	Blacksmith	W. Appleton.
47	Russell L. Cilley	"	Clerk	1449 Elm.
95	Edward H. Clough	۰۰		Appleton.
99	John J. Kelley	"	Machinist	River road N.
101	Milo B. Wilson	"	Mason	48 Blodget.
108	Luville O. Blanehard.		Blacksmith	817 Union.
126	Alvin MeLane	"	Carpenter	661 Chestnut.

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#### PENNACOOK HOSE COMPANY NO. 1.

Badge No.	NAME.	Rank.	Occupation,	Residence.
34	Albert Maxfield	Foreman	Belt-maker	98 Liberty.
36	Joseph E. Merrill	Asst. foreman.	Currier	21 Ash.
50	Frank D. Burleigh	Clerk	Carpenter	6 M. S. B.
37	Walter L, Blenus	Driver	Teamster	26 Vine.
38	George H. Porter	Hoseman	Carpenter	279 Laurel.
<b>1</b> 8	Albert A. Puffer	"	R. R. employé	499 Beech.
52	Charles B. French	••	Carpenter	39 M. S. B.
53	John E. Sanborn		··	274 Laurel.
35	Samuel W. Patten	"	Belt-maker	3 M. S. B.
45	George I. Ayer	"	Electrician	28 M. S. B.
51	Edwin W. Merrill	··	Clerk	21 Ash.
39	Henry Gray	"	Machinist	7 M. S. B.

#### House No. 26 Vine Street.

#### MASSABESIC HOSE COMPANY NO. 2.

House on Maple Street, corner East High.

No.	NAME.	Rank.	Occupation.	Residence.
54	John F. Seaward	Foreman	Carpenter	27 Warren.
55	Revilo G. Houghton	Asst. foreman.	Gas-fitter	288 Bridge.
58	Henry G. Seaman	Clerk	Carpenter	14 South.
57	Walter Seaward	Driver	Teamster	521 Maple.
56	George W. Huntley	Hosem a	Plumber	264 Lowell.
59	Jos. W. Batchelder	"	Carpenter	467 Maple.
64	Albert E. Batchelder.		··	467 Maple.
65	Fred S. Lewis	··	Plumber	27 South.
62	Julien B. Huntley	··		36 Dutton.
63	Frank E. Heald	"	Book-keeper	289 Concord.
60	Charles W. Powell	"	Carpenter	540 Maple.
я	Addison Seaward		"	296 Orange.

#### REPORT OF THE FIRE ENGINEER.

#### CHEMICAL ENGINE COMPANY NO. 1.

#### House No. 8 Vine Street.

Badge No.	NAME.	Rank.	Occupation.	Residence.
116	George N. Burpee	Foreman	Electrician	19 Ash.
115	Jesse W. Truell	Clerk	Hackman	153 Hanover.
117	Warren F. Wheeler	Driver	Teamster	8 Vine.
118	Frank A. Pherson	Engineer	Engineer	8 Vine.
44	Frank H. Harvey *	Fireman	Teamster	546 Chestnut.

EXCELSIOR HOOK-AND-LADDER COMPANY NO. 1.

#### House No. 18 Vine Street.

Dauge No.	NAME.	Rank.	Occupation.	Residence.
91	Jerome J. Lovering	Foreman	Carpenter	300 Pine.
m	Roseoe Dyer	Asst. foreman.	Machinist	36 Water.
90	Henry Johnson	Clerk	Piper	20 M. S. B.
94	Charles M. Denyou	Driver	Teamster	IS Vine.
92	Osear P. Stone	Fireman	Clerk	696 Elm.
96	James Orrill		Barber	100 Blodget.
98	John N. Chase		Overseer	268 Bridge.
14	John Wilson	··	Carpenter	19 Warren.
00	Hiram P. Young		Taxidermist	33 Dutton.
03	Luther J. Flint	"	Carpenter	4 Dutton.
04	Harrison H. Cole	··		45 M. S. B.
09	George M. Jones		Gardener	558 Chestnut
10	Pharis E. Rogers		Mason	135 Orange.
97	Charles W. Bailey	"	Carriage-maker	Linden.
07	Непгу Неар	··	Manufacturer	4 Whitney.
13	Charles H. Laxon	"	Carpenter	27 Middle.
106	Charles Edgar	··		16 M. S. B.
05	John T. Gott	"	Teamster	301 E. Spruce
12	Henry C. Crosby	"	"	234 Lake ave
93	Charles H. Gile		Carpenter	56 Stark eorp

\* Detailed as driver of supply wagon.

#### INDEPENDENT HOSE COMPANY NO. 5.

Badge No.	NAME.	Rank.	Occupation.	Residence.
133	Charles E. Stearns	Foreman	Milk dealer	Front.
134	Thomas Hamilton	Asst. foreman.	Handle-maker	Goffstown r'd.
135	George B. Glidden	Cierk	Milk dealer	Dunbarton r'd.
136	George Lawrence	Steward		Front.
137	Sherman L. Flanders.	Hoseman	Groce <b>r</b>	"
138	Andrew J. Moynihan.		Fireman	"
139	Charles Linen	"	Machinist	**
140	Clarence H. Stearns	"	Clerk	**
141	William F. Stearns		Leather-cutter	"
142	Alfred D. Maxwell	"	Ice-Dealer	Goffstown r'd.
143	Elbridge G. Reed	··	Driver	223 Lowell.
144	Benjamin Rerbert			51W.Merrimck

House corner of Front Street and Old Falls Road, Amoskeag.

#### Location of Hydrants.

Amherst, northwest corner of Vine street. Amherst, southwest corner of Chestnut street. Amherst, northwest corner of Pine street. Amherst, northwest corner of Walnut street. Amherst, northwest corner of Beech street. Amherst, northwest corner of Maple street. Amherst, northwest corner of Lincoln street. Amherst, northwest corner of Ashland street. Amherst, northwest corner of Hall street. Amherst, northwest corner of Belmont street. Amherst, northwest corner of Belmont street.

Appleton, northwest corner of Chestnut street. Appleton, northwest corner of Pine street. Appleton, northwest corner of Union street. Arlington, northwest corner of Cross street. Arlington, northwest corner of Warren street. Arlington, northwest corner of Ashland street. Ash, front of No. 32. Auburn, corner of Franklin street. Auburn, northeast corner of Elm street. Auburn, front of No. 40. Auburn, northwest corner of Chestnut street. Auburn, northwest corner of Adams street. Auburn, northwest corner of Union street. Auburn, northwest corner of Beech street. Auburn, northwest corner of Maple street. Baker, corner of Elm street. Baker, corner of River road, Baker, corner of Calef road. Baker, corner of Nutt road. Bay, corner of Salmon street. Bedford, northwest corner of Granite street. Bedford, near No. 36 M. P. W. corporation. Bedford, northwest corner of Central street. Beech, northwest corner of Park street. Beech, front of No. 584. Belmont, near No. 345. Belmont, corner Young street. Belmont, near Coffin residence. . Birch, northwest corner of Lowell street. Birch, northwest corner of Washington street. Blodget, front of primary-school house. Blodget, northwest corner of Chestnut street. Blodget, northwest corner of Pine street. Blodget, northwest corner of Union street. Bridge, front of No. 26. Bridge, northwest corner of Chestnut street. Bridge, northwest corner of Union street.

Bridge, northwest corner of Walnut street. Bridge, northwest corner of Beech street. Bridge, northwest corner of Ash street. Bridge, northwest corner of Maple street. Bridge, near No. 242. Bridge, northwest corner of Russell street. Bridge, northwest corner of Linden street. Bridge, corner of Ashland street. Bridge, corner of Hall street. Brook, northwest corner of P. Adams's lot. Brook, northwest corner of Chestnut street. Brook, northwest corner of Pine street. Brook, northwest corner of Union street. Brook, northwest corner of Beech street. Brook, northwest corner of Ash street. Calef road, near Patrick Harrington's. Calef road, near D. T. Smith's house. Canal, near east corner of Depot street. Canal, near office door M. L. W. Cedar, corner of Elm street. Cedar, front of No. 36. Cedar, northwest corner of Chestnut street. Cedar, northwest corner of Pine street. Cedar, northwest corner of Union street. Cedar, northwest corner of Beech street. Cedar, northwest corner of Maple street. Cedar, northwest corner of Lincoln street. Central, northwest corner of Chestnut street. Central, northwest corner of Pine street. Central, northwest corner of Union street. Central, near gate, Merrimack square. Central, northwest corner of Beech street. Central, northwest corner of Maple street. Central, northwest corner of Lincoln street. Central, front of No. 374. Central, northwest corner of Wilson street.

Central, northwest corner of Hall street.

Central, corner of Cass street. Chestnut, northwest corner of Lowell street. Chestnut, opposite High street. Chestnut, northwest corner of Pearl street. Chestnut, northwest corner of Orange street. Chestnut, northwest corner of Myrtle street. Chestnut, northwest corner of Prospect street. Chestnut, northwest corner of Salmon street. Clarke, northwest corner of Elm street. Clarke, northwest corner of Chestnut street. Concord, corner Elm street. Concord, opposite Vine street. Concord, northwest corner of Chestnut street, Concord, northwest corner of Union street. Concord, northwest corner of Walnut street. Concord, northwest corner of Beech street. Concord, northwest corner of Maple street. Concord. northwest corner of old Amherst street. Concord, northwest corner of Ashland street. Concord, northwest corner of Hall street. Concord, northwest corner of Belmont street. Cypress, south end of street. Cypress, at Manchester shoeshop. Dean, northeast corner of Canal street. Dean, northwest corner of Elm street. Depot, northeast corner of Elm street. Elm, opposite foot of Manchester street. Elm, northwest corner of Salmon street. Elm. northwest corner of Cove street. Franklin, opposite Middle street. Gore, corner of Beech street. Granite, northwest corner of Elm street, Granite, near Franklin street, Granite, northeast corner of Canal street. Granite, east end of Granite bridge. Grove, corner of Elm street. Grove, in East Manchester. 14

Hancock street.

Hancock, near shoeshop. Hancock, northwest corner of River road. Hancock, near brewery. Hanover, corner of Elm street. Hanover, front of Opera House. Hanover, northwest corner of Chestnut street. Hanover, northwest corner of Pine street. Hanover, northwest corner of Union street. Hanover, northwest corner of Beech street. Hanover, northwest corner of Maple street. Hanover, northwest corner of Lincoln street. Hanover, northwest corner of Ashland street. Hanover, northwest corner of Hall street. Hanover, northwest corner of Belmont street. Harrison, opposite No. 15. Harrison, northwest corner of Chestnut street. Harrison, northwest corner of Pine street. Harrison, northwest corner of Union street. Harrison, northwest corner of Beech street. Harrison, northwest corner of Maple street. Harrison, northwest corner of Oak street. Harrison, northwest corner of Russell street. High, corner of Ashland street. High, corner of South street. High, fifty feet east of Wilson road. Hollis, northeast corner of Canal street. Hollis, northeast corner of Hobbs street. Hollis, northwest corner of Elm street. lewett, corner of Massabesic street. Kidder, northeast corner of Canal street. Kidder, northeast corner of Hobbs street. Kidder, northwest corner of Elm street. Kidder's court, northwest corner of Elm street. Lake avenue, near No. 36. Lake avenue, northwest corner of Chestnut street. Lake avenue, northwest corner of Union street.

Lake avenue, northwest corner of Maple street. Lake avenue, northwest corner of Lincoln street. Lake avenue, northwest corner of Wilson street. Lake avenue, corner of Cass street. Lake avenue, east end near Hastings residence. Langdon, northwest corner of Elm street. Langdon, northeast corner of Canal street. Laurel, northwest corner of Pine street. Laurel, northwest corner of Union street. Laurel, northwest corner of Beech street. Laurel, northwest corner of Maple street. Laurel, northwest corner of Lincoln street. Laurel, near No. 244. Laurel, northwest corner of Wilson street. Laurel, near Belmont street. Laurel, northwest corner of Milton street. Laurel, northwest corner of Beacon street. Lowell, northwest corner of Beech street. Lowell, northwest corner of Ash street. Lowell, northwest corner of South street. Lowell, front of No. 276. Lowell, northwest corner of Wilson road. Lowell, northwest corner of Ashland street. Mammoth road. Manchester, corner of Elm street. Manchester, front of James Bros.' stable, Manchester, northwest corner of Central street. Manchester, northwest corner of Pine street. Manchester, northwest corner of Union street. Manchester, northwest corner of Beech street. Manchester, northwest corner of Maple street. Manchester, northwest corner of Lincoln street. Manchester, northwest corner of Wilson street. Manchester, northwest corner of Hall street. Manchester, northwest corper of Belmont street. Maple, northwest corner of Lowell street.

Market, near Canal street. Market, near second back street west of Elm street. Market, northwest corner of Elm street. Massabesic, northwest corner of Old Falls road. Massabesic, southeast corner of Taylor street. Massabesic avenue. Massabesic, near Mammoth road. Mechanic, northeast corner of Canal street. Mechanic, near second back street west of Elm street. Mechanic, northwest corner of Elm street. Merrimack, corner of Elm street. Merrimack, opposite gate, Merrimack square. Merrimack, northwest corner of Chestnut street. Merrimack, northwest corner of Pine street. Merrimack, northwest corner of Union street. Merrimack, northwest corner of Beech street. Merrimack, northwest corner of Maple street. Merrimack, northwest corner of Lincoln street. Merrimack, near No. 362. Merrimack, northwest corner of Wilson street. Merrimack, northwest corner of Hall street. Merrimack, near Belmont street. Merrimack, northwest corner of Beacon street. Middle, northeast corner of Canal street. Middle, near No. 67 Amoskeag corporation. Monroe, northwest corner of Elm street. Myrtle, opposite No. 33. Myrtle, northwest corner of Pine street. Myrtle, northwest corner of Union street. Myrtle, northwest corner of Walnut street. Myrtle, northwest corner of Beech street. Myrtle, northwest corner of Ash street. Myrtle, northwest corner of Maple street. Myrtle, northwest corner of Oak street. Myrtle, northwest corner of Russell street. North, northwest corner of Bay street. North, northwest corner of Chestnut street.

North, northwest corner of Pine street. North, corner of Liberty street. Orange, opposite Clark's avenue. Orange, northwest corner of Pine street. Orange, northwest corner of Union street. Orange, northwest corner of Walnut street. Orange, northwest corner of Beech street. Orange, corner of Ash street. Orange, corner of Maple street. Orange, corner of Oak street. Orange, corner of Russell street. Orange, corner of Linden street. Orange, corner of Hall street. Pearl, northwest corner of Elm street. Pearl, northwest corner of Clark's avenue. Pearl, northwest corner of Pine street. Pearl, northwest corner of Union street. Pearl, corner of Beech street. Pearl, corner of Walnut street. Pearl, northwest corner of Ash street. Pearl, northwest corner of Maple street. Pearl, northwest corner of Oak street. Pearl, northwest corner of Russell street. Pearl, northwest corner of Linden street. Pearl, northwest corner of Ashland street. Pearl, northwest corner of Morrison street. Pennacook, northwest corner of Chestnut street. Pennacook, northwest corner of Pine street, Pennacook, northwest corner of Union street. Pine, near Road House. Pine, northwest corner of Lake avenue. Pine, northwest corner of Concord street. Pine, northwest corner of Lowell street. Pine, northwest corner of High street. Pine, northwest corner of Bridge street. Pleasant, northeast corner of Canal street.

Pleasant, near No. 35 Manchester corporation.

Pleasant, northwest corner of Franklin street. Pleasant, northwest corner of Elm street. Prospect, between Elm and Chestnut streets. Prospect, northwest corner of Chestnut street. Prospect, northwest corner of Pine street. Prospect, northwest corner of Union street. Prospect, northwest corner of Walnut street. Prospect, northwest corner of Beech street. Prospect, northwest corner of Ash street. Prospect, northwest corner of Maple street. Prospect, northwest corner of Oak street. Prospect, northwest corner of Russell street. Prospect, corner of Linden street. Reservoir, on force main. River road (north), north of Webster street. River road (north), near Mrs. John Kelly's. River road (north), near J. Otis Clark's. River road (south), near gate of tannery. Sagamore, corner of Union street. Salmon, corner of Union street. Shasta, corner of Elm street. Shasta, corner of River road. Shasta, corner of Beech street. Silver, corner of Union street. Silver, corner of Beech street. Somerville, corner of Union street. Spring, northeast corner of Canal street. Spring, northwest corner of Charles street. Spring, northwest corner of Elm street. Spring, corner of Elm street. Spruce, northwest corner of Chestnut street. Spruce, northwest corner of Pine back street. Spruce, northwest corner of Union street. Spruce, between Chestnut and Elm streets. Spruce, northwest corner of Beech street. Spruce, northwest corner of Maple street.

Spruce, northwest corner of Lincoln street.

Spruce, northwest corner of Wilson street. Spruce, northwest corner of Belmont street. Spruce, near T. J. Perry's house. Stark, northeast corner of Canal street, Stark, near No. 13 Stark corporation. Stark, northwest corner of Elm street. State, northwest corner of Granite street. State, opposite No. 57 Manchester corporation. State, opposite No. 13 Manchester corporation. State, corner of West Central street. Summer, corner of Elm street. Taylor, corner Young road. Union, northwest corner of Lowell street. Union, northwest corner of High street. Valley, northwest corner of Elm street. Valley, northwest corner of Willow street. Valley, northwest corner of Beech street. Valley, northwest corner of Wilson street, Valley, northwest corner of Belmont street. Valley, northwest corner of Taylor street. Valley, northwest corner of Cypress street. Valley, northwest corner of Jewett street. Valley, 150 feet east of J. L. Woodman's. Vine, opposite Central station. Walnut, northwest corner of Lowell street. Walnut, opposite No. 79. Walnut, northwest corner of Sagamore street. Water, near No. 38 Amoskeag corporation. Water, northwest corner of Elm street. Webster, northwest corner of Chestnut street. Webster, corner of Adams street. Webster, northwest corner of Union street. West Auburn, northeast corner of Canal street. West Bridge, northeast corner of Canal street. West Bridge, northeast corner of Hobbs street. West Bridge, northwest corner of Elm street. West Brook, northeast corner of Canal street.

West Brook, northwest corner of Elm street. West Cedar, northeast corner of Canal street. West Cedar, northwest corner of Elm street. West Central, northeast corner of Canal street. West Central, corner of Franklin street. West Central, northwest corner of Elm street. West Merrimack, northeast corner of Canal street. West Merrimack, near 111 Amoskeag corporation. West Merrimack, northwest corner of Franklin street. West Merrimack, northwest corner of Elm street. West Pennacook, northwest corner of Elm street. West Webster, northwest corner of Elm street. West Webster, northeast corner of River road. Wilson, corner of Lake avenue. Young, corner of Elm street. Young, northwest corner of Beech street. Young, corner of Maple street. Young, 96 feet east of R. N. Batchelder's. Young, corner of Jewett street. Young road.

#### PISCATAQUOG AND MCGREGORVILLE.

A, corner of South Main street. A, near No. 73. A, northwest corner of B street. Adams, corner of Main street. Adams, corner of Beauport street. Amory, corner of Beauport street. Amory, near Dubuque street. Amory, corner of Rimmon street. Bath, corner of River street. Bath, corner of Shirley street. Bedford road, near Huntress's. Bennington, corner of Main street. Blaine, corner of Cleveland street. Blaine, east end of street. Bowman street, opposite cemetery. C street, corner of Bedford road. Cartier, corner of Sullivan street. Cartier, corner of Putnam street. Carroll street. Cleveland, northwest of Second street. Clinton, corner of Dover street. Clinton, corner of South Main street. Conant, corner of Cartier street. Conant, corner of Dubuque street. Conant, corner of Rimmon street. Dartmouth, corner of O'Neil street. Douglas, corner of Quincy street. Douglas, corner of Green street. Douglas, corner of Barr street. Douglas, corner of West street. Douglas, corner of Main street. Douglas, east of Main street. Ferry, corner of Main street. Granite, corner of Quincy street. Granite, corner of Green street. Granite, corner of Barr street. Granite, corner of West street. Granite, corner of Dover street. Granite, corner of Main street. Granite, corner of Shirley street. Granite, corner of River street. Highland, between Wilkins and Mast streets. Kelley, corner of Beauport street. Kelley, corner of Cartier street. Kelley, corner of Dubuque street. Main, near Milford street. Marion, corner of McGregor street. Mast, corper of South Main street. Mast, corner of Bowman street. Mast, between Bowman and South Main streets.

Mast, opposite J. C. Smith's house.

Mast, 400 feet west of Charles Hoitt's house. Mast, near J. P. Brock's. Mast, near the J. N. Prescott house. McGregor, near Johnson block. McGregor, opposite "Reed" house. Milford, southwest corner of South Main street. Milford, southeast corner of Bowman street. Milford, corner of old Bedford road. Milford, corner of Bismark street. Patten, corner of Ferry street. Putnam, corner of Main street. Putnam, corner of Beauport street. Putnam, corner of Dubuque street. Riddle, near Mast street. School, corner of South Main street. School, opposite schoolhouse. School, corner of River street. Shirley, northwest corner of Walker street. Shirley, southwest corner of Ferry street. Sullivan, corner of Main street. Sullivan, corner of Beauport street. Temple, corner of Main street. Walker, corner of River street. Walker, corner of Patten street. Walker, corner of Parker street. Walker, near corner of South Main street. Wavne, near G. Belisle's house. Wayne, near corner of Beauport street. Wayne, near corner of Main street. Wilkins, northwest corner of Highland street. Wilkins, northwest corner of Mast street. Wilkins, opposite Tirrell residence. Winter, corner of South Main street.

#### AMOSKEAG.

Dunbarton road, corner of Front street. Dunbarton road, near L. D. Colby's.

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Goffstown road, four hydrants. Main, at Robinson's slaughter-works. Main, near brick schoolhouse. Main, corner of Goffstown road. Main, opposite the John E. Stearns house. Main, near the Hiram Stearns house. Mill, near paper-mill. Mill, corner of Main street. Varnum, corner of Main street.

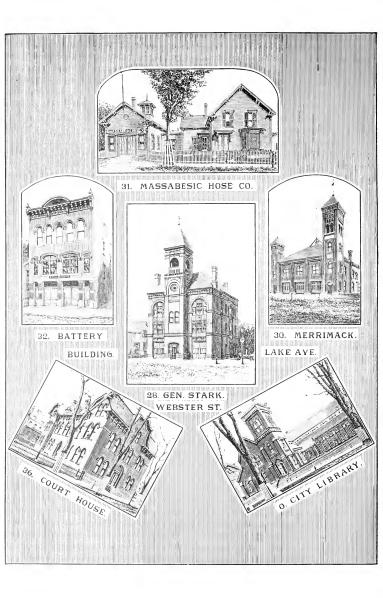
In addition to the above, there are five private hydrants that are available in case of need :

Two at P. C. Cheney Co.'s paper-mill. One at S. C. Forsaith Co.'s machine shop. One at J. Hodge's wood-working establishment. One at the A. H. Lowell iron foundry. Total number, 455. ,

## TRUSTEES OF THE CITY LIBRARY.

OF THE

## REPORT



## REPORT

#### OF THE

## TRUSTEES OF THE CITY LIBRARY.

To the City Councils of the City of Manchester :

The Trustees of the City Library herewith respectfully submit their thirty-eighth annual report of the affairs and condition of the library, and, accompanying the same, the report made to them by the treasurer of the board, containing a statement of the amounts received and the expenditures made by him in behalf of the board from the funds in their possession and under their control; and also the report of the librarian, which gives in detail the statistics of the operation of the library during the year, and the condition of the property under her charge at the close of the year.

From the report of the treasurer it appears that during the year the sum of eighteen hundred and eighty-five dollars and one cent has been expended for the purchase of books, and the sum of one hundred and seventy-one dollars and ninety-three cents for the purchase of periodicals, being a total expenditure for both these purposes of two thousand and fifty-six dollars and ninetyfour cents. Of the amount expended for the purchase of books, the sum of eleven hundred and eighty dollars and forty-six cents was taken from the income of the Dean fund and applied for the increase of that department of the library, and the sum of sixtyseven dollars and fifty-two cents was expended in the purchase of books to replace those worn out and withdrawn from circulation. Exclusive of these two amounts the sum expended for the purchase of miscellaneous books was six hundred and thirty-seven dollars and three cents, leaving a balance in the hands of the treasurer, at the close of the year, of the amounts appropriated by the city councils for the purchase of books, of seven hundred and nine dollars and twenty-three cents.

The balance of the accumulated income of the Dean fund, unexpended at the close of the year, was five thousand three hundred and thirteen dollars and sixty-three cents. In expending the income of this fund the trustees have continued the plan originally adopted, and made purchases of works on scientific and mechanical subjects.

The accumulated income of the Mary E. Elliot fund at the close of the year was six hundred and thirty-six dollars and sixty-three cents. No books have been purchased from the income of this fund, as the trustees have not deemed it advisable to make such purchases until suitable accommodation could be provided for the shelving of the books by themselves in a separate department of the library, and proper arrangements made for their consultation by the members of the medical profession in the city.

The removal of another department of the library to the basement of the library building, which has been accomplished during the year, will probably provide suitable room for this new department. The trustees have invited the co-operation of the members of the medical profession, resident in the city, in the selection of medical works to be placed in this department of the library for reference.

The incidental expenses of the library for the past year have been three thousand five hundred and twenty-five dollars and seventy-three cents, which amount includes the sum of one thousand one hundred and twenty-seven dollars and sixty-six cents expended in the preparation of the new catalogue. The items of these expenditures may be found in detail in the annual report of the city, the bills for the same having been paid by the city treasurer from the sum appropriated for the library upon their approval by the trustees.

#### REPORT OF THE TRUSTEES OF THE CITY LIBRARY. 225

The librarian reports that the library has been open for the delivery of books three hundred and eight days. During this period the number of books delivered for home use was fifty-six thousand two hundred and sixty-five, being an average of nearly one hundred and eighty-three per day. In addition to the number delivered for home use, eight thousand two hundred and seventy books were delivered for use in the reading-room, an average of twenty-seven per day. The total number of books delivered for both these purposes was sixty-four thousand five hundred and thirty-five, an average of two hundred and nine per day. As compared with the preceding year, the circulation for home use shows an increase of four thousand seven hundred and sixty-seven, while the number delivered for use at the library room shows a decrease of one thousand seven hundred and fortyfive. The circulation of books for home use during the past year was the largest recorded since the library was established.

The number of volumes in the library at the date of the last report was thirty-three thousand six hundred and thirty-nine. There have been added during the year by purchase, seven hundred and sixty-two volumes; by donation, four hundred and forty-seven volumes, and eighty-one volumes of periodicals have been bound, making the number of bound volumes in the library, at the end of the year, thirty-two thousand nine hundred and twenty-three, and the total number, including maps and pamphlets, thirty-four thousand nine hundred and twenty-nine.

Seventy-nine different periodicals have been regularly received at the library during the year, — fifty-eight by purchase and twenty-one by donation — and as the various volumes have been completed they have been bound and placed upon the shelves for circulation.

During the year, seventy-one volumes have been withdrawn from circulation, having become too much worn to be fit for further use. Of this number, and of others retired from circulation in previous years, eighty-six volumes have been replaced at a cost of sixty-seven dollars and fifty-two cents.

Accompanying the report of the librarian is a list of books presented to the library during the year, with the names of the  $\frac{15}{15}$ 

persons presenting them, so far as known. The trustees have caused due acknowledgment to be made in behalf of the city to all who have thus manifested their interest in the growth of the library.

The estate of the late Eliza A. Eaton, the residue of which, after payment of debts and legacies, was bequeathed to the city for the benefit of the library, still remains in the hands of the administrator, although nearly three years have elapsed since the death of the testatrix. The trustees are not aware of any reason why the administrator should not at once make a final settlement of his trust in the probate court, and pay over the balance of the estate found remaining in his hands to the party authorized to receive the same.

The vacancy in the board of trustees, caused by the death of Hon. Daniel Clark, in January of last year, was filled by the election of Mr. Walter M. Parker for the unexpired term.

The preparation of the new catalogue of the library for publication has been continued during the year by the compiler, Mr. Charles A. Durfee. Mention was made in our last report that the work upon the catalogue had not progressed so rapidly as the trustees were led to expect, and that to secure the completion of the manuscript at as early a date as possible the services of Mrs. Emma A. H. Piper were obtained as an assistant to Mr. Durfee. Mrs. Piper has been employed upon the catalogue during the whole of the past year, and has rendered material assistance toward the completion of the manuscript. At the end of the year Mrs. Piper was transferred from this work to the preparation of a card catalogue for use at the library rooms, since which time Mr. Durfee has carried on the work alone. It is now expected that the catalogue will be ready to be placed in the hands of the printer within a few months.

The preparation of a card catalogue of the library was commenced at the beginning of the year, and work upon the same will be carried forward as rapidly as practicable. The trustees have deemed it advisable to catalogue the novels and juvenile books first, these being most frequently called for. This list is

now nearly completed, and Mrs. Piper expects it will be ready for use within a short time.

The public documents contained in the library, as well as the newspapers, have during the year been moved to the basement of the library building, proper shelving and cases having been constructed for the same by the committee on lands and buildings. This change has long been needed and will enable the trustees to properly arrange for the growth of the library in its various departments, and particularly the purchases to be made from the Mary E. Elliot fund.

Mrs. M. J. Buncher has discharged the duties of librarian during the year with the same fidelity and conscientious endeavor for the accommodation of the patrons of the library as in the past, and to the satisfaction of the trustees.

The trustees desire to express their acknowledgments to the members of the city councils for their cordial co-operation in matters relating to the affairs of the library, and for the courtesy and consideration with which all suggestions of the trustees for its improvement have been received and carried out.

MARCH 12, 1892.

In board of trustees read and approved, and ordered to be signed by the chairman and clerk of the board and transmitted to the city councils.

#### E. J. KNOWLTON, Mayor.

N. P. HUNT, Clerk.

## TREASURER'S REPORT.

To the Board of Trustees of the City Library :

The treasurer of the board presents the following account of the receipts and expenditures by the board of the funds received on account of the library.

1891.				Dr.
Jan.	г.	To balance of appropriation Appropriation for 1891,	\$483.04	
		for books Mrs. M. J. Buncher, cata-	1,000.00	
		logues sold	25.30	
		Mrs. M. J. Buncher, for books lost, etc	5.21	
		Mrs. M. J. Buncher, bal-		
		ance of fines	72.16	\$1,585.71
Jan.	г.	To balance of income of		
		Dean fund	\$5,957.10	
		income of Dean fund .	153.00	
July	Ι.	income of Dean fund . interest on accumulation	153.00	
		of income	230.99	
				\$6,494.09
Jan.	Ι.	To Mary E. Elliot fund . balance of interest on	\$2,000.00	
		Mary E. Elliot fund .	522.82	

April 1	. To interest on Mary E. Elliot	
	fund \$90.00	
	interest on accumulation	
	of income 23.50	\$2,636.32
		\$10,716.12
1891.		Cr.
Jan. 2.	Paid New England News Co., periodicals	\$11.90
8.	The History Co., books	4.50
19.	Boston Book Co., periodicals	5.00
Feb. 3	J. H. Hickcox, periodicals	5.00
3.	Frank B. Webster, periodicals	1.00
3.	Lend-a-Hand Co., periodicals	2.00
3.	D. C. Heath & Co., books	.43
3.	George H. Polley & Co., periodicals.	6.00
4.	New England News Co., periodicals .	12.94
4.	D. Van Nostrand Co., (Dean fund)	
	books	619.04
18.	W. B. Clarke & Co., books	7.70
24.	Central Law Journal Co., periodicals	5.00
25.	Charles Scribner's Sons, books	6.50
March 3.	Estes & Lauriat, books	9.00
4.	New England News Co., periodicals .	12.36
16 <b>.</b>	George E. Littlefield, books	3.60
April 6.	New England News Co., periodicals .	10.33
15.	Augusta H. Worthen, books	3.50
16.	Little, Brown & Co., books	5.50
22.	Estes & Lauriat, books	9.00
25.	D. Van Nostrand Co., (Dean fund)	
	books	112.75
25.	George H. Polley & Co., (Dean fund)	
	books	43.00
27.	Charles W. Smiley, periodicals	1.00
27.	Temple & Farrington Co., books .	2.00
27.	J. S. Smith, periodicals	2.00
28.	James D. & E. S. Dana, books	·75

## ANNUAL OFFICIAL REPORTS.

	30.	Paid A. A. Grant, books	\$23.00
May	Ι.	Little, Brown & Co., books	3.50
	4.	New England News Co., periodicals .	11.65
	12.	Balch Brothers, books	10.00
	12.	George H. Polley & Co., (Dean fund)	
		books	64.50
June	3.	New England News Co., periodicals .	13.97
	3.	D. Van Nostrand Co., (Dean fund)	
		books	67.99
	3.	W. B. Clarke & Co, books	5.30
	3.	W. B. Clarke & Co., (replaced) books	4.06
	11.	Estes & Lauriat, books	9.00
	I2.	W. B. Clarke & Co., books	277.76
	13.	Lawyers' Co-operative Publishing Co.,	
		books	5.00
	13.	George E. Littlefield, books	3.15
	18.	W. B. Clarke & Co., books	31.82
	22.	Little, Brown & Co., books	12.00
	27.	Little, Brown & Co., books	3.75
	30.	George H. Polley & Co., (Dean fund)	
		books	20.00
July	3.	New England News Co., periodicals .	11.99
	11.	D. Van Nostrand Co., (Dean fund)	
		books	165.12
	14.	D. Appleton & Co., books	13.50
Aug.	4	. New England News Co., periodicals .	11.41
	13.	A. S. Clark, (replaced) books .	17.10
Sept.	4	. New England News Co., periodicals .	12.66
	14	. George C. Gilmore, books	1.00
	22	Boston Society Natural History, peri-	
		odicals	3.00
	23	. Henry P. Rolfe, books	4.00
	23	. D. Van Nostrand Co., (Dean fund)	
		books	88. <b>o6</b>
Oct.	3	. New England News Co., periodicals .	9.52
	6	. Samuel Cooper, books	I.00
	12	. Little, Brown & Co., books	4.25

## REPORT OF THE TRUSTEES OF THE CITY LIBRARY. 231

Oct.	22. P.	aid W. B. Clarke & Co., books	\$3.26
Nov.	3.	W. B. Clarke & Co., books	150.13
	3.	W. B. Clarke & Co., (replaced) books	23.90
	4· `	New England News Co, periodicals .	12.74
	12.	W. B. Clarke & Co., (replaced 22, 46)	
		books	30.56
	21.	Balch Brothers, books	10.00
Dec.	2.	New England News Co., periodicals .	10.46
	1.4.	W. B. Clarke & Co., books	5.03
	31.	balance of appropriation	709.23
		balance of Dean fund	5,313.63
		Mary E. Elliot fund and interest .	2,636.32

\$10,716.12

The expenditures for the incidental expenses of the library, including the amounts paid on account of the preparation of the new catalogue, for the year ending December 31, 1892, which were paid by the city treasurer, upon the approval of the committee on accounts of the board of trustees, the items of which may be found in the annual report of the city, have been as follows:

Services of	librar	ian							\$800.00
Services of	assista	ant to l	ibra	rian					353.85
Gas .									200.06
Insurance									125.00
Binding .	•								1.48.70
Re-binding									203.42
Fuel .				•					482.57
Supplies .					•				57.10
Printing tru	stees'	report							15.00
Newspapers									6.00
Incidentals									6.37
New catalog	gue	•	•	•	•		•	•	1,127.66
Total						•			\$3,525.73

### ANNUAL OFFICIAL REPORTS.

#### RECAPITULATION.

Balance of appropriation, Dec. 31, 1890 \$2,695.69 Appropriation for 1891	
	\$6,495.69
Balance of amount appropriated for catalogue, Dec.	
31, 1890	3,387.98
	\$9,883.67
Paid trustees for purchase of books . \$1,000.00	
Paid incidental expenses and catalogue . 3,525.73	
Balance of appropriation, Dec. 31, 1891 3,097.62	
Balance of appropriation for catalogue,	
Dec. 31, 1891 2,260.32	\$9,883.67

Respectfully submitted.

NATHAN P. HUNT,

Treasurer of the Trustees of the City Library.

DECEMBER 31, 1891.

We have examined the foregoing report, and find the same correctly cast and properly vouched.

> E. J. KNOWLTON, L. B. CLOUGH, Committee on accounts of City Library.

> > DECEMBER 31, 1891.

I certify that I have examined the several items of receipts and expenditures embraced in the foregoing report of the treasurer of the trustees of the city library, and find the same correctly cast and properly vouched.

> JAMES B. STRAW, City Auditor.

# LIBRARIAN'S REPORT.

Gentlemen of the Board of Trustees :

I have the honor to submit to you my fourteenth yearly report, being the thirty-eighth annual report of the City Library.

Whole number of volumes December 31, 1890	33,639					
Accessions during the year:						
By purchase						
Donated						
Periodicals and papers bound 81						
	1,290					
Whole number of volumes at present :						
Маря 16						
Pamphlets 1,990						
Bound volumes						
	34,929					
Number of periodicals and papers regularly received						
by purchase	58					
Number by gift	2 I					
Number of days open to the public for reading and						
distribution of books	308					
Number of volumes delivered for home use	56,265					
Average per day	183					
Largest number delivered in one day, April 4	487					
Largest any one month, March	5,702					
Smallest any one month, June	4,107					
Number of books delivered in the reading-room .	8,270					

Average per day						27
Number of guarantees receive						503
Whole number issued since n			ation	•	·	8,197
Number of cards returned to			•	•	•	68
Number of cards used on dep			•	•	·	9
Postals sent to delinquents			•	·	·	379
Number of books taken from a	circul	ation	, unfi	it for u	ıse	71
Volumes replaced during the				·	·	86
Number of books lost or inju			uid fo	r.	·	2
Number unpaid for			·	•	·	I
Number of books missing at				•	·	I
Number repaired and reboun					•	595
Number repaired and covered	d at t	he li	brary	•	·	6,018
Balance of fines on hand Dee						\$72.16
Amount received from Jan.	ı to	Dec.	31, 1	891		122.18
						eto 1 0 1
Amount paid for express, sta	ntione	aru a	nd			\$194.34
incidental expenses .			nu	\$55.	10	
Paid N. P. Hunt, treasurer		·	·		16	
and in it finny freasurer	·	·	·			\$127.46
Balance of fines on hand	1 Dec	. 31,	1891	•		<b>\$66.</b> 88
Balance of cash on hand Dee	c. 31,	1890	o, for	findir	ng-	
lists and lost and injured b						\$30.51
Amount received from Jan.	t to T	)ec -	, T 1 5	Soli		
			<b>,</b> , , , , , , , , , , , , , , , , , ,			
For 144 finding-lists	·	·	·	\$14		
Two books lost	•	·	·		·95	
By gift from depositor	·	·	·	3	.00	
						19.35
						\$49.86
Paid N. P. Hunt, treasurer	•	•	•		•	30.51
						\$19.35
Balance of fines on hand						66.88
Total balance						\$86.23
- oral balance i	·	·	•	•	·	"oo. 23

The review of the work of the last year brings a good deal of satisfaction in respect to the improvements made in connection with the compiling of the new catalogue.

The reclassifying and rearranging has in many cases brought order out of disorder. In the early years of the library the want of room obliged the librarian to locate books wherever there was available space. Consequently, in time, volumes belonging to the same set became widely separated and gradually brought irregularity and confusion. In the recataloguing of the old part of the library, the early errors became glaring faults, and demanded correction. The work of bringing the stray volumes into consecutive order has given us much additional labor, but with it has come, also, a feeling of great satisfaction, for the convenience of those using the library will be greatly increased, as well as that of the librarian.

Another improvement has been made in providing a suitable place for our public documents and bound newspapers. The basement room has been amply shelved, and the regular set of executive documents, numbering 2,561, exclusive of duplicates, have been removed and arranged by congresses and sessions. The eight hundred newspapers have also been given their new location, in which they are easy of access, and can be consulted with perfect convenience. The remaining documents, 739 in number, bound in cloth, and mostly regular yearly reports from the several departments, have been brought together and arranged in sets. All duplicates will occupy a separate location. The above changes have been made in connection with the regular work of the library, with no interruption or confusion to mar even the usual quiet of the reading-room.

The number of volumes added to the library the past year is 1,290, by purchase, 762. Of this number 354 are added to the Dean donation, and include many valuable publications. The number of gifts has been unusually large. Only those already entered in the accession book appear in the yearly addition. We have received seventy-one volumes of the regular set of executive documents, and the several departments of Congress have shown their usual liberality.

The circulation of the past year shows the same variation in figures. While the number delivered for use in the readingroom falls considerably short of last year, the home circulation has greatly increased, and exceeds that of any previous year. It is difficult to explain these fluctuations. It is worthy of note, however, that although the circulation has been so large, only one French book is unaccounted for at the close of the year. Seventy-one volumes were removed from circulation unfit for use, and eighty-six replaced. The work of repairing and recovering in the library increases yearly; the number sent to the bindery for repairs, about as usual.

The issue of new cards is somewhat larger than the preceding year, and the number returned less.

It is a pleasure to report a year of steady progress, as the past seems to have been, and with the completion of the work, and the use of the new catalogue, we may reasonably anticipate greater results.

> Respectfully submitted. MRS. M. J. BUNCHER, *Librarian*.

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## DONATIONS TO THE CITY LIBRARY.

## 1891.

Secretary of State of New Hampshire.

Annual State Reports. 3 vols. 1890. 8vo.

"Hammond" State Papers. Vol. 18. 8vo.

- New Hampshire Manual of the General Court, with complete official succession, 1680–1891. By H. B. Carter. 12mo.
- First Regiment of New Hampshire Volunteers in the Rebellion. By Rev. Stephen G. Abbott, chaplain. 1890. 8vo.
- Journal of New Hampshire Senate and House (Special Session). 1890.
- IRVING A. WATSON, M. D., Secretary.

Ninth Annual Report of the New Hampshire State Board of Health. 1890. 1 vol. 8vo.

- First Annual Report of the Board of Commissioners of Lunacy. 1890. 1 vol. 8vo.
- Ninth, Tenth, Eleventh, and Twelfth Reports on Registration of Births, Marriages, and Deaths of New Hampshire.

CITY OF MANCHESTER, N. H.

Sixty-eight volumes of Municipal Reports of various cities and towns in the United States. 8vos.

E. W. Towns, City Clerk.

Eight volumes of Municipal Reports of the City of Worcester, Mass. 8vo.

- JAMES H. DODGE, Auditor.
  - Ten volumes of Municipal Reports of Boston, Mass. 8vos.
- HEIRS OF HON. JOHN B. CLARKE.
  - A set of the Official Records of the Union and Confederate Armies during the Rebellion. 37 vols. and 19 duplicates.

HEIRS OF JAMES MITCHELL, ESQ., Manchester.

Forty-three volumes of Harper's Monthly, Vols. 41 to 83 inclusive, and 14 volumes of miscellaneous books.

- JUDGE AND MRS. J. W. FELLOWS.
  - Sixty-six volumes of miscellaneous books (largely medical), and 118 unbound numbers on the same subjects, many of them of very early date.
- DR. W. W. WILKINS, Manchester. Fifty-six bound volumes and 75 unbound numbers, 88 miscellaneous pamphlets, mostly on medical subjects.
- HEIRS OF HON. DANIEL CLARK.
  - Forty-two volumes of miscellaneous books, among which are eight volumes of "The American Review," published in 1845. 12mo.
- Rev. G. L. DEMAREST, Manchester. Six volumes of periodicals for the year 1891, viz. : Popular Science Monthly, North American Review, and the Forum.
- RIGHT REV. BISHOP BRADLEY, Manchester, History of the Catholic Church in the United States from 1843 to 1890. 8vo.
- HON. JAMES F. BRIGGS, Manchester. Six volumes of the Official Records of the Rebellion. 8vo.
- MRS. A. M. SCOTT, Manchester.
  - The Story of the Irish in Boston. Edited by James B. Cullen, Ill. 1889. 8vo.

SERENO D. NICKERSON, R. G. S.

Nineteen volumes of the Proceedings of the Masonic Grand Lodge of Massachusetts.

REPORT OF THE TRUSTEES OF THE CITY LIBRARY. 239

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R. H. TILLEY, Newport, R. I. New-England Notes and Queries. Vol. 1. 1890. 12mo.

- G. C. GILMORE, ESQ., Manchester.
  - Journal of the Senate and House, State of New Hampshire, for the year 1870. 8vo.
  - "Secure a Home in New Hampshire."
  - "Lakes and Summer Resorts of New Hampshire." By N. J. Bachelder. Other pamphlets.
- CITY CLERK, Salem, Mass. Six volumes of Municipal Reports, 1885 to 1890 inclusive. 8vo.
- E. M. BOWMAN, ESQ., city clerk, Nashua, N. H. Five volumes Municipal Reports for the years 1874, '76, '88, '89, '90.
- THOMAS COOKE & SON, N. Y. The Business of Travel A fifty years'
  - The Business of Travel. A fifty years' record of progress. By W. F. Rae. 1891. 12mo.
- COBDEN CLUB, London.
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C. B. SPOFFORD, Esq., Claremont, N. H. Early History of Claremont, and other pamphlets of interest.

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WILLIAM A. PEELE.

Third Biennial Report of Department of Statistics, State of Indiana. 1889–90. 8vo.

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Report of the Board of Education, Los Angeles. Other pamphlets.

- B. P. CILLEY, Esq., Manchester.
  - A Sketch of the Life of Maj. Gen. Joseph Cilley, of Nottingham, N. H. By George William Plummer, of Epping.
- HON. CHARLES H. BARTLETT, Manchester.

Oration delivered before the Grand Army, on the Life and Character of General Gilman Marston, May 30, 1891.

HOWARD J. KIMBALL, ESQ.

Names and Records of the Members of the First New Hampshire Battery during the Rebellion. Pamphlet.

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Interesting Manufacturing Statistics for 1891. Pamphlet-

THOMAS W. LANE, chief engineer.

Annual Report of the Fire Department, Manchester, for the year 1890. Pamphlet. JOHN F. CLOUGH, county commissioner.

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UNKNOWN.

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- Address before the American Bankers' Association. By Edmund J. James, Philadelphia. 1891. Pamphlet.
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- Political and Financial Errors of our Recent Monetary Legislation. By Francis A. Brooks. Pamphlet.
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WILLIAM T. GIBSON, the Editor.

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- Dover, N. H. Pamphlet. Eighth Annual Report of Public Library. 1890. Pamphlet.
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- Lawrence, Mass. Reports of the Free Public Library for the Years 1874, 1875, 1877, and 1890. Bulletins Nos. 5, 6, and 7. Seven pamphlets.
- Lynn, Mass. Twenty-eighth Annual Report of the Trustees and Librarian. December, 1890. Pamphlet.
- Los Angeles, Cal. Annual Report of the Public Library for 1890. Pamphlet.
- Lowell, Mass. Annual Report of the Free City Library for the Year 1884. Pamphlet.
- Milwaukee, Wis. Thirteenth Annual Report. October 1, 1890.
- Malden, Mass. Thirteenth Annual Report of the Public Library. 1890. Pamphlet.
- Manchester, Eng. Thirty-ninth Annual Report on the Working of the Public Free Libraries. 1890. Pamphlet.
- Minneapolis, Minn. First Annual Report of the Free Public Library. December 31, 1890. Bulletin No. 3. February, 1891. Two pamphlets.
- Melrose, Mass. Reports of the Public Library, Nos. 1 to 8 inclusive, and for the year 1890. Nine Pamphlets.
- New York. Astor Library Reports, from 1869, '77, '78, and 1886, to 1890. Nine pamphlets. Annual Report of

#### REPORT OF THE TRUSTEES OF THE CITY LIBRARY. 245

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  July, 1890. Two pamphlets.
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- Omaha, Neb. Fourteenth Annual Report of the Board of Directors of the Public Library, Year ending May, 1891. Pamphlet.
- Providence, R. I. Thirteenth Annual Report of the Public Library, for the year 1890. Pamphlet.
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- Philadelphia, Pa. Seventy-first Annual Report of the Apprentice's Library Company. 1890. Pamphlet. Bulletins of Library Company Nos. 26 and 27. 1891. Two pamphlets.
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- West Bromwich, London. Report of Committee of Handsworth Public Library, for the year ending March, 1891. Pamphlet.
- Wilmington, Del. Thirty-fourth Annual Report of the Wilmington Institute. 1891. Pamphlet.
- Waterbury, Conn. Reports of the Board of Agents of the Bronson Library Fund, for the years 1888–89, 1889–90. Two pamphlets.
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- "American Young Folks," a monthly magazine. G. Waldo Brown, publisher, Manchester, N. H. 4to.
- "American Sentinel." Pacific Press Association, Oakland, Cal. For the year 1891. Folio.
- "City Library." City Library Association, Springfield, Mass., publishers. Vol. 4, 1891.

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- "Canadien." E. R. Dufresne, proprietaire, Manchester, N. H. For 1891. Folio.
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- "Good Health." From the Sanitarium Health and Temperance Co., Battle Creek, Mich. 1891. 4to.
- "High School Echo." Published by the senior class of the Manchester High School. Vol. 2. 1891. 4to.
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#### UNITED STATES GOVERNMENT.

STATE DEPARTMENT.

Consular Reports, Vols. 33 and 34, Nos. 128 to 131 of Vol. 35. 1891.

- Bureau of Statistics. Special Reports Nos. 1 to 5, inclusive, completing volumes 2, 3, and 4.
- International American Conference. Reports of Committees and Discussions thereon. 2 vols. 4to.
- Hon. W. G. Veazey, commissioner. Fourth Annual Report of the Interstate Commerce Commission. December, 1890. 8vo.
- TREASURY DEPARTMENT.
  - Report of the Superintendent of the United States Coast and Geodetic Survey, for 1888 and 1889. 2 vols. 4to. Bulletins Nos. 19 to 23, inclusive.
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From Hon. Alonzo Nute, M. C.

- Geological Surveys. J. W. Powell, Director. 3 vols. 4to. Report on Navigation for the year 1889. 8vo.
- Report of the Commissioners of Education. 1887-88. 8vo.
- Smithsonian Reports for the year 1887. 2 vols. 8vo.
- Report of Commissioner of Pensions. June, 1891. 8vo.
- Report on the Fisheries of Alaska. 1889. 8vo.
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- Atlas Sheets. Geology of the Quicksilver Deposits on the Pacific Slope. By Becker. 4to.
- From Hon. H. W. Blair.
  - United States Geological and Geographical Survey of the Rocky Mountain Region. J. W. Powell, Director.
  - Report of the Geology and Resources of the Black Hills of Dakota. 2 vols. 4to.
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- Circular of Information No. 1, 1891. Higher Education in Indiana.

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  - "Reciprocidad Commercial Entre Mexico Los Estados Unidos." 1890. Svo.

SMITHSONIAN INSTITUTION.

- Miscellaneous Collections. Vol. 34. 8vo.
- Annual reports of the Institution for the years 1888 and 1880. 2 vols. 8vo.
- Annual Report of the National Museum. June 30, 1888. 8vo.
- Experiments in Aerodynamics. By S. P. Langley. No. 801, Smithsonian Series.
- Nos. 671 and 672 Natural History illustrations, viz., The Anatomy of Astrangia Danæ, and six species of North American fresh water fishes. Two numbers. 4to. 1889.

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- Official Records of the Union and Confederate armies. From volume 32 to 37, with parts. 15 vols.
- Annual Report of the Life-Saving Service. Year, June, 1889. 8vo.
- Atlas to accompany the Official Records of the Union and Confederate Armies in the War of the Rebellion.

QUARTERMASTER-GENERAL U. S. A.

- Flags of the Army of the United States during the War of the Rebellion. 1861-1865. 4to.
- Regulations of the Uniforms of the United States Army, Illustrated. 4to.
- Commanders of Army Corps, Divisions, and Brigades of the United States. 4to.
- Twelve volumes of the "Roll of Honor" and Index.
- Four volumes relating to the removal of deceased Union soldiers to national cemeteries in the Southern and Western States. 8vo.

NAVY DEPARTMENT.

United States Board of Geographical Names. Bulletins Nos. 1 and 2. 1891. M. McDonald, commissioner.

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Report on Marriage and Divorce in the United States. 1867-1886. Svo.

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UNITED STATES CONGRESS.

Seventy-one volumes of Public Documents of the Fortyninth, Fiftieth, and Fifty-first Congresses.

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## REPORTS

 $\mathbf{OF}$ 

## COMMITTEES ON CEMETERIES.

#### REPORT

#### OF THE

## TRUSTEES OF THE CEMETERY FUND.

To the City Councils of the City of Manchester :

GENTLEMEN, — The Trustees of the Cemetery Fund have the honor to present herewith their twelfth annual report, embracing the report of their treasurer, which shows the financial operations for the year ending December 31, 1891, and the condition of the fund at the present time.

No work has been attempted the past year beyond the ordinary care of the endowed lots, nor can any improvements of considerable magnitude be accomplished until the means at the command of your trustees increase to such an extent as to warrant the outlay. In this connection we desire to reiterate what has been said in former reports relating to the meager amounts that have, in many instances, been donated for this purpose, as the interest only can be used.

The trustees have expended the means at their command for the care and preservation of lots as well as they were able, and are pleased to say that their efforts have generally received the commendation of parties interested.

Respectfully submitted.

E. J. KNOWLTON, Mayor, P. C. CHENEY, JAMES A. WESTON, Trustees of Cemetery Fund.

January 1, 1892.

## TREASURER'S REPORT.

To the Trustees of the Cemetery Fund :

GENTLEMEN, — I herewith transmit to you the ninth annual report of the funds received and expenses paid to December 31, 1891.

#### Pine Grove Cemetery.

Amount of permanent fund on han	nd, as
per last report	. \$10,045.71
Received during the year from :	
Charles W. Brown	. 162.32
Mrs. S. J. N. S. Woods	. 174.74
Mrs. Stephen E. Sawtelle	. 142.27
Charles Brown	. 162.64
Mrs. Safford W. Prescott	. 100.00
Mr. and Mrs. John Kilgore .	. 166.71
Alfred F. Patten and others .	. 134.36
Benjamin J. and Fred A. Robinso	on . 145.80
Daniel Butterfield and others .	. 134.48
Thomas L. Thorpe	. 171.90
Orrin E. Kimball	. 205.50
Charles C. Cole	. 158.97
Dr. C. M. Dodge	. 160.00
Nellie E. Robinson estate	. 200.00
Josiah Carpenter	. 344.00
Martin V. B. Edgerly	. 149.31

Freeman Higgins				\$128.84	
Alfred D. Stark				133.52	
Alvin Pratt estate				300.00	
Samuel Thompson				97.46	
Selwin B, Wallace				97.46	
George A, Alger				83.72	
A. G. Fairbanks				175.26	
Total permanent	fund	l.			\$13,774.97
Income on hand as p	er las	t repo	ort	\$467.66	
Income received since				529.77	
Total income			•		\$997.43
Expenses paid as follow	s:				
James Bros.				\$32.63	
Sidney A. Blood				16.25	
Pine Grove cemetery	, care	e of l	ots	290.50	
Joseph B. Sawyer				41.30	
Total expense				\$380.68	
Cash in hand				616.75	
					\$997.43

#### Valley Cemetery.

Amount of permanent	fund	on	hand,	as		
per last report .					\$3,450.00	
Received since last repo	ort fr	om :				
Charles F. Durgin es	tate				200.00	
John J. Underhill					100.00	
Adaline Hartshorn					100.00	
Asenath Bugbee .					100.00	
Mrs. E. P. Merrill					50.00	
Samuel N. Bell estate	÷ .	•			500.00	
Eliza Edgerton .		•			100.00	
Total amount of	f peri	man	ent fun	d	· ·	\$4,600.00

#### ANNUAL OFFICIAL REPORTS.

Income as per last report	\$324.76	
Income received since last report .	178.75	
Total income	\$5	503.5 I
Expenses paid as follows:		
Palmer & Garmon	\$20.00	
Valley cemetery, care of lots	.85.15	
Total expense	\$105.15	
Cash on hand	398.36	
	\$5	503.5I

#### Piscataquog Cemetery.

Amount of permanent fund on hand, as	
per last report \$200.00	ر د
Received during the year from :	
Sarah B. Gage 100.00	,
Total amount of permanent fund	\$300.00
Income on hand as per last report . \$11.25	
Income received since last report . 10.83	5
Total income	\$22.08

#### Merrill Cemetery.

Amount of perma	inent	fund	on l	hand, a	as pei	r last	re-	
port				•	•	·	•	\$200.00
Income received :	since	last r	eport			•	•	\$10.00
Expenses paid as	follo	ws:						
G. B. Tilton				•		\$6	.00	
Cash on hand			•	•	•	4	.00	
					,			\$10.00

Most respectfully submitted.

SYLVANUS B. PUTNAM, Treasurer of Trustees of Cemetery Fund.

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This is to certify that I have examined the books of accounts of Sylvanus B. Putnam, treasurer of the trustees of the cemetery fund, embracing the receipts and expenditures for the year ending December 31, 1891, and that I find the same correct and properly vouched. I have also examined the securities in which said fund is invested, and find as follows:

#### Pine Grove Cemetery.

#### Valley Cemetery.

Bonds of the city of Manchester, N. H., 5 per cent, 1913 . . . . \$4,600.00

Total amount of permanent fund . . . \$4,600.00

#### Piscataquog Cemetery.

Bonds of the city of	Mane	hester	, N. I	Н.,			
5 per cent, 1913					\$300	.00	
Total amount of	perm	anent	fund				\$300.00

#### Merrill Cemetery.

#### REPORT

#### OF THE

## TRUSTEES OF CEMETERIES.

#### Pine Grove Cemetery.

The sub-trustees of the Pine Grove Cemetery have the honor to submit the following report :

During the past year substantial progress has been made in the development and ornamentation of this cemetery. Thirteen hundred yards of concrete drive have been laid; 400 feet of 3-inch and 175 feet of 2-inch pipe put down, and 12 hydrants and 3 catch-basins set.

No new avenues have been laid out the present year. Those previously constructed have received careful attention, and 1,020 loads of gravel used upon them. Loam to an amount of 247 loads has been used, and 250 loads of muck taken from the Straw lot ready for use the coming season ; 403 loads of sand have also been removed.

Of the 30 lots on Hillside lawn unsold at the commencement of the year, 23 have been sold, leaving but 7 undisposed of, and for a portion of these, negotiations are now pending. The exhaustion of this source of supply of perpetual care lots must soon create a demand for those on Riverside lawn, which will be ready for sale early in the coming season.

The demand for lots of this character will necessitate the early setting apart of other parts of the cemetery for a like purpose, and their development; the effect of such lots upon the general appearance of the grounds is so gratifying that their sale ought to be encouraged in all legitimate ways.

The Hill and Barton mausoleum, erected on Chapel lawn during the year, is one of the finest structures of this character to be found in this section of the country, and must always remain a beautiful ornament to the cemetery and a lasting tribute to the affection and generosity of those whose name it bears.

The year has also witnessed the erection of thirty-one monuments, many of which are remarkable for their beauty and elaboration of design, and all of them highly appropriate for their intended use.

The Swedish lot has been extended southerly and westerly, so as to meet the demand for family lots which now exists among this class of our people. Four granite curbings have also been put in, adding greatly to the beauty of the lots so inclosed.

An attempt was made to purchase the Benjamin Mitchell lot, so called, as authorized by the city councils, and the offer of the owners was accepted, but the interference of other parties during the negotiations prevented the purchase.

The superintendent, Byron A. Stearns, has proved a very acceptable incumbent of that position, and deserves great credit for his interest in and devotion to the duties which have devolved upon him.

The sub-trustees append the following statistical tables to their report with the hope that they may be satisfactory to the lot owners, and give desirable information in regard to the duties performed by the superintendent.

#### SUPERINTENDENT'S ACCOUNT.

Received for deposit on lots						\$777.00
for interments .						447.50
for water rents .						443.75
	•	•	•		•	583.55
for removals .		•	•		•	68.50
for removing sand	•	•		•		37.00

#### ANNUAL OFFICIAL REPORTS.

Received for trimming	graves					\$16.00
for clay sold	•	•		•	•	3.00
						\$2,376.30

#### MISCELLANEOUS.

Lots sold on Hillside la	wn							23
Lots unsold on Hillside	lawn							7
Restricted lots sold								32
Restricted lots unsold								39
Ordinary lots sold .		:						28
Ordinary lots unsold								30
Total lots sold during th	ne ye	ar						83
Number of interments								235
Number of removals								17
Clay used on avenue bo	rders	(loa	ds)					9
Water rents due and unj	paid						\$13	5.50
Labor on lots .							\$12	8.00
			Јон	мL.	SANI	BORN.		

George W. Bacon. John P. Young. George M. Bean. Charles H. Bartlett.

#### Valley Cemetery.

The sub-trustees of the cemetery known as "the Valley" respectfully submit the following report for the year 1892:

During the year the usual amount of labor has been expended in keeping the cemetery in proper condition; and in addition quite a number of improvements have been made. A new arbor or summer house has been constructed a short distance below the one previously built, and a substantial bridge placed across the brook at a convenient distance from the same. The valley on

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both sides of the brook has been graded and grassed over as far as the brook has been paved, thus adding greatly to the beauty of the cemetery. The paving of the bottom and edges of the brook has been extended about two hundred feet, and it is expected that the remaining portion can be completed during the coming year.

Since the new tomb was constructed, considerable trouble has been experienced in properly placing the bodies deposited therein, on account of the lack of racks for their reception. During the year the trustees have caused the tomb to be furnished with racks sufficient to provide for the reception of seventy-five bodies, each separate from any other, a great improvement upon the custom followed in past years of placing them on the floor in piles. It is the intention of the trustees to have the roof of the tomb, which has never been water-tight since it was built, thoroughly repaired during the next year.

During the year there have been seventy-nine interments in the cemetery, and seventeen removals of bodies, while forty-six bodies have been placed in the tomb.

Materials used in improvements have been as follows:

Turf .		•				•			3,240 feet.
Loam .					•		•		243 loads.
Stone .							•	•	30 "
Gravel .			•					•	141 "
Sand .									225 "
Manure	•					•			2 cords.
Ashes .		•					•		3 tons.
Phosphate	•	•	•	•	•				½ ton.

Monuments have been erected on the following lots: E. T. Baldwin, G. W. Morrison, Mrs. W. F. Bradbury, — McCoy, C. H. Perkins, Samuel Mitchell, and Taylor G. Sweatt.

#### RECEIPTS.

Appropriation	•			•		\$2,800.00
Tomb fees					\$224.00	
Graves and ren	nov	als			242.50	

Care and water			•	\$775.00	
Grass and wood sold .	•	•	·	20.50	
Labor and materials .	·	•	·	238.00	6 x . # 0 0 . 0 0
					\$1,500.00
Total	•	•	•		\$4,300.00
EXI	PENDI	TURES			
Paid C. H. G. Foss, superin	tende	ent		\$728.00	
C. H. Griffin, labor				339.29	
Luther Leavitt, labor				303.50	
James Hannan, labor				248.91	
Joseph Simoneau, labo	r.			223.26	
C. Henry Gilman, labo	or.			8.26	
George Van Brocklin,	labor			19.88	
B. F. Bascomb, team,	grave	l, etc.		239.25	
Temple & Farrington (	Co., t	ook,	etc.	4.10	
District No. 2, sand				4.00	
F. G. Riddle, printing	•			3.85	
C. H. G. Foss, shrubs				15.70	
Timothy Carr, loam				4.00	
J. B. Varick Co., hard	ware a	and pl	105 <b>-</b>		
phate				51.21	
Peter Woodman, loam	and	turf		77.90	
H. H. Huntress, plant	s .			3.00	
J. Francis, rubber boo	ts.			3.00	
J. Francis, plants and	labor			49.14	
T. W. Lamprey, shrub	s.			4.00	
Killey & Wadleigh, ha	ardwa	re .		8.75	
Michael Murray, manu	ıre			10.00	
J. A. Auger, ashes .	•			1.67	
H. McEvoy, loam .				38.40	
J. Hodge, lumber .				2.15	
T. A. Lane, pipe .				42.51	
Pike & Heald, pipe an	id hos	se.		21.18	
Ray Brook Garden Co	o., pla	ints	•	13.48	
B. W. Hill, cloth .	•	•	•	4.25	

Paid Manchester Hardware Co., hardware	\$3.09	
J. J. Abbott, paint	2.78	
Head & Dowst, bridge and summer		
house	287.78	
N. J. Whalen, repairing straps .	.50	
Stone & Wellington, shrubs	.4.00	
B. A. Stearns	6.00	
W. Smith, stones	1.50	
L. M. Aldrich	.20	
J. R. Vance & Co., stove-pipe .	1.80	
Welcome Jencks, loam	14.50	
		\$2,794.79
S. B. Putnam, treasurer		1,500.00
Balance		5.21
Total		\$4,300.00
Appropriation for repair of city tomb		\$500.00
Transfer		20.00
		\$520.00
Paid Manchester Heating and Lighting Co.		\$520.00

The superintendent, Mr. Charles H. G. Foss, has continued to discharge the duties of his position with the same fidelity as in the past, and to the entire satisfaction of the sub-trustees.

> JOHN J. HOLLAND, LEVI K. SNOW, BUSHROD W. HILL, N. P. HUNT, J. M. KENDALL, Sub-Trustees of the Valley Cemetery.

## TREASURER'S REPORT.

#### To the Trustees of Cemcteries :

GENTLEMEN, — I herewith present to you my annual report of the money received by me during the year ending December 31, 1891:

#### Pine Grove Cemetery.

Number of deeds delivered during the year 1891, seventy-six.

To cash received for the same .	•	\$2,952.30	
interest		32.17	
cash received from superintendent	•	1,599.30	
			\$4,5 <sup>8</sup> 3.77
By superintendent's receipts		\$1,599.30	
treasurer's receipts	•	2,984.47	
			\$4,583.77

#### Valley Cemetery.

All money received by me has been turned into the city treasury, for which I have the proper vouchers from the city clerk.

I have in my possession forty-one deeds ready for delivery, the most of which will be taken in a few months; there are a few, however, which have been standing for a long time with no prospect of their being delivered. They have been repeatedly notified, but show no disposition to complete their contract. In one case during the past year, one lot that was contracted for eight years ago by J. O. Webster, was declared forfeited by the subtrustees, the body that was buried thereon removed to the public grounds, and the lot sold to another party. A few more of such extreme measures will have to be resorted to in order to clear up and dispose of long-standing contracts.

> Most respectfully submitted. SYLVANUS B. PUTNAM, Treasurer of Trustees of Cemeteries.

MANCHESTER, N. H., February 6, 1892.

I hereby certify that I have examined the accounts of Sylvanus B. Putnam, treasurer of the trustees of cemeteries, and find the same correct and properly vouched for.

> JAMES B. STRAW, City Auditor.

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# OVERSEERS OF THE POOR.

OF THE

## REPORT

## REPORT

#### OF THE

## OVERSEERS OF THE POOR.

To the Mayor, Aldermen, and Common Council of the City of Manchester :

In compliance with the ordinances of said city, the Overseers of the Poor herewith present their annual report for the year 1891.

The whole number of families that have received more or less assistance off the farm during the year has been sixty, consisting of two hundred and twenty-four persons, all of whom have a settlement in this city. Three of this number died during the year.

The whole number of paupers supported at the city farm during the year has been three.

The whole number of persons supported at the State Industrial School during the year has been two, at a cost of one dollar and fifty cents per week for each person.

The whole number of persons supported at the county farm during the year has been one, at a cost of two dollars per week.

The overseers of the poor have given and allowed four hundred and fifty orders to paupers off the farm during the year, consisting chiefly of groceries, fuel, medicine, board, clothing, and emergencies. The amount allowed to the several wards is as follows:

Ward 1							\$62	31		
Ward 2							106	.40		
Ward 3							171	20		
Ward 4							220	. 30		
Ward 5							1,598	.86		
Ward 6							398	.85		
Ward 8							594	.06		
									\$3,151.98	
Bills allowe	ed for	emer	gency	cases	·	·		•	1,779.29	
Total	allowe	d.							\$4,931.29	
Cash receiv	ved fro	om co	unty		·		·	٠	1,634.31	
Total	cost	•		•	•			•	\$3,296.96	
All	of wh	ich is	respe	ctfully	' sub	mitte	d.			
		V	Villia	м Н.	MA	XWEL	l, Wa	rd 1	, Clerk.	
		1	Гнома	s L.	Quin	IBY, Y	Ward 2	2.		
		H	Benjan	IIN F	. GA	RLAN	D, Wa	rd	3.	
							Ward .		0	
		1	PATRIC	к Соя	STEL	lo, W	ard 5.			
		0	HARL	es Fr	ANCI	s, Wa	ard 6.			
WILLIAM MARSHALL, Ward 7.										
		V	VILLIA	M WI	EBER	, Wai	d 8.			
A true c	opy.									
				WILI	JAM	IH.	MAX	WE	ELL,	

Clerk of the Board.

To the Mayor, Aldermen, and Common Council of the City of Manchester :

In compliance with chapter \$1, sections 1 and 2, Laws, State of New Hampshire, passed at the June session, 1889, the Overseers of the Poor herewith present their annual report, under the head of "Aid to Dependent Soldiers and their Families."

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The whole number of families of indigent soldiers who have received more or less aid during the year has been thirteen, consisting of thirty-four persons, at a cost of nine hundred and seven dollars and ninety cents.

All of which is respectfully submitted.

WILLIAM H. MAXWELL, Ward I, *Clork*. THOMAS L. QUIMBY, Ward 2. BENJAMIN F. GARLAND, Ward 3. GEORGE S. HOLMES, Ward 4. PATRICK COSTELLO, Ward 5. CHARLES FRANCIS, Ward 6. WILLIAM MARSHALL, Ward 7. WILLIAM WEEER, Ward 8.

A true copy.

WILLIAM H. MAXWELL, Clerk of the Board.

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# JOINT STANDING COMMITTEE ON CITY FARM.

### REPORT

#### OF THE

# JOINT STANDING COMMITTEE ON CITY FARM.

To his Honor the Mayor and City Councils of the City of Manchester:

GENTLEMEN,— The Joint Standing Committee on City Farm hereby submit to you their annual report for the year ending December 31, 1891. Having fairly and impartially appraised all personal property at the farm, we find the summary as follows:

Live stock							\$1,867.00
Wagons, carts, and te	am	furnis	hings				1,029.45
Farming implements							1,189.15
Hay, grain, and prod	uce						3,411.75
Household furniture		•					2,328.96
Provisions and fuel							1,461.26
Statement of accou	ints	for th	e year	18	91:		\$11,287.57
		D	)R.				
To appropriation					\$6,500	.00	
overdraft .					I 2	.05	
							\$6,512.05

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By cash receipts of the farm	n	•		\$1,774.46	
increase in stock .	•	•	•	2,490.56	
permanent improvemen	ts			565.50	
bills receivable .				32.08	
Balance .	•			1,649.45	
					\$6,512.05

Cash paid city treasurer, \$1,774.46. Total number of weeks' board, 2,213.

Average cost of board per week for each person,  $74\frac{1}{2}$  cents.

Your committee thought it advisable to abolish the old system of charging one thousand dollars interest against the farm as heretofore, as there is no other department in the city that pays interest on the money invested; therefore the rate of board is reduced forty-five cents and two mills per week, whereas, if the one thousand dollars interest had been charged, the rate of board per week for each person would have been one dollar and nineteen cents and seven mills.

A gain in stock of \$2,490.56 is shown since our appraisal one year ago, which is vouched for by the immense amount of produce raised on the farm the past season, which will be more than sufficient to feed the stock and fatten the pork the coming year.

It has been customary for the superintendent, the past two years, to raise produce enough on the farm to feed the stock and make their own pork without buying meal or swill, which was not the case a few years ago, as the reports show that from two to three hundred dollars per year was paid for city swill.

Following is a list of crops harvested the past season, not counting what was consumed through the summer and fall.

Corn .		•				946 bu	shels.
Potatoes						683	" "
Mangold bee	ets					826	" "
Blood beets						1 30	"
Sugar beets						80	" "
Carrots .						265	"
Turnips .	•	•			•	330	"

Parsnips	5.				20 bushels.
Onions					65 ''
Beans					15 ''
Oats					175 ''
Squashe	s.				8,000 pounds.
Cabbag	е				9,300 "
Pumpki	ns				2,000 "
Pork					5,226 "
Beef					665 ''
Apples					75 barrels.
Cider					7 ''
Celery					500 bunches.
Hay					100 tons.

One of the most extensive improvements on the farm was the clearing of stone and the plowing up of eight acres of the old pasture land ready for cultivation next season; this makes about fifteen acres of pasture land plowed up the past two years. There has been a new hen-house built, which gives room to keep one hundred fowls in place of sixty as heretofore; also numerous repairs in and about the buildings.

By way of improvements our anticipations have not been realized. With the view of utilizing the labor of the prisoners, we hoped to have furnished crushed stone for the street department, to have secured much of the work done in Derryfield park, and to have secured the contract for the collection and disposal of garbage, for which a bid, based on a faithful service, and 30 per cent less than the previous year, was presented. An effort was also made to place highway district No. 8 in charge of Superintendent Streeter; this was defeated in your joint councils, contrary, we believe, to the best interests of the city and district.

We condemn the practice of the street department in hiring private teams, when there is as good a one belonging to the city, at the farm, spoiling for work. A little protection to home industry in this direction would be for the interest of the city.

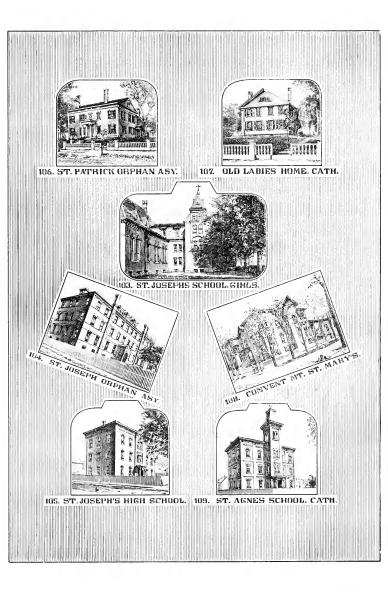
Early in the year your committee were impressed with the necessity of relieving the hampered condition of the prison quarters, and the urgent necessity of the erection of a suitable prison

building, where the inmates would have proper sanitary conditions, and where the foul-mouthed, hardened criminal could, at least in a measure, be isolated from the younger men just started Such a building is called for in the interest of morals. in crime. and that the institution be in fact as in name, correctional. Later on, we were apprised of the fact that we were exceeding our duties, that these matters belonged to the committee on the house of correction. Feeling somewhat relieved, we gladly welcomed them to an investigation of the situation, they agreeing with us in our conclusions. The joint committee considered various plans of overcoming the difficulty by remodeling the buildings, but finally decided to ask for an appropriation for a new building the ensuing year. Whether or not this much needed building will be erected rests with the committee on the house of correction and the city councils.

The number of paupers cared for is happily small, still it is necessary that we should be in a position to care for such as there may be of this unfortunate class not provided for elsewhere.

We append to this report an interesting essay on "The Defective Classes," by A. O. Wright, secretary of the State Board of Charities and Reform of Wisconsin, which contains much matter for serious consideration.

The annual inspection, November 12, was an occasion of more than usual interest. His Honor the Mayor very thoughtfully extended an invitation to their Honors Mayors Clapp of Concord and Beasom of Nashua to accept the hospitalities of our city on the occasion. The latter was unavoidably detained at home, but the pleasure of the occasion was much enhanced by the presence of the genial mayor of the capital city. After a thorough inspection of the premises, the immense stores of garnered produce, the finely conditioned draught horses, sleek kine, pork, present and prospective, were pronounced good. Even the cornsheller elicited commendation from the alderman from ward 7. Feeling satisfied that the interests of the city were being cared for at the farm, the invitation of Mrs. Streeter to one of her excellent suppers was all the more acceptable. That it was enjoyed goes without saving. After cigars were lighted, the company



followed the bent of their inclinations, congregating in coteries throughout the house. An hour or two was profitably as well as pleasantly spent. Mayor Clapp was the center of a very interesting group. He not only possesses a fund of valuable information, but has the happy faculty of imparting the same, and we have no doubt that much profit was derived from the interchange of views relating chiefly to municipal affairs.

Our duties have been made comparatively easy, from the fact that in the superintendent and matron, Mr. and Mrs. Streeter, the city has officers in every way qualified for their arduous and ofttimes unpleasant duties.

> WALTER M. FULTON, BVRON WORTHEN, OLIVER J. BUTMAN, ALBERT J. PEASLEE, D. J. AHERN, Joint Standing Committee on City Farm.

#### THE DEFECTIVE CLASSES.

BY A. O. WRIGHT, EX-SECRETARY OF THE STATE BOARD OF CHARITIES AND REFORM OF WISCONSIN.

The defective classes form a series of small but very troublesome tumors upon the body politic. For various reasons, ranging all the way from the imperative need of protection to society up to those humane influences for which our century is distinguished, these classes have fallen under the more or less effective guardianship of government in all civilized countries. Private effort is also doing much to palliate or to prevent the evils which the defective classes bring on themselves, and upon society at large.

I propose the following classification of the defective classes, depending upon the three divisions of the mental faculties which are generally accepted by psychologists: Insanity and idiocy are different forms of defective intellect. Crime and vice are caused by defect of the emotions or passions; and pauperism is caused by defect of the will. Blindness and deaf-mutism are defects of the senses, requiring special forms of education, but are not defects of the mind any more than the loss of an arm or a leg. Blind or deaf people, properly educated, are not a burden or a danger to society as are criminals, insane persons, or paupers. Their defects are physical not mental, and they should not be classed with people who have these mental defects. The above classification has the advantage of starting from the center instead of from the circumference. "The mind is the measure of the man," and it is the abnormal and defective mind which produces the mischief. Anything which fosters abnormal and ill-regulated thoughts or passions, or which weakens the control of the reason, conscience, and will over the mind, tends to produce insanity, crime, and pauperism. Everything which aids selfcontrol reduces the tendency to these abnormalities.

The distribution of the defective classes by nationality, education, wealth, age, sex, occupation, and the like, is interesting from a scientific point of view, and important from a practical standpoint. A study of the distribution of insanity, crime, and pauperism may reveal the conditions which create or foster them. And, as society has more or less control over social conditions, it may be possible to heal some of these ulcers on the body politic if we know where they are and what irritant produced them. But please notice I say *may*, not *shall*. The small success of all effort in the past toward curing these evils ought to make social reformers modest.

First, the question of sex. Men and women are about equally afflicted with insanity. Either the causes are the same in men and women which produce insanity, or they are equivalent. Heredity, worry, overwork, under-feeding, sickness, and the weaknesses of old age affect women and men equally; and the perils of childbirth and of loneliness for solitary farmers' wives

are about equal to the dangers from accident and the vices to which men are exposed. But crime and pauperism are liabilities of men much more than of women. There are generally about forty times as many men as women in our prisons. The disproportion is not quite so great in some states, and is still less in European countries. In Europe there is no sentimental pity for a woman on account of her sex. But even in Europe the proportion of men to women is perhaps ten to one. Women do not commit crime as readily as men do, - it may be from principle. it may be from cowardice, it may be from lack of temptation. And women do not become paupers as readily as men. In getting outdoor relief, it is true, women are a little ahead of men : but that is because it is easier for a woman to get poor relief than for a man. And, in fact, where outdoor relief is laxly administered, though it is the women who usually apply for it, there are often lazy men behind them, sending them for it, or else drinking up all their earnings in the comfortable consciousness that the public will support their families. So that, even in outdoor relief, it is probable that the men have a good share of the pauperism. And in the poorhouses there are about twice as many men as women.

Second, as to age. About an equal number of each sex are born idiots, and remain so all their lives, so that the question of age in idiocy need not be taken into account, except that idiots are not long-lived. But insanity is a defect of mature years. Going through an insane asylum, you are struck with the general age of the patients in contrast with the youth of the attendants. This, of course, is partly caused by the fact that insanity is not very curable. Only about one fourth of the insane recover. A few die, and the rest end their days as chronic insane. But it is also caused by the fact that most insane are middle-aged or elderly before they become insane.

Crime is rarely committed by little children, and, when committed, is frequently excused by the law or by the judges and jury. But every visitor to a jail or state's prison must notice the comparative youthfulness of the prisoners. The average age of the convicts in state prison is twenty-seven. Or, to put it in another way, the majority of convicts in state prison are under twenty-five. The difference between twenty-seven and twentyfive is accounted for by the difference between an average and a majority. The direct opposite of this is the case with pauperism. The majority of paupers are over fifty years old. Criminals are mostly young men. Paupers are mostly old men and old women. Youth is the age of passion, and perverted passions lead to crime. The author of "The Jukes Family" says that among the descendants of Margaret, the "mother of criminals," it is very noticeable that in youth they were prostitutes and criminals and in age beggars and paupers. The same perverted instincts which led them to prey upon the community took the direction of crime in the time of strength and of pauperism in the time of weakness.

The question of education is often stated, as if education favored insanity and opposed crime and pauperism. As a fact, I do not think that education has so great an influence either way as many seem to think. We were told half a century ago that it was cheaper to build schoolhouses than jails and poorhouses. We have dotted the country over with schoolhouses, and we find that jails and poorhouses are just as necessary as ever. But some one may say that this is because there is no compulsory education and because we have an unusual number of ignorant foreigners coming to our shores. But this is sufficiently answered by looking at Germany with its homogeneous population and compulsory education, and compulsory religious as well as secular education at that. In Germany, crime and pauperism and insanity are increasing, as they are with us. Criminals, paupers. and insane all average a little below the rest of the community in education. Their smaller knowledge and less natural ability make them break down into insanity more easily, and also more easily drift into crime or pauperism. The best statistics of criminals have been kept for over half a century by the Eastern Pennsylvania Penitentiary. The result of these statistics seems to show that idleness rather than ignorance is the mother of crime. An investigation, which I made a few years ago by personal inquiries from poorhouse to poorhouse in Wisconsin, satisfied me that about one third of the paupers are made so by idleness, one third by liquor, and one third by all other causes com bined. In my judgment, the idleness which makes truants from school, and therefore poor scholars, leads to crime or pauperism in many cases, and in these cases it is not ignorance which is the cause of crime, but idleness which is the cause of both ignorance and crime.

The question of social standing is not of as great importance in this democratic country as in Europe. Paupers, of course, do not come from the wealthy or the middle classes. Many of the laboring classes do drop into pauperism through misfortune or vice. But many of the paupers are not even of the laboring class, but come from the outcasts of society. The same is the case with the criminals. They do not come chiefly from the wealthy or middle classes. Some of them come from the laboring classes. But they are very largely from the outcasts of society. The insane are found in all classes in considerable numbers. But the laboring class furnishes more than its share of insane, and the outcasts an immense proportion to their number. Criminals and paupers and tramps frequently become insane, - I should say ten times as many as from the same number of average humanity.

The advantages and disadvantages of city life have often been talked of. Many people suppose that the excitement and strain of city life conduce to insanity. Others say that the loneliness of country life has the same effect. An English physician has taken the pains to tabulate the statistics of insanity for the city of London for forty years, and for several purely agricultural counties in the south of England with about the same population for the same period, and finds that there is no difference between city and country in the amount of insanity. But for crime all statistics show clearly that crime is concentrated in the cities, which are the refuge of the criminal classes and the nurseries of young criminals in the neglected street children. Pauperism is greater in the city than in the country, though this may arise from the corrupt municipal governments encouraging pauperism to win votes.

The effects of climate have not been much considered; but I

believe it will be found that warm climates do not have so great a proportion of insanity as cold climates. It is certain that in Europe Greece has a much less proportion of insanity than Norway. In this country there is less insanity in the South than in the North in proportion to population. A part of this is due to the negroes in the South having a small proportion of insanity, and the foreigners in the North having a large proportion. But it is possible that climate has also something to do with it. I cannot discover that climate has anything to do with crime. Pauperism is increased in cold climates by the greater difficulty of getting a bare subsistence.

Much has been said about the rapid increase of the defective classes, especially of the insane. Statistics show this both in Europe and America. But statistics of the mere numbers of insane at any given time are very deceptive. The greater humanity with which the insane are treated now than a hundred or even twenty-five years ago, has preserved their lives, and thereby caused an accumulation of the insane. This greatly increases the numbers who are alive at any given time, but does not show that any more persons become insane in any one year than ever. Careful statistics have been kept in England with reference to the latter point, and it is found that there was an increase in the proportion of commitments to the total population up to a recent time, but that it now seems to have reached its highest point and become stationary. It is believed that the increase in the commitments was caused partly by the discovery and placing in institutions of cases that would otherwise have been hidden at home and partly by calling things insanity which formerly would have been called by some other name, such as senile dementia, epilepsy, eccentricity, or primary dementia. I believe that these statistics show that insanity is not now increasing faster in England than the population.

In the United States insanity is obviously increasing very rapidly. In ten years in Wisconsin their insane under public care have increased from about 1,700 to over 3,000. This is partly due to the causes discussed above; but it is also due to another fact, to which I think I was the first to call attention — that the

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ratio of insanity to the population is much greater in the older states than in the newer ones, and in the older counties of Wisconsin than in the newer ones. The rapid increase of crime in this country is doubtless an incident of the rapid growth of city population. But probably the more careful administration of the laws has increased the number of prisoners, while the system of reformatories for boys and girls, and all the good influences of Christian civilization, have been resisting the increase of crime. It is noteworthy that a better prison system in England than we have in this country, joined to the private reformatory work of all kinds, has brought the increase of crime to a stop, and that there is absolutely less crime in Great Britain now than there was fifteen years ago, notwithstanding the increase of population.

The same causes have made an increase of pauperism in this country, — the growth of cities, and the foolish or corrupt use of public money in aiding undeserving applicants for poor relief.

To a considerable extent these three defective classes link into one another. It is hard to say whether a tramp is a pauper or a criminal. Many crimimals may be called insane - and some are so adjudged when they have money or friends to help them, - and some insane have criminal tendencies. A very large per cent of criminals become insane in prison or afterward. A considerable number of paupers become insane. The children of the one class pass easily into the other class. Street children, who are the children of misfortune, are easily drawn into crime. Here and there in our country, and in every other one, are knots of defectives all tangled up together, --- families closely related furnishing a whole population of criminals, paupers, idiots, and lunatics among themselves. Such were the family in Ulster County, New York, called by Dr. Dugdale "The Jukes Family," to disguise their real name. Such is the "Tribe of Ishmael" recently described by Mr. McCulloch in Indianapolis. The interchangeability of these defects is very clearly shown in these cases.

What are we now doing with the defective classes? With some exceptions all civilized nations are pursuing the following lines of policy. Pauperism is *relieved* and *discouraged*. The treatment fluctuates between the extremes of lavish relief and stringent discouragement, but is generally a compromise between these two extremes. Insanity is *cured*, if possible; if not, it is usually *protected* in institutions of some sort. Crime is *punished* in prisons, and *prevented* in reformatories.

These methods express the average wisdom of the present generation, which is far in advance of what has previously been done for the defective classes. It does not follow that this is the best that can possibly be done for them. In fact, here and there experiments are in progress which, I believe, represent not the average wisdom, but the best wisdom of our times. Here and there private societies have taken up the work of eradicating pauperism, not by relief, which often encourages it, nor by merely repressive measures, but by carrying out the motto of the charity organization societies, "Not alms, but a friend." And Rev. I. H. Crooker, of Madison, has recently shown that this is not a new discovery, but is a century old, when it was more fully applied to *public* poor relief than it has since been. The methods of reforming criminals and thus reducing crime have been discovered and applied in the British Isles, while in America they have been only so applied in a few places. The methods of treating the insane have been growing milder and more humane in Europe and America within a few years. In my judgment, the state hospital of Alabama, and the county asylums for the chronic insane of Wisconsin, mark the highest point yet reached in the direction of liberty for the insane. At the rate of progress which we are now making, it will take a generation for the average American treatment of the defective classes to reach the standard set for pauperism by the charity organization societies, for crime by Elmira and Concord, and for insanity by the Wisconsin system of care for the chronic insane.

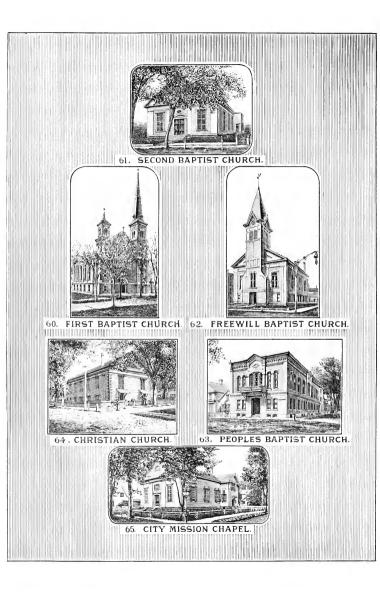
Our measures of treatment of the defective classes sometimes increase the very evils we meant to cure. Poor relief, instead of relieving pauperism, very often increases it; instane asylums seem to increase the number of instane; prisons, of criminals. This, however, is not a necessity of the case, but only an incidental evil which needs to be guarded against.

We must allow that our humane methods of treatment, in addition to the good effects which they have, do also tend to increase the numbers of the defective classes by prolonging their lives and making their lot a more desirable one. I have already mentioned the accumulation of insanity by the mere prolongation of life in the insane in civilized countries. It is still a question whether this does not account for the greater number of insane in civilized over savage countries. Where the insane are killed as witches, or executed as criminals, or killed by private vengeance or malice, or allowed to die by neglect, and where only the robust can survive the hardships and perils of life, in any case it is not wonderful that the insane existing at any given time are few. So also with pauperism. If no poor relief is given, there will be no paupers; for some will starve and others will steal. But crime seems to decrease with milder punishments. whether these are the causes of the decrease or only a result of the general civilization of society, which is reducing both crime and punishment alike. It is also true that we discover and do something for a large number of cases now who would not be known as defectives under a less perfect administration of government. This is one of the causes of the apparent increase of insanity, as I have already said. Crime is more completely looked after, and things are called crime now which would not have been called so a few years ago.

But, on the whole, I believe that the measures we are taking to treat the defective classes are really reducing their numbers. For one thing, we keep them shut up in institutions, where they are not allowed to propagate their kind or to practice or teach their vices. A notable exception to this is the county jail system, where prisoners are herded together in idleness to constitute schools of crime and vice. Our methods do also cure many of the defectives. About one fourth of the insane are permanently cured. From half to two thirds of the criminals are never convicted a second time. Many paupers and tramps do finally drop back into society again. It is of course a struggle which may be made to appear to be tending one way or the other according as we are optimistic or pessimistic in the bent of our own minds. But I take the side of the optimist, and believe we are gradually healing up these ulcers upon society.

The best sign of the future is that public sentiment and legislation are steadily tending in the direction of prevention as well as cure. Some measures of prevention, like the various phases of child-saving work, have been already fruitful of good results. In other cases, it is still doubtful what is best to be done in the way of prevention. But I believe the time is coming when, by the combination of public and private effort, we shall greatly reduce, if we do not entirely eradicate, the defective classes.

In my dealings with them I am sometimes tempted to despair of humanity. But then I look at our churches and schools, our literature and our industries, and, best of all, our happy homes, the pledge of the future, and I take heart again. I remember that after all, the total number of prisoners, paupers, insane, and idiots in the United States, is only one per cent of the population, a less proportion than any other civilized country has.



# DECITY SOLICITOR.

OF THE

REPORT

# REPORT OF THE CITY SOLICITOR.

#### To the City Councils :

GENTLEMEN,-I herewith submit my report for 1891, as city solicitor.

Of the cases pending in the supreme court for Hillsborough county, January 1, the following, viz., those of Emmeline C. Call, Worthley Brothers, Frederick E. Scheer, Hannah Ryan, and Edwin R. Whitney, all for damages for personal injuries received in the use of alleged defective highways; that of Caroline S. Head and others, for damages to land by water flowing on it from the highway; and that of Rebecca C. Newton, for land damages by changing the grade of Webster street, were all settled without trial, and in a manner, in my judgment, beneficial to the city. In my view it is for the interest of the city to settle highway accident cases when it can be done reasonably, even in instances where no actual fault can be imputed to those having charge of the streets. The law imposes upon municipal corporations in the care of their highways a burden which, properly interpreted, is a just and suitable one. Reasonable care under all circumstances is the rule the law sets up; but when the decision of what is reasonable care is left solely to the jury, as it is in this state, the city or town is apt to suffer. The ordinary juryman in this class of cases seems to consider the results of the accident to the plaintiff far more carefully than he does the responsibility for it. Prejudice against a wealthy municipal corporation, the feeling that the city is able to pay without much inconvenience or expense to any individual, sympathy for the suffering of the plaintiff, play a far more important part in determining the juror's decision than the calm judgment, the impartial weighing of the testimony, and the unbiased conclusions therefrom, which the law makes the criteria of a just verdict. Therefore it has been my policy since holding this office to settle as many cases as possible upon a fair basis. It is better. I think, to pay a small sum in a peaceful settlement than it is to take the chances of a jury's giving much larger damages; and every verdict against the city, by the publicity given by the press and otherwise, encourages more suits, while a quiet settlement out of court avoids this result. Upon this basis, settlements were made in the foregoing suits, as well as in the cases of Hannah Connor and Mary Gendron, begun during the year, and in some instances of claims where no suit had been begun.

The cases of Louis Laventure and Margaret Golden, both highway accident cases, in which the New England Telegraph and Telephone Company and John H. Maynard were respectively called in to defend, were disposed of by those parties without expense to the city; and in the first taxable costs were recovered for the city.

The case of William M. Parsons, of the same nature, was tried by a jury at the March term of court, and a verdict of \$4,000 damages was given him. A motion for a nonsuit and to set aside the verdict was made and argued before the full bench at the December law term, and a decision will probably be rendered upon that motion in March.

The appeal of Maxwell and Campbell from the judgment of the committee of appraisers, for the value of a horse killed by order of the mayor and aldermen, as having glanders, was also transferred to the law term, and a decision may be expected in March. The other cases upon the docket January 1, viz., those of Augusta A. Currin, Maria Colby, T. S. Colby, Lee Big, and Edwin Branch, all for damages for personal injuries received in the use of highways; and the petition of P. C. Cheney Company and others for a new highway from Amoskeag village to Mast road in Goffstown, are still pending on the docket.

The cases of the city against M. J. Jenkins and his bondsmen, which were begun before January 1, were entered at the March term, and it has been agreed to refer them to some experienced person, as they are not proper suits for a jury trial, but the referee has not yet been agreed upon.

The following cases have been entered during the past year, and are now pending in the supreme court :

#### AT THE MARCH TERM:

#### Catherine McCarthy v. Manchester.

A suit for damages for breaking a leg by falling on the sidewalk of Auburn street, caused by an alleged icy condition of the walk.

#### Celia Clark v. Manchester.

A suit for damages for personal injuries received by falling on the sidewalk of Middle street, March 8, 1890, owing to the alleged icy condition of the same. The Amoskeag Manufacturing Company, which by an old agreement with the city has the care of Middle street, has been summoned to appear and defend this action.

# Manchester v. James A. Weston and Others, Owners of the old Manchester House.

To recover the amount of the verdict paid by the city in the case of *Mary Kildea* v. *Manchester*, she being injured while passing in front of their building, while in process of removal.

#### Manchester v. John Ferguson.

To recover the amount of the verdict in the case against the city of Margaret Kelley, who fell into an open bulkhead leading into the cellar of a building owned by him on Central street.

#### AT THE SEPTEMBER TERM.

#### Honora Russell v. Manchester.

A suit for damages for personal injuries alleged to have been occasioned by falling on the sidewalk of Lake avenue, April 9, 1891, owing to a projecting water pipe.

#### ANNUAL OFFICIAL REPORTS.

#### Sarah E. Mayhew v. Manchester.

A suit for damages for personal injuries occasioned by being thrown from a sleigh, January 24, 1891, on Chestnut street. The defect charged was a depression in the street made by the tracks of the Bridge-street line of the Manchester Street Railway, which corporation has been called in to take care of the case.

#### Inez Tirrell v. Manchester.

A suit for damages for personal injuries occasioned by falling on the sidewalk of South Main street. February 27, 1891, owing to the alleged defective condition of the same due to ice.

#### Rodney N. Whittemore v. Manchester.

A suit for damages for personal injuries alleged to have been caused by being thrown from his wagon on the River road, March 30, 1891. The defect charged was that one of several logs which had been piled by the side of the road had fallen into the traveled roadway. The parties cutting the timber on the adjoining lot, who placed the logs there, have been summoned to take care of the action.

#### Thomas Lane v. Manchester.

A suit for damages for personal injuries caused, April 4, 1891, by falling from the steps of a saloon on Elm street, which steps are alleged to be an obstruction in the highway. The owners of the building have been summoned to appear and defend the same.

#### Edward Wyman v. Manchester.

A suit for damages for personal injuries alleged to have been caused by catching his foot on a projecting root, and falling on the sidewalk of Parker street, June 11, 1891.

#### Charles S. Cousins v. Manchester.

A suit to recover the annual salary of a fireman for the year 1890, the same being withheld on the ground that the plaintiff

at the time of his appointment as a fireman was a member of the Common Council.

The appeal of Elijah Chadwick from the award of damages for land taken for a new highway in West Manchester. In this case the highway has since been discontinued, and it will probably not occasion much trouble.

The foregoing constitutes a brief summary of the work in the supreme court for the past year. But, as I stated in my last annual report, this work constitutes but a small part of the duties of this office. It is impossible to give any detailed report of the greater portion of the labors of the solicitor. Looking up law, investigating claims and accidents, drawing all necessary legal documents, counseling and advising city officers of all departments, attending police court, meetings of city government, and committee meetings, these and many other things make this office a busy one. All such duties have been performed to the best of my ability. I would express my hearty appreciation of the kindly treatment I have received from all the members of the city councils, and from the various officials with whom I have been brought in contact. To his Honor the Mayor, to the committee on claims, and to the city marshal, whom I meet more frequently than the others, I am under especial obligations for their unvarying courtesy and kindness,

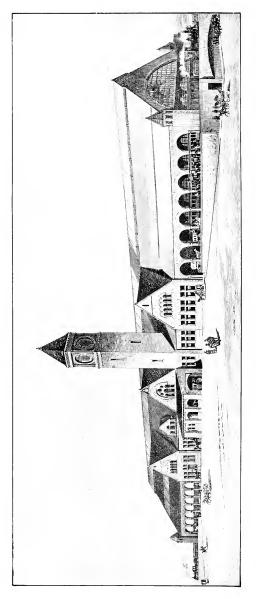
Respectfully submitted.

EDWIN F. JONES,

City Solicitor.

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BOSTON & MAINE RAILROAD'S PLAN OF PROPOSED PASSENGER STATION IN MANCHESTER

# CITY PHYSICIAN.

OF THE

### REPORT

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# REPORT OF CITY PHYSICIAN.

To his Honor the Mayor, and Gentlemen of the City Councils :

I herewith submit my report for the year 1891.

The health of the city poor has been exceptionally good, no death having occurred.

Total number of patients, 121.

Total number of visits made, 1,234.

Diseases treated: Alcoholic neuritis, 1; bronchitis, acute, 6; bronchitis, chronic, 2; cholera morbus, 1; childbirth, 1; coryza, 1; dermatitis, 1; delirium tremens, 5; gonorrhea, 3; general debility, 1; hemorrhoids, 1; insanity, 16; locomotor ataxia, 1; miscarriage, 1; mitral regurgitation, 1; phthisis pulmonalis, 10; paraphimosis, 1; acute articular rheumatism, 1; senile debility, 2; stomatitis, 3; suppurating tubercular gland, 1; typhoid fever, 2; ulcer of leg, 1; urethral stricture, 1; vaccination, 4; varicose veins, 1; venereal warts, 1; accidents requiring surgical treatment, 39.

In the treatment of many cases among the city poor, the attendance of a trained nurse is as essential as that of the physician and many such cases could be properly cared for in their own homes but for the lack of such service, and I would respectfully recommend that the city physician be authorized in those cases where he should consider it necessary, to employ such nurses.

> FREDERICK PERKINS, M. D., City Physician.

# REPORT OF THE MILK INSPECTOR.



### REPORT OF MILK INSPECTOR.

#### To his Honor the Mayor, and the Board of Aldermen of the City of Manchester:

I herewith submit a report for the year 1891.

The method of inspection followed has been nearly the same as that practiced in the city of Boston, Mass.

The towns of Bedford, Goffstown, and Dunbarton have furnished the larger part of the milk used in the city for the year, Bedford furnishing more than any other town.

No cases of tuberculosis were reported during the year, which shows that more attention has been paid to the health of the herds from which the milk supply of the city is obtained. The thorough inspection of cattle in surrounding towns has undoubtedly had a good effect, as it has stimulated cattle owners to cause their herds to be more closely cared for, both in a sanitary way and in the matter of feed.

The inspection was carried on most extensively at night, between the hours of I o'clock and 7 o'clock A. M., during the summer months, without using the same evenings in each successive week. As the warm weather came on, the demand materially increased and the supply decreased, which occasioned a shortage which tempted dealers who might not care to be strictly honest in their business to "extend" the milk they brought in to meet the demand. This was done with water and a little sweetening and coloring, - but still the demand increased and the supply grew shorter at the farms. This state of things necessitated a more rigid inspection, and "extended" milk was found. To further facilitate the work, the services of a professional chemist were engaged with the permission and advice of the Mayor. Mr. Clarence Bancroft was engaged for this purpose, and all samples collected and found deficient in specific

gravity and butter-fat, and below the per cent of total solids required by law, were at once analyzed. In a short time fourteen complaints were sworn out, and at the fall term of the supreme court, held at Nashua, fourteen indictments were found by the grand jury, the indictments being against eight different parties, the complaints being presented by the milk inspector. The prosecution of the cases was placed in the hands of the county solicitor. The cases were brought before Judge Isaac W. Smith, who imposed a fine of one hundred dollars and ten dollars costs in each case, and where more than one indictment was found against a single individual, the fine was paid on one and filed on the others. Two of the parties prosecuted had three indictments each, two had two each, and the other four had one each, and all the fines were paid, with one exception, without a hearing, and in each case the full extent of the fine imposed was paid, with costs, the city receiving one half of the fines and one half of the costs, and the other half of the fines and costs going to the state, according to law. In the prosecution of these cases it was deemed advisable to bring the complaints directly before the supreme court, as being much the shorter method of procedure.

During the summer months and during the autumn the milk supply continued short, and especially was it quite noticeable immediately after the indictments were found by the grand jury. The result was that at one time milk brought 64 cents per can of eight and one half quarts, and very few routes could procure enough to supply the demand. Many customers, and especially stores, were cut down in quantity, and this scarcity continued until cold weather came on, and the demand, in a measure, for extra milk ceased. The deficiency in the supply from the farms in the surrounding towns was caused by the excessive drouth, the feed in pastures becoming almost worthless, and the streams and wells becoming so dry that it was almost impossible in many cases to supply herds with the proper amount of good pure water, and in fact, in some localities the water was worth almost as much as the milk.

In the month of October a meeting of the milk dealers was held, an association was formed, and the price of milk was advanced to six cents per quart, and I think the people of our city

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nuade no objection to the advance in price providing they could be insured a straight article. This association, if properly conducted, may be the means of doing much good eventually in regulating the future supply of milk brought to the city, and can largely aid in keeping the quality up to the standard required by law. The advance in price, if divided with the farmer, will allow him to feed a little better, thereby improving the quality of his milk. There has for many years been a tendency among those who have furnished milk from the herds, to purchase those cows, in replacing their stock, which would produce *quantity* without regard to *quality*, which has been one cause of lowering the standard, and this should be corrected as fast as circumstances will permit.

One hundred and thirty-three licenses have been issued during the year and duly recorded, amounting to \$66.50. There are 89 regular routes, and the average number of quarts of new milk delivered daily is 16,195. Average number of quarts of skimmed milk delivered daily, 1,235. Estimated number of cows to produce the daily supply of milk for the city, 2,563.

The fines and costs on eight prosecutions amounted to \$880, of which the city received \$4.40, and the state \$440.

The duties devolving upon this office necessitate a large outlay of time and expense, and are assuming such proportions that it really should have the whole time of one person devoted to it. This work has to be done largely during the hours of the night, and often consumes the time of the following day, and many cases are made by private parties who have samples of milk inspected for their own information, which is important, especially in cases where it concerns the milk supply of the city. Within the limits of the city I have occasionally visited the farms where a portion of our milk supply is obtained, and sampled the milk in order to ascertain the quality before it left the farm.

There have been but few complaints from customers during the year, and they were properly attended to in each case.

Very respectfully,

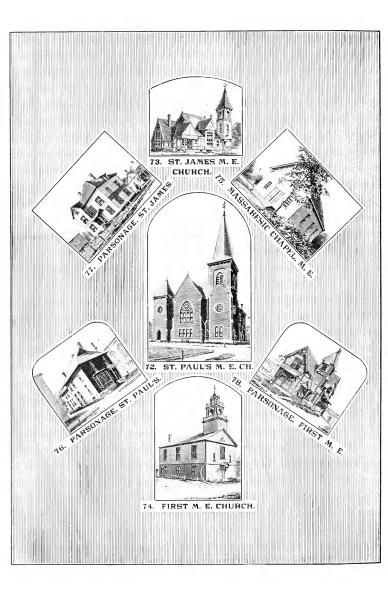
H. F. W. LITTLE,

Milk Inspector.



REPORT OF THE CITY MARSHAL.

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# REPORT OF CITY MARSHAL.

MANCHESTER, N. H., Feb. 14, 1892.

To the Honorable Mayor and Board of Aldermen:

GENTLEMEN, — I have the honor to submit to you my annual report of the police department for the year ending December 31, 1891, showing the strength and condition of the force, and reviewing briefly the service performed by it during the year.

### Police Department.

The police force of Manchester, on the 31st of December, 1891, consisted of thirty-four men, organized with rank and title as follows: viz., One city marshal, one deputy marshal, one captain, seven day patrol, and twenty-four night patrol, with one night patrolman detailed to take charge of the station nights.

SUMMARY OF THE WORK ACCOMPLISHED BY THE DEPARTMENT.

Fines and costs, \$6,668.97. Assaults, 216; assault on officer, 7; adultery, 3; burglary, 12; breaking glass, 13; drunk, 1,179; defacing buildings, 2; disorderly house, 5; exposure of person, 6; embezzlement, 2; evading car-fare, 3; fornication, 31; fast driving, 4; gambling, 1; keeping liquor for sale, 182; keeping open Sunday, 22; larceny from person, 14; larceny, 109; vagabond, 9; noise and brawl, 29; obstructing sidewalk, 1; peddling without a license, 2; playing ball in streets, 6; keeping lottery tickets for sale, 1; assault with attempt to kill, 2; neglect to support child, 1; common drunkard, 1; overdriving, 1; playing cards Sunday, 3; keeping dog without a license, 5; kidnaping, 2; obscene and profane language, 4; obtaining money by false pretenses, 4; attempt to rape, 2; rape, 1; throwing stones in street, 6; aggravated assault, 1; disorderly conduct, 5; selling short lobsters, 1; discharging firearms in street, 1; injury to buildings, t; tramp, t; running away from house of correction, 6.

The cases were disposed of as follows :

Paid fines imposed, 627; committed to the house of correction for non-payment of fines, 665; committed to the house of correction on sentence, 57; committed to jail for non-payment of fines, 97; committed to jail on sentence, 5; committed to the state reform school, 4; bound over for their appearance at the supreme court, 158; committed to jail, bail not furnished, 58: committed to the county house of correction at Wilton, 37; sentence suspended, 21; appealed, 15; nol. prcs'd, 33; discharged, 62; whole number of arrests, 2,401; whole number of females, 280; whole number of males, 2,121; on file, 101; whole number admitted for lodging, 1.277; accidents reported, 21; assisted out of town officers, 27; buildings found open and secured, 419; cases investigated, 482; cases of cruelty to animals investigated, 22; defective streets and sidewalks reported, 116; disturbances suppressed, 528; dogs killed, 114; dogs lost and found, 20; dangerous dogs, notices served to owners, 45; fires discovered and alarms given, 5; fires extinguished without an alarm, 13.

Injured and sick persons assisted, 60; intoxicated persons taken home, 199; lights extinguished in buildings, 77; lights furnished for dangerous places, 122; lost children restored to their parents, 113; money or other stolen property recovered, \$3,281.68; nuisances abated, 59; search warrants for liquor served, none found, 35; search warrants for stolen goods served, 18; stray teams put up, 100; street obstructions removed, 246.

In closing my report I extend my heartfelt thanks to the honorable board, to Judge Hunt, Police Clerk Bickford, and Solicitor Jones; and for the members of the police department, with one or two exceptions, I have only words of praise for the manner in which they have performed their duties during the past fiscal year.

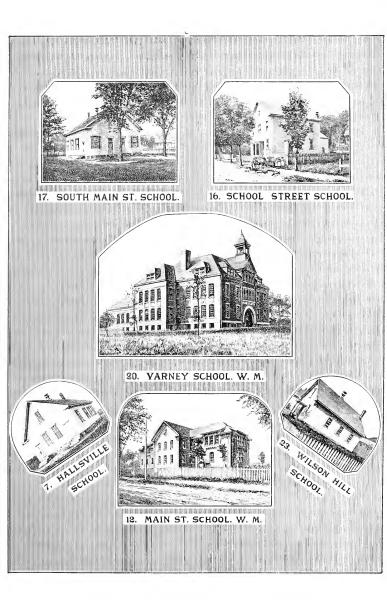
Respectfully submitted.

H. W. LONGA, City Marshal.

# SCHOOL COMMITTEE.

OF THE

# REPORT



# REPORT OF THE SCHOOL COMMITTEE.

#### To the City Councils :

The school committee respectfully presents the following report, it being the forty-fifth in the annual series. In the appendix will be found in tabulated form all the usual statistics pertaining to the schools.

The year just closed has been one of marked prosperity in the public schools of Manchester. We have enjoyed freedom from accidents, epidemics, and other disturbing causes. The corps of teachers has remained intact more perfectly than in previous years. All the principals remain with us, and but few changes have been made among the other teachers. In these instances we have lost the services of some valuable teachers, but have been very fortunate in securing trained and faithful instructors to take their places.

With the growth of such a prosperous city as ours, we naturally expect an increase in the school population from year to year. Such has been the case in 1891, and two hundred and fifty-seven more pupils have been enrolled this year than last. The services of six additional teachers have been required for their instruction; four were employed regularly throughout the year, and special divisions, organized for a term or more, required the equivalent of two more. Some of these divisions must continue regularly, others will be organized at the opening of the next term, and still others cannot be delayed longer than the February promotions.

### SCHOOL ACCOMMODATIONS.

We congratulate you upon the completion of the new schoolhouse in East Manchester, which will give ample accommodation to that section for years to come. While unpretentious in external appearance, it will take rank among the very best school buildings of the day.

The addition to the Webster-street building affords abundant school room in that section, and we are gratified with the prospect of a new schoolhouse being erected in ward No. 9 early in the coming spring.

But the eastern central part of the city is now in sore need of relief. The Wilson Hill, Lincoln-street, and Ash-street schools are all crowded beyond the limits of safety and good health.

Whatever plan may be adopted for the relief of the others, the immediate erection of a building upon the Bridge-street lot seems necessary for the accommodation of the Ash-street pupils. The buildings at Bakersville and Goffe's Falls are also crowded and must very soon be enlarged. The need of more room at the high school is apparent, and the demand is urgent that the building be enlarged and remodeled.

#### REPAIRS.

The school property is in a good state of repair, considering the limited appropriation for that purpose.

Within the past year several considerable items of expense have been incurred in this direction. At the Ash-street school a new boiler has been added, which, together with the old one, will furnish ample steam for all kinds of weather. The radiating surface throughout the building has been increased fifty per cent. Outside doors were provided for the basement, and the ceilings were renewed in eight rooms. The sanitary arrangements at the high school were thoroughly overhauled and repaired. New floors were laid in several rooms of the Franklin-street building, and the Wilson-hill building was reshingled. At Bakersville the old furnace was replaced by an entire new steam-heating plant, which is now ready for use. Of the general repairs, those upon furniture and blackboards require the greatest outlay.

The proper maintenance of the city's school property has grown to be an undertaking of no small proportions, and is deserving of a more liberal consideration than is usually given it. In this connection the subject of ventilation demands our most serious attention. We have but two school-buildings properly ventilated. In some few others a fruitless attempt has been made in that direction, but in most of them absolutely nothing has been done to that end. The typical schoolroom is a closed box, with steam-pipes around the sides and with no possible means of admitting fresh air save through open door or window, and many of the latter are double during the greater part of the school year.

Several inexpensive and plausible methods of ventilating have been suggested, but owing to lack of funds none can be tried. A moderate sum at the disposal of the committee on repairs for experimenting with some of these methods in a small way appears to be a necessity.

#### HIGH SCHOOL.

The high school has done a very satisfactory year's work. It has materially increased in size since free text-books have been furnished.

The additional teacher employed during this year has afforded much relief, but many of the classes are still too large. Another teacher could be profitably employed now, and will be required in the near future.

It is the opinion of the principal that the pupils should enter the high school at an earlier age. The general verdict seems to be that the younger members take a deeper interest in their studies and fall in more readily with the general routine of school work.

While it is the aim of this board to keep the Manchester high school fully up to the best as a high school, we offer no encouragement to the imitation of college customs, especially in the line of sports. The tendency toward professionalism in athletics is to defeat its own end. It induces a few to indulge in dangerous strains upon the system, while it discourages the many from taking healthful exercise. A large gymnasium would be a most valuable addition to the school, wherein moderate exercise, so necessary to health, should be taken by every boy and girl in the school.

#### TRAINING SCHOOL.

The training school suffered in the early part of the year from a lack of teachers in the training classes. In view of this fact, and after making careful inquiry among the graduates of the Ligh school, the sub-committee deemed it advisable to modify the conditions of admission so as to permit the graduates from our own high school to enter the training-school without previous examination, and to serve one term on trial before taking the regular teachers' examination. A few minor changes also in the conditions of remaining in the school were thought proper, in order to give a more certain assurance that any graduate can be vouched for as a competent teacher.

The full board adopted these recommendations. In consequence of these changes an unusually large number of young ladies were admitted to the school at the opening of the fall term. The success of this school is not only an honor to the city but a convenience and source of economy. We draw upon it continually for substitutes as well as for new teachers. Their satisfactory work in the schoolroom, together with the difficulty we find in obtaining competent substitutes and teachers for the grammar schools, would justify the early extension of the training course to grammar grade work.

# GRAMMAR AND LOWER GRADE SCHOOLS.

These are distinctively the public schools, for at present no parents seriously think of anything less than a grammar school education for their children. If the higher schools are to get their students at an earlier age it is here they must come to bring about the change. Again, if there be any superfluous time spent, the poorer classes are losers to the extent of the wages of their children for such time. Will, then, anything less than the nine years now required suffice to give the average pupil a grammar school education, or can a more extended and useful education be given in that time? These are questions of great importance and for continual consideration. Progression constantly tends towards the addition of some new branch to the course of study, and we strive to retain or only modify what we already have. The last subject to knock for admission to our course is manual training. This has so many good points in its favor, and is spoken of so highly by those who have introduced it, that we cannot afford longer to be without a practical test of its merits. Time must be found for this, and doubtless will be, without producing any undue pressure, such as some of our citizens mistakenly believe to exist at present. A very little modification will answer at first, and experience will show where greater subsequent changes may be made.

It will require but little persistent visiting in our schools to convince any one that the children are not at all overworked. If any objection can be raised it will be to the hurry in getting through a long routine of exercises in the short school day. The five-hour day was established because of the constant brain work required. Now that so many manual exercises are interposed to the relief of mental exertion, we may well consider the advisability of a longer school day and also a longer school year.

# TRUANCY.

The truant officer's report shows a satisfactory decrease in truancy and in the number of labor certificates granted. This officer is compelled to do his work under very unfavorable conditions. As there is absolutely no reliable census of the children of school age, it is only by chance that he finds those whose names are not already upon the school enrollment. Some action should be taken to secure annually a complete and accurate enumeration of the children of school age, to the end that our laws for compulsory education may be more strictly enforced.

# EVENING SCHOOLS.

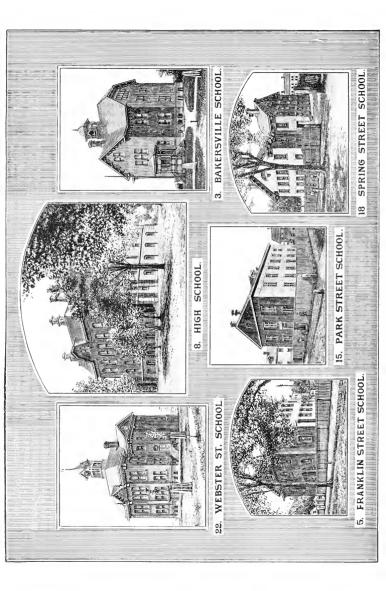
The evening schools have been as prosperous as in years past, and the attendance as good. Their value is, however, scarcely appreciated. The formalities and limitations necessary to the graded day schools are not used here, and the individual is more nearly approached. It is sought to take the pupil just as he is, and give him some needed mental discipline and useful information. In many instances quite as good results are obtained, in proportion to the time spent, as in the day schools. These schools reach a class that no day school can, however free and attractive it may be, or however exacting the laws in regard to labor and education. When these facts are better understood by the general public, a much larger number will avail themselves of the priceless opportunities our city offers.

The public exercises conducted by this board in the year past consisted of the annual contest for the Clarke prizes, a musical festival by the combined high and grammar schools, and the usual graduating exercises of the high school. To all of these, as indices of the work done in the schools, we refer with satisfaction.

Through some misapprehension the appropriations for school purposes this year were greatly inadequate. Especially was this the case with the item of teachers' salaries. We would call attention to the necessary and non-flexible nature of these expenditures, and the consequent accuracy of our estimates, and would bespeak a more favorable consideration of the request of our finance committee for the ensuing year.

In conclusion we commend the abilities and faithful work of superintendent, teachers, and other officers connected with the schools, and thank your honorable bodies for thoughtful co-operation.

> WILLIAM K. ROBBINS, For the Committee.



# SUPERINTENDENT'S REPORT.

To the Manchester School Board :

GENTLEMEN, — The following is respectfully offered as the Annual Report of the Superintendent of Public Instruction for the year 1891.

# Organization and Attendance.

Throughout the year six teachers have been employed in the high school, also one for two terms. In the grammar schools there have been twenty-three teachers for the year, one for two terms and another for one term, — an equivalent of twenty-four in all. In the middle schools there have been sixteen teachers throughout the year. In the primary schools there have been twenty-eight teachers during the entire year; also three others for one term each, — an equivalent of twenty-nine primary schools in all, taught by twenty-six teachers. This is accounted for by the fact that the principal of the training school, who for convenience is reckoned among the middle-school teachers, has charge of three primary schools where no regular teachers are employed. There have also been two partially graded schools\* employing three teachers, and six ungraded schools † with one teacher for each.

The organization of the city schools for 1891 has therefore been equivalent to eighty-four distinct schools of a single room each, taught by eighty-two teachers. The number of pupils is 257 greater than last year's enrollment, and six additional teach-

<sup>\*</sup> The upper room at Amoskeag and the Hallsville school.

<sup>†</sup> Country suburban.

ers have been employed for their instruction. The size of the city schools may be seen from the following :

Average Number of Pupils per Teacher, upon both the Average Enrollment and the Average Number belonging.

Schools	÷.				Av. Enroll- ment.	Av. No. be- longing.
High			۰.		35	31
Gramma	•				36	33
Middle					40	36
Primary					46	40
Partially	gra	ided			35	27
Ungrade	d			•	2 I	19

The number of pupils registered in the different ungraded (or suburban) schools varies widely, ranging from 16 in the school at Webster's Mills to four times as many, or 64, in the school at Goffe's Falls. By an inspection of the attendance tables in the "Appendix" (pages C, D, E, and F, as lettered at the foot of the pages), great differences may also be seen in the number of pupils belonging to the various schools of respective grades. This cannot be helped, and is chiefly owing to two facts : one, that the growth of population is much more rapid in some sections than in others; the other, that sufficient rooms for school purposes have not been available in sections where some of the schoolrooms have long since been unduly crowded. Nevertheless, the table above presented shows averages for the several grades as satisfactory as could be reasonably expected for the proper assignment in eighty-four rooms (an aggregate average of 48 pupils to each room) of the 4.071 children scattered over so large a territory.

The number of pupils in attendance upon the public schools this year is, I think, the largest in the history of the city except for the years 1881 and 1882, when pupils of French parentage began to be rapidly transferred to the parochial schools. Of the 4,071 pupils at school, the attendance upon respective grades may be shown as follows :

Schools.					Enroll- ment.	Per cent of Enrollment.
High .					224	5.5
Grammar					979	24.0
Middle .					687	16.9
Primary					1,895	46.6
Partially g	rad	ed			124	3.0
Ungraded					162	4.0
* T	otal	s			4,071	100.0

The following tabular arrangement will show the comparative rate of tardinesses for five years, including the present year :

SCHOOLS.	1887.	1888.	1889.	1890.	1891
High	4.6	4.0	4.8	<b>2</b>   <b>8</b>	2.1
Grammar	2.6	2.0	2.0	1.9	2.1
Middle	3.2	3.2	3.1	2.4	2.5
Primary	2.1	2.4	2.8	2.3	2.6
Partially graded	2.9	2.7	4.2	3.4	5.1
Ungraded	4.1	2.7	2.1	1.1	2.6

Average Tardinesses on Average Attendance, per Pupil.

No grade except the high school has lowered its rate of tardiness below the record of its own grade for last year. The Hallsville school is very largely responsible for the high rate of tardinesses in the partially graded schools, as heretofore; but it is hoped that the improved facilities for this school will arouse the people to greater co-operation with the teachers in their attempts to establish habits of punctuality and otherwise to secure right training for the Hallsville children.

NEED OF MORE SCHOOLROOMS.

The rapid growth of the city this year has made it more apparent than ever that there is imperative need of immediate action

\* Exclusive of duplicate enrollments.

for the relief of the over-crowded school buildings in the eastern section of the city.

In the Lincoln-street schoolhouse there has this year been a school for two terms upon the third floor. A similar arrangement will have to be repeated next year, and likely enough continued during the entire year. The new building at Hallsville will not materially relieve the over-crowded condition in the Lincoln-street schoolhouse; for there are only about twenty pupils in the latter house who can attend the former, and of these there are so few in the several rooms of the Lincoln-street school that their withdrawal will hardly be perceptible. In the Ashstreet schoolhouse there has this year been a school upon the third floor for the entire year, and also another for one term ; and a similar arrangement will have to be repeated there next year, except that the additional room will have to be continued for at least two terms, instead of one. The two primary schools in the Wilson Hill house also continue to be distressed for sufficient room. Notwithstanding several pupils have been sent out of their district to the training-school, the lower primary at the Wilson Hill house was obliged to receive 54 pupils for the fall term; and this, too, where rooms are ill constructed, cannot be properly ventilated, and are only designed for and regularly provided with but 45 sittings.

It seems to me that the best way to relieve the schools in the eastern section would be to build three small schoolhouses instead of one large one, all for primary schools, as follows: a two-story house on the city lot at the corner of Bridge and Union streets, with two schoolrooms on the lower floor, and a wardroom on the upper floor; a four-room house where the Wilson Hill building now stands; and a house of two or four rooms upon the extension of Orange street or Pearl street, east of Linden street. These houses should all be built as soon as possible.

With a new four-room building on the Wilson Hill lot, the two primaries now there and the one in the Lincoln-street school could be organized in the new house on the Wilson Hill lot as four schools, with about three dozen pupils for each. Space for another dozen in each room, together with space available in the

training school (if necessity should require more) would provide the southeastern section with sufficient primary-school facilities till the proper time comes for the erection of another schoolhouse The withdrawal of the primary grade from the Linfarther south coln-street house would render its room available for the school otherwise compelled to occupy the third floor. With the suggested new house at the corner of Bridge and Union streets, pupils enough for two schools there could be taken from the three primaries at the Ash-street school and still leave pupils enough for two primary schools, one of which should be transferred to a new house east of Linden street. The four primary schools thus organized out of the three unduly large ones now in the Ash-street school, two being located at the corner of Bridge and Union streets, one in the Ash-street house, and another east of Linden street (as before suggested), would have about thirty-six pupils each without making any allowance for the increase in this section; but this would be provided for by space for a dozen more pupils in each of the four schools just mentioned. These changes would render two rooms now occupied by primary schools in the Ash-street house available for use by the two divisions otherwise compelled to occupy the third floor.

Three important advantages would arise from the plan above outlined : first, the primary-school children would be housed nearer home and in buildings by themselves ; second, the Webster-street, Ash-street, and Lincoln-street schools, with proper readjustment of boundaries, would probably accommodate the grammar and middle grades in the eastern section of the city till necessity requires a new schoolhouse in the section far south where the city is likely to continue the rapid growth of the last year or two, which has already made six schools a necessity at Bakersville where but four can now be properly cared for; and, third, the general plan suggested would, I think, save much ultimate expense, for it would seem that another house in the remote southern section will prove an eventual necessity, whatever others may be provided. These suggestions, I may say, are based upon the supposition that whatever changes are made for the better accommodation of the high school will probably be made upon its present site. If the present high-school property is to be used for other public school purposes, the matter here so largely discussed would need further consideration.

The movement already made for more school room in Mc-Gregorville is in the right direction, and should be urged.

Conditions about the school at Goffe's Falls are likely to demand your attention, and I therefore deem it proper to explain By an act of the last legislature, fifteen homesteads, in them. that part of Londonderry near Goffe's Falls, were set off from that town and joined to Manchester for school purposes only. As a result of this, the school was so increased in the spring and fall by the attendance of 14 pupils from seven of the Londonderry homesteads that the school numbered 48 pupils for the spring term and 57 pupils for the fall term. The schoolhouse can hardly accommodate properly the 57 - 14, or 43, belonging to Manchester; for there is but one room, and three dozen pupils are full enough for one teacher in an ungraded school. The average daily attendance this fall has been 50, and the energies of the teacher have been severely taxed. One cannot endure such work long. But what will be done if the other eight homesteads also furnish two pupils each? Already the chairman of the sub-committee has been requested to improve the school by the employment of an assistant teacher. Such employment and an additional schoolroom at Goffe's Falls are contingencies for which you may have soon to provide.

#### TEACHERS.

The following teachers have withdrawn from the schools during the year: Misses Nancy S. Bunton, Clara E. Woods, and Bertha L. Dean, from the Ash-street school; Miss Carrie E. Hoit, from the Bakersville school; Miss E. C. Root, from the high school, and Miss Abbie R. West was by death called from her position in the Hallsville school.

The three first named had no superiors in the grades in which they respectively taught. Miss Bunton had been longest in the service, but her interest and enthusiasm never flagged. She was

principal of the City Training School for Teachers till its reorganization, and was then transferred to the higher middle grade in the Ash-street school, where she continuously served till the time of her resignation. Her early success as a teacher led to her appointment as principal of the training school, and she fully met the expectations of all in every position entrusted to her care. For more than a score of years Miss Bunton was regarded as one of the most efficient teachers in the corps. Misses Dean and Woods each taught about a dozen years. Miss Dean was earnest, persistently faithful, unusually thorough, and to a high degree successful. Her pupils had the beneficial influence of a lady of exemplary character, genuine refinement, and much culture. Miss Woods was the genius of our primary schools. She early displayed unusual tact in the training of little children, soon took front rank among our primary teachers and easily maintained it. Her love for children seemed well-nigh unbounded, and they in turn delighted in or worshiped their teacher. Misses Hoit and Root each taught but a few months in our schools, but they manifested excellent qualities as instructresses, which portends well for their future success.

#### OBITUARY.

Universal grief was felt upon the death of Miss West. None knew her but to love and admire. She was not only in every way refined and ladylike, but of noble character and presence. She was also singularly sweet-tempered, and instinctively won the hearts of her pupils. Though a beginner in the service of her chosen vocation, she manifested great aptness in the work, had wrought a good degree of success, and gave great promise of a brilliant future.

Now, at the close of the year, come the resignations of two other good teachers, Misses Nettie F. Ainsworth, of the Lincolnstreet school, and Ella F. Sanborn, of the Franklin-street school. These ladies had acquired an experience and attained successes that make it certain the city will deeply regret their withdrawal from its service. Miss Ainsworth, by the strength of her character and dignified ways, has, for several years, handled and taught a large school with apparent ease and signal success. Miss Sanborn, by faithful endeavor and persistent determination, has won success in a grade not most in accord with her tastes.

Changes in the corps of teachers by transfer, etc., may be seen on page J of the "Appendix."

# High School.

The high school appears to be in unusually good condition. The pupils are evidently trusted with the confidence of their teachers, and seem desirous of demonstrating that they are worthy of trust and capable of properly caring for their own conduct. There is also manifest not only a willingness to properly prepare lessons, but a desire that amounts to determination to learn for the sake of the knowledge that may be acquired.

In fact, the school has rarely been infested with disturbing elements during the fall and winter terms. Any that have become manifest usually appeared in the spring, upon the assignment of parts for graduating exercises to occur at the end of the term, and it does seem that there should be some improved method for the assignment of honorary parts to pupils entitled to participate in the high school graduating exercises. For many years there has been a feeling among both pupils and parents that the honorary parts of highest distinction have frequently been given to others than those most worthy. Considerable unpleasantness has arisen in consequence and much dissatisfaction often been felt, though generally somewhat smothered. It is certainly difficult, and probably impossible, to devise any plan entirely unobjectionable; but improvement may be made, and I submit the following for consideration.

In the first place, I think the award should be made on the basis of scholarship instead of scholarship and deportment combined, as heretofore. My reason is that the deportment record is not made from a uniform standard for all, for it is the result of the combined reports of several different teachers, whose judgments undoubtedly differ more or less in regard to the marking of even similar misdemeanors. Moreover, certain pupils are chiefly under the supervision of one set of teachers and others of another set : and the circumstances that occasion marks for misdemeanors vary widely in the different localities assigned to the charge of the several teachers, depending upon the size of classes and width of passage ways, or the number of pupils seated in a room and the purposes for which there. Hence it is unjust and wrong to base the award of honorary parts, in any degree, upon the deportment record, or upon any other record resulting from marks compiled from varying standards. And, for this reason, it is neither just nor right to base the award of parts upon the tabulated averages in scholarship of the entire senior class, without regard to the divisions of the course of study pursued, for there is no uniformity of standard when so done. The divisions of the course of study, being "English," "Classical," "College Preparatory," and "Scientific Preparatory," vary much in respect to subjects of study, as may be seen from an inspection of the course itself. (See "Appendix," page Z.) There is not only a vide difference in the character and degree of difficulty in the studies taken by different members of the senior class, but the pupils are taught, examined, and marked by different sets of teachers, who are appropriately assigned the various studies of the several divisions of the course. The lack of uniformity, when averages of scholarship are tabulated from results found under such circumstances, is quite apparent.

The question is, therefore, how to indicate with fairness those pupils most deserving distinction upon graduation. I reply that it may be done by tabulating the scholarship averages of each of the four divisions of the senior class separately, and having the names of those ranking first and second in each division printed as such upon the program of the graduating exercises.\* This plan would make prominent a larger number of the worthy, make no invidious distinctions, and have the merit of being much more just than any method yet trued. From the eight pupils thus ranked as first or second, two in each of the four divisions of the course, the teachers should select the valedictorian

\* See illustration upon page P of the "Appendix."

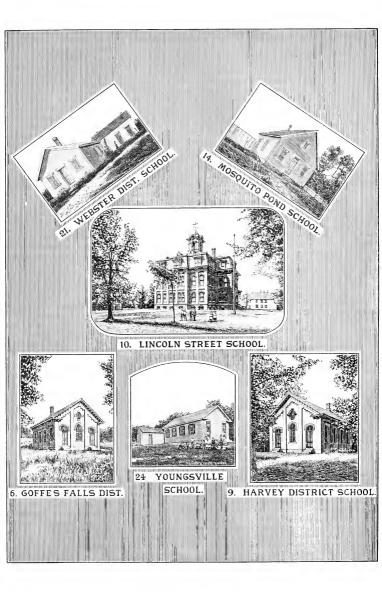
and salutatorian of the class, without other consideration than to secure those who would perform such parts as acceptably as any in the list. These parts would not then have to be taken, as sometimes heretofore, by diffident young ladies, with voices insufficient to be heard, under the stress of a rank alone regarded as first or second; for the organization of the school is such, and the work required under the several divisions of the course of study is so different, that the best or second best scholar of the senior class or any other class, regarded as a unit, cannot be positively decided.

Under the plan I have suggested for determining honors, the graduating exercises may be so arranged as to reflect most credit upon the school, without detriment to the reputation of the best scholars in the class, for the names of the best scholars would appear as such prominently printed upon the program of graduating exercises; and the teachers being limited to the list only in their choice of valedictorian and salutatorian could select for the other parts those pupils from the entire class who would best perform such parts, and that, too, without ignoring a recognition of the best scholars in the class, whether more than two of them should be selected for parts in the graduating exercises or not.

# The Training School.

During the first half of the present year, the training school was without its regular complement of sub-teachers, a fact owing to the lack of a full quota of applicants for admission to the class in both September of last year and February of this year months when the sub teachers' class is usually re-organized and enlarged. But by the temporary employment as teachers of two or three graduates of the school, and by extra labor upon the part of the principal, the work was not allowed to deteriorate.

At the opening of the fall term the number of candidates seeking admission to the sub-teachers' class was eleven, the largest number ever at one time applying, and all were admitted. The school, therefore, now contains fourteen sub-teachers, only one of whom will graduate next month. By reason of the



amendment recently made to the "Rules" for the government of the training school, the semi-annual examination of those serving the trial period in the school will also occur next month, and some may be retired in consequence of failure properly to meet the requirements of that, but the contrary is fervently hoped. \* There are, however, a few applications for admission to the school on file at this office, and it is not expected that there will be any lack of a full class for at least a year to come.

A circular of information in regard to the training school has recently been prepared, jointly by the sub-committee of the school and the superintendent, which I here incorporate, in the hope that it will be of general interest to our citizens, and in the belief that its provisions may yet prove of historical importance.

The usual list of members belonging to the training school during the year, with dates of entrance and graduation, will be found in the "Appendix," page J.

### (Copy of Circular of Information.)

# CITY TRAINING SCHOOL FOR TEACHERS.

This school was first organized in 1869. The design of the school was to afford means for supplying the city schools with better teachers, and with those somewhat conversant with a graded system; and also to provide for a better class of substitute teachers than could be secured from among the fresh graduates of the high school. It was reasoned that the city schools could in no way be so surely and economically improved as by the establishment of a school for the proper training of the young lady residents here rapidly assuming teachers' positions. For about a dozen years the work was wholly practical, and the training otherwise acquired was almost entirely by observation.

In 1882 the school was reorganized, to secure the advantages to be derived from a course of professional training for the teachers' class. The school has since prospered, and continued to

<sup>\*</sup> All successfully passed the examination in January, 1892.

supply the city schools with a large majority of their lady teachers. Many of its graduates are also successful teachers in other places.

This school affords excellent opportunities for normal study, and for observation and practice in graded schools, at a moderate expense. Its advantages are offered, preferably, to young lady residents of Manchester, and graduates of the Manchester High School, but other applicants will be admitted upon conditions and terms which may be learned by addressing an application to the Superintendent of Public Instruction, Manchester, N. H.

The plan adopted upon reorganization in 1882, and which has since been pursued as far as practicable, is as follows :

There is a principal, upon whom devolves the twofold responsibility of carrying on a school of about one hundred and fifty pupils, occupying four rooms, including six primary and two middle school classes, with a four years' course of study, and of giving to the pupil teachers one year's course of study in normal training, and a year and a half of actual teaching under her direction. There are twelve sub-teachers, in three classes of four each,— a senior class, each member of which, having completed the course of study, has charge of a room an entire term, a middle class, and a junior class. The members of the middle and junior classes divide their time between study and recitation in the normal class, and assisting the seniors in teaching. The whole course, as indicated above, occupies one year and a half.

The object of the school is to fit teachers for the work of organizing, governing, and teaching in the public schools.

This work recognizes the necessity of a thorough knowledge, first, of the laws of growth or development of the mind; second, of the subjects required to be taught; and third, of the best methods of teaching.

The subjects are taught on the topical plan, text-books being used as reference books. Teaching exercises by the principal and the sub-teachers form a large part of the class work. Throughout the course, written abstracts of lessons and written criticisms are required. The efforts and attainments of pupils in the normal class, and their success in actual teaching, will constitute the data upon which the principal will make her reports to the sub-committee, as required by the rules of the school board.

The subjects upon which candidates for admission to the school are examined are reading, spelling, penmanship, arithmetic, language, history, geography, physiology, music, and drawing.

Pupil teachers (or sub-teachers) are admitted to the school upon the opening of the fall term of the city schools, and February 1 \* of each year. Resident candidates are given the preference of admission when more than the requisite number of qualified ones make application.

The course of study for the normal class is as follows (forty-five minutes a day being devoted to recitation) :

*Junior Class.* Reading, Writing, Language, Oral Instruction, Elementary Botany, Elementary Physiology and Hygiene, with reference to the effects of stimulants and narcotics, Elementary Geography, Arithmetic, Drawing, Clay Modeling, Care of Schoolroom and Children, Reading of Educational Papers and Magazines, followed by discussions of matter read.

*Middle Class.* Psychology, with reference to the development of the child mind, Art of Teaching, School Government, School Organization, History of Pedagogy, School Laws of New Hampshire, Reading of Educational Papers and Magazines, followed by discussion of matter read.

#### Extract from Chapter V. of the Rules of the School Board.

SECTION 1. Pupils desiring to enter the training school as sub-teachers shall make written application for admission to the board, stating therein where educated, what experience, if any, they have had in teaching, and the grade (whether primary or higher) for which they propose to fit. Such applications shall be referred to the sub-committee on the training school, who shall have power to admit the applicants to the school, under the regulations.

SECT. 2. Candidates for admission must be graduates of some high school, or an equivalent,<sup>†</sup> and furnish evidence of good moral character. Pupils will

<sup>\*</sup> At option of the sub-committee of the school, when more sub-teachers may be needed.

 $<sup>\</sup>dagger$  The attainment required must be equivalent to a course as comprehensive, at least, as the three-years course of the English division in the Manchester High School, well understood.

be admitted at the beginning of the fall term in each year; at other times only in special instances, subject to the decision of the sub-committee.

SECT. 3. The number of pupils constituting the training class shall be determined from time to time by the sub-committee of the school, but as a rule only two pupils shall be assigned for practice in any schoolroom.

SECT. 4. Members of the training school shall be held responsible for their deportment and work as pupils, by the principal of the school, and in their practice work shall be recognized as sub-teachers, subject to the general rules which control regular teachers.

SECT. 5. The course of instruction in the training department shall continue for three periods of five school months each. The first period shall be called the trial period, during which the condidates shall serve without compensation.

Before the close of this period, candidates must pass an examination in subject matter required by the board for teachers; and the principal of the school, and the superintendent, shall give to the sub-committee on the training school, upon blanks prepared for that purpose, the result of the examination, and their judgment of each candidate, as to her fitness for the work and probable success as a teacher. From those who receive their approval shall be selected by the sub-committee, according to their rank, as many as can be admitted for the second period.

Before the close of the second period the principal of the training school and the superintendent shall report to the committee in regard to each teacher in the same manner as before. And if there are any whose work during this period has not been satisfactory, and who do not promise success in the future, they shall be dropped and their places filled by others.

To those who complete the course in the training school the committee will give a certificate stating the fact.

Pupils in the training class may be assigned by the superintendent to serve as substitutes for other teachers, as in his discretion occasion may require.

SECT. 6. Any member of the training class who shall be elected a teacher in any school of the city before completing the course of study, upon the recommendation of the principal of the school or the sub-committee of the school to which she may be elected, will be entitled to a certificate to teach in the grade for which she was admitted, without further examination; and the sub-committee may, if they deem it advisable, in consideration of service as a teacher, grant her the diploma of the school.

SECT. 7. The regular course of study for those who desire professional training for primary teaching will be one year, and an advanced course of five months will be required of those who are admitted to, and desire certificates to teach in, the higher grades. Graduates of the one-year primary course, and also graduates of any state normal school, may take the advanced course of five months, upon application and admission in accordance with these rules, for practice and professional training in grades above the primary. The course of study in the training class shall be such as may be prescribed by the sub-committee.

SECT. 8. The principal of the training school shall perform in that school the usual duties of principal of a school, and also such special duties in connection with the training school as the sub-committee and superintendent may direct. The rank of teachers other than principal, and the course of study in the schools used for practice by the training class, shall be the same as in other schools of the city of the same grades.

SECT. 9. The principal of the training school shall, when requested by the superintendent, visit the school of any graduate or pupil of the training school who may be elected as teacher of any school in the city, for the purpose of observation in regard to her success.

SECT. IO. Pupils in the training class shall be paid at the rate of \$10 per month after five months', and at the rate of \$20 per month after a year's service, for actual work in the school.

SECT. II Annually, in the month of June, and prior to the election of teachers, the principal shall report to the sub-committee the names of the sub-teachers who have graduated within the previous year, with the qualifications, rank, prospects of success of each, and with such special recommendations and suggestions as she may deem advisable and necessary to acquain the committee with their capacity for teaching, the substance of which report shall be communicated to the board by the sub-committee, and upon the selection of teachers, the graduates of this school shall have the preference if equally qualified.\*

SECT. 12. As a condition of admission to the training school, candidates will be required to sign a contract whereby they shall agree to conform to and abide by the rules and regulations made for the government of the school.

#### Drawing and Manual Training.

The study of drawing has not only been long recognized as a subject worthy of place in our course of study, but it has been deemed of sufficient importance to receive special treatment. At irregular intervals special teachers have been employed in an endeavor to have the study put upon as firm a basis, and as thoroughly taught, as any of the other studies in our schools. The "standing committee on drawing" in various years has, in due appreciation of the importance of the study, presented to the board the need of a permanent special teacher of drawing, and the board has concurred in the opinion of the committee, and repeatedly endeavored to get an appropriation for the purpose;

<sup>\*</sup> But no guarantee of any position in the city schools is thus implied.

but it has never succeeded in getting an adequate amount, and hence the study has never been a complete success, and must therefore be characterized as a partial failure. Properly taught, the study would be held in as high esteem as that of music, found to be of as much ethical value, and very much more largely to afford a training sure to bear directly in a most helpful way upon the endeavors of all, and especially of those who seek to better their condition in life chiefly through the employment of their hands. Is it not, indeed, because of the better understanding which some minds have of common mechanisms, through a knowledge of the principles involved in drawing (either intuitively understood or by study attained), that many excel and obtain better positions in common life, while others for this reason become inventors or occupy the highest positions in their respective callings? It is in the belief of this, as I understand the matter, that further help of a similar sort is thought to be afforded by such instruction as can be given in the schools by what has come to be known as "Manual Training."

Its introduction in the public schools is already an established fact in most cities of the size of ours, and even in many smaller towns to a much larger extent than in our own good city. It will doubtless be a matter of surprise to most citizens, and possibly to not a few of our teachers, that I have here used language implying the introduction of manual training in our schools to even a limited extent. But if so, the surprise will be for the reason that form study and drawing are not recognized as elements of manual training, though they constitute its base and embody its most prominent characteristics. As the possibly best aid to the formation of a correct idea of what is meant by manual training, as advocated for attention in the public schools, there may first be wade a declaration of what it is not.

"It is not more valuable to the mechanic than to the statesman, or to the man of letters; it is not the teaching of a single trade, for as soon as the pupils know how to do anything well they cease to do that, and learn to do something a little more difficult; it is not an education of the hand to the neglect of the brain, an education in the power of doing to the detriment of the power of thinking; it is not an end, but a means; it is not a shop, but a school — a well-developed youth being the only commodity that it seeks to put upon the market; it is not even the beginning of a technical education, for it has no more relation to a polytechnic school than the ordinary grammar school has to a college of medicine."

Then what is manual training, what is the purpose of teaching it somewhat extendedly in the public school, and how can it there be properly taught?

"Manual training is a system of methods and devices in teaching, which take into account the paramount importance of addressing the mind of the child through the avenues of all his sense-organs, laying particular stress upon the use, hitherto much neglected, of the sense of touch and the muscular sense, — mere hand training being regarded as purely incidental, though immensely valuable." . . . . "Full benefit is realized only when the spirit of such teaching enters into, and finds expression in, all the exercises of the school." . . . "Teachers who witness daily lessons in hand training soon learn that its value consists largely in the emphasis given to sense activity, and seek to apply this principle while instructing in other branches. Thus the spirit of the school is greatly improved."

The leading purposes of manual training in the schools are "to stimulate correctness of perception, soundness of judgment, taste in design, ingenuity in overcoming difficulties, definess in manipulation, and neatness of wrought as well as of written work; to give the pupil the power to do things, as well as to think and to talk about them; to pay a premium on energy, diligence, originality, and manliness; to place a barrier against idleness, as the beginning of all crimes, and save the boy from incompetence and dishonesty; to keep the boys in school until the high school course is completed; to reduce the difficulty of discipline to a minimum; to awaken and sharpen attention, and give children an appreciation of, and love for, order and exactness; to accustom the pupil to do thoroughly and well whatever he undertakes; to foster habits of observation, accuracy, and persevenance; to lay the foundation for many trades, by the presentation and mastery of the principles that underlie all trades; to provide a third mode of expressing thought through forms represented and things produced; to produce more complete, and therefore more competent men, by educating all the powers of every boy; to take away the bitterness of the boy who is dull with his books and ready with his hands, because it teaches him to see that he is good for something; to restore his confidence, quicken his interest in school, save his self-respect, and open a welcome door into practical life; to make the boy who chooses a learned profession a more useful and broad-minded citizen; to teach the future man to know, love, and respect labor, to appreciate correctly the value of labor products, and to comprehend the social value of laboring people."

It is not easy to indicate, nor yet settled, how all these ends can be best attained; but pedagogical investigations and the experiments of recent years, founded thereon, prove that the object in view can be most largely realized by a proper adjustment and application of such exercises as best train both the mind and hand.

Says Rabelais :

"Teach through the senses; inculcate independence of thought; train for practical life; develop mind and body equally."

Bacon :

"Education is the cultivation of a just and legitimate familiarity betwixt the mind and things."

Comenius :

"Schools have been fitly called the workshops of humanity."

Pestalozzi :

"Man must seek his chief instruction in his chief work, and not allow the empty teaching of the head to precede the labor of the hand."

Froebel:

"For what man tries to represent or to do he begins to understand."

Carlyle :

"All speech and rumor is short-lived, foolish, and untrue. Genuine work alone, what thou workest faithfully, that is eternal as the Almighty Founder and World Builder himself."

#### Spencer :

"Science is organized knowledge; and before knowledge can be organized some of it must first be possessed. Every study, therefore, should have a purely experimental introduction; and only after an ample fund of observations has been accumulated should reasoning begin."

#### Ruskin :

"Let the youth once learn to take a straight shaving off a plank, or draw a fine curve without faltering, or lay a brick level in its mortar, and he has learned a multitude of other matters which no lips of man could ever teach him."

Charles H. Ham :

"These emphatic opinions of great teachers, scientists, and philosophers, in support of the educational principles which underlie drawing, object lessons, constructive exercises, and laboratory processes of every description, cannot be whistled down the wind. They are the deductions of scientific research, the fruitage of an intimate acquaintance with the laws of psychology, the embodiment of the wisdom of the ages. In the rich realms of literature, science, and philosophy, the names of these men are pre-eminent. The dead among them, departing, left few peers behind ; and the living — proud distinction ! — receive the homage of a grateful world, which venerates them while it enjoys the royal bounty of their genius."

Now the means thought best to attain the ends in view, through the aid of the school, are, in the

Primary grades :

Development of conceptions of form, through the handling and critical observation of objects, and the representation of those conceptions by clay-modeling, tablet-laying, stick-laying, paper-folding, paper-cutting, and drawing.

Grammar grades :

Drawing, free-hand and mechanical, sewing, cooking, woodworking, including wood-carving.

High school :

A course similar to that for grammar grades, but more extended.

Such a course of instruction, combined with a properly modified form of the hitherto generally recognized common-school course of study, will, it is believed, afford a very much better preparation for intelligent, useful, and self-sustaining citizenship. Before another decade shall have passed, it will be held in great surprise if the managers of the public schools of Manchester shall not have provided a thorough basis for the kind of school destined soon to exist in every city of importance ; for it cannot be long before our citizens, seeing the needs of communities elsewhere much more effectually met in the public school, will demand from our schools the better advantages; but they must be doomed to disappointment in any expectation that the schools will speedily afford the desired improvements in full, unless prior to such demand the conditions in the schools shall have been made right for the suggested change.

It may be properly inferred that I think the coming school, at least for cities of the size of ours, and for which our citizens will ere long call, will be an organization for the training of both the mind and the hand; for the average citizen must realize from his own experience the advantages arising from the reflex action of the training of either upon the other — mind or hand — and recognizing the effect of such action as proof that the cotemporary culture of the mind and hand will afford the best education, he will not be long, after once set seriously to thinking about it, in demanding such culture for his children.

In his inaugural address his Honor, the Mayor, and also the vice-chairman of our board previously and repeatedly, have put themselves on record as advocates of manual-training instruction in the city schools. It must seem, too, to every one giving the matter any thought, that the time has surely come when that instruction already in the schools constituting an essential part of such training should be unified and fully utilized. I refer to instruction in the study of form, in clay-modeling, tablet-laying, stick-laying, paper-folding, and paper cutting, now undertaken to a greater or less extent in our various primary schools, and to drawing in all our grades. The instruction afforded in these subjects is far from best or any considerable uniformity in degree of efficiency; for it is dependent upon the knowledge and skill of a corps of teachers whose training, as a whole, has not been adequate to this line of instruction. Cities and towns which have been determined that this department of instruction (so important of itself, and absolutely essential to any system of manual training in the schools) should be treated with a thoroughness at least commensurate with the amount of time devoted to it, have found it necessary to employ continuously for years a special agent for the purpose, known as the teacher of drawing, and that, too, notwithstanding the fact that the corps of teachers in many of such cities and towns has been chiefly selected from among the graduates of the best normal schools. The reason for this felt necessity has been because of the rapid development and growth of the subject in question, and until its principles and methods become as settled and well understood by the average teacher as are the principles and methods pertaining to the other subjects taught in the schools, there will be need of a special teacher of drawing wherever a proper equivalent shall be demanded for the money put into paper, books, pencils, and for the valuable time devoted to the study.

The efforts that have ever been made here to put the study of drawing upon a proper footing in our schools, by the occasional employment of a special teacher for a few months, or for a longer period for only a day or two a week, have been insufficient for much lasting good, and chiefly significant in revealing the greatest weakness in our schools. I trust, gentlemen of the school board, that you may see a way speedily to act in this matter in accordance with what I believe must be your convictions, and soon furnish our schools with a special teacher in drawing who shall devote his, or her, full time to the advancement of this important study in our schools, direct the work, and instruct our teachers in accordance with their needs. This I deem highly advisable for the proper accomplishment of our present course, as well as for what are likely to be any future courses of study in our schools, and absolutely necessary to the establishment of proper conditions for the speedy and successful introduction of a full course in manual training whenever determined. The cost, in addition to what is now annually expended upon this department of our work, should not exceed fifteen hundred dollars, a total of two thousand dollars: or, otherwise expressed, about a cent and a third a week per scholar, annually.

My object in writing so fully upon manual training is twofold: first, to show that form study and drawing constitute an essential part of such training (as far as it is designed to be taught in the public school) and almost the whole of it as applied to grades below the grammar school, in which lower grades there is 631/3 per cent of all the pupils enrolled in our schools, and that therefore to have form study and drawing rightly and thoroughly taught would afford about two thirds of our pupils all the manual training, except penmanship \* and sewing, that is anywhere advocated for instruction in primary and middle grades, to say nothing of such instruction as a necessary preparation for the more advanced similar work now attempted in our higher grades. which should likewise be better done; second, to disclose the purpose for which manual training is being advocated as a subject of instruction in the public school, to indicate its general character, and to make clear that it is no part of its purpose to teach any trade or trades.

#### In General.

The other studies taught are in general well handled, and the schools have upon the whole made at least a good degree of progress during the year.

I had designed in this report to outline some of the improvements made in the study of language by our schools in recent years, a study whose importance is second to none, and to furnish some tangible evidence of successes attained; but the too

\*Already taught.

great length of this report is already manifest, and I will defer any further treatment of the subject for the present.

There is, however, one other subject to which I wish to call your attention as needing early treatment. This is reading. Several years ago a few hundred dollars were expended for what was known as supplementary reading matter, comprising such classics as The Seven Little Sisters, Æsop's Fables, Robinson Crusoe, Swiss Family Robinson, Scott's Tales of a Grandfather, Lamb's Tales from Shakespeare, Lady of the Lake, Evangeline, The Autobiography of Franklin, American Authors, also productions from such eminent writers as Dickens, Goldsmith, Addison, and Tennyson. The favorable effect of the use of such reading by the pupils in our schools has been very marked in introducing pupils to an acquaintance with the most noted and best authors, in cultivating a taste for exalted thoughts clothed in best styles of expression, and in putting the schools in close connection with the city library. The enduring good that must have been derived by the hundreds of children who have been benefited by the use and influence of such literature as has thus been afforded can scarcely be estimated, and is far beyond all comparison with the cost of supply.

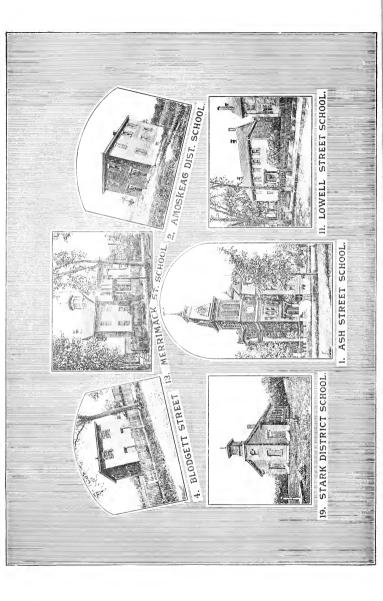
The books named are now nearly all worn out, from the circulation and use given them in the schools, and I recommend as action of the utmost importance that you promptly again furnish the schools with another supply of choice reading matter, that the children now in the schools may therefrom derive the beneficial influences bestowed upon their predecessors. Your children may have an acquaintance with the best in literature from access to it in the home library, but the very large majority of the children in our schools are sure to have any acquaintance of the sort only as it is made in the schools. Moreover, the great advantages named can be had virtually without additional cost, for the city now furnishes the regular text-books in reading, needed for drill exercises in earliest attempts at reading, and in elocution. Hence, these text-books will be saved wear and tear in proportion to the extent it is bestowed upon the books asked for supplementary reading.

The general subject of reading may be also improved, without much cost to the city, by again employing a special instructor in elocution and charging the greater part of the expense thereof to the John B. Clarke prize-speaking fund. I may here say that it was the wish and earnest desire of the late Colonel Clarke that the board annually supplement the prize-speaking fund by an amount sufficient to procure the permanent employment of a special instructor in elocution.

#### Conclusion.

In closing this somewhat lengthy report, I wish to express my gratitude to the teachers for their faithful, earnest, and efficient work; and to you, gentlemen of the school board, for your loyalty and the assistance you have rendered me, as well as for the liberal policy that has characterized your efforts in behalf of the schools.

> Respectfully submitted. WILLIAM E. BUCK, Superintendent.



# APPENDIX.

- I. POPULATION, ETC.
- II. SCHOOLHOUSES.
- III. Schools.
- IV. TEACHERS.
  - V. PUPILS.
- VI. TRUANCY.
- VII. FINANCE.
- VIII. SCHOOL YEAR, 1891.
  - IX. HIGH SCHOOL GRADUATING CLASS.
  - X. WINNERS OF CLARKE PRIZES.
  - XI. ORGANIZATION OF COMMITTEES, 1892.
- XII. LIST OF TEACHERS, 1892.
- XIII. SCHOOL YEAR, 1892.

# APPENDIX.

# STATISTICS.

### I. – Population.

Population of the city by last census, 1890	•	•	43,983
Legal school age, 5 to 21.			

#### II.-Schoolhouses.

Number of schoolhouses in use				22
Number of schoolhouses not in use				1
(Bridge-street house, corner of Union.)				
Number of schoolrooms used for day schools				84
(Three of the same, and six others, used for cvening sch	iools.	Roon	as u	noc-
cupied by city for day schools are two at Spring-street hou	se, thi	ee at	Low	ell-
street and two at Bridge-street, the last two being unfit.)				
Number of rooms used for High-school classes				7
Number of rooms used for Grammar schools				24
Number of rooms used for Middle schools .				16
Number of rooms used for Primary schools .				29
Number of rooms used for Partially Graded sch	ools			2
Number of rooms used for Ungraded Schools		•		6

# III. - Schools.

(All for both sexes.)			
Number of High Schools			

(A)

I

Number of combined Grammar and lo	ower g	grade	(Mid	dle	
and Primary) schools					7
Number of combined Middle and Prim	ary so	hools	(Me	rri-	
mack-street or Training school) .				•	I
Number of schools all Primary grade					5
Number of Partially Graded schools .					2
Number of Ungraded schools	•	•		•	6

# IV. - Teachers.

Male teachers in the High school	3
Female teachers in the High school	4
Male teachers in the Grammar schools	5
Female teachers in the Grammar schools	19
Female teachers in the Middle schools	16
Female teachers in the Primary schools	26
Female teachers in the Partially Graded schools	3
Female teachers in the Ungraded schools	6
Special teachers : One male in music the entire year .	I
Average number of male teachers*	8
Average number of female teachers	74
Male teachers in the evening schools	9
Female teachers in the evening schools	II
Average number of male teachers in the evening schools .	5
Average number of female teachers in the evening schools	5
Male teachers in the evening Drawing schools	3
Average number of male teachers in the evening Drawing	*
schools	3
* Evolutive of special teachers	Ŭ

\* Exclusive of special teachers.

(B)

TEACHERS.	Albert Somes, Master. (1. 1. Houbott, Sub-master. W. T. Abbott, Abanahan, Larcreis Abanahan, Mary Stanton, Stanton, Natile Fickering, S. C. Itotier, I term, Mary H. Ottler, I term,	C. W. Bickford, Master. Anna O. Heath, Jennie M. Chaudher, Carrie E. Reid,		Lizzie P. Gove.	Frank S. Sutcliffe, Master. Annie W. Patten, Belle R. Daniels, Mary F. Barnes, Nettie F. Ainsworth,		F. C. Baldwin, Master. (certrule F. How, Mary E. Buton, 24 ferms, hertha L. Deon, 24 ferms, Edith S. Dole, 4 term,	
Per cent of daily at- tendance.	6.70	288 288 298 298 298 298 298 298 298 298	95.0	911.5	8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.1 8.5.2 8.5.5.5 8.5.5.5 8.5.5.5 8.5.5.5.5.5 8.5.5.5.5	93.6	95.2 92.6 90.5	92.6
үлэгэдсгэү. Ачегадсо Алогия Эрикбиаттв	01 01	2268	Ξ	19	% \$1 \$ % ₹	218	9858	139
Average No.	5	8157 28 88	130	2	84844	233	485 4	150
Whole No. belonging.* Boys. Girls.	31	2883	8	81	88859	151	282 8 28	201
	102	2289	8	13	288855	133	33332	69
.oZ shole. Gallona	202	8388		50	852333		2.25 1	
SCHOOLS.	High School,	Franklin-street, First Division	Franklin-street totals	Spring-street, Fourth Division	Lincoln street, First Division 1	Lincoln-street totals	Aslastreet, First Division	A ab-atreat totals

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#### ANNUAL OFFICIAL REPORTS.

George Winch, Master. Babdara B. Joy, Lillian Little, B. Maria Dickey,		B. S. Andrew, Master. F. Mande J. Brickett, Mabel J. Brickett, Alta C. Willand,		Lizzie A. Burns.			Eva F. Tuson.	/ Nancy S. Bunton, 1 term. / Emma J. Cooner. 2 terms.	Kittie J. Ferren.	Emma L. McLaren.	Fannie D. Moulton.	Susie G. Woodman.	Cora B. Gilford.	C. E. WIPG, FILEIPAL C. Anomete Alliett	II. G. Flanders.	Mary W. Mitchell.	Millie S. Morse.	Ellen E. McKean.	Nettie C. Woodman.	Lelia A. Brooks.	) Carrie E. Hoit, 2 terms.   Augusta S. Downs, 1 term.		or transfer from other of the eity schools. 1. Sleeper, from February 1 to July 1. 1. uni midule school totals are aritusted accordingly.
90.9 95.2 83.1	92.4	90-0 94-1 95-2	92.5	93.5	93.2		90.6	95.6	91.4	87.1	33.1	83.6	8	2.00	1.26	85.7	90.0	91.7	91.9	6.98	88.8	2.06	amnar a
8448	145	8988	14	29	743		8	1	ŝ	21	5	\$	48	22	851 8	8	36	g	5	00	32	524	l by pro ght by zate gr
8458	157	8532	8	31	797		32	<del>1</del> 6	35	31	23	47	48	38	88	위	9	36	37	3	36	578	eceived and tau
8288	110	2223	54	5	531		5	30	83	Ξ	2	8	818	33	35	21	8	51	8	21	7	:357	nupils r floor, ass, an
2,8,8,8	66	<b>8</b> 233	39	18	#		15	33	61	18	81	8	23	28	33	15	31	19	14	15	<u>x</u>	330	ale of j e third hool el
20 I I 20		8778		52			22	66	33			5		37	15	62	68	59	3	3	60		eing ma d on th ddle-se
Varuey School, First Division.	Varney School totals	Webster-street, First Division 	Webster-street totals	Bakersville, Grammar grades	GRAMMAR-SCHOOL TOTALS †	MIDDLE SCHOOLS.	Webster-street, Higher and Lower	U Ash-street, Higher§	<ul> <li>Lower</li> </ul>	Spring-street, Higher	" Lower	Lincoln-street Higher	" Lower	Merrinack-street, Lower	'' Louisvice, Lower	Main-street, Higher.	" Lower	Varney-school, Higher	" Lower	Bakersville, Higher	", Lower	MIDDLE-SCHOOL TOTALS	<ul> <li>Exclusive of duplicate enrolments, no account being made of pupils received by promotion or transfer from other of the eity schools. The second class of first britishon graves placed on the third flow, and tangitly A ranie M. Streper, from deformaty 1 of July 1.</li> <li>The Juroobscreet extra fourth division grave mailes solio (Lass, and accretate grammar and unidue school forthers) accordingly.</li> </ul>

# REPORT OF THE SCHOOL COMMITTEE.

Websterstreter, Higher and Lower
Franklin-street, Higher 128 Main-street, Higher 188 Main-street, Higher 188 S 8 Main-street, Higher 188 Main-street 188 Lower 189 Lower 181 Lower

ATTENDANCE UPON THE VARIOUS DAY SCHOOLS. - Continued.

Delle E. Haines.	Annie B. Goodwin, z terms. ) Georgia M. Chenev, 1 term.	Izetta S. Locke. Edith M. Stebbins. Misses West, Burns, and Knight.			Nettie B. Fogg. (Ella F. Barker.	Abbie R. West, 1 term. Olive A. Rowe, 1 term.			Inez M. Warren. Georgia Kendrick. Emuna J. Ela. Mary A. Searcy. Generieve B. Knight, 2 terms.	( Mary G. Wortnen, J. term. ) Olive A. Rowe, 2 terms. ) Nellie M. Atwood, 1 term.		and the other of the other and only
91.5	90.0	89.2 84.1 88.2	6.68		90.0	S6.5	87.8		81.8 92.3 92.9 78.9	88.8	5.06	90.7
35	36	848	1,037		5	45	24		0.841 26 44 8	00	101	2,689 2,536
39	40	242	925 1,154 1,037		30	52	8		1823	6	112	2,940
26	5	£4%	925		21	ŧ	63		2883 A	> <del>+</del>	12	2,068 1,933
$^{24}$	28	8851	970		16	46	62		28.130	. 1	16	2,003 1,881
3	19	5.83			56	60I			61986 1	12 12		
South Main-street, Higher	" Lower	Bakersville, Higher	PRIMARY-SCHOOL TOTALS	PARTIALLY GRADED SCHOOLS.	Amoskeag, Grammar and Middle	Hallsville, all grades	PARTIALLY GRADED SCHOOL TOTALS.	UNGRADED SCHOOLS.	) Stark District (dote's Frais (Invey District Youngville	webster's Mills	UNGRADED-SCHOOL TOTALS	Aggregate totals for 1891

\* Exclusive of duplicate eurollments, no account builty made of pupils received by prototion or transfer from other of the city schools. † Exclusive or word involve a multitude of crross. Many pupils would be recioned two or three times, on account of numerous transfers from one school to another, made at the July promotion, at times of removal produced listicity, etc., etc.

#### ANNUAL OFFICIAL REPORTS.

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#### DAY SCHOOLS.

Summary of the attendance upon the several grades of public day schools for the year 1891:

GRADES,	Whole differen		Average No. belonging.	Average daily attendance.	cent of ance.
	Boys.	Girls.	Avera	Avera	Per daily tend
High	102	122	217	212	97.9
Grammar	448	531	797	743	93.2
Middle.	330	357	578	52 <b>4</b>	90.7
Primary	970	925	1,154	1,037	89.9
Partially graded	62	62	82	72	87.8
Ungraded	91	71	112	101	90.2
Totals, 1891	2,003	2,068	2,940	2,689	91.5
Totals, 1890	1,881	1,933	2,795	2,536	90.7

#### EVENING SCHOOLS.

Summary of the attendance upon the several grades of public evening schools for the year 1891:

		ge No. aging.	ge daily idance.	cent of y at- ance.	
Boys.	Girls.	Avera	Avera	Per e daily tend	
291		66	47	71.2	
· · · · · · · · ·	260	43	34	79.1	
54	60	Бυ	35	70.0	
110		60	50	83.3	
455	320	219	166	75.8	
430	257	189	141	74.1	
	differen Boys. 291 54 110 455	291         260           54         60           110         455	different pupils.         Jig bin bin bin bin bin bin bin bin bin bin	Boys.         Girls.         Girls. </td	

# (G)

#### Evening School Teachers.

Charles E. Cochran, principal of Lowell-street school, for boys.

Assistants – Etta S. Dana, C. A. Bohlin, David Eckvall, Arthur W. Morgan, W. J. Mooar, John J. Shea, Nellie M. James, Gertrude A. Burns, and Millie S. Morse.

Frank S. Sutcliffe (Winter), and William J. Mooar (Fall), principals of Spring-street school, for girls.

Assistants – Lizzie D. Hartford, Maggie Linen, Alice H. Boyd, and Edith S. Dole.

Charles W. Bickford (Winter), and L. H. Carpenter (Fall), principals of School-street school, for both sexes.

Assistants — Nellie M. Atwood, Evelyn Prescott, and Mary A. Clement.

Evening Drawing-School Teachers.

John M. Kendall, Henry W. Allen, and Alphonzo H. Sanborn.

(H)

#### GENERAL SUMMARY.

The following table presents the main features of interest pertaining to the attendance upon the public schools for the last ten years.

Date.	Enrolled in public day schools.	Whol- belor	e No. oging.	verage number be- longing.	ge daily attend- e.	Percentage of daily at- tendance.	rerage attendance at evening schools.	Graduated from gram- mar schools.*	d city schools for h.	Entered high from city schools.†	aduated from high school.	Average number teach- ers employed.
	Enrol sch	Boys.	Girls.	Average longin	Average ance.	Perce ten	Average evenin	Gradu mai	Passed high.	Enter sch	Graduated school.	Avera ers
1882	4,095	2,086	2,009	2,957	2,712	91.7	164	76	65	57	53	73
1883	$^{4,062}$	2,061	2,001	2,848	2,612	91.4	103	97	75	66	27	71
1884	3,918	1.924	1.994	2,872	2,645	92.1	95	85	71	49	38	72
1885	3,806	1,891	1,915	2,725	$2,\!430$	90.6	96	98	89	71	35	72
1886	3,632	1,812	1,820	2,698	2,175	91.9	79	78	71	53	42	74
1887	3,670	1,817	1,853	2,711	2,468	90.8	98	98	95	61	42	76
1888	3,712	1,806	1,906	2,768	2,500	90.3	116	88	80	58	45	76
1889	3,787	1,862	1,925	2,801	2,581	92.2	177	101	96	73	55	75
1890	3,814	1,881	1,933	2,795	2.536	90.7	141	121	114	83	33	75
1891	4,071	2,003	2,068	2,940	2,689	91.5	166	120	101	69	26	82

#### CHANGES IN CORPS OF TEACHERS,

The whole number of different teachers employed one term or more in the day schools, within the year, has been 91. Their respective positions may be learned from the attendance table on pages C, D, E, and F of the Appendix, but the various changes made within the year can be more readily understood by an inspection of the following:

\*Including grammar classes in suburban schools.

 $\pm U {\rm snally}$  some pupils have annually entered from other schools. This year seven have so entered.

#### REPORT OF THE SCHOOL COMMITTEE.

Teachers.	Date of effect of resignation.		te of begin- ing service.
Nancy S. Bunton.	Mar. 20.	Gertrude A. Burns.	Jan. 26.
Carrie E. Hoit.	June 26.	Annie M. Sleeper.	Jan. 26.
Abbie R. West.*	June 26.	Emma J. Cooper.	Apr. 13.
Clara E. Woods.	June 26.	Nellie M. Atwood.	Sept. 14.
Bertha L. Dean.	Nov. 20.	Georgia M. Cheney	. Sept. 14.
E. C. Root.	Nov. 25.	Augusta S. Downs.	Sept. 14.
	Date of effect of transfer.	Mary G. Worthen. Edith S. Dole.	Oct. 12. Nov. 23.
Gertrude A. Burns.	Sept. 14.	Mary H. Cutler.	Nov. 31.
Annie B. Goodwin.	Sept. 14.		1.011 311
Olive A. Rowe.	Sept. 14.		
Annie M. Sleeper.+	Sept. 14.		
Genevieve B. Knig	ht. Oct. 12.		

#### TRAINING SCHOOL SUB-TEACHERS.

Gertrude A. Burns.<sup>‡</sup> Georgia M. Cheney.<sup>‡</sup> Annie M. Sleeper.<sup>‡</sup> Gertrude L. Southard.<sup>‡</sup> Mary G. Worthen.<sup>‡</sup> Mary A. Clement.<sup>‡</sup> Susie L. Dodge.|| B. Millie Cayzer.<sup>§</sup> Carrie E. Litch.<sup>§</sup> Mary W. Allen.<sup>¶</sup> Issa M. Tuttle.<sup>¶</sup> Mabel R. Brown.\*\* Lucy M. Choate.\*\* Mary J. Corcoran.\*\* Annie R. Corson.\*\* Alfreda Hall.\*\* Mertie C. Hawks.\*\* Carrie E. Head.\*\* Perley E. Higgins.\*\* Mary S. Richardson.\*\* Josie L. Riddle.\*\* M. Minnie Sturtevant.\* \*

\* Died July 3. † Substitute for Miss Chandler in Franklin-street school, fall term. ‡ Graduated January 30, 1891. @ Entered February 2, 1891. # Entered September 14, 1891. \$ Withdrew.

(J)

	Abs report	entees ed from	No. vo rily re t	olunta- turned o.	No. rep cause attend	orted d to 1.	d out of	o. found sick and unable to attend.	wise un- dy de-	ound.
Date,	City schools	Parochial schools.	City schools.	Parochial schools.	City schools.	Parochial schools.	No. moved out of the city.	No. found sick and unable to attend.	No. otherwise un- avoidably de- tained.	No. not found.
January	16	22	6	1	9	14		3	5	
February	24	23	6	1	16	16	1	4	3	
March	11	16	1	· · · · • •	9	10	<b></b>	5	2	<b></b>
April	18	27	3		10	23	3	3	3	• • • • •
May	28	15	9		17	11	•••• •••	1	5	
Juue	19	21	2	1	12	17		4	3	
September	12	30		3	<b>1</b> 0	20	5	2	$^{2}$	1
October	29	42	7	2	12	22	2	19	6	1
November	17	21	3		7	19	3	3	3	• • • • •
December	13	14	3		7	9	1	3	3	1
Totals	187	231	40	9	109	161	15	47	35	3
Date.		Thants not en- rolled found on streets.	to at	Parochial Renduced Renduction Renducti Renduction Renduction Renduction Renduction Rendu	No. others between 6 and 16 nnable, from ill health. to attend any school.	o. of school age	school hours. No. of parents visit- ed.	No. temporarily con- fined at the police station.	No. brought before the court.	No. employment cer- tificates granted.
	<b>.</b>	Ē	. Cit	Pa	ž	ž	X		No	
January		24	15	9			80 9 <b>3</b>		•••••	88
February	• • • • •	7	5	2			81 77	7	1	27
March	••••	4		4	3		73 41	2		73
April	•••	13	6	7			56 72			55
May	• • • • •	17	5	12			87 71	4		44
June		7					85 - 46 62 - 132		1	40
September		4	5 4	2			62 132 74 95			40
November		* 3	4				14 95 78 52		• • • • • • •	19 23
107ember		2	1	1			18   52   73   42   42   42   42   42   42   42   4			28
December	• • • • •									

VI. — Work of Truant Officer.

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ITEMS OF ACCOUNT.	Resources from appro- priations and transfers.	Expenditures, 1891
Salaries of teachers	\$49,398.52	\$49,398.52
Books and stationery	300.00	62.50
Free text-books and supplies	3,210.73	3,210.73
Furniture and supplies	750.00	746.46
Repairs	4,044.88	4,041.88
Care of rooms	3,715.75	3,715.75
Fuel	4,673.54	4,673.54
Printing and advertising	400.00	396.11
Contingent expenses	931 92	931.92
Evening common schools	1,500.00	1,064.53
Evening drawing schools	600.00	552.71
Total	\$69,525.34	\$68,797.65

# VII.-Finance.-1891.

COST OF CITY SCHOOLS, 1891.

Expenditures, as ab	ove sp	ecifie	d.				\$68,797.65
		Sal	aries.				
Members of the sch	nool be	ard					180.00
Clerk of the board							100.00
Superintendent of s	chools						2,000.00
Truant officer .							750.00
Total .							\$71,827.65
Rece	ipts on	Acce	ount oj	f the .	School	s.	
Literary fund .							\$5,287.50
Non-resident tuition	n.						320.95
Sale of text-books	•	•		·	•		138.52
Total .	•		(L)		•		\$5,746.97

Net amount raised by taxation			\$66,080.68
Raised by taxation in 1890 .		•	67,581.71
Reduction			\$1,501.03

The city valuation for 1891 is \$24,872,492; and hence the rate of school tax for the year is  $$66,080.68 \div $24,872,492$ , or .00265 + .

The following account of school property is largely the same as for last year, when an accurate inventory was made of it. The expenditures this year may be supposed to offset ordinary wear and tear, except in the case of new buildings.

#### SCHOOL PROPERTY, DECEMBER 31, 1891.

*Furniture*. Included under this head are teachers' and pupils' desks, chairs, settees, tables, portable blackboards, clocks, pianos and their appurtenances, ladders, double windows, and heating apparatus.

General Supplies. Included under this head are ink-stands, bells, waste baskets, thermometers, brooms, floor-brushes, dusters, dust pans and brushes, door-mats, pails, dippers, wash basins, window brushes, mops, coal hods, shovels, axes, hammers, screwdrivers, and wheelbarrows.

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#### REPORT OF THE SCHOOL COMMITTEE.

SCHOOL BUILDINGS.	Furniture.	General supplies
High sehool	\$3,428,00	\$25.00
Franklin-street	2,229.00	36.00
Spring-street	1,937.00	28.00
Lincoln-street	3,355.00	56.00
Ash-street	3,231.00	30.00
Main-street	2,107.00	30.00
Webster-street	2,108.00	54.00
Bakersville	813.00	15.00
Varney school	1,605.00	25.00
Blodget-street	228.00	7.00
Lowell-street	302.00	11.00
Training school	1,613.00	28.00
Wilson Hill	321.00	9.00
South Main-street	319.00	12 00
Amoskeag	345.00	8.00
Hallsville	169.00	7.00
Stark District	94.00	4 00
Goffe's Falls	114.00	5.00
Harvey District	124.00	6 00
Youngsville	85.00	5.00
Webster's Mills	65.00	5.00
Mosquito Pond	62.00	4.00
Evening Schools	250.00	200.00
Total	\$24,904.00	\$610.00

*Special Supplies.* Included under this head are maps, globes, charts and chart supporters, numeral frames, slates, pencils, pencil sharpeners, pens, penholders, crayon, erasers, pointers, measures, geometrical forms, compasses, and rulers.

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GRADES.	Special supplies.	Unabridged d i c- tionaries and li- brary or refer- ence books.	Regular text- books.
High school	\$200.00	\$575.00	\$1,600.00
Grammar schools	900.00	325.00	2,600.00
Middle schools	500.00	190.00	1,225.00
Primary schools	387.00	150.00	550.00
Suburban schools	154.00	75.00	350.00
Evening schools	5.00	·····	50.00
Totals	\$2,146.00	\$1,315.00	• <b>\$6,</b> 375.00

Amount of totals in two foregoing tables . . . \$35,350.00

SUPERINTENDENT'S OFFICE, DECEMBER 31, 1890.

furniture .		•	•	•	•	\$250.00
general supplies		•				25.00
special supplies						I I O. OO
blank books and	paper					150.00
regular text-bool	ks .	•		•	•	350.00
	general supplies special supplies blank books and	general supplies special supplies blank books and paper	general supplies special supplies blank books and paper .	general supplies	general supplies	general supplies       .

#### VIII. - School Year.

Winter term of twelve weeks opened December 29, 1890, closed March 20, 1891. Vacation of three weeks.

Spring term of eleven weeks opened April 13, closed June 26. Vacation of ten weeks.

Fall term of fourteen weeks opened September 14, closed December 18. Vacation of two weeks.

Number of school days in the year, as provided above by the school board, 185.

Average number of days the schools were taught, 176.

(Being closed several holidays, days of "Teachers' Institutes," and halfdays on account of bad weather or insufficient heat.)

#### IX.-High School Graduating Class.

FOUR YEARS' COURSE.

George P. Beckford, cl.	Perla Eva Higgins, <i>cl.</i>
Mabel Ruth Brown, cl.	Sally Hunt, c.
Almy Chase, cl.	Hattie Eunice Kidder, c.
Helen Wood Clark, c.	Minot Taylor Phelps, e.
Annie Rosmer Corson, cl.	Minnie Mabelle Phillips, d.
Eustache Charles E. Dorion, c.	Mary Shaw Richardson, e.
John Henry Fahey, cl.	Josephine Lillian Riddle, e.
Samuel Thomas Ferguson, c.	Lizabel Savory, e.
Mary Isabel Gould, cl.	M. Minnie Sturtevant, cl.
Mertie Clara Hawkes, cl.	Fred Maurice Weston, e.

THREE YEARS' COURSE.

Edith Alfreda Hall, s.	A. Ardelle Nourse, cl.
Josie May Hardy, e.	Rose Leillia Still, s.
Leola Almira Morey, cl.	Frederick N. Walker, cl.
E signifies English Division.	Cl. signifies Classical Division.
S signifies Scientific Division.	C signifies College Division.

The following arrangement for indicating pupils entitled to honors was not published upon the program of graduating exercises; but it is here presented to illustrate the method which, under "Iligh School," in the superintendent's report, is suggested for future programs.

#### HONORS.

Number of pupils who pursued the English Division of the course of study, 7.

1. Lizabel Savory.

2. Josephine Lillian Riddle.

Number in the Scientific Preparatory Division, 2.\*

1. Rose Leillia Still.

\* When there are but two pupils in a division, the one not first is of necessity second and cannot therefore with propriety be credited with an honor.

#### ANNUAL OFFICIAL REPORTS.

Number in the Classical Division, 13. 1. Almy Chase. 2. May Isabel Gould. Number in the College Preparatory Division, 4. 1. Sally Hunt and Hattie Eunice Kidder. \* 2. Eustache Charles E. Dorion.

# X.-Winners of Clarke Prizes.

FOR EXCELLENCE IN ELOCUTION AT CONTEST, JANUARY 29, 1891.

Alice Chalk, \$13. Grettie E. Canney, \$11. A. Ardelle Nourse, \$9. Josie E. Cass, \$7. Sarah E. Wylde, \$5. Frank Bartlett, \$5.

#### XI. - Organization, 1892.

SCHOOL COMMITTEE.

EDGAR J. KNOWLTON, MAYOR, ex officio, Chairman. EDSON S. HEATH,

President of the Common Council, ex officio. Ward 1. Charles H. Manning.

- Charles D. Sumner.
- Ward 2. William H. Morrison. George H. Stearns.
- Ward 3. George D. Towne. Louis E. Phelps.
- Ward 4. Stephen B. Stearns. Edwin L. Richardson.
- Ward 5. James P. Slattery. William J. Sughrue.
- Ward 6. Frank T. E. Richardson. George W. Dearborn.

\* Misses Hunt and Kidder had the same scholarship rank.

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#### REPORT OF THE SCHOOL COMMITTEE.

- Ward 7. Marshall P. Hall. Edward B. Woodbury.
- Ward 8. William K. Robbins. Luther C. Baldwin.

VICE-CHAIRMAN OF THE BOARD.

#### MARSHALL P. HALL.

CLERK OF THE BOARD.

#### EDWARD B. WOODBURY.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

#### WILLIAM E. BUCK.

#### TRUANT OFFICER.

#### SAMUEL BROOKS.

#### STANDING COMMITTEES.

*Finance*. The Mayor, Messrs. Heath, Hall, Woodbury, and F. T. E. Richardson.

Salaries. Messrs. Woodbury, Robbins, and Slattery.

Repairs, Furniture, and Supplies. Messrs. Manning, S. B. Stearns, and Summer.

Text-Books, Apparatus, and Studies. Messrs. Hall, Baldwin, and G. H. Stearns.

Drawing. Messrs. Baldwin, Hall, and Phelps.

Music. Messrs. F. T. E. Richardson, Phelps, and Morrison.

*Fuel and Heating.* Mr. G. H. Stearns, The Mayor, Messrs. Heath, Manning, and Dearborn.

*Examination of Teachers.* Messrs. Robbins, Morrison, and Towne.

Attendance. Messrs. E. L. Richardson, S. B. Stearns, and Sughrue.

Health. Messrs. Towne, Slattery, and Sumner.

#### SUB-COMMITTEES.

High School. Messrs. Manning, Hall, Morrison, S. B. Stearns, Robbins, and Towne.

Franklin-street School. Messrs. Woodbury, Sumner, and Baldwin.

Spring-street and Lowell-street Schools. Messrs. Towne, Slattery, and Sumner.

Lincoln-street School. Messrs. S. B. Stearns, F. T. E. Richardson, and E. L. Richardson.

Ash-street School.\* Messrs. Phelps, Towne, and Hall.

Webster-street and Blodget-street schools. Messrs. G. H. Stearns, Morrison, and Woodbury.

*Bakersville School.* Messrs. Morrison, F. T. E. Richardson, and Woodburv.

Varney School. Messrs. Baldwin, S. B. Stearns, and Phelps.

Training School and Wilson Hill School. Messrs. Hall, Robbins, and Phelps.

Main-street and South Main-street Schools. Messrs. Robbins, Baldwin, and Dearborn.

Amoskeag and Stark District Schools. Messrs. Sumner, Dearborn, and Sughrue.

Hallsville and Youngsville Schools. Messrs. Dearborn, Manning, and Sughrue.

Goffe's Falls and Harvey District Schools. Messrs. Slattery, G. H. Stearns, and E. L. Richardson.

Webster's Mills and Mosquito Pond Schools. Messrs. E. L. Richardson, Slattery, and Sughrue.

*Evening Schools*. Messrs. F. T. E. Richardson, Manning, and G. H. Stearns.

#### XII. - List of Teachers.

HIGH SCHOOL. - BEECH STREET.

Master. Albert Somes.

Sub-Master. George I. Hopkins.

\* Also of any others that may be organized on Bridge street.

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#### REPORT OF THE SCHOOL COMMITTEE.

Assistants. William T. Abbott. Lucretia E. Manahan.\* Mary Stanton. Nellie Pickering. Mary H. Cutler. Camille Benson.

FRANKLIN-STREET SCHOOL.

Second Floor. - Grammar Grades.

Principal. Charles W. Bickford. Assistants. Annie O. Heath. Jennie M. Chandler. Carrie E. Reid.

First Floor. - Lower Grades.

Higher Middle. C. Augusta Abbott. Lower Middle. Hattie G. Flanders. Higher Primary. Nellie M. James. Lower Primary. Ella F. Sanborn.

SPRING-STREET SCHOOL.

Second Floor. - Mixed Grades.

Principal. Lizzie P. Gove (4th Grammar division). Higher Middle. Emma L. McLaren.

First Floor. - Lower Grades.

Lower Middle. Fannie D. Moulton. Higher Primary. Nellie I. Sanderson. Lower Primary. Lucia E. Esty. Lower Primary. Maude L. Kent. \*Deceased.

eceased.

#### LINCOLN-STREET SCHOOL.

Second Floor. - Grammar Grades.

Principal. Frank S. Sutcliffe. Assistants. Annie W. Patten. Isabelle R. Daniels. Mary F. Barnes.

First Floor. - Lower Grades.

Grammar and Middle. Annie M. Sleeper. Higher Middle. Susie G. Woodman. Lower Middle. Cora B. Gilford. Higher Primary. Theodora Richardson.

ASH-STREET SCHOOL.

Second Floor. - Grammar Grades.

Principal. Fred C. Baldwin. Assistants. Gertrude F. How.\* Mary E. Bunton. Edith S. Dole.

First Floor. - Lower Grades.

Higher Middle. Emma J. Cooper. Lower Middle. Kittie J. Ferren. Higher Primary. May F. Nutt. Lower Primary. Annie B. Goodwin. Lower Primary. Bertha A. Young.

WEBSTER-STREET SCHOOL.

Second Floor. - Grammar Grades.

Principal. B. S Andrews. Assistants. F. Maude Joy. Anna P. Cummings. Alta C. Willand.

\* Third floor.

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First Floor. - Lower Grades.

Mixed Middle. Eva F. Tuson. Mixed Primary. Lettie M. Smith.

BAKERSVILLE SCHOOL.

Second Floor. — Mixed Grades.

Principal. Lizzie A. Burns (grammar classes). Assistant. Lelia A. Brooks.\* Higher Middle. Issa M. Tuttle.\* Lower Middle. Augusta S. Downs.

First Floor. - Lower Grades.

Higher Primary. S. Izetta Locke. Lower Primary. Edith M. Stebbins.

VARNEY SCHOOL.

Second Floor. - Grammar Grades.

Principal. George Winch. Assistant. Barbara B. Joy.

First Floor. - Mixed Grades.

Assistants. Lillian Little (Third Division). Maria Dickey (Fourth Division). Mary J. Dowd (Fourth Division). Higher Middle. Ellen E. McKean. Mixed Middle. Nettie C. Woodman.

#### HALLSVILLE SCHOOL.

Principal. William H. Huse. Mixed Middle. Ella F. Barker. Mixed Primary. Olive A. Rowe. \*Third floor.

#### TRAINING SCHOOL.

#### (Merrimack street, cor. Union.)

Principal. Caroline E. Wing.

A lower Middle School (No. 15), a higher (No. 21), and two lower (Nos. 22 and 23) primary schools, embracing first four years of school work. Principal is assisted by members of Training Class.

MAIN-STREET SCHOOL.

Second Floor. - Mixed Grades.

Principal. Mary W. Mitchell (Higher Middle). Lower Middle. Millie S. Morse. Higher Primary. Mary E. Brophy. Higher Primary. Mary I. Walsh.

First Floor. - Primary Grades.

Mixed Primary.	Mary A. Clement.
Mixed Primary.	Gertrude A. Burns.
Lower Primary.	Kate T. Clarke.
Lower Primary.	Gertrude L. Southard.

BLODGET-STREET SCHOOL.

Second Floor.

Higher Primary. Gertrude H. Brooks.

First Floor.

Lower Primary. Georgianna Dow.

#### LOWELL-STREET SCHOOL.

Second Floor.

Lower Primary. Genevieve B. Knight. (W)

#### First Floor.

Higher Primary. Helen M. Morrill.

#### WILSON-HILL SCHOOL.

Lower Primary. Huldah C. Graupner. Lower Primary. Ella Hope.

#### SOUTH MAIN-STREET SCHOOL.

Higher Primary. Delle E. Haines. Lower Primary. Georgia M. Cheney.

#### PARTIALLY GRADED SCHOOLS.

Amoskeag. Nettie B. Fogg. Mixed Primary. Mary G. Tynan.

#### UNGRADED SCHOOLS.

No. 1. Stark. Inez M. Warren.

- 2. Goffe's Falls. Georgia Kendrick.
- 3. Harvey. Emma J. Ela.
- 4. Youngsville. Mary A. Seavey.
- 5. Webster's Mills. Mary G. Worthen.
- 6. Mosquito Pond. Nellie M. Atwood.

#### SPECIAL TEACHERS.

Music. J. J. Kimball.

#### JANITORS.

Webster-street and Blodget-street Schools.

Michael Finley, Pearl, near Chestnut.

#### High School and Ash-street School.

John S. Avery, 404 Merrimack. (X) Lincoln-street and Wilson-Hill Schools. William Stevens, 418 Central.

Spring-street and Lowell-street Schools. William H. Morrill, 45 Pennacook.

Franklin-street and Training Schools.

Edward P. Cogswell, 218 Central.

Varney and South Main-street Schools.

H. G. Batchelder, 123 Carroll.

Main-street School.

J. C. Blaine, 58 School.

Hallsville.

William H. Newry, 538 Central.

Bakersville School.

H. C. Dickey, Bakersville.

EVENING SCHOOLS.

(Open from October to March, five evenings each week.)

Lowell-street Building. Three schools for boys.

Spring-street Building.

Two schools for girls.

School-street Building.

Two schools, one for each sex. (Y)

EVENING DRAWING SCHOOL.

(Open from October to March.)

Spring-street Building.

Machine-drawing classes meet on Monday and Thursday evenings.

Architectural-drawing classes meet on Tuesday and Friday evenings.

GRADUATES	OF	TRAINING	SCHOOL	NOT	EMPLOYED	$\mathbf{AS}$	REGULAR
		TEACHERS,	FEBRUA	RY 20	, 1891.		

Emma B. Abbott.\* Alverta P. Barrett.\* Emma M. Streeter.\*

OTHERS NEVER HERE EMPLOYED IN TEACHING, WHO HAVE CER-TIFICATES OF QUALIFICATION.

Maud Bell, Fannie L. Perry, Fannie E. Smith, Martha T. Learnard, Lizzie M. McAfee, Hattie J. Hoyt, Evelina Davis, William S. Harris, Hattie N. Gage, Carrie L. Barker, Georgie F. Drake, and Lucie G. Thompson. All certificated for grammar and lower grades.

Helen W. Poor, Belle F. Small, Hattie M. Ellis, Hattie E. Merrill, Alithea M. Hutchins, Amy B. Smith, and S. Louise Valentine. Certificated for middle and primary grades.

# XIII. - School Year, 1892.

Winter term of twelve weeks opens January 4, closes March 25. Vacation of two weeks.

Spring term of eleven weeks opens April 11, closes June 24. Rest of year not yet determined.

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\* Certificated for primary and middle grades.

ENGLISH DIVISION. 3 of 4 Junes . ENGLISH, WITH FRENCH IF DESILIED.	CLASSICAL DIVISION. 4 Days ENGLISH AND LATIN, WITH PRENCH IP DESIRED.	COLL. PREPARATORY SC 5 Years, 1 ENGLISH, LATIN, GREEK, AND FRENCH.	COLL: PREPARATORY SCIENTIFIC PREPARATORY. 5 1008-1, 2
	FIRST YEAR FALL TERM.	ALL TERM.	
Algebra. English Grammar and Analysis. Physics.	Algebra. Latin. Physics.	Same as the Classical Division.	Same as the English Division.
	WINTER TERM.	TERM.	
Algebra. English Grammar and Composition. Physics.	Algebra. Latin. Physics.	Same as the Classical Division.	Same as the English Division.
	SPRING TERM.	ERM.	
Algebra. Rhetoric. Physics.	Algebra. Latin. Physics.	Same as the Classical Division.	Same as the English Division.
	SECOND YEAR.— FALL TERM.	FALL TERM.	
Geometry, * Studies m English, † Physiology,	Geometry. Latin. Physiology.	Geometry. Latin. Greek.	Geometry. Studies in English.† French.
	WINTER TERM	TERMI.	
Geonetry. General History. Civil Government.	Geometry. Latin. Civil Government.	Geometry. Latin. Greek.	Geometry. General History. French.
	SPRING TERM.	TERM.	
Geometry. General Idistory. Botany. †	Geometry. Latin. Botany. †	Geometry. Latin. Greek.	Geometry. General History. Prench.
	THIRD YEAR FALL TERM.	PALE TERM.	
English History. Commercial   French § may take Arithmetic.   Erench § may take Chemistry.   the place of either.	English Latin. English Preach may take History Jube place of either.	Itis, and Geog. of Rome. Latm. Greek.	Arithmetic rev. English History. French.
			e de la construction de l'impose

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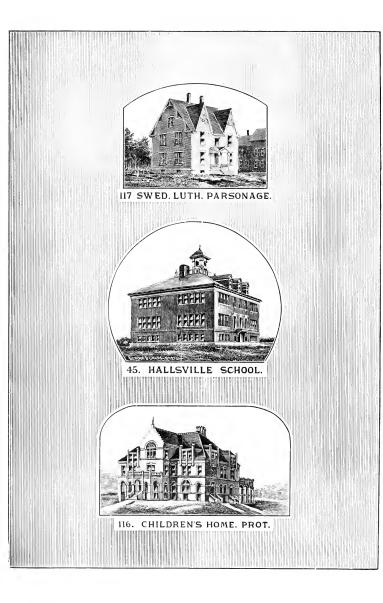
Algebra rev. English Authors. French.	Geometry rev. English Authors, French. (End of Scientific Course, See last page.)	FIFTH YEAR. COLLEGE COURSE.	Rhetoric. ¶ French. Latin and Greek. ••		English Authors * French. Latin and Greek.	Semantic states of the second se	English Authors. French. Latin and Greek.	is Throughour the Course.
llis. of Rome and Greece. Latin. Greek.	His. and Geog. of Greece. Latin. Greek.	ALL TERM.	Arithmetic rev.¶ Latin. Greek.	ERM.	Algebra rev. Latin. Greek,	ORM.	Geometry rev. Lathn. Greek. (FlyTH YEAR, NEXT COL.)	PUPIL EVERY TWO WEEK
General Latin. General French may take Ilis. Chemistry. I the place of eriber. SPRNG TRENG	General French may take (Themistry, ) the place of either.	FOURTH YEAR FALL TERM	Trigonometry, French may Trigonometry, French may Almeralogy and Geology, 1 place of either.	WINTER TERM	English Authors. Algebrarev.[]] French may take Astronomy. ] place of either.	WRIT DURING	English Authors, Surveying, Preach may ordeometry rev. Take place Physical deog. ) of either.	INATING) IS REQUIRED OF EACH
Book-keeping (French may take and Arithmetic) (French may take Chemistry.) (the place of either,	English Authors. Book-keeping) French may take and Arithmetic, Jue place of either. Chemisty, Jue place of either.		Trigonometry, 1 Three studies in or Arithmetic rev. 1 bislish, or Arithmetic rev. 1 bislish, or Arithmetic Bug, Grammar rev. 1 breach may or Arith. Rev Minerabasy 1 sites the place Minerabasy and Geology, 1 1 of one of them, and Geology.		Algebra rev.   Three studies in Burlen Science. French may Astronomy. Externo place of one of them.		surveying, Three studies in or deometry rev. English, or Mental Science Firchen may Physical Geog. of one of them.	A DECLARATION OR AN ESSAY (ALTERNATING) IS REQUIRED OF EACH PUPIL EVERY TWO WERES THROUGHOFT THE COURSE.

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# REPORT

OF THE

# BOARD OF HEALTH.



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# REPORT OF THE BOARD OF HEALTH.

#### To his Honor the Mayor :

These have been

The Board of Health submits its annual report for the year 1891.

At the beginning of the year the board consisted of George C. Hoitt, M. D., chairman; Joseph B. Sawyer, C. E., clerk; and William M. Parsons, M. D. The term of Dr. Parsons expired on the first Monday in February, and Neil F. Starr, M. D., was appointed to the office. On the same day the board was reorganized by the choice of Dr. Hoitt as chairman, and of Mr. Sawyer as clerk, and the board as thus constituted and organized remained unchanged to the end of the year.

#### EXPENDITURES.

These have t	een :							
Pay of employee	es .							\$1,203.88
Street-car fares								38.85
Stationery and [	ostage							9.35
Carriage hire .								16.75
Printing and ad	vertising	g •						62.52
Traveling expen	ises .							1.30
Removing dead	animals	, etc	., .	•				9.25
Analysis of wate	er from s	uspe	cted v	vells				9.60
Removing cases	of infec	tiou	s dise	ase to	city	hospi	ital	
and caring fo	r them		•	•				12.50
Total								\$1,364.00

The salaries of the members of the board, added to the above amount, make the total cost of the health department \$1,964.

#### ANNUAL OFFICIAL REPORTS.

#### WORK OF THE INSPECTORS.

Two inspectors have been employed, Mr. Russell White throughout the year, and Mr. M. J. Jenkins from March 2 to December 31. Mr. White has, under the direction of the board, had charge of the restriction of contagious diseases, the removal of dead animals, and the supervision of vault cleaners. He reports as follows:

Houses placarded	l for	scai	·let f	lever					23
	for	dipl	nther	ria			•		17
	for	mea	sles						83
								-	
Total		•	•	•	•	•		•	123

School teachers, employers, and others have been notified of the existence of the disease whenever that precaution was necessary.

Houses of	con	taining	cases	of ty	phoid	fever	visite	ed	•	•	69
Privy	vat	ilts insp	ected	after	being	g clea	ned :				
Cleaned	by	Timot	hy Mo	Ken	na						821
	$\mathbf{b}\mathbf{y}$	Thoma	s Wel	ch	•						521
	by	John T	f. Go	tt	·	•	·		•		35
	Т	otal .			•					I	377
Dead	ani	mals re	moved	l and	burie	d :					
Swine											I 2
Horses											2
Dogs			·							•	30
Cats	•			•		•	•	•	•	•	9
	Т	otal									53
Compla	ints	investi	gated	and	nuisar	nces a	bated				154

Mr. Jenkins was employed in the investigation of complaints, the serving of notices, and a part of the time in the supervision of the vault cleaners. A large part of his work was done by personal interviews with the owners or agents of the premises, and he secured the abatement of a large number of nuisances in that way; but he kept no account of the number. He served formal legal notices as follows: For the removal of swine, 3; abatement of sink-water nuisances, 5; to enter sewer, 3; to abolish privy vaults, 31; to remove drains entering Mile brook, 9; to cleanse and repair privies, 2; to put dwellings in a proper sanitary condition, 5. In most of these cases compliance with the notice was secured. In some cases the owners have been reluctant and tardy. In a few others, where it appeared to the satisfaction of the board that rebuilding or extensive alterations are contemplated in the immediate future, the notice was suspended.

#### VAULT CLEANING.

Three parties have been licensed to do this work, viz., Timothy McKenna, Patrick Welch, and John T. Gott. It has been necessary to exercise a close and constant supervision of the cleaners in order to secure reasonably good work. This has taken much of the time of our men, and so long as it is the object of those who do the business to make money rather than to do good, satisfactory work, this supervision will be necessary. It is our belief that the licensing system should be abolished, and that the board should be given the means and the authority for vault cleaning. This is generally regarded as one branch of the legitimate work of a health department, and there is no more reason for having it done by a licensee or contractor than there is for having the duties of the fire or police department so done. The same thing is true of the scavenger service.

#### REMOVAL OF PRIVY VAULTS.

In the autumn of 1890 the board issued notices for the removal of all vaults on the west side of Church street between Washington and Bridge streets, and the orders were complied with in the spring of 1891. On April 11 the board determined to begin the removal of all the vaults on lots fronting on Elm street between Central and Harrison streets, and soon after the work was extended to Vine street from Amherst to Concord streets. On August 24 it was voted to issue notices for the discontinuance of all vaults on Amherst street between Elm and Chestnut streets, and the work was begun at once. In all these districts it is now well advanced. In several instances where the vaults still remain, the water-closets which are to be substituted are partly in place. In other instances the vaults will give place to new blocks which are to be built the coming season. In a few cases a little legal coercion may be required. It is the intention of the board to finish up what they now have in hand, and to extend the work as fast as practicable.

A few vaults in other localities have been abolished at the suggestion or direction of the board, and in several instances which have come to our knowledge, the owners have substituted waterclosets without any intervention of the department. It is gratifying to know of these and other evidences of the growing public sentiment in favor of better sanitation.

#### CONTAGIOUS DISEASES.

The number of cases of contagious diseases reported to the board in each month, with the number of deaths therefrom as reported to the city registrar, is given in the following table :

						-								
Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	Deaths.
Diphtheria	7	3	2	1	· · · •	1	1			$^{2}$	1	3	21	2
Scarlet fever	4	7	4					$^{2}$	1	···· <sup>1</sup>	3	4	25	
Typhoid fever	<b>2</b>	3	1	3	$^{2}$	5	3	10	11	14	13	9	76	18
Measles	$^{2}$	7	1	$^{2}$	$^{2}$	$^{2}$	15	5	$^{2}$	1	11	39	89	2

The next table epitomizes the history of these diseases for the last five years so far as it is known to the board :

	Diph	theria.		ırlet ver.		hoid /e <b>r.</b>	Mea	sles.	То	tals.
YEARS.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1887	73	17	94	4	28	18	*	9		48
888	126	30	44	1	35	12	187	9	392	52
889	79	23	259	5	36	16	54	4	428	48
890	41	9	63	3	36	17	298	6	438	35
891	21	2	25		76	18	89	2	211	22

\* No returns.

The figures giving the numbers of deaths are probably accurate, or very nearly so. Those for cases of diphtheria are thought to be approximately correct; but scarlet fever and measles have been so little feared by large numbers of our population that many cases were not put under the care of a physician, and consequently were not reported. There is need of a law like that of some other states, requiring householders to report in such cases. Occasionally some person will tell us that he knows of a bad case of some contagious disease of which we know nothing, and which requires the immediate attention of the board. When asked where the case is, he refuses to tell on the ground that he does not wish to meddle with the affairs of his neighbor. Such a course is about as foolish and pusillanimous as it would be to know that his neighbor's buildings were on fire, and his own in danger, and to refuse to give an alarm lest he should be meddling with his neighbor's business.

With regard to typhoid fever it may be said that sanitary authorities generally agree that there are eight or ten cases for every death. If that proportion holds in this city, less than one half of the cases have come to our knowledge. The state board of health, acting under authority conferred by statute, requires physicians to report all cases of this disease. It is probable that in so grave a disease nearly every case must come to the notice of some physician, and it seems that there must be great negligence on the part of some members of the profession.

It is sometimes asked, What is the necessity of reporting typhoid fever since there is no need of isolation? The answer is that the disease is controllable by other means, which it is the business of the board to see carried into effect. Typhoid fever is one of the preventable diseases, and if all health officers, physicians, and nurses would do their whole duty it would be a rare disease. This opinion is based upon the fact that intelligent efforts to restrict it are attended with most successful results, showing that the natural history of the disease and the proper means for its restriction are well understood. The disease is not often. possibly it is never, contracted directly from the sick person by way of respiration, but the contagious principle, being eliminated in the discharges from the bowels, enters the systems of new victims by way of the stomach. The most usual carrier of the disease is the drinking-water. Fearful outbreaks have been caused by contaminated wells, and even by public water supplies. Milk also is known to be an occasional vehicle of the typhoid germ. Moreover, if there is any weight to be given to the testimony of close observers and careful investigators, then the evidence is overwhelming that typhoid fever is a filth disease. and that any mass of decomposing organic matter, such as foul privy-vaults, filthy drains, pig-stys, damp and unclean cellars or rooms, affords a fertile field for the reproduction and multiplication of the typhoid germ. It is evident from the above consideration that every case should be reported to the health department as soon as it is known, and that the department should at once take energetic measures for the restriction of the disease. To say that it is unnecessary to report because isolation does not apply is much like saving that it is unnecessary because vaccination is not called for in the case. But just as vaccination is useful in preventing epidemics of smallpox, so, probably to an equal extent, are cleanliness and the thorough disinfection of the stools useful measures in exterminating typhoid fever.

There is another phase of this subject to which in the interest

of humanity we cannot forbear to call the attention of our people. It is well known that our sewers lead directly from our homes to the Merrimack, and that the water supplies of Lowell and Lawrence are drawn from the same river. It is known also that these cities are scourged much worse than is Manchester by this disease. In Lowell the record is as follows:

1889,	cases	reported,	194,	deaths,	65.
1890,	<i>4</i> 4		454,	"	123.
1891,	" "	"	296,	44	77.

In the last year only thirty-three of the seventy-seven deaths were in cases which had been reported, the ratio being one in nine. If the same ratio held as to the forty-four deaths in unreported cases there were about seven hundred cases in that city last year. Their board of health says that "in our opinion typhoid fever is more to be dreaded by the population of Lowell than all other contagious diseases, and so long as the sewage of Manchester, Hooksett, Suncook, and Nashua drains into our water supply, we are surrounded by its infection and cannot escape."

It is enough that we defile the stream with all our sewage as well as with great quantities of hurtful manufacturing waste and slaughter-house drainage, without poisoning it by the dejections of our sufferers from typhoid fever. To divert the sewage from the river would require time and the outlay of a vast sum of money, albeit it is an outlay which the city will some day be obliged to make, but to keep out the poison of typhoid dejections is a duty so imperative and so easily performed that no one can willfully or carelessly neglect it and be worthy of respect as a humane man or a good citizen.

The table shows an increase of the number of cases of typhoid which, not being accompanied by a corresponding increase in the number of deaths, is probably due to better reporting on the part of physicians, and is thus more apparent than real. Other noticeable features of the table are that scarlet fever has caused no deaths, and that diphtheria and measles are each chargeable with but two, while the totals for these four of the principal communicable diseases show but two hundred and eleven cases and twenty-two deaths.

The mortality from these diseases is regarded by most authorities as one of the principal indices of the sanitary condition of a community, and of the efficiency and value of its health service. It would be presumption to claim that the annual diminution of the figures in the last column of the table is due solely to the work of this board, but the movement is at any rate in the right direction, and whatever may be the cause of the diminution, the table is submitted as a sufficient answer to those ignorant and irresponsible persons who, in their warfare upon the board of health, have not scrupled to slander the good name of the city for healthfulness and decency, and to represent the place as a Black Hole of filth and sickness.

## REPORT OF THE BOARD OF HEALTH. 383

## TABLE

## SHOWING THE MORTALITY OF THE CITY BY DISEASES AND BY MONTHS FOR THE YEAR 1891, COMPILED FROM THE RECORDS OF THE CITY REGISTRAR.

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
abdominal     abdominal     mastoid.     mastoid.     Abortion     Accidents not specified     arun over by cars     "horse-cars     "horse-cars     "drowned     asphyxia     "scalded     coasting Alcoholism. Anaemia				1 1 1 		1 	····· ···· ···· ···· ···· ···· ···· ····	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1    1 1 1 1 1 1 1 1 1 1	1 ····· ····· ····· ····· ····· ····· ····· ····· ····· ····· ······		$ \begin{array}{c}                                     $	112112212121211112112122423562425121264131441122411212341223412341
Cellulitis, pelvic Debility Dentition Diabetes	3 1	····· 4	$\frac{\cdots}{2}$			· · · · · · · · · · · · · · · · · · ·	4		$\frac{2}{1}$		1	1 3	$\frac{1}{22}$

TABLE. — Continued.

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Hepatitis       1       1       1       1         "ehronic       1       1       1       1         "femoral       1       1       1       1         "femoral       1       1       1       1       1         "femoral       1       1       1       1       1       1         "femoral       1	" therenlar 1 1

Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December.	1.00
Meningitis, cerebrał				1	1					1			
<ul> <li>cerebro-spinal</li> <li>tubercular</li> </ul>			1						i	·····			
Metritis Metro-peritonitis					••••		• • • • •		••••		÷		
Miscarriage	·		1						1				
Neuralgia of heart						2							
Nephritis													
" chronic.													
Edemia glottidis							· · • • •			1			
old age		2	$^{-3}_{1}$	1	$\frac{1}{3}$	1				2		5	12
Paralysis "progressive										••••		1	
Pericarditis		1								1		1	
Peritonitis Pleurisv				1							1		
Pleuro-pneumonia												i	
Pneumonia	6	5	7	5	6	3	1		2	2	3	$2\hat{0}$	6
" acute " bronchial				••••					••••			$\sim 2$	
												1	
		1	2									2	
Premature birth Rachitis	3				1	2				1	1	•••	1
Rheumatism										l''i'		1	
" acute													
stricture of æsophagus	• • • •			• • • •	•••	1			···;·		····· 1		
tomach, inflammation				l						····			
uicide, not specified								1					
" arsenic vphilis, hereditary							¦…;		1			• • • •	
uberculosis				1	1							1	
" acute	1	1									1	1	
"umor in bladder	• • • •		·i		••••						••••	••••	
" brain			1										
lcer of duodenum									• • • •		1	· · · ·	
" gastric Veakness		1				1	· · · ·				•••	••••	
Vhooping-cough	1	1				i	<b>.</b> .	1	1				
Inknown.	· ·	··				•••	10	1		2		1	
fot stated till-born	5	4	6	24	6 5	$\frac{6}{7}$	16 5	$\frac{23}{2}$	$\frac{10}{4}$	12 4	75	$^{17}_{3}$	11
	c	1	3	1	0	'	,	1	. *	4			. *
Totals	66	58	63	62	62	70	109	124	70	83	55	112	93

# TABLE. - Continued.

	1885.	1586.	1887.	1885.	1889.	1890.	1681.
Develotion much of the second s							
ropmanton, revised estimate.	72.15	39,002	40.215		689 4	44,126	45,500
Number of deams, exclusive of still-births	12	122	261		19:	901	(7) 27:
Beaths, per thousand of population	19.35	18.51	18.81		17.90	20.40	19.34
Deaths of children under 5 years	313	:::::	356		22	131	393
Ratio. deaths of children to total deaths, per cent	10 56	1.0	11.61		46.20	48.17	44,66
Deaths of children per thousand of population	12.2	2) X	2.5		20.2	12.6	8.61
Peaths from zymotic diseases	5	205	305		661	000	Z
Deaths from zymotic diseases per thousand of population.	6.10	5.25	6.37	5.48	4.66	5.5	36.55
Cholera infantum	ź	115	<u>1</u>		£	141	2
Consumption	8	109	33		62	3	Ŧ
(Joup)	22	51	5		8	15	-
Diplitheria	x	e.	12		81	6	91
Bronchiftis, all forms	8	=	65		13	ž	22
Pneumonia, all forms	<del>2</del>	5	8		ž	35	2
Heart disease, all forms.	-10	i:	Ş		5	4	8
Scarlet lever.	9	0	+		5		e
Typhoid fever	8	괃	1		16	5	<u>x</u>
Measles	×	-0	x	6	+	9	61
Whooping-cough	=	m	-	5	9	-	5
Shitlipox	et :		1				
Riths ner thousand of normation	1,106			002*	51/X *	36	983
Marriages reported	404	121-027	10	139	506	463	610

\* The returns are manifestly incomplete.

SOME COMPARISONS OF VITAL STATISTICS FOR THE LAST SEVEN YEARS.

## ANNUAL OFFICIAL REPORTS.

These tables are as nearly perfect as they can be made from the city registrar's books. With respect to the number of deaths, they are believed to be substantially correct, but in other respects carelessness and ignorance in making returns have marred the usefulness and perfection of the record, and have to an equal extent vitiated the tables. In more than one eighth of the cases the cause of death is not given, and some of the causes which are given, such as "cough" and "headache" might as well have been omitted.

It is believed that the importance of these records is not appreciated as it should be. Aside from their value and interest to the sanitarian and statistician, they have a value as evidence in questions of citizenship, inheritance of property, pension claims, and divorce, and are of interest to the antiquarian and genealogist. Unlike many other records, these, if well kept, will have a permanent and increasing value. The statute recognizes this value and has provided liberal compensations for returns and registration.

These tables compare favorably with those of other New England towns of similar size and with a similar population.

The "grippe" has left its mark upon the record. In the month of December it caused three deaths in its own name, twenty-four were charged to pneumonia, and four to croup, swelling the list for the month to one hundred and twelve, as against seventy-one for the corresponding month of the previous year. The recent visitation of this disease, whether estimated by the amount of sickness and loss of time which it has caused, or by the number of valuable lives cut short, is probably the most calamitous pestilence that has ever visited the adult population of the country. It appears to be a disease against which boards of health and physicians are nearly powerless. Let us hope that means for its restriction and cure will soon be discovered.

Another noticeable feature of the tables is the high death rate of children under five years of age. Annually from 42 to 48 per cent of our deaths are of this class, and they occur largely among our foreign population. Cholera infantum is the principal cause. It is a disease but slightly controllable by public sanitation, unless it is seconded by intelligent care and regimen in the particulars of diet, bathing, clothing, and fresh air. The department has a great responsibility in this matter, but so long as people will crowd into tenement blocks, and be careless, ignorant, and stupid, this disease will continue to decimate the children.

The absence of deaths from scarlet fever is noticeable, as is also the small number of deaths from this cause in the preceding years. The disease has almost ceased to be feared; and herein lies a possible danger. It may at any moment assume its old-time malignity, when it stalked abroad under the names of canker rash and putrid sore throat.

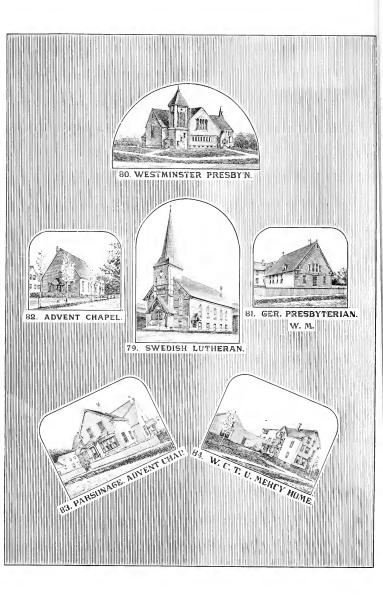
In conclusion, we take great pleasure in testifying to the harmonious and helpful relations which have existed between the board of health and city councils, and especially, sir, in acknowledging the many helpful and kindly acts and words of your Honor.

Respectfully submitted.

GEORGE C. HOITT, JOSEPH B. SAWYER, NEIL F. STARR, Board of Health of Manchester.

MARCH, 1892.

# ELECTRIC LIGHTS, GAS LIGHTS, ETC.



# ELECTRIC LIGHTS, GAS LIGHTS, AND OIL LAMPS.

Electric Lights in Use.

- No. 1. Corner Cypress and Massabesic, arm.
  - 2. Massabesic-street watering-trough, pole.
  - 3. Corner Park and Beacon, pole.
  - 4. Corner Central and Hall, arm.
  - 5. Corner Lake avenue and Massabesic, arm.
  - 6. Corner Wilson and Laurel, arm.
  - 7. Corner Merrimack and Hall, arm.
  - 8. Corner Manchester and Hall, arm.
  - 9. Corner Manchester and Wilson, arm.
  - 10. Corner Hanover and Ashland, arm.
  - 11. Corner Hanover and Hall, arm.
  - 12. Corner Hanover and Beacon, arm.
  - 13. Corner Concord and Ashland, arm.
  - 14. Corner Bridge and Hall, arm.
  - 15. Corner Myrtle and Russell, arm.
  - 16. Corner Pearl and Linden, arm.
  - 17. Corner Pearl and Russell, arm.
  - 18. Corner Bridge and Nashua, arm.
  - 19. Corner Nashua and High, arm.
  - 20. Corner Concord and Dutton, arm.
  - 21. Corner Amherst and Porter, arm.
  - 22. Corner Hanover and Lincoln, arm.
  - 23. Corner Manchester and Lincoln, arm.
  - 24. Corner Merrimack and Lincoln, arm.
  - 25. Corner Laurel and Lincoln, arm.

- No. 26. Corner Central and Lincoln, arm. 27. Corner Lake avenue and Lincoln, arm. 28. Corner Spruce and Lincoln, arm. 29. Corner Spruce and Maple, arm. 30. Corner Lake avenue and Maple, arm. 31. Corner Central and Maple, arm. 32. Corner Merrimack and Maple, arm. 33. Corner Manchester and Maple, arm. 34. Corner Hanover and Maple, arm. 35. Corner Amherst and Maple, arm. 36. Corner Concord and Maple, arm. 37. Corner Lowell and Nashua, arm. 38. Corner Bridge and Maple, arm. 30. Corner Myrtle and Maple, arm. 40. Corner Orange and Ash, arm. 41. Corner Harrison and Beech, arm. 42. Corner Myrtle and Beech, arm. 43. Corner Pearl and Beech, arm. 44. Corner Bridge and Beech, arm. 45. Corner Lowell and Ash, arm. 46. Corner Amherst and Ash, arm. 47. Corner Lowell and Beech, arm. 48. Corner Concord and Walnut, arm. 49. Corner Amherst and Beech, arm. 50. Corner Hanover and Beech, arm. 51. Hanover Square, pole. 52. Corner Manchester and Beech, arm. 53. Corner Merrimack and Beech, arm. 54. Corner Laurel and Beech, arm. 55. Corner Central and Beech, arm. 56. Corner Lake avenue and Beech, arm. 57. Corner Spruce and Beech, arm. 58. Corner Cedar and Union, arm. 59. Corner Lake avenue and Union, arm. 60. Corner Central and Union, arm.
  - 61. Corner Laurel and Union, arm.
  - 62. Corner Merrimack and Union, arm.

- No. 63. Corner Manchester and Union, arm.
  - 64. Corner Hanover and Union, arm.
  - 65. Corner Amherst and Union, arm.
  - 66. Corner Concord and Union, arm.
  - 67. Corner Lowell and Walnut, arm.
  - 68. Corner Lowell and Union, arm.
  - 69. Corner High and Union, arm.
  - 70. Corner Bridge and Union, arm.
  - 71. Corner Bridge and Walnut, arm.
  - 72. Corner Orange and Union, arm.
  - 73. Corner Prospect and Union, arm.
  - 74. Corner Brook and Union, arm.
  - 75. Corner Pennacook and Union, arm.
  - 76. Corner Webster and Pine, arm.
  - 77. Corner North and Pine, pole.
  - 78. Corner Sagamore and Pine, arm.
  - 79. Corner Blodget and Pine, arm.
  - 80. Corner Harrison and Hazel, arm.
  - 81. Corner Prospect and Pine, arm.
  - 82. Corner Myrtle and Pine, arm.
  - 83. Corner Orange and Pine, arm.
  - 84. Corner Pearl and Pine, arm.
  - 85. Corner Bridge and Pine, arm.
  - 86. Tremont Square, pole.
  - 87. Corner High and Pine, arm.
  - 88. Corner Lowell and Pine, arm.
  - 89. Corner Concord and Pine, arm.
  - 90. Corner Amherst and Pine, arm.
  - 91. Corner Hanover and Pine, arm.
  - 92. Corner Manchester and Pine, arm.
  - 93. Corner Merrimack and Pine, arm.
  - 94. Corner Laurel and Pine, arm.
  - 95. Corner Central and Pine, arm.
  - 96. Corner Lake avenue and Pine, arm.
  - 97. Corner Cedar and Pine, arm.
  - 98. Corner Auburn and Pine, arm.
  - 99. Corner Cedar and Chestnut, arm.

No. 100. Park Square, pole. 101. Corner Lake avenue and Chestnut, arm. 102. Corner Central and Chestnut, arm. 103. Merrimack Square, pole. 101. Corner Merrimack and Chestnut, arm. 105. Corner Manchester and Chestnut, arm. 106. Corner Hanover and Chestnut, arm. 107. Concord Square, east, pole. 108. Concord Square, west, pole. 109. Corner Chestnut and Concord B. S., arm. 110. Corner Chestnut and High, arm. 111. Corner Chestnut and Bridge, arm. 112. Corner Chestnut and Pearl, arm. 113. Corner Chestnut and Myrtle, arm. 114. Corner Chestnut and Harrison, arm. 115. Corner Chestnut and Brook, arm. 116. Corner Pennacook and Chestnut, pole. 117. Corner Salmon and Chestnut, pole. 118. Corner Webster and Chestnut, arm. 110. Corner Clarke and Elm, arm. 120. Corner Webster and Elm, arm. 121. Corner North and Elm, arm. 122. Corner Salmon and Elm, arm. 123. Corner Pennacook and Elm, arm. 124. Corner Brook and Eim, arm. 125. Corner Harrison and Elm, arm. 126. Langdon street, pole. 127. Corner Dean and Elm, arm. 128. Corner Prospect and Chestnut, arm. 129. Corner Orange and Elm, arm. 130. Corner Kidder and Elm, arm. 131. Elm east B. S., on Pearl, arm.

- 132. Corner Bridge and Elm, arm.
- 133. Corner Washington and Church, arm.
- 134. Corner Birch and Lowell, arm.
- 135. Corner Lowell and Elm, arm.
- 136. Elm East B. S. between Lowell and Concord, arm.

- No. 137. Corner Water and Elm, arm.
  - 138. Corner Vine and Concord, arm.
  - 139. Corner Vine and Amherst, arm.
  - 140. Corner Amherst and Elm, arm.
  - 141. Corner Mechanic and Elm West B. S., arm.
  - 142. Stark street. arm.
  - 143. Corner Market and Franklin, arm.
  - 144. Corner Market and Elm, arm.
  - 145. Corner Hanover and Elm east B. S., arm.
  - 146. Corner Elm and Manchester, arm.
  - 147. Corner Dean avenue and Elm west B. S., arm.
  - 148. Corner Elm and Merrimack, arm.
  - 149. Corner Merrimack and Franklin, arm.
  - 150. Middle street, arm.
  - 151. Merrimack Square, west, pole.
  - 152. Corner Elm and Central, arm.
  - 153. Corner Elm and Lake avenue, arm.
  - 154. Corner Elm and Spruce, arm.
  - 155. Beech and Cedar, pole.
  - 156. Corner Elm and Cedar, arm.
  - 157. Corner Franklin and Granite, arm.
  - 158. Corner Elm and Auburn, arm.
  - 159. Corner Elm and Green, arm.
  - 160. Corner Elm and Valley, arm.
  - 161. Bakersville watering trough, arm.
  - 162. Corner Summer and State, pole.
  - 163. Corner Granite and State, arm.
  - 164. Granite Bridge, east, pole.
  - 165. Corner Bedford and Granite, pole.
  - 166. Corner Canal and Granite, pole.
  - 167. Corner Depot and Canal, pole.
  - 168. Central between Franklin and Canal, pole.
  - 169. Corner Bedford and Central, arm.
  - 170. Corner Canal and Merrimack, arm.
  - 171. Corner Canal and Middle, arm.
  - 172. Corner Canal and Stark, arm.
  - 173. Corner Canal and Mechanic, arm.

No. 174. Corner Canal and Spring, arm. 175. Corner Canal and Bridge, arm. 176. McGregor Bridge, east, pole. 177. Corner Canal and Hollis, pole. 178. Corner Canal and Dean, pole. 179. Corner Canal and Langdon, arm. 180. Corner River road and North street, arm. 181. Amoskeag bridge, east, arm. 182. Amoskeag bridge, west, arm. 183. Amoskeag watering-trough, pole. 184. Amoskeag brick store, pole. 185. Corner McGregor and Main, pole. 186. Corner McGregor and Bridge, pole. 187. McGregor bridge, west, pole. 188. Corner Amory and Main, pole. 189. Corner Amory and Beauport, pole. 100. Corner Wayne and Beauport, pole. 191. Corner Marion and Main, pole. 192. Corner McGregor and Wayne, pole. 193. Corner McGregor and Putnam, arm. 194. Corner Sullivan and Main, pole. 195. Corner Beauport and Sullivan, pole. 196. Corner Main and Schuvler, pole. 107. Corner Wilton and Main, pole. 198. Corner Douglas and Main, arm. 100. Corner Douglas and Barr, arm. 200. Corner Granite and Green, arm. 201. Corner West and Granite. arm. 202. Corner Granite and Main, arm. 203. Corner Granite and Second, arm. 204. Granite bridge, west, pole. 205. Corner School and River, arm. 206. Corner School and Third, arm. 207. Corner Second and Bath, pole. 208. Corner Ferry and River, arm. 200. Corner Ferry and Third, arm. 210. Corner Walker and Second, arm.

- No. 211. Corner Blaine and Third, arm.
  - 212. Corner Clinton and Main, arm.
  - 213. Corner Walker and Main, arm.
  - 214. Corner Parker and West, arm.
  - 215. Corner Winter and Parker, arm.
  - 216. Corner Main and Mast, pole.
  - 217. Corner Main and Milford, arm.
  - 218. Corner Main and A, arm.
  - 219. Corner Carroll and Milford, arm.
  - 220. Corner Old Mast road and Mast, arm.
  - 221. Corner Hall and Amherst, arm.
  - 222. Corner Laurel and Maple, arm.
  - 223. Corner Central and Wilson, arm.
  - 224. Corner Harrison and Pine, arm.
  - 225. Corner Massabesic and Belmont, pole.
  - 226. Corner Union and Appleton, arm.
  - 227. Corner Elm and railroad crossing, pole.
  - 228. Corner Franklin and Pleasant, arm.
  - 229. Corner Elm and Appleton, arm.
  - 230. Corner Milford and Riddle, arm.
  - 231. Corner Nutt road and Portsmouth railroad, pole.
  - 232. Corner Lake avenue and Canton, pole.
  - 233. Corner Laurel and Hall, arm.
  - 234. Corner Beech and Brook, arm.
  - 235. Corner Kidder and Boyden, pole.
  - 236. Corner Myrtle and Walnut, arm.
  - 237. Bridge and Linden, arm.
  - 238. Corner Lowell and Ashland, arm.
  - 239. Corner Lowell and Belmont, arm.
  - 240. Corner Pearl and Union, arm.
  - 241. Corner Salmon and Union, pole.
  - 242. Water street, arm.
  - 243. Corner Arlington and Ashland, arm.
  - 244. Corner Orange and Oak, arm.
  - 245. Corner Prospect and Oak, arm.
  - 246. Corner Arlington and Russell, arm.
  - 247. Corner Gore and Walnut, arm.

No. 248. Corner Laurel and Milton, arm. 249. Massabesic street - Hospital, pole. 250. Corner Lake avenue and Wilson, arm. 251. Corner Bridge and Ash, arm. 252. Hanover street, east, pole. 253. Corner Franklin and Depot, arm. 254. Corner Spruce and Union, arm. 255. Corner East High and Wilson road, pole. 256. Corner Beech and Auburn, pole. 257. Corner Kidder and Whitney, pole. 258. Corner Valley and Jewett, pole. 259. Corner Concord and Derry, pole. 260. Corner Auburn and Union, pole. 261. Corner Harrison and Walnut, arm. 262. Corner West Hancock and Second, pole. 263. Corner Douglas and West, pole.

264. Corner Hooksett road, Amoskeag, pole.

### Gas-Lights in Use.

Appleton and Pine. Clarke and Chestnut. Clarke and River road. Elm, near Ray brook. Monroe street. Appleton, west end. Webster and River road. Salmon and River road. Salmon, between Elm and Canal. Canal, near paper mill. Blodget, between Elm and Chestnut. Blodget and Chestnut. Brook and Pine. Prospect, between Elm and Chestnut. Myrtle, between Elm and Chestnut. Orange and Chestnut. Orange, between Chestnut and Elm. Bridge, between Chestnut and Elm. Pearl and Walnut. Orange and Walnut. Orange and Beech. Myrtle and Ash. Pearl and Maple. Arlington and Maple. East High and Maple. Lowell and South. Lowell and Jane. Amherst and Ashland. Concord and Hall. Lowell and Hall. Concord and Belmont. Amherst and Belmont. Amherst and Beacon. Lowell and Beacon. East High and Belmont. Prospect and Russell. Harrison and Russell. Harrison and Oak. Harrison and Maple. Harrison and Ash. Prospect and Ash. Prospect and Beech. Prospect and Walnut. Belmont and Central. Maple and Cedar. Willow and Merrill. Two lights on South Elm. Two lights on Hancock and River road. Auburn and Franklin. Three lights on State. River street, near Turner Hall. Milford and Bowman.

Mast and Bowman. Dover and Clinton. Dover and Granite. Two lights on Hancock, west of River road. Dover and Douglas. Douglas, half way between Main and River streets. Two lights on Pleasant, between Franklin and Canal. Merrimack Common. Two lights on Mechanic. Spring street. Wilson and Merrimack. Manchester and Belmont. Hanover and Milton. Two lights on River road, between Hancock and Baker streets. Hanover and Belmont.

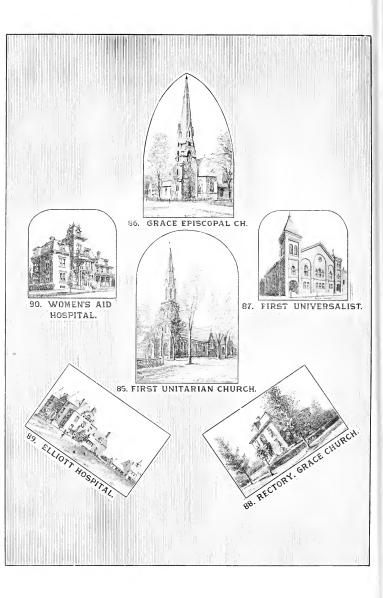
Oil Lights in Use.

Clarke and Union. Concord and Beacon. East High and Hall. Pearl and Linden. Canal, near Amoskeag bridge. Merrimack and Beacon. Hanover and Mammoth road. Lake avenue and Mammoth road. Elm and Shasta. Elm and Baker. Two lights on Baker. Douglas and West. Douglas and Quincy. Granite and Ouincy. Mast road and Riddle. Carroll street. Bowman street.

A and B streets. Light near the Huntress gardens. Mammoth road and Cohas avenue. " " and Island Pond road. " " and Cilley. 44 " and Young. " " and Candia road. Massabesic and Old Falls road. Massabesic and Taylor. Belmont and Green. Belmont, at A. L. Walker's house. Belmont and Valley. Valley and Taylor. Valley and Cypress. Valley and Jewett. Cypress and Prout avenue. Jewett and Young. Young and Taylor. Three lights on River road south of Blue store. Three lights in Amoskeag. Ten lights in Goffe's Falls. Three lights in Youngsville. One light on Candia road, near Noah Reed's. One light on Candia road, near Walter Cody's house. One light at junction Lake avenue and Hanover.

One light on Island Pond road, Mill-Dam House.

# REPORT OF THE CITY AUDITOR.



## REPORT OF THE CITY AUDITOR.

To the City Councils :

GENTLEMEN,— The Auditor herewith submits to your honorable body his second annual report.

#### WORK OF THE OFFICE.

There have been made during the year the usual examinations of the treasurer's accounts, examinations of the city clerk's accounts, annual examination and settlement with the tax collector, annual examination of water-works accounts, annual examination of accounts of superintendents of Pine Grove and Valley cemeteries, and of the treasurer of the cemeteries, annual examination of the accounts of the superintendent of the city farm, monthly examination of the accounts of the weigher at the city scales, quarterly examinations of the account of the clerk of the police court.

Above six thousand bills against the city have been examined and certified as "correct." All the pay-rolls for the thirteen highway districts, for the schools, for the fire department, the water-works, the police department, the cemeteries, and the city officials have been examined and certified to.

Twelve monthly drafts, amounting in the aggregate to \$858,-031.79, have been drawn on the city treasury.

Accounts have been kept with all the appropriations, with the treasurer, and the tax collector.

Thirteen ordinances, twelve recommendations, eighteen orders, eight resolutions, five contracts, two copies of perambulation of town lines have been typewritten in this office for use of committees, etc.; also three messages and other documents, letters, etc., for the mayor, one hundred and fifty letters and five communications for city auditor, and one hundred and fifty circulars prepared and typewritten; lists of non-resident tax-payers typewritten for use of tax collector. The labor connected with the refunding of \$100,000 of water bonds was mostly done in this office. The City Report for 1891 is compiled by the auditor, as required by the ordinance. The engravings contained therein, in their details, were under the direct supervision of the auditor's clerk, Mr. Allan E. Herrick.

Mr. Herrick's experience as a shorthand writer and reporter was of great advantage to the city solicitor, in the case of Parsons v. City, as the entire testimony was taken by him and transcribed on the typewriter.

#### IMPROVEMENTS SUGGESTED.

Your attention is called to the suggestions made in my report of last year, in relation to the office of city clerk. The prospect of a removal of the New Hampshire Trust Company to their new building to be erected during the present year will afford the city councils an opportunity to recover, without friction, the use of the city property, and place the city clerk in a room sufficiently large for the easy and proper performance of the duties of his office.

If the auditor were placed on the first floor, near to the treasurer's office, some changes could be made in the methods now in use, and additional and more direct checks obtained on the treasurer's office.

The bills after being listed and approved by the committee on accounts, as they now are, would remain in the possession of the auditor, and be paid by check of the auditor drawn on the treasurer. A copy of the list, furnished to the treasurer, would give him the means of comparing all checks of the auditor before payment thereof. The auditor would give his check for the total amount of all pay-rolls, and the treasurer would pay the same as

now by the envelope system. All bills and pay-rolls would be numbered, and that number would be found in the auditor's check and on the list. In some cities the treasurer is also the tax collector, and in such cases no receipt of the tax collector is valid unless countersigned by the city auditor. In this way the daily collections of the tax collector are within the knowledge of the auditor, and balances are made daily, and deposits made daily by the collector to the credit of the city. In some cities it is also the custom for the city to place its money in that bank which will pay the highest interest on the average deposits; the bank giving sufficient bonds to the city to secure such deposits. The city has been fortunate in having for its treasurers and tax collectors, honest men; such good fortune may not always endure, and it would be well if the city council should revise its methods adopted forty-six years ago, and bring them more in touch with modern and improved systems of accounting.

#### EXPENDITURES.

The amount of the appropriation for auditor's de-

partment wa	s.						\$1,700.00
There was expe	nded i	for sala	ry of	aud	itor	\$1,000.00	
There was expe	nded	for sal	lary o	f au	dit-		
or's clerk .						598.30	
There was expe							
Balance .			•			•49	
							\$1,700.00

The auditor acknowledges his indebtedness for the loan of plans and other services in illustrating and preparing this city report to T. A. McKinnon, Esq., superintendent of the Concord & Montreal R. R.; Hon. J. W. Sanborn, superintendent of the Boston & Maine R. R.; Rev. M. V. B. Knox, of St. James M. E. church; C. W. Damon, Esq., of Haverhill, Mass.; Rt. Rev. Pierre Hévey, of St. Mary's church; John M. Kendall, Esq.; Robert Laing, Esq.; Rev. H. E. Cooke, of the Episcopal church; Rev. Thomas M. Davies, of the Westminster Presbyterian church; Mrs. William H. Berry, of the building committee of the Children's Home; Walter G. Africa, Esq., superintendent of the Manchester Electric Light Co.

He also returns his thanks to the Mayor and city councils and heads of departments for their uniform courtesy and kindness.

Respectfully submitted.

JAMES B. STRAW, City Auditor.

## To the City Councils of the City of Manchester, N. H. :

GENTLEMEN, — I have examined the accounts of Sylvanus B. Putnam, city treasurer, for the year ending December 31, 1891, and find proper vouchers for all payments, and all receipts are duly accounted for.

The net cash on hand January 1, 1891, was . Receipts during the year	. \$79,552.02 . 871,669.91
Amount of drafts during the year Net cash on hand December 31, 1891	\$951,221.93 . \$858,031.79 . 93,190.14
The cash balance taken December 31, 1891 follows :	\$951,221.93 , I find to be as
Deposited in Suffolk National Bank	. \$8,949.00
First National Bank	. 19,102.11
Second National Bank	. 20,649.28
Manchester National Bank	. 28,189.82
Amoskeag National Bank	. 19,267.03
Merchants National Bank	. 24,436.36
office safe ,	· 9,439.49
Gross amount of cash on hand Deduct amount of bills unpaid	. \$130,033.09 . 36,842.95
Net cash on hand December 31, 1891 .	. \$93,190.14

The accounts for the year ending December 31, 1891, of the city clerk, of the superintendent of schools, of the tax collector, of the water-works, of the city marshal, of the clerk of the police court, of the superintendent of the Pine Grove cemetery, of the superintendent of the Valley cemetery, of the treasurer of the cemetery trustees, of the superintendent of the city farm, and of the weigher at the city scales, have each and all been carefully examined and the income from these sources, as shown by the said books, has been deposited with the city treasurer, and appears in his accounts.

Respectfully submitted.

JAMES B. STRAW, City Auditor.. Dr.

Sylvanus B. Putnam, Treasurer, in account with the

Τо	cash on hand January 1, 1891				\$134,594.99
	temporary loan				210,000.00
	insurance tax				3,920.25
	railroad tax	•			22,059.03
	savings bank tax				73,275,55
	literary fund	•			5,287.50
	diseased cattle killed				138.50
	board of paupers off the farm				1,789.10
	city farm				1,774.46
	Miville & Co., overdraft .				7.26
	city teams, District No. 2, pay-roll				3,038.74
	Isaac Huse, overdraft				8.84
	Joseph H. Dearborn				8.88
	E. W. Harrington				9.25
	Alpheus Gay				21.00
	highway district No. 2				2,00
	Gordon Woodbury, 10 loads grave	el			10.00
	Head & Dowst, for labor .				5.40
	C. H. Hutchinson, old iron .				33.36
	sewer licenses				2,103.50
	Manchester Heating & Lighting Co	., 0	verd	raft	3.94
	Killey & Wadleigh, overdraft	•			11.88
	commons, pay-roll, overdraft				22.50
	Ebenezer Hartshorn, bridge plank				4.45
	redemption of land sold for taxes				374.50
	C. E. Crombie, lamp-post .				3.25
	S. J. Mills, one lantern				2.00
	James H. Sargent, three lamp-posts	5			10.00
	Orrin E. Kimball, one lamp-post				3.33
	W. H. Carpenter, old building				10.00
	Charles W. Calif, street lantern				2.00
	George E. Morrill, two lamp-posts				6.66
	David Perkins, three lamp-posts				10.00
	Amount carried forward .	•		•	\$458,552.12

## REPORT OF THE CITY AUDITOR.

City of Manchester, year ending December 31, 1891.

3y	unnai	d bills	Ianu	ary 1, 13	Sot				\$55,042.97
<i>.</i> ,		orary lo		, .,		•	•	•	180,000.00
		d debt		•••	·	•	•	•	100,000.00
	intere				•			·	4,659.34
		ns, wa	ter ho	nds .			·	÷	32,093.00
	-	ns, cit		15,584.00					
		ns, cer				729.35			
		rs off t	-						4,928.24
	city fa								6,512.89
	city te								5,290.73
	-	ay dist	rict N	ю. 1					345.29
	"	· · ·	"	2 and	13				12,028.39
	" "	"	"	4.					385.74
	٠.	"	66	5.					596.61
	" "	"	"	6.					498.38
	"	" "	"	7.					1,474.07
	44	"	" "	8.					1,028.81
	" "	"	"	9.					504.15
	" "	"	" "	10.					4.473.80
	" "	" "	"	11.					1,107.80
	"	"	"	12.					224.37
	"	"	" "	13.					182.88
	new hi	ighway	s.						14,448.09
	damag	e for l	and ta	aken for	highv	vays			5,704.45
	wateri	ng stre	eets						5,364.26
	lightir	ng stree	ets						42,908.78
	paving	street	s	• •					6,511.80
	macad	amizir	ıg						19,616.23
	gradin	g for a	concre	ete .					5,532.84
	sewers	and d	rains						55,409.73
	comm	ons	•						2,406.76
	bridge		•						2,672.25
	incide	ntal ex	pense	s.		•			15,639.62
	Amo	ount co	ırried	forwar	đ.			•	\$504,005.62

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Dr. Sylvanus B. Putnam, Treasurer, in account with the

	Amount brought forward					\$458,552.12
To	Joseph Quirin, land sold					414.73
	L. W. Page, land sold .					454.55
	Philip Riley, land sold					918.55
	Mrs. Delie McDonald, land	sold				39.13
	Marian J. Parsons, land sold					100.00
	Pine Grove cemetery, sale of	lots				2,984,47
	B. A. Stearns, superintendent			ve ce	em-	//
	etery .					1,599.30
	J. O. Webster, forfeiture of l					10.00
	C. H. G. Foss, superintenden		lev c	emet	erv	1,500.00
			-			21.80
	Merrimack Steam Fire Engin	ie Co	mpai	ıv. r	ent	
	of hall		• •			24.00
	Eureka Fire Hose Co., freig	ht or	n hose	э.		10.39
	A. M. Finney, overdraft					8.97
	fire department, team work					4,910.21
	C. W. Downing, overdraft					.50
	Manchester Locomotive Co.,	wor	k on	the	old	5
	boiler					250.00
	police department .					7,961.54
	city hall					2,355.00
	W. E. Moore, overdraft					12.00
	rent of tenements .					508.29
	Hillsborough county, repairs	s on (	court	hou	se	57.48
	city officers' salaries, overdra					80.00
	Amasa S. Hilands, overdraft					2.50
	Jerome B. Titus, overdraft					2.50
	water-works				•	76,605.23
	J. J. Abbott, overdraft					1.52
	Carl E. York, overdraft					1.43
	W. E. Buck, text-books sold					138.52
	Joseph B. Sawyer .					1.20
	Amount carried forward	•	•	•	•	\$559,525.93

REPORT OF THE CITY AUDITOR. 413

City of Manchester,	year ending	December 31,	1891.

	Amount brought for	ward				\$504,005.62
Зy	Pine Grove cemetery					5.941.34
	Valley cemetery .					2,794.79
	fire department .					40,641.04
	fire-alarm telegraph					1,154.66
	hydrant service .					5,000.00
	police department					37,937.07
	city hall					1,380.37
	printing and stationery	7				2,304.62
	repairs of buildings					2,456.96
	city library .					4,525.73
	militia					875.00
	abatement of taxes					2,557.24
	state tax					63,435.00
	county tax					46,032.47
	city officers' salaries					14,798.45
	water-works .					49,625.65
	health department					1,964.00
	city engineer's departi	nent				3,499.90
	scavenger teams ,					18,892.25
	repairs of schoolhouses	;				4,044.88
	fuel					4,673.54
	furniture and supplies					746.46
	books and stationery					62.50
	printing and advertising	ng				396.10
	contingent expenses					931.92
	care of rooms .					3,715.75
	evening schools .					1,064.53
	teachers' salaries .					49,398.52
	mechanical drawing so	chool				552.71
	Women's Aid and Re	lief S	ocie	ty.		400.00
	decoration of soldiers	grav	es			333.54
	Elliot Hospital, free b	eds				600.00
	Amount carried fort	ward				\$876,742.61

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Dr.	

Sylvanus B. Putnam, Treasurer, in account with the

		•								
				ht fort	ward	·	•	•	•	\$559,525.93
To	Russel	Whi	te	•	•	•	•	•	•	9.90
	dog lie	enses		•	•	•		•		2,155.58
	billiare	l tabl	e lice	enses	•	•		•	•	315.00
	trustee	s cem	etery	fund	•			•		5,000.00
	show l	icense	es		•	•	•	•		169.00
	Smith	& Sn	hith, o	old she	d	·		•	•	10.00
	Union	Publ	ishin	g Co.,	over	draft		•		14.00
	city sc	ales		•	•	•		•	•	415.67
	tuition			•	•		•	•	•	320.95
	Freder	ick W	/. Sti	ckney		•		•		115.40
	Grand	Rapi	ds So	hool I	Furni	ture	Со.,	disco	int	
	and	freigl	nt							41.59
	milk li	cense	s							65.50
	Lizzie	D. H	artfo	rd, ove	erdra	ft				5.00
	Maggie	e G. I	Liner	n, over	draft					4.50
	interes	t on t	axes	•	•					411.96
	taxes for	or the	e year	1885						1.63
	" "	"	"	1886						1.62
	" "	"	"	1887						6.80
	" "	"	"	1888						15.99
	" "	" "	"	1889						153.70
	" "	"	"	1890						18,348.89
	" "	"	"	1891		•	•		•	419,156.29
									8	51,006,264.90
UnĮ	paid bill	s Jan	uary	1, 189	2	•	•	•	•	36,842.95
									đ	1 042 107 85

\$1,043,107.85

	Amount brough	t fo.	rward					\$876,742.61
By	firemen's parade							755.32
	Stark park .							371.81
	Derryfield park							409.07
	free supplies .							3,210.73
	indigent soldiers							906.40
	street sweeping							1,198.31
	mayor's incidenta	als						234.25
	auditor's office							1,699.51
	addition to Webster-street schoolhouse 5,1							
	new schoolhouse,	Ha	allsville					20,759.25
	Varney school							1,128.70
	receiving tomb	·	•	•	•	•	•	520.00
								\$913,074.76
	Cash on hand	·	•	•	•	·		130,033.09
							ş	\$1,043,107.85

### REPORT OF THE CITY AUDITOR.

## STATEMENT OF THE RECEIPTS AND EXPENDI-TURES OF THE CITY OF MANCHESTER, N. H., FOR THE YEAR 1891.

## Receipts.

#### CENTRAL DEPARTMENT.

Received	from :						
Direct	city taxe	s.				\$391,652.45	
Count	y taxes .					46,032.47	
Insura	nce taxes					3,920.25	
Railro	ad taxes			•		22,059.03	
Saving	s bank ta	ixes .	•	•		73,275.55	
						5,287.50	
Cost a	nd intere	st on t	axes			411.96	
Licens	es to ente	er sewe	r.			2,103.50	
						2,155.58	
Licens	es to sell	milk			•	65.50	
Licens	es to keej	p billia	rd tal	ole		315.00	
Licens	es to sho	ws and	exhil	bitio	ns.	169.00	
Rents			•			2,887.29	
Land 1	edeemed	•				374.50	
Land s	old .	•				1,926.96	
Tempo	orary loa	in, ant	icipat	ion	tax,		
1891	· ·	•	•			180,000.00	
Tempo	orary loa	n, ant	icipat	ion	tax,		
1892	e		•	•	•	30,000.00	
Cemet	ery bonds	з.	•			5,000.00	
							\$767,636.54

#### STREET AND SEWER DEPARTMENT.

Received from	:					
Bridges .					\$4.45	
City scales	•				415.67	
Street depar	tmen	t tear	ns.		3,047.58	
						\$3,467.70

MUNICIPAL RECEIPTS. 417
SCHOOL DEPARTMENT.
Received from text-books and tuition \$459.47
FIRE DEPARTMENT.
Received from fire department teams \$4,920.6c
POLICE DEPARTMENT.
Received from court fines and costs \$7,962.04
PUBLIC PLACES.
Received from :         .         \$4,593.77           Pine Grove cemetery         .         .         \$4,593.77           Valley cemetery         .         .         .         1,500.00          \$6,093.77        \$         .         .         .         .
WATER-WORKS.
Gross receipts \$76,605.23
CHARITABLE, PATRIOTIC, AND PHILANTHROPIC.
Received from : City farm \$1,783.72 Hillsborough county (boarding pau- pers)
MISCELLANEOUS.
Received from miscellaneous sources
Total amount of receipts during the year . \$871,669.91 Net cash on hand January 1, 1891 79,552.02
27 \$951,221.93

## Expenditures.

#### CENTRAL DEPARTMENT.

## Interest.

Paid	on account Stark park pur	cha	ase,		
	August 1, 1890, to Janua	ary	3,		
	1891				
	interest on water-bonds	•		32,093.00	
	interest on city bonds .	•	•	15,584.00	
	interest on cemetery bonds .			729.35	
	interest on temporary loan	n,	an-		
	ticipation tax, 1891			4,009.34	
	interest on temporary loan				
	ticipation tax, 1892	•	•	450.00	
					\$53,065.69
Paid	funded debt	•		\$100.00	
	temporary loan				
	city hall			1,380.37	
	printing and stationary	•	•	2,304.62	
	incidental expenses .				
	mayor's incidentals .	•		234.25	
	city officers' salaries* .	•		11,768.45	
	city auditor's department	•		1,699.51	
					\$266,192.51
	STREET AND SEWE	R I	DEP	ARTMENT.	
Paid	highway district No. 1	•		\$345.29	
	highway districts Nos. 2, 3				
	highway district No. 4			385.74	
				596.61	
				498.38	
	highway district No. 7			1,474.07	

0 /				
highway district No.	8		1,028.81	
highway district No.	9		504.15	
highway district No.	ΙO		4,473.80	
highway district No.	II		1,107.80	
highway district No.	I 2		224.37	

\* Salaries of superintendent, school committee, and truant officer transferred from city officers' salaries and carried to school department.

0	13	·	·	20	
new highways .					
land taken for highwa					
watering streets .				5,364.26	
paving streets .				6,511.80	
macadamizing .				19,616.23	
grading for concrete	•	•	•		
scavenger teams .	•	•	•	18,892.25	
street sweeping .		•		1,198.31	
lighting streets .	•	•		42,908.78	
bridges city teams				2,672.25	
city teams				5,290.73	
sewers and drains			•	55,409.73	
			-		\$206,400.01
ENGINE	er's i	DEPAR	RTM	ENT.	
Paid engineer's department	·	·	·	• •	\$3,499.90
HEALT	H DE	PARTI	MEN	а.	
Paid health department					\$1,964.00
SCHOOL	- DEI	PARTM	IEN	т.	
Paid repairs of schoolhouses	5			\$4,044.88	
fuel				4,673.54	
furniture and supplies				746.46	
has been all stations one				· · · ·	
printing and advertisin	ng			396.10	
contingent expenses				931.92	
care of rooms .				3,715.75	
care of rooms . evening schools .				1,064.53	
teachers' salaries .				49,398.52	
salaries school comm				17/07 - 5.	
truant officer * .				1.030.00	
salary of superintender					
struction * .				2.000.00	
				-,	

\* Salaries of superintendent, school committee, and truant officer transferred from city officers' salaries and carried to school department.

420 REPORT OF THE CITY AUDITOR.	
Paid evening school mechanical draw-	
ing \$552.71	
free text-books 3,210.73	
	\$71,827.64
CITY LIBRARY.	
Paid city library	\$4,525.73
FIRE DEPARTMENT.	
Paid fire department \$40,641.04	
fire-alarm telegraph 1,154.66	
hydrant service 5,000.00	
firemen's parade	
	\$47,551.02
POLICE.	
Paid police department	\$37,937.07
PUBLIC BUILDINGS.	
Deid wareing of huilding.	
Paid repairs of buildings \$2,456.96 addition Webster-street school-	
house	
new schoolhouse, West Manchester 1,128.70	
new schoolhouse, West Manchester 1,120.76 new schoolhouse, Hallsville	
	\$29,483.71
WATER-WORKS.	
Paid water-works, construction \$22,667.74	
repairs 21,995.06	
current expenses . 4,962.85	\$49,625.65
	\$49,025.05
PUBLIC PLACES.	
Paid commons \$2,406.76	
Stark park	
Derryfield park 409.07	
Pine Grove cemetery 5,941.34	

## MUNICIPAL EXPENDITURES.

Paid Valley cemetery . receiving tomb .					
PATRIOTIC, CHAF	HTABLI	E, AN	р ы	ILANTHRO	PIC,
Paid paupers off the farm city farm . indigent soldiers . Women's Aid and I free beds, Elliot Ho decoration soldiers'	: Relief I spital	Hosp	ital	6,512.89 906.40 400.00	
militia .	•			875.00	<b>)</b>
			-		\$14.556.07
	ТА	XEs.			
Paid abatement of taxes					\$2,557.24
Total of municipa	l expe	nditu	res		\$748,564.32
STATE	1255	ours		<b>N</b> 12	
SIAIL	42D C	.0121	7 1.3	AL <sup>*</sup> .	
Paid state tax county tax					
Total state and co	unty ta	ax.		•	\$109,467.47
Grand total of ex	pendit	ures o	luring	g the year	\$858,031.79
Cash on hand December Less unpaid bills .	· ·	·		0 00 /	
Net cash on hand	•			•	
					\$951,221.93

•

AND 1891.
1890
CHESTER, N. II., 1

			RECEIPTS.	PTS.				
-			ч					
	Cor	utv.	TAXE	S RECEIVED	TAXES RECEIVED FROM THE STATE.	rate.	Costs and	Court fines
city taxes. tax	ta	taxes.	Insurance 1ax.	Railroad tax.	savings bank tax.	Literary fund.	interest on faxes.	and costs.
\$409,601.92 \$46,032.17	\$46,0	12	\$3,752.25	\$21,443.72	\$08,392.94	\$4,504.70	\$342.41	\$6.939.57
391,652.45 46.082.47	46.03	17	3,920.25	22,059.03	73,275.55	5,287.50	411.96	7,902.04
			RECEPTS, - Continued	– Continued.				
Itill shoro'				LICENSES.				Gross re-
board of paupers. Sewer.	To ent sewe	r. r	To keep dog.	To sell milk.	To keep billiard table.	For shows and exhi- bitions.	Rents.	water- works.
\$2,201.57 \$1,013 40	\$1,013	0	\$1,361.16	\$-19.60	\$37.50	\$190.50	\$2,871.63	\$90,463.37
1,789.10 2,10	$^{2,10}$	2,103.50	2,155.58	65.50	315.00	169.00	2,887.20	76,605.23

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REPORT OF THE CITY AUDITOR.

YEAR.	Pine Grove ecmetery.	Valley cemetery.		Bridges.	City scales.	cales.	Fire de- partment feams.		Street de. partment feams.	Tuition and text-books.	d Lun -old.		Premium on bonds sold.
1800	\$4,423.37 4,593.77	\$1,300.00 1,500.00	00.00	8434.09 4.45		\$487.45	\$4,699.47 4.920.60	92	\$2,700.69 3,047.58	c 428-75 156.4,	\$1,747.50 1,926.96		\$5,670.00
		Indements	[] [] []		Miscolla-		LOANS.	ćs.	Une'	Unclaimed Tc	Potal receipts during the	ts Gi	Grand total cecipts dur-
YEAR.	recov	recovered.	deemed.		neous.	Temporary	orary.	Bonded.	ered	e	/car, exclud ing cash on hand.		ing the year, including cash on hand.
1890	6, <u>5</u> 8	\$2,500.00		:	02.52.5%	\$100,000.00		\$102,000.00		\$678.95	\$\$20,014.03		\$969,863.36
			\$374.50	-50	951.74	210,01	210,000.00	5,000.00			871,669.91		951,221.93

RECEIPTS. - Continued.

GROSS RECEIPTS AND EXPENDITURES. 423

		INTEL	INTEREST.		ept.	<b>Δ.1</b> υ.	лэц рисл	fat .es.	ւոլ ։ այ	sres. es.	.1	s'10 • 1 1 6 • 1 1 9
	On water bonds.	er On city bonds.	On eem- etery bonds.	On tem- porary loan.	ը Եսովշվ	оцитэТ .пвоі	atura oture	nəfiən <b>i</b> nəqzə	чота Мауог'	ffto yff) irnfas	City hal	tibu A tibu A tuent
1890	\$34,177.00 32,093.00	00 \$15,771.00 00 15,584.00	\$567.50 729.35	\$11,820.82 4,659.34	\$99,000.00 100.00	\$100,000.00 \$2.058.18 180,000.00 2.304.62	\$2.058.18 2.304.62	\$17,380 91* 15.639.62	\$188.00	\$13,489.41† \$2,741.79 11,768.45 11,768.45	\$2,741.79 1,380.37	\$1,699.51
Y.F	YEAR.	Thirteen highway dis- tricts.	New highways.		Land damages.	Sprinkling.	Paving.		Macadamiz- ing.	Grading for concrete.		Scavenger teams.
: :	1890	\$21,045.45 22,850.29	\$9,075.61 14,448.09	5.61	\$\$58.16 5,704.45	\$7,593.00 5,304.26	\$6,633.75 6.511.80		\$20,925.52 19.616.23	\$5,080.86 5.52.84		\$15,958.46 18 809 95

\* \$00.55 taken from incidental expenses and carried to Amoskeng cemetery. † \$alaries of truant officer, committees, and superintendent taken from city officers' salaries and carried to school department.

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REPORT OF THE CITY AUDITOR.

GROSS RECEIPTS AND	) EXPENDITURES.
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Street         Lighting         Bridges, unding         City teams.         Severs and streets.           streeting.         surgets.         surgets.         surgets.         surgets.         streets.           streeting.         surgets.         surgets.         surgets.         surgets.         surgets.           from every.         scine.         surgets.         surgets.         surgets.         surgets.           from every.         scontorevery.         surgets.         sur					STREET AND SEWER DEFAULMENT COMMAND	rawae ne	INFIGU N	· · · · · · · · · · · ·					:	
Silisations         Silisations           Silisations         Silisations           Silisations         Silisations           Silisations         Silisations           Actionations         Silisations           Silisations         Silisations	YEAI	~	Stre sweel	aet aing.	Lightin streets		idges, ma tenance.		y teams.	Sewers drain		Engincer's department.	Health department.	ltn ment.
Repairs of schoolbouses.     EXTENDITIONS       Repairs of schoolbouses.     EXTENDITIONS       Repairs of schoolbouses.     EXTENDITIONS       Repairs of schools     Schools       Repairs of schools     Schools       Repairs     Schools       Repairs     Schools       Repairs     Schools       Repairs     Schools       Schools     Schools       Repairs     Schools       Schools     Schools			\$1,5 1,1	37.08 98.31	\$41,099. 42,908.	= <u>8</u>	\$3,879.68 2,672.25		6,246.19 5,200.73	\$05,05\$ 301,65		\$3,221.89 3,499.90	19 18 18	007596'1 807292'18
<ul> <li>Fuel.</li> <li>Fuel.</li> <li>Purniture</li> <li>Purniture</li></ul>	11					3	SCHO		Continued.					
24,119.76 \$3,768.32 \$575.15 \$141.35 \$589.05 \$589.10 \$3,376.75 \$1.254.81 \$45,404.87	lo stingen	senotioodas	.ləu <sup>q</sup>	Furniture saitqus bus	Books and sta- tionery.	Printing and advirtising.	Contingent expenses.	smoor to end).	Evening sloods:	'ztenchez' Seinslisz	90 - Salaries - Of seltool - Cour. a n.d - Draant Officer.	salary of su- perintendent et schools.	Evening seltools, me- meehan i e a l drawing.	Free text. Prooks.
1891 4.004.83 4.653.564 746.46 62.50 286,10 931.92 3,715.75 1,061.53 49,388.52 1,680.00	\$4,1 4.0		\$3,703.32 4.673.54	\$575.15 746.46	\$141.35 62.50	\$389.05 396,10	\$\$30.10 931.92	\$3,376.75 3,715 75	\$1.254.81 1,061.53	\$45,404.87 49,398.52	\$1,020.00' 1,030.00	\$2,000.00	\$694 %9 552.71	\$9,005.11 3,210.73

EXPENDITURES. - Continued.

	Hallsville, senodloodse,	\$20,759.25			лтозкеад. Лтозкеад	\$60.35*
	ري المالية الم المالية المالية المالية المالية المالية المالية المالية المالية				Derryfield Dark,	\$409.07
LDINGS.	Zew school. house, West Manchester.	\$43,704.11 1,128.70			Receiving tomb.	\$520.00
PUBLIC BUILDINGS.	Zew city stable.	\$5.394.02		LACES.	ГаПеу сетету.	\$2,750.56 2,794.79
	Repairs.	\$4,443.87 \$ 2,456.96		PUBLIC PLACES.	Ріпе (ітоvе сете (ітоvе	\$5,017.54 5,941.34
	Police department.	\$37,096.16 37,937.07	EXPENDITURES Continued.		STARK PARK. Inte- Land nee. bought.	\$8,000.00
	Firemen's parade.	\$705.32		stark Mainte- nance.	\$60.75 371.81	
FIRE DEPARTMENT.	Пудгал <b>t</b> service.	\$18,080.00	EXPENDI		.snommoD	\$4,214.03 2,406.76
	Fire-alarm telegraph.	\$1,585.43 1,154.66		ļ	Juerrent .sesnegxe	\$4,582.81 4,962.85
	Բire վеթаrt. ment.	\$41,409.53 40,641.04		WATER-WORKS.	Repairs.	\$17,506.01 21,995.06
CITY LIBRARY.	Воокз.	\$1,000.00 1,000.00		W.M.	Construe.	\$11,314.87 22,667.74
CITY L	лаінтепапсе.	\$3,239.SS 3,525.73				
	У ЕЛВ.	1890			лели.	1890

\*\$60.35 taken from incidental expenses and carried to Amoskeag cemetery.

REPORT OF THE CITY AUDITOR.

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EXPENDITURES. — Continued.

			CHAI	RITY, PATRIOT	CHARITY, PATRIOTISM, PHILANTHROPY.	topy.		
YEAR.	Paupers off the farm.	City farm.	Indigent sol- diers.	Decoration of soldiers' graves.	Militia.	Woman's Aid and Relief Hospital.	Free beds, Elhot Hospital.	Woman's Mercy Home.
	\$4,336.46 4,928.24	\$7,467.30 6,512.89	\$737.82 906.40	\$374.27	00.678\$	\$400.00 \$00.00	\$600.00 600.00	\$500.00
			EXPENI	EXPENDITURESContinued.	ntinued.			
	YEAR.		TAXES. Abatements.	Total of mu- nicipal ex- penditures.	State tax.	County tax.	Grand total of expendi- tures.	Cash on band.
1890		0683	\$2,999.39 2.557.24	\$780,843.87 748,561.32	\$63,435.00 63,435.00	\$46,032.47 46,032.47	\$890,311.34 \$58,031.79	\$79,552.02 93,190.14

GROSS RECEIPTS AND EXPENDITURES.

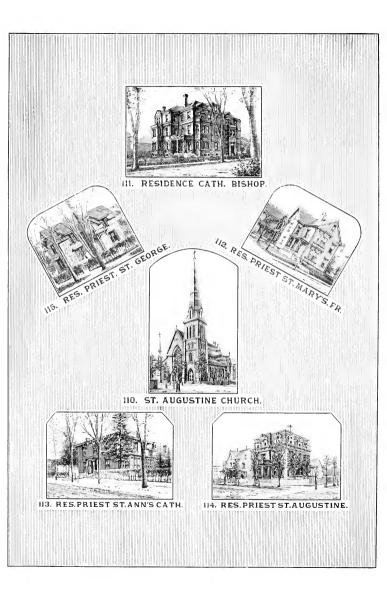
## Interest.

Appropriation	٠	. \$51,500.00	
Transferred from reserved fund		. 3,000.00	
			\$54,500.00

#### EXPENDITURES.

Paid interest on Stark park purchase,		
Aug. 1, 1890, to Jan. 3, 1891 .	\$200.00	
Amoskeag National Bank on \$50,-		
000-loan from May 1 to Dec.		
1-4, 1891, due Dec. 1, 1891 .	1,319.27	
Second National Bank on \$50.000-		
loan, two notes of \$25,000 each,		
from June 1 to Dec. 1, 1891 .	1,096.10	
Granite State Trust Co., on \$50,-		
000 loan, two notes of \$25,000		
each, at 4.31 per cent, from July		
1 to Dec. 1, 1891	1,055.86	
Granite State Trust Co., on one		
note of \$30,000, due Dec. 1,		
1891, from Aug. 1 to Dec. 1,		
1891, four months, three days,		
at $5^{1/}_{24}$ per cent	538.11	
Granite State Trust Co., discount		
on one note of \$30,000, payable		
Dec. 1, 1892	75.00	
Granite State Trust Co., interest		
on one note of \$30,000, due		
Dec. 1, 1892, for three months to		
Dec. 1, 1891, at 5 per cent .	375.00	
coupons on city bonds	15,584.00	
coupons on water bonds	32,093.00	
coupons on cemetery bonds .	729.35	
	\$53,065.69	
Transferred to reserved fund	1,434.31	
reaction to reaction and the second		\$54,500.00

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RESERVED F	UND.
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Payment of Funded Debt. EXPENDITURE. Paid water bond redeemed . . . \$100.00 . Reserved Fund. To appropriation . . . . . . \$20,000.00 To transfers from the following accounts : Pine Grove cemetery . . \$3,000.00 .. .. " 58.66 Interest . . . 1,434.31 City hall . 719.63 . . Printing and stationery . . 195.38 Mayor's incidentals . 65.75 . City officers' salaries 701.55 Auditor's department .49 Highway district No. 1 4.71 " 4.4 44 4 114.26 . . " " 44 5 3.39 " " " - 6 1.62 . " " 66 7 25.93 " 64 6.6 IТ 42.20 " " 13 " 17.12 Damage for land taken for highways . . . . . 795.55 Street sweeping 1.69 . Engineer's department . .10 Health department . 36.00 Furniture and supplies . 3.54Books and stationery . 237.50 . Printing and advertising . . 3.89 Evening schools . . 435.47 Evening schools, mechanical drawing . . . . 47.29

Fire-alarm telegrap		·	•	\$245.34	
Repairs of building	-	•		114.09	
Water-works, repai	rs			4.94	
Water-works, curre	nt ex	pense	s.	37.15	
Commons .				593.24	
Stark park .				128.19	
Valley cemetery				5.21	
Derryfield park				90.93	
Indigent soldiers				592.60	
Militia				25.00	
Cash on hand not of	therw	ise sp	ecifi	-	
cally appropriate	d			12,434.54	
					\$22,217.26
					\$42,217.26

#### EXPENDITURES.

Вy	transfers to	the f	ollov	ving a	accour	nts :	
	Pine Grove	e ceme	etery				\$3,000.00
	Printing a			~			500.00
	Highway l	Distric	t No	). I			50.00
	٤ د	"	" "	2			28.39
	٠٠	" "	• '	8	•		28.8I
	" "	"	44	9			4.15
	4.6	" "	• •	10			673.80
	" "	" "	"	II			150.00
	" "	" "	" "	12	•		24.37
	New highw	ays		•			4,448.09
	Damage for	r land	take	n for	highw	ays	4,500.00
	Scavenger	teams		•			6,892.25
	Watering s	treets					564.26
	Macadamiz	ing		•			2,316.23
	Bridges			•			472.25
	Paving stre						1,011.80
	Grading fo		rete	•			532.84
	Lighting st	reets			•		908.78
	City teams				•		290.73
	Sewers and	drain	s			•	409.73
	Interest						3,000.00

Incidental expenses				\$639.60	
Decoration of soldiers'	grave	2S		33.54	
Firemen's parade				255.32	
Repairs of schoolhouses	5			44.88	
Fuel				973.54	
Contingent expenses				131.92	
Care of rooms .				15.75	
Teachers' salaries				2,398.52	
Free text-books .				210.73	
Fire department .				3,641.04	
Police department				937.07	
Water-works, construct	tion			2,667.74	
Receiving tomb .				20.00	
Paupers off the farm				428.24	
City farm				12.89	
			-		\$12.2

---- \$42,217.26

### Temporary Loan.

#### RECEIPTS.

RECEIPTS.	
Received from Amoskeag National Bank, on note dated May 1, 1891, due December 1,	
1891 from Amoskeag National Bank, on note dated May 1, 1891, due December 1,	\$25,000.00
1891. from Granite State Trust Co., on note dated August 1, 1891, due December	25,000.00
I, 1891 from Granite State Trust Co., on note dated July I, 1891, due December I,	30,000.00
1891. from Granite State Trust Co., on note dated July 1, 1891, due December 1,	25,000.00
1891 . from Second National Bank, on note dat-	25,000.00
ed June 1, 1891, due December 1, 1891	25,000.00

Received from Second National Bank, on note dated June 1, 1891, due December 1, 1891 \$25,000.00 (Above notes given to anticipate the tax of 1891.) from Granite State Trust Co., on note dated August 31, 1891, due December

1, 1892, given on account of sewers and in anticipation of the taxes of 1892 30,000.00

\$210,000.00

#### EXPENDITURES.

Paid Amoskeag National Bank two notes of \$25,000 each, dated May 1, 1891 Granite State Trust Co., two notes of \$25,000 each, dated July 1,	\$50,000.00
1891	50.000.00
of \$30.000, dated August 1, 1891 Second National Bank, two notes of \$25,000 each, dated June 1,	30,000.00
1891	50,000.00
	\$180,000.00
By balance to new account	30,000.00
	\$210,000.00
City Hall.	
Appropriation	• • \$2,100.00
Expenditures.	
PUBLIC COMFORT.	
<ul> <li>Paid Manchester Heating and Lighting Company, 15 lbs. mop waste</li> <li>J. J. Abbott, 4 lbs. black paint and brush.</li> <li>W. B. Abbott, paint and labor</li> </ul>	1.25

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### FUEL AND LIGHTS.

Paid L. B. Bodwell & Co., 10 tons egg       \$65.00         L. B. Bodwell & Co., 2 tons egg       \$13.00         L. B. Bodwell & Co., 1 cord hard       \$00         wood .       .       7.00         E. P. Johnson Co., 95,650 lbs. egg       \$298.91         People's Gas-Light Co., for gas       \$257.74	\$641.65
TELEPHONE.	
Paid New England Telegraph and Telephone Co., use of telephones, etc	\$78.46
SUNDRIES.	
<ul><li>Paid M. P. Barker, making awning for engineer's office \$24.00</li><li>M. J. Coleman, repairs on water-</li></ul>	
closet	
of glass, etc 4.71 A. M. Eastman, brooms, mops,	
soap, handles, etc 8.87 Head & Dowst :	
Labor and materials on City Hall drug store	
drug store 1.05 Labor and materials on City Hall	
drug store 2.43	
Labor and materials on door , 3.91	
Labor and materials on flag-pole,	
etc 62.25 28	

Labor and materials on sky-light,

ind indictions of only right,	
etc	\$0.60
Paid Peter Harris, 21 keys	2.75
Thos. A. Lane, 1-pan valve on	
water-closet	3.50
Thos. A. Lane, labor on water-	
closet	3.30
Thos. A. Lane, labor and materials	
on gas fixtures, etc	23.98
James Martin & Son, one 15x9	
American flag	12.50
James Martin & Son, two 4x4	-
weather signals	2.25
Henry McAllister, materials and	·
labor	2.85
Manchester Hardware Co., 2 balls	Ū
twine for city treasurer's office	. 20
Noyes Manufacturing Co., repairing	
gas regulator	35.00
Pike & Heald, repairs on roof	3.55
J. Stickney, 2 chair cushions, asses-	0.00
sors' office	2.00
Mary Shiney, 58634 hours' labor,	
at 20 cents per hour .	117.35
J. B. Varick Co. :	
1 steel coal-barrow	10.00
25 feet 12-inch rubber hose	2.25
Ropes, needles, and twine for	Ŭ
awnings	1.90
1 16-inch ostrich duster .	.60
5 gallons ozone and 1 5-gallon	
can	13.25
1 No. 2 claw hatchet	• 75
5 <sup>3</sup> / <sub>4</sub> square feet wire screen .	. 29
John Williams, 4 days' labor on	
settees	10.00
John Williams, glue, screws, and	
nails	1.90

\$2,100.00		
\$1,380.37 719.63	• • • •	Total expenditure Amount transferred to reserved fund .
\$645.51	.40	office
		Pike & Heald, labor at mayor's
	.75	air valve
	7.36	treasurer's office Pike & Heald, 1 Jenk automatic
		L. M. Aldrich, 1 screen door,
	5.00	to John Barker
	5	Whitten & Fifield, teams delivered
	.25	Henry McAllister, repairing lock
	1.25	Charles E. Lord, stock on city mes- senger's office
	2.80	mason work
		Charles E. Lord, 7 hours' labor,
	9.00	comfort and city hall
	. 75	O. P. Lucier, 3 ozonators, public
	4.75	soap
	.90	J. S. Holt & Co., 38 gallons of
	.90	John Barker, cash paid for express.
	28.00	fices, etc.
		sand-paper, and 9 days 3 hours' labor on mayor's and clerk's of-
		Cummings & Co., shellac, varnish,
	16.98	and labor, city messenger's room
		William B. Abbott, paint, paper,
	3.82	deeds
		Dana W. King, fees as register of
	15.00	30c
	Ũ	E. J. Williams, 50 hours' labor, at
	1.65	zinc
	5	E. J. Williams, cement, nails, and
	16.50	cents, repairing City Hall roof .
	\$1.38	E. J. Williams, 275 slate, at 6
	¢ 7 . 28	Paid Weston & Hill, 234 yards carpet .

### Printing and Stationery.

Appropriation		\$2,000.00	
Transferred from reserved fund		500.00	
			\$2,500.00

### Expenditures.

#### ASSESSORS.

Paid John B. Clarke Co., advertising		
notices, April 6–16, 2 inches . John B. Clarke Co., printing 6	\$11.50	
cards	·75	
Temple & Farrington Co., blank books	106.50	
Temple & Farrington Co., pencils,	<i>,</i>	
blotting-paper, etc Temple & Farrington Co., pass-	6.97	
books, etc	3.65	
Pamphlet Laws	1.00	
Union Publishing Co., advertising assessors' notice, 3 squares, from		
April 6-15	15.00	\$145.37
		- 10 01
CITY CLERK.		
Paid N. J. Bachelder, 800 blank dog licenses	\$7.50	
A. S. Campbell & Co., 1,200 blank		
death returns . A. S. Campbell & Co., 500 permits	4.00	
and licenses . A. S. Campbell & Co., 900 blanks,	4.25	
various kinds	11.15	

Paid P. D. Harrison, 300 rosters	\$15.00
P. D. Harrison, 300 blanks for	r 5
clerk of common council .	3.00
P. D. Harrison, 200 notices to	5
jurors	1.25
P. D. Harrison, 200 orders .	2.25
S. S. Piper, stamps and postals .	3.00
Sampson, Murdock & Co., New	0
England Business Directory .	6.00
Temple & Farrington Co.:	
Mucilage and ink	1.37
ı blank-book	1.35
I gross of pens	1.50
ı dozen license books	8.00
ı blank-book	16.00
ı canvas cover	1.50
3 gross rubber bands	.90
4 dozen pencils	2.00
2 dozen pen-holders	I.IO
Mucilage, pens, etc.	1.61
2,600 blanks, various kinds	19.25
ı blank book	7.50
2 waterproof bookcases	1.50
Paper, rubber bands, etc.	9.76
2 blank books	23.24
2 canvas covers	3.00
Stationery	6.00
ı blank book	8.00
I canvas cover	1.25
1 index	. 50
Diary and envelopes	1.60
Manchester post-office, postage	
stamps	.50
J. Arthur Williams, 2,800 blank re-	5
ceipts, permits, etc	9.60
J. Arthur Williams, 900 blank re-	-
ceipts, permits, etc	6.35

438 REPORT OF THE CITY AU	DITOR.	
Paid J. Arthur Williams, 400 ordinances H. A. Greenough & Co., Merri-	\$2.00	
mack River Directory	5.00	6105 × 9
		\$197.78
CITY TREASURER.		
Paid Novelty Advertising Co., ink rib-		
bon and ink	\$0.75	
bon and ink		
dates for Atlas Dater	·75	
S. S. Piper, P. M., for 500 envelopes	10.90	
S. S. Piper, P. M., for 500 envelopes	11.50	
Temple & Farrington Co.:		
2,500 envelopes	3.25	
4,000 pay envelopes	4.00	
4,000 pay envelopes	4.00	
1 dozen pencils	.50	
2,000 pay envelopes	2.00	
Repairing shade	. 25	
Pen-holders, eraser, and ink .	.58	
1 dozen pass-books	.42	
2,000 pay envelopes	2.00	
Ink	· 75	
Thos. H. Tuson, printing 300 re-		
ceipt blanks	2.40	
J. A. Williams, 300 postal cards and		
printing same	3.90	
		\$47.95
TAX COLLECTOR.		
Paid A. S. Campbell & Co., 1,000 note		
heads	\$3.00	
J. B. Clarke, advertising sale of	- 0	
non-resident lands	32.40	
J. B. Clarke, printing 20,000 bills	20.00	
Republican Press Association, ad-		

vertising non-resident sale . . 9.90

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Paid Temple & Farrington Co., 1 blank		
book	\$10.00	
Temple & Farrington Co., 2 gross		
pens, stationery	3.08	
Temple & Farrington Co., 4 blank		
books	4.00	
Temple & Farrington Co., station-		
ery	2.25	
Manchester post-office, 1,025 2-		
cent envelopes	22.54	
		\$107.17

# CITY AUDITOR.

CITY AUDITOR,	
Paid John B. Clarke, printing 10,000	
blanks	\$40.00
John B. Clarke, printing 600 blanks	7.65
·· ·· ·· ·· 300 ··	6.75
·· ·· ·· ·· 200 ··	1.75
Hammond Typewriter Co., 5 reams	
No. 57 paper	15.50
Manchester post-office, 100 10-cent	5.5
stamps	10.00
Manchester post-office, 100 5-cent	
stamps	5.00
Manchester post-office, 100 3-cent	3.00
	1.00
1	3.00
Manchester post-office, postage .	5.00
Temple & Farrington Co.:	
Stationery	2.78
ı bill case	2.25
6 sheets blotting paper	.42
Paste, blocks, ink, etc.	3.08
2 blank books	5.00
Dictionary, etc	2.25
I copy Pamphlet Laws	1.00
American Express Co., express on	1.00
65 packages	11.92

Paid Novelty Advertising Co., printing 200 statements bonded debt A. Hilcken, binding paper blocks .	\$4.50 1.69	\$129.54
SUNDRIES.		
J. B. Clarke :	\$70.00	
Printing 1,500 copies of city re- port for 1890, as per contract. Advertising for proposals for ad- dition to Webster-street school-	960.71	
house, 5 squares 7 times . Printing 300 copies Mayor's Ad-	13.12	
dress, etc Binding 150 Reports Printing 125 half-letter circulars	32.00 218.58	
bonded bebt	2.25	
10 times	15.25	
nance, 6 inches 3 times Advertising refunding of water	I 4. 40	
bonds	10.85	
ryfield map for City Report, 1890 Hub Engraving Co., 1 cut and elec- trotype of Derryfield park for	. 25	
City Report, 1890 . A. E. Herrick, expenses to Boston	6.00	
and return	2.90	
and return	2.85	
for the City Report for 1890 .	258.45	

Paid Manchester post-office, stamps for		
Mayor	\$2.00	
Manchester post-office, stamps for	"n 2.00	
Mayor	2.00	
Manchester post-office, stamps for	2.00	
Mayor	3.00	
Wm. E. Moore, printing letter-	3.00	
heads, etc., for Mayor	12.00	
Wm. E. Moore, printing letter-	12.00	
heads, etc., for Mayor	12.00	
Wm. E. Moore, printing and 2 box-	12.00	
es envelopes	2.50	
Temple & Farrington Co., 492	2.50	
boxes for mailing City Report .	24.60	
	24.00	
Temple & Farrington, 6 gross rub-	0	
ber bands	8.10	
Temple & Farrington Co., binding		
pay-roll and 6 blocks	2.75	
Western Union Telegraph Co., tel-		
egram to Boston	.25	*- (. ( )-
		\$1,676.81
Total expenditures		\$2,304.62
Amount transferred to reserved fund		195.38
		\$2,500.00

### Incidental Expenses.

Appropriation		. \$15,000.00
Transferred from reserved fund	•	. 639.60 

#### Expenditures.

### BIRTHS, MARRIAGES, AND DEATHS.

Paid O. D. Abbott				\$10.25
D. S. Adams .	•		•	7.50
E. Bernier .	•	•	•	14.75

Paid J. M. Collity					\$4.75
C. W. Downing					7.00
C. M. Dodge					9.25
E. M. Fugere					2.50
George Frechette					9.00
L. French .					3.75
L. M. French					14.25
L. B. How .					3.75
J. A. Jackson					12.25
M. E. Kean .					11.25
J. E. Lamaitre					34.50
J. E. A. Lanouette					47.00
J. W. D. McDonal	ld				17.00
G. B. Morey .					4·75
J. E. E. Roy .					7.75
E. Sylvain .					36.75
C. B. Sturtevant					7.00
George D. Towne					4.50
Ellen A. Wallace					2.00
E. B. Dunbar					5.75
C. F. Flanders					30.00
H. W. Boutwell					30.50
J. Ferguson .					41.50
A. G. Straw .					1.25
N. P. Kidder, fees	for	480 ma	rria	ges	72.00
N. P. Kidder, fees					161.25
N. P. Kidder, fees					144.75
,		<i>J-J</i>			

\$758.50

# DISTRICTS NOS. 2 AND 3.

Paid labor of men and teams as per pay-roll:

January	•				\$21.00
Februar	y				21.00
March					21.00
April					113.86
May					110.07
June	•	•	•	•	214.52

### INCIDENTAL EXPENSES.

July .			\$153.63	
August .			152.42	
September			198.48	
October .			55.25	
November			32.25	
December			39.25	
			\$1,132.73	,

#### DISTRICT NO. 10.

Paid labor of	men and	teams as	s per pay-roll :	:	
August,	North Ma	in-street	schoolhouse	•	\$195.00

# DAMAGES AND JUDGMENTS.

Paid Milton A. Abbott, damage to crops, fence, and lawn in building sewer	\$30.00
Johanna Cronin, personal injuries received on Dean street	150.00
Margaret Connor, damages settled by agreement Emeline C. Call, damages settled by	200.00
agreement James Dearborn, damages from	1,250.00
sewer overflow . Achsah L. Elliott, personal damages,	5.00
falling on Lincoln street, Decem- ber 26, 1890	240.00
C. S. Head and W. G. H. Dunham, damages settled by agreement	425.00
<ul><li>E. Y. Harwood, damages by falling into a vault Hepzibah A. Johnson, personal dam-</li></ul>	10.00
ages, falling on Manchester street Antoine Sevigney, damage to real	50.00
estate by grading Beauport street Lewis K. Mead, bill paid in settle-	632.33
ment of A. L. Elliott	2.40

Paid Hannah Mead, personal damage on		
	\$80.00	
Chestnut street . Hannah Ryan, personal damage,		
settlement of suit	400.00	
George W. Reed, damage to hack .	15.00	
Frederick E. Scheer, personal injur-	13.00	
ies, suit settled .	300.00	
Joseph H. Wiggin, injury to horse	200.00	
Worthley Bros., settlement of suit .	50.00	
Edwin R. Whitney, settlement of	5	
suit, personal injury .	1,500.00	
James Taylor, damage by reason of		
obstruction in Central street	10 00	
John T. Beach, repairing wagon of		
Taylor	8.98	
Rebecca Newton, settled by agree-		
ment, on file in the city clerk's		
office	50.00	
Mary Sheehan, damage to person on		
Cedar street	60.00	
estate of Daniel Farmer, land dam-		
age on highway by reason of		
flowage	50.00	
Elliot Hospital, board and care of		
C. B. Clarkson for six weeks	60.00	
Mrs. Luther Campbell, damage to		
hens by dog	2.00	
Mrs. Luther Campbell, damage to		
turkeys by dog	13.00	
tate by change of grade on Beau-		
port street		
Charles H. Bartlett, one third the	575.00	
amount paid Charlotte Hovey,		
injuries received by falling into		
an open bulk-head	115.00	
· · · · ·		\$6,

6,483.71

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#### LEGAL EXPENSES.

LEGAL EXPENSES.	
Paid J. M. Collity, services in case of R. Call .	\$35.00
A. E. Herrick, 118 pages typewrit-	,,55.00
ten testimony from shorthand	
notes, 17 cents per page, in case	
of Dr. Parsons v. city	20.00
John G. Hutchinson, service of	
notices and fees paid witnesses in	
sundry cases	21.06
Edwin F. Jones, cash paid for writs	
and entry fees in supreme court .	6.50
W. W. Wilkins, services in case of	-
R. Call	25.00
W. W. Wilkins, services in case of	
Dr. Parsons	50.00
Kennard, Young, and Harvey, ref-	
erees' fees	15.00
Charles H. Reed, services looking	
up witnesses, in suit of Parsons $v$ ,	
Manchester	56.25
L. B. How, services, examination,	
and testimony in the case of Dr.	
Parsons 7. the City of Manches-	
ter	50.00
J. B. Clarke Co., printing 30 briefs	
Parsons $v$ . City	13.00
Edwin F. Jones, expenses attending	
law term, and postage	4.61
William W. Wilkins, consultation	
in case of fractured leg of Julia	
Guedrow	5.00
William W. Wilkins, consultation	
in case of injured hip of Hannah	
Olo	5.00

\$306.42

CITY COUNCIL AND COMMITTEES.

Paid Ezra S. Stearns, copy of act of legis-	
lature	\$1.50
Ezra S. Stearns, copy of act of legis-	, U
lature	3.50
John P. Bartlett, professional ser-	
vices before the legislature .	200.00
Edwin F. Jones, services and ex-	
penses at Concord on legislature	
matters, as per agreement with	
special committee of the city	
councils	280.00
Western Union Telegraph Co., tele-	
grams to Concord and Boston .	4.66
H. E. Burnham, services and ex-	
penses on legislative matters .	1 50.00
W. J. Freeman, hacks and teams for	
Mayor and committees	87.00
James Brothers, use of hack to city	
farm	5.00
E. T. James, hacks, etc., for com-	
mittee on streets, putting up signs,	
etc., etc	81.75
A. L. Jenness & Son, use of hacks,	
etc., by sundry committees .	73.50
Jesse W. Truell, use of hack, com-	
mittee on commons, streets, cem-	
eteries, etc	49.00
Whitten & Fifield, use of hacks by	
committees	26.00
Union Publishing Co., advertising	
dog license notice	17.50
Union Publishing Co., advertising	
proposals for water bonds	10.00
J. C. Nichols & Son, use of hacks	
for committees	44.00

Paid O. E. Branch, services and expenses		
at Concord before the legislature	\$25.00	
John B. Clarke, advertising propos-	#* J	
als for coal, six squares eight times	15.00	
John B. Clarke, advertising propos-	- 5	
als for electric lighting	14.40	
Daily Press Publishing Co., adver-	14140	
tising notice relating to dog law	9.00	
Union Publishing Co., advertising	9.00	
proposals for coal and wood .	18.66	
Union publishing Co., advertising	10.00	
proposals for electric lighting,		
four and one half squares, Tues-		
day, Thursday, and Saturday to		
September 25	21.00	
Manchester post-office, 200 two-cent	21.00	
stamps, Mayor's office	4.00	
Novelty Advertising Co., stamps,	4.00	
etc., for clerk of common council	2.00	
American Bank Note Co., 100 blank	2.00	
water bonds	65.00	
C. H. Simpson, use of hacks for	03.00	
committees, etc.	10.00	
committees, etc.		\$1,217.47
		<i>e</i> -,,,,
CITY LIBRARY.		
Paid John A. Barker, care of boiler at		
city library	\$119.50	
Robert Clark, work done in and	\$119.50	
around the city library building,		
sweeping sidewalks, shoveling		
snow and ice, cutting grass	63.13	
Charles A. Hoitt & Co., one table	2.50	
Head & Dowst, lumber and labor		
for shelving, etc.	323.97	
Thos. A. Lane, materials and labor	5.03	
,	5.25	6 T T T T T

\$514.13

### REPORT OF THE CITY AUDITOR.

#### DISEASED CATTLE.

Paid H. Fox Davis, et al. :		
Services as appraisers of horse of C.		
H. Simpson	\$6.00	
Killing and burying same	2.00	
Five days' labor at state industrial		
school examining and killing cattle,		
and use of team	15.00	
Services of three appraisers, cows of		
Patrick Harrington	6.00	
Killing one cow at same place	3.00	
Paid H. Fox Davis, burying glandered		
horse of A. Eastman	2 00	
H. Fox Davis, services in two other		
cases	2.00	
A. L. Dodge, examining horse of		
Flanders, Mills & Fairbanks .	7.00	
A. L. Dodge, use of team	5.00	
D. C. James, services in August		
and December relating to glan-		
dered horses	8.00	
Patrick Harrington, one cow killed	20.00	
H. Fox Davis, killing and burying		
glandered horse of John S. Miller	300	
Henry P. Mullowney, examination,		
etc., of diseased horse .	5.00	
A. L. Dodge, examination of W. E.	-	
Prescott's horse	2.00	
A. L. Dodge, examination of C. E.		
Smith's horse	3.00	
		\$89.00
CITY SCALES.		
Paid William Bailey, for services as city		
weigher, to December 1 .	\$333-33	
F. H. Crawford, for services as city		
weigher	33-33	

Paid L. B. Bodwell & Co., 1 ton of egg		
coal	\$6.25	
L. B. Bodwell & Co., $\frac{1}{2}$ ton stove		
coal	3.75	
L. B. Bodwell & Co., 2 feet mixed		
wood	1.87	
L. B. Bodwell & Co., $1\frac{1}{2}$ tons		
stove coal	10.50	
L. B. Bodwell & Co., 2 feet hard		
wood, sawed and split	2.25	
S. C. Forsaith Machine Co., lumber		
used in repairing building .	12.16	
S. C. Forsaith Machine Co., labor		
and lumber	7.59	
Temple & Farrington Co., 1 gross		
of pens	I.00	
Temple & Farrington Co., 1 bottle		
of ink	.38	
Temple & Farrington Co., note		
paper	.42	
Temple & Farrington Co., 1 direc-		
tory	2.00	
J. Y. McQueston & Co., 1 office		
high chair	1.00	
Walter Neal, labor and material,		
(December, 1890)	5.33	A 107 76
		\$421.16

# MILK INSPECTOR.

Paid John B. Clarke, advertising no-	
tice, 2 inches, 2 times	\$4.50
H. F. W. Little, 30 postal cards,	
etc	·55
H. F. W. Little, lactoscope, hy-	
drometer, etc	8.90
J. A. Williams, printing 300 notices 29	1.50

## 450 REPORT OF THE CITY AUDITOR.

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Paid J. A. Wil	liams,	printi	ng 30	o en	ivel-		
opes.					•	\$1.25	
Clarence	Bancı	roft, a	nalyzi	ng r	nilk	90.00	
							\$106.70

### RELATING TO THE STREETS.

Paid C. E. Crombie & Co., 54 rock	
maple and elm trees	\$54.00
Fred S. McLearn, 173 signs	75.13
Whitten & Fifield, teams used in	755
November and December, town	
line work	11.50
Head & Dowst, 17 hours' labor, 4	11.50
lbs. 8-penny wire nails, street	
signs	4.23
John Williams, 8 days' labor on	
tree boxes	20.00
John B. Varick Co., hoop-iron and	
nails on tree boxes	2.15
Manchester Hardware Co., nails on	
tree boxes	1.33
Merrill & Freeman, 4 barrels lime	
on tree boxes	4.00
J. B. Varick Co., hoop-iron, wire	
nails, etc., on tree boxes .	4.55
L. N. Westover, lumber and labor	
on tree boxes	10.48
Pike & Heald, materials and labor	·
at True Perry's house on Lake	
avenue	49.83
Head & Dowst Co., materials and	49.03
labor on True Perry's house, Lake	
avenue	356.45
McIver & Follansbee, lowering	350.45
True Perry's house on Lake ave-	
nue	130.00

Paid Charles H. Robie, concrete work at		
True Perry's block on Lake ave-		
nue and Massabesic street, 147.5		
yds., at 45c.	\$66.37	
D.C.Whittemore, use of land for road	20.00	
F. S. Bodwell & Co., 1 step at New-		
ton's, on Webster street	17.14	
George Holbrook, labor and use of		
tools, cutting and trimming trees,		
etc	133.34	
George Holbrook, taking down		
sign of J. Hodge	1.75	
James Kirby, services $7\frac{1}{2}$ days		
trimming trees	15.00	
W. G. Landry, bank wall on Bow-	-	
man street	575.00	
John F. Larkin, pipes, crosses, ties,	0.0	
brimstone, etc.	39.32	
John F. Larkin, drilling stone holes	6.00	
John F. Larkin, labor, putting up		
fence-rail at East Spruce street .	45.00	
H. D. Lord, 1 2-wheel road-scraper	25.00	
J. B. Varick, 1 wheel-scraper	46.00	
J. B. Varick, 2 axes and 2 ax-		
handles	2.10	
Charles H. Robie, concrete work,		
West Central street, 265 yards, at		
25c	66.26	
Charles H. Robie, concrete work,		
City Hall, 147.1 yards, at 25c.	36.77	
Charles H. Robie, concrete work,		
Main-street schoolhouse, 211.5		
yds., at 45c	95.17	
Charles H. Robie, concrete work,		
Newton and Webster streets,		
112.1 yds., at 45c	50.45	
Flint & Little, repairing levels, dis-		
trict No. 2	2.80	
		\$1,967.11

## 452 REPORT OF THE CITY AUDITOR.

#### ASSESSORS.

Paid H. D. Lord, furnishing transfers of real estate for one year	<b>.</b> .	\$12.00
TAX COLLECTOR.		
Paid George A. Alger, rebate on tax of Hilan Pare, 1889, sold for taxes (duplicate) W. E. Dealand, redeemed taxes on	\$9.04	
property of Eliza Eaton, now owned by City Library W. E. Dealand, tax of William Cur-	15.05	
rier, 1889, being duplicate of William Carrignant George E. Morrill, collector, taxes sold and purchased as agent for	6.83	
the city	816.28	
bills	63.20	\$910.40
MEDICAL ATTENDANCE.		
Paid C. W. Downing, services in sundry		
cases Thomas Franker, services as inter-	\$37.25	
preter Fred Perkins, certificate of insanity,	2.00	
F. Searle	3.00	
Fred Perkins, certificate of insanity, H. Minard	3.00	
Fred Perkins, certificate of insanity, Armidas Duncourse Fred Perkins, medicine per order	3.00	
of the Mayor	10.70	

Paid Fred Perkins, services rendered M. Houlihan, Charles Clarkson, and Cornelius Linnehan, as per award of joint standing committee on		
claims	\$28.00	
		\$86.95
SUNDRIES.		
Paid G. F. Bosher, advertising, postage, and posting, and selling two lots		
of land on Lowell street	¢ 11 50	
J. A. Barker, night services, March	\$41.50	
12 and 26, April 9 and 10, Octo-		
ber 29, and November 12.	20.00	
water-works, water rent for Women's	20.00	
Aid and Relief Society Hospital		
to July I	10.98	
water-works, water rent for Women's	10.98	
Aid and Relief Society Hospital,		
to January 1, 1892	21.96	
water-works, water rent for Women's	21.90	
Aid and Relief Society Hospital,		
to April 1, 1892	10.98	
J. B. Varick Co., tools for sealer of	10.98	
weights and measures		
A. F. Barr, for cash paid county	5.15	
sealer	3.95	
A. F. Barr, for sealing city scales .	.75	
Hartford Steam Boiler Inspection &	.75	
Insurance Co., insurance on boil-		
ers in eight schoolhouses for three		
years	320.00	
Hartford Steam Boiler Inspection &	520100	
Insurance Co., insurance policy		
No. 17231, for one year on stone-		
crusher boiler	22.50	
J. A. Williams, 2,000 note circulars	5.00	
	0	

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Paid Mrs. N. P. Kidder, clerical services	
in city clerk's office	\$150.00
Mrs. N. P. Kidder, clerical services	
in city clerk's office to October 1	75.00
Mrs. N. P. Kidder, clerical services	
in city clerk's office to December 1	75.00
A. D. Gooden, land, deed dated	
July 18, 1891, and acknowledged	
August 6, 1891	345.00
H. Giebel, decorating City Hall,	
Merchants' Week	57.50
Head & Dowst, 210 feet sapling,	
city pest house	5.25
Head & Dowst, 48 feet 2 x 4 spruce,	
city pest house	·75
William E. Moore, printing lot of	
slips for city report, 1891 .	8.00
First Light Battery, cartridges, etc.,	
and firing national salute July 4,	
1891	41.85
town of Goffstown, taxes on land	
for 1890–91	1.74
Dana W. King, recording deed .	1.09
Pike & Heald, stovepipe at pest	
house	1.15
G. F. Bosher :	
100 large posters, house lots .	3.50
Posting same	1.50
Advertising in "Daily Union"	30.58
Advertising in "Daily Mirror"	19.50
Advertising in "Daily Press".	13.00
Services selling 5 house lots .	25.00
A. E. Herrick, expense to Boston	
and return, to see about engrav-	<i></i>
ings for the city report	2.80
A. E. Herrick, expense to Boston	c
and return, twice	5.80

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Paid A. E. Herrick, cash paid for ex-		
press, etc	\$0.50	
S. B. Putnam, expense to Concord		
and return, to settle with state		
treasurer	.72	
Pike & Heald, stove and furniture		
at city pest house	33.88	
A. D. Sherer, $8_3$ feet pine, $1\frac{1}{2}$ hours'		
labor, screws, nails	2.81	
Sampson, Murdock & Co., 25 city		
directories, 1891	50.00	
Hub Engraving Co., 1 relief plate,		
map of sewer system, and 1 elec-		
trotype of same for report of 1892	14.65	
		\$1,429.34
PERAMBULATION OF TOWN	LINES.	
Paid W. H. Bennett, perambulation of		

Paid W. H. Bennett, perambulation town line between Manches			
and Hooksett Whitten & Fifield, use of team	•	\$4.00 5.00	
,			\$9.00
Total expenditures		\$1	5,639.62

## Mayor's Incidentals.

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Appropriation	•	•		\$300.00
Expenditures	s.			
Paid William Sanborn, expense of ente taining officers of Portland Pip				
Co E. T. James, hack to pond . E. T. James, hack, etc., to pond		\$4.5 5.0 19.5	00	

Paid E. J. Knowlton, expenses of five		
trips to Concord on city business	\$3.75	
E. J. Knowlton, allowance for hire		
of teams	115.00	
H. W. Herrick, work on pictures		
in Mayor's office	8.00	
Hale & Whittemore, 2 frames for		
the Mayor's office	6.00	
Frank W. Elliott, entertainment		
furnished visitors from Boston in		
company with city officials .	50.00	
W. J. Freeman, team for Mayor at		
sundry times	5.50	
J. C. Nichols & Son, span and car-		
ryall	6.00	
Whitten & Fifield, use of team .	11.00	
Total expenditure		
Total expenditure		
Transferred to reserved fund	• •	65.75
		\$300.00

### City Officers' Salaries.

### EXPENDITURES.

### CENTRAL DEPARTMENT.

Paid E. J. Knowlton, mayor	\$1,800.00
Nathan P. Kidder, city clerk .	900.00
Sylvanus B. Putnam, city treasurer	1,200.00
Edwin F. Jones, city solicitor .	800.00
George L. Stearns, clerk of common	
council	200.00
T. W. Lane, inspector of buildings	100.00

Paid T. W. Lane, inspector of buildings	
from Feb. 1 to Dec. 31, 1890 . \$91.67	
John A. Barker, city messenger . 700.00	,
J K. Rhodes, 14 days substituting	
for messenger 24.50	
	\$5,816.17

CITY PHYSICIAN AND OVERSEERS OF THE POOR.

Paid Fred Perkins, city physician .	\$200.00	
E. J. Knowlton, chairman, ex officio,		
overseers poor	25.00	
William H. Maxwell, ward 1 .	25.00	
Thomas L. Quimby, ward 2 .	25.00	
Benj. F. Garland, ward 3 .	25.00	
George S. Holmes, ward 4 .	25.00	
Patrick Costello, ward 5	25.00	
Charles Francis, ward 6	25.00	
William Marshall, ward 7 .	25.00	
William Weber, ward 8	25.00	
William H. Maxwell, clerk of board	75.00	
Judith Sherer, matron at pest house	360.00	
		\$860.00

SCHOOL OFFICERS AND BOARD OF SCHOOL COMMITTEE.

Paid William E. Buck, superintendent	of	
schools		\$2,000.00
Samuel Brooks, truant officer		750.00
E. J. Knowlton, chairman, ex offic	io	10.00
Edward B. Woodbury, clerk	of	
board		100.00
C. H. Manning, ward 1.		I0.00
C. D. Sumner, ward 1 .		10.00
W. H. Morrison, ward 2 .		10.00
George H. Stearns, ward 2 .		10.00
George D. Towne, ward 3 .		10.00
Louis E. Phelps, ward 3 .		10.00

Paid Stephen B. Stearns, ward 4 .		\$10.00
E. L. Richardson, ward 4 .		10.00
James P. Slattery, ward 5 .		10.00
William J. Sughrue, ward 5 .		10.00
F. T. E. Richardson, ward 6.		10.00
George W. Dearborn, ward 6		10.00
Marshall P. Hall, ward 7 .		10.00
Edward B. Woodbury, ward 7	•	10.00
Luther C. Baldwin, ward 8 .		10.00
William K. Robbins, ward 8		10.00
Edson S. Heath, president com	non	
council, ex efficio		10.00

#### BOARD OF ASSESSORS,

Paid	Henry Lewis, ward 1, assessor .	\$147.50
	John E. Stearns, ward 2, assessor .	160.00
	David O. Fernald, ward 3, assessor	792.50
	Harrison D. Lord, ward 4, assessor	235.00
	John Ryan, ward 5, assessor .	165.00
	George H. Dudley, ward 6, assessor,	
	clerk of board	425.00
	William T. Rowell, ward 7, assessor	1.45.00
	Frank T. Provost, ward 8, assessor	147.50
	E. W. Brigham, assistant assessor .	227.50
	John Cayzer, assistant assessor .	30.00
	Hiram Forsaith, assistant assessor .	27.50
	Nicholas Nichols, assistant assessor	297.50
	Henry H. Stone, assistant assessor .	.40.00
	Isaac Whittemore, assistant assessor	80.00
	A. Z. Adam, interpreter, assistant	
	assessor	30.00
	Louis Comeau, interpreter, assistant	
	assessor	30.00
	W. G. Fernald, clerk, assistant as-	
	sessor	I 20.00

Paid M. Gilbert, interpreter, assistant as-		
sessor	\$20.00	
Harry F. Lord, clerk, assistant as-		
sessor	12.50	
H. D. Lord, furnishing transfers of		
real estate for one year	12.00	
		\$3,144.50
CITY TAX COLLECTOR.		
•		
Paid George E. Morrill :		
Quarter ending February 28, 1891 .	\$200.00	
Quarter ending May 31, 1891	200.00	
Balance of salary and commissions to		
June 1, 1891	860.28	
Quarter ending August 31, 1891 .	200.00	
Quarter ending November 30,1891 .	200.00	
		\$1,660.28
MILK INSPECIOR.		
Paid H. F. W. Little, as milk inspector		
from February 1, 1890, to Feb-		
ruary 1, 1891	\$150.00	
H. F. W. Little, as milk inspector	- 0	
from February 1, 1891, to De-		
cember 31, 1891	137.50	
		\$287.50
Total expenditures		\$14,798.45

rotar expenditures	•	· p14,790.45
Amount transferred to reserved fund	•	. 701.55
		\$15,500.00

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# City Auditor's Department.

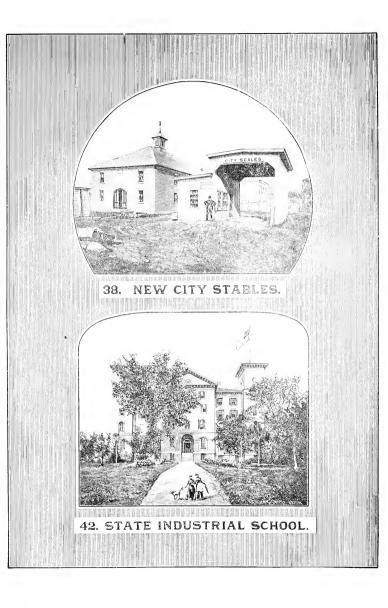
Appropriation . . . . . . . . \$1,700.00

# 460 REPORT OF THE CITY AUDITOR.

## EXPENDITURES.

#### LABOR.

LABOR.		
Paid James B. Straw, auditor, salary for		
the year 1891	\$1,000.00	
A. E. Herrick, clerk, salary for the		
year 1891	598.30	
		\$1,598.30
SUPPLIES.		
Paid A. E. Herrick, for cash paid for		
fountain eraser .	\$0.50	
A. E. Herrick, for cash paid for ex-	<i>F</i> 5	
press	1.50	
Albert Hilcken, 1 ledger with cover	7.00	
Albert Hilcken, 1 book	2.25	
Albert Hilcken, 50 pieces cardboard	·25	
Albert Hilcken, binding book for	Ū	
inventories	1.75	
Hammond Typewriter Co., repair		
on typewriter	5.09	
Hammond Typewriter Co., 1 rec-		
ord ribbon	·94	
Manchester Hardware Co., ball of		
twine	.10	
J. B. Varick Co., 1 paper of tacks .	.08	
Novelty Advertising Co., 39 rubber		
stamps	19.45	
George H. Ritcher & Co., 12 bind-		
ing cases	2.75	
Geo. H. Ritcher & Co., 6 E. cases	1.50	
Temple & Farrington Co., 100		
sheets carbon paper	3.75	
Temple & Farrington Co., 9 sheets		
No. 25 book board	1.80	
Temple & Farrington Co., 1 quire		
manilla paper	·75	



Paid Temple & Farrington Co., muci-	
lage and paste \$1.10	
Hale & Whittemore, framing pho-	
tographs of public buildings . 2.00	
Manchester post-office, 100 2c. stamps 2.00	
National Typewriter Co., part pay-	
ment on typewriter	
<del></del>	\$101.21
Total expenditures	\$1,699.51
Amount transferred to reserved fund	•49
	\$1,700.00

## Highway District No. 1.

Appropriation	•						\$300.00	
Amount transferre	d	from	reser	veo	d fund	Ι.	50.00	
								\$350.00

#### Expenditures.

Paid labor as per pay-rolls:

			• •				
	Februar	гy				\$27.50	
	March					57.75	
	June					112.88	
	July					78.50	
	August					21.50	
	Decem	ber				13.50	
							\$311.63
Paic	d Killey	& V	Vadle	eigh:			
3	3 spades					\$2.70	
I	ı cask 60	oo wi	re n	ails		2.50	
1	r street l	noe				.50	
1	ı rake					·45	
1	t shovel					.65	

### REPORT OF THE CITY AUDITOR.

Paid J. C. Ray, 1 road scraper	\$6.00	
J. H. Campbell, 2 loads of stone		
for culvert	1.24	
Temple & Farrington Co., 1 time-		
book	.62	
J. P. Fellows, sharpening tools .	2.70	
Edward Dodge, 163 loads of gravel	16.30	
	<u> </u>	\$33.66
Total expenditures		\$345.29
Amount transferred to reserved fund .	• •	4.7I
		\$350.00

# Highway Districts Nos. 2 and 3.

Appropriation			. \$12,000.00
Amount transferred from reserved fund	•	•	. 28.39
			\$12,028.39

#### Expenditures.

#### LABOR.

Paid labor of men and teams, as per pay-roll:

January				\$1,115.88
February				1,112.17
March .				1,148.28
April .		•		788.43
May .				711.81
June .	•			769.12
July .	•			1,098.99
August .				776.75
September	•		•	923.09
October				1,049.74
November				787.09
December		•		989.33
				\$11,270.68

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HIGHWAY DISTRICTS NOS. 2	and 3.	463
Paid R. N. Whittemore, 4 days' labor of men and teams in December and January Whitten & Fifield, team	\$19.75 1.00	\$20.75
TOOLS.		,,20.75
Paid L. D. M. McDonald, 100 feet drag		
plank	\$4.00	
C. H. Hutchinson, 1 steel stamp .	4.50	
J. B. Varick Co.:		
2 dozen No. 3 scoop shovels .	20.00	
2 dozen No. 3 scoop shovels .	16.00	
3/4 dozen contractors' picks .	9.75	
1 dozen pick handles	2.50	
10 plow points	9.00	
1 standard plow	2.50	
2 dozen snow shovels	7.50	
1 pair cutting-nippers	1.00	
$28\frac{1}{2}$ lbs. steel crowbars .	1.43	
1 Doe E. No. 8 landside	.90	
1 Doe E. No. 8 handle	· 75	
1 post-hole digger	2.00	
20 lbs. 60-penny cone cut nails .	.50	
1 14-tooth steel ráke	· 35	
Manchester Hardware Co.:	55	
1 dozen Ames square-point shovels	10.50	
2 leaden jacks	5.00	
ı saw-horse	•35	
10½ feet No. 0 mill chains .	.58	
1 dozen Ames square-point shovels	10.50	
3 axes	2.55	
3 ax wedges	.15	
2 14-tooth rakes	.63	
50 lbs. wire nails	1.78	
Killey & Wadleigh :	1.70	
I 16-tooth steel rake	. to	

•

5-6 dozen snow shov	els			\$2.71	
2 axes with handles				2.00	
1 dozen Ames shove	ls			10.50	
- ½ dozen heavy pick	s			5.00	
1/2 dozen hickory pie	ck ha	indle	s.	1.00	
2 dozen hickory pick	c har	odles		4.00	
1 dozen picks .				10.00	
$\frac{1}{2}$ dozen striking har	nmer	• hane	lles	1.00	
1 dozen street broom	ıs			6.00	
1 priming hammer				1.13	
1 handle	•			.15	
1 No. 3 B. hatchet				.85	
1 dozen brooms				6.00	
			-		\$165.46

#### EXPLOSIVES.

Paid Killey & Wadleigh, 100 feet D. F.		
fuse	\$0.65	
Killey & Wadleigh, 9 pounds of		
powder	1.13	
Killey & Wadleigh, 50 feet W. P.		
fuse	.33	
Killey & Wadleigh, 50 feet plati-		
num fuse	1.88	
		\$3.99

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#### TELEPHONE, GAS, STATIONERY.

Paid New England Telegraph & Tele-	
phone Co., use of telephone .	24.00
People's Gas-Light Co., gas at office	33.19
Temple & Farrington Co. :	
ıledger	1.25
record book and other stationery	1.99
fountain pen and ink	2.00
6 time-books	15.00
I directory	2.00
mounting one map	·75

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2 dozen time books			\$10.00	
ı blank-book			I.00	
4 memorandum books			1.02	
2 dozen pencils			1.00	
ink, paper, and pass-books			2.17	
13 blank-books .			16.20	
E. R. Coburn & Co., 25	blanl	<-		
books ,			20.97	
				\$132.54

#### PLACKSMITHING AND REPAIRS.

Paid Welcome & Son, sharpening picks	\$1.00	
M. J. Whalen, repairing belt .	1.00	
Thomas Hickey, sharpening picks	.85	
Pike & Heald, repairing railings,	5	
etc., South Manchester	3.64	
	3.04	
J. T. Beach, repairs on street		
sweeper	1.25	
J. Hadlock, 4 new champion edge		
plates	16.00	
J. Hadlock, 20 bolts for same .	2.00	
Thomas A. Lane, repairs and mate-		
rials on pumps, etc.	18.06	
Sanborn Carriage Co., links in		
spreader chain and fitting whiffle-		
tree spring	. +0	
J. O. Tremblay, repairing hoe	.40	
S. C. Forsaith Machine Co., 1 hour		
labor on plow point	.40	
		\$45.00
MATERIALS.		
Paid R. R. Reif, 23 loads of sand .	\$2.30	
Daniel Connor, 284 loads of sand .	₽ 3 28.40	
A G Gray 761 loads of sand	76.40	

A. G. Gray, 764 loads of sand . 76.40 Mary Hastings, 585 loads of sand . 58.50 30

Paid Head & Dowst, lumber and labor .	\$6.55	
F. S. Bodwell :		
10 circles at 3.50	35.00	
81 feet edge stones, 40 Union		
street	32.40	
16 feet edge stones, Hanover and		
Belmont	6.40	
8 feet edge stones, Concord street,		
William Corey's	3.20	
27 feet edge stones, Olzendam's.	10.80	
Frank Libbey, 101 loads gravel	10.30	
Daniel Connor, 74 loads gravel .	7.40	¢
		\$277.45
SUNDRIES.		
Paid Killey & Wadleigh, glass, putty, and		
nails	\$0.40	
Killey & Wadleigh, 30 lbs. 60-	<i>F</i> 1	
penny nails	1.15	
Killey & Wadleigh, 2 stable pails .	.50	
Manchester Hardware Co., tacks,	.50	
rubber cloth, etc	1.73	
Manchester Hardware Co., 6 tire		
bolts	. I 2	
J. B. Varick Co., hardware	1.15	
J. B. Varick Co., 2 lbs. lead	. 16	
J. B. Varick Co., hardware	2.86	
J. B. Varick Co., glue and sand-		
paper	. 7 1	
J. J. Bell, rent of office for one		
half month	3.00	
Eager & Rand, 8 bushels of salt .	4.80	
T. L. Thorpe, 10 lbs. copper waste	1.00	
McQuade Bros., 1 barrel	.75	
J. R. Carr, I light of glass and set-	- 15	
ting	1.75	
Thomas A. Lane, materials and	1.12	
labor	25.02	

Paid Pike & Heald, 6 dippers, mops,		
basin, etc	\$1.80	
Hale & Whittemore, 2 frames for		
photographs	3.00	
American Express Company, on		
cutters for road-machine	.40	
A. N. Clapp, 1 barrel kerosene oil	6.14	
J. W. Wilson, moving blacksmith		
shop	2.00	
Whitten & Fifield, team for use of		
Hartshorn	30.25	
L. M. Aldrich, filing cross-cut saw		
three times	1.05	
Eager & Rand, 40 gallons kerosene		
oil	5.20	
Martin Fitzgerald, labor on stone-		
work at sundry times and places	16.18	
Temple & Farrington Co., 2 shades	.50	
		\$112.52
Total expenditures	\$	\$12,028.39

### Highway District No. 4.

### Expenditures.

#### LABOR.

Paid labor of men and teams, as per pay-rolls:

January				\$44.75
Februar	у			6.78
March	:			24.64
May				10.50
June				66.50

September			\$53.12	
November			136.49	
December			17.45	
				\$360.23

#### MATERIALS.

Paid Killey & Wadleigh, 35 lbs. 60-	
penny wire nails \$1.23	
Killey & Wadleigh, 8 lbs. 30-penny	
wire nails	
Devonshire mills, 40 loads of gravel.	
at 6c 2.40	
Head & Dowst, 1,115 feet 3-inch	
spruce plank 17.84	
Byron Moore, 62 loads of gravel . 3.72	
	\$25.51
Total expenditures	\$385.74
Amount transferred to reserved fund	114.26
	\$500.00

## Highway District No. 5.

Appropriation								\$600.00
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### Expenditures.

#### LABOR.

Paid labor of men and teams, as per pay-rolls :

January	γ.	•			\$3.00
Februa	ry				6.00
March					40.26
April					8.00
May	•		•		126.50

June .	•	•	•	•	•	\$58.00	
July .				•		2.25	
August .					•	73.50	
September				•	•	122.35	
October						43.00	
November						46.00	
December						3.50	
							\$532.36

#### TOOLS.

Paid J. B. Varick Co., 4 Ames shovels . J. B. Varick Co., 1 No. 3 Doe	\$2.50	
plow point J. B. Varick Co., 1 No. 3 Doe	.60	
plow cutter	.80	\$3.90
BLACKSMITHING.		
Paid R. W. Flanders, sharpening tools .		\$7.55
SUNDRIES.		
Paid Henry Golden, 41 loads of gravel .	\$4.10	
Libbey Bros., 185 loads of gravel . Mark E. Harvey, 166 loads of	18.50	
gravel Head & Dowst, 625 feet spruce,	16.60	
3 x 5 · · · · · · ·	10.00	
Head & Dowst, 20 chestnut posts $$ .	3.60	
		\$52.80
Total expenditures		\$596.61
Amount transferred to reserved fund .	•••	3.39

\$600.00

### Highway District No. 6.

Appropriation			•		•		\$500.00		
	ENPENDITURES.								
			LAB	OR.					
Paid labor of me	en ano	d teau	ns, as	per p	av-rol	ls:			
January						\$4.50			
February						4.75			
March .						43.60			
May .						67.45			
August .						292.23			
October						27.00			
November						37.50			
							\$477.03		
			TOC	DLS.					
Paid J. B. Varicl	к Со.	. r pl	ow			\$11.00			
J. B. Varie		· •				4.50			
51		,					\$15.50		
		BL	ACKSM	UTHIN	ſG.				
Paid James Mor	ricon	char	nenin	r nick	c etc				
Talu James Moi.	115011,	shar	penni	s pick	.s, etc.	••••	\$5.10		
			SUME	RIES.					
			SUNL	KIES.					
Paid Temple &	Farri	ngton	Со.,	1 tim	e-boo	k	\$0.75		
Total e	xpen	diture	es .				\$498.38		
Amount transfer	red to	o rese	rved	fund	•	• •	1.62		
							\$500.00		

### Highway District No. 7.

Appropriation	•					•	•	\$1,500.00
---------------	---	--	--	--	--	---	---	------------

Expenditures.

#### LABOR.

Paid labor of men and teams, as per pay-rolls :

January		•	\$64.50
February			37.25
March .			96.35
April .			71.12
May .	.•		329.13
June .			478.74
July .			19.50
August .			11.46
September			184.85
October			50.11
November			87.50

\$1,430.51

TOOLS.

Paid J. B. Varick Co. :				
8 round-point shovels			\$5.33	
3 round-point shovels	•		2.00	
3 No. 5 E. Doe plow poin	ts		2.25	
1 E. Doe plow point .		•	2.25	
2 red lantern globes .			1.50	
<b>2</b> 36-inch sledge handles	•	•	•34	
4 <sup>3</sup> ⁄ <sub>4</sub> lbs. sledges and shims			.66	
1 handled ax	•		.87	
				\$15.20
MA	TERI	ALS.		

Paid J. S. Coffin, 11 loads of sand .	\$2.20	
Head & Dowst, 93 feet 3-inch plank	1.31	
		\$3.51

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#### BLACKSMITHING.

Paid Welcome & Sons, sharpening picks, etc		\$24.85
Total expenditures		\$1,474.07
Amount transferred to reserved fund	·	25.93
		\$1,500.00

### Highway District No. 8.

Appropriation .						\$1,000.00
Amount transferred	l from	reserved	fund	•	•	28.81
						\$1,028.81

#### EXPENDITURES.

#### LABOR.

Paid labor of men and teams as per pay-rolls :

	January							\$24.00	
	February	y.						13.00	
	March							31.37	
	April							9.30	
	May							1 30.60	
	June							311.98	
	July							93.25	
	August					· .		329.98	
									\$943.48
	city farr	n, la	bor o	f mei	ı and	team	5.		50.00
									\$993.48
					TOC	DLS.			
Pa	id Manche	ester	Hare	lware	Co.				
	Ames ro	und	-point	sho	vels			\$2.63	
	I E. Doe		•					.57	
	1 3 lbs. plc	-					•	.78	
	r3 ros. pro	m Ca	asting	з.	•	·	·	•/0	

1 No. 4 plow handle	\$0.75	
1 plow point, 49 lbs., at 6c.	2.94	
Paid J. B. Varick Co., 4 8-lb. contract-		
or's picks	3.32	
J. B. Varick Co., 4 pick handles .	.68	
J. B. Varick Co., 18 lbs. 1-inch		
octagon steel	2.70	
J. B. Varick Co., 1 7-foot pump	•	
and tubing	4.50	
-		\$18.87
BLACKSMITHING.		
Paid H. F. Thompson, sharpening drills and	other	
tools		\$8.55
	•	P0.22
EXPLOSIVES.		
Paid Manchester Hardware Co.:		
2 lbs. powder	\$0.50	
12 feet of fuse	.06	
8 lbs. A mining powder, at 20c.	.00 1.60	
30 feet fuse	.15	
50 feet fuse	.20	
10 lbs. powder	2.00	\$4.51
		*****
SUNDRIES.		
Paid Temple & Farrington Co., 1 time-		
book	\$1.00	
V. M. Currin, labor in picking up		
and removing stones from the		
highway, from the 12th to the		
18th of December, 1890	2.40	
		\$3.40

Total expenditures			\$1,028.81

### Highway District No. 9.

Appropriation	•		•	\$500.00
Amount transferred from reserved fund	·	•	•	4.15
				\$504.15

#### Expenditures.

#### LABOR.

Paid labor of men and teams as per pay-roll:

March				\$58.87	
June				186.22	
August				141.24	
Decemb	er			92.37	
					\$478.70

#### MATERIALS.

Paid Oliver Merrill, 163 loads of gravel . J. B. Varick Co., 50 E. C. bolts,	\$16.30	
$4^{\mathbf{I}_2}_{\mathbf{I}_2} \times \mathbf{I}_2$	1.15	\$17.45
BLACKSMITHING.		
Paid R. W. Flanders, sharpening tools .	• •	\$3.10
TOOLS.		
Paid J. B. Varick Co., 2 lanterns with red		
globes	\$4.00	
J. B. Varick Co., 1 solid steel ax .	.90	
		\$4.90
Total expenditures		\$504.15

### HIGHWAY DISTRICT NO. 10.

### Highway District No. 10.

Appropriation	•	•		\$3,800.00
Transferred from reserved fund			\$500.00	
Transferred from reserved fund			173.80	
				673.80
				\$4,473.80

#### Expenditures.

#### LABOR.

Paid labor of men and teams, as per pay-rolls :

January . February March . April . May . June . June .		• • • •		•	· · ·	\$239.02 289.41 289.15 236.62 185.51 267.39 429.71	
August .						588.89	
September						511.26	
October .						122.00	
November						77.54	
December						184.75	
Paid Amoskeag hours of tean		actui	ring C	0., 1,0		\$3,421.25	<b>6</b> 0
							\$3,825.25
			TOC	LS.			
Paid C. H. Hut J. B. Vari Killey & 6 snow 2 wheel 1 10-po	ck Co., Wadleig shovels barrows	1 e gh :	lectrio	e batt		\$5.70 22.00 2.00 4.00 1.80	

3 hickory handles	\$0.60	
1 coal screen	8.00	
Manchester Hardware Co.:		
9 Ames scoops	9.38	
ı spade	.80	
1 light handle round-point shovel	.65	
1 scythe	.60	
I scythe stone	.10	
3 14-tooth rakes	.95	
Pike & Heald, 2 small scoops .	.75	
Pike & Heald, 2 galvanized iron		
scoops	3.00	
A. N. Clapp, 6 lantern globes .	.75	
		\$61.08
N. A CHONIDUING		
BLACKSMITHING.		
Paid D. F. Cressey, sharpening drills, etc.	\$13.15	
A. Filion, setting tire on road-ma-		
chine wheel	4.00	
A. Filion, 2 bolts	. 25	
A. Filion, making and ironing		
neck yoke	2.00	
setting up road-scraper and making		
draw hooks for same	2.00	
		\$21.40
MATERIALS.		
Paid A. G. Wallace :		
104 feet of pine, etc	\$2.43	
60 feet 3-inch hemlock	.90	
128 feet 2-inch spruce	2.05	
456 feet spruce, $2 \times 6$ and $1 \times 6$ .	7.30	
26 chestnut posts	5.20	
150 feet pine finish	3.75	
Sawing and planing hard wood .	.50	
Paid Charles A. Brooks, gravel lot, dis-		
trict 10	500.00	

### HIGHWAY DISTRICT NO. 11.

Paid James Baldwin Co., 172 feet hard- wood plank, for plows	\$6.88	\$529.01
SUNDRIES.		
Paid Manchester Hardware Co., 3 feet		
mill chains	\$0.30	
Manchester Hardware Co., sag		
screws and washers	. 17	
Killey & Wadleigh, hardware	·75	
J. F. Wyman, 4 feet pine wood .	2.74	
J. F. Wyman. 2,750 lbs. egg coal	9.63	
J. F. Wyman, 2,000 lbs., egg coal .	7.00	
Temple & Farrington Co., ink, pen-		
cils, memorandum books	1.25	
Temple & Farrington Co., 12 time-		
books	10.23	
People's Gas-Light Co., for gas .	.56	
A. N. Clapp, sandpaper and putty	. 31	
A. N. Clapp, 1 broom, 2 gallons oil,		
4 lbs. wire nails	·93	
A. N. Clapp, wire spikes, scythe		
stones, etc	1.65	
A. N. Clapp, glass, putty, and nails	. 29	
J. Stickney, chamois skin	.50	
Thomas A. Lane, 1 lb. 58 packing	·75	
		\$37.06
Total expenditures		\$4,473.80

### Highway District No. 11.

\_\_\_\_\_

Appropriation	•	•	•		\$1,000.00	
Transferred from	res	erved	fund		150.00	
						\$1,150.00

#### EXPENDITURES.

#### LABOR.

Paid pay-rolls, labor of men and teams :

Februa	ry					\$83.25
March						62.00
April						99.75
May			•			216.00
June	•					207.00
July	·	•		·	•	257.75

#### MATERIALS.

\$102.50	
6.38	
3.40	
13.47	
e	
, 0	
10.00	
1.41	
8.50	0==6.0-
	\$176.83
\$1.30	
2.50	
	\$3.80
	6.38 3.40 13.47 2.22 10.50 9.30 10.00 1.41 .75 8.40 8.50 \$1.30

#### TOOLS.

Paid Killey & Wadleigh, 1 sl	hovel			\$C	.75	
Killey & Wadleigh, 1 s	pade				.67	
						\$1.42
Total expenditures						\$1,107.80
Transferred to reserved fund	•	·	•			42.20
·						\$1,150.00

### Highway District No. 12.

Appropriation				•	\$200.00	
Transferred from	reser	ved f	und		24.37	
						\$224.37

#### Expenditures.

#### LABOR.

Paid city farm in March			\$33.12	
city farm in April .			54.00	
city farm in June .	•		137.25	
Total expenditures	·	•		\$22.4.37

### Highway District No. 13.

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### Expenditures.

#### LABOR.

Paid labor of men and teams :

Februai	rу	•	•	•		\$7.00
March						15.00
June						21.00

October .					\$84.88 26.50 12.63	\$167.01
		TO	ols,			
Paid Killey & Wadle	eigh :					
2 Ames shovels					\$1.71	
2 Ames shovels					1.71	
1 14-tooth rake					.50	
3 pick-handles					.60	
2 steel scoops					1.50	
						\$6.02
		MATE	RIALS.			
Paid Willey & Ro chips . J. H. Campbe					\$3.06	
chips .					5.44	
E. O. Dodge,					1.10	
0			0			\$9.60
		SUNI	ORIES.			
Paid Temple & Fari	ringtoi	ı Co.	, г ti	me-bo	ok	\$0.25
Total expenditu	nres .					\$182.88
Amount transferred						17.12
						\$200.00

### New Highways.

Appropria	ition .			•			. \$10,000.00
Amount t	ransferred	from	reserved	fund	•	\$318.	57
Amount t	ransferred	from	reserved	fund		2,000.	00

Amount transferred from reserved fund . \$2,000.00 Amount transferred from reserved fund . 129.52 \$4,448.09 ......

\$14,448.09

#### EXPENDITURES.

#### LABOR.

Paid labor of men and teams, as per pay-roll, in district No. 2:

		1.01							
А	pril							\$383.35	
M	ay							1,063.89	
Ju	ne							921.68	
Ju	ıly							1,403.58	
Α	ugust							675.99	
Se	ptem	ber						319.80	
0	ctobe:	r						256.25	
Ν	oveml	ber						131.49	
D	eceml	ber						.40.00	
									\$5,196.03
Paid 1	abor c	of me	n an	d tear	ns, as	per p	av-re	ll, in dis-	
	trict						2		
0	ctobe	r.							\$163.25
		_							⊮ '0'-0
Paid k				d tear	ns, as	per l	ay-ro	oll, in dis-	
	trict	No.	7:						
А	ugust	·	•	•	·	•	•	• •	\$300.00
Paid k	abor o	f me	n an	d tean	ns, as	per p	ay-ro	ll, in dis-	
	trict				<i>.</i>	• •	1	,	
А	pril							\$352.89	
	lay								
	ine							871.56	
ĥ	ily							1,020.70	
•	ugust							653.71	
	0							925.01	
	ecem							114.19	
									\$5,046.07

\$5,040.07

Paid labor of men and teams, as per pay-roll, in dis- trict No. 11:	
August	\$213.12
Paid Head & Dowst, use of one wheel- scraper, 3 days	
Manchester, 382.5 cubic yards, at	
\$6.50 2,486.25 Concord & Montreal Railroad,	
cash, consulting engineer	\$2,527.35
ENPLOSIVES.	
Paid Killey & Wadleigh, 10 lbs. No. 1 forcite, district No. 2 \$3.60 Killey & Wadleigh, 15 lbs. No. 1	
forcite, district No. 2 <u>5.40</u>	\$9.00
TOOLS.	
Paid Killey & Wadleigh, 6 Ames round-	
point shovels, district 2 \$5.25	
A. N. Clapp, 9 axes and 2 handles. 5.75	
Manchester Hardware Co. :	
24 Ames round-point shovels, dis-	
trict No. 2	
1/2 dozen extra pick-handles . 1.00	
$\frac{1}{2}$ dozen round-point shovels . 5.25	
1 dozen picks, district No. 10 . 10.00 1 dozen hickory handles, district	
No. 10	
I dozen Ames round - point	
shovels, district No. 10 10.50	

### NEW HIGHWAYS.

1 dozen Ames round-point		
shovels, district No. 10 1 dozen hickory handles, district	\$10.00	
No. 10	1.50	
John B. Varick Co. :	5	
6 Doe plow-points, district No 2	5.40	
1 dozen side tubular lanterns, dis-		
trict No2	4.50	
1 dozen ruby globes, district No. 2	6.50	
1 dozen No. 1 wicks, district No.		
2	.10	
1734-pound crowbar, district No.	_	
	. 89	
6 E No. 8 Doe plow-points, dis-		
trict No. 2	5.40	
1 ax-handle, district No. 2 .	. 20	
2 handled axes, district No. 2 . 1 5-inch steel tape, district No. 2	1.50	
<sup>3</sup> / <sub>4</sub> pound marline, district No. 2	5.76	
$4^{23}_{4}$ lbs. steel bars, district No. 2	. I 2 2. 57	
1 nut auger, 138, district No. 2	.70	
1 dozen contractors' picks, dis-	.70	
trict No. 2	13.00	
1 dozen No. 1 pick-handles, dis-		
trict No. 2	2.50	
2 pinning-hammers, 778 lbs., dis-		
trict No. 2	1.26	
		\$123.65
BLACKSMITHING.		
Paid Thomas Hickey, sharpening picks,		
district 2	\$8.10	
D. F. Cressey, sharpening picks,		
etc., district 10	70.47	
J. B. McCrillis, sharpening picks,		
etc., district 2	16.71	
		\$95.28

•

### STONE, LUMBER, AND OTHER MATERIAL.

Paid F. S. Bodwell:	
52 feet flagstones on Concord street, at	
90c	\$46.80
3 circles, 3 feet, at \$3.50	10.50
12 feet edge stones, Nashua street, at	
40c	4.80
7.6 feet edge stones, Depot street .	3.00
15.6 feet edge stones, St. Anne's church	7.20
6 circles, Chestnut street, at \$3.50 .	21.00
1.2 feet circle, Chestnut street	2.50
42 feet edge stones, Chestnut street .	16.80
4 circles, West Merrimack street .	I 4.00
2 circles, 2 feet, Merrimack street .	5.00
6 circles, city yard	21.00
50 feet edge stones, city yard	20.00
88.7 feet edge stones, Union street .	35.43
17.7 feet edge stones, Blodget street .	6.80
1.3 feet circle, corner Amherst and	
Union streets	3.50
60 feet 10-inch flag stones, Elm and	
Depot streets	54.75
3,264 perch wall stone, laid, at \$3.00.	97.92
11.6 perch cover stone, laid, at \$4.50.	52.20
21 feet edge stone, at 40c	8.40
1 circle corner	5.00
6 cesspool stones at \$2.75	16.50
18 feet edge stones, corner Hancock	
street	7.20
2 circles, corner Second and Hancock	
streets	7.00
18 feet edge stones	I 4.00
4 circles	7.20
Paid Head & Dowst Co. :	
Lumber and planing	<b>1</b> 3. 34
140 feet 12-inch spruce at 16c.	2.24
240 feet fence boards	4.08

77 chestnut posts \$1	2.32
48 feet 1 x 6 spruce	.77
766 feet spruce boards 1	3.02
Paid A. C. Wallace, 440 feet spruce 4 x 6	
	7.04
A. C. Wallace, 256 feet spruce, 2 x 8	4.10
A. C. Wallace, 14 Chestnut posts .	2.80
	. 20
Warren Harvey, 12 perch covering	
stone at \$4 4	.8.00
Charles A. Bailey, 145 feet curb-	
	8.00
stone, at 40c 5 Charles A. Bailey, 14 feet corner	
	5.00
	9.00
William Corey, cash paid Isaac	
Huse for 100 feet edge stone at	
20C	20.00
	\$718.41
SUNDRIES.	
Paid J. B. Varick Co., 1 ball of twine .	\$0.35
J. B. Varick Co., 1 4-gallon pail .	1.25
J. B. Varick Co., 29 lbs. wire nails	.87
Pike & Heald, 4 fiber pails .	1.80
Pike & Heald, 1 dipper	.10
Thomas A. Lane, materials and	
labor in plumbing 4	47.61
Killey & Wadleigh, 2 balls of twine	.80
Killey & Wadleigh, 1 tape measure	.60
Killey & Wadleigh, 1 dozen pencils	.50
Killey & Wadleigh, 2 colored pen-	
cils	.10
J. B. McCrillis & Son, sharpening	
picks and bars	1.50
A. N. Clapp, 15 lbs. nails	.45
	\$55.93
Total expenditures	. \$14,448.09

### Damage of Land Taken for Highways.

Appropriation		•			\$2,000.00	
Transferred from	res	erved	fund	,	4,500.00	
						\$6,500.0 <b>0</b>

### Expenditures.

### DAMAGES AWARDED BY MAYOR AND ALDERMEN.

Paid J. Ferguson, land damage, exten-		
sion of Elm street	\$195.85	
J. M. Stanton, land damage, exten-		
sion of Elm street	1,642.40	
Samuel Hall, land damage, exten-		
sion of Webster street	305.30	
Samuel Hall, land damage, exten-		
sion of Webster street	915.90	
Nathaniel Perkins, land damage,		
extension of Hall street	1,500.00	
Reuben Flanders, land damage, ex-		
tension of Hall street	1,025.00	
John H. Maynard, land damage,		
extension of Hall street	I 20.00	
Total expenditures		SE 201 45
		\$5,704.45
Amount transferred to reserved fund .	• •	795.55
		\$6,500.00

### Watering Streets.

Appropriation							•	\$4,800.00
Amount transfer	red fro	om re	served	l fund		\$470.	62	
Amount transferr	red fro	om re	served	l fund	ι.	93.	6.4	
								564.26
								\$5,364.26

### Expenditures.

#### LABOR.

Paid labor of pay-rol		and	teams	in c	listrict	No.	2, as p	er	
January							\$43.8	8	
February						•	45.2		
March						•	68.1		
						•			
April		•	•	·	·	•	244.5		
May	•	•	•	•	•	•	647.6	2	
June							882.5	0	
July							812.1	5	
August							674.0	4	
Septembe	r						470.8	0	
October								8	
December	r					•	32.0	0	
								- \$4,1	14.01
Paid labor of 1 pay-rol		ind to	eams i	n di	strict N	lo. 10	, as pe	r	
A							A	_	

April	•	•	•	•	•		\$22.00	
May							94.00	
June						•	181.00	
July	•						183.00	
August							185.00	
Septemb	oer						198.00	
October							48.00	
								\$911.00

REPAIRS.

Paid Thomas A. Lane :

Labor a	and p	lumb	ing	mater	rials	on	
founta	ains an	d wa	ter-tr	oughs	s in 1	De-	
cembe	er, 1890	э.			•	•	\$10.05
21 dipp	ers .	•	•	•	•		4.20
Labor a	nd mat	erials	on f	ounta	ins	•	6.00
Labor a	nd mat	erials	s on s	tand-	pipes	•	20.53

Labor and materials on troughs and	
fountains	\$14.74
Labor and materials on troughs and	
fountains	4.24
Labor and materials on troughs and	
fountains	7.86
Labor and materials on stand-pipes .	3.11
Labor and materials on troughs and	
fountains	1 3.21
Labor and materials on troughs and	
fountains	.69
Labor and materials on troughs and	
fountains	8.49
Labor and materials on troughs and	
fountains	18.26
Labor and materials on stand-pipe .	1.50
Labor and materials on stand-pipe .	6.50
Labor and materials on stand-pipe .	5.50
Labor and materials on stand-pipe	.55
Labor and materials on troughs and	
fountains	23.94
Paid Pike & Heald :	
Labor and materials on water-cart	25.23
Labor and materials on troughs .	1.67
24 drinking cups for fountains	4.80
Chain and labor	4.02
Labor and materials on water-cart .	19.04
Repairing trough front of Central block	3.48
2 drinking cups, chain, and labor on	
fountains at Ash-street schoolhouse .	.87
24 drinking cups, chains, and labor .	8.25
Cleaning waste to trough	.50
Paid Geo. A. Durgin, painting water-cart	40.00
A. Filion, repairs on water-cart	2.25
D. F. Cressey, repairs on water-cart	7.05
Killey & Wadleigh, paint, varnish,	
etc., for carts	34.36

Paid John T. Beach, shade on sprinkler .	\$5.00	
John T. Beach, cross sill in Moni-		
tor No. 1	2.60	
John T. Beach, ironwork in Moni-		
tor No. 1	4.00	
John T. Beach, work on spring .	.75	
A. D. Gooden, maintaining water-		
ing-trough on Lake avenue for		
the year 1890	3.00	
J. B. Varick Co., 5 lbs. refined iron	.11	
D. F. Cressey, 1 water wrench .	1.00	
D. F. Cressey, 1 long 3-16 rod of		
iron	.40	
J. B. McCrillis & Son, materials		
and labor on water-carts	16.40	
Marden & Woodbury, labor re-set-		
ting stone troughs on Lowell street	3.25	
H. C. Ranno, axle grease	1.85	
		\$339.25
Total expenditures		\$5,364.26

### Paving Streets.

Appropriation	•	. \$5,500.00
Amount transferred from reserved fund .		. 1,011.80
		\$6,511.80

### EXPENDITURES.

#### LABOR.

Paid labor	$\mathbf{of}$	men	and	teams	in di	istrict	No. 2, as
per	рау	-rolls	:				
April							\$332.88
May							365.58

June .						\$374.62	
July .						329.92	
August .						291.50	
September						233.53	
October						268.52	
November						137.22	
December						36.26	
							\$2,370.03
Paid labor of r	nen a	nd te	ams i	in dis	trict	No. 7. as	
per pay-i						,,	
May .						\$43.00	
August .						75.00	
0							\$118.00
							2110.00
Paid labor of m per pay-r		nd te	ams i	n dist	rict	No. 10, as	
April .						\$23.75	
May .						120.25	
June .						358.62	
July .						112.14	
August .						31.50	
September						150.75	
October						12.63	
							\$809.64
Daid Jahon of an						NT	
Paid labor of m per pay-r		nd tea	ams 1	n dist	rict	No. 11, as	
August .						\$213.13	
October .				•	÷	482.12	
october .	•	•	·	·	·	402.12	\$695.25
							*****
			FONE		GRAV.	EL.	
Paid W. H. Cob						\$45.50	
E. Hartsho	rn, 3:	2 load	s of st	tone		19 20	
Charles P.	Still,	5 load	ds of s	stone		7.50	
Head & D	owst (	Co., st	one			103.80	
A. G. Bear	1, 14	loads	of sto	ne		22.40	
J. L. Fogg	, 22 l	oads (	of stor	ne		35.20	

Paid George S. Smith, 8 loads of stone .	\$12.80	
Marden & Woodbury, 15 loads of		
stone	11.25	
John Proctor, 5 loads of stone .	8.00	
John B. Clarke, 30 loads of stone .	15.60	
E. Hartshorn, 50 loads of gravel .	5.00	
Mary Hastings, gravel	8.00	
Daniel Connor, paving	4.80	
F. S. Bodwell, 49 feet edge stones		
on Spruce street	19.60	
Warren Harvey, 183.11 feet of curb-		
ing at various places	73.56	
Warren Harvey, 2,842 feet of edge		
stone, Elm and Sagamore .	11.36	
Warren Harvey, 625 feet 1 cut curb		
1,250 at 40c	5.00	
Warren Harvey, 15 feet curbing at		
Walnut and Prospect	6.00	
		\$414.57

CONCRETE CROSSINGS AND OTHER WORK.

Paid Charles H. Robie :	
Milford street, 65.7 yards at 75c.	\$49.27
Nashua street, 29 yards at 75c	21.75
Nashua street, 27.3 yards at 45c.	12.29
Beech street and South Amherst, 25.3	
yards at 35c	8.85
West Hancock, 65.7 yards at 75c.	49.28
Douglas and Main, 26.6 yards at 35c.	9.31
Lincoln and Spruce, 67.6 yards at 75c.	50.70
Elm and Depot, etc., 71.1 yards at	
75c	53.32
Lake ave. and Massabesic, 83.1 yards	
at 75c	62.32
Elm east back and Hanover, 20 yards	
at 35c	7.00
Amherst and Union, 23.5 yards at 75c.	17.63

Amherst and Beech, 34 yards at 75c	\$25.50
Lowell and Birch, 5.3 yards at 75c.	3.97
Union and High, 32 yards at 75c.	24.00
Pine and Harrison, 33.8 yards at 35c.	11.83
Pine and Prospect, 17.7 yards at 35c.	6.20
Harrison and Maple, 17.7 yards at 35c.	6.19
Salmon and Elm east back, 17.7 yards	
at 75c	13.28
Laurel back and Maple, 17.7 yards;	
Massabesic and Spruce, 51.55 yards;	
Massabesic and Belmont, 45.33 yds. ;	
Manchester and Belmont, 31 yards;	
Hanover and Belmont, 28.88 yards ;	
Hanover and Milton, 21.33 yards;	
Hanover and Milton, 26.44 yards,	
— 222.31 yards at 75c	166.75
Spruce and Union (3), 90.66 yards at	
50c ,	45.33
Spruce back and Union, 13.3 yards at	
50c	6.65
Cedar and Harrison (4), 120.88 yards	
at 50c	60.44
Granite and Barr, 18.66 yards at 75c.	13.99
Granite and Green, 24.88 yards at 75c.	18.66
Granite and Green, walk, 10.83 yards	
at 45c	4.87
Varney school, 21.77 yards at 45c.	9.79
Lake ave. engine house, 274.22 yards	
at 75c	205.66
Elm, west side Merrimack common,	
478.21 yards at 25c.; Central-street	
side Merrimack common, 505.33	
yards at 25c	245.88
Chestnut and Blodget, 17.7 yards at	
75 <sup>c.</sup>	13.28
Sagamore and Elm, 211.7 yards at 75c.	158.77
Sagamore and Elm, 25 yards at 45c	11.25

PAVING STREETS.

Webster, Newton's, 11.3 yards at 45c.	\$5.08
Pine east back, corner North, 13.33	
yards at 75c	9•99
Union, west side, and Harrison south	
back, 15.5 yards at 75c	11.62
Union, east side, and Harrison south	
back, 15.5 yards at 75c	11.62
Union and Prospect (2), 58.6 yards at	
75 <sup>c</sup>	43.95
Pearl, north side, ½ walk, 40 yards at	
25 <sup>c</sup>	10.00
East High and Maple, 35.5 yards at	
75 <sup>c</sup>	26.62
Patching, 2 yards at 45c	.90
East High and Nashua, 42.6 yards at	
75 <sup>c.</sup>	31.95
Ash east back and Concord, 17.7 yards	
at 75c	13.28
Hanover and Belmont, 30.2 yards at	
75 <sup>c.</sup>	22.65
Lake ave. and Beacon, 28.6 yards at	
75 <sup>c.</sup>	21.45
Lake ave., Smith's, 31.4 yards at 45c.	14.13
Second, south West Hancock (2),	
64.8 yards at 75c	48.60
West Webster and Chandler (1), 33.3	
yards at 75c	25.00
Paid George W. Higgins :	
Merrimack and south back Union,	
17.7 yards; Lake ave. and south	
back Union, 17.7 yards; Walker	
and River, 34.1 yards; Central,	
Kimball Co., 33.3 yards,— 103.03	
yards at 75c	77.47
Ferry south back and River, 17.7 yards	
at 25c	4.42
Spruce, walk, 32 yards at 45c.	14.40

Spruce-street crossing, 8 yards, at 75c.	\$6.00
Spruce and Chestnut west back, 23.1	
yards; Spruce and Elm east back,	0
40.9,— 64 yards, at 75c	48.00
Varney school, walks outside, 16.7	
yards, at 45c	75.15
Varney school, driveway, 12.44 yards,	
at 75c	9.33
Elm east back street, south side, 17.7	
yards; Hall and Central, 30.2 yards;	
Prospect and Russell, 41.7 yards;	
Washington and Elm east back, 16.9	
yards; Washington and Elm east	
back, 16.9 yards; McGregor street	
and Amoskeag Corporation, 107.5	
yards, 230.9 yards, at 75c	172.50
Elm east back street, Pearl, 17.7 yards,	172.30
at 35c	6.19
	\$2,104.31
Total expenditures	\$6,511.80
Macadamizing.	
A	* 0
Appropriation	

1	грргорна	anon	•	•	•	•	·	•	•	\$13,000.00	C
А	mount t	ransfer	red fi	om re	eserved	l fund		\$457	.83		
A	mount t	ransfer	red fi	rom r	eserved	l fund		1,858.	.40		
										2,316.2	3
											-
										\$20,316.23	3

#### Expenditures.

#### LABOR.

Paid labor of m	en an	d tear	ns, as	per p	ay-rol	ls, in dis-
trict No.	2:					
January						\$68.81
February						59.87

March							\$66.	00	
April							456.	06	
May							1,456.	60	
June							2,458.	40	
July							1,553.	22	
August							1,485.	58	
Septem	ber						1,713.	13	
October	C						374.	99	
									\$9,692.66
Paid labor o trict			d tea	ms, as	s per j	pay-re	oll, in d	lis-	
									\$467.62
,			·	·	•	·	•	•	5407.02
Paid labor o trict			l teai	ns, as	per I	ay-re	olls, in d	is-	
June							\$67.	.50	
July							13.	50	
								_	\$81.00
				STC	NE.				
Paid E. W.	Atwo	ood, i	22,3	40 lbs	s. stor	ne .	\$30.	57	
G. W	. Bi	itterf	ield,	125,	750	lbs.		¢ .	
ston	е						31.	42	
E. W.	Butte	erfield	1, 56	865 1	bs. st	one	1.4	. 2 I	
D. But							85.	.65	
F. M.	Barn	ard,	31,27	5 lbs.	stone	÷.	7.	.81	
W. H.	Cob	urn,	4,655	; Ibs.	stone		1.	.16	
E. B. 1	Fello	ws, 2	8,075	lbs.	stone		7	.00	
James	Fulle	erton,	509	,295	lbs. st	one	127	. 32	
Palme	r &	Gar	mon	32	loads	of			
chip	s						23	.50	
С. Р. 5	Stills,	, 105	,145	lbs. s	tone		26	. 28	
Joseph							85	• 39	
F. B.	Wort	thley,	322,	060 l	bs. st	one	80	.50	
J. A. 1							69	.05	
C. E.							31	.63	
W. H.	Carl	pente	r, 61	990	lbs. st	one	15	.50	

	\$31.14	Paid J. S. Carpenter, 124,560 lbs. stone
	64.92	Lewis Cyr, 259,725 lbs. stone .
	6 07	H. L. Kimball, 24,320 lbs. stone .
	16.10	J. L. Fogg, 64,400 lbs. stone
		William G. Landry, 235,180 lbs.
	58.79	stone
	28.76	H. S. Plummer, 115,090 lbs. stone
	162.25	C. H. Robie, 649,095 lbs. stone .
	32.14	C. H. Tirrell, 128,595 lbs. stone .
	41.54	Willey & Rowe, 166,195 lbs. stone
	4.15	Charles Downing, 16,620 lbs. stone
	7.44	F. R. French, 29,770 lbs. stone
	3.13	Mrs. Hartshorn, 12,525 lbs. stone .
		Amoskeag Manufacturing Company,
	874.24	6,994,045 lbs. stone
. A .		

\$1,967.66

### GAS, FUEL, AND FREIGHT.

Daid Boople's Cas Light Co., for gas in	
Paid People's Gas-Light Co., for gas in January	\$0.28
People's Gas-Light Co., for gas in February	. 14
E. P. Johnson Co., 5,500 lbs. Cumberland coal	19.00
E. P. Johnson Co., 2,100 lbs. pea coal, for the year 1890	3.15
E. P. Johnson Co., 2 barrels of coal	2.50
L. B. Bodwell & Co., 1,000 lbs. Franklin coal, for crusher, dis-	
trict No. 7 L. B. Bodwell & Co., 1,500 lbs.	4.00
Franklin coal, for crusher L. B. Bodwell & Co., 3,250 lbs.	6.00
Franklin coal, for crusher L. B. Bodwell & Co., 2 cords of	13.25
pine slabs, for crusher	8.00

MACADAMIZING.

Paid J. A. Brown, 12 cords of wood, at		
\$3.50	\$42.00	
Gilman Clough, 1012 cords of		
wood, \$3.50	36.75	
C. H. Hutchinson, 290 lbs. of		
foundry coke	1.45	
People's Gas-Light Co., 10 chal-		
drons of coke	44.00	
Boston & Maine R. R., freight on		
castings	3.01	
Concord & Montreal R. R., freight		
on wood	8.00	
Concord & Montreal R. R., freight		
on castings	2.69	
		\$194.22

#### TOOLS.

Paid Manchester Hardware 0	Co. :		
1 dozen picks			\$10.00
1 dozen hickory handles			2.00
1 dozen sledge handles			1.75
3 lbs. stone wedges .			.60
1 mattock			.60
1 hickory handle .			. 25
Paid J. B. Varick Co. :			
1 nail hammer			·55
1 50-foot tape measure			.50
1 100-foot tape measure			I.00
55 lbs. steel bars .			8.25
12 trays for canal barrows			9.00
12 sledge handles .			2.00
12 sledge handles .			2.00
4 lantern globes, red .			2.40
2 pick handles			.40
12 sledge handles .	•		2.25
6 ax handles	•		1.13
29			

2 Snell's bits						\$0.43
12 ruby globes						6.60
12 ruby globes						6.00
г basket .						. 25
1 dozen safety l	anter	ns, no	glol	bes		4.50
1 steel flue brus	h				•	·75
35 lbs. steel, 1 <sup>1</sup>	8 x 5 i	á	•	•		5.25
Paid Killey & W	Vadle	igh, 1	r do:	zen	36-	
inch sledg	e hai	ıdles	•	•	•	2.00
Pike & Heal	d, 1	10-ga	llon	galv	an-	
ized can w	rith fa	aucet			•	5.80

\$76.26

#### LUMBER, CASTINGS, AND REPAIRS.

Paid L. M. Aldrich, filing large saw .	Śo.40
J. Stickney, 40 feet 15-inch leather	
belting	39.60
J. Stickney, 12 feet 6-inch leather	
belting for stone crusher	15.96
L. N. Westover, labor and lumber .	2.96
L. N. Westover, 154 feet rock maple	6.99
L. N. Westover, 1912 hours' labor	7.80
Paid S. C. Forsaith Machine Co. :	·
24 feet spruce, $3 \times 4 \cdot \cdot \cdot \cdot$	. 38
Balance due on anvil vise	
Labor and materials on crusher	21.23
26 hours' labor	
6 washers	.21
Iron grates and bars, 22 lbs., for road	
roller	.66
$30\frac{12}{2}$ hours' labor	
$\frac{30}{2}$ lb. iron $\frac{1}{2}$ lb. $\frac{1}{2}$ lb. $\frac{1}{2}$ lb. iron $\frac{1}{2}$	.02
$\int_{2}^{2}$ m. from $\cdot$	
$1 1 \frac{1}{2} - \text{inch oil cup} \qquad . \qquad $	-
	·75
Paid Farrell Foundry & Machine Co., 2	17.06
pieces 15 x 9 plates	45.96

Paid Farrell Foundry & Machine Co.,	
planing same	\$6.00
Farrell Foundry & Machine Co	37.13
Paid Charles H. Hutchins:	
62 lbs. babbitt for crusher	I 2.40
20 hours' labor, babbitting on crusher	8.00
$19^{1}_{4}$ hours' labor on crusher	7.70
15 lbs. iron for crusher	· 45
9 lbs. soft steel for crusher	. 36
35 lbs. castings for crusher	1.05
$27^{1}_{2}$ lbs. soft steel	Ι.ΙΟ
$40\frac{1}{2}$ hours' labor on picks .	16.20
Labor and material on crusher .	82.59
4 pieces castings, 327 lbs	9.81
6 pieces castings, plugs, 18 lbs	-54
Paid J. B. Varick Co., cylinder oil, pack-	
ing, belting, glass, putty, glue,	
and other hardware	57.87
Pike & Heald, pipe and labor .	2.28
Thomas A. Lane, pipe and labor .	1.30
Paid Head & Dowst :	
334 feet timber   .   .     416 feet timber   .   .	5.35
416 feet timber	6.66
5 ience raiis	1.25
14 feet timber	.23
14 feet timber	.30
Paid John B. Varick Co., 1 bar Norway	
iron, 30 lbs	1.05
John B. Varick Co., 1,010 elevator	-
bolts	17.68
John B. Varick Co., 50 lbs. tallow	3.50
John T. Beach, labor, etc., sharp-	
ening steam driller, sharpening	
tools	5.80
Thomas Hickey, sharpening picks,	·
etc	10.80

Paid Caorgo Holbrook an foot about nut		
Paid George Holbrook, 50 feet chestnut plank	\$1.25	
George Holbrook, iron and bolts .	2.00	
George Holbrook, teaming .	.25	
George Holbrook, 1 3-10 days'	3	
labor, sidewalk of LaBonte .	3.25	
Thomas A. Lane, 2 Scotch glass	55	
tubes	.50	
Paid S. C. Forsaith Machine Co. :	5	
Labor and materials on road roller .	18.88	
Setting and filing cross-cut saw	1.00	
Labor and iron on crusher	.94	
2 1 1/2 x 3/4 cap screws	.10	
168 lbs. machine steel, for picks .	11.76	
10 hours' labor on grates	4.00	
73 hours' labor on picks	29.20	
To inch file	. I 2	
5 hours' labor on crusher	2.00	
SUNDRIES.		\$543.45
Paid Thomas L. Thorp, 100 lbs. cop		
Paid Thomas L. Thorp, 100 lbs. cop waste	\$10.00	
Paid Thomas L. Thorp, 100 lbs. cop waste J. B. Varick Co., flax packing, cyl-	\$10.00	
<ul><li>Paid Thomas L. Thorp, 100 lbs. cop waste</li><li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts,</li></ul>	\$10.00	
<ul><li>Paid Thomas L. Thorp, 100 lbs. cop waste</li><li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue,</li></ul>	,	
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> </ul>	\$10.00 3 <sup>2.1</sup> 7	
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> <li>Eager &amp; Rand, 15 gallons kerosene</li> </ul>	32.17	
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> </ul>	,	\$11.13
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> <li>Eager &amp; Rand, 15 gallons kerosene</li> </ul>	32.17	\$44.12
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> <li>Eager &amp; Rand, 15 gallons kerosene oil</li> <li>CONCRETE.</li> </ul>	32.17	\$44.12
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> <li>Eager &amp; Rand, 15 gallons kerosene oil</li> <li>CONCRETE.</li> <li>Paid George W. Higgins, concreting</li> </ul>	32.17	\$44.12
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> <li>Eager &amp; Rand, 15 gallons kerosene oil</li> <li>CONCRETE.</li> <li>Paid George W. Higgins, concreting roadway, Merrimack street, 1,620.</li> </ul>	32.17	\$44.12
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> <li>Eager &amp; Rand, 15 gallons kerosene oil</li> <li>CONCRETE.</li> <li>Paid George W. Higgins, concreting roadway, Merrimack street, 1,620 96 yards, at 75c.</li> </ul>	32.17	\$44.12
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> <li>Eager &amp; Rand, 15 gallons kerosene oil</li> <li>CONCRETE.</li> <li>Paid George W. Higgins, concreting roadway, Merrimack street, 1,620 96 yards, at 75c.</li> <li>Paid Charles H. Robie :</li> </ul>	32.17	\$44.12
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glne, lacing, etc.</li> <li>Eager &amp; Rand, 15 gallons kerosene oil</li> <li>CONCRETE.</li> <li>Paid George W. Higgins, concreting roadway, Merrimack street, 1,620 96 yards, at 75c.</li> <li>Paid Charles H. Robie : Concreting on Chestnut street, from</li> </ul>	32.17	\$44.12
<ul> <li>Paid Thomas L. Thorp, 100 lbs. cop waste</li> <li>J. B. Varick Co., flax packing, cyl- inder oil, rivets, machine bolts, band iron, carriage bolts, glue, lacing, etc.</li> <li>Eager &amp; Rand, 15 gallons kerosene oil</li> <li>CONCRETE.</li> <li>Paid George W. Higgins, concreting roadway, Merrimack street, 1,620 96 yards, at 75c.</li> <li>Paid Charles H. Robie :</li> </ul>	32.17 <u>1.95</u> \$1,215.72	\$44.12

Patching walks on Chestnut street,	
92.88 yards, at 45c	\$41.80
Concrete work on Concord street,	
99.1 yards, at 35c	34.68
Concrete work on Concord street,	
835.4 yards at 75c	626.55
On Union street, from Laurel to Lake	
avenue, 2,283.26 yards, at 75c.	1,712.44
On Merrimack south back street, from	
east of Union street, 174.63 yards	
at 75c., being $\frac{1}{2}$ of total amount,	
349.26 yards	1 30.97
Concreting roadway on Union street,	
between north side of Lowell and	
south side of Concord street, 1,210.3	
yards at 75c	907.72
Patching and repairing on above, 13.31	
yards at 45c	5.99
	\$6,549.24
Total expenditures	. \$19,616.23
Amount transferred to bridges .	\$200.00
Amount transferred to health department	
	700.00
	\$20,316.23

## Grading for Concrete.

Appropriation							\$5,000.00
Amount transferr	ed fro	m res	served	l fund		•	532.84
							\$5,532.84

## Expenditures.

## LABOR.

Paid labor of m per pay-re		and te	ams	n dis	trict	No. 2, as	
January						\$939.33	
February	·		÷		÷	652.13	
March .		ż				434.46	
April .	÷					119.89	
May .						290.05	
June .						43.50	
July .						78.13	
August .						214.49	
September						222.75	
October						229.18	
November						41.50	
December	÷					220.13	
December	•	·					\$3,485.54
Paid labor of mo per pay-r			ms ir	dist	rict N	0. 10, as	
January ·						\$167.01	
February						169.86	
March .						108.38	
April .						206.25	
May .						299.75	
June .						231.00	
July .						248.21	
August .						168.08	
September						42.75	
October						37.25	
December						195.46	
							\$1.874.00
Paid labor of m			ams	n dis	strict	No. 7. as	
per pay-r	olls :						
August .				•		\$25.00	
October	·			·		25.00	\$50.00

# SAND AND GRAVEL.

Paid E. Hartshorn, 320 loads of sand .	\$32.00	
M. A. Hartshorn, 134 loads of sand	13.40	
Benjamin Mack, 58 loads of sand .	5.80	
		\$51.20

## STONE.

Paid Frank S. Bodwell:		
2 circles, Jencks	\$7.00	
14 feet edge stones	5.60	
1 circle, Auburn, corner Union .	3.50	
16 feet edge stones	6.40	
1 circle, corner Hanover and Hall	3.50	
2 circles, city yard	7.00	
1212 feet edge stones, city yard .	5.00	
6 circles, city yard	21.00	
		\$59.00

#### SUNDRIES.

Paid Pettee & Adams, 10 bags of salt .	\$8.00	
L. B. Bodwell, I cord of pine slabs	4.00	
D. F. Cressey, sharpening tools .	1.10	
		\$13.10
Total expenditures		\$5,532.84

## Scavenger Teams.

\_\_\_\_\_

Appropr	iation					\$12,000 00
Amount	transferi	red from	n reserv	ed fund	\$2,000.00	
" "	"	" "	<b>6</b> 6	٠.	1,500.00	
"	" "	• •	4 5	" "	683.38	
1.	" "	٠٠	6.6	• •	2,708.87	
						6,892.25
						218 802 25
						\$18,892 25

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## Expenditures.

#### LABOR.

Paid labor of men and teams in district No. 2, as per pay-rolls:

January	•	•	•	•	•	\$780.03
February						773.87
March .						906.16
April .						1,481.73
May .						1,238.83
June .						1,283.94
July .						1,196.17
August .						1,226.24
September						1,295.57
October						1,042.90
November						970.98
December						1,160.30

- \$13,357.32

Paid labor of men and teams in district No. 10, as per pay-rolls :

January							\$162.20
February	y						162.01
March							140.56
April							190.00
May						•	182.25
June							197.90
July						•	162.00
August		•		•	•		166.77
Septemb	ber	•					197.50
October							180.00
Novemb	er		•	•	•		114.54
Decemb	er	•					1 35.00

\$1,990.73

ON CONTRACT AS SCAVENGER.

Paid Timothy Shea, third quarter ending March 9 . . . . . \$1.225.00

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Paid Timothy Shea, fourth quarter end-		
	\$1,225.00	
Paid H. E. Vaughn :		
1 month ending July 9	158.33	
1 month ending August 9	158.33	
1 month ending September 9	158.33	
21 days ending October 1	110.83	
1 month ending November 1	158.33	
1 month ending December 1	158.33	
1 month ending December 31	158.34	
		\$3,510.82
TOOLS.		
Paid Manchester Hardware Co., 6 street		
rakes	\$3.00	
Manchester Hardware Co., 12		
square-point Ames shovels .	10.50	
Manchester Hardware Co., 3 Hea-	5	
ry steel rakes	.88	
Killey & Wadleigh, hardware .	I.00	
, , ,		\$15.38
SUNDRIES.		
Paid Union Publishing Co., publishing proposals for scavenger service,		
$5\frac{1}{2}$ squares daily 4 times .	\$8.75	
John B. Clarke, publishing propos-		
als, $2\frac{1}{2}$ inches 4 times .	9.25	
		\$18.00
Total expenditures	• •	\$18,892.25

## Street Sweeping.

Appropriation . . . . . . . . . \$1,200.00

#### EXPENDITURES.

## LABOR.

Paid labor of men and teams in district No. 2, as per pay-rolls: April \$58.12 . . . . May 166.50 . . . . . June 121.49 . . . . . . July . . . . . . 153.91 August . 167.08 . . . . . September 183.14 . . . . . October . 136.10 . . . . . November 15.00 . . . . \$1,001.34 Paid labor of men and teams in district No. 10, as

Paid labor of men and teams in district No. 10, as per pay-rolls:

April						\$38.00	
July			•	•	•	16.50	
Septemb	ber		•		•	42.50	
							\$97.00

#### SUNDRIES.

Paid Head & Dowst, lumber and labor,	
repairs on street sweeper , ,	\$9.32
S. C. Forsaith Machine Co., 1 hour's	
labor on bolt	10
S. A. Felton & Son, 1 street-sweep-	
er cylinder refilled	32.00
S. A. Felton & Son, 1 street-sweep-	
er cylinder refilled	32.00
Manchester Hardware Co., 12 rat-	
tan street brooms	4.00

Paid Mancheste dles for Killey & W Killey & W Killey & V	\$1.25 6.00 12.00 3.00	\$99.97				
Total Amount transfer				fund .	•••	\$1,198 <b>.31</b> 1.69
						\$1,200.00
		Ligh	ntin	g Streets.		
Appropriation Amount transfer	red f				· ·	\$42,000.00 908.78  \$42,908.78
		E	XPEN	DITURES.		\$42,900.70
		ELF	CTRI	IC LIGHTS.		
Paid Mancheste	r Ele	ctric I	ioht	t Co ·		
	. 1		5	Charges.	Discount	
January	•	•	•	\$3.338.85	\$5.95	
February	•	•	•	3.339.63	1.48	
March .	•		•	3,016.44	16.13	
April .	•	•	•	3.345.48	10.70	
May .	•	•	·	3,243.60	2.8.4	
June .	·	•	•	3,351.72	49.86	
July .	•	•	•	3,245.98	1.27	
August .		•	•	3,366.15	6.06	
September	•		•	4,375.90	1.49	
October	·	•	·	3,268.20	2.45	
November	·	•	•	3,377.14	11.35	
December	·	•	•	3.838.81	35.41	
Total	disco	ounts		\$40,107.90	\$144.99	

ducted . . 144.99

\$39,962.91

GAS.

Paid People's Gas-Light Co., for gas:

January				\$110.88
February				104.30
March .				85.40
April .				86.38
May .				78.12
June .				71.68
July .				64.54
August .				66.78
September				70.42
October				76.16
November				95.48
December				91.00
Soldiers' me	onumei	nt		.56
Light on en	gine h	ouse		6.44

\$1,008.14

#### CARE OF GAS AND OIL LIGHTS.

Paid People's Gas-Light Co., for lighting, extinguishing, and care of gas and oil street lights :

January		•		\$139.22
February	7			143.93
March				109.60
April				160.43
May				131.15
June				136.03
July				146.92
August				140.69
Septemb	er			138.59
October				128.65
Novemb	er			148.06
Decembe	er			130.28

\_\_\_\_\_\_ \$1,653.55

#### BRIDGES.

#### SUNDRIES.

Paid People's Gas-Light Co.:			
15 barrels and 5 gallons kerosene oil			
8 barrels kerosene oil		34.38	
7 gallons of whisky		15.75	
1 oil can		.42	
$_3$ bushings $_{34}^3$ x $_{12}^1$		.09	
3 pounds of waste		.26	
½ box 10 x 12 glass		1.38	
½ box 12 x 14 glass		1.62	
3 glass cutters		.25	
3 glass cutters		.31	
2 gallons sperm oil		2 00	
3 barrels kerosene oil		13.29	
1 box of glass 10 x 12		2.50	
1 box of glass 12 x 14		3.00	
1 box of glass 14 x 16			
Setting oil-post at Massabesic house			
Teaming post to Massabesic house		2.00	
6 glass cutters	•	.42	
Paid Eager & Rand, matches .		4.35	
Thomas A. Lane, repairs on lante	rn	.58	
J. B. Varick Company, 6 glass-cu	ıt-		
ters		.75	
Clark M. Bailey, for matches, chi	m-		
neys, burners	•	117.48	
			\$284.18
Total expenditures		• • • • •	\$42,908.78

## Bridges.

Appropriation	•	•	•					\$2,000.00
Amount transfer	rred f	rom n	nacad	amizi	ng.	\$200	.00	
Amount transfer	red f	rom r	eserve	d fun	d.	IOC	.00	

Amount transferred from reserved fund . \$31.59

Amount transfer	red fr	om r	eserve	ed fun	d.	340.66	
							\$672.25
							\$2,672.25
		E	XPENI	DITUR	ES.		
			LA	BOR.			
Paid labor of me	-11 - 212	1 ten		nor	OF PC	lle in die	
trict No.		, ica	mə, aə	per l	ay-ic	nis, ni uis-	
January	2.					6- 1 <b>-</b> 6-	
February	·	·	•	·	•	\$147.62	
March .	·	•	·	•	•	125.37	
	•	·	•	·	·	116.75	
April .	•	·	·	•	·	120.48	
May .	·	·	·	•	•	12.50	
June .	·	·	·	•	•	60.87	
July .	·	·	·	·	•	42.93	
August .	·	·	•			64.88	
October						25.13	
November						46.87	
December						169.65	
							\$933.05
Paid labor of me	en and	l tear	ns, as	per p	av-ro	lls, in dis-	
trict No.				1 1		,	
June .							\$16.64
Paid labor of me	en and	l tea	ns as	ner i	av-ro	lle in die-	
trict No.		i icai	no, ao	per [	ay-10	115, 111 (115-	
July .						\$8.13	
September						3.75	
							\$11.88
Paid labor of me trict No. o		l tear	ns. as	per p	ay-ro	lls, in dis-	
-	·						
September			·	•	·	• •	\$109.50
Paid labor of me trict No. 1		l teai	ns. as	per p	ay-ro	lls, in dis-	
Nevember							<u>~0 0 -</u>

November . . . . . . . . . . . \$8.87

#### BRIDGES.

Paid labor of men and teams, as per pa	ay-rolls, in	
district No. 11:		
January		\$24.00
Paid E. A. G. Holmes, 23 days' labor,		
Squog bridge	\$57.50	
Paid Walter Neal :		
1 day's labor on bridges	3.00	
3¼ days' labor on Amoskeag bridge .	9.75	
3 days' labor on Amoskeag bridge .	7.50	
3 <sup>1</sup> / <sub>4</sub> days' labor, with horse, on Amos-		
keag bridge	4.87	
Cash paid for ironwork	4 00	
45 lbs. nails	1.45	
<sup>3</sup> ⁄4 day's labor on McGregor bridge .	2.25	
34 day's labor on McGregor bridge .	1.87	
3/4 day's labor, with horse, on Mc-		
Gregor bridge	1.12	
7 lbs. nails	. 23	
17 <sup>12</sup> / <sub>2</sub> days' labor on Granite bridge .	52.50	
1912 days' labor on Granite bridge .	48.74	
8314 days' labor on Granite bridge .	146.57	
17¾ days' labor, with horse, on Gran-		
ite bridge	26.62	
Work patching	2.00	
Ironwork	2.25	
Hammer handles	.60	
		\$372.82
LUMBER.		
Paid A. C. Wallace :		
1,733 feet pine, 12 x 12 and 9 x 12, for		
district No. 5	\$38.13	
a abootput most district Man		

district 10. 5 .	•	•	•	\$30.13
1 chestnut post, distric	et No. 5			. 20
Trucking the above .				4.00
336 feet pine, 4 x 10 a	und 4x6	, An	los-	
keag bridge	•			6.95

326 feet chestnut, 1½ x 2, Amoskeag	
bridge	\$8.15
4.598 feet chestnut, 3 x 6, Granite	
street	101.16
Planing and grooving the same	13.79
61,287 feet 3-inch hemlock plank,	
Granite bridge	766.09
70 feet 8 x 10 chestnut, Granite bridge	1.54
145 feet pine, P. and S. cleats	2.90
700 feet hard pine for sidewalk .	12.60
Paid Head & Dowst:	
112 feet 3-inch sapling	1.79
1,209 feet 3-inch sapling, bridges, dis-	
trict No. 9	19.34
1,100 feet 3-inch sapling, bridges, dis-	
trict No. 9	17.60
267 feet 8 x 10 inch sapling, bridges,	
district No. 9	4.27
470 feet 4 x 4 spruce, bridges, No. 9 .	7 • 5 <sup>2</sup>
8 7-inch and 2 9-inch chestnut posts,	
district No. 9	1.78
15 chestnut posts, bridges, district No.	
9 · · · · · ·	2.40
465 feet spruce timber, bridges, dis-	
trict No. 9	$7 \cdot 44$
424 feet spruce timber	6.78
12 chestnut posts	1.92
293 feet 3-inch spruce plank	4.77
32 feet 4 x 4 spruce	. 5 1
158 feet 2-inch chestnut	3.95
32 feet hard pine, Granite street .	.96
218 feet $1\frac{1}{4}$ -inch pine .	5.01
Sawing and planing	.60
213 feet 14 inch hard pine	4.90
Sawing and planing	.60
Teaming bridge timber, Granite street	1.50

240 feet 11/8-inch hard pine and saw-	
ing	\$8.85
1,385 feet, 3-inch hemlock plank,	
bridge, district No. 5	19.39
1,340 feet spruce	21.44
Sawing and planing same	3.73
Paid George W. Rief, 84 feet 2-inch oak	3.36
George W. Rief, $9\frac{1}{2}$ hours labor .	3.80
A. C. Wallace, 60 feet 3-inch pine	
planed and sawed	1.20
A. C. Wallace, 20 feet oak planed	
and sawed	.60
A. C. Wallace, lot of chestnut 6 x 6	
and sawing for wedging	2.25
HARDWARE.	
Paid J. B. Varick Co. :	
6 C. E. bolts 3 <sup>1</sup> / <sub>2</sub> x <sup>3</sup> / <sub>8</sub> , 'Squog bridge	50.12
25 pounds lead, 'Squog bridge	1.88
1 quart lard oil, 'Squog bridge	.15
39 pounds 11/4 cast washers, 'Squog	
bridge	1.17
1 cask 6-penny wire spikes	2.75
15 pounds 20 steel wire nails	.45
Paid Isaac Webster, stone for bridge in	
district No. 9	3.50
Allen N. Clapp, 25 pounds spikes	
('Squog)	·75
Killey & Wadleigh, 10 pounds 10-	
penny nails	·35
Killey & Wadleigh, 10 pounds 8-	
penny nails	·35
Killey & Wadleigh, spikes and nails	
for Granite bridge	50.61
Killey & Wadleigh, 1 cask 6-inch	
spikes	3.00
00	

Paid Manchester Hardware Co., 13		
pounds 10-penny nails	\$0.52	
Manchester Hardware Co., nails		
and spikes	3.80	
S. C. Forsaith Machine Co., 200		
feet 1¼-inch hard pine, Granite		
bridge	5.00	
L. M. Aldrich, filing 8 saws	1.60	
		\$76.00

## BLACKSMITHING.

Paid D. F. Cressey, ironwork	•	•	·	\$5.72
Total expenditures .				\$2,672.25

## City Teams.

Appropriation			\$5,000.00
Amount transferred from reserved fund	•	•	290.73
			\$5,290.73

#### Expenditures.

#### LABOR.

•

Paid	labor	$\mathbf{of}$	men	and	teams	in	district	No.	2,	as
	per	pa	y-rolls	5:						

January		•		•			\$173.88
Februar	y					•	176.86
March							154.38
April							216.89
May						•	1.43.81
June						•	163.16
July							90.50
August						•	95.81
Septemb	ber		•		•	•	115.87

## CITY TEAMS.

October .			\$97.13	
November			90.34	
December			101.25	
				\$1,619.88

## OATS, CORN, FEED, HAY, STRAW.

Paid Drake & Parker, 20 bags of oats .	\$28.00
Drake & Parker, 40 bags of oats .	53.00
Drake & Parker, 4 bags of cracked	
corn	6.40
Drake & Parker, 12 bags of ground	
feed	17.70
Paid Pettee & Adams:	
4 boxes salt, 20 pounds	.80
241 bags of oats	277.95
46 bags of cracked corn	67.16
785 pounds of bran	10.05
3 bags of feed	4.20
Paid Partridge Bros., 156 bags oats .	189.00
Partridge Bros., 30 bags cracked	
corn	46.40
Partridge Bros., 26 bags ground feed	36.90
city farm, 13,600 pounds of hay .	τ18.87
J. A. Brown, 12,950 pounds of hay 👞	103.60
Waterman Smith, 3,735 pounds of	
hay	28.00
D. Butterfield, 2,175 pounds of hay	17.40
Isaac Huse, 2,210 pounds of hay .	17.78
C. C. Webster, 4,225 pounds of hay	38.02
Paid Merrill & Freeman :	-
406 bags of oats	316.25
83 bags of cracked corn	119.45
44 bags of feed	59.60
950 pounds of bran	12.40
7,672 pounds of rye straw	77.86
60 pounds best wheat	1.50
Paid C. D. Welch, 12,390 pounds of hay	111.67
	,

Paid G. F. Mills, 10,270 pounds of hay B. W. Hill, 4,580 pounds of straw,	\$92.43	
at $\$18$	41.22	
A. E. Horton, 2,235 pounds of		
carrots, at Soc.	17.88	
P. M. Lord, 7,215 pounds of hay,		
at 90–95c	65.64	
A. G. Bean, 1,685 pounds of carrots	13.48	
		\$1,990.61
BLACKSMITHING.		
Paid Thos. Hickey, shoeing horses, etc. Connor & Grossman, shoeing horses,	\$157.75	
etc	78.25	
J. Tremblay, shoeing horses, etc	26.85	
J. F. Woodbury & Co., shoeing		
horses, etc	51.25	
Mahaney & McSweeney, shoeing		
horses, etc	13.00	
		\$327.10
HARNESSES AND REPAIRS		
Paid J. Stickney, material and labor re-		
pairing horse cover	\$1.00	
F. N. McLaren, repairing harness,		
collars, etc	5.20	
Thos. P. Riley, repairing harnesses	41.70	
N. J. Whalen, repairing harnesses,		
blacking, oiling, etc.	17.35	
Frederick Allen, repairing harness-		
es, etc.	11.35	
Kimball Carriage Co., 1 pair of		
collars	24.00	
N. J. Whalen, 1 heavy draft harness N. J. Whalen, 1 heavy rubber horse	60.00	
cover	6.00	
N. J. Whalen, I horse sheet .	2.00	
The generation of the sheet in the sheet is		\$168.60

## CITY TEAMS.

## REPAIRS ON CARRIAGES AND NEW CARRIAGES.

Paid J. B. McCrillis &	Son :				
2 new cart tires.				\$8.00	
New bed				3.00	
Labor on cart gear				4.00	
1 new cart body				20.00	
Labor ironing body	and par	t of gear	r.	28.00	
8 stakes				4.00	
Painting cart .				10.00	
Bolts and other repa	irs .			54.42	
2 one-horse dump ca	rts .			200.00	
Ironwork on sundry	carts .			3.75	
Paid American Horse	Protect	or Co.,	6		
whiffletrees, spr	ings, an	d sinks		13.80	
J. T. Beach, repa	irs on te	eams		155.49	
					\$504.46
	HAR	DWARE.			
Paid Manchester Hard	lware C	Co., bol	ts,		
sandpaper, and	other h	ardware		\$4.85	
Killey & Wadleig	gh, soap	, lanteri	ıs,		
hay rake, and o	ther ha	rdware		8.90	
Paid J. B. Varick Co. :					
Bolts, chain, door sj	oring, ri	ngs, rop	e,		
neat's-foot oil, refi	ned iron	, bit, file	es,		
whip, sponge, ho	se nozz	le, screv	vs,		
steel rakes, stake	irons, v	vire nai	ls,		
knob, latches, win	dow br	ush, hor	se		
brush				15.80	
Hay fork, brooms, et				30.63	
Paints, varnish, brush				5.63	
Boiled oil and glass				18.34	
-					\$84.15
MEDICINI	ES AND	MEDICAI	L SEF	RVICES.	
Paid J. Alexander :					
I visit to horse (colic	c) and n	nedicine		\$1.25	
Visits to bay horse, ]				21.00	
-					

Medicine . Gray horse sprained in fore feet . 1 day and 1 night attendance on horse	\$3.25 2.00	
(colic)	3.50	
Medicine	1.50	
Paid Pulsifer Chemical Co., horse liniment	4.00	
J. S. Golden, treatment of horse,		
3 visits	3.00	
J. S. Golden, medicine	2.00	
J. S. Golden, treatment and medi-		
cine to Dec. 5, 1891	49.50	
A. N. Baker, dentistry work on	., .	
horses	20.00	
John B. Hall, medicine	4.40	
Nathan Chandler, I can of oint-		
ment	.75	
Smith & Gould, 6 bottles Gray's	15	
Lotion	3.00	
Z. F. Campbell, medicines	6.51	
1 ,		\$125.66

## GAS, TELEPHONE, COAL.

\$99.26	Paid Peoples Gas-Light Co., for gas .
	N. E. Telegraph and Telephone
39.15	Co., use of telephone
	Fred T. Dunlap, 1 ton egg coal
7.00	bought in November, 1890 .
14.00	E. P. Johnson Co., 2 tons egg coal
	L. B. Bodwell & Co., 4 tons egg
25.00	coal, in November, 1890
	L. B. Bodwell & Co., 4 tons egg
25.00	coal in January, 1891
	L. B. Bodwell & Co., 2 tons egg
13.50	coal in November, 1891
\$222.91	

#### SUNDRIES.

Paid Manchester Horse Railway, 1 pack-		
age horse-car tickets	\$4.50	
E. T. James, use of wagons, horses,		
sleigh, etc	121.50	
Whitten & Fifield, horse hire .	10.00	
E. B. Merrill, 1 pail harness oil .	3.00	
Boston & Maine Railroad, freight .	4.40	
W. H. Vickery, 12 dozen keys .	3.00	
White Mountain Oil Co., 53/4 gal-		
lons axle oil	2.75	
Pike & Heald, labor, etc., repair-		
ing stove	5.37	
Pike & Heald, mop stick, waste,		
and dipper	·79	
Pike & Heald, materials and plumb-		
ing at stables	29.87	
Head & Dowst, lumber at city sta-		
bles	23.87	
L. N. Westover, lumber and labor		
in city stables	12.84	
S. C. Forsaith Machine Co., 200		
feet northern hard pine, city yard	4.00	
Lubrion Compound Co., 10 pounds		
axle lubrion	2.50	
O. D. Grant, 1 No. 2 Sampson jack	5.00	
Thomas A. Lane, pipe and fittings,		
and labor of 2 men 5 hours on		
gas, at city stables	3.62	
A. N. Clapp, $52\frac{1}{2}$ gallons oil .	4.46	
C. N. Fisher, 2 keys	.36	
Eager & Rand, ginger, ivorine, oil,		
salt, matches, soap, wicks, etc	5.53	a
		\$247.36
Total expenditures		\$5,290.73
•		

## Sewers and Drains.

Appropriation		•		•		\$25,000.00
Amount received	from	temp	orary	loan	\$30,000.00	
Amount transferr	ed fro	m res	erved	fund	409.73	
						30,409.73
						\$55,409.73

#### Expenditures.

## LABOR.

Paid labor of men	and	teams	in	district	No.	2, as per
pay-rolls :						

January .	•		•	•	\$448.04
February					690.97
March .					502.77
April .					1,065.38
May .					2,422.63
June .	•				2,765.32
July .					2,107.24
August .					2,639.13
September					3,151.69
October .		•			2,338.41
November					874.06
December					411.50
					\$19,417.14

Paid labor of men and teams in district No. 7, as per pay-roll :

	\$49.48	•	•	•	·	•	у	Januar
	13.50			•		•	•	April
	46.00	•						June
\$108.98								

Paid labor of men and teams in district No. 10, as per pay-roll:

January,	•	•	•	•	•	\$20.07
February	•	•	•	•	•	54.25

March .			\$116.43
April .			544.43
May .			1,470.99
June .			1,605.22
July .			1,513.66
August .			2,062.50
September			2,659.46
October			2,946.86
November			973.67
December			131.50
			\$14,105.04

EXPLOSIVES.	·····••
Paid Killey & Wadleigh :	
305 lbs. forcite, district No. 10 .	\$103.80
350 feet platinum fuse, district No. 10	13.16
300 feet W. platinum fuse, district No.	
το	5.05
4 rolls connecting wire, district No. 10	2.00
1 keg of powder, district No. 10	2.75
12 lbs. powder	1.51
300 feet D. T. and W. P. fuse .	1.97
I box blasting caps	1.50
$170\frac{1}{4}$ lbs. forcite	64.70
250 feet platinum fuse	9.76
450 feet platinum fuse	16.92
205 lbs. No. 1 forcite	73.80
18 lbs. blasting powder	2.25
5 lbs. Weld's Compound	1.00
5 lbs. No. 3 c. forcite	1.25
100 feet D. F. fuse	.65
200 feet W. P. fuse	1.30
100 feet W. P. fuse	.60
25 feet cotton fuse	. 1 5
1 coil cannon wire	.50
100 feet platinum fuse, district No. 10	3.76
50 lbs. No. 1 forcite, district No. 10 .	18.00
100 feet cannon wire, district No. 10	1.00
	\$327.38

## TOOLS.

Paid Killey & Wadleigh :	
2 dozen No. 1 oak pick handles .	\$4.50
I dozen round-point shovels	11.00
7 32-inch sledge handles	1.17
I dozen round-point shovels	10.50
1 dozen pick handles	1.75
1 dozen oak handles	2.00
338 lbs. drill hammer, district No. 10	.94
2 handles, district No. 10	. 20
12 picks, district No. 10	10.50
12 handles, district No. 10 .	2.00
28 lbs. steel bars, district No. 10	1.54
56 lbs. 5-16 cable chain, district No. 10	4.48
2 hand drill hammer handles, district	
No. 10	. 20
6 striking-hammer handles, district	
No. 10	.90
15 lbs. striking hammers, district No.	
10	2.25
$15^{1/}_{24}$ stone hammer with handle, dis-	
trict No. 10	1.51
6 oak striking-hammer handles, dis-	
trict No. 10	τ.00
Paid Manchester Hardware Co., 2 pine	
stable pails	.70
Manchester Hardware Co., 1 rule .	. 15
Paid Manchester Hardware Co., district	
No. 10:	
6 street hoes	2.19
ı socket hoe	·35
6 lanterns	2.00
12 red globes	5.50
6 peerless shovels	5.75
24 round-point shovels	21.00
2 light handled shovels	1.30

12 picks	·	·	\$10.00
12 hickory pick handles .	·	·	1.75
2 50-foot tape lines	·	·	1.00
1 brick hammer	·	·	·75
1 nail hammer	•	•	.50
1 handled ax	•	•	1.00
Other tools	•	• 9	2.08
1 greasing jack	·	•	2.50
6 Ames and 2 square-point show	els	•	5.75
ı saw set	•		.65
1 saw clamp	•		·75
1 hammer handle		•	.10
1 dozen round-point shovels			10.50
1 plumb ball			.90
Files and cord			1.49
4 mattocks			2.33
4 hickory pick handles .			.67
8 peerless shovels			8.00
1 hand ax			.62
6 canal barrows			10 00
6 red lantern globes .			2.00
3 canal barrows			5.25
4 peerless shovels			4.00
19 lbs. cast steel			1.90
4 canal barrows			7.00
1 spirit level			.60
1 6-inch double pulley block			1.25
1 6-inch single pulley block			.70
4 street hoes			1.46
6 tubular lanterns			3.50
10 red lantern globes .			3.33
6 hickory pick handles .			1.50
Paid Manchester Hardware Co.:			-
6 Ames round-point shovels, o	listri	ct	
No. 10			5.25
6 "Peerless" shovels, district N	0. 10		6.00
6 tubular lanterns, district No. 1			3.50

1 red lantern globe, district No.	10		\$4.00
12 hickory handles, district No.	IО		3.00
12 lead pencils, district No. 10			.40
10 lbs. English steel, district No	. 10		1.60
26 lbs. 1 3 octagon cast-steel,	distr	ict	
No. 10			2.60
25 lbs. 1 1/8 Jersey steel, district	No.	10	3.75
6 Harvey's picks			5.00
20 lbs. drill steel			2.00
4 mattocks			2.20
4 hickory handles			1.00
6 striking-hammer handles .			.50
Paid J. B. Varick Co. :			
12 pick handles			2.00
2 gimlets			.20
3 handles			. 30
1 saw			I.I2
1 plumb bob and line.			1.00
16 lbs. cast-steel			2.40
18 lbs. cast-steel			2.70
12 pick handles			2.00
147 lbs. cast-steel			22.05
2 tape-measures			1.70
I blacksmith hammer .			1.00
1 brick-hammer			.75
$27\frac{1}{2}$ -inch trowels			1.20
6 ruby lantern-globes .	•		3.60
6 spading-forks			3.40
1 14-inch Stilson wrench .		•	2.25
10 contractor's picks			7.50
1 18-inch Stillman's wrench			3.00
12 contractor's picks .			7.00
12 pick handles			2.00
1 steel square			.60
2 34-inch sledge handles .			.30
1 hand-ax		•	.10
5 lbs. rope	·		.55

12 cesspool handles	\$4.50	
12 sledge handles	1.50	
12 tubular lanterns and ruby globes .	I 2.00	
18 "Granite State" shovels	9.00	
Paid John F. Conway, measuring guage.	·75	
George L. Robinson, 6 pairs of		
rubber boots	18.00	
William P. Farmer, 7 pairs of rub-		
ber boots	17.30	
J. Stickney, 2 pairs of boots	7.00	
J. Stickney, 2 oil suits	4.50	
J. Stickney, 1 pair oil overs	1.25	
J. Stickney, 2 oil suits, district No.		
10	4.50	
Paid S. C. Forsaith Machine Co. :		
1 new Knowles steam-pump, with		
boiler and fittings as per contract .	970.00	
Steel spanner for steam pump	· 35	
140 lbs. brass castings for reducer for		
steam pump	5.18	
$18\frac{1}{2}$ hours' labor on the above .	7.40	
1 new portable forge, complete	35.40	
		\$1,397.36
SEWER-PIPE.		
Paid George D. Goodrich, sewer-pipe,		
per contract	\$264.26	
George D. Goodrich, sewer-pipe,	φ <del>-</del>	
per contract	297.77	
George D. Goodrich, sewer-pipe,	- 21-11	
per contract	215.06	
Henry Fisk, sewer-pipe, per con-		
tract	5,428.29	
Henry Fisk, sewer-pipe, per con-	571-5-9	
tract	369.10	
Manchester Heating and Lighting	5 /	
Co., sewer-pipe, as per contract	323.18	
· · · · ·	0.0	

Paid Manchester Heating and Lighting	
Co., sewer-pipe, as per contract	\$329.18
Manchester Heating and Lighting	
Co., sewer-pipe, as per contract	5,267.14
Pettee & Adams, sewer-pipe	337.31
	\$12,831.29

## MATERIALS, LABOR, ETC.

Paid Charles H. Hutchinson :	
13,755 <sup>1</sup> / <sub>2</sub> lbs. manholes, grates, traps,	
etc	\$412.67
$10\frac{1}{2}$ lbs. brass pins for traps	3.15
72 feet pine lumber	1.44
I lb. of glue	. 50
r pint of shellac	. 40
2 dozen screws	.10
44 hours' labor on traps, covers, etc	17.60
$34^{1/2}_{1/2}$ hours' labor on new manhole and	
cover pattern	13.80
Repairing stamp	1.15
2,257 lbs. manholes, castings, etc.	67.71
725 lbs. manholes, castings, etc	21.75
6 hours on mammoth grate, etc	2.40
Paid George F. Higgins, 220 lbs. 8-inch	
cast-iron pipe, used as culvert under	
crossing on McGregor street	6.60
Paid Manchester Locomotive Works :	
2.534 lbs. grates and covers	76.02
974 lbs. grates	29.22
8 lbs. castings (brass)	2.00
26 lbs. forgings	.78
$1\frac{8}{10}$ days' labor on 26 forgings .	7.20
7,765 lbs. castings, traps, manholes,	
etc	232.95
10,309 lbs. castings, traps, manholes,	
etc	309.24
3,505 lbs. castings, traps, manholes,	
etc	105.15

4 lbs. castings (brass), manholes, etc.	\$1.00
1,407 lbs. castings, traps, manholes,	
etc	43.11
1,170 lbs. castings, traps, manholes,	
etc	35.10
Paid Thomas A. Lane :	
50 feet ¾-inch hose, district No. 10 .	6.00
234 lbs. hemp packing, district No. 10	.68
1 ball asbestos packing, district No. 10	. 25
1 flue cleaner and wire, district No. 10	Ι.ΟΟ
50 feet 4-ply hose, district No. 10	9.50
2 Edison diaphragms, district No. 10.	4.50
28 feet suction hose, district No. 2	50.00
2 set of hose couplings, district No. 2	9.00
12 suction hose packings, district No. 2	1.20
Materials and labor, district No. 2	43.09
Materials and labor, district No. 10 .	4.94
Materials and labor, district No. 2 .	3.04
Paid S. C. Forsaith Machine Co. :	
11-inch smoke-stack, 60 lbs., for steam	
drill	3.00
1 water glass for steam drill	. 25
1 tie piece and express for steam drill	2.IO
8 hours' labor on steam drill	3.20
$17^{1/2}_{1/2}$ hours' labor on steam drill .	7.00
Globe, valves, elbows, etc., for steam	
drill	8.22
146 lbs. of castings at 3 <sup>1</sup> / <sub>2</sub> c.	5.11
11 hours' labor	4.40
$9\frac{12}{2}$ hours' labor on steam drill .	3.80
5,342 feet spruce plank	85.47
214 feet spruce joist	3-42
270 feet pine	5.13
30 feet fence cap	.75
4 hours' labor on drills, district No.	
10	1.60

2812 hours' labor on drills	\$11.40	
Norway iron, 2 lbs	.14	
Paid Allen N. Clapp, pails, oils, and		
other supplies for district No. 10	85.97	
John Driscoll, ½ dozen dippers .	.87	
John Driscoll, 1 large dipper 🥣 .	. 50	
J. Hodge, 67 feet 1-inch sapling .	1.68	
J. Hodge, $6_{14}^{1/2}$ hours' labor	2.50	
J. Hodge, screws	.50	
Paid Manchester Locomotive Works:		
16 hooks, 20 lbs. refined iron	.60	
12 brass rivets, 4 lbs. brass castings .	1.00	
1 6-10 days' labor on above	6.40	
5,434 lbs. grates, traps, and other cast-		
1ngs	163.02	
1,822 lbs. grates, traps, and other cast-		
ings for district No 10	54.66	
Paid Marden & Woodbury, labor on		
stone cutter, $3\frac{1}{4}$ days	11.37	
Concord Foundry Co., 1 18-inch		
base grate	5.00	
		\$2,003.30
BLACKSMITHING.		
Paid D. F. Cressey, sharpening picks and		
other tools, district No. 10 .	\$23.26	
D. F. Cressey, work on steam drill	372.10	
Amoskeag Manufacturing Co., 12		
hours' labor sharpening drills .	5.28	
John T. Beach, sharpening tools of		
all kinds	7.33	
Joseph Greenwood, sharpening		
picks, drills, etc	12.10	
Thomas Hickey, sharpening picks,		
drills, etc	16.20	
James Morrison, sharpening drills,		
picks, etc	2.15	
		\$438.42

CEMENT, BRICK, STONE, LUMBER.

Paid Merrill & Freeman, 13 barrels Nor-	
ton cement	\$21.45
Pettee & Adams, 733 barrels Norton	
cement	1,032.83
Pettee & Adams, 1 barrel of Port-	
land cement	3.00
Pettee & Adams, four barrels bag	
strings	.50
W. F. Head & Son, 189,000 brick	
at \$6.50	1,228.50
Waterman Smith, 16.8 perch stone,	
Hanover-street culvert	33.60
F. S. Bodwell, 77 cesspool stones .	225.60
Head & Dowst Co., lot of paving	Ū.
stone, corner of Central and	
Canal streets	50.00
Head & Dowst Co., 1,400 U and	-
D brick	11.00
L. M. Aldrich, labor and lumber .	1.65
A. C. Wallace, 22,081 feet spruce	U.S.
boards and plank, district No. 10	353.50
A. C. Wallace, 664 feet spruce 4 x 6	10.62
A. C. Wallace, 9,020 feet spruce	
plank, etc., in district No. 10	148.09
Paid Head & Dowst Co. :	
Lumber, labor, etc., boxing pump on	
engine at Barr-street sewer, district	
No. 10	8.71
25 feet 1 1/8 spruce at \$25, district No. 10	.63
105 feet drag plank at \$40, district	
No. 10	4.20
3,946 feet spruce at \$16, district No.	
10	63.13
4,390 feet old plank at \$10, district	
No. 10	43.90
34	

43 feet 4 x 4 spruce	<b>\$0.</b> 69	
on Lowell street	1.40	
Hallsville sewer, near shoeshop . S. C. Forsaith Machine Co., 102	8.06	
feet spruce boards and joists . S. C. Forsaith Machine Co., 3,010	1.63	
feet spruce plank, Belmont street Amoskeag Manufacturing Co., 112,-	48.16	
000 brick, at \$7.15 L. M. Aldrich, 16 feet of chestnut	800.80	
lumber	•40	
hours' labor	.80	\$4,103.75
FREIGHT.		
D.1.C. 18 M	. 1 : 1	
Paid Concord & Montreal Railroad, freigh and castings		\$171.05
		\$171.05
and castings		\$171.05
and castings	• •	\$171.05
and castings	• • •	\$171.05
and castings	 \$5.68 11.76	\$171.05
and castings	\$5.68 11.76 2.50	\$171.05
and castings	\$5.68 11.76 2.50 1.67	\$171.05
and castings	\$5.68 11.76 2.50 1.67 12.00	\$171.05

SEWERS AND DRAINS.	
Paid S. M. Worthley, oatmeal	\$2.10
Dennis Kerwin, 8 lbs. tallow .	.48
E. R. Coburn, 26 special blank-	
books	20.98
J. H. Wiggin, 3 empty barrels .	·54
Manchester Horse Railway, 100 car	
tickets	4.50
L. B. Bodwell, $\frac{1}{2}$ cord of pine slabs	2.00
L. B. Bodwell, 2,100 lbs. Cumber-	
land coal	6.82
J. F. Wyman, 2,445 lbs. egg coal,	
district No. 10	7.88
J. F. Wyman, 9,440 lbs. Cumber-	
land coal, district No. 10 .	30.68
J. F.Wyman, 2 cords of pine wood,	
district No. 10	10.00
J. F. Wyman, 6,820 lbs. Cumber-	
land coal, district No. 10 .	22.16
E. P. Johnson Co., 1 barrel of	
Cumberland coal, in 1890 .	1.25
E. P. Johnson Co., ¼ ton of Cum-	
berland coal, in 1890	1.85
E. P. Johnson Co., 6 barrels Cum-	
berland coal	7.50
E. P. Johnson Co., 2,000 lbs. Le-	
high coal, on Russell-street sewer	7.50
Orin Rawson, lot of cut wood, Rus-	
sell-street sewer	11.75
Pettee & Adams, $5\frac{3}{4}$ pounds of	
string	.83
Pettee & Adams, 1 cask of lime .	I.00
Pettee & Adams, 2 cider barrels .	.60
Pettee & Adams, salt	·55
John W. Wilson, moving black-	
smith shop	6.00
S. C. Forsaith Machine Co., 1 gal-	
lon cylinder oil	.80

Paid S. C. Forsaith Machine Co., 1 load	
stub wood	\$2.25
J. Stickney, 3 pounds rubber pack-	
ing	·75
J. B. Varick Co., hardware .	51.68
J. B. Varick Co., hardware, district	-
No. 10	5.65
Manchester Hardware Co., hard-	
ware	4.10
Killey & Wadleigh, repairing steam	
drill	46.15
Killey & Wadleigh, hardware .	53.38
Head & Dowst Co., use of engine	
18 days, from April 25, 1891 .	18.00
Head & Dowst Co., use of drill 18	
days, from April 25, 1891	18.00
Thos. L. Thorpe, 126 pounds bags	3.78
F. A. Platts, 6 gallons kerosene oil,	
2 lantern globes	.98
J. W. Wilson, teaming	14.98
E. P. Annis, 16 gallons kerosene	
oil, 8 pounds of suet	2.32
A. & D. M. Poore, $\frac{1}{4}$ ton Cumber-	
land coal	1.60
Paid John F. Larkin, Webster-street en-	
gine house :	
57 feet 4 inches soil pipe	10.26
14-inch trap	1.50
Fittings	7.26
Putting conductor pipe and gutter .	6.50
Labor 5 days, 2 men	30.00
Paid Thos. A. Lane, 25 feet 7-ply steam	
wound hose, district No. 10 .	21.25
Thos. A. Lane, other materials, dis-	
trict No. 10	4.60
Thos. A. Lane, labor 1 man 3 hours	
on hose, district No. 10	1.20

## ENGINEER'S DEPARTMENT.

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Paid Horace Holbrook, 2 loads for cov-	
ering blasts	\$2.00
Eager & Rand, 5 gallons kerosene	
oil, 1 jug, 1 gallon vinegar .	<u> </u>
Total expenditures	\$55,409.73

## Engineer's Department.

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Appropriation . . . . . . . . \$3,500.00

## Expenditures.

## LABOR.

Paid W. H. Bennett, service as city en-		
gineer	\$1,171.00	
H. J. Briggs, 208 3–10 days' labor		
assisting engineer	415.95	
D. I. Dewey, 11 days' labor in office	14.50	
H. M. Young, 309 6–10 days' labor		
assisting engineer	690.60	
G. W. Wales, 294 6–10 days' labor		
assisting engineer	585.20	
John M. Kendall, work on plans of		
receiving tomb, Valley cemetery	3.00	
		\$1,709.25

## TEAM AND TEAM EXPENSES.

Paid W. H. Bennett, cash paid for horse	
one half-day	\$1.25
Connor & Grossman, shoeing horse	7.50
J. F. Woodbury, shoeing horse .	3.50
E. T. James, horse hire	164.50
Whitten & Fifield, horse hire, April,	
May, June, and July	91.25

Paid Whitten & Fifield, horse hire, Au-		
gust to September 12	\$47.50	
Whitten & Fifield, horse hire to		
November 7	43.75	
J. T. Beach, repairing wagon .	21.85	
Frederick Allen, repairing bridle,		
50c., harness, \$3.50	4.00	
A. H. Stark, varnishing democrat		
wagon	8.00	
		\$393.10

## SUPPLIES AND OFFICE EXPENSES.

Paid H. M. Young, 1 tape clas	np.		\$° 75
H. M. Young, use of tea			5.00
H. M. Young, repairing	bag	and	-
rubber boots			.75
Paid W. H. Bennett :			
1 paper of tacks			. 25
Postage stamps			2.00
Express			.20
Paste and gum			.56
Horse-car fares		•	5.70
Expense to Concord and retu	rn 3 tii	nes	3.66
Repairs of tapes, etc			7.05
Paid Buff & Berger, I Boston r	od.		15.00
George Blanchet, 82 yar	ds of a	cot-	
ton cloth			11.49
George Blanchet, 1 walnu	it case		5.00
Paid E. R. Coburn & Co.:			, i i i i i i i i i i i i i i i i i i i
1 copying press and book .			6.00
15 dozen pencils			13.70
1 roll tracing cloth			9.45
2 rolls blue print			2.75
Ink, fasteners, letter file, 3			
blank-book, pens, and othe	er stati	on-	
ery	•		18.53

.

1 draughtsman's scale	\$5.00
6 record books	4.00
334 pounds egg shell paper	1.88
India ink	2.40
Paid Albert Hilcken, repairing binding	
on books	2.45
Manchester Hardware Co., 1 level,	
2 4-foot rules	2.85
Sampson, Murdock & Co., 6 Man-	-
chester maps	1.50
Temple & Farrington Co., 2 blank	Ū
books	8.25
Temple & Farrington Co., ink and	0
other stationery	4.44
J. B. Varick Co., 1 lantern	.35
J. B. Varick Co., 6-inch belt punch	
J. B. Varick Co., 1 feather duster .	2.25
J. B. Varick Co., 1 hand hammer.	1.25
T. H. Tuson, printing on blanks	0
for sewer orders	.60
Thos. W. Lane, 1 long curve bracket	1.83
Thos. W. Lane, 1 self-lighter .	.75
A. S. Campbell & Co., 100 postals	15
and printing	1.60
and princing	\$150.36

#### SUNDRIES.

Paid John B. Clarke, printing 125 re-	
ports, 42 pages	\$20.85
John B. Clarke, printing plan of	
Derryfield park	5.00
S. C. Forsaith Machine Co., 1,000	
chestnut stakes, pointed	15.00
Head & Dowst, lumber and labor	
at engineer's office	12.25
J. Hodge, 2,500 pine grade stakes	22.50

Paid J. B. Varick Co., paint brush	n, nai	ls,			
and twine			so	.59	
					\$76.19
Total expenditures .					\$3,499.90
Amount transferred to reserved fur	nd	•	•		.10
					\$3,500.00

## Health Department.

Appropriation	•	•	·	·	•			\$1,500.00
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## Expenditures.

#### LABOR.

Paid Geo. C. Hoitt, salary as health offi-		
cer from February, 1890, to Feb-		
ruary, 1891	\$200.00	
W. M. Parsons, salary as health of-		
ficer, as above	200.00	
Joseph B. Sawyer, salary as health		
officer, as above	200.00	
Russell White, inspector, 310 days'		
labor	620.00	
M. J. Jenkins, inspector, $229\frac{1}{2}$		
days' labor	516.38	
Chas. H. Reed, 30 days' services		
from Aug. 19 to Sept. 30, 1890	67.50	
		\$1,803.88

## PRINTING AND STATIONERY.

John B.	Clarke, 1	50 rep	orts,	16	
pages, co	over .				\$8.90
John B. Cl	larke, pul	lishing	noti	ce,	
3 inches	3 times				8.50

Paid Union Publishing Co., publishing		
notice, 4 squares 3 times .	\$8.00	
A. S. Campbell & Co., printing 650		
blanks and 100 2-cent envelopes	7.50	
A. S. Campbell & Co., printing 200	• 5	
note heads	1.10	
Budget Job Printing Co., printing		
health bulletins for January .	2.50	
Frank H. Challis, printing health		
bulletins for 5 months ending		
June 30	12.50	
Frank H. Challis, printing health	12.30	
bulletins for 3 months, July, Au-		
gust, September	7.50	
Temple & Farrington Co., 1 record	7.30	
book	·55	
J. B. Sawyer, stationery	•45	
J. B. Sawyer, 500 one-cent stamped	•45	
envelopes	5.60	
J. B. Sawyer, stationery, etc.	3.86	
S. S. Piper, postmaster, 500 one-	3.00	
cent stamped envelopes .	6.00	
sent similared envelopes 1		\$72.96
		<i></i>
TEAMS.		
Paid F. X. Chenette, use of team	\$3.00	
F. X. Chenette, hacks and team re-		
moving family to the pest-house.	4.50	
J. Freeman, use of team	1.00	
M. J. Jenkins, horse car fares	4.75	
E. T. James, horse and buggy to		
Londonderry	2.50	
Russell White, horse-car fares	33.76	
Russell White, expenses to Law-		
rence and return	1.30	
<b>T</b>	-	

Paid Thos. Franker, services with team, burning bed and clothing infect-		
ed with typhoid fever David Perkins, burying large dead	\$1.50	
dog	τ.00	
Russell White, team carrying infect- ed bed to furnace	2"	
J. C. Nichols & Son, use of team .	.25 3.50	
J. E. A. Lanouette, 2 visits to Ger-	3.30	
vais family at pest-house	3.00	
		\$64.06
SUNDRIES.		
Paid John B. Hall, prescriptions for Ger-		
vais family	· §2.00	
George H. Dorr, appraising beds		
and clothing of Gervais family .	2.00	
A. L. Jenness & Son, use of hack		
by board of health A. D. Sherer, cleansing and fumi-	2.50	
gating tenement on Lake avenue		
(Gervais family)	2.50	
J. C. Nichols, use of horse and car-	2.30	
riage	2.00	
C. O. Phelps, removing and bury-		
ing dead horse, by order of board		
of health	2.50	
E. R. Angell, analysis of water, etc.	9.60	
		\$23.10
Total expenditures		\$1,964.00
Amount transferred to reserved fund .		36.00
		\$2,000.00

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# Repairs of Schoolhouses.

Appropriation			\$4,000.00
Amount transferred from reserved fund	•	•	44.88
			\$4,044.88

### Expenditures.

### MASON-WORK.

Paid B. W. Robinson, whitewashing,		
patching, labor, and stock on 14		
schoolhouses	\$184.08	·
Charles E. Lord, stock and labor		
on Spring-street schoolhouse .	231.58	
Paid B. W. Robinson :		
Brickwork on chimneys, smoke-pipe,		
etc	11.73	
12¼ days' mason labor, at \$3.50 .	42.87	
7 days' tending, at \$1.75	12.25	
2 casks of lime, $1\frac{1}{2}$ casks of cement $\therefore$	4.25	
1,600 brick at \$8.50, setting steps at		
Ash-street schoolhouse	13.60	
Paid Amoskeag Manufacturing Co., 18		
stones, 49.59 cubic feet, for Ash-street		
school basement steps	19.83	
-		\$520.19

#### PAINTING AND GLAZING.

Paid John A. Sargent, painting and glaz-	
ing, stock and labor on sundry	
schoolhouses	\$346.73
James R. Carr, frosting 8 windows	
at Webster-street schoolhouse .	2.00
Samuel A. Hill, 13 lights of glass	
and 5 pounds of paint in $4$	
schoolhouses	3.59

<ul> <li>Paid Samuel A. Hill, 11 lights of glass.</li> <li>J. C. Blaine, putty, glass, etc.</li> <li>L. &amp; W. Seiberlich, glass, paint, and varnish</li> <li>J. J. Abbott, painting and glazing in 5 schoolhouses</li> <li>J. J. Abbott, stain, shellac, varnish, and labor</li> </ul>	\$2.18 1.00 2.09 21.30 4.59	\$ <b>3</b> 83.48
CLEANING VAULTS.		
Paid J. S. Webster, cleaning 2 vaults in Webster district T. McKenna, cleaning 10 vaults at	\$2.50	
\$3.50 C. C. Webster, cleaning vault at	34.50	
Harvey district schoolhouse . C. C. Webster, cleaning vault at	2.50	
Goffe's Falls schoolhouse	2.50	\$42.00
WOODWORK.		
Paid Head & Dowst, for sheathing and other lumber at the Webster-street		
schoolhouse	\$22.31	
schoolhouse	40.22	
Head & Dowst, for sheathing and other lumber at the North Main-		
street schoolhouse George H. Dudley, labor, lumber,	3.40	
and hardware	1,157.74	
A. C. Wallace, stick of timber, flag pole	I 2.00	\$1,235.67

PLUMBING AND IRONWORK.

Paid Thos. A. Lane :		
For materials and labor in plumbing,		
piping, etc., in various schoolhouses	\$400.70	
Boiler for Ash-street schoolhouse, con-		
tract	490.00	
Plumbing materials, at Ash-street		
schoolhouse	575-42	
Hand-hold, packings, and labor on		
boiler	4.90	
Paid Mahurin Lightning Rod Co., for		
44 feet rod on Webster-street		
schoolhouse	17.60	
Mahurin Lightning Rod Co., for		
90 feet rod on new wing Web-		
ster-street schoolhouse	36.00	
Mahurin Lightning Rod Co., one		
point	2.00	
Pike & Heald, labor on furnaces,	-0-0	
boilers, etc	78.08	
J. B. McCrillis & Son, fire-irons for Ash-street schoolhouse	2.08	
D. J. Adams, fitting keys, repairs	2.08	
on door bell, etc.	1.65	
Manchester Heating and Lighting	1.05	
Co., bell and tube-work at Web-		
ster-street schoolhouse	146.00	
Amoskeag Manufacturing Co., 26	140.00	
pairs desk legs, 490 lbs., at 5c.	24.80	
Amoskeag Manufacturing Co., forg-		
ing for flag pole	2.54	
8 91		\$1,781.77

#### SUNDRIES.

Paid	George	Whitford,	grading	yard	at	
	Linco	oln-street so	hoolhous	e		\$19.37

Paid Henry C. Dickey, sinking and con-		
necting barrel at Bakersville		
schoolhouse	\$5.00	
Francis Galipian, filling for North		
Main-street schoolhouse yard, 356		
loads, at 15c	53.40	
Francis Galipian, grading of each		
load	1.50	
F. P. Colby, moving pianos at		
Webster-street schoolhouse .	1.50	
J. S. Avery, glazing 1 light of glass		
at Ash-street schoolhouse	.50	
Samuel Boyce, piling wood and		
setting glass at Varney school .	.50	
		\$81.77
Total expenditures		\$4,044.88

# Fuel.

Appropriation				
Amount transferred from reserved fun	d.	•	•	973.54
				\$4,673.54

# Expenditures.

### COAL.

Paid L. B. Bodwell & Co., 265,480 lbs.	
of egg coal	\$852.63
A. & D. M. Poore, 402,170 lbs. egg	
coal	1,258.78
Moore & Preston, 343,870 lbs. egg	
coal, at \$6.25	1,074.59
Moore & Preston, 24,000 lbs. egg	
coal, at \$7	84.00

Paid DeCourcy & Holland, 6,000 lbs. egg coal, at \$6.75 DeCoury & Holland, 6,250 lbs. egg coal	\$20.25 19.54	\$3,309.79
Paid DeCourcy & Holland, 1 cord hard wood, cut DeCourcey & Holland, 1 cord of	\$7.00	
white pine wood, cut L. B. Bodwell & Co., 1½ cords	5.50	
hard wood, sawed	10.50	
L. B. Bodwell & Co., 7 barrels .	.70	
L. B. Bodwell & Co., 266,810 lbs.	•	
egg coal	833.78	
Moore & Preston, 6 cords of beech		
and maple, sawed	40.75	
Moore & Preston, $38\frac{1}{2}$ cords of		
pine wood, sawed	148.50	
J. H. Proctor, 1 cord of pine wood,		
sawed and split	5.00	
W. Finley, sawing old wood	.75	
C. N. Harvey, $\frac{1}{2}$ cord of hard		
wood	2.87	
C. N. Harvey, ½ cord of pine		
wood	\$1.75	
C. N. Harvey, sawing and splitting	·75	
J. Hodge, kindlings	3.90	
M. Dana, moving wood	3.00	
S. A. Blood, $I_{4}^{1/2}$ cords of wood .	7.50	
Paid Warren Harvey :		
45 cords of wood for sundry schools .	265.50	
Teaming from Lincoln-street school to		
training school	1.50	
$I_{2}^{1/2}$ cords sawed at the high school $\cdot$ .	1.75	

1½ cords sawed at the South Main- street school	
house	\$1,343.25
CHARCOAL.	
Paid L. B. Bodwell & Co., 49 barrels charcoal	\$20.50
Total expenditures	\$4,673.54
Furniture and Supplies.	
Appropriation	\$750.00
Expenditures.	
CHEMICAL APPARATUS AND SUPPLIES.	
Paid Tebbetts & Soule, for chemical supplies $\ .$	\$60.85
HARDWARE.	
Paid Killey & Wadleigh, floor brushes, screwdriver, ax handle, pick handle,	
and other hardware	
2 wire door mats	
I truck for superintendent's office . 2.50 Screws, baskets, snow shovels, floor brush, brooms, water pails, steel	
hoes, and other hardware 74.36	
12 ash barrels, hardware, etc	
hardware	
	\$175.29

#### BOOKS AND STATIONERY.

Paid Silver, Burdette & Co., for b	isto	ries,		
index, and maps .			\$30.15	
A. G. Whitcomb, 5 dozen i	nk v	vells	10.25	
Paid J. L. Hammett :				
16 Stanford's maps			60.00	
3 gross maple rules			4.60	
1/2 dozen compasses			10.80	
т dozen call bells			7.00	
5 gross gem erasers			32.15	
1 gross Ross ink wells .		•	7.50	
20 gross lead pencils			45.00	
$\frac{12}{22}$ gross H. and C. compasses			10.80	
3 Johnson's maps			8.25	
Paid Ginn & Co., music charts			15.30	
				\$241.80

#### FURNITURE.

Paid Charles A. Hoitt	& 0	Co. :			
Re-seating chair					\$0.35
1 desk and 1 table					14.25
5 10-foot settees, 50	feet	: at 600		•	30.00
1 desk	•	•			11.25
2 office chairs .					3.00
3 chairs	•				2.62
Re-seating 2 chairs				•	1.10
2 2-gallon jars .					.90
Paid Temple & Farrin	gton	Co.,4	o sha	des,	
fixtures, rings,	and	labor	for	the	
Varney school	hous	е.			65.50
George F. King	g &	Merri	ll, 2	9-	
inch globes	•	•			8.00
George F. King	& 1	Merrill	, 4 p	airs	
of compasses					1.75
D. A. Simons, 2	chai	irs .			3.50
C. A. Abbott, 1	teac	her's d	es'a		9.65
35					

Paid George S. Perry, 2 revolving black- boards	25.00
bo <b>ar</b> d	5.40
George H. Richter & Co., 1 20-	
drawer Shannon cabinet, black	
walnut	56.00
Head & Dowst Co., 229 feet of sap-	
ling, sawing and planing foot-	
rests for small children	7.08
—	\$245.35

#### SUNDRIES.

Paid A. S. Barnes & Co., 10 gallons		
black ink	\$6.00	
Thorp, Adams, & Co., 10 gallons		
black ink	6.00	
A. N. Clapp, soap, Tuxedo, etc.	.89	
A. M. Eastman, ivorine, oil, gold		
dust soap, brooms, etc	3.40	
A. A. Jenkins, tuning piano at		
Franklin-street school	1.50	
A. A. Jenkins, 2 strings on piano		
at training school	.50	
A. A. Jenkins, tuning piano at		
high school	2.00	
Prang Educational Co., 12 bricks		
of clay, for molding in primary		
schools	2.88	
		\$23.17
Total expenditures		\$7.46.46
Amount transferred to reserved fund		3.54
		\$750.00

# Books and Stationery.

Appropriation	• •	\$300.00
Expenditures.		
SUNDRIES.		
Paid American Book Co., 2 Webster's		
International dictionaries American Book Co., 50 Wentworth's	\$17.20	
Arithmetical Problems J. L. Hammett, 10 quarts carmine	12.21	
ink	6.25	
quarto dictionary E. B. Woodbury, postal cards and	7.00	
paper	2.25	
paper for high school J. B. McCrillis & Son, 1 typewriter	. 2.4	
ribbon for high school	1.00	
J. B. McCrillis & Son, 500 sheets Griffin paper for high school	.65	
J. B. McCrillis & Son, 500 sheets Griffin paper for superintendent's	<i>,</i>	
office	.65	
Gill's fasteners, etc	10.05	
S. S. Piper, P. M., postage stamps for use of board	5.00	
Total expenditures		\$62.50
Amount transferred to reserved fund .	• •	237.50
		\$300.00

# Printing and Advertising.

Appropriation	•	•			•	•		\$.100.00
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### EXPENDITURES.

#### SUNDRIES.

SCADKI	2.3.		
Paid John B. Clarke, printing :			
130 postals, ringing out .			\$2.60
600 manuals, 16 pages, cover			16.75
200 certificates, teachers' .			1.75
125 organizations, 16 pages, bou	nd		16.00
250 postals, truant officer .			4.75
Advertising teachers' examination	ion,	3	
squares 2 weeks, daily .			10.50
Advertising teachers' examinati	on,	3	
squares 2 times, weekly .			5.50
160 lists mill pupils			4.60
300 cards for frames, to show	grade	2,	
classes, etc			1.50
300 ruled cards			2.25
160 lists mill pupils			6.00
50 placards			2.00
1,000 corporal punishment blan	ŝS		5.00
1,000 cards ruled two ways			4.00
Advertising Varney school, $5\frac{1}{2}$ s	quare	es	
2 times			6.20
1,000 half-note headings .			3.75
400 pamphlets			1.25
600 reports, 72 pages, cover, 4	plate	es	50.80
2,400 examination papers .			19.85
115 note circulars			2.50
700 examination papers			18.10
500 examination papers			11.00
554 tickets, reserved, high schoo			2.25
1,800 programs, high school .			10.00

40 lists teachers and salaries	\$4.50	
100 half-note circulars, contracts .	2.25	
Cutting and punching cardboard .	1.00	
Rebinding 3 vols. Scribner's Reader .	1.25	
Blank order book of 200 pages	3.75	
5,000 primary Friday cards	9.00	
160 lists mill pupils	7.00	
20 lists school slips	1.50	
5 lists school slips	.50	
125 letter circulars to teachers	6.00	
1,000 certificates	2.75	
1,500 cards ruled both ways	6.00	
2,825 blanks of various kinds	98.00	
1 blank record book	9.50	
		\$361.90
Paid A. S. Campbell & Co., 200 postals		
and printing	2.75	
A. S. Campbell & Co., 200 yea and		
nay cards	1.60	
A. S. Campbell & Co., 300 postals		
and printing same	3.86	
Daily Press Publishing Co., adver-		
tising teachers' examinations, 4		
squares 11 times	13.00	
Union Publishing Co., advertising		
teachers' examinations, 2 squares,		
Daily and Weekly, 2 weeks .	13.00	
		\$34.21
Total expenditures		\$396.11
Amount transferred to reserved fund		3.89
		\$400.00
Contingent Expense	9	
		* 0
Appropriation Amount transferred from reserved fund	• •	\$800.00
rimount transierred from reserved fund .	• •	131.92

\$931.92

# EXPENDITURES.

#### FRE1GHT.

Paid J. G. Jones, freight and cartage . W. R. Blakeley & Co., moving books from North Main-street to	\$33.65	
Varney schoolhouse W. R. Blakeley & Co., trucking school furniture from and to sun-	2.30	
dry schoolhouses	7.00	\$42.95
WATER AND GAS.		
Paid Manchester Water-works, water for October, November, and Decem- ber, 1890	\$91.20	
People's Gas-Light Co., for gas .	145.18	\$236.38
SUNDRIES.		
Paid Killey & Wadleigh, r feather dus- ter, steel rake, lag screws, cord,		
and other hardware J. B. Varick Co., oil, cord, shoe pegs, floor brushes, 1 steel rake, 1 dog seissors, rim locks, window	\$2.65	
brush and handle Higgins Bros. Co., use of 25 chairs	10.10	
at Opera House L. K. Mead, 3 boxes chlorides (dis-	1.50	
infectant). Manchester Hardware Co., wrap- ping twine, floor brushes, screw	1.26	
hooks and eyes, wire nails Edward B. Woodbury, postage	3.86	
Edward D. Woodbury, postage .	3.00	

Paid Temple & Farrington Co., card-	
board, drawing paper, carbon pa-	
per, 120 sheets of paper, and	
other stationery	\$4.40
Temple & Farrington Co., 1 box of	
charcoal, 2 quires 50-pound pa-	
per for drawing at high school	1.20
C. A. Trefethen, repairs on clocks	
and microscope from April 22 to	
October 28 · · · ·	8.50
C. A. Trefethen, repairs on clocks	
February 9 to October 10, 1891.	20.50
Peter Harris, keys, key rings, re-	
pairing locks	.65
W. P. Goodman, mucilage, memo-	
randa, inkstands, and other sta-	
tionery	10.01
J. S. Avery, setting glass at sundry	
schoolhouses	3.50
Allen N. Clapp, 6 pounds soap	1.02
Hammond Typewriter Co., 1 dozen	
blue carbon, superintendent's	
office	.50
Manchester Heating and Lighting	-
Co., 2 glass jars for the high	
school battery	.70
Pike & Heald, dipper, waste, mop	
sticks, cleaning and repairing	
stoves and pipes, brushes, labor,	
	25.72
etc. George S. Perry, 40 packages sand	-51
	6.00
disks George S. Perry, 12 No. 12 turkey	
	5.00
dusters	5.5.5
R. H. McDonough, chloride of	3.33
lime (disinfectant)	5.55

Paid Thorp & Adams Manufacturing Co.,	
10 gallons jet black ink, less kegs	
returned	\$5.10
A. A. Jenkins, repairing and tun-	- 0
ing pianos	20.00
A. A. Jenkins, tuning piano at Op-	
era House (graduation) .	2.00
William E. Buck, for carriage hire,	
visiting schools	56.00
William E. Buck, for telegrams and	
expressage	34.79
William E. Buck, for postage, stamps	54.75
and cards	7.00
William E. Buck, for carriage hire,	1.00
visiting schools, etc.	35.00
Gust. Foster, rent of hall for school	34.00
E. T. James, horse and sleigh .	3.00
G. H. Dudley, 3 days' labor on in-	3,00
ventory	7.50
Wyckoff, Seamans & Benedict, 1	7.50
No. 5 5778 Remington type-	
writer	100.00
Wyckoff, Seamans & Benedict, 2	100.00
8-drawer cabinets	48.00
Wyckoff, Seamans & Benedict, 2	40.00
Longley copy holders	3.00
Opera House Co., rent of Opera	3.00
House, Thursday, June 25, 1891	25.00
William Heron, Jr., 134 diplomas.	25.70
Albert Somes, expenses to Boston	23.70
and return	4.65
William H. Elliott, 4 pitch pipes .	1.00
William H. Elliott, 1 plano cover.	2.50
Ginn & Co., 1 new 2d music chart	-
J. L. Hammett, books and maps .	7.75 21.15
Prang Educational Co., 100 school	21.15
squares No. 2	6 ==
squares NO. 2	6.55

		Paid Eastern Educational Bureau, sub-
		scription for "Common School
		Education '' for year beginning
	\$2.00	January, 1890, for training school
		Educational Publishing Co., sub-
		scription to "Popular Educator,"
		beginning November, 1890. for
	1.00	training school
		Frank II. Kasson, subscription for
		"Education" for two years begin-
	6.00	ning January, 1890
		Ruby I. Fox, cleaning Youngsville
	2.50	schoolhouse in December, 1890 .
		Margaret Flynn, cleaning school-
	2.50	house at Goffe's Falls
	5.50	Frank W. Fitts, ribbon for diplomas
		Hale & Whittemore, framing 4 pho-
	8.00	graphs school buildings
		Harley & Robbie, ribbon for diplo-
	1.19	mas
	10.00	S. S. Piper, P. M., postage stamps
	1.56	Joel Daniels & Co., paint
	I.4.00	Frank P. Colby, moving pianos .
		F. T. E. Richardson, cash paid ex-
	35.25	penses of musical festival
\$652.59		
\$931.92		Total expenditures

# Care of Rooms.

Appropriation							\$3,700.00
Amount transfer	red fi	rom re	eserve	d func	ł.		15.75
							\$3.715.75

### Expenditures.

### LABOR.

Paid J. S. Avery, janitor high and Ash-	
street schoolhouses	\$600.00
Ella F. Barker, janitor Hallsville	
schoolhouse , ,	34.50
Inez M. Warren, janitor 14 weeks	-
Stark schoolhouse	14.00
Joseph C. Blaine, janitor South	
Main-street schoolhouse	243.52
James E. Bailey, janitor Amoskeag	
schoolhouse	170.00
E. P. Cogswell, janitor training-	
school house	360.55
E. P. Cogswell, extra labor piling	
wood	.50
H. C. Dickey, janitor Bakersville	
schoolhouse	295.84
D. S. Dunbar, janitor Mosquito	
Pond schoolhouse 23 weeks	18.00
Andrew Dobbins, janitor Goffe's	
Falls schoolhouse	37.00
Rose Elliott, janitor Webster's Mills	
schoolhouse	17.50
Della R. Webster, janitor Hallsville	
schoolhouse	7.00
E. J. Ela, janitor Harvey district	0
schoolhouse	47.87
Olive A. Rowe, janitor Hallsville	
schoolhouse 14 weeks	21.00
Michael Finley, janitor at Webster	
and Blodget street schoolhouses . Ruby I. Fox, janitor Youngsville	277.75
schoolhouse	14.00

Paid Samuel A. Hill, janitor at West		
Manchester schoolhouses at \$525		
per year	\$337.50	
Samuel A. Hill, janitor at Varney		
and School-street schoolhouses at		
\$450 per year	75.00	
Samuel A. Hill, extra labor from	75	
December 24, 1890, to January		
31, 1891, 39 days	26.88	
Wm. H. Morrill, janitor at Spring-	20.00	
street and Lowell-street school-		
houses at \$350 per year	250.01	
A. M. Robinson, janitor at Stark	350.04	
district schoolhouse	26.25	
Etta P. Prostor ignitor at Vounge	26.25	
Etta B. Proctor, janitor at Youngs-		
ville schoolhouse	7.00	
Etta B. Proctor, cleaning school-		
house	2.50	
Wm. Stevens, janitor Lincoln and		
Franklin street schoolhouses 6		
months at \$600 per year	300.00	
Wm. Stevens, janitor at Lincoln		
street and Wilson Hill school-		
houses at \$450 per year	225.00	
H. G. Batchelder, janitor at Varney		
and South Main street schools .	66.30	
V. M. Curran, janitor at Webster		
and Blodget street schoolhouses	122.20	
Harry Richardson, care of Foster's		
Hall, spring term	t 3.00	
Mrs. Nathan Sleeper, cleaning Halls-		
ville schoolhouse	2.50	
Tebbetts & Soule, 3 pints of am-		
monia delivered to E. P. Cogs-		
well	.60	
J. C. Blair, brooms, mop, pearline,		
and soap	1.95	
Total expenditures		\$3.715.75

# Evening Schools.

Appropriation	· .	\$1,500.00
Expenditures.		
SALARIES.		
Paid Nellie Atwood, 10 evenings at \$1.00 Charles W. Bickford, 20 evenings	\$10.00	
at \$2.20	44.00 28.80	
Charles E. Cochran, 80 evenings at \$2.20 Etta S. Dana, 30 evenings at 90c.	176.00 27.00	
Lizzie D. Hartford, 40 evenings at \$1.00.	10.00	
Maggie G. Linen, 85 evenings at 90c	76.50	
90c	9.90	
	62.00	
F. S. Sutcliffe, 25 evenings at \$2.20 M. J. Brickett, 5 evenings at 90c	55.00 4.50	
Alice H. Boyd, 45 evenings at \$1 Gertrude A. Burns, 34 evenings at	45.00	
90C	30.60	
Mary A. Clement, 45 evenings at \$1 L. H. Carpenter, 45 evenings at	45.00	
\$2.20	99.00	
Edith S. Dole, 20 evenings at 90c	18.00	
David Ekvall, 44 evenings at 90c. Nellie M. James, 10 evenings at	39.60	
90c	9.00	
Millie S. Morse, 25 evenings at 90c. Arthur W. Morgan, 45 evenings at	22.50	
\$1.00	45.00	

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EVENING SCHOOL MECHANICAL	DRAWING.	557
Paid Evelyn E. Prescott, 37 evenings at 900 John J. Shea, 44 evenings at 900	\$33.30 39.60	\$960.30
JANITOR5.		
Paid William H. Morrill, for services as janitor Samuel A. Hill, services as janitor J. C. Blaine, services as janitor .	\$77.80 6.00 17.20	\$101.00
SUNDRIES.		
Paid John B. Clarke, printing 75 placards Allen N. Clapp, 2 gallons of oil .	\$3.00 .23	\$3.23
Total expenditures Amount transferred to reserved fund .	 	\$1,064.53 435.47
		\$1,500.00
Evening School Mechanical	Drawing	
Appropriation		\$600.00
Expenditures.		
SALARIES.		
Paid Henry W. Allen, for services . John M. Kendall, for services . A. H. Sanborn, for services .	\$178.75 1c8.00 131.25	\$418.co

### JANITORS.

Paid W. H. Morrill, for services . . §30.00

#### SUPPLIES.

Paid J. B. Varick Co., 300 thumb tacks .	\$1.80	
J. B. Varick Co., 1 gross thumb		
tacks	2.25	
J. B. Varick Co., 24 rubber tri-		
angles, 6 inch, 60 x 30 .	8.40	
John B. Clarke, 75 placards	3.00	
John B. Clarke, 1,500 note circu-		
lars	8.50	
Novelty Advertising Co., 1 No. 2		
midget stamp	1.25	
Novelty Advertising Co., 500 labels		
for models	1.00	
E. R. Coburn, drawing paper	31.64	
Head & Dowst, labor and lumber .	40.92	
D. A. Simons, 7 stools	5.95	
		\$104.71
Total expenditures		\$552.71
Amount transferred to reserved fund		47.29
		+600.00

\$600.00

# Teachers' Salaries.

Appropriation		. \$47,000.00
Amount transferred from reserved fund		. 2,398.52
		\$49,398.52

#### Expenditures.

Paid teachers,	as per	pay-r	oll:		
January					\$4,011.00
February					5,528.48
March .					4,724.73

# FREE TEXT-BOOKS.

April			•			\$4,865.42	
May						5,317.43	
June	•					4,971.53	
Septem	ber	•			•	4,905.94	
Octobe	r					5,003.75	
Novem	ber					5,126.34	
Decem	ber					4.943.90	
Т	otal	expen	ditur	es .		· · \$49,39	98.52

# Free Text-Books.

Appropriation			. \$3,000.00
Amount transferred from reserved fund	•	•	. 210.73
			\$3,210.73

# Expenditures.

### FREE TEXT-BOOKS.

Warren P. Adams       .	Paid American Book Co.	•		\$995.66
E. R. Coburn & Co.,       19.20         Effingham, Maynard & Co.       38.08         John B. Clarke       8.75         D. C. Colesworthy       45.60         William P. Goodman       7.20         Joseph Gillott & Sons       43.18         Ginn & Co.       309.94         D. C. Heath & Co.       113.49         Houghton, Mifflin & Co.       10.35         J. L. Hammett       46.70	Warren P. Adams .			44.54
Effingham, Maynard & Co.       38.08         John B. Clarke       8.75         D. C. Colesworthy       45.60         William P. Goodman       7.20         Joseph Gillott & Sons       43.18         Ginn & Co.       309.94         D. C. Heath & Co.       113.49         Houghton, Mifflin & Co.       10.35         J. L. Hammett       46.70	Boston Supply Co.			15.50
John B. Clarke       8.75         D. C. Colesworthy       45.60         William P. Goodman       7.20         Joseph Gillott & Sons       43.18         Ginn & Co.       309.94         D. C. Heath & Co.       113.49         Houghton, Mifflin & Co.       10.35         J. L. Hammett       46.70	E. R. Coburn & Co.,			19.20
D. C. Colesworthy       .	Effingham, Maynard &	Co.		38.08
William P. Goodman       7.20         Joseph Gillott & Sons       43.18         Ginn & Co.       .       309.94         D. C. Heath & Co.       .       113.49         Houghton, Mifflin & Co.       .       10.35         J. L. Hammett       .       .       46.70	John B. Clarke .			8.75
Joseph Gillott & Sons	D. C. Colesworthy			45.60
Ginn & Co	William P. Goodman			7.20
D. C. Heath & Co	Joseph Gillott & Sons			43.18
Houghton, Mifflin & Co	Ginn & Co			309.94
J. L. Hammett	D. C. Heath & Co.			113.49
	Houghton, Mifflin & C	lo.		10.35
Harron & Dros	J. L. Hammett .			46.70
narper & bros	Harper & Bros			16.85
G. F. King & Merrill	G. F. King & Merrill			300.06
Lee & Shepard 8.49	Lee & Shepard .			8.49

Paid J. B. Lippinco	ott			\$78.00	
Novelty Adver	tising Co.			.63	
G. L. Perry .				116.09	
Prang Educati	onal Co			198.76	
Carl Schoenho	of			10.44	
Silver, Burdett	е & Со			43.00	
Smith & White	e			50.79	
Thorp & Adan	ns			68.40	
Thompson & I	Brown .			31.65	
University Pub	olishing Co.			58.19	
William Ware	& Co			268.20	
Educational Pu	ublishing Co.			I.00	
Leach, Shewell	& Sanborn			3.60	
					\$2,952.34
	LABOR,	ETC			
Paid J. G. Jones, ca	0			\$7.88	
Fannie L. San	born, for ser	vices	as		
clerk .	· ·		•	250.50	
					\$258.38
Total exper	nditures .	•	•	• •	\$3,210.73

# City Library.

Balance from las	t yea	r une:	spend	ed			\$5,888.17
Appropriation				•	•	•	3,800.00
							\$9.988.17

# E (PFNDitures.

# LIBRARIAN AND ASSISTANT.

Paid Mrs. M. J. Buncher			\$800.co	
A. F. Payne, assistant	libr	arian	353.85	
				\$1,153.85

### CITY LIBRARY.

#### CATALOGUE.

Paid Charles A. Durfee \$750.00	
Emma A. H. Piper, assistant in	
cataloguing 372.45	
Paid Temple & Farrington Co. :	
1/2 ream of cap	
1 record	
500 postal cards, printed for library . 6.50	
600 gummed slips, printed for library . 1.25	
1 bottle of ink	
12 lbs. paper and cutting 1.20	
Cutting paper	
	\$1,133.41
NEW BOOKS.	
Paid trustees of city library	\$1,000.00
BINDING, RE-BINDING, AND SEWING.	
Paid Temple & Farrington Co	\$354.92
GAS, FUEL, AND INSURANCE.	
Paid People's Gas-Light Co., for gas . \$200.06 L. B. Bodwell & Co., 20,045 lbs.	
egg coal, at \$6.50 65.15 L. B. Bodwell & Co., 131,015 lbs.	
egg coal, at \$6.25	
slabs 2.25	
A. & D. M. Poore, ½ cord of pine wood 2.50	
A. & D. M. Poore, $\frac{1}{2}$ cord of hard	
wood	
policy No. 1,108, Etna Insurance	
Co 62.50 36	

Paid L. B. Clough, agent, premium policy No. 32,700, New Ha		
shire Insurance Co	\$62.50	\$807.63

#### NEWSPAPERS.

Paid John B. Clarke, for daily "Mirror and Ameri- can," to April 1, 1891	
SUNDRIES.	
Paid Temple & Farrington Co., 1 blank-	
book, No. 3,064 \$4.50	)
Temple & Farrington Co., 5,600	
library cards	)
slips 9.00	)
C. F. Livingston, printing 4,250	
covers	
John B. Clarke, printing 200	
reports, 32 pages, covers, 2 plates 15.00	<b>b</b>
John B. Clarke, 12 lbs. paper . 1.20	<b>)</b>
L. B. Bodwell & Co., 15 lbs. of ice	
daily, June 1 to October 1 . 4.37	,
	\$69.92
Total expenditures	
Balance transferred to new account	5,162.44
	\$9,688.17

# Fire Department.

Appropriation			. \$37,000.00
Amount transferred from reserved	fund .	•	. 3,641.04
			\$40,641.04

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# Expenditures.

### SERVICES.

Paid Thomas W. Lane, chief engineer	\$1,125.00	
Fred S. Bean, assistant .	125.00	
Ruel G. Manning, assistant	125.00	
Eugene S. Whitney, assistant	125.00	
Clarence R. Merrill, assistant	125.00	
Fred S. Bean, clerk	25.00	
		\$1,650.00

Paid 19 teamsters and engineers, as per pay-rolls :

January .				\$1,008.25
February				1,000.00
March .		•		1,011.00
April .				1,002.50
May .				978.50
June .				1,003.38
July .				999.25
August .				1,003.00
September		•		1,033.25
October .	•			1,022.25
November				992.25
December				1,027.50

CALL MEMBERS.

Paid Amoskeag Steam Fire Engine Co.,	
for the year 1891	\$1,485.00
Amoskeag Steam Fire Engine Co.,	
extra labor, July 3 and 4 .	8.00
Fire King Steam Fire Engine Co.,	
for the year 1891	1,485.00
Fire King Steam Fire Engine Co.,	
extra labor, July 3 and 4 .	8.00
N. S. Bean Steam Fire Engine Co.,	
for the year 1891	1,485.00

Paid N. S. Bean Steam Fire Engine Co.,	
extra labor, July 3 and 4 .	\$8.00
Merrimack Steam Fire Engine Co.,	
for the year 1891	1,485.00
Merrimack Steam Fire Engine Co.,	_
extra labor July 3 and $4$ .	8.00
Gen. Stark Steam Fire Engine Co.,	0
for the year 1891	1,485.00
Gen. Stark Steam Fire Engine Co., extra labor July 3 and 4	Q
Chemical Engine Co., for the year	8.00
1891	F 2 F 00
Massabesic Hose Co., for the year	535.00
1891	1.2.15.00
Massabesic Hose Co., extra labor	-,-+,).00
July 3 and 4	8.00
Pennacook Hose Co., for the year	
1891	1,245.00
Pennacook Hose Co., extra labor	
July 3 and 4	8.00
Excelsior Hook and Ladder Co., for	
the year 1891	2,0.45.00
Excelsior Hook and Ladder Co., ex-	
tra labor July 3 and 4	8.00
	\$12,559.00

### OTHER LABOR.

Paid Henry C. Crosby, 7 nights' service	
as driver of "doubling" horse	
on Hook and Ladder at 25c \$	1.75
* Charles M. Denyou, expenses to	
Lebanon on account of fire de-	
partment horses	5.42
Henry C. Parsons, 34 days and	
nights "doubling" horse on	
Chemical Engine Co 1	7.00

Paid Henry C. Parsons, 57 nights' cer- vice on Chemical Engine Co., as		
driver "doubling" horse . Henry S. Reed, 79 nights' driving	\$14.75	
"doubling" horse for Hose No. 1 Wm. Scheer, 6 days driving horse	20.25	
for Steamer No. 2	9.00	
as engineer for Steamer No. 2 . Stephen Thomes, 7 days' services	15.75	
as engineer for Steamer No. 3 . Stephen Thomes, 2 days' services	12.25	
as engineer for Steamer No. 2	3.50	
Fred Charron, for services	3.25	
Edwin E. Weeks, 2 weeks' services	35	
as engineer for Steamer No. 3	20.50	
J. N. Brown, 7 days' services as		
engineer for Steamer No. 2	12.25	
John Shea, 28 days' services as	12.25	
driver for Steamer No. 2	12.00	
Charles E. Stearns, for use of horse	42.00	
for Hose No. 5	3.00	\$180.67
LAUNDRY.		
Paid Mrs. George B. Forsaith, laundry		
work, etc.	\$31.25	
Mrs. H. M. Hulme, laundry work,	p3=3	
etc	50.90	
Mrs. C. C. Tinkham, laundry work,	30.90	
etc	24.52	
work, etc	14.30	\$120.97
		p120.97
FURNITURE, ETC.		
Paid Barton & Co., 25 yards matting at		
\$1.12 <sup>1</sup> / <sub>2</sub>	\$28.13	
*····/2 · · · · ·	".co.r.5	

Paid Barton & Co.	, 10 ya	rds m	atting	g at	
					\$7.87
Barton & Co.	, zincii	ng end	s.		3.00
Hale & Whitt	temore,	framii	1g 2 [	oho-	
tographs .					4.00
J. B. Jones, 3	office	chairs			3.75
Sargent's Cha	ir Brac	e Co.,	212 0	loz-	
en braces ac					7.50
Paid Darwin A. Sin	nons:				
1 water pitcher .					.40
1 bedstead .					4.50
2 mattresses .					3.75
1 wire spring .					2.55
2 chairs					4.00
2 chairs		•			3.50
2 comforters .		•			2.00
I pair of pillows					1.50
1 bedstead and o	ther fur	niture			21.80
Paid J. Stickney, 2					.67
J. Stickney, 1	piece	of mat	ting	cut	
to order .					1.75
Temple & Fa	.rringto	n Co.,	mak	ing	
and hangin		n Co.,	mak	ing	1.97
and hangin Temple & Fai	g 2 sha rringtoi	n Co., des 1 Co.,	mak 2 do	ing ozen	1.97
and hangin Temple & Fai	g 2 sha rringtoi	n Co., des 1 Co.,	mak 2 do	ing ozen	1.97 .84
and hangin	g 2 sha rringtoi ks .	n Co., des 1 Co.,	mak 2 do	ing ozen	
and hangin Temple & Far picture hoo Paid Weston & Hil 823 yards mattin	g 2 sha rringtoi ks . 1: g for N	n Co., des 1 Co., . S. B	mak 2 dc Sean	ing ozen Co.	
and hangin Temple & Fau picture hoo Paid Weston & Hil 823 yards mattin Zincing ends	g 2 sha rringtoi ks . I : g for N	n Co., des 1 Co., . S. B	mak 2 dc Sean	ing ozen Co.	.84
and hangin Temple & Fau picture hoo Paid Weston & Hil 823 yards mattin Zincing ends Sewing	g 2 sha rringtoi ks . l: g for N	n Co., des 1 Co., . S. B	mak 2 dc Sean	ring ozen Co.	.84 5.85
and hangin Temple & Fau picture hoo Paid Weston & Hil 823 yards mattin Zincing ends	g 2 sha rringtoi ks . l: g for N	n Co., des 1 Co., . S. B	mak 2 dc Sean	ring ozen Co.	.84 5.85 2.87
and hangin Temple & Fai picture hoo Paid Weston & Hil 8 <sup>2</sup> 3 yards mattin Zincing ends Sewing 2 <sup>1</sup> ⁄ <sub>4</sub> yards carpet tion	g 2 sha rringtoi ks . I : g for N for La	n Co., des 1 Co., . S. B ke ave	mak 2 dc Sean enue	ring ozen Co.	.84 5.85 2.87
and hangin Temple & Fai picture hoo Paid Weston & Hil 8/3 yards mattin Zincing ends . Sewing 2 <sup>1</sup> / <sub>4</sub> yards carpet tion 1 mat for Lake ar	g 2 sha rrington ks . l: g for N for La venue s	n Co., des n Co., . S. E ke ave	mak 2 dc	ing	.84 5.85 2.87 .50
and hangin Temple & Fai picture hoo Paid Weston & Hil 8 <sup>2</sup> 3 yards mattin Zincing ends . Sewing . 2 <sup>1</sup> 4 yards carpet tion . 1 mat for Lake a 6 pillow slips for	g 2 sha rrington ks . l: g for N for La venue s N. S. 1	n Co., des 1 Co., . S. E ke ave tation Bean (	mak 2 dc ean enue	ing	.84 5.85 2.87 .50 1.46
and hangin Temple & Fai picture hoo Paid Weston & Hil 8 <sup>2</sup> 3 yards mattin Zincing ends . Sewing . 2 <sup>1</sup> 4 yards carpet tion . 1 mat for Lake a 6 pillow slips for 2 spreads for N. S	g 2 sha rrington ks . l: g for N for La venue s N. S. I S. Bean	n Co., des 1 Co., . S. E ke ave tation Bean C Co.	mak 2 do ean enue Co.	ing	.84 5.85 2.87 .50 1.46 1.75
and hangin Temple & Fai picture hoo Paid Weston & Hil 8 <sup>2</sup> 3 yards mattin Zincing ends . Sewing . 2 <sup>1</sup> 4 yards carpet tion . 1 mat for Lake a 6 pillow slips for 2 spreads for N. 5 2 pillow shams fo	g 2 sha rrington ks . I: g for N for La venue s N. S. I S. Bean r Stean	n Co., des 1 Co., . S. E ke ave tation Bean ( Co. ner No	mak 2 do ean	ing	.84 5.85 2.87 .50 1.46 1.75 1.00 1.96 1.45
and hangin Temple & Fai picture hoo Paid Weston & Hil 8 <sup>2</sup> 3 yards mattin Zincing ends . Sewing 2 <sup>1</sup> / <sub>4</sub> yards care tion 1 mat for Lake au 6 pillow slips for 2 spreads for N. S 2 pillow shams fo 1 5-6 yards matti	g 2 sha rrington ks . I: g for N for La venue s N. S. I S. Bean r Stean ng for 3	n Co., des n Co., . S. E ke ave tation Bean ( Co. ner No Steame	mak 2 do	ing 	.84 5.85 2.87 .50 1.46 1.75 1.00 1.96 1.45 1.56
and hangin Temple & Fai picture hoo Paid Weston & Hil 8 <sup>2</sup> 3 yards mattin Zincing ends . Sewing . 2 <sup>1</sup> 4 yards carpet tion . 1 mat for Lake a 6 pillow slips for 2 spreads for N. 5 2 pillow shams fo	g 2 sha rrington ks . I: g for N for La venue s N. S. I S. Bean r Stean ng for 3	n Co., des n Co., . S. E ke ave tation Bean ( Co. ner No Steame	mak 2 do	ing 	.84 5.85 2.87 .50 1.46 1.75 1.00 1.96 1.45

Zincing ends for Fire King Co	\$3.62
Laying for Fire King Co	1.25
2034 yards matting for Vine street .	14.01
Zincing ends for Vine street	4.25
1018 yards matting for Vine street .	5.06
Laying for Vine street	.61
40 yards crash	4.00
$I_{+}^{1/2}$ yards matting for Vine street .	.85
Galvanizing iron on ends for Vine street	1.00
54 yards of matting for Webster street	36.45
Galvanizing iron on ends for Webster	
street	7.60
Laying matting for Webster street .	2.25
5/3 yards drapery silk	4.96
4 7-12 feet of rod	.23
1 pair of brackets	.13
Labor	
4 pairs pillows, sewing	1.00
12 pillow cases	2.25
6 sheets	5.52
	\$225.27

### PRINTING AND STATIONERY,

Paid John B. Clarke, printin	ng:			
300 envelopes				\$1.25
300 order blanks, bound				2.75
150 postal notices .	•			2.75
350 reports, 56 pages, cov	er, 2	2 plate	es.	35.30
250 1/2 note circulars				2.00
200 postal notices .				3.00
250 blanks, quarterly repo	rts			6.25
1,000 ½ note headings				2.75
50 18 note circulars .			•	1.25
10 cards box 56 .			•	1.25
500 postal headings .				6.50
Other printing				1.00
Paid Thomas W. Lane, po	stage	e on	re-	
ports				2.80

Paid L. T. Mead, ink, blotting paper, etc. Temple & Farrington Co., <sup>1/2</sup> M envelopes.	\$1.85 1.75	\$72.45
GAS AND TELEPHONE.		
Paid New England Telegraph and Tele- phone Co., use of telephone . People's Gas-Light Co., for gas .		\$1,004.01
FUEL.		
Paid L. B. Bodwell, 80,500 lbs. egg coal, at \$6.50	\$261.63	
wood	3.75	
slabs	7.09	
egg coal, at \$6.25 DeCourcy & Holland, 153,735	406.25	
lbs. egg coal, at \$6.25 Fred. Charron, sawing and splitting	480.40	
13 feet kindling E. P. Johnson Co., 30,790 lbs. egg	3.25	
coal, at \$6.25	96.22	\$1,258.59

#### FREIGHT AND TRUCKAGE,

Paid Boston & Maine R. R., for freight	\$0.50	
Concord & Montreal R. R., freight	11.63	
Thos. W. Lane, for expressage paid		
from January 8 to June 11	8.20	
John W. Wilson, for truckage at		
sundry times	4.50	
		\$24.8 <b>3</b>

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### FIRE DEPARTMENT.

### SUPPLIES.

Paid Boston Belting Co., 2 412-inch	
clamps, for suction hose	\$1.60
C. M. Bailey, 24 brooms (rattan) .	11.00
C. M. Bailey, 612 lbs. waste .	61.20
C. M. Bailey, 10 reams 15 x 20 tis-	
sue paper	5.00
J. A. & W. Bird & Co., 2 barrels	
	31.86
soda, 896 lbs	
soda, 448 lbs	15.68
Paid Cornelius Callahan Co. :	
3 Boston pipes \$45.00	
1 14-inch gauge 17.50	
#6	
\$62.50	
less long striker, returned 12.50	50.00
2 Coleman extra holders	20.00
Repairing chemical engine	3.50
1 chemical shut-off	17.50
1 New Eng. bell, and repairing striker	4.75
$1 I_{\frac{1}{6}}$ tap	1.50
die, for cutting thread	10.00
1 intermediate piece	1.00
Paid Cavanaugh Bros., bay horse, No.	
34, with commission and keep,	
\$332.25, less amount for horse	
sold at auction, \$42.50 .	289.75
Cavanaugh Bros., pair of gray	
horses	700.00
Eureka Fire Hose Co., 3,000 feet	
2 <sup>1/2</sup> -inch "knit jacket" fire hose,	
at 65c	1,872.00
Charles T. Holloway, 1 gross 3-	
ounce bottles, with rubber stops	7.00

Paid J. Hinman & Co., 1/2 gross pony		
bottles and corks	\$5.00	
A. W. Harris Oil Co., 5 gallons of	φ.j	
oil	3.40	
A. W. Harris Oil Co., 1 5-gallon	3.4-	
can	.75	
Dennis Kerwin, soap and soapine .	24.60	
Manchester Locomotive Works, I	2.4.00	
forged wrench	1.75	
J. B. McCrillis & Son, 2 pairs elec-	1.15	
tric wire cutters	35.00	
Plumer & Holton, 10 reefers	87.50	
George W. Rief, 5 stands for noz-	07.50	
	1 50	
zles	1.50	
polish Ford's Wheel-Hub Ring Co., 12	35.50	
0 ,		
rubber wheel-hub rings	I 4.00	
J. H. Wiggin & Co., 5 boxes, 30		
lbs. salt	Ι.ΟΟ	
J. H. Wiggin & Co., 12 bottles		
ammonia	3.00	
Killey & Wadleigh, 3 horse brushes	4.50	
Killey & Wadleigh, 1 pair 3 x 3		
butts	.15	
J. B. Varick Co., spirits of turpen-		
tine, drawing knife, and octagon		
rimmer	1.95	
A. H. Paige, stencil-plate alarm .	. 30	
A. H. Paige, 1 box black paste .	.50	
S. L. Flanders, 1 oil tank	1.25	
S. L. Flanders, 10 gallons of oil .	1.40	
S. L. Flanders, ½ cord wood	3.63	
		\$3.330.02

### PLUMBING AND REPAIRS.

Paid	James	R.	Carr,	30	lights	of	glass	
	and	setti	ng	•	•			\$10.31

Paid Flint & Little, grinding 12 fire-axes	\$1.50
S. F. Hayward & Co., 50 feet 4-ply	
engine hose	17.50
S. F. Hayward & Co., 2 sets 1-inch	
coupling and rings	3.50
Charles H. Hutchinson, labor and	
stock, repairing	18.27
Peter Harris, repairing lock, nozzle,	
etc	1.30
Head & Dowst, 4 brass pulleys .	. 40
Head & Dowst, labor and stock .	14.26
Thomas A. Lane, labor and plumb-	
ing materials	124.19
Mills & Sturtevant, lumber, hard-	
ware, and labor	28.57
Paid Manchester Locomotive Works:	
4 hours' labor	1.60
Repairs on steam fire engine No. 629.	1.60
Repairs on hose carriage	6.80
Repairs on chemical engine \$30.74	
Repairs on 4 trace chains	
with snap hooks 10.00	
\$40.74	
Creditor by 356 lbs. old	
copper tubes	~ 1 1
1 wheel cap, wrench, and fitting	5.14 1.25
4 pump leathers	4.00
Labor and stock on Amos-	4.00
keag steamer No. 1 . \$724.72	
Less 615 lbs. old copper	
tubes 61.50	
	663.22
1 day's labor on steam fire engine No.	U
621	4.00
621	1.00

Paid Manchester Mills, lumber, bolts,		
paint and labor repairing gate in-		
jured by steamer	\$18.16	
Pike & Heald, hardware, etc	14.97	
Sanborn Carriage Co., sundry re-		
pairs	1.15	
C. A. Trefethen, repairing clock .	I.00	
John K. Wilson, lumber and labor		
on stables at Webster-street en-		
gine house	52.31	
J. T. Beach, repairing hooks, bar,		
etc	3.60	
		\$1,000.60
HARDWARE.		
Paid Manchester Hardware Co., hardware	\$87.89	
Killey & Wadleigh, hardware	82.66	
J. B. Varick Co., hardware .	19.25	
5,		\$189.80
MEDICAL AND SURGICAL.		
Paid J. Alexander, visits and medicine	\$51.40	
A. W. Baker, dentistry on 12 horses	24.00	
J. O. Burbank, 2 packages horse		
powders	2.75	
E. H. Currier, Williams's sure cure	7.00	
A. L. Dodge, visits and medicines .	22.75	
G. H. Ellinwood, veterinary sur-		
gery	2.00	
A. D. Smith, medicines .	11.70	
Snelling & Woods, medicines and		
disinfectants	34.05	
Smith & Gould, 1 dozen lotion .	6.00	
Z. F. Campbell, Medicine .	22.12	
		\$183.77

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## CARRIAGE WORK AND CARRIAGE REPAIRS.

Paid A. Filion, making cart body and		
ironing the same for steamer		
No. 2	\$70.00	
A. Filion, repairing sleds, pole, and		
ironwork	5.50	
A. Filion, other repairs	7.85	
J. B. McCrillis & Son, for labor		
and materials on carriage repairs	795.92	
Manchester Locomotive Works, re-		
pairs on horse pole for the		
"''Squog'' hose wagon	12.00	
Manchester Locomotive Works,		
one horse pole, leather covered .	23.50	
Manchester Locomotive Works, re-	0.5	
pairs on Merrimack hose carriage	6.00	
Sanborn Carriage Co., sundry re-		
pairs	10.15	
·		\$930.92
BLACKSMITHING.		
Paid D. F. Cressey	\$104.00	
Thomas Hickey	76.50	
James Morrison	4.60	
Mahaney & McSweeney '	337.05	
J. O. Tremblay	97.45	
J. F. Woodbury & Co		
· · ·		\$650.10
HAY, GRAIN, ETC.		
Paid Daniel Butterfield o o 20 lb; hay	-2122	

Paid	Daniel Bu	tterfiel	d, 9,9	920 ll	⊳∴ha	ιy.	\$84.85
	city farm,	19,40	5 lbs.	hay			171.76
	William C	lark,	32,820	o lbs.	hay		207.46
	William A	A. Du	nton,	68o	lbs.	rye	
	straw						6.12

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Paid Drake & Parker, oats, shorts, meal,	
etc	\$686.13
H. Fradd & Co., 125 lbs. bran .	1.38
Charles Francis, 2,155 lbs. carrots .	17.24
Moore & Preston, 1,005 lbs. straw .	9.05
Partridge Bros., oats, feed, straw.	
etc	702.09
Pettee & Adams, oats, hay, straw,	
corn, etc	928.86
Waterman Smith, 11.485 lbs. of hay	86.14
L. Shelters, 36,880 lbs. of hay .	323.I2
B. E. Thompson, 10,035 lbs. of hay	85.29
John L. Woodman, 7,415 lbs. hay	59.32
Henry Chandler, 12 bushels carrots	9.00
C. D. Welch, 8,065 lbs. of hay .	70.98
G. L. Colby, 1,180 lbs. straw .	11.62
Melvin Hall, 26 weeks' pasturing	
department horses at \$1.25 .	32.50
Henry W. Parker, oats, shorts, etc.	185.25
J. H. Wiggin & Co., 1 bag of flour	.80
C. M. Wheeler, 5,880 lbs. carrots	
at \$18	52.92
Samuel T. Page, 14,805 lbs. hay .	133.25
A. D. Haynes, 8,295 lbs. hay at \$19	78.80

\$4,033.93

## HARNESS AND HARNESS REPAIRS.

# Paid Frederick Allen :

16 cans oleo						\$17.00
2 horse covers						6.50
Harness repair	з.					2.50
2 fancy horse	pads					10.00
Leathering po	le					2.50
1 fly terret						I.00
Cleaning, oilii	ig. ai	nd rej	airin	g harı	iess	12.68
1 cushion .						3.50
Paid W. H. Ada	ms, l	harnes	s, rej	bairs, 6	etc.	192.20

Paid Kimball Carriage Co., repairi	ing	
collars		\$2.00
Chas. E. Berry, 12 rein snaps		10.00
Chas. E. Berry, 6 trace snaps		6.50
Chas. E. Berry, new top of hame	е.	4.00
C. B. Merrill, 5 cans of oil .		5.00
Paid H. C. Ranno:		
Repairs on heavy express harness		35.75
3 dust blankets		9.00
Canvas cushion		1.75
1 express draw part		9.25
2 flag collars		1.50
1 pair double reins		3.50
4 whips		7.50
10 coat straps		3.50
3 whips		5.50
2 extra large fawn blanket hoods		I I.00
Harness, repairs, etc		56.58
Making over 2 salem collars .		5.00
1 pair 1/2-inch double pole straps		4.50
1 bristle horse brush		2.50
Part of swing harness		22.00
Horse collar		3.25
Parade bridle		3.90
Extra draw part		8.00
2 steel ring bits		1.00
Wool mat		2.00
Repairs, etc		5.60
3.9 lbs. woolen blankets		21.75
3 whalebone whips, eel-skin lined		6.00
Lettering blankets		2.00
Extra large blanket hood		5.00
Repairs, etc		1.40

\$514.11

#### LABOR.

aid labor of m	en an	d tea	ms, as	per	pay-re	oll, in dis-
trict No.	2:					
January						\$34.13
February						32.25
March .						20.25
April .						4.50
May .						10.95
June .						14.90
July .						28.23
August .						54.34
September						136.62
October						69.19
November						59.49
December						27.22

#### SUNDRIES.

\$492.07

Paid Thos. W. Lane, expenses to Spring-	
field, Mass., attendance on Na-	
tional Association of Fire Engi-	
neers, August 11, 12, 13 .	\$24.06
Thos. W. Lane, express at sundry	
times	6.30
Thos. W. Lane, telegrams	.65
Timothy Shea, cleaning vault, Mas-	
sabesic hose house	3.00
Cavanaugh Bros., use of horse 11	
days, at \$1.50	16.50
Cavanaugh Bros., use of horse 20	
days, from July 29 to August 18	20.00
Cavanaugh Bros., use of horse from	
Aug. 19 to Sept. 9	20.00
A. M. Finney, laying carpets .	20.04
Thos. Welch, cleaning vault .	3.50

## FIRE-ALARM TELEGRAPH.

Paid H. F. McKean, rent of stable 1	2		
months, to Dec. 1, 1891 .		\$24.00	
L. M. Aldrich, wicket in window	•	.75	\$138.80
Total expenditures .	•	· ·	\$40,641.04

# Fire-Alarm Telegraph.

Appropriation		•	•		•		•	\$1,400.00
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# Expenditures.

### LABOR.

Paid Geo. E. Bad	ger, 1	1 3-1	o daj	s' lab	oor		
at \$1.25						\$14.25	
Geo. N. Bur	pee, l	abor	•			6.00	
M. A. Weath	ers, la	bor s	tringi	ng wi	res		
across the	river					5.00	
Paid Thos. W. La	ne, Jr.	, lab	or as j	per pa	iy-	-0	
roll:						407.75	
October .	•					47.25	
November	•					45.50	
December						47.25	
Paid Chas. Kean,	labor					2.00	
							\$575.00

#### SUPPLIES.

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Paid Pike & Heald for acid, coal hod,	
and solder	\$1.90
Warren Harvey, 12 chestnut poles,	
7 inches, at \$3	36.00
Manchester Hardware Co., for sash	
cord, cutting plyers, screws, tools,	
lag screws, washers, bolts, oil,	
white lead, and 2 doz. split rings	10.83
37	0

Paid Manchester Hardware Co., 10 lbs.	
washers	\$0.80
Manchester Hardware Co., 500 6 x	
5% coach screws	13.75
Manchester Hardware Co., screws,	
trowel, and cement	1.43
Paid American Electrical Works:	
65 <sup>1</sup> / <sub>2</sub> lbs. 18 assorted annunciators at	
$25\frac{1}{2}$ c	16.70
14 lbs. 18 double con. office wire .	3.71
3 3-16 lbs. yellow fixture wire	2.81
1 box	.30
1034 lbs. continental braid	2.84
1034 lbs. continental braid 38 lbs. conductors 1752 lbs. conductors	8.93
$17\frac{1}{2}$ lbs. conductors	4.29
Boxes	·35
Paid J. H. Bunnell & Co., 300 No. 12	
B. & S. McIntyre connectors, 7c.	21.00
J. H. Bunnell & Co., 1 S. L. key .	1.50
J. H. Bunnell & Co., 24 Leck zincs	1.20
Manchester Locomotive Works, 8	
pieces of brass	1.00
W. H. Darling, 394 zinc	
castings \$137.90	
Creditor by 499 lbs. battery	
copper at 4c.,and 330 lbs.	
battery copper at 2c 26.56	
Jamos Baldwin Co. and colla pine	111.34
James Baldwin Co., 325 oak pins and 1 barrel	
	3.45
Electric Gas Lighting Co., 2 keys.	1.08
Electric Gas Lighting Co., pocket	- 9
screwdrivers and Boston tape . Electric Gas Lighting Co., 1 Samp-	.98
	- %-
son battery	7.80
Eastern Electrical Supply Co., 192 lbs. (2 miles) No. 14 galvanized	
	11.28
iron wire	11.28

Paid Eastern Electrical Supply Co., 2,293		
lbs. (5 barrels) blue vitriol at 140.	\$91.72	
Eastern Electrical Supply Co., 300		
feet No. 14 Clarke wire	5.17	
Eastern Electrical Supply Co., 1 lb.		
$\frac{1}{2}$ -inch tape	.45	
Pike & Heald, 45% lbs. of copper .	1.52	
New England Gamewell Co., 5 re-		
lease keys at 50c	2.50	
repairing alarm gong	8.35	
1 fire alarm gong	30.00	
Washburn & Moen Manufacturing		
Co., 324 lbs. copper wire (3		
miles) at $18\frac{1}{4}$ c	59.13	
E. S. Greeley & Co., 1 pair $16\frac{1}{2}$		
Weldon climbers	2.25	
E. S. Greeley & Co., 300 regular		
insulators	8.25	
E. S. Greeley & Co., 300 McIntyre		
connectors	10.20	
J. Hodge, 282 feet 3-inch spruce .	17.67	
J. Hodge, 211/ hours' labor	8.50	
J. B. Varick Co., 1 rachet bit brace	1.50	
J. B. Varick Co., 1 bit	.20	
J. B. Varick Co., 5 lbs. No. 18 cop-		
per wire	1.50	
Thos. A. Lane, 27 feet ½-inch pipe		
and labor	1.48	
		\$515.66

## FREIGHT, TRUCKAGE, ETC.

Paid A. L. Jenness, use of ho	orse	and	
wagon	•		\$11.50
W. B. Corey, truckage,	mo	ving	
poles, etc		•	13.25
J. W. Wilson, truckage			8.20

\$37.09	\$3.85	Paid Concord & Montreal R. R., freight on sundries Boston & Maine R. R., freight .
		SUNDRIES.
\$26.91	\$4.75 1.50 12.25 8.00 .41	<ul> <li>Paid Chas. E. Lord, stock and labor rebuilding chimney (damage by telegraph)</li> <li>Jas. R. Carr &amp; Co., painting 3 poles George Holbrook, stock and labor, damage by telegraph</li> <li>J. B. Clarke, printing 700 alarmbox lists</li> <li>J. J. Abbott, 3<sup>1/4</sup> lbs. of paint</li> </ul>
\$1,154.66 245.34	· ·	Total expenditures
\$1,400.00		
		Hydrant Service.
\$5,000.00	• •	Appropriation
		Expenditures.
\$5,000.00		Paid Water-Works, use of water
		· · · · · · · ·
		Firemen's Parade.
\$500.00 255.32		Appropriation . Amount transferred from reserved fund .

\$755.32

### REPORT OF THE CITY AUDITOR.

# Expenditures.

### SUNDRIES.

Paid John B. Clarke, printing 300 invita-		
tions, 300 envelopes, 175 circu-		
lars, 150 cards, 500 programs, for		
the year 1890	\$10.90	
John B. Clarke, printing orders for		
parade for 1891	2.50	
John B. Clarke, printing 300 invi-		
tations and envelopes for 1891.	4.00	
John B. Clarke, printing 500 routes		
of procession	3.00	
M. C. Paige & Co., 413 dinners at		
65c., for 1890	268.45	
M. C. Paige & Co., use of table and		
chairs	9.00	
M. C. Paige & Co., 458 plates, at		
70c., collation for 1891 .	320.60	
Manchester Military Band (First	-	
Regiment), services 1890	52.00	
Manchester Military Band (First	-	
Regiment), services 1891 .	52.00	
Thos. W. Lane, cash paid for post-		
age for 1890	3.50	
Thos. W. Lane, cash paid for post-		
age for 1891	2.87	
F. H. Pike, services as drum major		
for 1891	3.00	
Manchester Drum Corps, services		
rendered parade	10.00	
H. W. Cook, printing 250 Mer-		
chants' Week firemen's parade		
ribbon badges for 1891	12.50	
Thos. Brown, services at hall door.	1.00	
Total expenditures	• •	\$755.32

# Police Department.

Appropriation		•	•	•		•	. \$3	7,000.00
Amount transfer	red	from	reserved	fund	·	•		937.07
							\$3	7,937.07

Expenditures.

### SERVICES.

Paid	N. P. Hunt, police justice	•	٠	\$1,500.00	
	I. L. Heath, associate justice			82.00	
	J. B. Pattee, associate justice			8.48	
	J. C. Bickford, clerk .			600.00	
	H. W. Longa, marshal .			900.00	
	J. F. Cassidy, assistant marsl	nal		800.00	
	night patrol			20,972.50	
	day patrol			5,508.00	
	extra time cf regular patrol			829.71	
	extra time of special patrol			1,533.95	
	Thomas Francour, as janitor			63.88	
	Peter Larrabee, as janitor			579.00	
	Miss A. B. Brown, as matron			365.00	
	C. B. Hildreth, expenses to	Bostc	n		
	and Holyoke, looking for p	rison	er	10.00	
	C. B. Hildreth, services durin	g Me	r-		
	chants' Week			15.00	
					\$33,767.52

### GAS, ELECTRIC LIGHTS, AND FUEL.

Paid People's Gas-Light Co., for gas	\$280.98
Electric Company, 28 electric lights	216.57
Moore & Preston, $\frac{1}{2}$ cord sawed	
pine wood	2.75
L. B. Bodwell & Co., $\frac{1}{2}$ cord sawed	
hard wood	3.25
L. B. Bodwell & Co., 4,000 lbs. egg	
coal, Clinton station	1 2.50

Paid DeCourcy & Holland :         76,000 lbs. egg and broken coal         1,000 lbs. stove coal         2 cords wood, chunks         1 cord of birch, sawed and split         1 2 cords of hard wood, cut         1 2 cord of hard wood, sawed and split         1 cord of birch sawed and split         2 cords of hard wood, sawed and split         2 cord of birch sawed and split         2 cord of bard wood, sawed and split         64,805 lbs. egg and broken coal         2,200 lbs. egg coal	\$256.50 3.62 15.50 3.63 12.25 3.75 202.51 13.13	\$1,026.94
TELEPHONE AND TELEGR	APH.	
Paid New England Telephone and Tele-		
graph Co., telephones and tolls . Western Union Telegraph Co., for	\$159.95	
telegrams	22.52	\$182.47
TEAMS.		
Paid E. T. James, for use of teams . A. L. Jenness & Son, for use of	\$161.50	
hack	1.25	
A. Netble, for use of team	2.00	
George C. Wheeler, use of team .	2.00	
Joseph Monyer, use of team and services in arresting prisoner at		
Suncook, N. H	5.00	
J. C. Nichols & Son, use of team .	1.00	
Whitten & Fifield, use of team .	.75	\$173.50
FEEDING PRISONERS.		
Paid Daniel Davis, rations, from June 10		
to December 28, 1890	\$93.85	
Carl E. York, crackers	\$93.05 15.17	
		\$109.02

## PRINTING AND STATIONERY.

Paid John B. Clarke: Printing blank letter headings, bill- heads, blank warrants, blank writs,		
etc., for court and marshal's office .	\$47.75	
1 blank-book, roll-call	6.75	
100 reports, 8 pages, cover, 1 plate .	8.00	
1 blank-book, record of arrests .	12.00	
Advertising Fourth of July notice, 2		
inches 2 times	4.50	
Printing 150 1-letter headings	1.25	
200 photograph labels	1.25	
Paid A. S. Campbell & Co., printing civil dockets, blank writs, etc.,	0	
for the police court	82.75	
Temple & Farrington Co., ink, mucilage, and other stationery		
for the police court	5.86	
Temple & Farrington Co., ink, blotters, and other stationery, for		
police court	6.17	
Temple & Farrington Co., 250 en-		
velopes and 12 blocks	1.59	
Temple & Farrington Co., rubber		
bands, spool of tape, blotting-		
paper, etc	1.02	
Union Publishing Co., fireworks		
notice, 3 <sup>1</sup> / <sub>2</sub> squares 1 time	3.50	
		\$182.39
REPAIRS.		
Paid L. M. Aldrich, labor and lumber . M. J. Coleman, plumbing and ma- terials, labor on water-closets,	\$20.28	
sewer-drains, etc	95.14	

Paid James H. Cram, repairing shovels,		
bedstead, etc.	\$5.00	
J. J. Abbott, 3 lights of glass and		
setting	3.35	
Peter Harris, fitting key, repairing	0.00	
handcuffs, etc	2.75	
Head & Dowst Co., repairing roof		
and stock	10.51	
Head & Dowst Co., humber and	·	
labor	83.22	
Head & Dowst Co., labor in box-		
ing steam-pipes	5.25	
Thos. A. Lane, silver polish and		
labor	.70	
Thos. A. Lane, making fire tools .	3.60	
C. G. McDuffie, repairing snow		
shovels and chain	.40	
J. B. Varick Co., hardware	4.44	
Thos. A. Lane, boiler at police sta-		
tion, as per contract	445.00	
Thos. A. Lane, cutting hole through		
wall	10.00	
Thos. A. Lane, labor and materials		
on steam-pipe, etc	229.66	
Thos. A. Lane, plumbing, mate-		
rials, and labor	6.84	
Frank S. Bodwell, stonework on		
coal pocket at station, as per con-		
tract	180.00	
district No. 2, pay-roll	17.00	
		\$1,123.14

#### SUNDRIES.

Paid 1	Robitail	le Br	os., n	nilk, d	offee	, etc.		\$10.88
	Patrick	$\operatorname{Scol}$	lard,	broor	ns, n	atche	s,	
	etc.	•	•	•	•	•		13.96

Paid Carl E. York, coffee, milk, and	
sugar, from December 2 to Feb-	
ruary 25, 1891	\$26.66
B. F. Currier, 1 police belt	2.25
A. W. Graves, 1 13-foot ladder .	1.30
Paid Chas. A. Hoitt :	
Repairing chair	.50
3 chair cushions	3.25
1 table	6.00
I log pillow	1.25
Upholstering student chair	2.00
1 water cooler	2.75
Paid Weston & Hill, 23/4 yards matting	
and zincing	5.59
Weston & Hill, 2 yards oil matting	1.00
John Driscoll, second-hand range,	
etc	19.50
N. J. Whalen, police belts, straps,	
etc	13.38
N. J. Whalen, repairing police belt	1.00
Clark M. Bailey, matches, toilet	
paper, and paper bags	25.50
Longa and Cassidy, conveying pris-	0.0
oners	756.00
H. W. Longa, cash paid for witness	
fees and other expenses	99.08
Mrs. Filibert, washing blankets,	
towels, scrubbing, cleaning, etc	77.00
Thos. Franker, care of lost children	
(25)	23.00
Ada Franker, washing towels,	0
sheets, etc.	5.00
I. L. Carpenter, certificate of insan-	Ũ
ity (John Sullivan)	3.00
Dennis Kerwin, for soap	20.00
J. B. Varick Co., dusters, sponges,	
brushes, rope, and other supplies	7.39
· · · · · · · · · · · · · · · · · · ·	1 37

Paid J. B. Varick Co., 5 gallons ozone	
and 1 gallon can	\$13.15
Killey & Wadleigh, 1 22-inch	
duster	2.50
Killey & Wadleigh, 1 mop handle	. 1 5
O. P. Lucier, 3 Roberts ozonators	
at \$3	9.00
N. H. Colby, 6 dozen Elatol (dis-	
infectant)	27.00
L. K. Mead, medicines, ammonia,	
and other disinfectants . ,	22.87
L. K. Mead, 1 emergency case, etc.	6.60
L. K. Mead, prescription	·75
Frederick Perkins, extra services as	
surgeon, etc	116.00
Frederick Perkins, certificate of in-	
sanity, J. Sullivan	3.00
J. W. Wilson, trucking acid from	
depot	.50
Boston & Maine Railroad, freight	
on ammonia	.42
Dunn & Burns, killing 8 dogs from	
January 7 to March 2, 1891 .	4.00
Thomas Franker, killing 4 dogs .	2.00
Peter Larrabee, killing 27 dogs	
from February 21 to May 18,	
1891	13.50
Harley & Robbie, screen cloth .	1.26
Baker Telephone Index Co., G tel-	
ephone index for marshal's office	3.50
Higgins Bros., 1 stand lamp	2.50
L. W. Colby, 42 photographs of	
6 criminals	7.00
Thomas A. Lane, taking down signs	1.35
J. F. Cassidy, conveying Winfield	
Miner to the asylum for the in-	
sane at Concord, May, 1891 .	4.80

588 REPORT OF THE CITY AUD	TOR.	
Paid J. M. Collity, certificate of insanity, J. Sullivan	\$3.00	
		\$1,372.09
Total expenditures	• •	\$37,937.07
Repairs of Building	5.	
Appropriation Amount transferred from new schoolhous	e, West	\$2,500.00
Manchester	• •	71.05
		\$2,571.05
Expenditures.		
Paid Thomas A. Lane, 1 3-light chande- lier, Park-street wardroom .	¢ 1 50	
Thomas A. Lane, pipe, ties, and el-	\$4.50	
bows, Park-street ward-room . Thomas A. Lane, labor 2 men, 6	1.93	
hours	3.30	\$9.73
CITY STABLES.		
Paid Thomas A. Lane, plumbing mate-		
rials and labor	\$8.68	
Killey & Wadleigh, hardware .	1.30	
J. B. Varick Co., hardware	2.48	
Head & Dowst, 1,303 feet sheathing Head & Dowst, 65 feet spruce	31.88	
boards	1.04	
Head & Dowst, 250 feet hard pine		
floor boards	10.00	
Head & Dowst, other lumber .	1.35	
L. N. Westover, lumber and labor .	3.88	
W. F. Hubbard, door jambs, door		
casings, etc	4.48	\$65.09

### REPAIRS OF BUILDINGS.

### CITY LIBRARY.

Paid Thomas A. Lane, plumbing and labor       \$0.92         Paid R. Landers:       \$0.92         Paid R. Landers:       \$12.00         2 men 2 days' labor each       \$12.00         94 slate       \$2.24         12 lbs. cement       \$2.24         12 lbs. cement       \$15         Paid J. J. Abbott, 5 lights of glass and setting       \$1.25	
John Driscoll, materials and labor	
on roof, etc	\$96.18
BATTERY BUILDING.	
Paid Sullivan & Dunbar, materials and labor, painting \$125.82 L. N. Westover, labor and lumber . 2.87	\$128.69
VARNEY SCHOOL HOUSE.	
Paid George F. Higgins, concreting walks, 661,222 sq. yds. at 45c \$297.55 F. S. Bodwell, 8 steps for Varney school	\$414.87
COURT HOUSE.	
Paid Thomas A. Lane, labor of 2 men 32hours <t< td=""><td></td></t<>	

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<ul> <li>Paid Hillsborough county, 12 expense of repairs on steam heating apparatus</li> <li>J. J. Abbott, 3 lights and setting .</li> </ul>	\$43·33 2.75	\$161.03
CITY HALL BUILDING.		
Paid Head & Dowst Co., painting at drugstore Head & Dowst, lumber and labor on fence about the public com-	\$0.65	
fort	12.13	
rubber hose for public comfort M. J. Coleman, repairs on pipes,	2.50	
water-closets, etc.	7.06	\$22.34
ENGINE HOUSES.		
Paid M. J. Coleman, materials and labor at Merrimack engine house . M. J. Coleman, materials and labor	\$30.47	
at central station	117.31	
W. M. Darrah & Co., 29.59 squares	6.0	
5-ply beehive roofing W. M. Darrah & Co., other mate- rials and labor, Vine-street engine	146.83	
house John Driscoll, materials and labor	11.84	
on galvanized gutters, etc., on Vine-street engine house Marston & Gates Bros., mason-work,	27.30	
stock, and labor.	4.00	
L. & W. T. Seiberlich, paper and paper hanging, Fire King house	10.42	
J. Choate, varnishing inside of Fire King engine house	52.00	

Paid Head & Dowst, labor and	1 hard	ware		
Merrimack engine house .			\$1.50	
Webster-street engine house			38.96	
Fire King engine house .			42.02	
Vine-street engine house .		ż	271.87	
Massabesic hose house		·	30.31	
Lake-avenue engine house .			32.23	
Hook-and-Ladder house .	•		.30	
• Fire King engine house		•	.30 7.00	
Gen. Stark engine house .	•	·	.31	
Vine-street engine house .	•	·	164.59	
Webster-street engine house	·	•	8.15	
Fire King engine house .	·	·	.80	
Paid J. F. Larkin, putting in	•	r at	.00	
Webster-street engine l		i ai	6	
0		Iooli	51.76	
C. H. Hutchinson, repai on Webster-street scho				
			2.00	
J. R. Carr, room pap			0	
moldings, and hanging	g papei	• .	33.83	
	•••		00 0	CT 08- 80
Deidleben of money and to sure				\$1,085.89
Paid labor of men and teams	in dis	trict		\$1,085.89
Paid labor of men and teams per pay-rolls :	in dis	trict		\$1,085.89
	in dis	trict		\$1,085.89
per pay-rolls:	in dis	trict	No. 2, as	\$1,085.89
per pay-rolls : January	in dis	trict	No. 2, as	\$1,085.89
per pay-rolls : January February	in dis	trict	No. 2, as \$48.93 83.98	\$1,085.89
per pay-rolls : January February March	in dis	trict	No. 2, as \$48.93 83.98 117.63	\$1,085.89
per pay-rolls : January February March April <u>.</u>	in dis	trict	No. 2, as \$48.93 83.98 117.63 27.60	\$1,085.89
per pay-rolls : January February March April May	in dis	trict	No. 2, as \$48.93 83.98 117.63 27.60 21.00	\$1,085.89
per pay-rolls : January February March April May June	in dis	trict	No. 2, as \$48.93 83.98 117.63 27.60 21.00 27.00	\$1,085.89
per pay-rolls :         January       .         February       .         March       .         April       .         May       .         June       .         July       .	in dis	trict	No. 2, as \$48.93 83.98 117.63 27.60 21.00 27.00 21.00	\$1,085.89
per pay-rolls :         January       .         February       .         March       .         April       .         June       .         June       .         July       .         August       .	in dis	trict	No. 2, as \$48.93 83.98 117.63 27.60 21.00 21.00 21.00 21.00	\$1,08 <u>5</u> .89
per pay-rolls : January February March April May June July August September	in dis	trict	No. 2, as \$48.93 83.98 117.63 27.60 21.00 21.00 21.00 21.00 27.00	\$1,08 <u>5</u> .89
per pay-rolls : January February March April May June July August September	in dis	trict	No. 2, as \$48.93 83.98 117.63 27.60 21.00 21.00 21.00 21.00 21.00 21.00	\$1,085.89
per pay-rolls : January February March April May June July September November	in dis	trict	No. 2, as \$48.93 83.98 117.63 27.60 21.00 21.00 21.00 21.00 21.00 21.00	\$1,085.89 \$462.64
per pay-rolls : January February March April May June July September November	· · · · ·	· · · · ·	No. 2, as \$48.93 83.98 117.63 27.60 21.00 21.00 21.00 21.00 21.00 21.00	

pipe, central station . . . \$2.00

Paid M. J. Coleman, repairs on dra pipe, Merrimack engine house John Driscoll, repairs on roof		\$1.25	
central station	•	7.25	\$10.50
Total expenditures Amount transferred to reserved fund			\$2,456.96 114.09 \$2,571.05

# New Schoolhouse (Varney), West Manchester.

Balance from last year unexpended		
		\$1,199.75
Expenditures.		
FURNITURE.		
Paid Grand Rapids School Furniture Co.,		
50 desks, 8 rear seats, and 1		
teacher's desk	\$200.76	
Grand Rapids School Furniture Co		
2 single seats, rear	4.64	
C. A. Trefethen, 6 clocks at \$4 .	24.00	
C. A. Trefethen, I clock	5.50	
Chas. A. Hoitt & Co., 60 8-foot set-	0.0	
tees, 480 feet, at 60c.	238.00	
D. A. Simons, 18 chairs at 50c.	9.00	
D. A. Simons, 6 chairs at \$1.62 .	9.72	
J. W. Wilson, freight and truckage	.96	
		\$542.58
PRINTING AND ADVERTISI	NG.	
Deid Union Dublishing Co., advertising do	diantion	

Paid Union	Publishing	Со.,	adve	rtisin	g ded	icatio	1,	
4 squares 2	2 times							\$6.00

#### BUILDING.

Paid Thos. A. Lane, gas fixtures, as per		
contract	\$179.11	
Head & Dowst, labor and materials		
in making and erecting flag pole,		
and putting in electric bells and		
speaking tubes	322.02	
F. S. Bodwell, 3 stone steps	44.00	
A. N. Clapp, for fuse	.25	
D. F. Cressey, sharpening drills, etc.	5.24	
Labor of men and teams, district		
No. 10	18.00	
Labor of men and teams, district		
No. 10, in August	11.50	
		\$580.12
Total expenditures		\$1,128.70
Balance transferred to repairs of buildings		71.05
		\$1,199.75

# Addition to Webster-street Schoolhouse.

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## Expenditures.

#### CONTRACT.

Paid Mead, Mason & Co., on account,		
as per contract	\$4,987.00	
Mead, Mason & Co., changing 12		
second-story windows	44.00	
Mead, Mason & Co., extra door and		
trimmings in basement	7.00	
38		\$5,038.00

#### PRINTING AND ADVERTISING.

Paid Daily Press Publishing Co., for ad-	
vertisement of sealed proposals, 3	
squares 7 times	
Union Publishing Co., advertising	
for sealed proposals, 3 squares 6	
times 10.50	
	\$17.75
CONCRETE.	
Paid Chas. H. Robie, concrete work,	
124.4 yards at 25c	
Chas. H. Robie, concrete work,	
115.44 yards at 45c 51.95	29
	\$83.05
Total amount of expenditures	\$5,138.80
Amount transferred to Hallsville schoolhouse	2,861.20
	\$8,000.00

# Hallsville Schoolhouse.

### EXPENDITURES.

#### LAND.

### ARCHITECTS' COMPENSATION.

McFarland, Goodrich & McFarland, making plans for schoolhouse 5 McFarland,Goodrich & McFarland,	50.00 00.00 \$912.50
PRINTING AND ADVERTISING.	
Paid Daily Press Publishing Co., adver-	
tising for sealed proposals, 3	
1 , 0 ,	\$8.25
Union Publishing Co., advertising for sealed proposals, 3 squares, 8	
times	28.00
John B. Clarke, advertising for	
sealed proposals, from April 17	
to April 25, 1891, 2 inches, 7	
times	10.50
_	\$46.75

BUILDING.

Paid Head & Dowst, on contract :

	July .	•		·		•	\$4,000.00	
	August .						4,000.00	
	September						4,000.00	
	October						1,500.00	
	November						2,000.00	
	December						1,000.00	
								\$16,500.00
	Total e			з.				\$20,759.25
Bala	nce to new	accou	int		·	•		101.95

\$20,861.20

# Water-Works, Construction Account.

			\$27,667.74
Amount transferred from reserved fund	•	•	. 2,667.74
Appropriation			0.

### Expenditures.

### LABOR.

Paid men as per pay-rolls:

April					\$250.00	
May					210.00	
June					525.00	
July					700.00	
Augus	t.				325.00	
Septen	aber				375.00	
Octob	er	•			310.00	
Noven	nber				350.00	
Decen	nber		•		350.00	
						- 6

----- \$3,395.00

### SUPPLIES.

Paid Builders' Iron Foundry, iron pipe,	
branches, increasers, bends, etc	\$350.32
Chadwick Lead Works, 9,248 lbs. pig lead at \$4.40	406.91
Chadwick Lead Works, 639 lbs. 3- lb. pipe, \$38.42, less reels returned,	
\$11.98	26.44
Chadwick Lead Works, 100 lbs. fine solder	15.00
McNeal Pipe & Foundry Co., iron pipe, branches, etc.	9,767.43
Manchester Locomotive Works,	<i></i>
2,594 lbs. plugs, covers, and curbs Thos. A. Lane, couplings, unions,	77.82
elbows, etc.	15.49

Paid Chapman Valve Co., 12 6-inch bell-	
end water gates	\$141.90
Holyoke Hydrant and Iron Works,	
10 5-double hydrants, $5\frac{1}{2}$ feet.	355.00
Holyoke Hydrant and Iron Works,	
1055½ hydrants	3.40.00
Edison Manufacturing Co., 1 brass	
water-way valve for pump	3.23
Hays Manufacturing Co., 200 service	
boxes, 5 feet 9 inches.	200.75
Hays Manufacturing Co., 220 1-	
inch curb cocks at \$1.05 .	231.00
Hays Manufacturing Co., 1 1-inch	
Payne corp. cock, 18 bend .	1.15
Hays Manufacturing Co., cartage .	.50
Ludlow Valve Manufacturing Co.,	
1 10-foot, 1 12-foot, and 1 14-	
inch gates	126.50
Whittier Machine Co., 1,059 ft. 7	
inches of 1-inch "Adamanta"	
pipe, at 13½c., 3,692 feet 2 inch-	
es of 1-inch "Adamanta" pipe,	
less $37\frac{1}{2}$ per cent	423.70
Whittier Machine Co., 6 4-inch and	
6 6-inch bell-end water gates .	182.70
Sewall & Day Cordage Co., 204	
lbs. jute packing at $6\frac{1}{2}$ c	13.26
Thompson Meter Co., 1 2-inch me-	
ter	60.00
Thompson Meter Co., 20 58-inch	
meters	190.00
Thompson Meter Co., 3 34-inch	
meters	42.00
Thompson Meter Co., couplings .	10.95
Paid National Meter Co. :	
121 <sup>1</sup> / <sub>2</sub> -inch Crown Comp. meters .	1,936.00
$1^{\frac{1}{2}}$ -inch Crown Comp. meter	16.00

2 <sup>3</sup> / <sub>4</sub> -inch Crown Comp. meters			\$52.00
3 <sup>3</sup> / <sub>4</sub> -inch Crown Comp. meters			78.00
$1\frac{1}{2}$ -inch N. meter			10.75
Paid Smith & Anthony Stove Co., 2	2 coc	ks	6.05
Walworth Manufacturing Co	., 20	00	
corp. cocks			100.25
Walworth Manufacturing Co.	, г I	Э.	
Miller cutter, etc.			10.00
Paid Newark Brass Co., tapping m	achii	ne	
with gaskets:			
$\frac{1}{2}$ to 1 inch			50.00
$1\frac{3}{4}$ tap and drill (extra) .		•	2.75
1 1-inch tap and drill (extra)			3.00
$1\frac{1}{2}$ -inch corp. stop			.58
$1\frac{3}{4}$ -inch corp. stop			1.04
1 1-inch corp. stop			1.60
			<u> </u>

### HARDWARE, BLACKSMITHING, FREIGHT.

Paid Boston & Maine R. R., freight on		
iron pipe, hydrants, etc	\$1,353.96	
Concord Railroad Corporation,		
freight on pipe, oil, lead, etc.	21.53	
D. F. Cressey, sharpening tools, etc.	28.77	
Killey & Wadleigh, 1 keg of powder	2.75	
Manchester Hardware Co., 2 dozen		
Ames shovels	21.00	
Manchester Hardware Co., 1 dozen		
pick handles	1.75	
J. B. Varick Co., hardware of all		
kinds	39.92	
G. R. Vance & Co., 6 galvanized		
pails	6.00	
		\$1,475.68

### LAND.

Paid Samuel H. Hunting, land as per deed \$211.63

Paid Regina L. Brown, land in Auburn,		
as per deed	\$100.00	
James B. Hunting, land as per deed	152.31	
John J. Bell, land, etc., as per deed	800.00	
Woodbury A. Brown, land in Au-		
burn, as per deed	600.00	
Lizzie J. Richardson and others,		
land as per deed	215.00	
Mary E. & Joseph B. Young, land		
as per deed	337.00	
		\$2,415.94
SUNDRIES.		
Paid E. A. G. Holmes, labor and teaming	\$50.00	
Paid Jere. Hodge :		
97 feet 21 Michigan pine	6.60	
28 window blinds	26.76	
2 gothic blinds	3.25	
C. W. blinds, gothic heads	11.40	
Other lumber and labor	15.39	
Lumber, 2 <sup>3</sup> hours' labor	1.10	
50 boxes at 30c	15.00	
Paid Charles H. Hutchinson, repairing		
tools	.80	
A. Filion, repairing derrick	·75	
		\$131.05
Total expenditures		\$22,667.74
Amount transferred to water-works repairs		5,000.00
1		
		\$27,667.74

# Water-Works, Repairs.

Appropriati	on	•				•	•	\$17,000.00
Transferred	from	wate	r-worl	ks, co	onstru	ction		5,000.00
								\$22,000.00

### EXPENDITURES.

### LABOR.

\$615.78 578.30 608.55 775.38

Paid	l labor of	men	, as p	er pay	-rolls	:		
	January							
	February	;		•			•	
	March	•			•	•		
	April			•		•	•	
	May		•		•		•	

1,067.91 June . . . . . . 754.29 July . . . . . • 397.43 August . . . . . 697.21 . September 867.30 . . . . . October . 616.25 . . . . . November 370.52 . . . . . December . 582.33 . . . . \_\_\_\_\_

\$7,931.25

#### IRON PIPE, CASTINGS, LEAD, ETC.

Paid Builders' Iron Foundry, 5 br Chadwick Lead Works, 13,9			\$33.25
lead	•		610.83
2,156 lbs. castings at 3c 96 rough bolts at 8c		.68 .68	
Less 5,930 lbs. cast iron .	\$72 47	.36 .44	
1,000 lbs. castings	•		24.92 30.20
3,252 lbs. castings at 3c 1,190 lbs. castings at 3c 6 3-10 days' labor		•	97.56 35.70 26.00
$37\frac{1}{2}$ lbs. steel at 4c Team	•	•	1.50
205 lbs. castings at 3c.		•	6.15

Paid Taunton Locomotive Works, 66 lbs.	
grate casting at 4c	\$2.64
Paid Union Brass Co.:	
I dozen 12-inch corporation cocks	
with couplings	5.75
2 dozen 1/2-inch corporation cocks .	11.50
1 dozen 34-inch corporation cocks .	8.50
1 dozen 1-inch sold. nipples	1.25
2 dozen 1/2-inch corporation cocks,	
without couplings	9.50
Paid Union Water Meter Co., for meters	
and repairs	264.41
M. T. Davidson, $\mathbf{I}_{2}$ -inch globe	
check valve	·75
National Meter Co., repairs on	
meters	64.50
Peet Valve Co., 1 6-inch H. E.	
grate	I 2.00
Peet Valve Co., 4 6-inch H. E.	
grates	48.00
McNeal Pipe & Foundry Co., iron	
water pipe and branches, pipe at	
\$28.50 per ton, branches at $2\frac{1}{2}c$ .	
per pound	10,000.00
Paid Manchester Locomotive Works :	
2 curbs, 238 lbs., at 3c	7.14
12 6-inch plugs, 205 lbs., at 3c	6.15
96 rough bolts and nuts at 8c	7.68
I cover with rings, 60 lbs. plate at 6c.	3.60
$2\frac{1}{2}$ hours' labor	I.00
	<u> </u>

OIL, BELTING, PACKING, AND OTHER SUPPLIES.

# Paid Boston Belting Co., 191/2 lbs., pack-

ing at 50c		\$9.75
J. Hodge, 100 meter boxes		30.00
36 feet 3-inch Georgia pine		1.80

Paid 1 hour's labor	\$0.40
P. C. Cheney Co., 461 lbs. No. 1	÷ .
wiping waste at 8c	36.88
Thomas A. Lane, plumbing mate-	30.00
rials, valves, hose, etc.	83.41
Leonard & Ellis, $5\frac{1}{2}$ gallons of oil	
Underhau Oll Carl haund war	31.50
Underhay Oil Co., ½ barrel mon.	
grease, 251 lbs. at 16c	40.16
Underhay Oil Co., ½ barrel mon.	
red engine oil, 50 4-5 gallons at	
бос	30.48
Merrill & Freeman, 1 barrel cement	1.45
Pettee & Adams, 28 barrels cement	41.20
Pettee & Adams, I barrel of lime .	1.00
J. Stickney, 3 lbs. belt leather .	·75
J. Stickney, 4 oak leather packings,	
cut to order	20.25
J. Stickney, 1 dozen rubber chair	5
tops	·75
Fred H. Holton & Co., 25 rubber	.75
washers	1.50
Sewall & Day Cordage Co., 6 coils	1.50
jute packing, 620 lbs	40.30
Vacuum Oil Co., oil	24.33
A. M. Eastman, 14 gallons of oil .	2.52
BLACKSMITHING, HARDWARE, AND	FREIGHT.
Paid D. F. Cressey, sharpening picks and	

\$398.43

Paid D. F. Cressey, sharpening picks and	
other tools	\$65.76
Concord Railroad Corporation,	
freight on pipe, meters, etc.	1,149.53
Killey & Wadleigh, hammer and	
brass lantern Manchester Hardware Co., 1 breast	1.50
drill	2.25
Manchester Hardware Co., 1 <sup>1</sup> / <sub>2</sub> doz-	2.25
en shovels	15.75

Paid G. R. Vance & Co., 1 fire-pot	\$1.00	
J. B. Varick Co., hardware of all		
kinds	110.69	
Waldo Bros., 5 barrels raw fire clay	7.50	
Boston & Maine Railroad, freight		
on casting, oil, etc	2.70	
Boston & Maine Railroad, freight		
on 13 meters	1.33	
Boston & Maine Railroad, freight		
on sundries	.82	
Charles K. Walker, cash paid for		
expressage	2.00	
Charles K. Walker, cash paid for		
gas	1.82	
		\$1,362.85

### SUNDRIES.

Paid Amoskeag Manufacturing Co., plan-	
ing and finishing 1 ring gear, 125	
tons, \$170, less 1 20-inch sleeve,	
\$5	\$165.00
Amoskeag Manufacturing Co., plan-	
ing 1 steel pinion gear, 26 teeth,	
with royalty	24.00
J. J. Abbott, painting	102.64
John T. Beach, making wrench for	
drag	1.00
L. B. Bodwell & Co., 3 barrels	
charcoal	1.40
Paid Head & Dowst :	
146 feet spruce timber	2.49
112 feet 6 x 8 spruce	1.79
124 feet spruce timber	1.98
12 feet spruce boards	.19
Planing	.40
100 U. and D. brick	.85
15 hours' labor	3.75
1 iron for derrick	1.00

Paid E. A. G. Holmes :		
Labor on shed and fence	\$25.50	
On icehouse	21.00	
Doors in house	9.00	
Lumber	.92	
Labor on outside windows	5.50	
Labor	100.00	
Labor boxing pipes	45.50	
Paid A. Filion, repairing derrick	1.00	
C. H. Hutchinson, repairing tools	2.03	
Manchester Heating and Lighting		
Co., wringing coil, labor and ex-		
pense	5.50	
Charles H. Robie, 2-horse team		
$\frac{1}{2}$ day, carting gear to pumping		
station	2.00	
Charles K. Walker, cash paid ex-		
press on grates, etc	6.37	
Charles K. Walker, cash paid team	.50	
William E. Williams, repairing slate		
roof at station	9.30	
S. C. Forsaith Machine Co., boiler		
plate and brass castings	1.80	
S. C. Forsaith Machine Co., 321/2		
hours' labor	13.00	
E. P. Johnson Co., 96,230 lbs. egg		
coal, at \$7	336.80	
E. P. Johnson Co., 3 tons stove		
coal, at \$7.25	21.75	
Mills & Sturtevant, lumber	62.54	
J. B. Sawyer, 15 bound stones .	3.75	
		\$980.25
Total expenditures		21,995.06
Amount transferred to reserved fund .		4.94
	Ş	22,000.00

# Water-Works, Current.

Appropriation	•		•	•	•		\$5,000.00
Expenditures.							
Paid Charles K. V	Vall	. sa	larv a	as sur	er-		
intendent			~			\$375.00	
Charles K. V				•	oer-		
intendent	, to	Decer	nber	31	·	1,199.97	
							\$1,574.97
Paid for gas .		•		•	•	\$31.48	
for telegram					·	.25	
for expenses					·	.85	
for medicine	· ·			r) .	•	1.25	
for sawdust a	and	shavii	ngs	•	·	.50	
*		•	·	·	·	15.00	
for filing sav			•	•	•	.30	
for directory		i stam	р.	•	•	2.30	
for sundries	·	·	·	·	·	2.47	* · ·
							\$54.40
Paid labor, as per	рау	-roll:					
January .	•	•	•	·		\$211.67	
February	·	·	•	•	•	211.67	
March .	•	•	•	·	·	211.67	
April .		•	•	·	•	211.67	
May .	•	•	•	•	·	111.67	
June .	•	•	·	·	•	311.67	
July .	·	•	•	•	·	211.67	
August .	·	•	•	·	·	225.67	
September	·	·	•	·	•	211.67	
October .	·	·	٠	٠	•	20.4.00	
November	·	•	•	•	·	219.33	
December	·	·	·	•	·	203.33	
							\$2,545.69

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<ul> <li>Paid Joseph B. Sawyer, services of self and assistant, in making sundry surveys, in making deeds, etc., etc., from January 30, 1891 to May 13, 1891</li> <li>Joseph B. Sawyer, services of self and assistant, in making sundry surveys, in making deeds, etc., etc., from June 23, 1891, to No-</li> </ul>	\$55.7 <b>0</b>
vember 11, 1891 F. W. Elliott, May 20, meals to	60.00
commissioners	I 2.00
A. R. Ingham, January 24, 5 din-	
ners for commissioners A. R. Ingham, June 23, luncheon	3.75
and dinners	6.00
A. R. Ingham, June 23, use of	
steamer 4 hours	6.00
James Bros., hack to Auburn	8.00
E. T. James, teams at sundry times New England Telephone and Tele-	38.00
graph Co., use of telephones . town of Auburn, tax on sundry	II0.00
pieces of land	45.03
treatment of P. McDonough . G. B. Hoyt, recording deeds and	15.00
postage	3.56
at 40c	9.20
notices	23.50
A. S. Campbell, 500 postals, and	0.0
printing same	6.00
John B. Clarke, printing 500 re-	
ports, 32 pages, cover, and plate John B. Clarke, printing 14,150	28.00
blank bills	32.00

Paid John B. Clarke, advertising water-		
works notices	\$1.75	
John B. Clarke, advertising, and		
binding water reports	5.25	
Union Publishing Co., advertising		
water-works notices	10.60	
Moore & Preston, 4 tons egg coal,		
at \$7.25	29.00	
D. A. Simons, 4 cane-seat chairs,		
and gluing	4.00	
D. A. Simons, repairing 4 chairs .	1.00	
D. A. Simons, 4 office chairs .	6.00	
Frederick Perkins, treatment of		
John Hussey, 14 visits	20.00	
Frederick Perkins, treatment of		
Thomas McDonough, 9 visits .	25.00	
F. S. Bodwell, 5 bound stones .	5.50	
John Ferguson, medical services		
rendered McDonough, from	0	
March 15 to May 30 Pike & Heald, balance due on	18.00	
labor at pumping station .	1.39	
E. R. Coburn & Co., 7 meter books	1.39	
E. R. Coburn & Co., 4 day books	30.00	
E. R. Coburn & Co., 3 meter and	30.00	
rate books	39.00	
E. R. Coburn & Co., paper, envel-	39.00	
opes, stationery	11.56	
H. C. Dimond & Co., platform	5	
stamp	6.00	
James A. Weston, clerk of board of		
water commissioners	100.00	
		\$787.79
Total expenditures		\$4,962.85
Amount transferred to reserved fund .	• •	37.15
		\$5,000.00

## Commons.

Appropriation							\$3,000.00
		Ex	PEND	ITURE	s.		
Paid <b>a</b> s per pay	-rolls o	of con	nmon	s:			
April .						\$182.25	
May .						187.25	
June .						196.75	
July .						153.50	
August .						55.00	
September						121.00	
October					. •	167.00	
November						129.50	
							\$1,192.25
Paid as per pay	-roll, d	listric	t No.	. 2 :			
April .							97.00
1	REPAIR	S ANI	D GEN	VERAL	EXPI	ENSES.	
Paid L. M. Ald			÷.			\$1.25	
С. Н. Н.				0			
mowers						38.56	
Peter Har			0				
ers .						5.40	
Jere. Hod							
ling, fo						23.68	
Jere. Hod						0	
ling, fo						5.80	
Jere. Hoc						2.60	
H. Liebir	- ·	-					
fences, $42\frac{1}{2}$ lbs. paint						5.10	
H. Liebing, 11 6-10 days' labor . John A. Sargent, paints and oils .						26.10	
						13.62	
Killey &		0,	0				
mower	•	•	•	•	•	.50	

Paid John B. Varick Co., hardware,		
tools, etc	\$57.96	
Thos. A. Lane, plumbing materials,		
labor, etc	41.79	
Thos. A. Lane, plumbing materials		
and labor on Hancver-street		
fountain	18.26	
Thos. A. Lane, 2 cast nozzles for		
fountains	8.55	
Thos. A. Lane, nipples, hose noz-		
zles, dippers, and labor	3.80	
L. Pope, sharpening picks, etc.	1.00	
Flint & Little, lumber and labor .	·45	
S. C. Forsaith Machine Co., 10		
stakes	1.50	
J. T. Beach, work on wrench .	I.00	
Geo. F. Rief, materials and labor		
on settees	I2.02	
J. J. Abbott, $3\frac{3}{4}$ lbs. paint and		
putty	.50	
Pettee & Adams, 6 barrels cement	16.45	
		\$285.89
MACADAMIZING.		
Paid Chas. H. Robie, for concrete work,		
Hanover common, 80.9 yards		
at 25c	\$20.22	
Chas. H. Robie, for concrete work,	,	
Hanover common, 177 yards at		
45c	79.65	
Chas. H. Robie, for Park common	., 5	
walks, 742 yards at 45c.	333.90	
		\$433.77
FLOWERS, LOAM, ETC.		
Paid Ray Brook Garden Co., plants		
around fountain on Tremont		
common	\$20.00	
39		

Paid H. H. Huntress, plants on commons	\$51.53	
J. S. Holt & Co., 5 cords leached		
ashes	62.50	
J. S. Holt & Co., 95 bushels leached		
ashes	11.87	
J. B. Varick Co., clover, bent, and		
red-top seed, etc.	5.75	
J. B. Varick Co., 1,000 lbs. Coe's	5 , 5	
phosphate	17.50	
Morrill & Goggin, 46 loads loam	46.00	
Morrill & Goggin, 4 loads of loam		
at 30c	1.20	
George Whitford, 10 loads of loam,		
Hanover common	10.00	
F. S. Worthen, 2 flower beds on		
Hanover common	-10.00	
Chas. H. Robic, 1 load of gravel .	1.25	
D. H. Young, 1 cord of manure .	4.00	
A. H. Hood, plants for 2 beds on		
Tremont common	40.00	
Joseph N. Auger, $7\frac{1}{22}$ cords leached		
ashes	86.25	
		\$397.85
Total expenditures		\$2,406.76
Amount transferred to reserved fund .		593.24
		\$3,000.00

### Stark Park.

#### LABOR.

Paid labor on commons, as per pay-rolls:

May . . . . . . . \$16.00

610 -

June					\$8.75	
July					22.50	
August					73.00	
Septem	ber				90.75	
Noveml	ber			•	15.00	
						\$226.00

#### HARDWARE, ETC.

Paid J. B. Varick Co., scythes, bush		
hooks, grass hooks, lawn rakes,		
and other hardware	\$7.76	
American Express Co., for flag	3.75	
Harry J. Briggs, 1 day setting stone		
bounds	2.00	
Harry J. Briggs, 44 hours' work on		
surveys	8.80	
Geo. W. Wales, I day setting stone		
bounds	2.00	
Geo. W. Wales, 13 4-10 days sur-		
veying plans and tracings	26.So	
F. S. Bodwell, 4 stone posts, cut on		
taper, 6 inches on sides .	10.00	
		\$61.11

#### ENGINEERING SERVICES.

Paid W. H. Bennett, 62 hours' labor on	
survey notes and plans	\$24.80
Harrie M. Young, 44 hours' work	
on survey and plans	9.90
Harrie M. Yonng, use of team 2 days	5.00
Joseph B. Sawyer, 334 days' sur-	
vey of Stark park, self and 2 men	
at \$10	37.50
Joseph B. Sawyer, 1 day's labor of	
assistant making plan	3.00
Joseph B. Sawyer, expense	·75

612

Paid Eben T. James, team 11/2 days	for			
survey of the park		\$3	.75	\$84.70
Total expenditures .				\$371.81
Amount transferred to reserved fund	•		•	128.19
				\$500.00

### Pine Grove Cemetery.

Appr	opriatio	n			•		•			\$6,000.00
Amo	unt tran	sferre	d from	n rese	erved	fund,	$\mathbf{for}$	purcha	ase	
of	land	•	•		•	•		•	•	3,000.00
										\$9,000.00

# Expenditures.

#### LABOR.

Paid labor, as per pay-roll, at cemetery :

January			\$187.11
February			147.36
March .			123.36
April .			235.45
May .			370.00
June .			507.25
July .			364.28
August .			346.95
September			434.84
October			308.13
November			334.20
December			284.62
			\$2 612

\$3,643.55

#### PLANTS, TREES, LOAM, AND CLAY.

Paid A. A. Ainsworth, 7 loads of loam		\$10.50
J. Francis, plants	•	14.37
H. H. Huntress, plants	·	53.75

Paid Manchester Horse Railroad, 124	
loads of loam, at \$1.25 \$155.00 Manchester Horse Railroad, 98	
loads of loam, at \$1.25 122.50	
J. B. Varick Co., 500 lbs. Coe's	
phosphate 8.75	
J. B. Varick Co., 20 lbs. mixed	
grass seed 2.70	
J. B. Varick Co., grass and other	
seeds	
seed, etc 5.61	
C. C. Webster, 9 loads of clay . 9.00	
John Woodman, 20 loads of loam . 27.00	
	\$421.97
FUEL, TELEPHONE, ETC.	
Paid E. P. Johnson Co., 5 tons of egg	
coal \$35.50 New England Telegraph and Tele-	
phone Co 54.25	
Friend Cont. 1	\$89.75
DOOLS AND STATIONED	
BOOKS AND STATIONERY.	
Paid William E. Moore :	
Printing and binding 2 blank receipt	
books \$6.00	
100 postals and printing 2.00	
Letter-heads and blocking 2.50	
Printing postals and water receipts . 3.50	
Printing, binding, and lettering blank-	
book, certificate of lots 5.50	
Paid Temple & Farrington Co., station-	
ery and blank-books 9.64	\$29.14
	\$29.14

#### REPAIRS AND IMPROVEMENTS.

Paid Temple & Farrington Co., 17 win-	
dow shades	\$14.45
John Clifford, 3 days' mason work	9.00
Head & Dowst Co., labor and ma-	
terials	26.64
J. Hodge, 400 2-inch chestnut	
grade stakes	9.00
J. Hodge, 100 pine grade stakes .	.90
C. H. Hutchinson, 71 hours' labor	
on pruning-knife	.50
C.A. Hoitt & Co., repairing 4 chairs	2.75
H. Liebing, painting and frescoing	
main building	175.00
H. Liebing, painting tool-house .	30.00
Timothy McKenna. cleaning vault	
at cemetery	3.50
Pike & Heald, plumbing, materials,	
and labor	410.83
Palmer & Garmon, 6 range posts,	
and cutting, rubbing, and letter-	
ing same	7.53
C. H. Robie, concreting roadway,	
1.392 yards, at 60c.	904.So
J. Stickney, green covering cloth	
and tacks	.27
J. Stickney, 1 pair long rubber	
gloves	1.50
Whitten & Fifield, team delivered	
to John Young	7.50
J. B. Varick Co., glass, putty, oil,	
varnish, sheet lead, nails, 4 mat-	
tocks, 1 screwdriver, 2 snow	
shovels, ax, lawn rakes, 25 feet	
of hose, floor brush, turkey-	
feather duster, wrench, file, and	
other hardware	56.73

Paid S. C. Forsaith Machine Co., 300 chestnut stakes, 2 x 2, pointed . \$4.50 Marden & Woodbury, granite steps	
and posts 50.00 Bartlett, Gay & Young, 3 half-wash	
hydrants 16.25	
L. M. Aldrich, filing saw20	
	\$1.731.85
SUNDRIES.	
Paid Byron A. Stearns, cash paid for ex- penses of trustees of Pine Grove cemetery to Forest Hill ceme-	
tery, Boston, Mass., and return . \$16.00	
Byron A. Stearns, cleaning house at	
cemetery 1.78	
Wingate & Gould, 1 pair rubber	
boots 2.75	
Union Publishing Co., notice to	
water takers, etc 4.00	
G. R. Vance & Co	\$25.08
Total expenditures	\$5,011.31
	3.058.66
	\$9,000.00

# Valley Cemetery.

Appropriation					•		\$2,800.00			
Expenditures.										
LABOR.										
Paid labor, as per	pay	roll, a	at cer	neter	y :					
	•			•	•	\$58.83				
February	•	•	•	•	•	63.16				

	March							\$63.95	
	April						•	143.56	
	May				•			206.74	
	June							266.07	
	July						•	209.01	
	August							199.56	
	Septemb	er						238.83	
	October							154.64	
	Novemb	er						145.07	
	Decemb	er						122.68	
									\$1,872.10
Pai	d labor as	per	pay-r	oll, di	istrict	No.	2	\$4.00	
	B. F. B.							153.00	
									\$157.00

#### TURF, SAND. LOAM, PLANTS, ETC.

Paid B. F. Bascomb, 24 loads of stone .	\$27.00
B. F. Bascomb, 43 loads of sand .	14.10
B. F. Bascomb, 141 loads of gravel	45.12
Timothy Carr, 4 loads of loam .	4.00
J. Francis, plants of various kinds .	49.14
C. H. G. Foss, cash paid John L.	
Chilas, for trees and shrubs	6.25
C. H. G. Foss. cash paid Dingee &	0
Conard Co., for trees and shrubs	4.25
C. H. G. Foss, cash paid H. M.	
Whiting, for trees and shrubs .	2.00
C. H. G. Foss, cash paid H. M.	
Whiting for shrubs	00.1
R. W. Lamprey, 3 shrubs	4.00
Henry McEvoy, 96 loads of loam	38.40
H. H. Huntress. 3 dracæna	3.00
Michael Murray, 2 cords of manure	10.00
Ray Brook Garden Co., plants of	
various kinds	13.48
J. B. Varick Co., seeds and phos-	
phate	32.33

Paid Peter O. Woodman, 2,790 feet of	
turf	
Peter O. Woodman, 100 loads of	
loam	
Killey & Wadleigh, 100 lbs. lawn	
dressing 2.75	
J. N. Auger, 10 bushels of ashes . 1.67 Stone & Wellington, 1 double flow-	
ering cherry 1.00	
Stone & Wellington, 5 shrubs . 3.00	
Welcome Jencks, 29 loads of loam . 14.50	
Waterman Smith, 1 load of stone . 1.50	
	\$356.39
STATIONERY.	
Paid Freeman G. Riddle, 1 book of re-	
ceipts	
Freeman G. Riddle, 1 blank-book . 200	
Temple & Farrington Co., 1 direc-	
tory 2.00	
Temple & Farrington Co., ink,	
blotting paper, pencils, envelopes,	
mucilage, etc 2.13	
C. H. G. Foss, cash paid for 100	
stamped envelopes 2.20	
	\$10.18
REPAIRS, EXTENSIONS, TOOLS. ETC.	
Paid J. Hodge, 78 feet 2-inch sapling . \$1.95	
J. Hodge, $\frac{1}{2}$ hour's labor20	
Pike & Heald, plumbing materials	
and labor	
Thomas A. Lane, plumbing materi-	
als and labor	
J. Francis, 1 pair of rubber boots . 3.00	
Killey & Wadleigh, 2 lawn rakes, 1	
spade 1.35	

.

Paid Killey & Wadleigh, 2 chain wheel-		
barrows	\$4.00	
Killey & Wadleigh, 1 shovel .	.65	
Head & Dowst, building summer-		
house and bridge, as per contract	275.00	
Head & Dowst, material and labor		
on seats in summer house, etc.	12.78	
J. B. Varick Co., 30 ft. 1-inch hose	2.70	
J. B. Varick Co., ax, scythe, stones,	1	
and reel	1.28	
J. B. Varick Co., other hardware	13.90	
G. R. Vance & Co., 18 lbs. stove-	13.90	
pipe	1.80	
Hill & Co., 40 lbs. canvas, 12 x 10,	1.00	
at 10c.	4.00	
Hill & Co., express	·25	
L. M. Aldrich, filing saw	.20	
Manchester Hardware Co., 1 plane,		
2 rakes, 1 ball of twine	2.59	
<b>i</b> set grindstone fixtures	-	
M. J. Whalen, repairing strap .	.50	
J. J. Abbott, paint, shellac. and		
labor	2.78	
		\$393.12

#### SUNDRIES.

Paid Byron A. Stearns, cash paid for exp				
tees of the Valley Cemetery to Fores	t Hil	1 Cei	ne-	
tery, Boston, Mass., and return .		•	•	\$6.00
Total expenditures				\$2,794.79
Amount transferred to reserved fund	·	•	·	5.21

\$2,800.00

#### DERRYFIELD PARK.

Appropriation	•	•	•		\$500.00
Amount transferred from	reserved	fund			20.00
					\$520.00
-	-				

### Expenditures.

Paid Manchester Heatin	ng	and	Light	ting	Со.,	I	iron	
rack, as per contract								8520.00

### Derryfield Park.

Appropriation			•			•	•	\$500.00
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### Expenditures.

#### LABOR.

Paid labor as per commons pay-roll :

August .						\$120.30	
September						166.74	
October .						91.75	
							\$387.00
city farm, la	abor o	f nin	e men	i da	iy each	ι	5.62

#### SUNDRIES.

Paid J. B. Varick, axes, scythes, gai	den			
rakes, and other hardware .		SI	2.66	
Leander Pope, blacksmithing		2	2.80	
				\$15.46
Total expenditures				\$409.07
Amount transferred to reserved fund				90.93
				\$500.00

# Paupers off the Farm.

Appropriation			•	•		\$4,500.00
Amount transferre	l from	reserved	fund			428.24

\$4,928.24

# Expenditures.

#### GROCERIES.

Paid	G. W. Adams					\$72.00	
	B. Bresnehan					8.00	
	A. N. Clapp					18.00	
	A. M. Eastman					5.00	
	Eager & Rand					55.00	
	T. F. Fifield .					I 2.00	
	H. Fradd & Co.			•	•	18.00	
	Griffin Bros		•			714.00	
	P. Harrington					50.00	
	O. D. Knox & Co					78.00	
	Thomas Mahoney					207.00	
	McQuade Bros.					90.00	
	D. M. Poore .		•	•		36.31	
	Joseph Quirin				•	150.00	
	Robitaille Bros.					24.00	
	P. Ryan .		•	•		133.00	
	D. A. Shannahan					66.00	
	Henry Weber					132.18	
	Joseph Wiggin					21.00	
	Hallsville Grocery	Stor	e			2.00	
	Bartlett & Thom <sub>l</sub>	son			•	48.00	
	T. E. McDerby					24.00	
							\$1,963.49

#### FUEL.

Paid L. B. Bodwell &	Co.		\$11.50
J. H. Coburn			15.00
F. X. Chenette			19.20

620

DID G ANN I		
Paid DeCourcy & Holland		\$40.25
S. L. Flanders .		I 0.00
E. P. Johnson Co.		58.20
Merrill & Freeman		4.00
August Schink .		8.50
F. T. Dunlap .		5.95
Moore & Preston .		3.25

\$175.85

### BOARD AND CARE.

Paid	Mrs. William Cha	se				\$120.00	
	Hillsborough cour	ntv	farm			00.00	
	A. D. Hatch					120.00	
	Carrie E. Jacksor					95.24	
	Agnes Masse					56.00	
	Christiana Mayco					1 28.32	
	William J. Power					52.00	
	State Industrial Sc					1,642.27	
	J. D. Welcome					60.00	
	Carrie M. Watts					21.47	
	Daniel Stevens					16.00	
	Hannah Murphy					10.00	
	runnan murphy	·	•	·	·		\$2,411.30
							5=,411.30
			CLOTH	HNG.			
Paid	Dodge & Straw					\$1.25	
	Joseph Murray					2.60	
	Weston & Martin					11.75	
	M. A. McDonoug	h				13.70	
	E. F. Scheer & Co					1.25	
	Fred Dow .					1.50	
							\$32.05
			MEDIC	INES			
Paid	John B. Hall					\$2.75	
	L. K. Mead .					98.15	
							\$100.90

#### SUNDRIES.

Paid John B. Clarke, printing 400 postal	
blanks	\$5.25
John B. Clarke, printing 2,000 bill-	
heads	9.25
John B. Clarke, printing 36 envel-	
opes, 2c. stamp	1.50
Temple & Farrington Co., paper,	
envelopes, rubber bands. pens,	
penholders, etc	2.50
Temple & Farrington Co 1 blank-	
book	2.00
Temple & Farrington Co., 8 di-	
rectories .	16.00
Paid Fred Perkins:	
Certificate of insanity for Julia Paul .	3.00
Extra services for Mrs. Edward Mas-	
son	15.00
Surgical and medical services for Lizzie	
Farnum	15.00
Certificate of insanity, Frank L. Blais-	
dell	3.00
Certificate of insanity, L. M. Goward	3.00
Medical services for Timothy Devan .	5.00
Paid Henry W. Boutwell, consultation	
and visit to Mrs. Edward Masson	3.00
A. G. Straw, certificate of insanity for Julia Paul	
A. G. Straw, certificate of insanity	3.00
for L. M. Goward	
William W. Wilkins, examination	3.00
of Frank L. Blaisdell, insane	3.00
F. X. Chenette, burial expenses of	3.00
John Morency	25.00
H. D. W. Carvelle, professional ser-	23.00
vices rendered Fred Spaess, set-	
tlement made by overseers of the	
poor	58.00
1	,

Paid Peter T. Kean, burial of child of		
Edward Masson	\$3.00	
F. L. Wallace & Co., conveying J.		
Welch to city farm	2.00	
F. L. Wallace & Co., burial of		
Nancy J. Ray	25.00	
F. L. Wallace & Co., burial of		
Adam D. Wilson	25.00	
J. L. Robinson, medical attendance		
on Nora Griffin	I 2.00	
William H. Maxwell, stationery		
and other office supplies	2.15	
		\$244.65
Total expenditures		\$4.928.24

### City Farm.

Appropriation . . . . . . . . . . . \$6,500.00

### EXPENDITURES.

### HOUSE AND FARM LABOR.

Paid L. M. Streeter, Su	ipei	intend	ent		\$500.00
Mary E. Streeter,	М	atron			300.00
Emma M. Streete	r				57.01
A. Bancroft .					21.99
Thomas Burke					162.00
Mary Barr .					19.71
George Baker					18.75
Levi Carter .					18.66
Thomas J. Estes					174.62
Mrs. T. J. Estes					102.47
Hannah Hackett				•	65.59
Kate Houghton					16.06
D. B. Hutchins					205.65

Paid Mrs. D. B. Hutch	nins				\$85.32	
L. J. Proctor					96.45	
C. W. Pike .					31.25	
Samuel Richardso	n				.86	
H. Southworth					4.66	
Fred Shaw .					5.33	
W. K. Stockdale					13.50	
Fred Sanborn					220.61	
Lewis Wilber					55.32	
Hattie Covell					27.44	
Merritt Covell					38.40	
Mary J. Davis					4.00	
Joseph Murphy					31.99	
Mary Morse .					43.72	
Maria Nichols					30.43	
Lottie Flynn					3.43	
Jane Carpenter					6.43	
Mrs. Charles Tho	mps	on			3.00	
Charles Thompso					4.66	
district No. 2, $2\frac{1}{2}$	$\frac{1}{2}$ da	ys' lal	bor, n	nen		
and teams						
and teams	٠	•	•	•	2.00	
and teams	•		•	•	2.00	\$2,371.31
and teams		• FUE			2.00	\$2,371.31
Paid Moore & Presto		FUF	EL.		2.00	\$2,371.31
	n, :	FUF 2,225	сь. pou	nds	\$7.31	\$2,371.31
Paid Moore & Presto	n, : \$6.5	FUE 2,225 50	r. pou	nds	-	\$2,371.31
Paid Moore & Presto furnace coal at	n, 2 \$6.5 n, 1	FUF 2,225 50 0,000	r. pou	nds	\$7.31	\$2,371.31
Paid Moore & Presto furnace coal at Moore & Presto	n, 2 \$6.5 n, 1	FUE 2,225 50 0,000	rL. pou pou	nds nds	-	\$2,371.31
Paid Moore & Presto furnace coal at Moore & Presto stove coal at \$7	n, 2 \$6.5 n, 1 n, 2	FUE 2,225 50 0,000 :4,000	rL. pou pou	nds nds nds	\$7.31	\$2,371.31
Paid Moore & Presto furnace coal at Moore & Presto stove coal at \$7 Moore & Presto	n, 2 \$6.5 n, 1 n, 2 \$5.8	FUE 2,225 50 0,000 :4,000	н. pou pou pou	nds nds nds	\$7.31	\$2,371.31
Paid Moore & Presto furnace coal at Moore & Presto stove coal at \$7 Moore & Presto furnace coal at	n, 2 \$6.5 n, 1 n, 2 \$5.8 e:	FUE 2,225 30 0,000 24,000 35 .	рои • pou • pou •	nds nds nds	\$7.31	\$2,371.31
Paid Moore & Presto furnace coal at Moore & Presto stove coal at \$7 Moore & Presto furnace coal at Paid A. & D. M. Poor	n, 2 \$6.5 n, 1 n, 2 \$5.8 e: coal	FUE 2,225 30 0,000 24,000 35. 1 at \$7	н. pou pou pou	nds nds nds	\$7.31 35.00 70.20	\$2,371.31
Paid Moore & Presto furnace coal at Moore & Presto stove coal at \$7 Moore & Presto furnace coal at Paid A. & D. M. Poor 12,985 pounds stove 19,940 pounds egg co 5,835 pounds egg co	n, 2 \$6.5 n, 1 n, 2 \$5.8 e: coal al at	FUE 2,225 50 0,000	D. pou pou pou	nds nds	\$7.31 35.00 70.20 45.45	\$2,371.31
Paid Moore & Presto furnace coal at Moore & Presto stove coal at \$7 Moore & Presto furnace coal at Paid A. & D. M. Poor 12,985 pounds stove 19,940 pounds egg co	n, 2 \$6.5 n, 1 n, 2 \$5.8 e: coal al at	FUE 2,225 50 0,000	D. pou pou pou	nds nds	\$7.31 35.00 70.20 45.45 59.81	\$2,371.31
Paid Moore & Presto furnace coal at Moore & Presto stove coal at \$7 Moore & Presto furnace coal at Paid A. & D. M. Poor 12,985 pounds stove 19,940 pounds egg co 5,835 pounds egg co	n, 2 \$6.5 n, 1 \$5.8 e: coal al at coal	FUE 2,225 30 0,000 :4,000 35. :4,0000 35. :4,000 35. :5,000 35. :4,0000 35. :4,0000 35. :4,0000 35. :4,0000 35. :4,0000 35. :4,0000 35. :4,0000 35. :4,0000 35. :4,00000 35. :3,0000 35. :3,0000 35. :3,0000 35. :3,0000000 35. :3,00	EL. pou pou pou	nds nds	\$7.31 35.00 70.20 45.45 59.81 17.50	\$2,371.31
Paid Moore & Presto furnace coal at Moore & Presto stove coal at \$7 Moore & Presto furnace coal at Paid A. & D. M. Poor 12,985 pounds stove 19,940 pounds egg co 2,000 pounds stove of	n, 2 \$6.5 n, 1 \$5.8 e: coal al at coal	FUE 2,225 50 0,000 :4,000 35 . :4,000 35 . :4,000 35 . :4,000 35 . :4,000 35 . :4,000 35 . :4,000 35 . :4,000 35 . :4,000 35 . :1,2,2,5 :4,000 35 . :1,2,2,5 :4,000 35 . :1,2,2,5 :1,5 :1,5 :1,5 :1,5 :1,5 :1,5 :1,5 :1	EL. pou pou pou	nds nds	\$7.31 35.00 70.20 45.45 59.81 17.50 7.00	\$2,371.31

## CLOTHING AND DRY GOODS,

Paid Barton & Co., cotton, quilts, towels, crash, gingham, prints, ticking,		
napkins, and other dry goods .	\$101.97	
George Blanchet, cotton batting,		
shirting, ticking, toweling, prints,		
and other dry goods	51.28	
Clark & Estey, socks, needles, thim-		
bles, elastics, buttons, oil-cloth,		
combs, etc.	29.39	
Frank L. Downs, 4 pairs of men's		
rubber boots	10.50	
Frank L. Downs, 1 pair men's lace	Ũ	
balmorals	1.50	
Jas. A. Folsom, overalls, caps, jump-	Ũ	
ers, pants, and other clothing .	31.50	
Paid W. P. Farmer:	~ •	
9 pair of brogans	11.05	
6 pairs ladies' shoes	7.10	
3 pairs rubber boots	8.04	
Repairs	.55	
Brogans, shoes, and repairs	5.85	
Paid H. M. Moody, hats, overalls, jump-		
ers, mittens, coat, necktie, col-		
lars, gloves, vests, drawers, pants,		
and other clothing	108.05	
Miville & Co., gingham, batting,		
and cambric	7.26	
Miville & Co., gingham, batting,		
and cambric	7.26	
Wingate & Gould, boots, shoes,		
rubbers, umbrellas, etc	19.21	
G. W. Dodge, 6 pairs men's shoes	7.75	
G. W. Dodge, 2 pairs slippers .	1.60	
G. W. Dodge, 4 pairs soles	. 20	
40		\$410.06

### GROCERIES AND PROVISIONS.

Paid Bartlett & Thompson, 658 pounds	
of beef	\$41.03
Bartlett & Thompson, 9 pounds of	*
pork chops	1.08
Bartlett & Thompson, 81 pounds	
of cabbage	2.60
(). Brochue, 33 bushels of potatoes	35.80
Dodge & Laing, 71 bushels of pota-	00
toes	77.52
Dodge & Laing, 212 bushels beans	5.38
John F. Dowd, groceries	7.43
Drake & Parker, 34 barrels Pills-	
bury's best flour	211.80
Drake & Parker, 4 barrels Wash-	
burn's best flour	23.60
Drake & Parker, 1 barrel Millwood	4.75
Drake & Parker, 2 barrels P. flour .	9.50
A. G. Grenier, groceries	62.21
Hardy & Co., groceries	45.61
Geo. H. Hubbard, 127 lbs. smok-	
ing tobacco . ,	34.08
Daniel Johnson, 83 lbs. sausage at	
IOC	8.30
Daniel Johnson, 2 lbs. sage	.50
W. D. Ladd & Co., 2 barrels of	
crackers	4.85
Manchester Beef Co., 2 kegs of tripe	2.20
Manchester Beef Co., 14 lbs. ger-	
mans at 10c.	1.40
Manchester Beef Co., 178 lbs. of	
beef at $7\frac{3}{4}$ c	13.79
A. McDougal, 12 bushels potatoes.	12.30
McQuade Bros., groceries	216.80
E. S. Newton, boneless cod	37.89
Public Market, groceries	205.89

CITY FARM.

Paid J. H. Pierce & Co., tea, coffee,		
spices, and flavoring extracts .	\$52.80	
Joseph Quirin, groceries	107.04	
Tom. W. Robinson, 586 lbs. beef .	36.51	
E. M. Slayton, 50 bushels potatoes	57.35	
L. Shelters, 4 barrels potatoes .	13.15	
L. Shelters, 13 bushels potatoes .	13.41	
Union Pacific Tea Co., 7 lbs. tea .	4.00	
Union Pacific Tea Co., 6 lbs. coffee	1.92	
H. I. Woods, bread and crackers .	3.64	
J. H. Wiggin & Co., groceries .	18.35	
J. H. Wiggin & Co., 72 lbs. tobacco	16.80	
Carl E. York, groceries	71.81	
Clough & Co., groceries	33.01	
Henry W. Parker, 12 barrels Pills-		
bury's flour	73.20	
Robinson Bros., 14 lbs. tobacco	3.30	
		\$1,562.60

FURNITURE AND COOKING UTENSILS.

Paid Barton & Co.:		
2 yards of oil-cloth		\$0.50
2 yards of tapestry		I.00
2 shades		.50
3 skeins carpet thread		.12
3 yards oil-cloth		2.10
$_{28\frac{1}{2}}$ yards carpet	•	18.53
Paid Clark M. Bailey, pails, brooms,	dry	
measures, and dairy pans .		13.86
F. E. Nelson, crockery, flour sie	eves,	
dippers, plates		3.68
F. E. Nelson, kettles, milk-	pail,	
etc		28.81
Pike & Heald, merchandise	and	
labor		29.58
J. N. Tuck, 1 alarm clock .		5.50
D. B. Varney, 1 copper kettle		10.80

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.

Paid Weston & Hill:		
$33\frac{1}{8}$ yards carpet	\$19.21	
Other ary goods	11.29	
18 <sup>1</sup> / <sub>3</sub> yards hemp carpet	2.75	
Thread	.15	
1 shade	.25	
Paid "The Kitchen" (R. K. Horne), 6		
chambers	1.98	
"The Kitchen" (R. K. Horne), 1		
ewer and basin	.95	
"The Kitchen" (R. K. Horne),		
paper and paper tacks .	.43	
"The Kitchen (R. K. Horne),	-	
scrub brushes, lantern globe, bas-		
ket, etc	7.03	
Higgins Bros. Co., 2 steam-		
holders	.66	
Manchester Heating and Lighting		
Co., 1 No. 28 pastry-oven stove .	12.50	
Manchester Heating and Lighting		
Co., putting up stove and new		
pipe	2.50	
		\$174.68
SERVICES AND MEDICIN	NE.	
Paid I A Alexander veterinery cor		
Paid J. A. Alexander, veterinary ser-		
vices, etc	\$29.00	
scriptions, etc., from May, 1889,		
to April 4, 1891		
O. P. Lucier, 3 Roberts ozonators	21.75	
(disinfectants)	9.00	
E. K. Mead, medicines	6.50	
Eames Bros., prescription Z. F. Campbell, medicines	•35	
Z. F. Campben, medicines	8.74	\$75.34
		\$13.34

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#### CITY FARM.

#### FERTILIZERS, SEEDS, ETC.

Paid Gregory & Son, seeds of various		
kinds	\$4.65	
W. P. Jerrard, seeds of various		
kinds	3.55	
Aretas Blood, $3\frac{1}{2}$ cords of manure,		
at \$3.50	12.25	
S. B. Putnam, 3 cords of manure .	5.00	
		\$25.45

#### HARDWARE.

Paid Killey & Wadleigh, ground bone, whiting, adze handles, poultry netting, wire nails, oyster shells, rat traps, brooms, pail, solder, powder, trace chains, 4 wood-saws, 126 lbs. galvanized wire, axle grease, other hardware and agricultural supplies . \$67.78 • • • Manchester Hardware Co., 1 springtooth harrow, 1 dozen shovels, 1 grindstone, nails, spring doorlock, other hardware . . 88.33 I. B. Varick Co., I hand forcepump, 1/2 dozen square-point shovels, other hardware . . 17.64 \$173.75

#### HAY, GRAIN, AND OTHER FEED.

Paid Merrill & Freeman, meal, oats,		
bran, middlings, etc	\$566.70	
Partridge Bros., bran, oats	23.50	
Pettee & Adams, oats, middlings,		
bran, and grinding, etc	81.44	
		\$671.64

#### REPAIRS AND IMPROVEMENTS.

Paid John T. Beach, 1 dump cart . John T. Beach, ironing lead bar,	\$170.00
whiffletree, painting D. E. Guiney, materials and labor	3.00
repairing steam-pipe	2.80
Paid C. H. Hutchinson :	
Norway iron, soft steel, and 12 hours'	
labor on shackles, 1 hour's labor on	
box wrench	5.33
Materials and labor on mowing-ma-	
chine and cutter	11.25
$21\frac{1}{2}$ hours' labor on boiler .	8.60
I hand-hole gasket	.25
3 glass gauges, gasket, etc	·35
108 Hill patent boiler-plugs, 289 lbs.	15.90
Paid Peter Harris, sharpening and repair-	
ing lawn mower	1.00
Peter Harris, 3 keys	.45
Peter Harris, 2 keys	.50
Head & Dowst, timber, boards,	5
brick, and other materials and	
labor on various repairs	83.98
T. A. Lane, labor on water-pipe, at	03.90
barn	2,20
J. B. McCrillis & Son, printing, re-	2120
pairing, and other work and ma-	
terials on carts, wagons, etc.	52.05
Pike & Heald, repairing pumps,	52.05
	13.36
water-pipe, etc. R. M. Rollins & Son, Pitman bolts,	13.30
guards, knives, etc., for mowing-	
machine	
	11.25
J. Stickney, sole leather, pegs,	- 00
nails, etc	2.88
L. N. Westover, 6 ash stakes, at 8c.	.48

Paid L. N. Westover, 145 feet oak plank L. N. Westover, 1334 hours' labor Shirley & Stuart, 2 whitewash	\$6.53 5.00	
brushes	2.00	
Shirley & Stuart, lime	·75	
J. J. Abbott, paints, etc.	13.28	
S. C. Forsaith Machine Co., 86 feet		
of spruce, $4 \ge 4$ , planed four		
sides, at $2\frac{1}{2}c$ .	2.15	
S. C. Forsaith Machine Co., 72 feet		
of spruce, $1\frac{1}{2} \ge 3$ , planed two		
sides, at 2c	I.44	
S. C. Forsaith Machine Co., 46 feet		
of spruce furring, at 1.6c.	.74	
L. M. Aldrich, filing saws	.50	
		\$418.02
BLACKSMITHING, HARNESSES,	ETC.	
Paid J. H. Cram & Co., shoeing horses .	\$9.00	
C. G. McDuffie, shoeing horses .	5.18	
Thos. P. Riley, repairing harnesses,	5	
etc	9.00	
Thos. P. Riley, axle grease, fly col-	-	
lars, etc	3.00	
J. O. Tremblay, shoeing horses .	40.00	
F. N. McLaren, repairing harnesses	11.57	
Amos Dow & Son, shoeing horses .	3.00	
Paid Kimball Carriage Co.:		
1 pair horse covers	1.40	
1 pair zinc pads	1.50	
1 pair sheets	1.00	
1 pair flag collars	1.50	
4 collar pads	3.00	
2 rope ties	.36	
Paid H. C. Ranno & Son, repairing team		
harness, etc.	4.40	
N. J. Whalen, stock and lash .	1.25	COPT 16
		\$951.16

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#### SUNDRIES.

Paid John Dowst, agent, insurance on	
city farm property in the Capitol	
Fire Insurance Co., policy 18,829	\$20.00
C. M. Edgerly, agent, insurance on	
farm buildings and contents, pol-	
icy 100.829 Peoples Fire Insur-	
ance Co., \$40, less dividend of \$8	32.00
Paid A. Elliott & Co., insurance on farm	0
buildings and contents :	
Granite State Insurance Co., policy No.	
35,925, \$2,000	40.00
Northern Insurance Co., policy No.	
10,064, \$2,000	40.00
Paid E. P. Richardson, agent, insurance	
on building and contents, N. H.	
Fire Insurance Co., policy No.	
32,682	60.00
A. W. Baker, dentistry work on	
horses	8.00
Concord Railroad Corporation, for	
freight	. 32
N. E. Telegraph & Telephone Co.,	
use of telephone	42.00
"New England Homestead," sub-	
scription to March 1, 1892	1.50
S. S. Piper, postmaster, rent of	-
post-office box for quarter ending	
June 30, 1891	.75
S. S. Piper, postmaster, rent of	
post-office box for quarter ending	
September 30, 1891	·75
S. S. Piper, postmaster, rent of	
post-office box from January 1 to	
March 31	.67
Dennis Shea, use of boar	2.00

Paid L. M. Streeter, express, stamps, and		
box rent	\$3.55	
E. C. Tilton, scraping snow and		
cutting ice	14.00	
Temple & Farrington Co., blank-		
books, postage stamps, and other		
stationery	7.31	
Samuel Richardson, grinding and		
pressing 82 bushels apples .	5.01	
J. F. Baldwin, 1 box of watch clock		
dials	2.00	
Wm. Hayes, 4 cider casks	4.00	
Robert I. Stevens, services of bull .	4.00	
Union Publishing Co., advertising		
pigs for sale, 1 inch 2 weeks .	1.25	
Union Publishing Co., advertising		
for help	1.50	
		\$290.61
		* /
Total expenditures		\$6,512.89
In diment Caldiana		
Indigent Soldiers.		
Appropriation	· ·	\$1,500.00
Expenditures.		
GROCERIES.		
Paid G. W. Adams	\$154.00	
Bartlett & Thompson	54.00	
Griffin Bros.	260.00	
Thomas H. Mahoney	96.00	
D. A. Shannahan	84.00	
McQuade Bros	6.00	
Geo. C. Lord	6.00	
		\$660.00

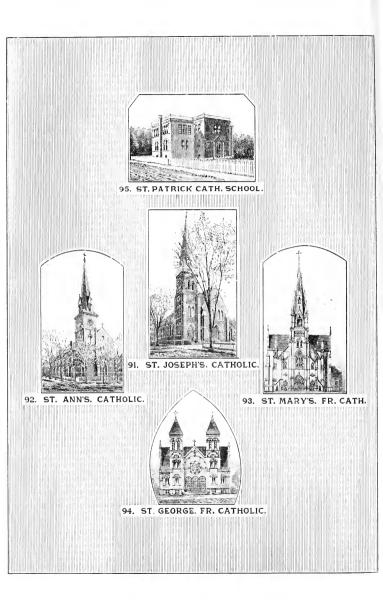
#### FUEL.

Paid L. B. Bodwell				\$2.00	I
Fred T. Dunlap .				3.75	
DeCourcy & Holland				8.25	
Merrill & Freeman				16.25	
Moore & Preston .				3.75	
					\$34.00
BOAR	D AN	D CAR	Е.		
Paid Mary McCook .				\$78.00	)
Daniel Sullivan .				62.00	)
E. C. Tilton .				36.00	)
John Flynn .				16.00	)
					- \$192.00
λ	EDIC	INES.			
Paid L. K. Mead					\$15.15
S	SUNDI	RIES.			
Paid John B. Clarke, 1,00	o bil	ll-head	ls and	filing	. \$5.25
Total expenditures	s .				. \$906.40
Amount transferred to reserve	ved f	und			. 592.60
Balance			•		. 1.00
					\$1,500.00

# Women's Aid and Relief Hospital.

\_\_\_\_\_

Appropriation	•	•	•	·	•	•	•	\$400.00
		Exp	ENDI	TURES				
Paid Women's A	id and	l Reli	ef Ho	ospital				\$400.00



### DECORATION OF SOLDIERS' GRAVES. 635

### Free Beds, Elliot Hospital.

Appropriation	•	•	•	·	·	·	·	\$600.00
		Exp	ENDI	TURES	÷.			
Paid Elliot Hosp	oital, a	moun	t for	2 free	beds			\$600.00

\_\_\_\_\_

## Decoration of Soldiers' Graves.

Appropriation .				•	\$300.00
Amount transferred	from	reserved	fund		33.54
					\$333.54

### Expenditures.

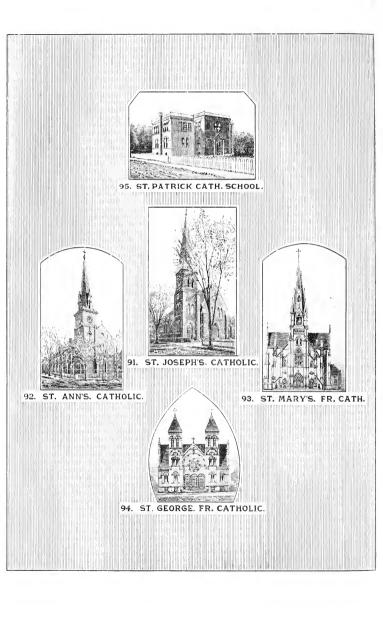
Paid to John T. Beach, commander of Louis Bell Post G. A. R., bills paid sundry persons for expenditures incurred on Memorial Day, May 30, 1891:

#### PRINTING.

Paid John B. Clarke, printing 1,816		
flags	\$20.40	
F. R. Challis, printing 1,000 pro-		
grams	2.75	
		\$23.15

#### CARRIAGE HIRE.

Paid E. V. Turcotte, use of two hacks	
and one barge	\$11.00
F. X. Chenette, use of two barges	
and one hack	15.00
Felch's stable, use of hack and	
horse hire	6.00



## DECORATION OF SOLDIERS' GRAVES. 635

#### Free Beds, Elliot Hospital.

Appropriation	·	·	·	•	•	•	·	\$600.00
		Exp	ENDI	FURES	s.			
Paid Elliot Hosp	oital, a	moun	t for	2 free	beds			\$600.00

-----

### Decoration of Soldiers' Graves.

Appropriation	•		•	•	•	•	\$300.00
Amount transferred	from	reserved	fund	·	•	•	33.54
							\$333.54

#### Expenditures.

Paid to John T. Beach, commander of Louis Bell Post G. A. R., bills paid sundry persons for expenditures incurred on Memorial Day, May 30, 1891:

#### PRINTING.

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flags	\$20.40	
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grams	2.75	
		\$23.15

#### CARRIAGE HIRE.

Paid E. V. Turcotte, use of two hacks	
and one barge	\$11.00
F. X. Chenette, use of two barges	
and one hack	15.00
Felch's stable, use of hack and	
horse hire	6.00

Paid A. L. Jenness & Son, use of hack .	\$4.00	
Whitten & Fifield, use of hack .	4.00	
E. T. James, use of hack	4.00	
G. W. Reed, use of hack	4.00	
J. C. Nichols & Son, use of two		
hacks	8.00	
C. H. Simpson, use of hack	.4.00	
J. Freeman, use of hack	4.00	
J. W. Truel, use of hack	4.00	
D. H. Morgan, use of team	2.00	
		\$70.00
MUSIC AND SINGING.		
Paid Manchester Military (First Regi-		
ment) band	\$75.00	
Manchester Drum Corps (J. H. Mc-	÷15	
Cabe)	I 2.00	
Manchester War Veterans' Drum		
Corps	15.00	
G. A. R. Quartet (H. Parker	- 3100	
French)	8.00	
		\$110.00
SUNDRIES.		
Paid J. B. Varick Co., garden trowels,		
etc	\$3.00	
J. Hodge, flag staffs	,53.00 12.00	
Head & Dowst Co., labor and ma-	12.00	
terials for platform on Monument		
square	51.00	
Palmer & Garmon, 25 markers	17.25	
Killey & Wadleigh, garden trowels,	17.25	
etc.	° -	
Manchester Mills, 206 <sup>1</sup> / <sub>2</sub> yards	.87	
	-6	
worsted goods	16.50	
to and from Monument square .		
to and nom monument square.	10.00	

MILITIA.

Paid First Light Battery, N. H. N. G.,		
for powder	\$10.00	
J. Shiney, putting flags on stakes .	5.75	
J. Shiney, team to French ceme-		
tery	I.00	
L. N. Westover, 48 flag stakes .	3.00	
		\$130.39
Total expenditures		\$333.54

### Militia.

Appropriation . . . . . . . . . . . . \$900.00

### Expenditures.

Paid Amoskeag Veterans	\$100.00	
First Regiment, N. H. N. G.	100.00	
City Guards	100.00	
Lafayette Guards, Co. H, First		
Regiment, N. H. N. G	100.00	
Manchester Cadets	100.00	
Manchester War Veterans	100.00	
First Regiment Headquarters, N.		
H. N. G	100.00	
Sheridan Guards	100.00	
(The above for maintenance of		
armories from February 12, 1891,		
to February 12, 1892.)		
Upton Light Infantry, to February		
12, 1892	75.00	
Total expenditures		\$875.00
Amount transferred to reserved fund .		25.00
		\$900.00

### Abatement of Taxes.

Appropr	ation	•	•	•	•	•			\$3,000.00
			Exp	ENDI	TURES	•			
Paid sundry persons on taxes abated . \$2,557.2. by balance transferred to new ac-									
c	ount	•	•	•	•				\$3,000.00

State Tax.

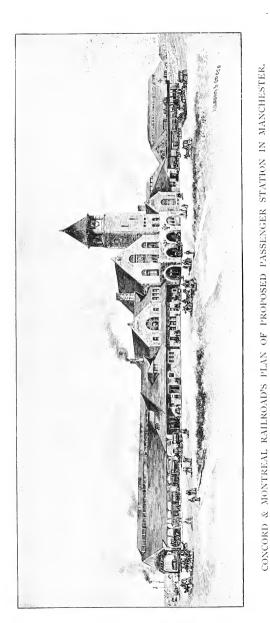
Appropriation . . . . . . . . \$63,435.00 Expenditure. Paid Solon A. Carter, state treasurer . . . . \$63,435.00

County Tax.

Appropriation . . . . . . . . . . \$46,032.47

Expenditure.

Paid Edwin F. Jones, county treasurer . . . \$46,032.47



#### General Descriptive Memorandum, to Accompany Sketches for the Union Passenger Station, Manchester, N. H.

BRADFORD L. GILBERT, of New York City, WM. M. BUTTERFIELD, of Manchester, N. H., Associate Architects.

The general perspective sketch is intended to represent the exterior of the building as it will appear when completed, and together with the general plans, elevations, and sections, indicates fully the entire design and the general features incorporated in the same.

The position of the station building proper has of necessity been determined by the location of the proposed overhead crossing of Central street, and the natural grade of the site proper. The arrangement of the general ground plan has been carried out as most desirable for the accommodation and convenience of the public, and an expeditious administration of the railroad service. Nothing known to modern railroad construction, which would tend to emphasize these special features, has been omitted, but the whole design is intended to suggest a building which, when erected, will be a model of convenience and comfort, a structure for which the citizens of Manchester will justly feel a local pride, and need offer no apologies.

The material of which the building will be constructed has been selected with a special reference to the location. The entire exterior exposed to view will be of rockfaced New Hampshire granite, with quoins around the openings, tooled so as to form a contrast with the rockfaced work, all backed up with brick. No detail or fancy ornamentation has been provided for anywhere, but the entire effect of the exterior is intended to be one of massive simplicity and graceful contour lines, formed by constructional outlines in correct and effective architectural design, forming a building which will show upon its face the purpose for which it has been receted. To enhance the effect of height, the tower has been designed, which will also be utilized for storage purposes, and for the large illuminated clocks as shown.

As previously stated, every accommodation possible has been provided for the public. Outside of the building on the track side, wide platforms have been provided, and the covered train shed, about ninety-two feet in width and seven hundred feet in length, covering all tracks and platforms. Ample egress has been provided from this train shed by means of wide platforms and sidewalks, covered in every case by overhead awnings. The roofs of the building will be entirely of slate, special attention having been paid to the matter of protection from damage by heavy snow storms.

On the street side of the station, a very wide and generous porte cochere has been provided, capable of affording shelter for several carriages at the same time. The rotunda, or general waiting-room, opening at this point, has been made a special feature of the design, the space opening through the clere story to the roof trusses with large generous windows at either end. A large open fireplace has also been provided. The entire floor and wainscoting of the rotunda, about ten feet in height, is intended to be carried out in marble. The size of this room will be sixty feet by sixty feet, and about fifty feet in height. From this rotunda the various rooms open off as most convenient.

The ladies have been provided with a large and generous private room, set apart exclusively for their use, and everything which might tend to their comfort and convenience. The restaurant is so located as to afford the most desirable service. Another large waiting-room has been provided with all conveniences for passengers who may not wish to use the rotunda. The large union ticket office has also been arranged conveniently to both waiting-rooms, and with a special feature for quick service.

The gentlemen are provided with a generous smoking-room with all conveniences. The express rooms are located at the south end of the building, and the baggage rooms where most central, at the northern end. Offices are provided also for the station agent, train dispatchers, telegraph service, and conductors. The sizes of these various rooms are marked on the general

ground plan. The second story of the building where utilized is arranged for railroad offices on the north side of the rotunda, and on the south side for the kitchen and serving pantries in connection with the restaurant (thus obviating all disagreeable odors from the cooking). The entire basement is excavated, and will be utilized for heating and storage purposes.

The questions of heating and plumbing have been given thorough and careful attention, and all known sanitary appliances conducive to health and comfort have been provided.

A fountain has been suggested in the triangular square facing the building, which if desired can be made a very pleasant and practicable feature.

It is intended to provide a large map on the wall of the rotunda, showing the various railroads and connections, as a matter of convenience for the public.

In addition to the foregoing description of the passenger station the citizens of Manchester are amply interested in the matter of the grade crossings at Granite and Central streets.

The grade crossing at Granite street has received the most careful attention of the Concord officials and others interested.

The practicability of abolishing the crossing by the substitution of a tunnel under the tracks, or any other feasible means, was submitted to John E. Cheney, engineer for the city of Boston, who has had a long experience in devising means to do away with grade crossings, and his opinion is recognized as authority upon such questions.

After a thorough investigation of more than a year of the location of the crossing and the lands adjoining (including the Manchester mill property and Bedford street south of the crossing, which would be practically destroyed by a tunnel), Mr. Cheney advises it is practically impossible to substitute a tunnel in place of the present crossing.

The plans submitted to the Manchester city government by the Concord & Montreal Railroad are recommended by him as the only feasible method of dealing with the crossing question.

The grade crossing at Central street will be abolished, and the overhead way will so relieve the pressure of traffic on Granite street that the gates can be closed whenever it is necessary to use that crossing for trains.

The overhead way like the one proposed has been adopted in many places, including five or six different places in New England, and although objected to before being built has been found in every case to accomplish the purpose for which it was designed, and in actual use to be thoroughly satisfactory to the public.

#### Resolution Raising Money and Making Appropriations for the Year 1891.

Resolved by the Mayor, Aldermen, and Common Council of the City of Manchester in City Council assembled, as follows :

That the sum of four hundred and forty thousand, forty-two and forty-seven one hundredths dollars (\$440,042.47) be raised for the use of the city for the year 1891, by tax on the polls and estates liable to be taxed therein, which, together with such unappropriated money as may be now in the city treasury, or may hereafter come into it, shall be appropriated as follows:

#### CENTRAL DEPARTMENT.

Interest			•			\$51,500.00
Payment of	fund	ed d	ebt			100.00
Reserved fu	nd					20,000.00
City hall						2,100.00
Printing an	d stat	ione	ery			2,000.00
Incidental	expen	ses				15,000.00
Mayor's in	ciden	tals				300.00
City officer	s' sala	aries				15,500.00

#### STREET AND SEWER DEPARTMENT.

Highway	district N	ю. 1			\$300.00
" "	"	2, 3			12,000.00
" "	" "	4			500.00
"	" "	5			600.00

#### APPROPRIATIONS.

Highway	district	No.	6	• ·					\$500.00
"	"		7						1,500.00
" "	"		8						1,000.00
"	" "		9						500.00
"	"	I	0						3,800.00
" "	" "	I	I						1,000.00
" "	" "	I	2						200.00
" "	" "	I	3						200.00
New high	nways		•						10,000.00
Land tak	en for hi	ighwa	ys						2,000.00
Watering	streets								4,800.00
Paving st	reets								5,500.00
Macadam	nizing st	reets					•		18,000.00
Grading	for cond	rete							5,000.00
Scavenge	r teams								1 2,000.00
Street sw	eeping								1,200.00
Lighting	streets								42,000.00
Bridges									2,000.00
City team	ns.								5,000.00
Sewers an	nd drain	s							25,000.00
Engineer	's depar	tment							3,500.00
Health d	epartme	nt	•					•	1,500.00
City audi	tor's de	partm	ent	•	•	•	•		1,700.00

#### SCHOOL DEPARTMENT.

Repairs of schoolhouses					\$4,000.00
Fuel					3,700.00
Furniture and supplies				•	750.00
Books and stationery				•	300.00
Printing and advertisin	g				400.00
Contingent expenses					800.00
Care of rooms .					3,700.00
Evening schools .					1,500.00
Teachers' salaries .					47,000.00
Evening school, mechan	nical	l draw	ving		600.00
Free text-books .					3,000.00

# REPORT OF THE CITY AUDITOR.

CITY LIERARY.

City library .	•	•	•		•	•		\$3,800.00
			FIRE.					
Fire department								\$37,000.00
Fire-alarm telegraph	h							
Hydrant service								5,000.00
Firemen's parade								500.00
			POLIC	Е.				
Police department			•		•		•	\$37,000.00
	F	UBLIC	BUH	LDING	s.			
Repairs of building	s							\$2,500.00
Varney school hous	ie							1,000.00
Addition to Webste								8,000.00
New schoolhouse at	Hal	lsville				•	•	18,000.00
		WAT	ER-W	ORKS.				
Construction .								\$25,000.00
Repairs								17,000.00
Current expenses						•	·	5,000.00
		PUBL	IC PL	ACES.				
Commons .								\$3.000.00
Stark park .								500.00
Pine Grove cemeter							•	6,000.00
Valley cemetery								2,800.00
Derryfield park								500.00
Repairs receiving to	əmb	•	•	•	•	•	•	500.00
PATRIOTIC	, сн.	ARITA	BLE,	AND	PHILA	NTHR	OPIC	2.

# Paupers off the farm . . . . \$4,500.00 City farm . . . . . . 6,500.00

#### APPROPRIATIONS.

Indigent soldiers			\$1,500.00
Women's Aid and Relief Hospital			400.00
Free beds, Elliot Hospital .			600.00
Decoration of soldiers' graves			300.00
Militia			900.00

#### TAXES.

Abatement of	of	taxes				\$3,000.00
State taxes						63,435.00
County tax						46,032.47

\$635,217.47

#### ESTIMATED RECEIPTS.

Amount to be raised by ta	ax.	•	•	•	• \$	440,042.47
Insurance tax		•				3,700.00
Railroad tax						21,000.00
Savings bank tax						68,000.00
Literary fund						4,000.00
Water-works						72,000.00
City hall						2,400.00
City teams						2,500.00
Tuition						350.00
Fire department						4,500.00
Police Department .						6,900.00
Pine Grove cemetery .						4,200.00
Valley cemetery						1,100.00
County of Hillsborough						2,200.00
City farm						2,000.00
Interest on taxes						325.00
						- •

FEBRUARY 10, 1891.

\$635,217.47

Carriages, value		0 \$50,400.00 0 53,490.00	Total.		\$462,769.00 443,541.76
Horses, asses, and mules, over 18 months old.	Value.	\$172,186.00 185,896.00	Tax levied.		* \$462,057.17 442,730.76
Hors and over	No.	1,797 2,151	e≓e e		\$1.91 *5 1.78
hand t, or sit.	ē.	\$378,226.00 382,626.00	Rate of tax per hun- dred.		66
Money on hand at interest, or on deposit.	Value.	#378, 989	Total value.		\$24,207,740.00 24,872,492.00
Stock in trade.		\$2,351,102.00 2,332,752.00	Factories and their machinery.	Value.	\$6,068,450.00 \$ 6.432.576.00
Real estate, value.		\$2,12,00 \$11,00 14,124,570,00 2,552,70 14,124,570,00	Stock in Fipulation Fibration Fibrat	Value.	\$19,900.00 \$6,
	. Tax.	#812.00 \$11.00	Stock in banks and other cor- f porations.	Value.	\$280,500.00 200.100.00
Dogs.	Female.	15 <b>9</b>	Sheep over 6 b months old.	Value.	\$46.00 \$
	Male.	710	Sheep month	No.	1 1 9
Polls.	Value.	\$972,300.00 1,036,700.00	llogs.	Value.	\$1,040.00
Pc	No.	9,723		No.	104
Resident and non-		8909	Cows,oxen,and other neut stock over 18 months old.	No. Value.	717 \$15,470.00 104

\*Tax on the Manchester Building Association, \$34,500 at 1 per cent. See Laws of 1889, chapter 12. Special dog tax, 1890, \$812; 1891, \$811.

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REPORT OF THE CITY AUDITOR.

#### VALUATION AND TAXES.

#### Assessors' Oath.

We, the Assessors of the City of Manchester, do solemnly swear that in making the invoice for the purpose of assessing the foregoing taxes, we appraised all taxable property at its full value, and as we would appraise the same in payment of a just debt due from a solvent debtor. So help us God.

# Valuation and Taxes.

The amount of taxes assessed on the polls and on the real and personal estate, within the city of Manchester, N. H., for the year 1891, was as follows:

	Va	luation.	Rate p	er \$1,000.	Tax.
Real estate	\$20	557,140	5 \$:	17.80	\$365,917.20
Personal property .	3	278,640	5 1	7.80	58,359.89
Overlay	•		• •	•	41
	\$23	835,792	2		\$424,277.50
No. of polls, 10,367	1,	036,700		7.80	18,453.26
Totals	\$24,	872,492	2		\$442,730.76
Special tax on 713 mal	e do	gs, at 💲	г.		713.00
Special tax on 49 femal	e dog	gs, at \$	2.	•	98.00
Total					\$443,541.76
The share distribute	d to	Manch	ester of	f the	
amount of the tax asses	sed,	as per r	eturns r	nade	
by the corporations to	stat	e treasu	rer:		
On railroads					\$22,059.03
On savings banks .	•	•		•	73,275.55
On insurance companie	s .	•	• •	•	3,920.25
On literary fund .	•	•	• •	•	5,287.50
Grand tax total					\$548,084.09

Appropriate	ed and	assess	ed in	1891	, for	city	ap-	
propriatio								\$427,275.00
Appropriate								63,435.00
Appropriate	ed and	asses	sed i	n 189	91, foi	r cou	nty	
tax .				•				46,032.47
Overlay *	•	•	•		•			11,341.62
Grand	tax to	tal					•	\$548,084.09

For further information in relation to taxes collected by the state, see State Treasurer's Report of June 1, 1891.

YEAR.	Duc June 1, 1891; assessed in 1891.	Discounts and abatements, 1891.	Collected in 1891.	Due December 31. 1891.
Taxes of 1883	\$1,170.10			\$1,170.10
Taxes of 1884	1.397.21	······	· · · · <b>· · · · · · · · ·</b> · · ·	1,397.21
Taxes of 1885	1,208.13		\$1.63	1,206.50
Taxes of 1886	1,266.47	·····	1.62	1,264.85
Taxes of 1857	1,172.44		6.80	1,165.64
Taxes of 1888	1,602.52		15.99	1,586.53
Taxes of 1889	1,566.28	····	153.70	1,412.58
Taxes of 1890 Taxes of 1890	367.89 ) 19,798.71 (	1,953.97	16,394.92	1,817.71
Taxes of 1891	443,541.76	568.70	418,587.59	24,385.47
Totals	\$473,091.51	\$2,522.67	\$435,162.25	\$35,406.59

TABLE OF TAXES DUE AND UNCOLLECTED.

\* This overlay consists of \$511 special dog taxes, \$2,688.29 assessed by the local assessors, under the provisions of General Laws, chapter 57, section 4, and the sum of \$7,842.33 in the amount received from railroads, banks, insurance companies, and literary fund above the amount estimated by the city councils.

Year.	Valuation.	Taxes.	No. Polls.	Poll Tax.	al.of pol
1846	\$3.187.726	\$22,005,95	1,808	\$2.10	\$300
1847	4.488.550	24.953.54	2,056	1.68	300
1848	4,664,957	39,712.53	2,688	2.58	300
1849	5,500.049	44.979.92	2.518	2.47	300
1850	5,832,080	48.974.23	2,820	2.37	300
1851	6,906,462	51,798.47	2,910	2.25	300
1852	6,795,682	54,379.45	2,745	1.92	240
853	6.995.528	61.545.81	2,907	1.82	240
854	8,237,617	62.022.44	2,814	1.80	240
855	8,833,248	71.952.09	3.725	1.94	240
856	9.244.062	114.214.88	3,760	2,96	240
857	9.983.862	84.862.98	3,695	2.04	240
858	10,259,080	78,210,85	3,695	1.83	240
859	9,853,310	81,368.01	3,495	1.92	240
860	9,644,937	86,804,87	3.651	2.16	240
861	9,343,254	99,104.96	3.974	2.40	240
862	8,891,250	84.827.45	3.071	2.21	240
863	9,597,786	96,233.86	2,995	2.40	240
864	9,517,512	142.815.98	3,168	$\tilde{3.50}$	240
865	9,478,368	209,696,20	3,176	5.18	240
866	10,050,020	245,567.19	4.114	5,50	240
.867	10,101,556	207,457,39	4.170	4.61	240
868	9,929,072	208,783.07	4.583	2.85	150
869	10.205.303	254,022.43	4,500 4,709	3.72	150
870	10.710.252	234,047.63	4.959	3.27	150
871	11,365,162	236,639.74	5,404	3.12	150
872	11,542,632	259,196.67	5,911	2.24	100
070	12,001,200	300,768.00	6.212	2.50	100
0.74	12,716,892	312,835,95	6,219	$\frac{2.00}{2.46}$	100
0.00	12,110,302 14,195,102	315,131,29	6,215 6,227	$2.40 \\ 2.22$	100
0.00	15,309,348	248,900.93	6,295	1.62	100
0.777	15,605,918	246,573.46	6,341	1.58	100
0.00	15,005,518 15,912,234	240,575.40 276,873.32	6,477	$1.55 \\ 1.74$	100
0=0	17,482,132	264,406.73	6,633	$1.74 \\ 1.50$	100
0.00	17,402,102 17,735,990	263.812.17	7,219	1.48	100
3.5.4	17,735,550 17,943,308	316,462,26	7,574	$1.40 \\ 1.76$	100
	17,545,505 19,175,408	312,673.82	7,831	1.62	100
000	20,055,986	332,741.72	7,944	$1.62 \\ 1.65$	100
001		361,401,61	8,143	$1.05 \\ 1.75$	100
0.0 *	$20,613,032 \\ 21,137,464$	345,260.15	8,145	$1.73 \\ 1.63$	100
	21.137.404 21.379.384	347,009.31	$\frac{8,157}{8,602}$	$1.63 \\ 1.62$	100
007		373,138.96	$\frac{8,602}{8,996}$	$\frac{1.62}{1.70}$	100
0.0.0	21,905,476				100
1888	22,162,928	432,914.45	9,344	$1.95 \\ 1.90$	100
1889	22,962,790	437.092.69	9,527	$1.90 \\ 1.91$	100
1890	24,207,740	462,869.17	9.723		100
.891	24,872,492	$443,\!541.76$	10,367	1.78	100

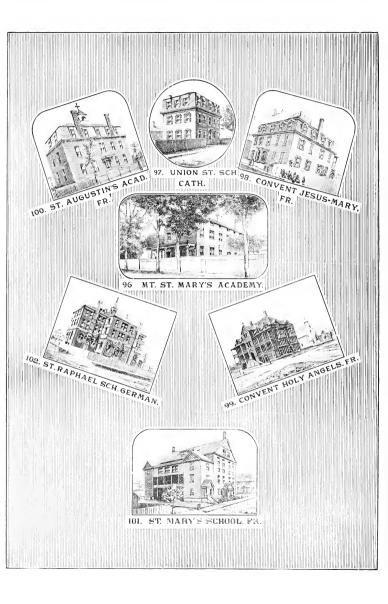
TAX VALUATIONS, ETC., FROM 1846 TO 1891, INCLUSIVE.

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# Settlement of the Account of George E. Morrill, Collector of Taxes, June 1, 1891.

			mount o inding, J 1, 1890.	une	Amount collected.	Balance out- standing, June 1, 1891.
Tax list, 1885		\$	1,208	13	\$1.63	\$1,206.50
1886			1,266	47	1.62	1,264.85
1887	• •		1,172	44	6.80	1,165.64
1888			1,602.	52	15.99	1,586.53
1889	• •		1,566.	28	153.70	1,412.58
Co. has an estat	- 6 4				\$179.74	
Cr. by receipt		er, No	5. 81	·	179.74	
Interest collect	ed, 1885	•	•	•	\$0.89	
	1886	•		•	.72	
	1887				2.06	
	1888		•		3.29	
	1889	•		•	17.99	
	1890				387.01	
					\$411.96	
Cr. by receipt	of treasur	er, No	o. 81	•	411.96	
			Dr.			
1890. To resi	dent list			• \$	\$461,290.59	
non	-resident	list			1,578.58	
volu	intary taxe	es .			367.89	
						\$463,237.06
			Cr.			
1890. By cas	h paid o	ity t	reasure	er,		
	r receipts	-			\$401,167.54	
cash	paid as	per	cour	ity		
	easurer's r			•	46,032.47	
	ounts .				11,265.25	
abat	ements				2,954.09	
unpa	id taxes,	June	r, 189	ι.	1,817.71	
						\$463,237.06

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#### CITY OF MANCHESTER TO GEORGE E. MORRILL.

Dr.

To salary for the year ending	June	г,		
1891			\$1,650.00	
commissions on old taxes			10.28	
				\$1,660.28

#### Cr.

By cash paid	d by tr	easure	r, on	accor	int		
of sal	ary .					\$800.00	
balance	paid 1	by tre	easurei	r, as	per		
bill .	•	· .			•	860.28	
							\$1,660.28

MANCHESTER, N. H., JULY 9, 1891.

I hereby certify that I have examined the account of George E. Morrill, tax collector of said Manchester, and find the same correct, as above stated.

JAMES B. STRAW, *City Auditor*.

# Some Laws and Decisions Relating to Exemptions from Taxation.

CONSTITUTION OF NEW HAMPSHIRE, ARTICLE 82, PAGE 38, PUELIC STAT-UTES.

#### ENCOURAGEMENT OF LITERATURE, ETC.

ARTICLE 82. "Knowledge and learning generally diffused through a community being essential to the preservation of a free government, and spreading the opportunities and advantages of education through the various parts of the country being highly conducive to promote this end, it shall be the duty of the legislators and magistrates, in all future periods of this government, to cherish the interest of literature and the sciences, and all seminaries and public schools; to encourage private and public institutions, rewards and immunities for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and natural history of the country; to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and economy, honesty and punctuality, sincerity, sobriety, and all social affections and generous sentiments among the people; *provided, nevertheless*, that no money raised by taxation shall ever be granted or applied for the use of the schools or institutions of any religious sect or denomination."

Public Statutes, chapter 55, section 2 :

SECTION 2. "Real estate, whether improved or unimproved, and whether owned by residents or others, is liable to be taxed, except houses of public worship, twenty-five hundred dollars of the value of parsonages owned by religious societies and occupied by their pastors, schoolhouses, seminaries of learning, real estate of the United States, state, or town used for public purposes, and almshouses on county farms."

SECTION 11. "Towns may by vote exempt from taxation for a term not exceeding ten years any manufacturing establishment proposed to be erected or put in operation therein, and the capital to be used in operating the same, nnless such establishment has been previously exempted from taxation by some town."

#### OPINION OF THE SUPREME COURT.

58 N. H. Rep. page 623. "The exemption in each case is limited to ten years. A perpetual alienation of the whole power of taxation would be the destruction of government; and the dangerous tendency of legislation suspending any part of that power, for any period, is manifest. *P. Bank* v. *Billings*, 4 Pet. 514, 561. So long as the existing laws remain unrepealed, and the constitutional construction heretofore adopted remains unchanged, contracts hereafter made under those laws and that construction will be valid. If the legislature for any reason wish

SCHEDULE OF PROPERTY USED FOR RELIGIOUS, CHARTABLE, AND EDUCATIONAL, FURIOSES, AND EXEMPT FROM TAXATION BY LAW, NOT INCLEDING THAT OWNED BY THE CITY OF MANCHESTER.

Remarks.	Tatuble. This is city property. Land included in cathe- (Jaral 106.	Tarable. Taved in 1891.	Building in prevent of ferences of Rase arent built and occu- i School, church not built. I Land not yet decied.		ferevion. Building in proves of Schilding only courced. Lot metuded in chich lot.	Tavable. Building contemplated.
Total of evenption	<ul> <li>*12.600 00</li> <li>33.300 00</li> <li>33.375 00</li> <li>33.375 00</li> <li>75,500 00</li> <li>75,500 00</li> <li>75,500 00</li> <li>10,000 00</li> <li>10,000 00</li> <li>10,000 00</li> <li>10,000 00</li> </ul>	12, 200, 00 1, 500, 00 2, 500, 000, 000, 000, 000, 000, 000, 00	2,500.00 21,250.00 20,875.00 20,875.00 29,000.00 25,100.00 22,614.00 22,614.00	256, 1120, 100 112, 7550 000 112, 7550 000 113, 7550 000 114, 400 00 114, 400	1,000 mm	25,000,00 2,500,00 35,000,00 25,000,00 25,000,00
Total valua- tion of property.	<ul> <li>\$12,400 00</li> <li>36,600 00</li> <li>36,600 00</li> <li>5,406,000</li> <li>7,5,500 00</li> <li>15,200 00</li> <li>15,200 00</li> <li>15,200 00</li> <li>15,200 00</li> <li>10,000 00</li> <li>10,000 00</li> </ul>	15, 100,000 12, 400,00 13, 06,00 7, 66,00 52, 000,00 16, 000,000 16, 000,000	3,560,00 31,256,00 56,875 00 31,256,00 33,400,00 38,400,00 38,400,00 29,641,00 29,641,00	254, 132 (1999) 255, 1510 (1999) 152, 7590 (1999) 152, 7590 (1999) 154, 2690 (1999) 154, 2690 (1999) 252, 2690 (1999) 252, 2690 (1999) 25, 2600 (1990) 25, 2600 (1990) 26, 2000 (1990) 26, 2000 (1990) 26, 2000 (1990) 26, 2000 (1900) 26, 200	17.500 00 2.500 00 2.500 00 7.500 00 7.000 00 7.000 00 7.000 00 7.000 00	Expension Expension 6,770,000 25,000,00 2,500,000 2,5600,00 2,600,000 2,5600,00 25,000,000 25,000,00 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000,000 25,000,000 25,000
Building, valuation.	Structure 36; energie 26; energie 35; energie 35; energie 35; energie 35; energie 12; energie 10; energie 10; energie 115;	55,000,00 65,000,00 55,000,00 40,000,00 25,000,00	25,500 00 30,000 00 20,000 00 25,000 00 25,000 00 15,000 00	25,400,000 12,5400,000 8,0000,000 8,0000,000 5,5400,000 5,5400,000 5,5400,000 25,0000,000 20,000,000 20,000,000 20,000,00	15,000,00 15,000,00 1,500,00 5,000,00 5,000,00 5,000,00 2,000,000	3,000.00 3,000.00
LAND. t. Valuation.	\$2,500 00 6,360 00 6,460 00 5,460 00 5,460 00 5,460 00 5,460 00 5,460 00 5,460 00 5,460 00 5,400 00 30,375,00 5,400 00 3,300 00 4,500 00	18,101,00 4,5600 00 0,4660 00 1 875,00 2,646 00 12,000 00 12,000 00	2,0001.00 5,000 5,000 16,875.00 14,000 3,000 14,000 7,014.00 7,014.00 20,0001.00	12, 2760 00 12, 2000 00 2, 2780 00 13, 2000 00 13, 2000 00 14, 2000 00 15, 2000 00 10, 20	5,000.00 1,000.00 4,000.00 3,750.00 2,550.00 2,550.00 2,550.00 2,500.	3.700.00 3.700.00 1.020.00 1.020.00 1.020.00
LA Square ft.	13,000 12,500 10,500 40,500 40,500 10,500 20,000 20,000	26,000 15,000 7,500 8,820 8,820 24,000 24,000	5,000 15,000 15,000 8,000 18,600 18,600	11,000 9,450 9,450 9,450 11,0100 11,0100 11,0100 11,0100 11,0100 11,0100000000	12,600 10,000 19,412 5,277 8,100 8,200 15,000 10,187	57,530 55,000 10,200
Loration.	East Sprace street, near Perch, and Sprace street, near Perch, and Strans acceptor (Proline), and a corran acceptor (Proline), and and a street (all). East and a street (all) East acceptor correct Black Lade accurate East Due streets Correct Clara and David Streets.	Beaupoit street, W. M. Corner Beech all Spruce streets. Corner Wayne and Spruce streets. Seen street corner streets. 233 Merrianak street	The state stretch correct of Run. 27.1 Beauport stretch. M	(1) (1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(	The second states and second s	Hanover, corner chekubut, Manusuch rosh. E. Manufester Pear attreet, corner of Receit . Webter attreet Signatore corner of Pure 1.3 Marchester Bank block, Ein st. 1.4 Marchester Bank block, Ein st.
Denomina- thou.	Freuch Cath. Catholic	Catholie .	French Cath Catholic French Cath French Cath German Cath German Cath. French Cath.	tant		
NAME.	Convert, Sakera Jesua Mary Convert, Sakera Allery Convert, Sakera Allery Menti Startin (1994) Lite senth value and the Lite senth value and the Oil dalar University in priority and all Mark method and for filling Mark senth of the Hold Aller and the Starting and the Hold Aller and the Convert of the Hold Aller and the Convert of the Hold Aller and the Convert of the Hold Aller and the Starting	Way are sparse foundable by least ort. Way are suit for many interests of Mary Spreechal science. Stars, spreechal science of the Base preset St. Ame's entrest of Base preset St. Ame's entrest Residence Catholic sisters and to have a st. doorph's rational	Base printers of the Garge way and the Printer Prevent Gard Res., printers of SN, Mary S, Garger M, Markow	Trust Burget Canrol. Test Repeat Length Canrol. Second Langert Canrol. Second Langert Canrol. Second Conference and Lance Test Conference and Lance Lance Mathematic Lance Cancer Canada Mathematic Lancer Cancer Canada Mathematic Lancer Canada Mathematic La	Weisunstate the evolution of the content of the con	Eliot Hosy tail hosy and hosy tail hose to the second second second second for the Host tail wavelenger Children's House Wavelenger Children's House Rev- platfor Sacolish Luttheran chi Gale house.
No. of English	888 6385588888 888 638888888888888888888888888888			232853853853855855855855555555555555555		2831

SCHEDULE OF PROPERTY USED FOR MANUFACTURING PURPOSES, EXEMPT BY LAW FROM TAXATION.

Exemption Unexpired Valuation reades. term.	April 1, 1897 5 years. \$1,000,000	a 8 years 200,000.00	3 1 year 60,000,00	<ol> <li>4 years 22,100.00</li> </ol>	April 1, 1990 10 years 25,000.00	<ol> <li>Ju years. 30,000 000</li> </ol>	5 3 years 37,540.00	5 3 years 30,000.00	1. 9 years 37,500.00		\$1,442,100,00
Exemption reases.		April 1, 1900	April 1, 1880	April 1, 1890	April 1, 1996	April 1, 1900. 10 years.	April 1, 1895	April 1, 1895	April 1, 1901		
Exemption commenced.	April 1, 1887		November 1, 1887 April 1, 1893 1 year	Pacember 1, 1885 April 1, 1890. 4 years	April 1, 1890.	April 1, 1890 -	June 1, 1884 April 1, 1895	June 1, 1884 April 1, 1835 3 years	June 10, 1890 April 1, 1901. 9 years		
Gools manufactured.	Cotton April 1, 1887	Cutton	Sturkings, etc	Wood manufactures.		Carriages.					
Loration.	Jetterson Mill	Stark Mills Mill. West Syde, north of Mc. Cotton	Obendam Mill, formerly Nas Stockings, etc	Land and building, Dean Ave. Wood manulactures.	Land and bublings. West Cen-	tral and Canal streets. Stock and tools, West Central Carriages.	and Canal streets Cand and buildings, Ballyothe	stock and mardumery, Hallsville Shoes	Land and buildings, West Man chester, West Baucock street		
Occupant.	Amoskeag Manufacturing Co Annoskeag Manufacturing Co Jefferson Mill	Stark Mills	A. F. Olzendam	William W. Hubbard	(* Kunball Carriage Co.	Kuubali Carriage Co	Kunbali Brothers	Kunball Brothers	· Craita & Green .		
0 w ner.	Amoekeag Manufacturing Co-	Stark Mills.	A F Olzendam	William W. Hubbard	and the second se	A. Ellioff A.W. N. Johnson.	Maurhester Slow Munufactor- ( Kumball Brothers	mg co ···	West Side Shoe Co.	Queen City Manutacturing Co.1	Total

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• Other Additional Company Company International On Additional Company are estimated as a menual of buildensity.
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to prevent the making of any more such contracts, their object can be accomplished by a repeal of the laws authorizing them."

Hospitals, etc., are exempt from taxation in their respective charters as "being of the nature of a public charity," as follows :

Gale Home for Aged and Destitute Women, N. H. Laws of 1889, chapter 199.

Elliot Hospital, N. H. Laws of 1881, chapter 178.

Manchester Women's Aid and Relief Society, organized in January, 1875; N. H. Laws, 1891, chapter 283.

Orphanage and Home for Old Ladies (Catholic) on Hanover street, N H. Laws, 1883, chapter 56.

#### Memoranda.

An extension, to the east, of St. Joseph's cathedral and a chapel, both in process of building, will soon occupy the two lots between the cathedral and the bishop's residence on Lowell street.

The house formerly on these two lots has been moved to the lot of the "Old Ladies' Home," and is being converted into a hospital fronting on Amherst street. The city council have voted to sell the Park-street schoolhouse for parochial school purposes.

St. Mary's French catholic church is not yet completed. When finished, it will cost, with land, about \$100,000.

St. George's French catholic church is not yet completed. When finisded, it will cost, with land, about \$75,000.

The Second Advent church building and lot have been sold to the Swedish Baptist society.

The South Manchester union chapel is in process of building.

It is probable that a lot will be purchased during the coming year, and a building erected for the "Gale Home." The real estate and personal property in the hands of trustees will now exceed in value \$120,000.

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	ē	chester, ?	<i>11</i>	,,	"	"	11	;	38.	chester, 1	,,	"	"	"	;;			;;	**	3
	Where payable.	office, Man	**	;;	.,	:	,,	"	Boston, Ma	office, Man	"	,,	"	"	;;	"	"	3	**	"
INTEREST.	I.M.	At treasurer's office, Manchester, N. H 	33	**		**	3	3	Suffolk Bank, Boston, Mass.	At trensmer's office, Manchester, N. H.	11	1	23	"	"	"	3	**	"	**
	When payable,	Semi-annud. "	3	.,	•	3	"	3	:			:	:	,,	"	;;	;	.,	.,	3
	Rate Der et.		e	e	9	9	ę	9	4	9	÷	φ	4	÷	9	9	φ	9	9	ç
11-11	ipal ile.	2021	1507	1202	1891	1902	1902	2001	1910	1895	92	1895	1907	1893	1893	1893	1893	1893	1893	1001
thate when	the principal is payable.	Jan. 1, 1, 1,	-	::	- -	-	-	ŕ	100,000 July 1,	1,	-	÷-	Jan. 1.	Nov. 1.	-	-	-	1	1	Indu 1
	.ІвзоТ		\$100,000		100 000	000'007		100.000	100,000			100.000	000 001	nun nur						70,000
.tı	inoiaV	\$6,000 31,000 63,000	\$6 000	31,000	63,000	\$6,000	31,000	63,000	\$100,000	\$5,000	25,000	20,000	\$100,000	\$1,000	2.000	8,000	21,000	20,000	18,000	¢60.000
- <b>e</b> щ	nenom) tion.	$$100 \\ 500 \\ 1,000 \\$	100	200	1,000	100	200	1,000	1,000	100	000	1,000	1,000	100	200	500	1,000	2,000	3,000	000 1
	əquinX	888	9	3	3	\$	8	8	100	20	3	2	160	10	10	2	5	10	ę	50
	ion.	Water bonds. """"	3	;		17	3	;	4	3	::	:	3	ity bonds.	"	"	3	33	;	:
	eript	÷				3	3	3	:	::	:	:	3	5		ž	3	3	ï	**
	Description.	Water 	3	3	;	Ĩ								0						

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# REPORT OF THE CITY AUDITOR.

Semi-unnual. At treasurer's office, Manchester, N. H.	Suffolk lank, Boston, Mass. 4 4	
Semi-annual.	3 3 3 3	
** **	***	
1161	2061 1905 1905	
July 1, 1911 1, 1911	2222 2222 2222 2222 2222 2222 2222 2222 2222	
	50,000 50,000 50,000 50,000 50,000	
19.500 39,000	\$50,000 50,000 50,000 5,000	
500 1.000	1,000 1,000 1,000 1,000	
88	8884	
July 1, 1881 Bridge bonds. 1, 1881 ".	City bonds.	
July 1, 1881 1, 1881	April 1, 1885 City honds. 1, 1885 City honds. 1, 1885 c. c. c. 1, 1888 c. c. c.	

	oer cent to d water. les.*	Mt 4 per cent, water-works.†	five per cent, cemetery bonds‡	\$70,000 issued Oct. 31, 183, \$50,000 issued July 1, 1864, Sixpercent to fund debts.	<pre>ssued July 1, 1881, 4 per cent to build McGregor bridge.</pre>
YEAR.	Six per build works.	At 4 wate	Five ceme	\$70,000 is 31, 1833 issued 1864. Si to fund	Issued . 4 per build bridge
1890	\$400,000	\$200,000	\$13,850	\$120,000	\$60,000
891	400,000	200,000	18,850	120,000	60,000
Issued April 1, 1886, 4 per cent to find debts.	Total.	Amount of 6 per cent bonds due and paid.	Amount of 6 per- finded at 4 per- cent.	Total amount of bonded debt, De- cember 31.	Amount of 6 per centwaterbonds on which inter- est has censed, not yet present.
\$135,000	\$948,850	\$99,900*	\$100,000	\$948.850	\$100
155,00)	953,850	100		953.850	

#### TABULAR STATEMENT OF BONDED DEBT, CITY OF MAN-CHESTER, N. H., FROM JANUARY 1, TO DECEMBER 31.

REMARKS. — The city guarantees the perpetual care of lots in the cemeteries of the city to parties who pay \$100 and upward. There are \$18,850 in cemetery bonds, so called, in the hands of the city treasurer, which are not included in the \$935,000.

Total amount of bonded debt, including cem-

etery bonds Net indebtedness		ater p				•	\$953,850.00 600,000.00
Net debt afte	er dec	luctin	g wat	er del	ot.		\$353,850.00

<sup>\*\$400,000,</sup> water bonds, issued January 1, 1872; \$100,000 of these bonds refunded January 1, 1887.

 $<sup>\</sup>dagger$  \$200,000, water bonds, issued July 1, 1874; \$100,000 of these bonds refunded July 1, 1890.

<sup>;</sup>  $\hat{s}_{2,200}$ , cemetery bonds, issued in 1884, and other additional bonds each year. The city guarantees the perpetual care of lots in the cemeteries. Bonds payable July 1, 1913.

#### BONDED DEBT.

As shown in the assessors' books for the year ${}_{1891}$ :	
The assessed value of personal property, includ-	
ing poll tax	\$4,315,346.00
The assessed value of real estate	20,557,146.00
Total value for taxation	\$24,872,492.00
Tax rate 1.78 per cent on a hundred. Per cent of net indebtedness (excluding debt for	
water purposes) to assessed valuation Per cent of net indebtedness (including debt for	I.422
water purposes) to assessed valuation	3.834
Population, census of 1890	43,983
Population, census of 1880	32,458
Increase of population in ten years	11,525
Increase of population in 1891 (estimated at) .	1,500

No issue of bonds has ever been contested.

The interest on the debt has always been promptly paid at maturity.

None of the bonds are stated specifically as being payable in gold.

None of the bonds can be called for redemption.

The power of the city to borrow money in relation to the water-works is limited to the sum of \$600,000 by section 6, chapter 70, New Hampshire Laws of 1871, entitled "An act to enable the city of Manchester to establish water-works."

Year.	* Six per cent water bonds.	† Four per cent water bonds.	Five per cent ceme- tery bonds.	Six per cent to fund debts.	Four per eent to build Mc- Gregor bridge.	Four per cent to fund debts.	Total of annual in- terest.
1890		\$6,000 8,000	\$623.75 813.92	\$7,200 7,200	\$2,400 2,400	\$6,200 6,200	\$49,423.75 48.613.92

STATEMENT OF THE ANNUAL INTEREST CHARGE ON THE BONDED DEBT.

SUMMARY OF CITY DEBT.

Amount of bonded debt January 1, . \$948,850.00 1801 . Amount of cemetery bonds issued in 5,000.00 1801 . . Temporary loan; note due December 1, 1892 30,000.00 Accrued interest on temporary loan 125.00 Accrued interest on bonded debt . 21,392.26 . \$1,005,367.26 Total indebtedness Jan. 1, 1892 .

#### AVAILABLE ASSETS.

Net cash on hand J	anuary	1, 1892		\$93,190.14	
Taxes uncollected,	list of a	1891		24,385.47	
Stock of Suncook	Valley	Railroa	d,		
estimated value				14,000.00	
					\$131,575.61

\* \$400,000, water bonds, issued January 1, 1872; \$100,000 re-funded at 4 per cent, January 1, 1887. † \$200,000, water bonds, issued July 1, 1874; \$100,000 re-funded at 4 per cent,

July 1, 1890. ury 1, 1890. \$50,000, bridge bonds, issued July 1, 1881, at 4 per cent. \$155,000, bonds issued April 1, 1885, at 4 per cent. \$50,000, bonds to tund debts, issued October 1, 1863, and are due November 1,

1893.

 <sup>1836</sup>, 6000, bonds to fund debts, issued July 1, 1864, and are due July 1, 1894.
 §2,900, cemetery bonds, issued in 1884, and other additional bonds, each succeeding year. The eity guarantees the perpetual care of lots in the cemeters. teries.

Bonds payable July, 1913, to the trustees of cemetery funds; not negotiable. Amount that can be issued limited to the sum of \$20,000.

Total net ind	ebte	edness	Janu	ary		
1, 1892						\$873,791.65
Total net ind	ebte	edness	Janu	ary		
1, 1891		•		•	•	858,376.77
Increase						\$15,414.88

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Monthly rent.	Location.	Occupants.	No. of Poonts.	No. of Heat Gas rooms. Invished furnished by	Gas furnished by	Remarks,
\$6.25	\$6.25 28 Vinc street.	Charles II. Rogers	5 rooms. 1 room		*Family Family City Family City City	Halls used for private dancing
6.25	6.25 26 Vine street	Pennacook Hose Co. No. 1		2 halls City City	City	parties and other lestivities. Halls used for private dameing parties and other festivities.
6.25	20 Vine street	Walter L. Blenus	5 rooms. 5 rooms. 4 rooms.		Family Family City.	*Family. Family. *Family. Family. City City
6.25	6.25 18 Vine street	Hook and Ladder Co. No. I.   Charles M. Denvou	2 rooms.	City.	City	Gity Family
5.00	5.00 S Vine street	Warren F. Wheeler	3 rooms.		City.	Jity.
898 878	8.33 521 Maple street	Walter Seaward	7 rooms.			Family
5.00	44 Webster	Endl H. Smith	5 rooms.	city.		
		General stark S. F. E. Co	1 hall	City	City	Itall used for private dancing parties and other festivities.
	Main street, W. M	Fire King S. F. E. Co. No. 2.	7 rooms.		City City	Itall used for private dancing
	Massabesic street	Merrimack S. F. E. Co. No. 3. 5 rooms. City City	5 rooms.	City	City	purtnes and other festivities. Itall used for private dancing

\*One radiator in front room; heat furnished by city for that.

ENGINE-HOILSES

PUBLIC BUILDINGS OCCUPIED IN PART BY PRIVATE PARTIES.

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REPORT OF THE CITY AUDITOR.

Location. avenue. avenue. avenue. avenue. avenue. avenue. avenue. Location. Location. Location. avenue. aven	SCHOOL/HOUSES.	Occupant. Remarks.	Cathe avenue.         Catholic Parochial schools.         Twostory brick building.           Hallsville schoolbuse.         Catholic Parochial schools.         Twostory brick building.           Hallsville schoolbuse.         Catholic Parochial schools.         Twostory brick building.           Bakersville         Manoskeag         Manoskeag         Manoskeag	COURT-HOUSE.	Occupants. No. of Ireat Gas rooms. Invisiond furnished Remarks.	Franklin, corner of Mer- Manchester Art Association. 2 Art Ass'n. Art Ass'n. Art Ass'n. rimack. Franklin, corner of Mer- City Mission Society. 1 City Mis- City Mis- City Mis- rimack. Franklin, corner of Mer- City Mission Society. 1 City Mis- City Mis- City Mis- City Mission Society. 1 City Mis- City Mission Society. 1 City Mission Socie
		Location.	Lake avenue. Catholi Hallsville seboolhouse Bakersville		Location.	ranklin, corner of Mer- Manche rimack. ranklin, corner of Mer- City Mi rimack.

PARTIES Continued.
IBLIC BUILDINGS OCCUPIED IN PART BY PRIVATE PARTIF
ART BY
d NI 0
OCCUPIED
SUILDINGS
PUBLIC BU

CITY-HALL BUILDING.

		· · · · · · · · · · · · · · · · · · ·				
Annual rent.	Location.	Occupant.	Hall, of- fices, and stores.	Heat furnished furnished by	Gas trinshed by	Remarks.
\$360.00	904 Elm street.	John J. Roltand.	store and	City. 0	Occupant.	Druggist.
800.00 550.00	91× ** **	A. J. Lane. N. H. Trust Company.	basement. Office. Office	• •	::	Real-estate office, etc. Banking.
700.00		second National Bank.	(bank). Office	**	3	Banking. Pantal for various mumores
Uncer- tain.	Gly Hall on third story. Sundry persons.		Hall.	с ч	city.	at \$5 per eventing, but al- lowed to be occupied for charitable purposes free.
		ALATTA I	BATTERY BUILDING.			
Annuad rent.	Location.	Occupant.	Rooms.	Command.	nd.	Remarks.
Free.	Manchester street. "	First Light Battery. Emmet Guards.	2 rooms. 1 room.	First N. H. L. Ba Emmet Guards	Battery. ds.	2 rooms. First N.H. f., Battery. Battery occupies first and second floor and basement. I room. Enunct Guards. Guards. Out floor and basement. Ward meetings are held in buttery room on second floor.
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REPORT OF THE CITY AUDITOR.

# Real Estate Owned by the City.

#### SCHOOLHOUSES.

High school house and lot			\$50,000.00
Franklin-street schoolhouse and lot			20,000.00
Spring-street schoolhouse and lot			16,000.00
Lincoln-street schoolhouse and lot			50,000.00
Ash-street schoolhouse and lot .			58,000.00
Main-street schoolhouse and lot .			23,000.00
Webster-street schoolhouse and lot			22,639.00
Blodget-street schoolhouse and lot			3,500.00
Bridge-street schoolhouse and lot			4,000.00
Lowell-street schoolhouse and lot			7,000.00
Merrimack-street schoolhouse and lot			15,985.00
Wilson Hill schoolhouse and lot .			3,300.00
School-street schoolhouse and lot			5,000.00
South Main-street schoolhouse and lo	t		2,800.00
Bakersville schoolhouse and lot .			15,000.00
Stark district schoolhouse and lot			3,000.00
Amoskeag schoolhouse and lot .			3,700.00
Goffe's Falls schoolhouse and lot			3,600.00
Harvey district schoolhouse and lot			2,500.00
Webster's Mills schoolhouse and lot			600.00
Hallsville schoolhouse and lot (old)			3,500.00
Youngsville schoolhouse and lot .			1,400.00
Mosquito Pond schoolhouse and lot			1,200.00
Park-street schoolhouse and lot .			8,500.00
Varney schoolhouse and lot .			50,000.00
Hallsville schoolhouse and lot (new)*		•	20,759.00

ENGINE-HOUSES.

Engine-house, stable and land, Vine street .	\$47,000.00
Main street, West Manchester	20,000.00
*Amount expended in 1891.	

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\$394,983.00

Engine-house, cottage and lot, Lake avenue, cor- ner of Massabesic street	\$19,371.00
and lot, Webster street, corner Chest- nut	13,000.00
Clinton street, West Manchester .	2,500.00
Hose-house, cottage and lot corner Maple and	.,,,
E. High	5,000.00
•	

\$106,871.00

#### OTHER PUBLIC BUILDINGS AND LOTS.

City library, building and lot				\$41.000.00
City hall, building and lot .				60,000.00
City farm and permanent impro	veme	nts		34.000.00
Court-house and lot				51.000.00
Battery building on Manchester	stree	t.		18,000.00
Police station on Manchester sta	reet			43,300.00
City stables and city yard .				36,000.00
Gravel lots, 2 acres, Goffstown				400.00
Gravel lots, Bakersville .				700.00
Gravel, district No. 10, Brooks &	& Bro	ock		500.00
Land bought of A. D. Gooden		•		345.00

\$285,245.00

PERSONAL PROPERTY OWNED BY THE CITY.

Property in care city engineer	\$848.24
in care chief engineer of fire department	93,303.00
in care superintendent highway district	
No. 2	26,698.00
in care superintendent highway district	
No. 10	666.85
in care superintendent of schools	36.235.00
in care city messenger	2,759.00
in care city marshal and janitor .	1,970.25
in care superintendent of city farm .	11,287.57
in care trustees of city library	28.332.90

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Property in care superintendent of Pine Grove	
cemetery	\$248.35
in care superintendent Valley cemetery	106.00
Stock in Suncook Valley R. R., in care city treas.	50,000.00
Personal property in care city weigher	1,000.00
	\$253,455.16
Uncollected taxes in 1890	\$1,817.71
Uncollected taxes in 1891	24,385.47
Net cash in the treasury, December 31, 1890	93,190.14
	\$119,393.32

OTHER REAL AND PERSONAL ESTATE OWNED BY CITY.

Soldiers' monument							\$25,000.00
Permanent inclosure	of c	omme	ns				10,200.00
Amoskeag bridge over	er M	errima	ck ri	ver			25,000.00
Fountains and water	trou	ghs or	n stre	ets a	nd co	m-	
mons							3,500.00
Two city tombs .							10,000.00
McGregor bridge							90,000.00
Granite bridge .							25,000.00
South Main-street bri	idge,	over	Pisca	taquo	og rive	er.	10,000.00
Print-Works bridge,	on G	ranite	e, ove	r lov	ver ca	nal	5,000.00
Two bridges in high	vay c	listrict	t No.	9			2,000.00
One bridge at Goffe'	s Fal	ls					1,000.00
Expended on constru	ictio	n of se	ewers				294,470.00

\$501,170.00

#### PARKS AND CEMETERIES.

Valley cemetery, 19.7 acres .			\$200,000.00
Pine Grove cemetery, about 80 acres			40,000.00
Amoskeag cemetery, 1.05 acres .		•	4,000.00
Stark park, 28 acres	•	•	9,000.00
Derryfield park, 76 acres			25,000.00
Concord common, 4.48 acres .			200,000.00

## 666 REPORT OF THE CITY AUDITOR.

Tremont common, 2.25 acres	•		\$40,000.00
Hanover common, 3 acres .		•	100,000.00
Park common, 3.49 acres .			60,000.00
Merrimack common, 5.89 acres			200,000.00
			\$878,000.00

#### WATER-WORKS.

Real estate and	persona	l prope	rty o	f wat	er-woi	rks,	
at cost price							\$988,221.82

#### RECAPITULATION.

Real estate owned by the city, so	hooll	house	s	\$394,983.00
Real estate owned by the city				285,245.00
Real estate owned by the city, en	ngine	-hou	ses	106,871.00
Water-works at cost price .				988,221.82
Personal property owned by the	city			253,455.16
Uncollected taxes and cash				119,393.32
Other real and personal property				501,170.00
Parks and cemeteries				878,000.00
				\$ 3,527,339.30
DEODEDTV	1000	UNT		

#### PROPERTY ACCOUNT.

Inventory of assets, December 3	31, 1891		. \$	3,527,339.30
Inventory of assets, December 3	1, 1890	•	·	3,395,387.00
Gain in valuation .				\$131,952.30

The increase in the valuation as above stated results from the amount expended in 1891, on :

unount expended in Toyr, on.		
Sewers and drains		\$50,000.00
Hallsville schoolhouse		20,759.00
Addition to Webster-street schoolhouse .		5,139.00
Gravel lot, bought of Brooks & Brock .		500.00
Land bought of A. D. Gooden		345.00
Increase in property value of fire departme	nt.	2,207.00

Increase in district No. 2					\$1,698.09
Increase in school department					1,948.00
Increase in city farm .					1,148.17
Increase in city library .					1,000.00
Increase in uncollected taxes	•				4,838.19
Increase in net cash on hand					13,638.12
Increase in value of water-wor	ks	•	•	·	30,081.73
					\$133,302.30
Deduct value of land sold on Be	elmor	ıt			
street		• \$1	,200.0	00	
Deduct value of land sold Bro	oks å	è.			
Brock			150.0	00	
		-			\$1,350.00
Total net gain .					\$131,952.30
		.1 .	1.	,	0C . TTI

Details of inventory are on file in the auditor's office. The city-hall building, valued at \$60,000, is considered by good judges of real estate as worth on the market \$150,000, while the water-works would sell readily at \$1,500,000.

Among the assets of the city of Manchester is a certificate for five hundred (500) shares of the Suncook Valley Railroad as follows:

#### SUNCOOK VALLEY RAILROAD.

No. 1.	One Hundred Dollars per Share.	5c. Revenue Stamp c a n- celled.	500 Shares.

"BE IT KNOWN, That the City of Manchester is proprietor of —— five hundred shares in the capital stock of the Suncook Valley Railroad, of the par value of one hundred dollars per share, subject to the provisions of the chatter, and the by-laws of the corporation, and to the conditions hereon expressed, the same being transferable by an assignment in the books of said corporation; or by a conveyance, in writing recorded in said books. And when a transfer shall be made or recorded in the books of the corporation, and this certificate surrendered, a new certificate or new certificates will be issued."

Dated this 9th day of April, 1870.

S. N. BELL,

No dividends are to be paid on this stock for fortywo years from January 1, 1870.

The following is printed in red ink across the face of the certificate : "No dividends, income, or profits are to be paid to or received by the holders of these shares of stock in said railroad, their successors or assigns, during the term of forty-two years from January 1, 1870, the same being in accordance with the original subscription therefor, and the holder thereof takes said shares of stock subject to said condition, and his agreement and consent to said condition is expressed by his signature hereto, this day of 18 ."

Had this 550,000 been invested by the city at 6 per cent, compound interest, for forty-two years, it would in that time amount to 5577.851.75, a sum sufficient to pay more than one half of the present bonded debt of the city. Soon after this investment in railroad stock bearing no dividends, the people of the state of New Hampshire amended their constitution by adopting the following: "*Provided*, That the general court shall not authorize any town to loan or give its money or credit, directly or indirectly, for the benefit of any corporation, having for its object a dividend of profits, or in any way aid the same by taking its stocks or bonds."

This conservative action of the state has thus far saved her towns and cities from many extravagant and unprofitable investments, and kept them in sound financial conditions.

#### Auditor's Office.

City Hall building. Open from 8 to 12 A. M.; 2 to 5 P. M. 7 to 9 P. M. on Thursday and Saturday.

In every bill presented to the city auditor for his approval, the following points will be considered and passed upon :

r. Is the subject-matter of the bill under examination within the scope of the powers conferred by the legislature on the city government?

2. Is the bill certified by the party legally authorized to make the contract, or cause the expenditure to be made?

3. Has any appropriation been made to meet the expenditure, and is there a balance unexpended sufficient to pay this bill?

4. Are the number of articles in the bill, or the measurements either of dimensions, quantities, or weights correctly and fully stated, and is the proof of the delivery to the city of the whole amount charged sufficient?

5. Is the price charged a fair market price, or is it so largely in excess as to require the attention of the city councils to be called to the same?

6. Is the bill written in a fair, legible hand, correctly cast,

and on paper of sufficient length and width to admit of its proper backing and filing?

7. If the bill is in part payment of a contract, the date and the total amount of the contract, the amount already paid, the amount of the work not yet completed, and the per cent retained, if any, should be stated on the bill.

8. Any other inquiries in matters of law and fact which affect the question of indebtedness before the auditor.

9. Approval, rejection, or suspension for further information or correction as the circumstances of each case may require.

## COURT DECISIONS, LEGAL POINTS AND RULES, RELATING TO THE APPROVAL OR DISAPPROVAL OF CLAIMS AGAINST THE CITY.

No bill or account shall be paid by the city treasurer until the auditor has approved it as correct.

Public trusts or powers devolved by law or charter on the city councils cannot be delegated to others. *Dillon's Municipal Corporations*, section 96, volume 1.

No member of either branch [of the city councils], except the mayor, shall receive any compensation for his services, or shall hold any office or agency created during his continuance in office. General Laws, chapter 46, section 13.

The executive powers of the city and the administration of police, except where vested in the mayor, shall be exercised by the mayor and aldermen. General Laws, chapter 46, section 14.

The mayor and aldermen have all the powers and authority of selectmen of towns, unless it is otherwise provided by law. General Laws, chapter 46, section 14.

Joint standing committees have advisory powers only, they cannot legally be endowed with executive or legislative powers by ordinance or resolution of the city councils, as no by-law or ordinance shall be repugnant to the constitution or laws of the state.

No member of either branch of the city councils can enter into any verbal or written contract to furnish supplies to, or do

any work for the city. Any firm of which a member is also a member of the city councils is included in this prohibition.

No city official, or department, or board of officials having legal power to expend money for the benefit of the city, can purchase of or contract with themselves, with any one of the board, or with any firm of which one of said officials is a member. *Dillon's Municipal Corporations*, volume 1, page 436, section 444.

Every bill against the city shall specify the particular appropriation to which the same should be charged, and the moneys paid will be charged to such appropriations only.

He who is intrusted with the business of others cannot be allowed to make such business a source of profit to himself.

All orders passed by the city councils authorizing a ministerial act to be performed by its agent or agents must be strictly construed, and the act to be done must be specifically stated.

The board of engineers have the authority of firewards. (General Laws, chapter 106, section 11.) They have no power conferred upon them by law or ordinance to purchase new apparatus of any kind.

The joint standing committee on fire department have advisory powers only.

The laws and ordinances require the city auditor to withhold his signature from all bills against any appropriation where the amount of the appropriation is expended, until the city council shall have provided the means of paying the same. Section 4, chapter 3 of the City Ordinances, and section 4, ordinances relating to duties of the city auditor, approved January 7, 1890.

The power of towns to raise and appropriate money is derived solely from statutory provisions, which restrict the power to certain specified objects and other necessary charges.

Votes to raise or pay money for purposes other than those prescribed by statute are void, and towns cannot be compelled and generally will not be permitted, to carry such votes into effect.

It is not left to the unrestricted and irresponsible discretion of towns to vote gifts or to select donees; their charity is a duty defined, commanded, enforced, and regulated, and the objects of it are designated by law. A majority cannot dispose of the property of a minority in an unlimited manner. *Gove* v. *Eppins*, 41 N. H. 539.

The following parties are authorized by law or ordinance to make expenditures, within the scope of their powers, for their respective departments. For fire department and fire-alarm telegraph, the chief engineer, to be submitted monthly to the approval of the board of engineers; for police department, city marshal; for police court, police judge; for water-works department, superintendent, subject to the rules of the board of commissioners and the ordinances relating thereto; for city farm. superintendent; for overseers of the poor, each overseer, subject to the rules of the board of overseers, and their monthly review and approval : for schools, superintendent, or such person as the board of school committee may designate, bills to be approved by the board monthly; for streets, sewers, and other work under these departments, superintendent of each district, under control of mayor and board of mayor and aldermen; for city clerk's office, treasurer's office, tax collector's office, assessors' office. auditor's office, incidental expenditures, city physician, city messenger, city solicitor, city engineer, - mayor; for cemeteries, superintendents, subject to board of trustees (to consist of citizens not members of the city councils); for health department. board of health, subject to approval of mayor; city library, board of trustees, or person designated by them. It may be stated as a general rule, that all subordinate officials are under the supervision and control of the mayor, subject to such limitations and restrictions as the board of aldermen, acting as a board, may require.

The following form of blank is used in payment of ordinary bills for supplies or services, and can be obtained at the city auditor's office :

THE CITY OF MANCHESTER, N. H. To .....Dr. Date. Description of purchase. Amount. \$..... in full payment of the above account. Signed..... served for official purposes. In no case must any Blank bills can be obtained at the city auditor's separate pe-Make all monthly bills in this form, and in a legi Do not write on the back of this bill; that is re-#37 All monthly bills must be presented on or to two APPROPRIATION FOR voucher include items pertaining ore the 20th day of each month. I hereby certify that the articles "old on this line. herein mentioned have been received and services performed, that they were necessary for, and have been, or will be, applied to the work covered by the appropriation above mentioned, and the prices charged are just and reasonable. ole handwriting. appropriations. Approved. Mayor. Approved. office. Chairman Committee on ----43

## Communications of City Auditor to the City Councils. To his Honor the Mayor and Board of Aldermen:

GENTLEMEN,— Peter Larrabee presents a bill against the city for killing thirteen dogs, at one dollar each (thirteen dollars), from May 15 to June 23, 1891, inclusive. This bill the auditor declines to certify for payment for the following reasons:

Section II of an act passed by the last legislature, entitled "An act to prevent the destruction of sheep, and other damages by dogs," which took effect May 11, reads as follows: "SECTION 11. The mayor of each city and the selectmen of each town shall unnually, within ten days from the first day of May, issue a warrant to one or more police officers or constables. directing them to proceed forthwith either to kill, or cause to be killed, all dogs within such city or town not licensed and collared according to the provisions of this chapter, and to enter complaint against the owners or keepers thereof; and any person may, and every police officer and constable shall, kill or cause to be killed all such dogs whenever and wherever found. Such officers, other than those employed under regular pay, shall receive one dollar for each dog so destroyed from the treasurers of their respective cities or towns. All bills for such services shall be approved by the Mayor of the city or the selectmen of the town in which said dogs are destroyed, and shall be paid from moneys received under the provisions of this chapter."

Mr. Larrabee is employed as special police officer and janitor at the police station, at one dollar and seventy-five cents per day, and, being regular pay, he is not entitled to the sum claimed. If it be said that he is paid simply as a janitor and not as a police officer, then, not being commissioned as a "dog killer," he has no claim for compensation under the law. His time is at the service of the city as an employee.

Chapter 17 of the city ordinances is superseded by the state law. Mr. Larrabee desires the auditor to place this matter before your honorable board.

Respectfully submitted. JAMES B. STRAW, *City Auditor*.

MANCHESTER, N. H., July 7, 1891.

## To the City Councils of Manchester, N. H.:

GENTLEMEN,— The firm of Robitaille Bros. presents to the city auditor a bill for crackers, milk, etc., furnished to the police station during the months of March, April, May, and June, amounting to the sum of \$14.76. This bill is rejected by the city auditor under the rule that "no member of either branch of the city councils can enter into any verbal or written contract to furnish supplies to, or do any work for the city."

"Any firm of which a member is also a member of the city councils is included in this prohibition." (See pages 610 and 611 of the City Report of 1890.)

The senior member of the firm of Robitaille Bros. is at this time a member of the common council from ward 8.

Respectfully submitted.

JAMES B. STRAW,

City Auditor.

August 4, 1891.

To the City Councils, Manchester, N. H.:

GENTLEMEN, — In reply to the resolution of the city council, passed August 4, 1891, "instructing the city auditor to furnish information at its next regular meeting as to the amount of salary and extra compensation received by the city physician each year for the last five years," the following statements, taken from the published city reports, are respectfully submitted :

	Medicines.	Extra services.	Salary.
In the year 1886, paid,	\$279.97	\$43.00	\$200.00
In the year 1887, paid,	357.80	11.00	200.00
In the year 1888, paid,	121.15	I I 0.00	200.00
In the year 1889, paid,	176.60	137.00	198.91
In the year 1890, paid,	47.00	135.25	200.00
Total for five years, Average for each year,	\$982.52 196.50	\$436.25 87.25	\$998.9 <b>1</b> 199.78

Of the cost of medicines furnished above, a large part is for disinfectants used about the police station, city farm, etc., and also some medicines for cattle at the farm.

The auditor is of the opinion that an average of \$75 per annum will pay for all medicines furnished on the order of the city physician.

During the years above stated the following sums have been paid to other than the regular city physician :

In the year 1886 .			\$114.50
In the year 1887 .			58.00
In the year 1888			167.00
In the year 1889			217.00
In the year 1890 .			28.25
Total for five years			\$584.75
Average for each year			116.95
		 -	 

JAMES B. STRAW,

City Auditor.

MANCHESTER, N. H., September 1, 1891.

## Communications from the Mayor.

Office of the Mayor, Manchester, N. H., July 9, 1891.

## To the County Solicitor, Hillsborough County:

 $S_{IR}$ , — I, Edgar J. Knowlton, mayor of the city of Manchester, in said county, do hereby certify that within ten days after the 1st day of May, 1891, I issued a warrant to H. W. Longa, city marshal, directing him to proceed in accordance with the provisions of the law passed at the January session, 1891, entitled, "An act to prevent the destruction of sheep and other damages by dogs"; and on the 1st day of July said Longa reported

that he had attended to his duties and that there were not, to the best of his knowledge and belief, any unlicensed dogs in the city of Manchester.

> E. J. KNOWLTON, Mayor.

## STATE OF NEW HAMPSHIRE, HILLSBOROUGH SS.

Personally appeared Edgar J. Knowlton, mayor, and made oath to the above certificate by him subscribed.

Before me.

JAMES B. STRAW, Justice of the Peace.

MANCHESTER, N. H., July 10, 1891.

## Re-funding of Water Bonds.

CIRCULAR LETTER.

MANCHESTER, N. H., November 9, 1891.

*Dear Sir*, — Inclosed I send you a statement of the bonded debt of the city of Manchester, N. H. The following notice will be published by the city, and we would like to receive a bid from you within the time mentioned.

Yours respectfully,

EDGAR J. KNOWLTON,

Mayor.

#### NOTICE.

Office of Mayor, Manchester, N. H., December 2, 1891.

In accordance with a resolution passed by the city councils, October 6, 1891, under authority conferred by section 16, chapter 37, and section 1, chapter 48, of the General Laws of New Hampshire, the city of Manchester, N. H., will re-fund one hundred thousand dollars of water bonds due January 1, 1892.

The new loan will consist of 100 bonds of \$1,000 each, in all \$100,000; they will be dated January 1, 1892, and will be payable January 1, 1912, at the treasurer's office in Manchester, and will bear interest at the rate of 4 per cent, coupons payable in July and January at the Suffolk National Bank in Boston, Mass.

Sealed proposals for the purchase of whole amount of bonds will be received at the mayor's office, in said Manchester, until the 15th day of December, 1891, at 7.30 P. M., the city reserving the right to reject any and all bids.

## EDGAR J. KNOWLTON,

Mayor.

## Office of the Mayor, Manchester, N. H., December 16, 1891.

Adams, Blodgett & Co., 20 Congress St., Boston, Mass. :

GENTLEMEN,— Your bid for issue of \$100,000 city of Manchester water four per cent re-funding bonds of \$102,178 is accepted.

Please acknowledge, either by person or by letter, the acceptance. Below we give you list of the bids.

N. W. Harris & Co.			\$101.530
R. L. Day			102.050
Blake Brothers & Co.			100.760
Brewer, Cobb & Estabrook			101.810
Adams, Blodgett & Co			102.178
George A. Fernald & Co.			100.340
Gay & Stanwood			101.290
G. B. Chandler			
Kidder, Peabody & Co			101.810

Very respectfully,

#### THOMAS WALKER, JR.,

Chairman Finance Committee.

BOSTON, MASS., Dec. 17, 1891.

Thomas Walker, Jr., Esq., Chairman Finance Committee, Manchester, N. H.:

DEAR SIR, — We have your favor of the 16th inst., and we beg to confirm purchase of you of \$100,000 city of Manchester four per cent water re-funding bonds dated January 1, 1892, due January 1, 1912, at \$102,178 and accrued interest.

Please forward us at your earliest convenience full papers evidencing legality of the issue.

We thank you for giving us full list of the bids and bidders, and awaiting your favors, beg to remain

Yours very truly,

ADAMS & BLODGETT.

MANCHESTER, N. H., Dec. 21, 1891.

Adams, Blodgett & Co., 20 Congress St., Boston, Mass. :

GENTLEMEN,—At a meeting of the finance committee of the city of Manchester, a quorum being present, the bids were opened for the one hundred thousand dollars four per cent twenty-year water-works bonds, said bonds were awarded to Adams, Blodgett & Co., of Boston, for one hundred and two thousand one hundred and seventy-eight dollars (\$102,178), and same is hereby confirmed.

> EDGAR J. KNOWLTON, Mayor, THOMAS WALKER, JR., Chairman, W. BYRON STEARNS, CHARLES E. COX, FRED T. DUNLAP, Joint Standing Committee on Finance.

## REPORT OF THE CITY AUDITOR.

#### CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION relative to water bonds.

*Resolved*, by the mayor, aldermen, and common council of the city of Manchester, in city council assembled, as follows:

That for the purpose of re-funding the water bonds, due January 1, 1892, the mayor and joint standing committee on finance be and are hereby authorized and empowered to issue water bonds to the amount of one hundred thousand dollars (\$100,000), payable January 1, 1912, and bearing interest at a rate not exceeding four per cent, and the mayor and city treasurer are hereby authorized to sign said bonds for and in behalf of the city.

In board of Common Council. October 6, 1891. Passed. EDSON S. HEATH, *President*.

In board of Mayor and Aldermen. October 6, 1891. Passed.

E. J. KNOWLTON, Mayor.

A true copy. Attest.

From the General Laws of New Hampshire.

CHAPTER 37.

SECTION 16. Any town may fund its debt by vote of any legal meeting, and any such indebtedness may include the bounty of the general government to volunteers, conscripts, or substitutes which such town has assumed and paid for the purpose of filling its quota. And any town that may have funded its debt, or any part thereof, may at any legal meeting ratify and confirm the same, and may issue bonds payable at such time and place as they may by vote authorize, with coupons for interest, payable annually or semi-annually, in gold or other lawful currency, at a rate not exceeding 6 per cent.

#### CHAPTER 44.

SECTION I. All cities now or hereafter incorporated shall have, exercise, and enjoy all the rights, immunities, and privileges, and shall be subject to all the duties incumbent upon or appertaining to the town corporations to which they succeed.

#### CHAPTER 48.

SECTION I. All the powers vested by law in towns, or the inhabitants thereof, shall be exercised by the city councils by concurrent vote, each board having a negative upon the other

#### CHAPTER 70.

AN ACT to enable the city of Manchester to establish waterworks.

SECTION 6. Said city is authorized to levy taxes to defray the expense of such water-works, and to borrow money therefor, not exceeding in the whole the sum of six hundred thousand dollars, and to issue the notes, bonds, or obligations of said city therefor, payable at such time and at such rate of interest as the city councils of said city shall determine ; and such notes, bonds, and obligations shall be legal and binding on said city. — Laws of 1871.



# ORDINANCES AND RESOLUTIONS.

## ORDINANCES AND RESOLUTIONS

PASSED IN 1891.

CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

AN ORDINANCE in amendment of section 4, chapter 40 of the Laws and Ordinances.

That section 4, chapter 40 of the Ordinances in relation to cemeteries be amended to read as follows: "Section 4. The proceeds of the sales of lots in said cemeteries shall be paid into the city treasury, and a receipt taken for the same, and shall be subject to the appropriations of the city councils, for any legal municipal expenditure."

Passed to be ordained April 7, 1891.

CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

AN ORDINANCE in amendment of chapter 7, section 1, of the Laws and Ordinances.

That section r of chapter 7 of the Laws and Ordinances of the city of Manchester, N. H., be amended after the word "license" in the last line, as follows: "Whosever intends to erect or to

#### ORDINANCES.

make alterations in the external walls of a building of any description, shall fifteen days at least before he proceeds to build or erect the same, or to lay the foundation thereof, or to make the said alterations, or to do any act for carrying into execution his intention to do such things, give to the inspector of buildings notice in writing of his intention, with the dimensions of the structure proposed, the materials to be used, the number on the street or the precise location, and the name of the owner or owners of the land, in order that any encroachment or other injury or inconvenience to the public streets which might otherwise happen, may be thereby prevented; and in default thereof the city shall be discharged from all damages of any nature whatsoever resulting from the failure to give notice as above; provided particularly from all such damages or expenses as have been enhanced or occasioned by reason of anything done previously to or without such notice

The penalty for non-compliance with the provisions of this section will be the same as stated in section 28.

Passed to be ordained May 5, 1891.

## CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

AN ORDINANCE in amendment of section 22, chapter 14 of the Laws and Ordinances.

That section 22 of chapter 14 of the Ordinances of the city of Manchester be amended by striking out the words "one thousand," in the eighth line, and inserting in place thereof the words " thirteen hundred."

Passed to be ordained, October 6, 1891.

#### ORDINANCES.

#### CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

AN ORDINANCE relating to building and rebuilding privy vaults.

No privy vault shall, after the passage of this ordinance, be constructed or placed within one hundred feet of any public sewer, nor shall any privy vault be constructed as an appurtenance to or be used in connection with any building which is within one hundred feet of any public sewer.

Nor shall any privy vault now existing within one hundred feet of any public sewer, or used in connection with any building which is within one hundred feet of any public sewer, be rebuilt after the passage of this ordinance.

Any person who shall build or rebuild any privy vault in violation of the provisions of this ordinance shall be punished by a fine not exceeding twenty dollars, and all ordinances and parts of ordinances inconsistent with the provisions of this ordinance are hereby repealed, and this ordinance shall take effect on its passage.

Passed to be ordained, November 3, 1891.

CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

AN ORDINANCE in amendment of section 5, chapter 12, Laws and Ordinances.

That section 5, chapter 12, Laws and Ordinances, be amended by adding after the word "same," in the eighth line of said section, the following words : "Before any license can be granted by the city clerk for a connection with any public sewer or any house drainage put in or repairs made on them, a permit

must first be obtained of the city engineer, stating the frontage of the lot and the location of the same, with the plan proposed approved by him for the committee on sewers and drains, said permit to be made upon such forms as approved by the committee on sewers and drains; and all connections with the city's sewers shall be made with Y branches,'' so that section 5, chapter 12, as amended, will read as follows:

"No person shall enter any drain or pipe into any of the sewers constructed by the city without first obtaining a license therefor, and any person violating the provisions of this section shall be fined not less than one nor more than ten dollars, and a like penalty for every day he shall suffer such drain or pipe to continue so entered, after notice from the city clerk to disconnect the same. Before any license can be granted by the city clerk for a connection with a public sewer or any house drainage put in or repairs made on them, a permit must be first obtained of the city engineer, stating the frontage of the lot and the location of the same, with the plan proposed approved by him for the committee on sewers and drains, such permit to be made upon such forms as approved by the committee on sewers and drains ; and all connections with the city's sewers shall be made with Y branches."

Passed to be ordained, November 3, 1891.

CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

- RESOLUTION constituting a Special Committee to secure legislation enabling the City of Manchester to raise by the issue of bonds the money necessary to defray the expense of Permanent Municipal Improvement.
- *Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That a special committee, consisting of his Honor, one alderman, and one member of the common council be appointed, and said committee is hereby authorized to take the necessary steps to procure from the New Hampshire legislature, now in session at Concord, if possible, the passage of an act which shall enable the city of Manchester to raise money by the issue of bonds to defray the expense of permanent municipal improvement, when deemed advisable by the city councils ; *provided*, that the sum total of said bonds shall not exceed three hundred thousand dollars ( $\$_{300}$ ,  $\circ \circ \circ$ ), and said bonds to be issued at such time or times, for such specified objects and in such quantities, the sum total not to exceed the amount of issue, as the city councils may direct, and furthermore that said bonds run for such a period and become redeemable at such time as the city councils shall determine at the time of issue.

Passed January 16, 1891.

CITY OF MANCHESTER.

## IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION in regard to Additional Legislation.

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That a special committee, consisting of his Honor the Mayor, one alderman, and one councilman be appointed to consider whether any further legislation is required in order to guard the public health against impurities in the city's source of water supply, and also in other matters pertaining to the interests of the city; and that said committee is hereby authorized to bring all such matters before the legislature if they deem it advisable.

Passed February 3, 1891. 44

## CITY OF MANCHESTER.

## IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION confirming contract made with the Concord & Montreal Railroad.

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows:

That the agreement made on the 9th day of May, 1891, by and between the Concord & Montreal Railroad and the city of Manchester, by the mayor represented, relative to an underpass through the embankment and under the track of the Manchester & North Weare Railroad, be and hereby is ratified and confirmed.

Passed June 2, 1891.

## CITY OF MANCHESTER.

#### IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION confirming the contract relating to the New School Building in East Manchester, N. H.

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That the agreement relating to the new school building in East Manchester made on the 4th day of May, 1891, between Head & Dowst of the first part and the city of Manchester, as represented by the mayor and joint standing committee on lands and buildings, of the second part, be and hereby is ratified and confirmed.

Passed June 2, 1891.

### CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION confirming Contract relating to the addition to Webster-street schoolhouse.

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That the agreement relating to the addition to the Websterstreet schoolhouse, made on the eighth day of April, 1891, between Mead, Mason & Co., of the first part, and the Mayor and joint standing committee on lands and buildings as representatives of the city of Manchester, N. H., of the second part, be and is hereby ratified and confirmed.

Passed June 2, 1891.

CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION relating to public park.

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That a committee of five, consisting of two aldermen and three councilmen, be appointed for the purpose of making inquiry and investigation as to the necessity and desirability of a public park in the southern section of the city.

Passed July 7, 1891.

#### CITY OF MANCHESTER.

## IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION discontinuing a highway.

Resolved by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows:

That the following highway, situated in said city, be and is hereby discontinued, to wit: Beginning at a stake on the east side of Boynton street, on the land of Henry E. Hoyt, and then in an easterly direction to a stake on the west side of South Main street on land of Walter B. Balch.

Passed July 7, 1891.

CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION for the discontinuance of a part of the highway known as "Old Bridge Street Road."

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That so much of that highway known as "Old Bridge Street Road," as lies between the intersection of said road with the northerly line of Bridge street and a point in said old Bridge street road where the westerly line of Belmont street extended in a northerly direction intersects with said road, be and the same hereby is discontinued, and that application be made to the supreme court to secure its consent to said discontinuance.

Passed August 4, 1891.

#### CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION relative to the legacy of Eliza A. Eaton to the city of Manchester.

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That the treasurer of the trustees of the city library be authorized to receive from the administrator of the estate of Eliza A. Eaton the legacy bequeathed to the city of Manchester in her last will and testament and to sign and execute in behalf of the city any receipt or other voucher that may be necessary, and that the trustees of the city library be authorized to invest the money received from the said administrator, and apply the income thereof for the purpose indicated in said last will.

November 3, 1891.

#### CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION relating to Exempting from Taxation, The Queen City Manufacturing Company.

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That WHEREAS, the Queen City Manufacturing Company, a corporation established by law with a capital of fifty thousand dollars, desire to locate their factory and to carry on their business in said city of Manchester, providing sufficient inducements are given the corporation by the city government; therefore,

*Resolved*, That the capital of the Queen City Manufacturing Company aforesaid, and its machinery, raw materials, and other

property necessary in conducting its manufacturing business, and the land and the buildings used and occupied by said corporation in its business, shall be exempt from all taxation for a period of ten years from October 6, 1891.

Passed October 13, 1891.

## CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION relative to plan for Stark Park.

Resolved by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows:

That the Mayor and joint standing committee on commons be authorized to procure plans for Stark park. The expense thereof to be charged to the appropriation for Stark park.

Passed December 1, 1891.

## CITY OF MANCHESTER.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION relative to Engine-House and Ward-room in Ward 9.

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That the Mayor and joint standing committee on lands and buildings be authorized to procure plans and receive proposals for building a new engine-house and ward-room in ward 9. The expense thereof not to exceed the sum of ten thousand dollars.

Passed December 1, 1891.

## CITY OF MANCHESTER.

## IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND NINETY-ONE.

RESOLUTION relative to the discontinuance of a portion of Canal street in Manchester, so called, and a portion of Pleasant street, so called, in Manchester.

*Resolved* by the Mayor, Aldermen, and Common Council of the City of Manchester, in City Council assembled, as follows :

That so much of said Canal street, and so much of said Pleasant street as is contained within the following descriptions respectively, to wit : Commencing at a point where the northerly line of Merrimack street intersects the westerly line of Canal, street, marked A; thence southerly by the westerly line of said Canal street about 503 feet to the northerly side of the Central street "ramp" marked B, as shown upon the plan hereinafter designated; thence easterly on said northerly line of said "ramp," about 44 feet to a point marked C; thence northerly at right angles about 25 feet to the east line of Canal street, marked D; thence northerly by said line of said Canal street about 165 feet to the southerly line of Pleasant street, marked E; thence easterly by said line of said Pleasant street about 32 feet to the bank wall shown upon the plan marked F; thence northerly by said bank wall as shown upon said plan to the place of beginning.

Also commencing at a point on the westerly side of Canal street 84 feet southerly from the southerly line of said Central street "ramp," at a point marked G; thence southerly by said line of said Canal street about 307 feet to a point marked H; thence easterly on a line at right angles to the main track of the Concord & Montreal Railroad, in the passenger station, about 32 feet to point marked I; thence northerly parallel to said tracks about 130 feet to a point marked K; thence easterly at right angles 25 feet to a point marked L; thence westerly at right angles 25 feet to a point marked M; thence northerly at right angles 106 feet to a point marked N; thence westerly at right angles about 43 feet to the place of beginning; all of the foregoing being shown by lines and limitations denoted and delineated by red lines and letters, upon a certain plan marked and designated, as follows, to wit, Union passenger station, Manchester, N. H., dated August, 1891, filed with the city records of said Manchester, and made a part thereof, November 19, 1891, and the same is discontinued, and that the mayor in the name of the city be authorized to apply to the supreme court for its consent and approval and the discontinuance aforesaid.

Passed December 9, 1891.

CITY OF MANCHESTER.

AN ORDER to print Mayor Knowlton's Inaugural Address.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on finance cause to be printed three hundred copies of Mayor Knowlton's inaugural address; the expense thereof to be charged to the appropriation for printing and stationery.

Passed January 6, 1891.

CITY OF MANCHESTER.

## AN ORDER relative to Addition to Webster-street School Building.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on lands and buildings be authorized to receive proposals for and construct two additional rooms at Webster-street school building; the expense thereof to be charged to the appropriation for addition to Webster-street school building.

Passed March 3, 1891.

#### CITY OF MANCHESTER.

AN ORDER to Purchase Land in Hallsville, etc.

*Ordered*, if the Board of Mayor and Aldermen concur : That the mayor and joint standing committee on lands and buildings be authorized to purchase land in Hallsville for a new schoolhouse, and they hereby are empowered to receive proposals and erect a schoolhouse upon said lot; the expense thereof to be charged to the appropriation for new schoolhouse, Hallsville.

Passed March 3, 1891.

CITY OF MANCHESTER.

AN ORDER to buy a Dump-cart for use at City Farm.

*Ordered*, if the Board of Mayor and Aldermen concur: That the joint standing committee on city farm be authorized to purchase a dump-cart for use at city farm; the expense thereof to be charged to the appropriation for city farm.

Passed March 3, 1891.

CITY OF MANCHESTER.

AN ORDER to Purchase a Steam Boiler and Pump for the Sewer Department.

*Ordered*, if the Board of Mayor and Aldermen concur : That the mayor and joint standing committee on sewers and drains purchase a 12-horse-power boiler and pump combined, for use in pumping out sewer trenches, and the boiler to be arranged to run the steam drill; and that the expense of the same be charged to the appropriation for sewers and drains.

Passed March 3, 1891.

## CITY OF MANCHESTER.

## AN ORDER relative to Sewer Pipe.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on sewers and drains be and they hereby are authorized to contract for such quantities of sewer pipe as in their judgment the city may require for this year's use; the expense thereof to be charged to the appropriation for sewers and drains.

Passed March 3, 1891.

## CITY OF MANCHESTER.

## AN ORDER authorizing the Board of Water Commissioners to Purchase Land.

*Ordered*, if the Board of Mayor and Aldermen concur: That the board of water commissioners be and hereby are authorized in behalf of the city of Manchester, to purchase of Mary E. and Joseph B. Young a lot of land measuring ten acres and thirtytwo square rods, more or less, and situate in said Manchester, for the sum of three hundred and thirty-seven dollars (\$337); also of Lizzie J. Richardson and others, seven (7) acres and twentyseven (27) square rods of land situate in said Manchester, for the sum of two hundred and fifteen dollars (\$215); and that the expenditure for the same be charged to water-works construction appropriation.

Passed April 7, 1891.

#### CITY OF MANCHESTER.

AN ORDER Relating to the Purchase of three Horses for Fire Department.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on fire department are

hereby authorized to purchase three horses for the said department, and that the expense of the same be charged to the appropriation for the fire department.

Passed April 7, 1891.

CITY OF MANCHESTER.

AN ORDER to Erect an Electric Light.

*Ordered*, if the Board of Mayor and Aldermen concur : That the joint standing committee on lighting streets cause to be erected an electric light at the corner of Beech and Auburn streets.

May 5, 1891.

CITY OF MANCHESTER.

ORDERS TO BUILD CERTAIN SEWERS.

Passed May 5, 1891.

Beginning at the south side of Massabesic street at Cypress, thence southerly to Young street.

From the back street in Fourth street south of School street, thence southerly to Ferry street, and through Ferry street to Third street.

From the corner of Myrtle and Russell streets easterly through Myrtle street to Linden street.

From a point east of Main street in Blaine street; thence through Blaine and Third streets to the Piscataquog river, according to the city's plan of sewerage.

Beginning at Massabesic and Belmont streets, thence southerly to the Portsmouth Railroad crossing. Beginning at the junction of the back streets, between Central and Depot streets and the back street west of Franklin street; thence to Canal street and through Canal street to the Granite-street sewer.

Upon petition of Charles Davis and others, from present terminus of Spruce-street sewer at Belmont street; thence easterly to the proposed Weston street; thence easterly in Lake avenue to Canton street, also westerly to Beacon street.

Passed June 2, 1891.

On Beauport street; from Adams northerly on Beauport street to the foot of the bluff, about 200 feet.

Maple-street sewer, from Russell and Myrtle easterly through Myrtle street to its intersection with Ashland street produced.

From Walker street southerly to the New Hampshire Central Railroad land on Fourth street.

Passed August 4, 1891.

On North Main street, from Conant street northerly to Amory street. This is occasioned by the continual trouble with the present sewers in this section, they being too small and poorly constructed, the proposed changes to be in accordance with the improved sewerage plan for this section on file in city engineer's office.

Passed August 22, 1891.

In West street, from near the Head property; thence westerly about 600 feet; thence about 200 feet across the Baldwin land to Piscataquog river.

## Passed September 1, 1891.

On Second street, from Piscataquog river to about 150 feet south of West Hancock street.

On Wilson road, from Bridge street to East High, and on East High street from Jane to Ashland street. On Massabesic street from Cypress to Jewett street, and on Jewett street from Massabesic street to new schoolhouse.

Passed October 6, 1891.

In Pearl street from present terminus of Pearl street, thence easterly about 100 feet toward Morrison street. In Bay east back

street, from North street northerly about 300 feet. In Amory street, from Dubuque street westerly to Rimmon street, about 270 feet.

Passed December 1, 1891.

In Merrimack street, from Belmont to Milton, about 200 feet in length.

In Main street, from present terminus to C street, and in C street to B street.

In Sullivan street, from sewer in Main street to Beauport, about 200 feet.

In Carroll street, from Milford northerly, about 400 feet.

In Amherst street, from Belmont to Beacon, about 400 feet.

In Harrison street, from Oak street to Russell, about 400 feet.

Also for building certain cesspools on Cedar street and North street, four in number.

Passed July 7, 1891.

On Orange street, from Russell to a point about 250 feet east of Linden street. On Manchester street, from present terminus to Milton street. In Harrison south back street, from Union to Walnut street. In Cartier street, from Amory to Kelly street. From Kelly and Beauport streets to Amory and Main streets.

Fassed August 4, 1891.

In Parker street, from Winter street northerly about 100 feet.

And the expense thereof (of all the above orders) to be charged to the appropriation for sewers and drains.

CITY OF MANCHESTER.

AN ORDER to Purchase Land in West Manchester.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on lands and buildings

be authorized to purchase land in McGregorville, on which to build a hose-house and ward-room for ward 9.

The expense thereof to be charged to the appropriation for reserved fund.

Passed May 5, 1891.

#### CITY OF MANCHESTER.

## AN ORDER Relating to the Building of the Extension of Webster street.

*Ordered*, if the Board of Mayor and Aldermen concur: That Webster street, from the River road to the Concord Railroad land, as laid out October 28, 1890, by board of mayor and aldermen, be built to grade, with suitable gutters, as shall be established by the board of mayor and aldermen.

And the expense thereof be charged to the appropriation for new highways.

## CITY OF MANCHESTER.

## AN ORDER authorizing the Mayor to execute a quitclaim deed to D. C. Whittemore.

Be it Ordered by the Board of Mayor and Aldermen, the Common Council concurring : That His Honor the Mayor be and hereby is authorized to execute for and in the name of the city of Manchester to David C. Whittemore, a quitclaim deed of the property described in the deed of Henry R. Chamberlain of May 20, 1879, in which he quitclaimed to the city of Manchester all the right, title, and interest in certain land of said Whittemore's which he received in a tax deed dated May 5, 1879, from John Hosley, collector of taxes, the property being sold for unpaid taxes in 1875, the taxes having been afterwards

paid and accepted by the city and the property taxed ever since to said Whittemore.

Passed July 7, 1891.

CITY OF MANCHESTER.

AN ORDER to Macadamize.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on streets be authorized to macadamize Bridge street from the west end of McGregor bridge to McGregor street, a distance of about four hundred feet. The expense of the same to be charged to appropriation for macadamizing.

Passed July 7, 1891.

AN ORDER to concrete Nashua street from Lowell to Concord street, the expense of the same to be charged to appropriation for macadamizing.

Passed July 7, 1891.

CITY OF MANCHESTER.

AN ORDER to Concrete.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on streets repair the concrete roadway on Concord street from the east line of Elm street, passing to the east line of Vine street, and supply necessary flagging and corner curbing.

Passed July 7, 1891.

To concrete the roadway on Merrimack street from Elm to Franklin streets, and supply necessary flagging and corner curbing.

Passed July 7, 1891.

To concrete Chestnut street from the north line of Hanover street to the south line of Merrimack street, and supply necessary flagging and corner curbing.

Passed July 7, 1891.

To concrete Union street from Lowell to Concord street, and furnish necessary flagging and curbstones.

Passed July 7, 1891.

To concrete the roadway on Union street from the north line of Laurel street to the south line of Lake avenue, and supply necessary flagging and corner curbing.

Passed August 4, 1891.

The expense of all of the same to be charged to the appropriation for macadamizing.

#### CITY OF MANCHESTER.

AN ORDER to build certain Streets.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on streets build Walnut street from Gore street northerly to Salmon street, and Salmon street from Pine street easterly to Walnut street, as shown on the plans of said streets on file in engineer's department.

Passed August 4, 1891.

To build Allen street from Main to Boynton street.

Passed August 4, 1891.

To build Rimmon street from Amory to Kelly street.

Passed August 4, 1891.

To build Cartier street from Amory to Kelly, as shown by plans in the city engineer's office.

Passed August 4, 1891.

To build Kelly street from a point at west end of old laying out to the North Weare Railroad track as recently laid out, the expense of the same to be charged to appropriation for new highways.

Passed August 4, 1891.

CITY OF MANCHESTER.

AN ORDER to establish Grades.

*Ordered*, if the Board of Mayor and Aldermen concur: That the following grades are established as shown on their several plans.

Adams street, Webster street to the Adams land, plan 147.

Beauport street, Amory to Kelly, plan 129.

Hall street, Bridge to Prospect, plan 888.

West Webster street, River road to Concord Railroad land, plan 707.

Morrison street, Pearl to Arlington, plan 708.

West Hancock street, Main to Wentworth.

Passed July 7, 1891.

CITY OF MANCHESTER.

## AN ORDER to build a Bank Wall.

Ordered, if the Mayor and Board of Aldermen concur : That the mayor and joint standing committee on streets build a bank 45

wall on the north line of Bridge street, west of McGregor bridge. The building of this wall is necessary in order to build the street the full width, and the expense thereof is to be charged to the appropriation for incidental expenses.

Passed July 7, 1891.

## CITY OF MANCHESTER.

AN ORDER relating to the purchase of a new Boiler for the Police Station.

*Ordered*, if the Board of Mayor and Aldermen concur: That the committee on lands and buildings be and are hereby authorized to contract for a new boiler for the police station, with power to dispose of the old one now in there, the expense of the same to be charged to the appropriation for police department.

July 7, 1891.

## CITY OF MANCHESTER.

AN ORDER to purchase Gravel and sell lot of Land in West Manchester.

Ordered, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on streets be authorized to purchase five hundred dollars' worth of gravel of Charles Brooks, also to sell to said Charles Brooks a lot of land in West Manchester of about one half an acre in extent, the expense for gravel to be charged to the appropriation for district No. 10.

Passed July 7, 1891.

### CITY OF MANCHESTER.

### AN ORDER to receive proposals for and contract for the building of Retaining Wall on Bowman street, West Manchester.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on streets be authorized to receive proposals for and contract for the building of a retaining wall on the east side of Bowman street adjoining the Piscataquog cemetery; the expense thereof to be charged to the appropriation for incidental expenses.

Passed July 7, 1891.

### CITY OF MANCHESTER.

# AN ORDER authorizing a temporary loan for purposes of Sewers and Drains.

Be it ordered by the Common Council of the City of Manchester, the Board of Mayor and Aldermen concurring: That his Honor the Mayor and the city treasurer be and they hereby are authorized to borrow for and in the name of the city of Manchester the sum of thirty thousand dollars ( $\$_{30,000}$ ), to be used in the construction of sewers and drains, and to be placed in the treasury to the credit of the account for sewers and drains; the note or notes for said sum to be signed by the mayor, countersigned by the city treasurer, and payable December 1, 1892.

Passed July 7, 1891.

## CITY OF MANCHESTER.

AN ORDER to purchase and locate a Drinking Fountain.

*Ordered*, if the board of Mayor and Aldermen concur: That the mayor and joint standing committee on streets be and here-

by are authorized to purchase a drinking fountain and place the same on the northeast corner of Granite and Main streets, the cost not to exceed \$100; the expense to be charged to the appropriation for watering streets.

Passed July 7, 1891.

CITY OF MANCHESTER.

AN ORDER relating to the purchase of hose for the Fire Department.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on fire department be and are hereby authorized to purchase three thousand (3,000) feet of hose for the use of the fire department, and that the expense of the same be charged to the appropriation for the fire department.

Passed July 7, 1891.

CITY OF MANCHESTER.

AN ORDER to purchase land for the extension of Amoskeag Cemetery.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and committee on the Amoskeag cemetery be authorized to purchase a piece of land of F. D. Hanscom twenty feet wide and the length of the cemetery, starting from the highway, for the purpose of laying a water pipe and constructing a driveway and properly inclosing the grounds, and the expense thereof be charged to the reserved fund.

Passed May 5, 1891.

### CITY OF MANCHESTER.

AN ORDER to establish certain Grades.

*Ordered*, if the Board of Mayor and Aldermen concur: That the grades on Putnam street, as shown on plans in city engineer's office, Cartier to Dubuque street, be established.

Passed October 4, 1891.

CITY OF MANCHESTER.

AN ORDER to establish Grades.

*Ordered*, if the Board of Mayor and Aldermen concur: That the grades, as shown on the following plans in the city engineer's department, be established : Rimmon street, Amory to Kelly; Salmon, Pine to Walnut.

Passed August 4, 1891.

CITY OF MANCHESTER.

AN ORDER to change the grade of certain Streets.

*Ordered*, if the Board of Mayor and Aldermen concur: That the grades of certain streets be changed as follows: Concord street at Hall, plan No. 161; Milton street, Manchester to Hanover, plan No. 178; Hall street at Concord, plan No. 161; as shown on file drawing in city engineer's department.

Passed August 4, 1891.

### CITY OF MANCHESTER.

AN ORDER to erect an Electric Light.

*Ordered*, if the Board of Mayor and Aldermen concur: That the joint standing committee on lighting streets cause to be erected an electric light at the corner of Valley and Jewett streets; the expense thereof to be charged to the appropriation for lighting streets.

Passed August 4, 1891.

CITY OF MANCHESTER.

AN ORDER authorizing the Mayor to purchase a lot of land of A. D. Gooden.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor be authorized to purchase a lot of land on Spruce street containing 5,750 square feet (adjoining land of the city of Manchester) of A. D. Gooden for six cents per square foot; the expense thereof to be charged to the appropriation for incidental expenses.

Passed August 4, 1891.

CITY OF MANCHESTER.

AN ORDER to buy Wheel Scrapers.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on streets be authorized to purchase three wheel scrapers to be used in street work for grading purposes, the same not to cost over \$100, and the expense thereof be charged to the appropriation for incidental expenses.

Passed August 4, 1891.

### CITY OF MANCHESTER.

AN ORDER to Repair Spruce Street.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on streets repair Spruce street with crushed stone and build gutters on the same from Elm to Chestnut at an expense not exceeding \$300; and the expense thereof be charged to appropriation for macadamizing.

Passed August 4, 1891.

CITY OF MANCHESTER.

AN ORDER relative to Proposals for Electric Lighting.

*Ordered*, if the Board of Common Council concur: That the joint standing committee on lighting streets be authorized to receive proposals for lighting the streets of Manchester with electric lights for the term of three years commencing December 26, 1891, and report the same to the city government at its regular meeting October 6, 1891.

Passed September 1, 1891.

CITY OF MANCHESTER.

AN ORDER relating to Purchase of lot of Land in McGregorville for School Purposes.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on lands and buildings be and hereby are authorized to purchase a lot of land at the northwest corner of Amory and Dubuque streets, containing fifteen thousand nine hundred (15,900) square feet, at not more

than fifteen cents (15c.) per foot. Purchase to be made early in the year 1892; expense of the same to be charged to the appropriation for incidental expenses.

Passed December 1, 1891.

### CITY OF MANCHESTER.

# AN ORDER relating to Furnishing of Room for the Matron of Police Station.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on lands and buildings be and are hereby authorized to hire and furnish a suitable room as an office for Miss A. B. Brown, for the purpose of facilitating her work as matron of the police station; the expense of the same not to exceed seventy-five (\$75) dollars per annum, and this sum to be charged to the appropriation for police department.

Passed December 1, 1891.

CITY OF MANCHESTER.

AN ORDER relating to Appointment of Consulting Engineer by Board of Water Commissioners.

*Ordered*, if the Board of Mayor and Aldermen concur : That the board of water commissioners be and are hereby authorized to procure the services of a consulting engineer relative to the best plan of establishing a high pressure service.

Passed December 9, 1891.

#### STREET LIGHTING.

### CITY OF MANCHESTER.

# AN ORDER to Furnish an Additional Room at the Varney School.

*Ordered*, if the Board of Mayor and Aldermen concur: That the mayor and joint standing committee on lands and buildings be authorized to procure furniture for furnishing an additional room at the Varney school building; and that the expense be charged to the appropriation for incidental expenses.

Passed January 2, 1892.

### Street Lighting.

### PROPOSALS FOR LIGHTING THE CITY OF MANCHESTER WITH ELEC-TRICITY,

Two hundred or more arc lights of 2,000 candle power each being required, will be received by the joint standing committee on lighting streets at the office of the city clerk until 7.30 o'clock P. M., September 19, 1891. The lights will be required to run from twilight to twilight, and the system to be used must be the Thomson-Houston, or one equally good. Any contract when made must go into effect December 26, 1891, and to expire December 26, 1894.

The lighting company is to assume all claims for damages that may arise from poles, wires, lamps, dynamos, or other causes in such service. All bids to be accompanied by an acceptable bond of \$20,000 guaranteeing the execution of contract. The city reserves the right to accept or reject any or all bids.

# OLIVER B. GREEN,

Chairman Com. on Lighting Streets.

MANCHESTER, N. H., Sept. 4, 1891.

MANCHESTER, N. H., Sept. 25, 1891.

Committee on Lighting Streets, Oliver B. Green, Chairman:

GENTLEMEN, — The Manchester Electric Light Company respectfully submit the following bid of  $37\frac{1}{2}$  cents per night for lights on mast arms, and  $34\frac{1}{2}$  cents per night for lights on poles, in response to your advertisement for proposals, dated September 4, 1891.

Signed,

## ALONZO ELLIOTT, J. C. MOORE, H. E. PARKER,

Committee duly authorized by the Manchester Electric Light Co.

### ARTICLES OF AGREEMENT.

The Manchester Electric Light Company, a corporation duly established by law, and doing business in Manchester, in the county of Hillsborough and state of New Hampshire, and the city of Manchester, a municipal corporation in said county and state, hereby agree as follows, to wit :

The said company, for the consideration hereinafter mentioned, agrees for itself, its successors and assigns, at its own expense, to provide and maintain as the same are now established, two hundred and fifty (250) electric lights, to be of the standard of two thousand candle power arc lamps; to keep the same lighted from twilight to twilight upon every night of the year, in accordance with the requirements of the joint standing committee on lighting streets, and to use in the maintenance of said lights the Thomson-Houston system of electric lighting, or a system equally as good.

The said city agrees to pay monthly for said two hundred and fifty lights herein provided for and maintained as they are now established, the sum of  $34\frac{1}{2}$  cents per night each for all lamps on posts, and the sum of  $37\frac{1}{2}$  cents per night each for all lamps placed on mast arms; but in case any lamps, for any cause, shall fail to be lighted, upon such nights or parts of nights as they shall be unlighted a proportionate reduction in price shall be made.

The said city further agrees that said company may maintain its present lines through and over the streets of said city, and erect such new lines as may be required, and any additional construction shall be as good as that now in use, and erected under the same conditions, and the lights located as hereinafter provided.

The said city is hereby authorized to use the topmost arm on such poles or posts as said company has erected, or may hereafter erect, for its system of fire-alarm telegraph.

It is hereby understood and mutually agreed that all damages or injuries to said lights or lines arising from fire or other unavoidable casualty shall be repaired by said company with reasonable diligence, and shall not vitiate this contract, and that all damages to any person or property, caused by the poles, lamps, wires, or other apparatus used by said company, or by the use of same, occasioned by the negligence or want of care of said company, or its servants or agents, shall be borne by said company ; that all liability because of damages from the maintenance of the system of electric lighting used by said company shall rest upon said company ; that this contract shall terminate in three years from December 26, 1891.

At the termination of this contract all property used by said company under the same shall remain the property of said company, its successors or assigns.

If during the period for which this contract shall remain in force said city shall desire more electric lights, said company agrees to furnish the same at a price not exceeding the price fixed for the two hundred and fifty lights herein provided for, and the joint standing committee on lighting streets shall fix the location of said lamps, but within a radius of one and one quarter miles from the city hall.

### STREET LIGHTING.

In witness whereof we have hereunto set our hands and seals this the seventeenth day of November, 1891.

> CITY OF MANCHESTER, By E. J. KNOWLTON, Mayor.

# THE MANCHESTER ELECTRIC LIGHT CO...

[Seal.]

By A. ELLIOTT, President, WALTER G. AFRICA, Treasurer.

#### BOND

Know all men by these presents, that we, The Manchester Electric Light Co., J. C. Moore, Frank Dowst, and Alonzo Elliott. are held and firmly bound to the city of Manchester in the sum of fifteen thousand dollars, to be paid to said city of Manchester, and to the payment whereof we bind ourselves, our successors, and our heirs, firmly by these presents.

Sealed with our seal and dated the 25th day of September, A. D. 1801.

The condition of this obligation is, that whereas The Manchester Electric Light Co., a corporation duly established by law. has made to the city of Manchester a proposition for lighting the streets of said city by electricity, for the term of three years, from December 26, 1891, to December 26, 1894;

Now if said contract is awarded to said Manchester Electric Light Co. by said city, and said electric light company shall faithfully perform and fulfil all the conditions and requirements of said contract as set forth therein, and shall not default them, this obligation shall be void.

-	MANCHESTER I	ELECTRIC LIGH	IT CO.,
[Seal.]	By A	. Elliott, Presid	ent.
		J. C. Moore.	[Seal.]
		FRANK DOWST.	[Seal.]
		Alonzo Ellioti	. [Seal.]
ned, seale	ed, and delivered		2 5
in the	e presence of		
0			

Sign CHARLES S. STEVENS, NED T. WALLACE.

### House and Bridge at Valley Cemetery.

MANCHESTER, N. H., May 7, 1891.

John J. Holland :

DEAR SIR,— We will build the house and bridge at Valley cemetery, according to plans by W. H. Bennett, for the sum of two hundred and seventy-five dollars (\$275).

Yours truly, THE HEAD & DOWST CO.

### Addition to Webster-street Schoolhouse.

CONTRACT.

An agreement of two parts made this eighth day of April, A. D. 1891, between Mead, Mason & Co., party of the first part, and the committee on lands and buildings of the city government of the city of Manchester, party of the second part.

The said party of the first part, in consideration of the sum of money to be paid by the said party of the second part, as hereinafter mentioned, and the covenants and agreements hereinafter recited to be kept and performed by the said party of the second part, do for themselves, their heirs and assigns, covenant, promise, and agree to and with the said party of the second part, that the said party of the first part shall and will, in a good workmanlike manner, and according to the best of their ability, build according to the plans and specifications here annexed, and provide all specified materials for the same. And the said party of the first part further agrees that the work shall be commenced and constantly prosecuted, and that the material shall be promptly furnished.

It is agreed by and between the parties to this agreement as follows:

**1.** That the said party of the first part shall make no charge of any kind to the said party of the second part beyond the sum

of the original contract unless the said party of the second part alters the plans and specifications, in which case the value of such alterations shall be added to the amount to be paid, or deducted from the amount as the case may be. It is to be understood that no alterations are to be made except authorized by the party of the second part or representatives.

2. It is agreed that insurance shall be effected on the building as soon as the roof is put on and covered. The amount to be determined upon by said party of the second part, and it is to be increased as mutually understood by parties to the agreement, the policy to be made payable to the party of the second part, as their interest may appear, and each party to pay one half of the cost of the insurance.

3. That each and every person employed by sub-contract by said party of the first part shall be a suitable, competent, and satisfactory person to do the work.

4. The said party of the first part shall provide during the progress of the work a suitable foreman whose duty it shall be to attend to the work of the framing, laying out all measurements upon the works hereby agreed upon, in conformity with said plans and specifications furnished.

5. If at any time the party of the second part shall find that said work is not carried forward with sufficient rapidity, or materials are not furnished as fast as required, he shall give notice of insufficiency to the party of the first part, or his foreman, and if within five days the defects are not remedied in a satisfactory manner, the said party shall hire men or furnish material and the expense of the same be charged to the party of the first part, and will be deducted from the original sum.

6. The said party of the first part shall be responsible for any injury received by any person or persons during the progress of the work, and the said party shall furnish all necessary protection to the public during the progress of the work.

7. It is understood by the party of the first part that all works described or referred to in the annexed specifications are to be executed by the said party of the first part, whether or not the works are illustrated by the plans or working drawings, and is to

execute all work on plans and working drawings, whether or not they are described and referred to in the specifications and completed ready for the occupancy by said committee on or before the 29th day of August, 1891.

8. If any discrepancy shall be found to exist between the plans, working drawings, and specifications, the decision as to the fair construction of the true intent and meaning of the plans and working drawings and specifications shall be made by W. H. Bennett, city engineer, and the said party of the first part will execute the work in accordance with this decision.

9. Should any misunderstanding arise as to addition to or omission from the contract, caused by alteration, the said party of the second part shall have power to employ such means as shall be justifiable to obtain the true value of such alterations, the expense thereof to be equally divided between the parties to this agreement, and the above decision, when given, to be accepted by both parties.

The said party of the second part does for legal representatives, in consideration of the materials being provided as herein required by the said party of the first part, covenant, promise, and agree to and with the said party of the first part, that they will well and truly pay, or cause to be paid the party of the first part the sum of four thousand nine hundred and eightyseven dollars ( $$_{4,987}$ ).

MEAD, MASON & CO. First Party. E. J. KNOWLTON, Mayor, BYRON WORTHEN, WALTER M FULTON, THOMAS WILKINSON, JOHN P. CRONIN, CHARLES E. CHAPMAN, Second Party. WINFRED H. BENNETT, Witness.

This contract ratified and confirmed by vote of the city councils June 2, 1891.

### HALLSVILLE SCHOOLHOUSE.

### Hallsville Schoolhouse.

This memorandum of an agreement made and executed this 4th day of May, 1891, by and between William F. Head and Frank Dowst, partners and contractors under the firm name of Head & Dowst, and the city of Manchester WITNESSETH, that for and in consideration of the mutual promises and agreements hereinafter set forth, said parties do contract and agree together as follows :

Said firm of Head & Dowst hereby contracts and agrees to furnish all materials and build and complete for said city a school building in East Manchester, in accordance with the plans and specifications prepared by McFarland, Goodrich & McFarland, architects, which plans and specifications are hereby made a part of this contract, and to furnish and complete in said building a heating and ventilating system and sanitary closets in accordance with the proposals of the Fuller & Warren W. and V. Co., which are hereby made a part of this contract, for the sum of twentytwo thousand and sixty dollars (\$22,060), all of said materials to be in accordance with said specifications, and the work is to be done in a thorough and workmanlike manner, and the whole building to be completed on or before the 20th day of December, 1801, all of said work to be subject to the acceptance of the committee on lands and buildings of the city councils. Said city of Manchester hereby agrees to pay to said firm of Head & Dowst said sum of twenty-two thousand and sixty dollars (\$22,o6o) in monthly payments ; no such monthly payment to exceed 80 per cent of the amount of materials and labor furnished by said firm of Head & Dowst to the date of the payment, and upon the completion and acceptance of the said school building to pay the balance until the whole sum of twenty-two thousand and sixty dollars shall be paid.

In witness whereof the parties have hereunto affixed their hands this day and year above named.

HEAD & DOWST.

THE CITY OF MANCHESTER,

By E. J. KNOWLTON, BYRON WORTHEN, THOMAS WILKINSON, WALTER M. FULTON,

Joint Standing Committee on Lands and Buildings.

This contract ratified and confirmed by vote of city councils, June 6, 1891.

### Railroad over Second Street.

Memorandum of an agreement made this ninth day of May, 1891, by and between the Concord & Montreal Railroad and the city of Manchester, for the construction of an underpass through the embankment and under the track of the Manchester & North Weare Railroad, for the purpose and convenience of said city, extending Second street, so called, at West Manchester,

WITNESSETH: Said city of Manchester is to pay to said Concord & Montreal Railroad all cost or expense of excavating for said underpass, including the trenches for abutments; the cost of the abutments complete, including expenses of material and labor, and the cost of putting on the false work for carrying the track and trains during the progress of the work.

Said railroad is to furnish timber for the false work free of charge, and is to assume expense of the superstructure only.

All work is to be done under the direction, and to the satisfaction, of the chief engineer of said railroad.

> CITY OF MANCHESTER, Per E. J. KNOWLTON, *Mayor*.

W. A. STOWELL,

Superintendent of Construction, Concord & Montreal Railroad.

This contract ratified and confirmed by vote of the city councils, June 6, 1891.

### New Boiler at Police Station.

JULY 16, 1891.

To the Committee on Lands and Buildings, Byron Worthen Chairman:

GENTLEMEN,— My estimate for putting in a steel boiler and taking out the old boiler at police station, as follows :

Steel boiler, 12 feet long, 42 inches diameter, 52  $2\frac{1}{2}$ -inch tubes, including front and grate set up and connected to the pipes now in, ready to fire up, is four hundred and forty-five dollars (\$445), first class in every respect. The city to cut the hole through the wall and replace where the boiler is to go out.

Yours truly, THOS. A. LANE.

### Scavenger Service.

This agreement, made and executed this sixth day of June, 1891, by and between Hartley E. Vaughn, of Manchester, in the county of Hillsborough and state of New Hampshire, and the city of Manchester, a municipal corporation in said county and state, acting by Edgar J. Knowlton, mayor, specially authorized thereto by vote of the city councils, WITNESSETH: That for and in consideration of the mutual promises and agreements hereinafter set forth, said parties do hereby contract and agree together as follows, to wit: Said Hartley E. Vaughn hereby contracts and agrees to remove all perishable matter from the limits fixed and bounded in the compact part of said city of Manchester, as shown upon the map of said city in the office of the city engineer, in accordance with the provisions of the ordinance of said city of Manchester, establishing a scavenger service, passed May 6, 1890, for the term of one year from the ninth day of June, 1891, for the sum of one thousand, nine hundred dollars (\$1,900), to be paid by said city.

And he further agrees and contracts to use good horses and wagons, and a sufficient number for the suitable performance of the work, and to remove all of said matter at least two miles from the city limits and at least one fourth of a mile distant from any house, and to do all of said work in a proper and suitable manner, in all respects in accordance with the aforesaid ordinance, and to the satisfaction of the board of mayor and aldermen. And said city of Manchester hereby contracts and agrees to pay to said Hartley E. Vaughn, upon the satisfactory performance of his contract, the sum of one thousand nine hundred dollars (\$1,900), in monthly payments.

> EDGAR J. KNOWLTON, Mayor. HARTLEY E. VAUGHN, Contractor.

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### LIST OF ENGRAVINGS.

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