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AUDITOR'S  
FORTY-EIGHTH  
ANNUAL REPORT  
OF THE  
RECEIPTS AND EXPENDITURES  
OF THE  
CITY OF BOSTON,  
AND THE  
COUNTY OF SUFFOLK,  
FOR THE FINANCIAL YEAR 1859-60.

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1859, MAY 1, (*both included,*) APRIL 30, 1860.

CITY DOCUMENT, No. 56.



BOSTON:  
GEO. C. RAND & AVERY, CITY PRINTERS,  
No. 8 CORNHILL.  
1860.

FIRE DEPARTMENT. — This branch of the City service has been very much improved the past year, and it is now in a very efficient and flourishing condition. Six New Steam Fire Engines, and four New Horse Hose Carriages, have been added to the Department, so that we have now an efficient force of eight Steam Engines and two Hand Engines, all duly manned, *horsed*, and equipped for actual service; with suitable quantity of hose, hose-carriages, ladders, fuel wagons, &c. It is proposed to have all the Hose Carriages moved by horse power, as soon as it can be done; and to dispense, as

far as possible, with manual labor in the Department. It is a matter for congratulation that, with all the changes and additions of apparatus to the Department, the expenses of the present year will not exceed that of those preceding, while the actual running expenses, it is confidently expected, will be from fifteen to twenty per cent less than under the old system of hand Engines.

Never before was the City so well protected from fire as at present. With the changes already made, and those which it is proposed to make during the year, we think we may, at its close, be safe in saying that we shall have a Model Fire Department.

Accounts in detail of the City Property, the City Debt, the operations of the Committee on the Reduction of the City Debt; and all other statements required by the Ordinance establishing this Department, will be found under their appropriate heads.

All of which is respectfully submitted.

ELISHA COPELAND,

*Auditor of Accounts.*

ENGINE AND HOOK AND LADDER HOUSES.

*Alteration and Repairs on these Houses, viz :*

Carpenter's Work and Stock,	\$458 16
Painting and Glazing,	95 13
Whitewashing,	80 00
Masonry and Drainage,	87 24
Plumbing,	77 44
Paving Entrances,	48 00
Locks and Keys,	29 25
Iron Work,	2 50

Rent of Room on Lincoln's Wharf,  
four months, for the accommoda-  
tion of Hand Engine No. 8, prior  
to its being replaced by Steamer  
No. 8,

100 00

\$977 72

*Amount carried forward,*

\$463,672 25

*Amount brought forward,*

\$463,672 25

## STEAM ENGINE HOUSES.

*Cost of fitting up Houses for the accommodation of five new Steam Fire Engines, with their Horses, viz : Nos. 1, 3, 6, 7, and 9.**SOUTH BOSTON, No. 1, located on Broadway, South Boston.*

Painting and Glazing,	235 23
Mason Work and Drainage,	108 90
Lining Stalls,	82 00
Plumbing,	69 57
Paving Entrance,	67 63
Gas Fixtures,	50 32
Warming Apparatus,	18 88
Roofing, &c.,	17 22
Tackle, &c., for hoisting Hay,	12 19
Carpenter's Work and Stock,	927 32
	<u>\$1,589 26</u>

*EAGLE, No. 3. Located on Washington Street.*

Mason's Work and Drainage,	963 00
Carpenter's Work and Stock,	496 30
Painting and Glazing,	149 28
Plumbing,	139 85
Lining Stalls,	95 20
Gas Fixtures,	27 00
Roofing,	26 56
Paving Entrance,	12 40
Tackle &c., for hoisting Hay,	12 20
	<u>\$1,921 79</u>

*EAST BOSTON, No. 9. Located on Paris Street, E. B. which House is also occupied by Hose Company No. 6.*

Carpenter's Work and Stock,	\$548 35
Mason's Work and Drain,	441 38
Paving and Earth filling,	127 46
Lining Stalls,	99 33
Gas Fixtures,	35 14
Warming Apparatus,	8 85
	<u>\$1,260 51</u>

*Amount carried forward,*\$463,672 25

<i>Amount brought forward,</i>		\$463,672 25
<b>HOUSES FOR NO. 6 AND NO. 7. (<i>Wall Street and Purchase Street.</i>) <i>Repairs and alterations of these two Fire Engine Houses, which were fitted up last year.</i></b>		
Mason's Work and Drainage,	\$69 07	
Carpenter's Work and Stock,	70 79	
Gas Fixtures,	12 42	
Plumbing,	5 72	
Paving Entrances,	104 43	
Drain and Cesspool,	60 00	
	<u>\$322 43</u>	
<b>HOSE COMPANY, No. 3. <i>New House for this Company, located in Fruit Street.</i></b>		
Cost of erecting the above per contract,	395 00	
Extra work,	119 25	
	<u>\$514 25</u>	
<b>HOSE COMPANY, No. 4. <i>Extra Repairs on this House, viz :</i></b>		
Carpenter's Work and Stock,	\$185 00	
Painting and Glazing,	53 00	
Gas Fixtures,	17 52	
Warming Apparatus,	12 14	
Paper Hanging,	9 25	
	<u>\$276 91</u>	
<b>SARATOGA, STEAM ENGINE, No. 5.</b>		
Cost of piece of Land on Marion Street, East Boston, containing 825 feet, for the purpose of erecting a new House for the accommodation of this steamer,	897 07	
<i>Amount carried forward,</i>		<u>\$463,672 25</u>

*Amount brought forward,*

\$463,672 25

## RECAPITULATION.

Engine, Hose and Hook and Ladder

Houses,	\$977 72
Steam Engine House, No. 1,	1,589 26
Steam Engine House, No. 3,	1,921 79
Steam Engine House, No. 5,	897 07
Steam Engine Houses, Nos. 6 and 7,	322 43
Steam Engine House, No. 9,	1,260 51
Hose Company, No. 3,	514 25
Hose Company, No. 4,	276 91

Total for Engine Houses,

7,759 94

*Amount paid by Treasurer per item*

No. 13 of his account, \$6,758 72

*Amount not yet called for,* 19 00*Transfers by Auditor from Engine**House, Ward 1,* 982 22\$7,759 94

ENGINE HOUSE, WARD ONE. *New House on North Bennet Street and Bennet Place, for the accommodation of Steam Engine, No. 8, and its Horses, also for a Ward Room.*

Land.—Purchase of a house and lot,

\$6,000 00

Contract for altering the building,

3,600 00

Extra work,

615 28

4,215 28

Plans, &amp;c.,

157 00

Agency for the purchase of the Estate,

50 00

Drains and Cesspool,

79 63

Gas Fixtures, &amp;c.,

56 28

Paving Entrance,

53 40

Warming Apparatus,

49 92

Tackle and Slings for hoisting Hay,

12 20

10,673 71

*Amount paid by Treasurer per item*

No. 17 of his account, \$11,702 56

*Amounts carried forward,*

11,702 56

\$482,105 90*Amounts brought forward,* \$11,702 56 \$482,105 90*Transfers by Auditor to Engine**Houses and to Fire Department,* 1,028 85\$10,673 71

## FIRE DEPARTMENT.

*Exclusive of Engine and Hook and Ladder Houses, which are charged under that head; and also exclusive of the Salaries of the Chief Engineer, and the Clerk of the Board of Engineers, which are charged under the head of Salaries.*

*Amount carried forward,* \$662,935 11

## FIRE DEPARTMENT.

55

*Amount brought forward,* \$662,935 11

*The appropriation for the Fire Department includes the annual Expenditures of the Fire Department proper, the cost of carrying on the Fire Alarm System, and the cost and keeping in proper order for use, the Steam Fire Engines.*

*§ The rates of pay of the officers and members, and much other information on the business of the Department, will be found in the Appendix.*

## FIRE DEPARTMENT.

Annual compensation to the Assistant Engineers, Officers, and Members of the various Engine, Hook and Ladder, and Hose Co's, \$63,826 45

Repairs of Engines, Hose Carriages, Hook and Ladder Carriages, and other apparatus belonging to the Fire Department, exclusive of Repairs on Hose, and other work in that line, 3,092 80

New Leading and Suction Hose, Caps, Badges, and Buckets, 2,394 21

Hire of Horses and Riders to draw the Hand Engines and Hooks and Ladders to and from fires, 2,527 40

Repairs on the Leading and Suction Hose, Caps, Badges, and other work in that branch, 1,706 82

Bells for Fire Alarms, and hanging the same, New Belfries &c., viz:

On Mariner's Church, Ward 7, a new Steel Bell put up

*Amounts carried forward,* \$73,547 68 \$662,935 11

<i>Amounts brought forward,</i>	\$73,547 68	\$662,935 11
last year, but paid for this year, 1,616½ lbs., at 28 cts., and Incidental Expenses, \$25.50,	\$478 12	
On the Lawrence Schoolhouse, W'd 12, one of the same, weighing 3,304 lbs., and 66 inches in diameter, at 20 cts., net per lb., and Incidental Exp., \$5,	665 80	
	1,143 92	
Furniture and Utensils for Engine Houses, including Bedding, &c., for the Steam Engine Houses,	929 19	
Fire at Deer Island on the 20th Aug. last. Refreshments, Horse-hire and keeping, and other expenses of the Department on this occasion,	671 75	
Expenses of collecting apparatus after fires, and carting machines to and from workshops for repairs; and other miscellaneous expenses of the Fire Department, not charged elsewhere,	632 42	
Gas and Gas Fixtures for the Engine Houses,	610 69	
Fuel for the Engine Houses,	399 96	
Water for the various Engine Houses,	350 00	
Oil for Torches. Neatsfoot Oil, and Leather Preservative for Engine Hose,	287 42	
<i>Amounts carried forward,</i>	\$78,573 03	\$662,935 11



## FIRE DEPARTMENT.

57

<i>Amounts brought forward,</i>	\$78,573 03	\$662,935 11
Ladders. Purchase of new, & repairing of old ones,	268 55	
Reservoir Covers. New ones furnished by the Internal Health Department,	174 00	
Stationary and printing for the Department,	136 10	
Refreshments furnished Fire Companies who came from neighboring cities and towns to our assistance at large fires,	126 92	
Warming apparatus for Engine Houses,	92 42	
Rent of room for meetings of members of Company No. 12,	83 33	
Soap and Sponge,	76 84	
Clearing Hydrants and Reservoirs from snow and ice,	60 00	
Carriage hire for Committee,	51 00	
Rent of rooms for storing Engines where houses were not prepared to receive them,	50 00	
Filling and cleaning Reservoirs,	50 25	
Signs for Engine and Hose Carriage Houses, and for designating the location of Hydrants in the streets,	25 91	
Care of the Reservoirs at East Boston one year,	25 00	
Ringling Alarm Bells at East Boston one year,	25 00	
Allowance to Firemen for extra services at large fires,	16 00	
Special services of Constables for attendance at fires	8 00	
<i>Amounts carried forward,</i>	<u>\$79,842 35</u>	<u>\$662,935 11</u>

<i>Amounts brought forward,</i>	\$79,842 35	\$662,935 11
Damages, payment for injury done by the Department,	8 00	
FIRE DEPARTMENT, Exclusive of Steam Engines and Telegraphic Fire Alarm,	\$79,850 35	

## STEAM FIRE ENGINES.

Balance due last year on the  
purchase of Engines *Eclipse*  
and *Lawrence* at \$1,500  
each, \$3,000 00

Paid for four new  
Steam Fire En-  
gines, viz:

The nameless, (now  
called "*Boston*,")  
and the "*East Bos-  
ton*," at \$3,000  
each, and the "*Rob  
Roy*," at \$2,500, 8,500 00

Paid for the "*Eagle*"  
at \$3,000, less  
\$1,000 allowed for  
the "*Miles Green-  
wood*," 2,000 00

13,500 00

Monthly payments to the sell-  
ers of the *Eclipse* and *Law-  
rence*, for running and work-  
ing the Engines, and keeping  
them in repair at their own  
expense, one year, as per  
contracts,

5,603 05

Cost of Horses owned by the  
City, and kept constantly  
in harness and ready for  
drawing the Engines to and  
from fires,

3,175 00

Hire of Horses for the same  
purpose,

115 00

*Amounts carried forward,* \$22,393 05 \$662,935 11

FIRE DEPARTMENT.

59

<i>Amounts brought forward,</i>	\$22,393 05	\$662,935 11
Harnesses, &c., for the same,	647 89	
Grain, Hay, &c., for Horses,	937 49	
Fuel,	873 51	
Hose Carriage. One new one,	500 00	
Stable Furniture. Tools and Utensils for the Stables and Engines,	389 97	
Shoeing Horses, and Medi- cines for same,	159 34	
Washing Clothing and Bed- ding,	145 67	
New Fuel Wagon,	50 00	
Repairing the Engines,	14 12	
STEAM FIRE ENGINES,	<u>\$26,111 04</u>	

TELEGRAPHIC FIRE ALARM.

*The following payments have been made on  
this account, viz :*

Salary of Superintendent,	1,200 00	
Salary of Assistants,	3,516 00	
New Striking Machines,	1,041 91	
Drugs, Chemicals, and Spelter,	471 19	
Signal Boxes and Repairing the same,	408 54	
Purchase of a fifty-six hour Chronometer for use of office,	250 00	
Iron Weights, Brackets, and other Iron Work,	208 30	
Wires, and putting up same,	93 85	
One new No. 3 Lathe,	81 36	
Repairing Striking Machines,	89 90	
Office Machinery and Tools for Repairing,	69 85	
Incidental Expenses and dam- ages paid for injury to prop- erty by the wires or other- wise,	67 37	
Water used as a motive power,	65 00	
<i>Amounts carried forward,</i>	<u>\$7,563 27</u>	<u>\$662,935 11</u>

<i>Amounts brought forward,</i>	\$7,563 27	\$662,935 11
Washing the Office, and the Clothing and Bedding,	64 67	
Insulators, Copper Cups, Bat- teries, &c.,	55 65	
Carpenters' & Masons' Work, Repairing, &c.,	39 24	
Drain in Castle Street con- nected with the Hydraulic Striking Apparatus,	32 76	
Freight, Expresses, Omnibus Fares, and Carting,	32 51	
Furniture for Office,	27 07	
Repairs of Machinery in and out of Office,	24 32	
Printing and Stationery for Office,	12 90	
New Batteries,	10 58	
Rent of cellar at South Boston for the accommodation of a Striking Machine,	6 00	
Carriage Hire,	3 00	
TELEGRAPHIC FIRE ALARM,	<u>\$7,871 97</u>	
TOTALS as above, viz:		
Fire Department,	\$79,850 35	
Steam Fire Engines,	26,111 04	
Telegraphic Alarms,	<u>7,871 97</u>	
		113,833 36
<i>Amount paid by Treasurer per item No. 19 of his Account,</i>	\$113,490 82	
<i>Amount not yet called for,</i>	306 78	
<i>Transfers from other Accounts,</i>	<u>35 76</u>	
	<u>\$113,833 36</u>	

## FIRE DEPARTMENT.

*Chief Engineer.*

George W. Bird, 1,200 00

*Secretary of the Board  
of Engineers.*George H. Allen, 800 00

2,000 00

*The Salaries of the Assistant  
Engineers, \$250 per annum  
each, are charged to the ap-  
propriation for the Fire De-  
partment.*

## FIRE DEPARTMENT.

Received from the Chief Engineer, viz :

For two spare Engines sold,	1,150 00
Five old Hose Carriages,	200 00
Old Hose,	494 75
From Auditor,	478 82

2,323 57

*Per item No. 86 of Treasurer's account.*

## INCREASE OF THE CITY DEBT.

### NEW STEAM ENGINE HOUSE.

Amount of Loan authorized by Order of  
May 13th, 1859, for the purchase of a lot  
of land, and erecting thereon a Steam  
Fire Engine House and Ward Room in  
Ward I.,

12,000 00

## FIRE DEPARTMENT.

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All the Engines, Carriages, Telegraphic Alarm Apparatus, and all other property connected with the Department, belong to the City, and are under the control of the Chief Engineer, and Special Committees of the City Council on the Fire Department and on Fire Alarms, which are chosen every year.

The Department consists of one Chief Engineer, nine Assistant Engineers, a Secretary to the Board of Engineers, and twenty-one Companies, viz :

- Six Steam Engine Companies.
- Six Hand Engine Companies.
- Six Hose Companies, and
- Three Hook and Ladder Companies.

Each of the Hand Engine Companies has one Foreman, one Assistant Foreman, one Clerk, one Steward, and thirty-six men.

Each of the Steam Engine Companies has one Engineer (*or Foreman*), one Fireman, one Driver, and six Hosemen ; and is drawn by two or more horses. The Engineer (*or Foreman*), the Fireman, and the Driver, are all the time on duty at or near the Engine House, and the horses are at all times in harness, ready for *immediate service*.

One of the Hosemen is to be appointed by the Board of Engineers as *Foreman of the Hose*.

The Foreman (or Engineer) has the whole charge of the Engine and its appurtenances, and is responsible for the care, good order and well working of the Engine ; and is accountable for the proper performance of all the duties required of the Fireman and Driver.

The Fireman, besides his duties as such, is also to discharge the same duties as the Stewards of the Hand Engine and Hose Companies.

The Driver has charge of the Stables and Horses, and all that belongs to that branch of the service, and is to assist the Fireman in the discharge of his duties as Steward.

The *Foreman of the Hose* is to perform all the duties now required of the Foremen of Hose Companies, and of the Clerks of the Hand Engine and Hose Companies.

Two of the Hose Companies consist of twenty men each, and have double (*four wheeled*) Carriages, carrying 1,000 feet of Hose each. Four of the Hose Companies consist of fifteen men each, and have single (*two wheeled*) Carriages, carrying 500 feet of Hose each.

It is in contemplation to have all the Hose Carriages drawn by horses, and also to add to the Department two more Steam Fire Engines, thus dispensing with all the hand apparatus.

**FIRE ALARMS** — *A constant watch is kept at the Central Office, Court Square, night and day, by the operators. Each operator serves two alternate terms of four hours each, as principal, and the same as assistant operator; so that sixteen hours' service at the office, out of every twenty-four, is required from each operator. No operator is permitted to sleep during his watch, unless expressly relieved by some one else, and by consent of the Superintendent.*

*Each operator is accountable to the Superintendent for any omissions or mistakes that may occur at the Central Office during his hours of duty.*

*An accurate account is kept of the time of giving each alarm, and of the District and Station from which it originates, and all other necessary information.*

*The City is divided into seven Alarm Districts. Each District is subdivided into Stations, at each of which is a Signal Box. There are now fifty-two Signal Boxes or Stations, the number in a District varying from six to twelve.*

*Alarms are transmitted to the Central Office, from the Signal Stations or Boxes, by turning a crank in the Box. The Police Officers and one other person resident near each Box, have keys to the Boxes.*

*Alarms are usually given in less than a minute from the time the crank is turned in any Box.*

**THE MERIDIAN BELLS.**—Twenty-two Bells, at their various locations on Churches and School Houses, are struck from the Fire Alarm Office, precisely at noon every day, except Sundays. The greatest care is taken to secure the utmost accuracy in the time, for which purpose a first-rate chronometer has been provided, and a telegraphic communication with the Observatory at Cambridge is kept up.

## PAY OF THE DEPARTMENT.

That of the Chief Engineer is \$1,200 per annum; that of the Assistant Engineers is \$250 each per annum.

Engineers of Steam Engines receive	\$60 00	per month.
Firemen	"	"
Drivers	"	"
Foremen of Hose	"	"
Hosemen	"	"
	150 00	per year.
	125 00	"

Drivers of Hose and Hook and Ladder Carriages, \$40 *per month*; Foremen, \$150 *per annum*; Assistant Foremen, Clerks, Stewards, Hosemen, Axemen, and Rakemen, \$125 *per annum*; Members, \$100 *per annum*, — all payable quarterly, with the exception of those who are constantly employed on Steam Engines, who receive their salary monthly.

The Engines, and Hook and Ladder and Hose Companies stationed at East and South Boston, and in Northampton Street, are not required to turn out at any alarm unless *specially ordered*. Their pay is consequently less, and is as follows:

Foremen, \$100 *per annum*; Assistant Foremen, Clerks, Stewards, and all other officers, \$75 each, and the men \$60 each *per annum*.

## STATION HOUSES, viz:

- No. 1. In Old Hancock School Building, Hanover Street.
- No. 2. In City Building, Court Square.
- No. 3. In a hired building on Leveret Street.
- No. 4. In hired rooms in Boylston Square, rear of Boylston Market.
- No. 5. NEW BRICK HOUSE on East Dedham Street. Lot, 3,372 feet. Whole cost of House and Land, \$15,024 11.
- No. 6. BRICK HOUSE, Broadway, So. Boston. This building also accommodates Engine Co. No. 2.
- No. 7. NEW BRICK HOUSE on Meridian Street, E. Boston. Lot contains 3,755 feet.
- No. 8. BRICK HOUSE on Commercial Street, Ward 1, covering 1,070 feet of land, fitted up in 1855. This is the HARBOR POLICE OFFICE. A House for Engine No. 8 is connected with this house.



FIRE DEPARTMENT.—*See Appendix.*

STEAM FIRE ENGINES. — Six, viz: Eclipse, Lawrence, Eagle, Boston, South Boston, and East Boston.

HORSES.—Sixteen.

HAND ENGINES, in active service, five, viz: Cataract, Tremont, Barnicoat; Webster, East Boston; and Spinney, South Boston.

HOSE CARRIAGES in constant use, six, viz: Washington, Despatch, Franklin, Chester, Suffolk, and Deluge.

FUEL WAGONS.—Two, one near City Stables, on Harrison Av. and one on Merrimac Street.

FIRE HOOKS.—Eight.

FIRE LADDERS.—Seventy-six, of different sizes.

HOSE.—About twenty thousand three hundred feet, leading and suction.

FIRE BUCKETS.—Seventy-six.

STEAM FIRE ENGINE HOUSES. — Six, located as follows, viz: *North Bennet, Wall, Purchase, and Washington* (near Dover) Streets, in the City Proper, *Broadway* (near Dorchester Street), South Boston, *Paris Street*, East Boston.

HAND ENGINE HOUSES.—Six, viz: East Street, Warren Street, (*in Primary School House*), foot of Mount Vernon Street; and Court Square, in City Proper; Fourth, near K Street, South Boston; and Chelsea Street, East Boston.

HOSE CARRIAGE HOUSES. — Six, viz: Salem, Hudson, Fruit, Northampton Streets, and Shawmut Avenue, in City Proper; and Meridian Street, East Boston.

HOOK AND LADDER HOUSES.—Three, viz: one near the City Stable on Harrison Avenue, Ward 11; one on Friend Street, in Primary School House; and one at East Boston.

SPARE APPARATUS.—One Hook and Ladder Carriage; eight Hand Engines; six Hose Carriages, with about 800 feet of three-inch leather Hose. There is one Hose

Carriage with 400 feet of Hose, located at Washington village, and one with the same quantity of hose, located on the Mill Dam. This hose is only used by the residents of those locations.

**MAGNETIC FIRE ALARM APPARATUS**, in the City Building. Whole cost over \$25,000.

**HYDRANTS**.—For supplying water in case of fire. 902 in the City proper; 261 at South Boston, and 170 at East Boston. Total, 1,333. *An increase of 43 over last year. The Hydrants are located at an average distance of 250 feet from each other.*

**RESERVOIRS**.—One hundred and thirty-three, of which thirteen are located at East Boston; seventeen at South Boston; and the balance in the different wards of the City. They contain from 300 to 400 hogsheads each, and are supplied by rain water from the roofs of buildings.

**THE ENGINES, HOSE, CAPS, BADGES, BUCKETS, AXES, LADDERS**, and all the other Apparatus used by the Fire Department, are owned by the City, and are under the care and control of the Chief Engineer of the Fire Department.