

FIRE DEPARTMENT

AND ELECTRICAL INSPECTION DIVISION



CITY OF BOSTON



ANNUAL REPORT 1948

ANNUAL REPORT
OF THE
FIRE DEPARTMENT
AND ELECTRICAL
INSPECTION DIVISION
OF THE
CITY OF BOSTON
FOR THE
YEAR ENDING DECEMBER 31, 1948



CITY OF BOSTON
PRINTING DEPARTMENT
1949

HISTORY.

FIRE COMMISSIONERS.

*1874-1876. Alfred P. Rockwell.
 1877-1879. David Chamberlain.
 1879-1883. John E. Fitzgerald.
 1883-1885. Henry W. Longley.
 1885-1886. John E. Fitzgerald.
 1886-1895. Robert G. Fitch.
 1895-1905. Henry S. Russell.
 1905. Patrick J. Kennedy.
 (Acting February 17-March 20.)
 1905-1908. Benjamin W. Wells.
 1908-1910. Samuel D. Parker.
 1910. Francis M. Carroll.
 (Acting May 27-September 16.)
 1910-1912. Charles C. Daly.
 1912-1914. Charles H. Cole.
 1914-1919. John Grady.
 1919-1921. John R. Murphy.
 1921-1922. Joseph P. Manning.
 (Acting Nov. 8, 1921-April 1, 1922.)
 1922. William J. Casey.
 (Acting April 1-August 24.)
 1922-1925. Theodore A. Glynn.
 1926. Thomas A. Sullivan.
 (Acting January 26-July 6.)
 1926-1930. Eugene C. Hultman.
 1930-1933. Edward F. McLaughlin.
 1933. Eugene M. McSweeney.
 (October 16, 1933-January 5, 1934.)
 1934-1938. Edward F. McLaughlin.
 1938-1945. William Arthur Reilly.
 1945-1946. John I. Fitzgerald.
 (June 7, 1945-January 7, 1946.)
 1946- Russell S. Codman, Jr.

CHIEFS OF DEPARTMENT.

1826-1828. Samuel D. Harris.
 1829-1835. Thomas C. Amory.
 1836-1853. William Barnicoat.
 1854-1855. Elisha Smith, Jr.
 1856-1865. George W. Bird.
 1866-1874. John S. Damrell.
 1874-1884. William A. Green.
 1884-1901. Louis P. Webber.
 1901-1906. William T. Cheswell.
 1906-1914. John A. Mullen.
 1914. John Grady. (1 day.)
 1914-1919. Peter F. McDonough.
 1919-1922. Peter E. Walsh.
 1922-1924. John O. Taber.
 1925-1930. Daniel F. Sennott.
 1930-1936. Henry A. Fox.
 1936-1946. Samuel J. Pope.
 1946-1948. Napeen Boutillier.
 1948- John F. McDonough.

* Previous to 1874, the Boston Fire Department was in charge of the Chief Engineer.

[DOCUMENT 12 — 1949.]



ANNUAL REPORT

OF THE

FIRE DEPARTMENT

FOR THE YEAR 1948.

Boston, January 3, 1949.

HON. JAMES M. CURLEY,
Mayor of Boston.

DEAR SIR:

I have the honor to submit herewith a report of the activities of the Boston Fire Department and the Electrical Inspection Division for the year ending December 31, 1948.

In my report for 1947 it was stated that the modernization program for the Fire Department, instituted by your Honor in 1946, would probably be completed during 1948, subject to unforeseen delays with respect to the delivery of new equipment on order.

At this time the department has received the following listed equipment ordered under the 1947 Equipment Budget Loan:

- 20 Pumpers
- 10 Hose Wagons
- 1 Tractor for Tower 1
- 1 20-Ton General Motors Corporation Tractor
- 2 1,000-Gallon Gasoline Tank Wagons
- 3 ½-Ton Pickup Trucks
- 23 Small Cars

The equipment listed below is undelivered:

2 Hose Wagons; 5 85-Foot Aerial Trucks; and in addition 6 85-Foot Aerial Trucks ordered under the 1946 Equipment Loan making a total of 11 of this type; 6 65-Foot Aerial Trucks.

As the result of failure on the part of different manufacturers to make deliveries of ladder trucks, and on account of our desperate need for replacements in this branch of the service, your Honor has authorized me to proceed with the modernization of four aerials through the purchase of four new tractors together with other necessary work for the renovation of the trailers. A contract for this job is now being executed with the Mack Motor Company. The department during the year has previously modernized another aerial, namely, Ladder 2, in East Boston, with very satisfactory results.

My original estimate submitted early in 1946 for the cost of modernizing the entire department was evidently low, as shown by bids received during 1947 and 1948, indicating a material increase over 1946 prices. Therefore, in order to complete the modernization of all apparatus now in service, it is my estimate that the department should be provided with approximately \$650,000, either in the Departmental 1949 Budget Allowance, or by means of another equipment loan.

A new tractor was purchased for Tower 1 of the Bowdoin Square fire station. This piece has likewise been modernized in a manner similar to Tower 2, thus giving the city two of the finest and most efficient water towers in the country.

Mention should be made of five Cardox units each containing 750 pounds of carbon dioxide gas mounted on five hose wagons. These units cost \$2,279.25 each. The placing of these units in service during the month of July, 1948, is a distinct innovation for the fire service. Sufficient data has already been assembled to prove the worth of these units, and establish them as one of the most modern methods of extinguishment of certain types of fires. The quick use of one of these units on the occasion of a two-alarm fire aboard a naval vessel at the Charlestown navy yard prevented what might have been a fire of serious proportions. For the servicing of these units the department purchased a six-ton cardox storage tank at a cost of \$9,180. All portable CO₂

extinguishers are also filled from this tank at a cost of approximately one-third formerly paid to outside concerns for similar charging services.

Eighteen 2,000 GPM high pressure guns have been installed on 18 hose wagons, thereby constituting a formidable array of heavy deluge equipment for protection against a major conflagration. All engine companies, rescue companies, and several ladder companies have been provided with the new self-contained Chemox masks, allowing three masks per company. The equipping of the remaining companies with this type of mask will be provided for in the 1949 budget, in as much as a new state statute requires all fire apparatus in the Commonwealth to be so equipped with at least two self-contained masks, on or before July 1, 1949.

The second of two Navy mine sweepers purchased by your Honor in 1946, for reconversion into fireboats, was placed in service March 10, 1948, thereby completing the modernization of the Marine Division of the department. Boston now has the best equipped fireboat fleet of its size in the United States.

PERSONNEL.—The training of the new personnel comprising approximately 600 men inducted after the advent of the 48-hour week has proceeded at an accelerated pace. Through lack of proper facilities for a central Drill School to accommodate a large group of men it was necessary to decentralize the Drill School into various small groups scattered through various fire stations having limited facilities. This method, it is admitted, has not been conducive to obtain best results on uniform training for all the new inductees. Refresher courses have also been given to all permanent members. I have directed that all members of the fire-fighting force, excepting personnel assigned to Fire Prevention Division and the two High Pressure Stations, shall attend and qualify at the Navy Fire-fighting School, at South Boston. Twenty-five district chiefs, 37 captains, 114 lieutenants, 1,586 privates have already attended the school. The balance will finish the course early in 1949. At this school all members were taught the latest methods of handling water fog, foam, CO₂, and all the latest innovations in fire fighting.

Another important phase in the training of personnel has been the establishment of two schools for drivers. Qualified officers have been detailed to one school to

train all new men to become proficient as drivers of fire apparatus. The other school directed by qualified officers was set up to obtain a record of the proficiency of permanent drivers and to provide opportunities for greater improvement. Considerable headway has been made through these schools in reducing accidents involving vehicles of the department. For the period beginning November, 1946, to November, 1947, it was necessary for the chief inspector of the Fire Prevention Division to investigate 62 accidents involving fire apparatus. For the period, November, 1947, to November, 1948, since the Driving Schools were established, Fire Prevention Division has investigated 37 cases, showing a material reduction in the number of accidents. It is my intention to continue these schools during 1949.

Prior to 1946 company drills were held weekly, now, company drills are held daily.

A deputy chief has been detailed to Headquarters for a special assignment to cover all fire stations and report on the maintenance of all apparatus and condition of fire stations. The city has made a large investment, approximately \$1,500,000, for the purchase of new equipment, and it is my intention to continue, at all times, to impress upon the members of the department their responsibility in maintaining and protecting this new equipment in the best possible manner.

NEW CONSTRUCTION.—The construction of a new fire station at the corner of Charter and Hanover streets, to house Engine 8 and Ladder 1, at a cost of \$195,731.27, begun during 1947, was completed on September 1, 1948. This building constitutes one of the major improvements in the North End of the city during your Honor's present administration.

The work under contract awarded to the firm of J. A. Singarella Company, in the amount of \$123,200, for the construction of a new fire station at Mt. Vernon and River streets, Back Bay, is not yet completed. The contractor was delayed by foundation difficulties beyond his control. Furthermore, various legal matters pertaining to the construction of the new house had to be settled with the abutters resulting in further delays in the progress of the work.

On September 13, 1948, contract was awarded to the firm of Bossi Construction, Inc., in the amount of \$111,387, for the construction of a fire station at Wash-

ington street and Ferncliff avenue, West Roxbury. This job should be completed by the spring of 1949. It is proposed to place in service a new engine company, No. 55, when the building is ready for occupancy. Sufficient space and accommodations have been allowed in the design of the fire house for the installation of a ladder truck, should such a company be required at a future time.

NEW PROJECTS.—Your Honor has already allocated the sum of \$1,500,000 for the construction of a new Maintenance Division Garage and Headquarters, much needed by the department. This building will house the Headquarters' offices, Fire Prevention Bureau, Fire Alarm Construction Force, and the entire Maintenance Division. Space will also be provided to house Tower 2, now located at Bristol street, and Engine 23, formerly located in fire house, now closed, on Northampton street. Out-door space will be set apart for a department drill yard. The building will be located on land near the corner of Massachusetts avenue and Southampton street, the total area containing approximately 125,000 square feet. Of this area, 80,000 feet belongs to the City of Boston, and is utilized by the Paving Division of the Department of Public Works. The remainder of the area, containing approximately 45,000 square feet, has been purchased by the city from the New York, New Haven & Hartford Railroad.

Accompanied by Mr. John Gray, city architect, and executives from the Maintenance Division, I, personally, made an inspection of the New York Fire Department repair shops which are the most modern of any Fire Department in the country. The New York building was built in 1946 at a cost of \$2,500,000. According to the latest building cost index, if this building were to be constructed today it would cost \$3,750,000. Obviously, the needs of the Boston Fire Department are not as great as those of New York, so, with the amount of money at our disposal it is expected that the department will have a completely up-to-date and modern garage capable of handling the department's needs.

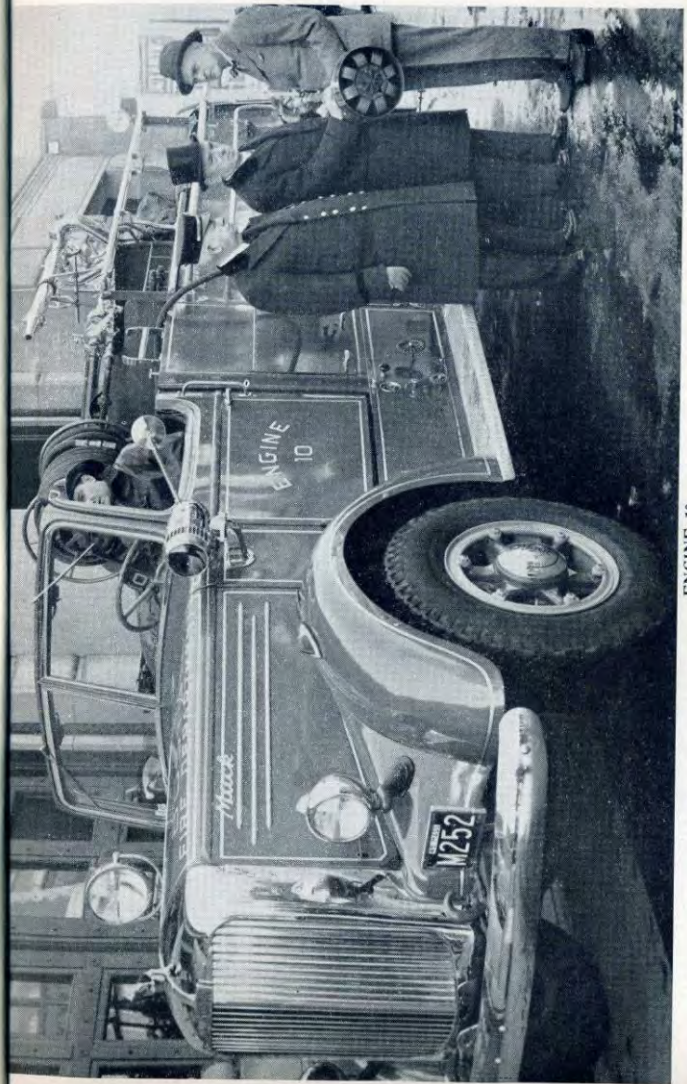
It was recommended in 1946 that the City of Boston adopt a modern Fire Prevention Code which would strengthen the Fire Prevention Division of the Department in its efforts to eliminate and reduce fire hazards throughout the city. After consultation with many

outside authorities and using as a model the codes promulgated by the National Fire Protection Association and the National Board of Fire Underwriters the Fire Prevention Division submitted to the Law Department of the city for review and consideration a proposed code for the City of Boston. It is realized that the Law Department has been faced with many legal difficulties in trying to clarify the code, on account of conflicting statutes, or lack of statutes which would give authorization for the legalizing of various provisions contained in the code. It is expected that the Law Department will be able to submit to your Honor for approval a final draft of the code within a short time.

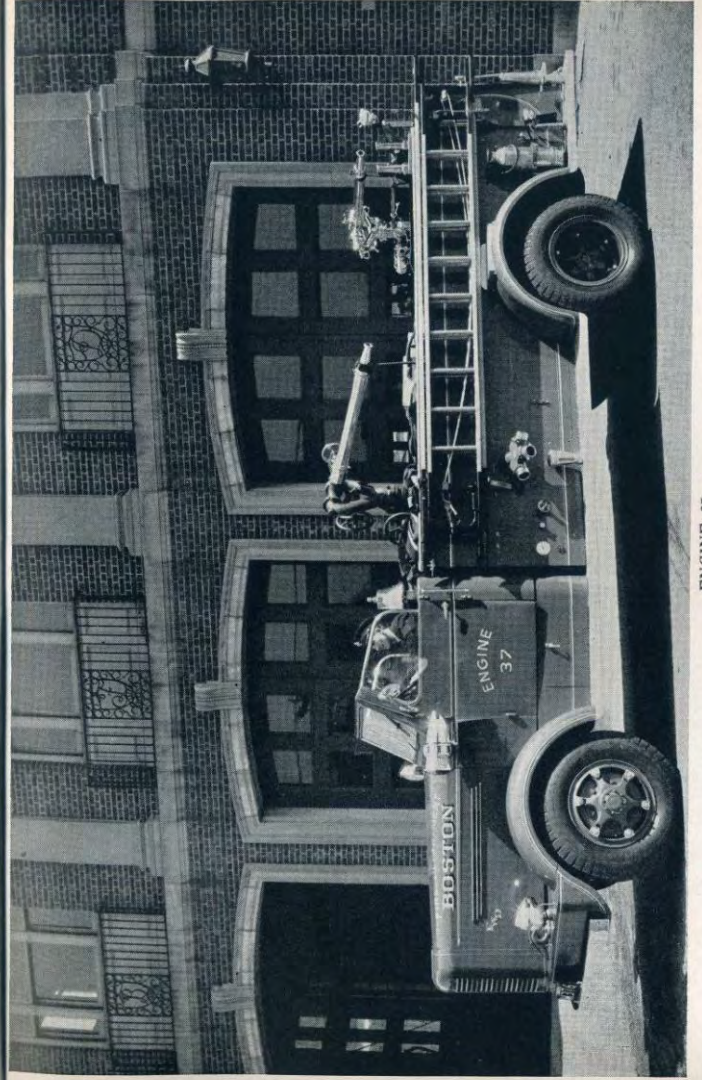
The Fire Department has set a high standard of efficiency in the extinguishment of fire occurring within the city. This fine work should be supplemented by equally progressive achievements along the lines of Fire Prevention. This, I am certain, the department can accomplish providing the means are given in the form of the recommended Fire Prevention Code.

Respectfully submitted,

RUSSELL S. CODMAN, JR.
Fire Commissioner.



ENGINE 10.
Mack Hose Wagon Equipped with One Fixed 2,000 G.P.M. Deluge Gun and One 750-Lb. Cardox Tank with 250 Feet of High Pressure Hose. Special Nozzle Enables Discharge of Refrigerated C.O.₂ at a Rate of 300 Lbs. Per Minute. Chief of Department John F. McDonough, Hon. James M. Curley, Mayor of Boston, and Fire Commissioner Russell S. Codman, Jr.



ENGINE 37.
Four-Wheel Drive Company Hose Wagon with One Fixed 2,000 G.P.M. Deluge Gun and One Portable 1,000 G.P.M. Deluge Gun.

EXECUTIVE ORGANIZATION
BOSTON FIRE DEPARTMENT
1942

PERSONNEL.

**EXECUTIVE ORGANIZATION.
BOSTON FIRE DEPARTMENT.
1948.**

Fire Commissioner, RUSSELL S. CODMAN, JR.

Executive Secretary, WILLIAM D. SLATTERY.

Medical Examiner, MARTIN H. SPELLMAN, M. D.

Chief of Department, JOHN F. McDONOUGH.

Superintendent of Maintenance Division, WALTER C. GLYNN.

Superintendent of Fire Alarm Division, ALBERT L. O'BANION.

Deputy Chief in Charge of Fire Prevention Division, EDWARD N. MONTGOMERY.

Superintendent, Electrical Inspection Division, BERNARD B. WHELAN.

Awarded "*John E. Fitzgerald Medal*" during 1948.

Ladderman LOUIS J. CIVITARESE, Ladder Company 26.

Awarded "*Walter Scott Medal for Valor*" during 1948.

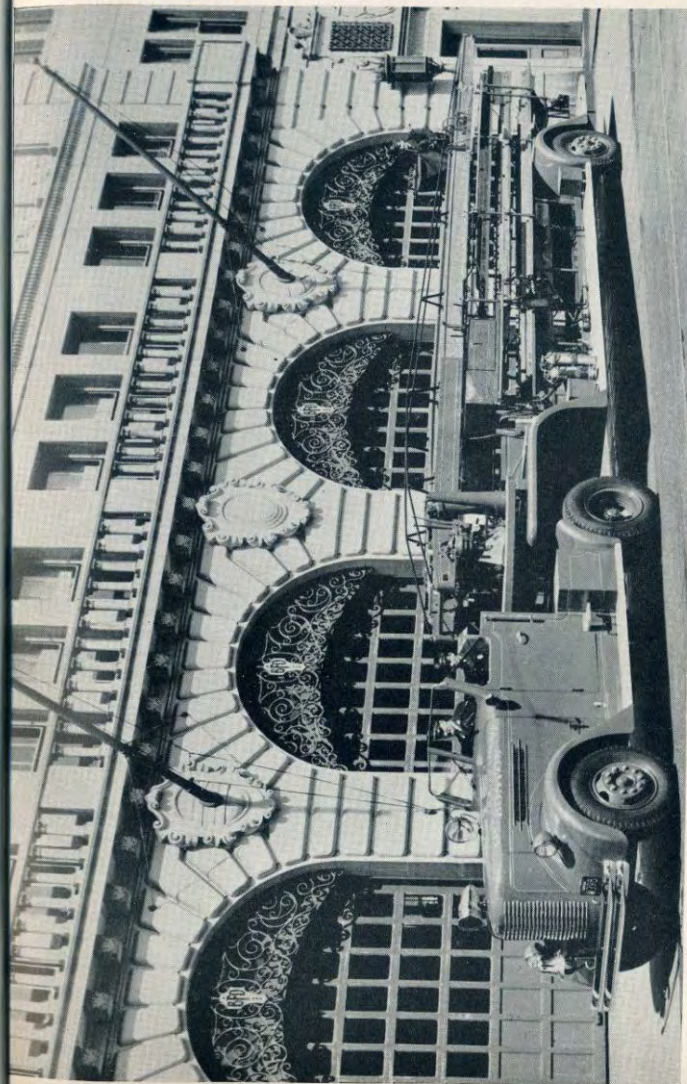
Ladderman EDWARD C. DONOVAN, Ladder Company 18.

**IN MEMORIAM.
Deaths of Active Members During 1948.**

DATE.	NAME.	RANK.	COMPANY.
January 9.....	Daniel R. A. Milliken.....	Steamfitter.....	Maintenance Division.
January 25.....	John F. Nugent.....	Man on Probation.....	Engine Company 26.
February 29.....	James W. Ryan.....	Motor Apparatus Engineer..	Maintenance Division.
March 12.....	Henry J. Egan.....	Bookkeeper.....	Headquarters.
April 21.....	George P. Stewart.....	Ladderman.....	Ladder Company 33.
May 6.....	William J. Buckley.....	Ladderman.....	Ladder Company 3.
July 31.....	Frederick J. Walsh.....	Hoseman.....	Engine Company 30.
August 17.....	George E. Groomes.....	Hoseman.....	Engine Company 45.
September 7.....	Valentine B. Nolan.....	Apparatus Operator.....	Fire Prevention Division.
September 27.....	Charles E. Cross.....	Hoseman.....	Fire Prevention Division.
October 11.....	George A. Jones.....	Hoseman.....	Fire Prevention Division.
October 13.....	Edmund J. Sharp.....	Hoseman.....	Engine Company 32.
December 25.....	Thomas J. McCarthy.....	Hoseman.....	Engine Company 54.
December 26.....	Francis X. White.....	Hoseman.....	Engine Company 18.

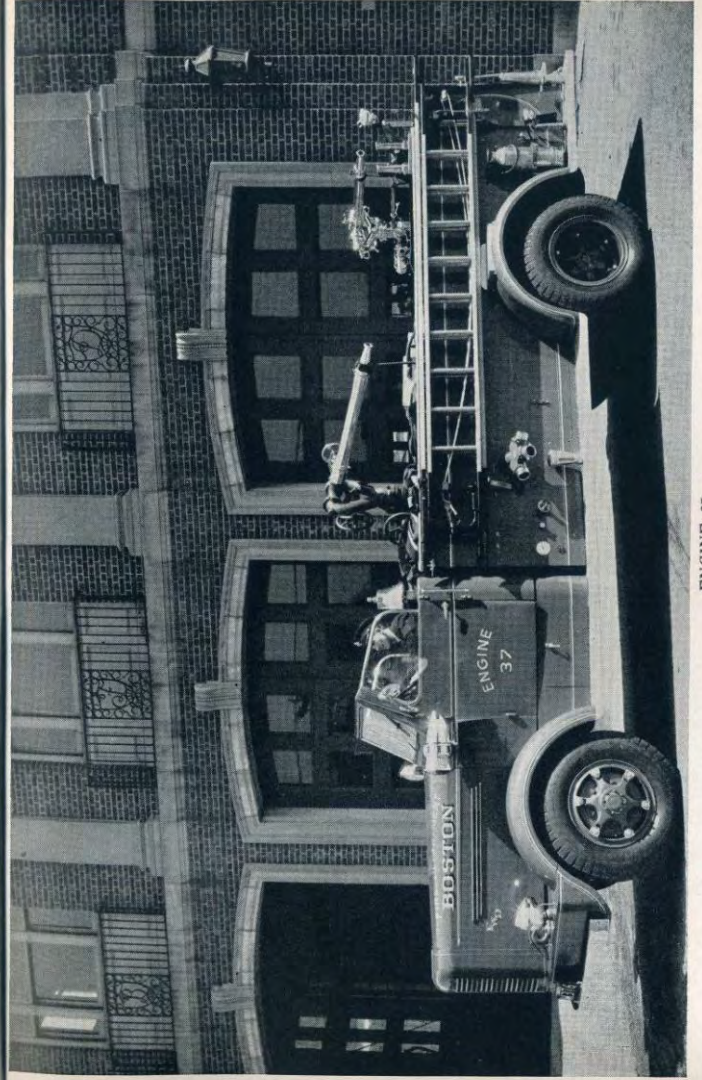


LADDER 7.
Four-Wheel Drive Company 85-Foot Spring Raised Ladder Truck.



LADDER 17.
Peter Pirsch Company 85-Foot Aerial, Power Driven.

STATISTICS.



ENGINE 37.
Four-Wheel Drive Company Hose Wagon with One Fixed 2,000 G.P.M. Deluge Gun and One Portable 1,000 G.P.M. Deluge Gun.

EXECUTIVE ORGANIZATION
BOSTON FIRE DEPARTMENT
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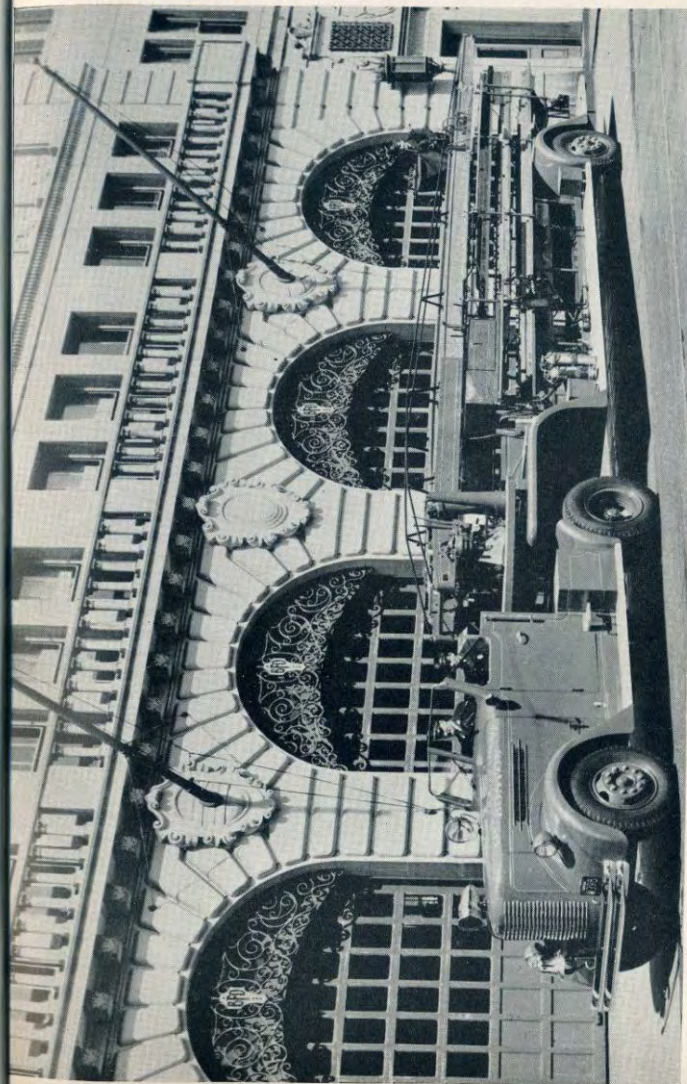
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LADDER 7.
Four-Wheel Drive Company 85-Foot Spring Raised Ladder Truck.



LADDER 17.
Peter Pirsch Company 85-Foot Aerial, Power Driven.

STATISTICS.

COMPARATIVE FIGURES — MAN POWER.
(Actually on Rolls.)

YEAR.	Total Fire Fighting Force.*	Total Number of Privates.†	Total Number of Apparatus Operators.	Total Number of Lieutenants.	Total Number of Captains.	Total Number of District Chiefs.
1944.....	1,156	851	56	121	82	23
1945.....	1,346	1,021	44	124	95	30
1946.....	1,373	1,062	37	124	89	31
1947.....	2,014	1,530	31	189	90	51
1948.....	2,165	1,594	25	221	88	49

* Includes Chief of Department, Aides to Commissioner and Chief of Department, Masters and Engineers on fireboats, High Pressure Service, Motor Squad, etc.
† As of December 31.

USE OF APPARATUS.
Summary — Service Reports, 1948, Engine Companies.

UNIT.	Alarms Attended.	Working Fires.	Hose Used, Feet.	Hours Work.	Pump Hours.
Engine 1.....	641	208	51,850	104.14	37.14
Engine 2.....	421	208	52,100	107.19	43.32
Engine 3.....	719	251	82,600	140.49	40.54
Engine 4.....	743	210	64,600	140.40	36.45
Engine 5.....	421	182	48,850	113.31	28.19
Engine 7.....	449	246	50,250	160.50	30.52
Engine 8.....	420	117	40,200	111.24	23.58
Engine 9.....	396	151	44,450	68.04	7.18
Engine 10.....	698	144	44,600	141.47	29.00
Engine 11.....	259	166	42,200	58.50	12.12
Engine 12.....	937	428	74,400	185.30	57.00
Engine 13.....	1,097	425	121,050	202.38	47.25
Engine 14.....	1,156	416	80,250	165.09	38.30
Engine 15.....	553	165	47,850	109.46	59.17
Engine 16.....	390	218	37,275	123.55	51.34
Engine 17.....	664	225	54,350	97.38	34.30
Engine 18.....	686	278	61,950	124.28	49.03
Engine 19.....	463	308	53,050	186.55	62.28

Summary — Service Reports, 1948, Engine Companies —
Concluded.

UNIT.	Alarms Attended.	Working Fires.	Hose Used, Feet.	Hours Work.	Pump Hours.
Engine 20.....	412	189	43,300	101.58	39.03
Engine 21.....	765	348	72,550	161.18	32.23
Engine 22.....	957	410	93,350	154.11	30.25
Engine 23.....	901	214	42,050	350.22	59.59
Engine 24.....	877	460	95,100	197.50	16.25
Engine 25.....	381	134	43,000	132.16	42.16
Engine 26.....	1,068	439	130,600	243.58	82.47
Engine 27.....	350	103	31,650	50.21	13.08
Engine 28.....	551	251	43,050	87.00	14.00
Engine 29.....	574	246	51,750	99.20	48.15
Engine 30.....	420	259	77,150	108.49	32.15
Engine 31 (Boat).....	236	13	4,050	19.35	10.55
Engine 32.....	320	207	36,250	163.05	39.53
Engine 33.....	688	446	95,900	195.00	15.00
Engine 34.....	391	164	34,700	86.00	21.00
Engine 36.....	353	163	36,100	72.58	24.03
Engine 37.....	821	440	94,650	167.30	41.30
Engine 39.....	353	151	37,750	143.37	25.32
Engine 40.....	271	158	21,750	57.02	11.28
Engine 41.....	523	272	61,400	111.11	50.01
Engine 42.....	860	359	89,150	153.12	40.00
Engine 43.....	749	233	76,450	154.15	37.35
Engine 44 (Boat).....	107	7	4,700	28.38	12.30
Engine 45.....	584	265	58,650	109.27	25.15
Engine 46.....	749	298	49,250	100.17	26.10
Engine 47 (Boat).....	170	7	1,550	17.05	15.45
Engine 48.....	361	187	51,000	79.00	37.00
Engine 49.....	244	98	30,100	58.00	25.10
Engine 50.....	546	210	42,300	106.57	15.56
Engine 51.....	324	137	31,900	58.23	5.48
Engine 52.....	520	277	45,350	105.15	16.45
Engine 53.....	474	105	56,100	56.26	19.55
Engine 54.....	40	38	11,050	15.47	12.07

USE OF APPARATUS.

Summary — Service Reports, 1948, Ladder Companies.

UNIT.	Alarms Attended.	Working Fires.	Ladders Used, Feet.	Hours Work.
Ladder 1.....	631	248	6,869	149.07
Ladder 2.....	391	220	2,500	96.49
Ladder 3.....	746	367	11,215	159.75
Ladder 4.....	1,243	594	10,077*	252.29
Ladder 5.....	756	238	2,695	94.22
Ladder 6.....	520	243	1,125*	99.02
Ladder 7.....	1,006	338	3,720	137.30
Ladder 8.....	646	301	8,972	176.44
Ladder 9.....	514	180	2,593	80.11
Ladder 10.....	727	326	2,125	107.59
Ladder 11.....	724	349	3,297	106.28
Ladder 12.....	1,124	497	13,986	241.22
Ladder 13.....	988	362	13,060	173.03
Ladder 14.....	731	332	3,205	124.24
Ladder 15.....	624	448	10,960	153.50
Ladder 16.....	644	296	1,156*	104.48
Ladder 17.....	556	396	10,352	176.09
Ladder 18.....	290	150	5,335	155.18
Ladder 19.....	324	181	1,252	65.38
Ladder 20.....	840	303	3,315	129.36
Ladder 21.....	229	144	836*	60.30
Ladder 22.....	504	221	1,800	91.46
Ladder 23.....	1,116	577	8,344*	338.45
Ladder 24.....	594	318	8,765	157.35
Ladder 25.....	410	185	280*	97.19
Ladder 26.....	821	420	6,367	142.07
Ladder 27.....	749	321	1,215*	114.14
Ladder 28.....	328	189	1,420*	74.00
Ladder 29.....	671	325	1,651*	106.56
Ladder 30.....	970	397	3,585	134.00
Ladder 31.....	468	180	1,285	91.44
Ladder 32.....	213	110	408*	47.25
Ladder 33.....	40	38	350	14.31

* Also used hose.

USE OF APPARATUS.

Summary — Service Reports, 1948, Rescue and Water Tower Companies.

UNIT	Alarms Attended.	Working Fires.	Hours Work.
Rescue 1.....	1,362	518*	187.25
Rescue 2.....	2,616	509*	570.00
Rescue 3.....	865	202*	129.41
Tower 1.....	256	28	31.22
Tower 2.....	206	3	14.39
Lighting Plant 1	446	56	97.56
Lighting Plant 2	605	134	234.27
Lighting Plant 3	767	72	87.31

* Also performed service in various emergencies, accidents, inhalator cases, etc.

COMPARATIVE FIRE DEPARTMENT EXPENDITURES.

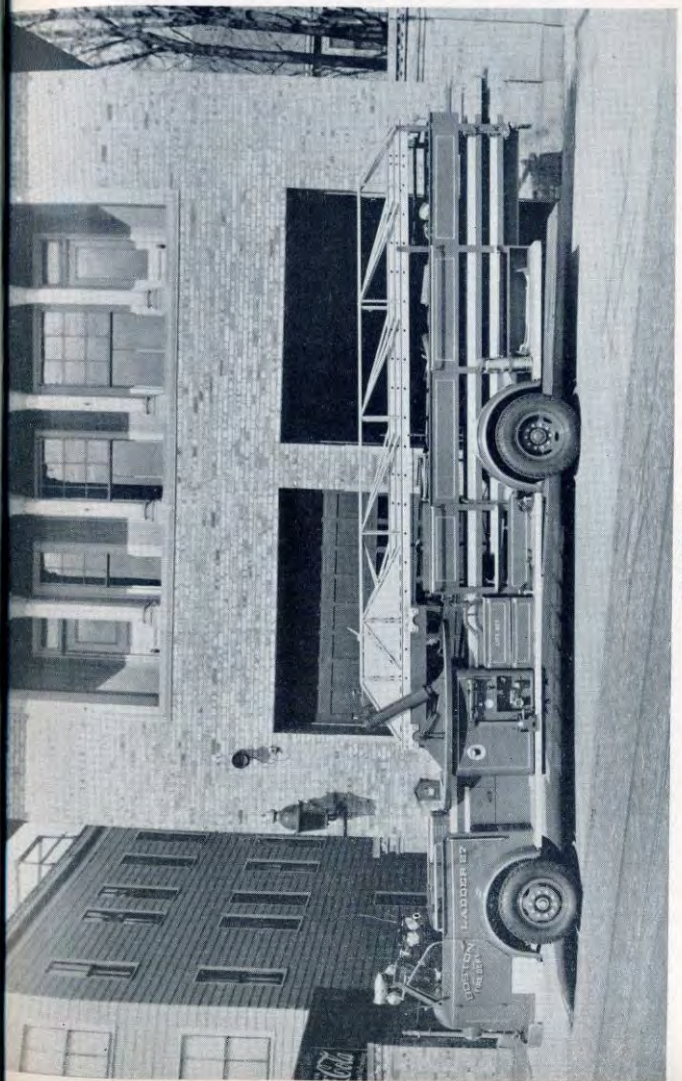
	1947.	1948.
A. PERSONAL SERVICES:		
Permanent employees	\$5,462,307 20	\$6,692,767 41
Overtime	2,983 14	1,219 74
	\$5,465,290 34	\$6,693,987 15
B. CONTRACTUAL SERVICES:		
Printing and binding	\$6,980 91	\$3,426 34
Advertising and posting . . .	62 00	21 00
Transportation of persons . .	636 76	833 49
Express charges	725 73	230 00
Light, heat and power	40,939 05	47,400 65
Rent, taxes and water	20,224 36	20,231 88
Bond and insurance premiums .	10 00	1,410 79
Communication	14,921 91	15,110 21
Motor vehicle repairs and care .	22,150 56	27,060 46
Cleaning	2,889 93	3,572 37
Medical	1,298 88	1,313 65
Expert	—	470 00
Fees, service of venires, etc. . .	381 00	1,103 70
Photographic and blueprinting .	—	16 00
General repairs	56,890 09	66,987 82
Miscellaneous services	225 00	3,380 40
	\$168,336 18	\$192,568 76
C. EQUIPMENT:		
Machinery	\$876 63	\$1,279 90
Electrical	8,844 69	12,955 54
Motor Vehicles	49,585 00	—
Furniture and furnishings . . .	6,701 02	11,355 14
Office	3,421 41	3,344 93
Library	545 24	180 65
	\$69,973 99	\$29,116 16
Carried forward	\$69,973 99	\$29,116 16

Comparative Fire Department Expenditures — Continued.

	1947.	1948.
C. EQUIPMENT — Continued.		
<i>Brought forward</i>	\$69,973 99	\$29,116 16
Marine	328 25	—
Medical, surgical, laboratory	211 20	—
Tools and instruments	34,947 75	63,122 20
Tires, tubes and accessories	9,659 77	12,645 30
Wearing apparel	62,226 90	88,767 44
Miscellaneous equipment	3,736 18	7,671 74
	<u>\$181,084 04</u>	<u>\$201,322 84</u>
D. SUPPLIES:		
Office	\$17,839 89	\$18,753 76
Food and ice	59 00	34 00
Fuel	103,492 17	115,181 46
Medical, surgical, laboratory	723 84	891 74
Educational and recreational	62 90	—
Laundry, cleaning, toilet	5,174 61	5,302 36
Gasoline, oil and grease	33,916 67	43,531 48
Chemicals and disinfectants	5,722 98	18,362 67
Miscellaneous supplies	10,113 46	10,451 60
	<u>\$177,105 52</u>	<u>\$212,509 07</u>
E. MATERIALS:		
Building	\$18,198 64	\$19,160 06
Machinery	132 00	64 77
Electrical	21,873 66	30,386 09
Miscellaneous materials	65,932 94	57,034 41
	<u>\$106,137 24</u>	<u>\$106,645 33</u>
F. SPECIAL ITEMS:		
Pensions and annuities	\$898,013 41	\$910,689 78
Workmen's compensation	731 89	1,669 55
	<u>\$898,745 30</u>	<u>\$912,359 33</u>
Grand totals	<u>\$6,996,698 62</u>	<u>\$8,319,392 48</u>

FIRE DEPARTMENT REVENUE, 1948.

Permits for storage of inflammable fluids, certificates of registration, etc.	\$86,855 50
Sale of badges	97 60
Sale of old condemned hose	52 59
Sale of junk	612 41
Miscellaneous sales	3,597 05
Damage to apparatus and motor vehicles	8,118 37
Damage to fire alarm boxes	2,686 25
Total	<u>\$102,019 77</u>



LADDER 27.
American LaFrance 65-Foot Aerial, Power Driven.



SOUND WAGON.

TABLE NO. 10. - FIRE ALARM DIVISION.

NAME	NO.	STREET	NO.	STREET	NO.	STREET
1	100	1st	100	1st	100	1st
2	200	2nd	200	2nd	200	2nd
3	300	3rd	300	3rd	300	3rd
4	400	4th	400	4th	400	4th
5	500	5th	500	5th	500	5th
6	600	6th	600	6th	600	6th
7	700	7th	700	7th	700	7th
8	800	8th	800	8th	800	8th
9	900	9th	900	9th	900	9th
10	1000	10th	1000	10th	1000	10th

FIRE ALARM DIVISION.

TABLE NO. 11. - FIRE ALARM DIVISION.

NAME	NO.	STREET	NO.	STREET	NO.	STREET
1	100	1st	100	1st	100	1st
2	200	2nd	200	2nd	200	2nd
3	300	3rd	300	3rd	300	3rd
4	400	4th	400	4th	400	4th
5	500	5th	500	5th	500	5th
6	600	6th	600	6th	600	6th
7	700	7th	700	7th	700	7th
8	800	8th	800	8th	800	8th
9	900	9th	900	9th	900	9th
10	1000	10th	1000	10th	1000	10th

**TOTAL NUMBER OF ALARMS TRANSMITTED.
(To Which Apparatus Responded.)**

	1946.	1947.	1948.
First alarms (boxes).....	10,400	8,608	8,269
Still alarms — (net total).....	6,599	6,498	5,578
Total alarms — Boston only.....	16,999	15,106	13,847
Mutual aid.....	85	83	71
Total alarms.....	17,084	15,189	13,918
Alarms received from citizens by telephone.....	5,688	5,553	4,977
Per cent of total alarms.....	33.4	36.6	35.8
Total false alarms.....	2,628	2,036	2,129
Per cent of total alarms.....	15.3	13.4	15.3
Total box alarms transmitted since April 28, 1852, through December 31, 1948.....	330,954*		339,223

* First alarm received at 8.25 P.M. on April 29, 1852.

ANALYSIS OF STILL ALARMS RECEIVED AND TRANSMITTED.

	1946.	1947.	1948.
Received from citizens by telephone.....	5,688	5,553	4,977
Received from Police Department.....	976	858	729
Received from Fire Department.....	1,611	1,385	1,303
Boxes received, treated as stills.....	106	58	27
Emergency calls treated as stills.....	869	969	1,161
Received from Boston Automatic*.....	214	214	184
Received from A. D. T.*.....	137	118	116
Received from G. A. C.*.....	79	53	86
Gross total.....	9,680	9,208	8,583
Deduct:			
Still alarms received for which box alarms were pulled after, and box alarm transmitted.....	216	191	83
Still alarms received for which box alarms were transmitted.....	2,865	2,519	2,922
Net total still alarms.....	6,599	6,498	5,578
Mutual Aid alarms.....	85	83	71

* Does not include alarms received after still alarm or after City box alarms, in which case no action was taken.

NOTE:— Net total still alarms indicates number of alarms for which apparatus was dispatched by telephone without box alarm and alarms for which private company box only was transmitted without City box alarm.

SUMMARY OF ALARMS DURING 1948 FROM BOSTON AUTOMATIC FIRE ALARM COMPANY, AMERICAN DISTRICT TELEGRAPH COMPANY, GENERAL ALARM COMPANY.

	Boston Automatic Fire Alarm Company.	American District Telegraph Company.	General Alarm Company.
Alarms transmitted by Company to Fire Alarm Headquarters.....	184	116	86
City box alarms transmitted after Company alarm had been transmitted.....	184	116	86
Company box alarm transmitted, no City box alarm transmitted.....	—	—	—
Company alarm transmitted, City box pulled by citizen after Company alarm transmitted, City box transmitted.....	—	—	—
Company alarm received after still alarm or City box alarm, and therefore not transmitted.....	6	15	9

ANALYSIS OF FALSE ALARMS.

	1946.	1947.	1948.
Box alarms received and transmitted.....	2,495	1,935	2,055
Telephone alarms received for which box alarms were transmitted.....	35	21	40
Boston Automatic alarms received for which box alarms were transmitted.....	—	1	1
A. D. T. alarms received for which box alarms were transmitted.....	2	2	—
G. A. C. alarms received for which box alarms were transmitted.....	—	—	—
Total false alarms for which box alarms were transmitted.....	2,532	1,959	2,096
Box alarms received, treated as still alarms (no box transmitted).....	37	44	11
Telephone alarms received, treated as still alarms (no box transmitted).....	22	33	22
Total false alarms to which apparatus responded.....	2,591	2,036	2,129
Adjacent box alarms received for which no action was taken.....	15	4	4

ANALYSIS OF ALARMS BY MONTHS.

1948.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Alarm.	Box.....	722	664	720	814	602	525	567	575	789	824	651	813	8,266
	Telephone.....	317	300	389	618	390	288	386	335	566	473	307	442	4,871
	Other stills.....	41	33	80	98	60	36	53	74	106	74	50	74	779
	Totals.....	1,080	997	1,189	1,530	1,052	849	1,006	984	1,461	1,371	1,068	1,329	13,916
	Members.....	3	2	5	3	2	4	2	5	5	5	2	4	37
Alarms Received From.	Police.....	11	8	13	11	4	18	10	14	13	6	11	127	15
	Watchman.....	15	11	15	15	6	7	9	14	17	9	4	26	148
	Automatic.....	50	43	23	20	20	21	11	25	21	15	9	48	306
	Outsider.....	875	778	997	1,310	839	659	850	776	1,105	1,024	834	1,084	11,191
	Totals.....	951	843	1,015	1,363	879	693	892	827	1,232	1,066	855	1,173	11,809

No Fires.													
False.....	129	154	174	167	173	156	114	156	209	305	213	156	2,106
Accidental.....	51	33	24	26	20	18	21	31	33	18	19	53	347
Rescue.....	117	107	85	110	107	97	135	112	135	143	141	144	1,423
Needless ball.....	83	90	73	53	46	51	58	47	53	63	50	73	740
Needless still.....	65	61	35	35	24	28	15	30	31	38	24	39	425
Automobile fires.....	109	88	94	111	103	101	101	107	95	119	97	121	1,246
Rubbish and Grass Fires.													
Rubbish, vacant lot.....	25	16	51	100	69	40	104	81	98	61	38	58	801
Rubbish, near building.....	9	17	26	51	34	20	25	36	56	36	22	33	365
Dump.....	.....	.....	4	5	6	2	11	5	17	3	4	2	59
Brush or grass.....	3	237	364	114	24	40	47	344	190	118	127	1,608	1,608
Other outdoor.....	51	33	51	81	60	56	107	75	123	112	55	79	883
Marine.													
Out of city walls.....	6	2	1	2	2	.....	2	2	1	2	1	2	23
.....	9	3	12	4	6	8	4	4	3	8	9	8	78
Building Fires.													
Confined to room.....	358	335	268	316	224	215	237	213	230	238	254	381	3,279
Confined to building.....	61	46	48	41	51	29	31	32	37	30	17	48	471
Extended to others.....	7	9	6	4	3	4	1	6	6	5	6	5	62

MULTIPLE ALARM FIRES.

	1944.	1945.	1946.	1947.	1948.
Two Alarms.....	39	61	54	49	65
Three Alarms.....	13	12	24	15	18
Four Alarms.....	0	5	4	7	1
Five Alarms.....	3	0	0	0	1
Totals.....	55	78	82	71	85

SUMMARY OF MULTIPLE ALARM FIRES
ACCORDING TO MONTHS OF THE YEAR—1948.

	Two Alarms.	Three Alarms.	Four Alarms.	Five Alarms.	Total.
January.....	13	2	1	1	17
February.....	7	2	—	—	9
March.....	4	3	—	—	7
April.....	6	1	—	—	7
May.....	4	1	—	—	5
June.....	3	1	—	—	4
July.....	2	—	—	—	2
August.....	1	3	—	—	4
September.....	6	—	—	—	6
October.....	6	—	—	—	6
November.....	3	1	—	—	4
December.....	10	4	—	—	14
Totals.....	65	18	1	1	85

SUMMARY OF ALARMS
ACCORDING TO DAY OF WEEK—1948.

	Boxes.	Stills.*	Total.	Number of Days in Year.	Average Per Day.
Monday.....	1,189	775	1,964	52	37.7
Tuesday.....	1,140	794	1,934	52	37.2
Wednesday.....	1,099	739	1,838	52	35.3
Thursday.....	1,152	769	1,921	53	36.3
Friday.....	1,297	837	2,134	53	40.0
Saturday.....	1,295	909	2,204	52	42.4
Sunday.....	1,097	826	1,923	52	37.0
Totals.....	8,269	5,649	13,918	366	38.1

* Alarms received from B.A., A.D.T., or G.A.C., where private company box only was transmitted without City box, have been included under *Still Alarms*.
All alarms for *Mutual Aid* have been included under *Still Alarms*.

SUMMARY OF ALARMS
ACCORDING TO TIME OF DAY—1948.

	Boxes.	Stills.	Total.
12.00 Mid.—1.00 A.M.....	282	161	443
1.00 A.M.—2.00 A.M.....	327	132	459
2.00 A.M.—3.00 A.M.....	170	81	251
3.00 A.M.—4.00 A.M.....	116	55	171
4.00 A.M.—5.00 A.M.....	84	51	135
5.00 A.M.—6.00 A.M.....	67	36	103
6.00 A.M.—7.00 A.M.....	91	55	146
7.00 A.M.—8.00 A.M.....	130	87	217
8.00 A.M.—9.00 A.M.....	191	134	325
9.00 A.M.—10.00 A.M.....	252	196	448
10.00 A.M.—11.00 A.M.....	291	266	557
11.00 A.M.—12.00 Noon.....	370	346	716
12.00 Noon—1.00 P.M.....	386	339	725
1.00 P.M.—2.00 P.M.....	384	387	771
2.00 P.M.—3.00 P.M.....	392	380	772
3.00 P.M.—4.00 P.M.....	444	357	801
4.00 P.M.—5.00 P.M.....	586	446	1,032
5.00 P.M.—6.00 P.M.....	695	440	1,135
6.00 P.M.—7.00 P.M.....	541	380	921
7.00 P.M.—8.00 P.M.....	549	359	908
8.00 P.M.—9.00 P.M.....	609	319	928
9.00 P.M.—10.00 P.M.....	543	282	825
10.00 P.M.—11.00 P.M.....	407	189	596
11.00 P.M.—12.00 Mid.....	362	171	533
Totals.....	8,269	5,649	13,918

**SUMMARY OF ALARMS
ACCORDING TO FIRE DISTRICTS—1948.**

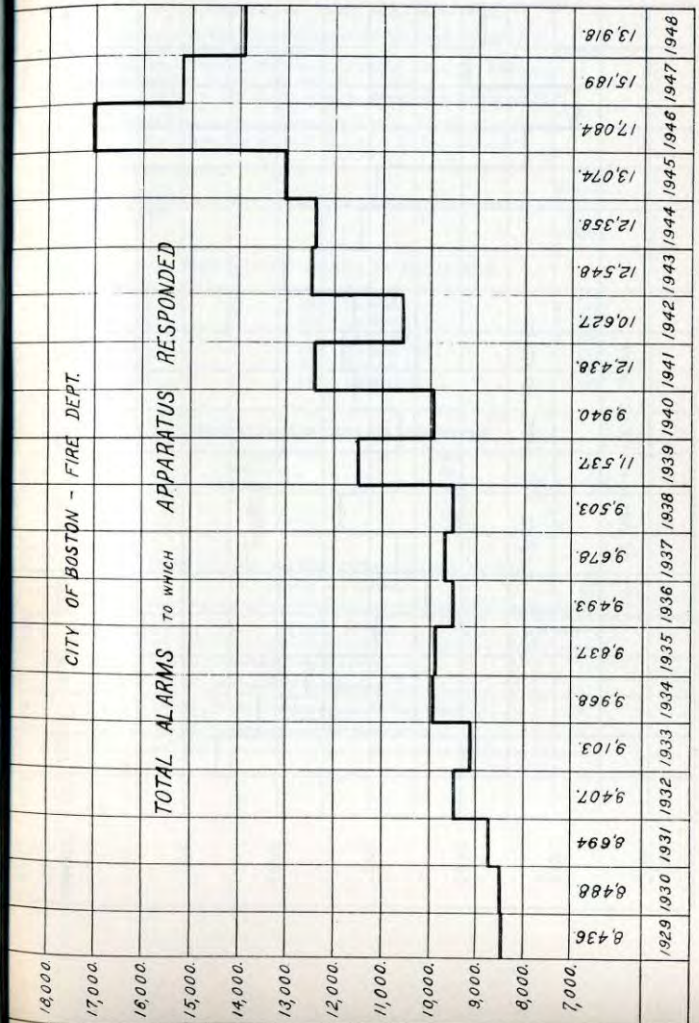
DISTRICTS.	Boxes.	Stills.	Total.
1. East Boston	403	324	727
2. Charlestown	428	227	655
4. North and West Ends	625	255	880
5. Business District	367	168	535
6. South Boston	769	373	1,142
7. South End and Back Bay	864	427	1,291
8. Roxbury (West)	1,027	574	1,601
9. Roxbury (East)	929	551	1,480
10. Dorchester (North)	642	462	1,104
11. Brighton	536	516	1,052
12. Jamaica Plain	575	374	949
13. Roslindale, West Roxbury	400	426	826
14. Dorchester (South)	633	552	1,185
15. Hyde Park	271	349	620
Total in City	8,269	5,578	13,847
Mutual Aid to outside Cities and Towns	—	71	71
Totals	8,269	5,649	13,918

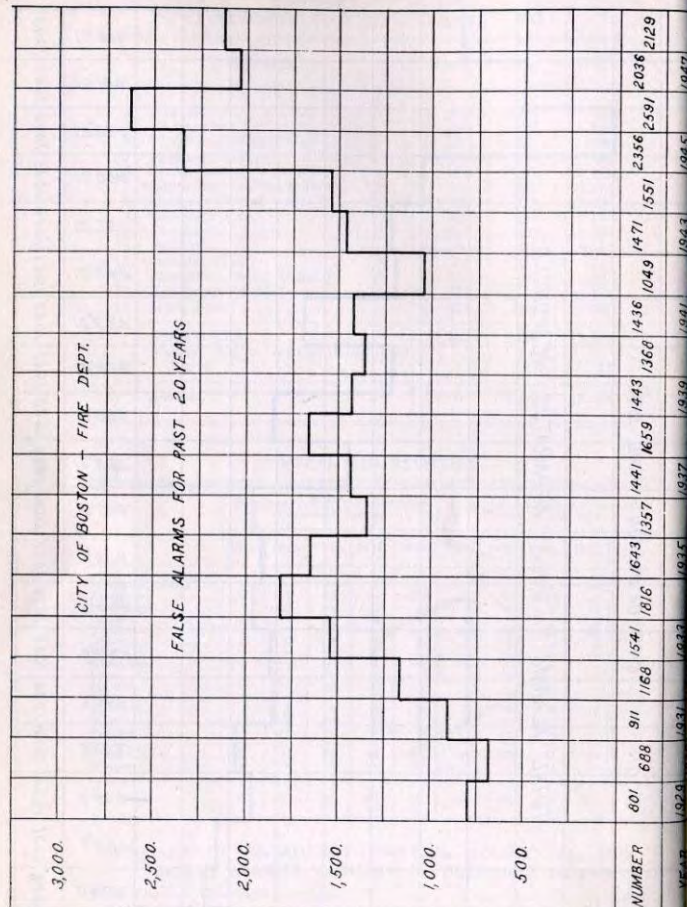
MUTUAL AID RESPONSE.

	Response of BOSTON to Outside Cities and Towns.					Response of Adjacent Cities and Towns TO BOSTON.				
	1944.	1945.	1946.	1947.	1948.	1944.	1945.	1946.	1947.	1948.
Biddeford, Maine.....	—	—	—	1	—	—	—	—	—	—
Brookline.....	11	9	19	14	11	39	97	119	97	83
Cambridge.....	2	2	—	1	4	3	—	—	1	1
Chelsea.....	11	4	17	12	9	3	—	—	3	8
Dedham.....	—	—	1	—	—	19	13	26	20	15
Everett.....	2	4	2	1	4	1	3	2	1	1
Fitchburg.....	—	—	—	1	—	—	—	—	—	—
Gloucester.....	—	—	—	1	—	—	—	—	—	—
Lynn.....	—	—	—	1	—	—	—	—	—	—
Malden.....	—	1	—	2	—	—	—	—	—	—
Milton.....	6	4	7	7	3	3	—	1	—	2
Newton.....	4	2	5	3	2	30	20	19	16	14
Quincy.....	3	4	—	1	3	3	—	2	—	1
Reading.....	—	—	—	1	—	—	—	—	—	—
Revere.....	—	—	—	2	—	—	—	—	—	—
Somerville.....	27	31	33	35	35	24	23	41	34	27
Waltham.....	—	—	1	—	—	—	—	—	—	—
Totals.....	66	61	85	83	71	125	156	210	172	152

**SUMMARY OF EMERGENCY SERVICES, ACCIDENTAL, AND
NEEDLES ALARMS, JANUARY 1—DECEMBER 31, 1948.**

Total Alarms—Emergency Service	1,423
Accidental Alarms	347
Needless Alarms	1,105





CITY OF BOSTON - FIRE DEPT.

FALSE ALARMS FOR PAST 20 YEARS

SUMMARY OF FIRE ALARM BOXES.

Total number of Fire Alarm Boxes in service as of December 31, 1947, as given in 1947 Report	1,813
Add to correct error in 1943 Annual Report, Boxes No. 7355 and 7356 installed, but not reported	2
Correct number of Fire Alarm Boxes in service as of December 31, 1947	1,815
Fire Alarm Boxes installed January 1 to December 31, 1948	4
Fire Alarm Boxes discontinued January 1 to December 31, 1948	1
Net increase in number of boxes	3
Total number of Fire Alarm Boxes in service as of December 31, 1948	1,818

FIRE ALARM BOXES IN DISTRICTS.

District 1	102	District 9	118
District 2	104	District 10	148
District 3	105	District 11	163
District 4	73	District 12	105
District 5	183	District 13	179
District 6	105	District 14	163
District 7	143	District 15	127

FIRE ALARM BOXES IN DIVISIONS.

Division 1	384
Division 2	594
Division 3	840
Total	1,818

FIRE ALARM BOXES ESTABLISHED IN 1948.
(Total - 4 Boxes.)

DATE.	Box.	Location.	District.
May 24	1578	Beacon and Clarendon streets.....	7
Aug. 17	3526	Morton and Wildwood streets.....	14
Sept. 16	12-3233	St. Mary's Infant Asylum, Cushing avenue.....	10
Dec. 13	4116	Rutherford avenue and Mason street.....	2

FIRE ALARM BOXES DISCONTINUED IN 1948.

DATE.	Box.	Location.	District.
Sept. 16	12-3231	St. Mary's Infant Aylum, Jerome street.....	10

FIRE ALARM BOXES RENUMBERED — 1948.

During 1948 a total of 254 Fire Alarm Boxes were renumbered, including 250 boxes in the 2400-2500-2600-2700 series and four boxes in the 3500 series. Box numbers of the 2800-2900 series were established in West Roxbury. Complete list of these boxes is given in General Orders, Nos. 20, 27, and 37.

CHANGE IN DESIGNATION OF FIRE ALARM BOXES.

Designation on Assignment Cards for 49 boxes was corrected or revised in accordance with change of ownership or change in street names. These changes are given in General Orders, Nos. 1, 15, 25, 28, 29, 32, 34, 36, and 65.

CONSTRUCTION WORK.
UNDERGROUND CABLES — 1948.

TYPE OF CABLE.		Number. Conductor.	INSTALLED.		REMOVED.	
Insulation.	Jacket.		Feet of Cable.	Feet of Conductors.	Feet of Cable.	Feet of Conductors.
Rubber	Lead	4	150	600	1,980	7,920
Polyethylene	Polyethylene	4	1,945	7,780	—	—
Rubber	Neoprene	4	1,825	7,300	300	1,200
Rubber	Loom	4	340	1,340	—	—
Rubber	Lead	6	—	—	690	4,140
Polyethylene	Polyethylene	7	210	1,470	—	—
Rubber	Neoprene	7	3,030	21,210	—	—
Rubber	Lead	10	320	3,200	615	6,150
Polyethylene	Polyethylene	10	2,820	28,200	—	—
Rubber	Neoprene	10	1,480	14,800	—	—
Rubber	Lead	19	695	13,205	2,235	42,465
Polyethylene	Polyethylene	19	1,505	28,495	—	—
Rubber	Neoprene	19	2,825	53,675	—	—
Rubber	Rubber	20	—	—	1,000	20,000
Polyethylene	Polyethylene	37	1,012	37,444	—	—
Rubber	Lead	37	—	—	915	33,855
Totals.....			18,157	219,739	7,735	115,730

OVERHEAD WIRE AND CABLE — 1948.

	Installed, Feet.	Removed, Feet.
Line wire No. 12 AWG, galvanized, T.B.W.P....	—	4,950
Line wire No. 14 AWG, twisted pair.	270	—

Overhead line wire removed was not replaced due to abandonment of poles.
Overhead construction transferred on 201 poles.



1,000-GALLON GASOLINE FUEL TRUCK.
Ford Motor Chassis with Car Wood Body.

FIRE PREVENTION DIVISION.

REVENUE RECEIVED FOR LICENSES, PERMITS, ETC., FOR THE YEAR 1948.

Month.	Blasting, Storage, Transportation and Sale of Explosives.	Fireworks.	Licenses.	Open-Air Fires.	Permits— Inflammable Fluids.	Tank Removals.	Gross Totals.	Deductions — Over- valued Permits.	Net Totals.
January.....	—	—	\$84 00	\$40 00	\$865 50	\$1 00	\$990 50	—	\$990 50
February.....	\$1 00	—	68 00	26 50	455 50	—	551 00	\$1 00	\$550 00
March.....	4 00	—	3,083 50	99 50	1,431 00	1 50	4,619 50	50	4,619 00
April.....	3 50	—	14,669 00	159 00	6,274 50	50	21,106 50	4 50	21,102 00
May.....	3 00	\$1 00	14,721 50	229 50	8,721 50	1 00	23,677 50	50	23,677 00
June.....	4 00	—	3,336 50	89 00	12,456 00	50	15,886 00	1 00	15,885 00
July.....	5 00	—	3,021 50	139 00	1,089 00	1 00	4,255 50	—	4,255 50
August.....	4 00	—	3,769 00	241 50	737 00	2 50	4,774 00	—	4,774 00
September.....	2 00	—	4,163 00	245 50	652 50	2 00	5,065 00	50	5,064 50
October.....	2 50	—	1,424 50	142 00	767 00	3 00	2,339 00	—	2,339 00
November.....	2 00	—	1,367 50	106 00	790 00	2 00	2,267 50	—	2,267 50
December.....	1 00	—	630 00	116 00	583 00	1 50	1,331 50	—	1,331 50
Totals.....	\$32 00	\$1 00	\$50,338 00	\$1,433 50	\$34,842 50	\$16 50	\$86,893 50	\$8 00	\$86,885 50

Total Receipts for 1948

Total Receipts for 1947

Net gain

\$86,885 50

\$7,524 00

\$19,368 50

SUMMARY OF INSPECTIONS AND INVESTIGATIONS — 1948.

GENERAL INSPECTIONS	
Dwelling houses, other than 1- and 2-family	18,727
Places of assembly, cabarets, dance halls, etc.	4,130
Mercantile and manufacturing occupancy	3,989
Department, small retail stores, etc.	4,772
Mystic Docks, Charlestown	1,716
Reinspections (all types)	6,053
SPECIAL INSPECTIONS AND SURVEYS	
Public schools	221
Private schools	131
Oil farms	8
Film exchanges	26
Libraries	23
Boarding homes for the aged, convalescent homes, etc.	184
Jails, institutions, etc.	32
Reinspections (all types)	143
INSPECTIONS BY FIRE COMPANY OFFICERS	
Building inspections	16,561
Theaters	4,558
Schoolhouses	3,338
Public buildings	803
Carburetors	60
Fuel oil burner installations and equipment	9,578
Inflammable fluids, storage facilities	341
Open air fires	639
Tank removals	33
License renewals, garage, repair shop, inflammables	2,680
License renewals, parking lots	335
License petitions (location approval)	240
Blasting	64
Boarding homes for children	188
Day nurseries	37
Hospitals	167
Reinspections (all types)	4,104
Total inspections and reinspections	83,881
Hazardous conditions remedied	19,467
Conditions referred to other departments (written)	305
FIRE DRILLS — FIRE PREVENTION WEEK:	
Schools	250
Theaters	72
Hospitals, institutions, etc.	139

ARSON SQUAD ACTIVITIES — 1948.

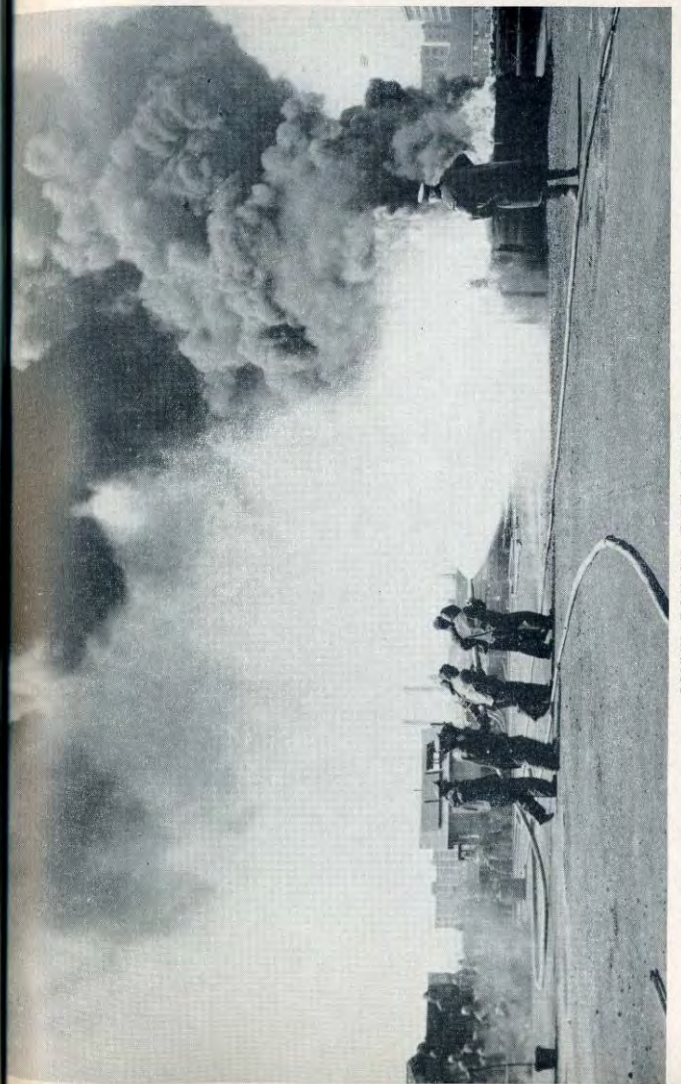
Fires reported as of suspicious origin	21
Fires reported as of undetermined origin	120
Fires, multiple alarms	65
Fires, cause given, but investigated	101
Fires, result of which loss of life occurred	16
Fires alleged to be set by boys	87
Fire Prevention inspections	173
Tests made of manholes, catch-basins, inflammable gases	116
Cases forwarded to District Attorney's office	5
Cases presented to the Grand Jury, Suffolk County	7
Convictions, Superior Court, Suffolk County	7
Cases presented, Municipal District Courts	25
Convictions, Municipal Courts	21

CHEMICAL LABORATORY.

(Summary of Analyses and Tests — 1948.)

Tests of flammable liquids	11
Tests of decorative materials	634
Analyses of material for Arson Squad	6

Because of inadequate facilities at the temporary laboratory, tests were limited.



SOUTH BOSTON FIRE SCHOOL.
Demonstration of Rockwood Type N. 23 Fog Nozzle, Discharge Approximately 200 G.P.M. at 100 Lbs. Nozzle Pressure.



SOUTH BOSTON FIRE SCHOOL.
Lee-side Extinguishment of Class B Fire.

**ANALYSIS OF FIRES IN BUILDINGS AND
CAUSES OF FIRES.**

ANALYSIS OF FIRES IN BUILDINGS — 1948.

Construction of Buildings.

Fire-resistive	281
Second class	1,928
Frame	1,600
Other types	3
Total	3,812

Point of Origin.

Basement	1,201
First floor	1,087
Second floor	509
Third floor	397
Above third floor	199
Roof	71
Outside	348
Total	3,812

Extent of Fire.

Confined to point of origin	3,279
Confined to buildings	471
Spread to other buildings	62
Total	3,812

CAUSES OF FIRES IN BUILDINGS — 1948.

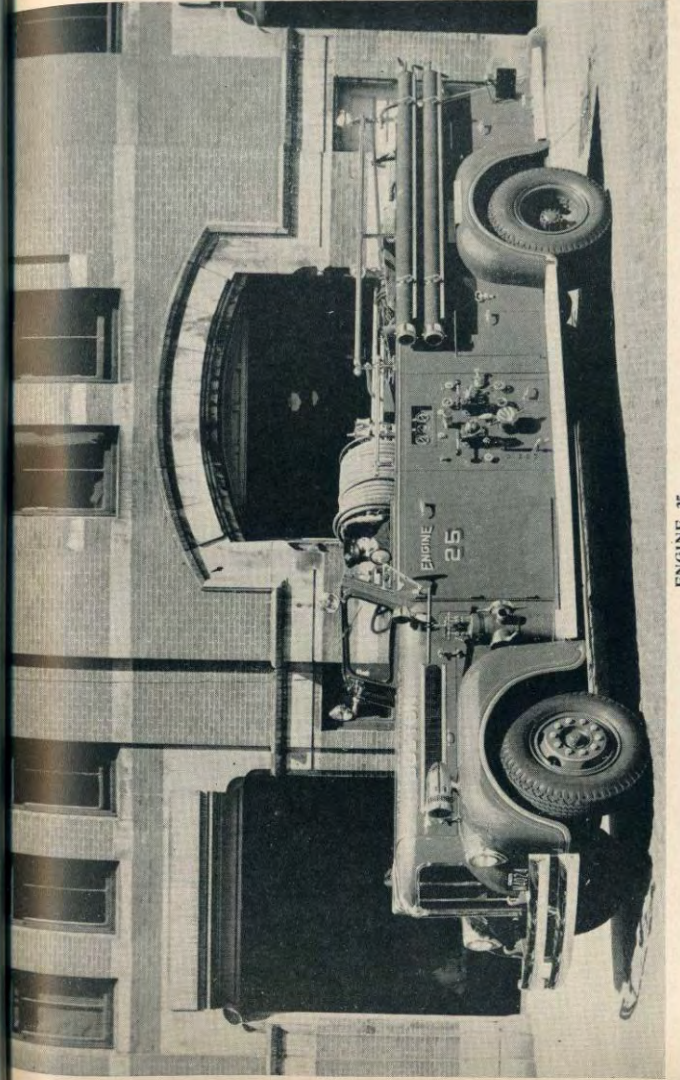
Fireworks	2
Careless smoking	1,026
Chimneys: Defective, soot, and sparks	362
Fuel oil burners	728
Electrical appliances and motors	359
Children and matches	180
Unknown	118
Miscellaneous known causes	232
Spontaneous ignition	74
Defective heaters and rubbish	156
Grease and food on stove	103
Other careless use of matches	42
Hot ashes	44
Defective wiring	152
Incendiary or suspicious	18
Clothes too near fire	39
Flammable liquids	16
City gas and appliances	23
Sparks from machines	18
Thawing water pipes	19
Malicious mischief	86
Kerosene lamps, stoves	13
Home dry cleaning	2
1948 Total	3,812

CAUSES OF OUTDOOR FIRES — 1948.

Brush	1,608
Automobile	1,246
Other outdoor fires	883
Rubbish (vacant lot)	801
Rubbish (near building)	365
Dump	59
Marine	23
1948 Total	4,985
Rescues (emergency calls)	1,423
Out of city calls	78



FIRST-AID CLASS.



ENGINE 25.
Maxim Motor Company 750-Gallon Pumper.

MAINTENANCE DIVISION.

MAINTENANCE DIVISION.

RECORD OF HOSE.

PURCHASED.	Condemned.	Repaired.	In Service.	In Stock.
18,560 ft.	17,998 ft.	29,880 ft.	215,337 ft.	12,683 ft.

PAINTING ACTIVITIES.

TYPE OF WORK.	Number of Jobs.	Labor Costs.	Material Costs.	Total Costs.
Complete apparatus.....	10	\$2,075 00	\$463 36	\$3,138 36
Partial apparatus.....	82	637 51	124 46	761 97
Miscellaneous.....	197	2,727 05	350 89	3,077 94
Totals.....	289	\$6,039 56	\$938 71	\$6,978 27

REPAIRS TO APPARATUS.

PERFORMED by →	B. F. D. Maint. Div.	Outside Concerns.	Total.
Number of jobs.....	4,911	586	5,497
Cost of labor and material.....	\$76,071 35	\$32,017 68	\$108,089 03

REPAIRS TO BUILDINGS.

PERFORMED By →	B. F. D. Maint. Div.	Outside Concerns.	Total.
Number of jobs.....	740	238	978
Cost of labor.....	\$18,744 70	—	—
Cost of material.....	5,786 94	—	—
Total Cost.....	\$24,531 64	\$15,198 62	\$39,730 26

REPAIRS TO FIREBOATS.

	COST, MATERIAL.			Total.
	Lumber.	Packing.	Valves.	
B. F. D., Maintenance Division.....	\$39 82	\$258 88	\$440 14	\$738 84
Outside Concerns.....	\$7,997 89			

MOTOR EQUIPMENT INVENTORY.

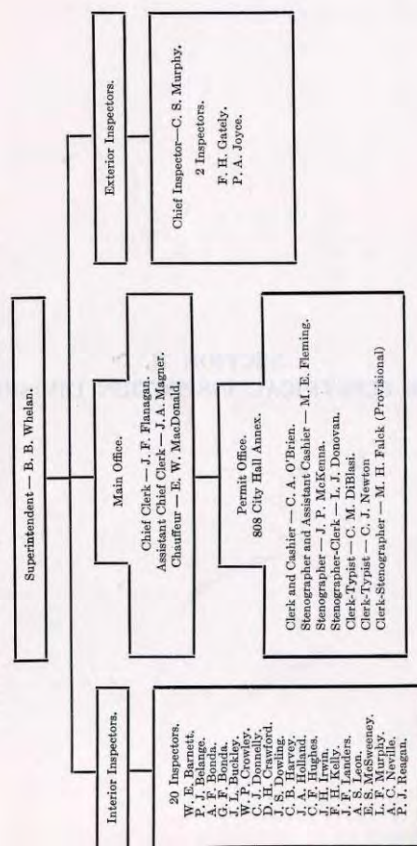
TYPE OF EQUIPMENT.	In Service.	In Reserve.
Pumping Engines.....	52	36
Hose Cars.....	41	29
Aerial Ladder Trucks.....	29	12
City Service Ladder Trucks.....	10	3
Water Towers.....	2	2
Wrecking Unit.....	1	—
Rescue Cars.....	3	2
Fuel Cars.....	2	—
Lighting Plants.....	3	1
Auxiliary Pumpers.....	6	—
Chief Officers' Cars.....	42	25
Commercial Trucks.....	29	—
Totals.....	220	110

RECORD OF UNIFORM CLOTHING.

ARTICLE.	Received and Distributed.	Repaired and Cleansed.	Reissued.
Overcoats.....	787	8	134
Sack Coats.....	786	14	60
Trousers.....	833	114	21
Uniform Caps.....	1,162	—	85
Rubber Fire Coats.....	416	397	56

**SECTION II,
THE ELECTRICAL INSPECTION DIVISION.**

THE ELECTRICAL INSPECTION DIVISION.



ELECTRICAL INSPECTION DIVISION.

The following report shows the work of the Electrical Inspection Division for the year 1948.

The underground district for 1949 was prescribed in accordance with the provisions of chapter 100 of the Acts of 1946.

EXPENSES AND INCOME OF THE DIVISION FOR 1947 AND 1948.

	1947.	1948.
Expenses.....	\$103,870 52	\$108,268 79
Income.....	68,882 00	68,649 14

FIRES AND MISCELLANEOUS TROUBLES.

Fires and miscellaneous troubles reported as due to electrical causes were investigated and reports of the same are on file in the records of the division:

Fire in buildings	240
Miscellaneous	16
Manhole troubles	24
Pole fires	2

Causes of Fires and Miscellaneous Troubles Investigated by the Electrical Inspection Division in 1948.

Defective cords	27
Christmas tree lights, short circuit	5
Refrigerator motor	38
Washing machine motor	3
Short circuit in switch box	2
Short circuit in electric fixture, due to broken parts and frayed cords, and short circuiting of wires under canopy	41
Steam shovel used in repairing street in contact with insulator caused break down of insulation	1
Water leak on electric fixture	12
Radio transformer breakdown	2
Defective electric heating blanket	1
Defective switch	8
Defective radio	7
Short circuit in electric wiring	30
Defective portable electric stove	1

Defective wall receptacle	9
Defective temporary wiring installed by janitor without inspection	1
Manhole explosion	24
Short circuit in candle-type electric unit	1
Defective motor (unclean or lack of lubrication, broken windings, etc.)	30
Overheated electric bulb ignited lamp shade	1
Transformer breakdown	5
Overloaded system	3
Iron left in circuit, overheated	9
Defective cable on elevated structure	1
Automatic elevator control	1
Broken receptacle on kitchen range	1
Pole fire	2
Spark from switch box fell on combustible material	1
Crane being operated pulled up cables causing short circuit	1
Poor contact of one side of circuit breaker caused same to overheat	1
Lightning surge	3
Short circuit in television set	1
Short circuit in Edison terminal box	2
Defective joint in Edison cable under bridge	1
Defective cutout caused short circuit in fuse box	1
Penny in fuse holder	1
Defective wiring installed by unlicensed person	1
Workmen digging broke insulation of Edison cable	1
B.X. punctured by nail hammered through same	1
Men drilling in street struck Edison cable causing short circuit	1

EXTERIOR DIVISION.

The underground district for the year 1949 as prescribed under authority of chapter 100 of the Acts of 1946 include the following streets from which poles are to be removed and the wires buried underground:

Jamaica Plain.

Pershing road, from Centre street to Pond View avenue; Montebello road, from Brookside avenue to Marmion street; Brookside avenue, from Boylston street to Cornwall street; Marmion street, from Cornwall street to Germania street.

Charlestown.

Water street, from Wapping street to North Washington street Bridge; Henley street, from Warren street to Chelsea street.

Dorchester.

River street, from Central avenue to Blue Hill avenue; Harvard street, from Blue Hill avenue to Washington street.

West Roxbury.

Cummins Highway, from Washington street to Hyde Park avenue; Park street, from Centre street to Martin street.

The above makes a total distance of four miles as prescribed by law.

In these prescribed streets from which poles and overhead wires are to be removed there are standing as of December 31, 1948, 209 poles with wires attached.

The ducts used this year for the underground conduits of the drawing-in system are of the following:

1. Vitrified clay (laid in concrete)
2. Fiber (laid in concrete)
3. Iron
4. Wood
5. Transite (laid in concrete)

In side or residential streets special underground construction for light and power purposes (115-230 volts), of a type known as "Split Fiber Solid Main System," has been installed.

EXPENDITURES.

	1947.	1948.
PERSONAL SERVICE:		
Permanent employees	\$96,000 17	\$100,803 12
CONTRACTUAL SERVICES:		
Printing and binding	63 00	135 00
Advertising and posting	97 90	65 30
Transportation of persons	1,379 10	1,425 10
Bond and insurance premiums	40 00	40 00
Communication	610 69	630 54
General repairs	50 00	9 50
	<u>\$2,240 69</u>	<u>\$2,305 44</u>
EQUIPMENT:		
Office	\$7 70	\$32 45
Library	—	4 50
Tools and instruments	—	—
	<u>\$7 70</u>	<u>\$36 95</u>
SUPPLIES:		
Office	\$2,612 27	\$2,214 36
MATERIALS:		
Electrical	—	\$9 00
SPECIAL ITEMS:		
Pensions	\$3,009 69	\$2,899 92
Grand totals	<u>\$103,870 52</u>	<u>\$108,268 79</u>

UNDERGROUND WORK FOR YEAR — 1948.

COMPANY.	LENGTH IN FEET.			NUMBER OF	
	Conduit.	Duct.	Cable.	Manholes.	Services.
Boston Edison Company	72,750	125,455	199,386	53	371
New England Telephone and Telegraph Company	20,736	94,762	335,234	6	45
Boston Consolidated Gas Company	587	1,837	33,318.6	6	9
Boston Fire Department	80	80	17,817	—	2
Boston Police Department	80	80	16,500	—	—
Metropolitan Transit Authority	—	—	48,515.5	—	—
Western Union Telegraph Company	—	—	—	—	—

TABLE SHOWING WORK OF EXTERIOR DIVISION — 1948.

Number of poles set in new locations	28
Number of poles removed	11
Number of poles reset, replaced, straightened	296
Number of poles standing in public streets	19,068
Number of inspections	9,023
Number of notices of overhead construction	4,799
Number of overhead reports	3,872
Number of notices of underground construction	2,229
Number of underground reports	1,575
Feet of wire removed by the various companies	236,135

WORK DONE.

The Following is a Summary of Work of Interior Division (Two Years).

	1947.	1948.
Notices of new work received	20,296	17,185
Number of permits issued to turn on current	14,906	14,228
Number of incandescent lamps inspected	1,397,499	1,543,437
Number of motors inspected	24,944	24,052
Number of arcs inspected	2,185	2,125
Number of inspections made	32,105	29,484
Number of inspections of theaters, places of amusement and public halls	917	960

CHARACTER OF CABLES USED BY VARIOUS COMPANIES — 1948.

COMPANY.	Type of Insulation.	Size.
Boston Edison Company	Rubber, varnished cambric, lead	No. 6 to 15,000 M.C.M.
New England Telephone and Telegraph Company	Paper, lead	2-2121 pairs, nos. 13-26.
Boston Consolidated Gas Company	Rubber, varnished cambric, lead, paper	No. 6 to 1,000 M.C.M.
Boston Fire Department	Rubber, polyethylene, lead	4 to 37 conductors.
Boston Police Department	Rubber, paper, lead	11 conductors and 10 pairs.
Metropolitan Transit Authority	Rubber, neoprene, lead	No. 6 to 1,000 M.C.M.
Western Union Telegraph Company	None.

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