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THE BUILDING LAW OF THE CITY OF BOSTON.

BEING ACTS OF 1907, CHAPTER 550, AS AMENDED,
ALSO SPECIAL ACTS RELATING TO BUILDINGS
AND THEIR MAINTENANCE, USE AND
OCCUPANCY.



CITY OF BOSTON
PRINTING DEPARTMENT
1914



THE BUILDING LAW OF THE CITY OF BOSTON.

CHAPTER 550, ACTS OF 1907—AS AMENDED. AN ACT RELATIVE TO THE CONSTRUCTION, ALTERATION AND MAINTENANCE OF BUILDINGS IN THE CITY OF BOSTON.

Be it enacted, etc., as follows:

Section 1. There shall be in the city of Boston a department to be called the building department, which shall be under the charge of the building commissioner. The commissioner, who shall have had at least five years' experience as an architect, a builder, or a civil engineer, shall be appointed by the mayor, for a term of five years. He shall receive such salary as shall be fixed by the city council, with the approval of the mayor.

The present officers and employees of the building department, except the board of appeal, shall hold their several offices and positions until removed or discharged according to law.

The commissioner may, with the approval of the mayor, appoint such number of inspectors, employees, and assistants as the city council shall, from time to time, determine. No person shall be appointed as inspector of construction who has not had at least five years' experience as a builder, civil engineer, or architect, or as a superintendent or foreman or a competent mechanic in charge of construction.

The commissioner may appoint as his deputy an inspector in the department who shall, during the absence or disability of the commissioner, exercise all the powers of the commissioner. No officer or employee connected with the department shall be interested in the doing of work or the furnishing of material or appliances for the construction, alteration, or maintenance of any building, or in the making of plans or of specifications therefor, unless he is the owner thereof or a member of a board within the building department. No such officer or employee shall be engaged in any work which is inconsistent with his duties or with the interests of the department.

[1913, c. 704, sect. 1.]

The clerk of the department shall, under the direction of the commissioner, keep a record of the business of the department, and the commissioner shall submit to the mayor a yearly report of such business. The records of the department shall be open to public inspection. The commissioner may require plans and specifications of any proposed structure or for the alteration of any structure or building to be filed with him, duplicates of which, when approved by the commissioner, shall be kept at the building during the progress of the work. Such duplicates shall be open to the inspection of any inspector in said department.

The commissioner shall grant permits for the construction, alteration, removal or tearing down of buildings or structures, and for plumbing, gas fitting, and the setting and maintenance of steam boilers and furnaces when applications for the same are made and filed in conformity with law.

All permits issued by the commissioner shall be on printed forms approved by him.

If the commissioner finds that the terms of a permit are being violated, he may, after notice mailed to the person to whom the permit was issued, order the whole or any part of the work, which is being done under the permit, to be stopped, and such work shall not be resumed until the terms of the permit have been complied with.

All applications for permits under the provisions of this

act shall be in writing, on forms furnished by the department. The commissioner may require the material facts set forth in the same to be verified by the oath of the applicant; he may also require, in his discretion, a survey of a lot on which any proposed building is to be erected to be filed with the application. Every application shall state the name and address of the owner.

- SECT. 2. The commissioner, or one of his inspectors, shall examine as often as is practicable every building in the course of construction or alteration, and shall make a record of all violations of this act and of all other matters relative thereto. The publication of such records with the consent of the commissioner shall be privileged.
- SECT. 3. The commissioner, or one of his inspectors, shall examine any building reported as dangerous or damaged, and shall make a record of such examination, stating the nature and estimated amount of the damage, and the purpose for which the building was used, and in case of fire the probable origin thereof; and shall examine all buildings in respect to which applications have been made for permits to raise, enlarge, alter, or repair, and shall make a record of every such examination.
- Sect. 4. The commissioner, or one of his inspectors, shall inspect every building or other structure or anything attached to or connected therewith which he has reason to believe is not provided with sufficient means of egress in case of fire satisfactory to the commissioner, exists in violation of any provision of this act or is unsafe or dangerous to life, limb, or adjoining buildings, and if he finds it not provided with sufficient means of egress in case of fire satisfactory to the commissioner, or to exist in violation of any provision of this act, or unsafe or dangerous, he shall forthwith in writing notify the owner, agent, or any person having an interest therein, to secure the same, to provide sufficient means of egress in case of fire or to comply with the provision of this act which is

being violated, and shall affix in a conspicuous place upon its external walls a notice of its dangerous condition or of its condition as a fire-trap or of its being a common nuisance within the provisions of this act. The notice shall not be removed or defaced without his consent.

[1914, c. 205, sect. 1.]

The commissioner may with the written approval of the mayor order any building which in his opinion is unsafe, not provided with sufficient means of egress in case of fire or exists in violation of any provision of this act, to be vacated forthwith.

[1914, c. 205, sect. 1.]

SECT. 5. The person notified as provided in the preceding section shall provide sufficient means of egress in case of fire satisfactory to the building commissioner, or shall comply with the provision of this act which is being violated, or shall secure or remove said building, structure, attachment or connection forthwith. If the public safety so requires, the commissioner, with the approval of the mayor, may at once enter the building or other structure which he finds unsafe or dangerous, the land on which it stands or the abutting land or buildings, with such assistance as he may require, and secure the same, and may erect such protection for the public by proper fence or otherwise as may be necessary, and for this purpose may close a public highway.

[1914, c. 205, sect. 1.]

SECT. 6. There shall be in said department a board to be called the board of appeal. Said board shall consist of five members appointed by the mayor in the following manner: One member from two candidates, one to be nominated by the Real Estate Exchange and Auction Board and one by the Massachusetts Real Estate Exchange; one member from two candidates, one to be nominated by the Boston Society of Architects and one by the Boston Society of Civil Engineers; one member from

two candidates, one to be nominated by the Master Builders Association and one by the Contractors and Builders Association; one member from two candidates to be nominated by the Building Trades Council of the Boston Central Labor Union; and one member selected by the mayor. These appointments shall be subject to confirmation by the board of aldermen. The appointments first made shall be for the terms of one, two, three, four, and five years, respectively, so that the term of one member shall expire each year. All subsequent appointments shall be for the term of five years. Vacancies shall be filled in the same manner in which original appointments are made. Each member of said board shall be paid ten dollars per day for actual service but not more than one thousand dollars in any one year. No member shall act in any case in which he is interested, and in case any member is so disqualified, or is absent from illness or other cause, the remaining members shall designate a substitute.

[1910, c. 631, sect. 1.]

All the members of said board shall be residents of or engaged in business in Boston.

Every decision of the board shall be in writing and shall require the assent of at least three members.

Sect. 7. An applicant for a permit whose application has been refused may appeal therefrom within ninety days. A person who has been ordered by the commissioner to incur any expense may within ten days after being notified of such order appeal therefrom by giving to the commissioner notice in writing of his appeal. Such notice or a certified copy thereof shall at once be transmitted by the commissioner to the board of appeal. After notice given to such parties as the board shall order, a hearing shall be had, and the board shall affirm, annul, or modify said refusal or order. The board may vary the provisions of this act in specific cases which appear to

them not to have been contemplated by this act although covered by it, or in cases where manifest injustice is done, provided that the decision of the board in such a case shall be unanimous and shall not conflict with the spirit of any provision of this act.

The decision shall specify the variations allowed and the reasons therefor, and shall be filed in the office of the commissioner within ten days after the hearing. A certified copy shall be sent by mail or otherwise to the applicant and a copy kept publicly posted in the office of the commissioner for two weeks thereafter. If the order or refusal of the commissioner is affirmed, such order or refusal shall have full force and effect. If the order or refusal is modified or annulled, the commissioner shall issue a permit in accordance with such decision.

The provisions of this section shall also apply to any similar action or order of the commissioner of wires, under the provisions of chapter two hundred and sixty-eight of the acts of the year eighteen hundred and ninety-eight, or of any amendment thereof or addition thereto, except that in respect thereto the words "commissioners of wires" shall be substituted for the word "commissioner."

Sect. 8. Methods of construction or maintenance equivalent to those required by the provisions of this act may be allowed with the written consent of the commissioner and the board of appeal specifying the same. A record of the required and the equivalent method allowed shall be kept in the office of the commissioner.

It shall be the duty of the board of appeal to submit to the mayor on or before the first day of February in each year a report giving a summary of all decisions of the board, together with such recommendations for revision of the law as may seem to them advisable. The commissioner shall cause the report to be printed as a separate document for public distribution.

Any requirement necessary for the strength or stability

of any proposed structure or for the safety of the occupants thereof, not specifically covered by this act, shall be determined by the commissioner, subject to appeal.

SECT. 9. The building limits of the city of Boston as they now exist shall continue until changed by ordinance, and the city council may by ordinance from time to time extend and define said building limits, and may establish other limits in any part of the city within which every building built after the establishment thereof shall be of the first or second class. This restriction shall not apply to wharves, nor to buildings not exceeding twenty-seven feet in height on wharves, nor to market sheds or market buildings not exceeding such height, nor to elevators for the storage of coal or grain, if the external parts of such buildings, elevators, or other structures are covered with slate, tile, metal, or other equally fireproof material, and the mode of construction and the location thereof are approved by the commissioner. Temporary structures to facilitate the prosecution of any authorized work may be erected under such conditions as the commissioner may prescribe. Single and two-family dwellings not to be occupied, or intended, arranged, or designed to be occupied, by more than two families, may be built of third class construction in all parts of the city of Boston not included in the building limits of said city as they existed prior to the twenty-second day of September in the year nineteen hundred and thirteen; but no such building shall occupy more than sixty per cent of the area of the lot upon which it is situated, and all such buildings shall be constructed with pitched roofs not less than thirty degrees with the horizontal.

[1914, c. 782, sect. 1.]

SECT. 10. The provisions of this act shall not apply to bridges, quays, or wharves, nor to buildings on land ceded to the United States or owned and occupied by the Commonwealth, nor to the Suffolk County court house,

jail, or house of correction, nor to railroad stations, nor to portable school buildings erected and maintained by the schoolhouse department, nor to voting booths erected and maintained by the board of election commissioners.

Except as otherwise provided by law, the provisions of this act shall not be held to deprive the board of health, the police commissioner, the board of street commissioners, the board of park commissioners, the board of examiners of gas fitters, the commissioner of wires, or the fire commissioner of the city of Boston of any power or authority which they have at the date of the passage of this act, or of the remedies for the enforcement of the orders of said boards or officers; unless such powers, authorities, or remedies are inconsistent with the provisions of this act; nor to repeal any existing law, not herein expressly repealed, except so far as it may be inconsistent with the provisions of this act.

DEFINITIONS.

Sect: 11. In this act the following terms shall have the meanings respectively assigned to them:—

First Class Building:— A first class building shall consist of fireproof material throughout, with floors constructed of iron, steel or reinforced concrete beams, filled in between with terra-cotta or other masonry arches or with concrete or reinforced concrete slabs; wood may be used only for under and upper floors, windows and door frames, sashes, doors, interior finish, hand rails for stairs, necessary sleepers bedded in the cement, and for isolated furrings bedded in mortar. There shall be no air space between the top of any floor arches and the floor boarding.

Second Class Building:— All buildings not of the first class, the external and party walls of which are of brick, stone, iron, steel, concrete, reinforced concrete, concrete blocks, or other equally substantial and fireproof material.

Third Class Building:— A wooden frame building.

Composite Building:—A building, partly of second class and partly of third class construction.

Foundation:— That part of a wall below the level of the street curb, or, if a wall is not on a street, that part of the wall below the level of the highest ground next to the wall, or, if so construed by the commissioner, that part of a party or partition wall below the cellar floor.

Height of a Building:— The vertical distance of the highest point of the roof above the mean grade of the curbs of all the streets upon which it abuts, and if it does not abut on a street, above the mean grade of the ground adjoining the building.

Party Wall:— A wall that separates two or more buildings, and is used or adapted for the use of more than one building.

Partition Wall:— An interior wall of masonry in a building.

Thickness of Wall:— The minimum thickness of such wall.

Story of a Building:— That part of a building between the top of any floor beams and the top of the floor or roof beams next above.

Basement:—That story of a building not more than forty per cent of which is below the grade of the street.

Cellar:— That part of a building more than forty per cent of which is below the grade of the street, and in third class buildings that part of the building which is below the sills.

Gas fitting shall mean the work of putting together any fittings, pipe or fixtures or other appliances which are to contain gas for heat, light or power purposes and will be subject to inspection under existing laws.

REQUIREMENTS FOR ALL BUILDINGS.

SECT. 12. No building, structure or foundation shall be constructed or altered without a permit, and such

work shall be done in accordance with drawings bearing the approval of the commissioner.

Every structure in process of construction, alteration, repair or removal, and every neighboring structure or portion thereof affected by such process or by any excavation, shall be sufficiently supported during such process.

The commissioner may take such measures as the public safety requires to carry these provisions into effect.

All buildings shall have leaders sufficient to discharge the roof water in such a manner as not to flow upon any public way or any neighboring property. Such leaders may project into a public way not over seven inches.

Every chimney flue shall be carried to a height sufficient to protect adjoining buildings from fire and smoke, and, unless the roof is covered with incombustible material, shall extend at least four feet above the highest point of contact with the roof.

Every permanent building more than twenty feet high having a flat roof shall have permanent means of access to the roof from the inside by an opening not less than two feet by three feet, with a fixed stepladder.

Every building shall have, with reference to its height, condition, construction, surroundings, character of occupation and number of occupants, reasonable means of egress in case of fire, satisfactory to the commissioner, except that in all factories or workshops hereafter built or altered, of second class construction, where ten or more persons are employed above the second floor, one exit shall consist of a fireproof stairway enclosed in incombustible material. No building hereafter erected shall be occupied or permitted to be occupied until said means of egress have been provided in accordance with plans and drawings approved by the building commissioner.

[1912, c. 369, sect. 1.]

Water pipes in every building shall be properly protected from frost.

All chimneys of masonry construction shall have walls at least eight inches thick, or be constructed of four-inch brick walls with a suitable flue lining.

Every building used for habitation shall have such number of water-closets as the board of health may require; every building where persons are employed shall have at least one water-closet for every twenty persons therein employed, and in any building where both sexes are employed, separate accommodations shall be furnished for men and women. Every enclosure containing one or more water-closets shall be provided with adequate ventilation to the outer air either by window or by suitable light shaft.

In every first and second class building all of the outside finish shall be of incombustible material, except window and door frames, and except finish about show windows in the first story. Where store fronts are carried up more than one story the columns and lintels shall be of, or finished with, incombustible material; but in no case shall store fronts be carried more than two stories, unless the same are constructed and finished throughout with fireproof material, except window and door frames.

Every ventilating flue shall be constructed of, or lined with, incombustible material.

Every floor in second class buildings shall have its beams tied to the walls and to each other with wrought-iron straps or anchors at least three eighths of an inch thick by one and one half inches wide, and not less than eighteen inches long, so as to form continuous ties across the building not more than ten feet apart. Walls running parallel, or nearly parallel, with floor beams shall be properly tied once in ten feet to the floor beams by iron straps or anchors of the size above specified.

Every wooden header or trimmer more than four feet long, carrying a floor load of over seventy pounds per square foot, shall, at connections with other beams, be framed or hung in stirrup irons, and joint-bolted. All tail beams and similar beams of wood shall be framed or hung in stirrup irons.

All walls, piers and columns acting as supports below the first floor of all buildings hereafter built shall be of masonry or metal. In all buildings hereafter erected, where outside means of egress are to be constructed, the building commissioner may order, when he deems it necessary, all the window openings in the same to be protected by metal frames and sash and wire glass, and all doors leading to such outside means of egress and the frames of the same to be of metal or metal covered. If doors are glazed, they shall be glazed with wire glass. Every kitchen, kitchenette or room used or adapted to be used for cooking purposes either by coal, gas or oil stoves, in every building hereafter erected, remodelled or enlarged, shall be not less than eight feet in the least dimension. Every such kitchen, kitchenette or room to be used for cooking purposes shall be lighted and ventilated by window openings in an external wall direct to the open air, and such window openings shall equal in size in the aggregate at least one eighth of the area of the floor of such room. When gas, coal or oil stove ovens, broilers or water heaters are connected to a ventilating flue, the flue shall be constructed of brick walls not less than eight inches thick, or with walls four inches thick lined with terra-cotta flue lining at least one inch thick. The building commissioner may order the basements of any mercantile building hereafter erected to be provided with a system of automatic sprinklers, approved by him as to location, arrangement and efficiency.

[1914, c. 782, sect. 2.]

PROHIBITIONS.

SECT. 13. No alteration or repair of a wooden building within the building limits shall be made without a permit

from the commissioner, and no permit to increase the height or ground area of such a building shall be granted, nor shall a permit for alterations or repairs be granted if the estimated cost of the proposed alterations or repairs exceeds one half of the cost of a like new building.

No wooden building, outside the building limits, shall be moved to any position within the building limits.

No recess or chase shall be made in any external or party wall so as to leave the thickness at the back less than eight inches.

No roof or floor timber entering a party wall shall have less than four inches of solid brickwork between it and the end of any other timber.

No part of any roof shall be constructed in such a manner as to discharge snow, ice, or other material upon a public street or alley.

No elevated staging or stand for observation purposes shall be constructed or occupied upon the roof of any building.

No chimney shall be corbelled from a wall more than the thickness of the wall.

No chimney shall be hung from a wall which is less than twelve inches thick.

No masonry shall rest upon wood, except piles and mud sills.

No part of any floor timber shall be within two inches of any chimney.

No studding or furring shall be within one inch of any chimney.

No furnace or boiler for heating shall be placed upon a wooden floor.

No smoke pipe shall project through any external wall or window.

No steam, furnace, or other hot air pipes shall be carried within one inch of any woodwork, unless such pipes are double or otherwise protected by incombustible material. No combustible partition shall be within four feet of the sides and back or within six feet of the front of any boiler, carrying a pressure of over ten pounds, unless the partition is covered with incombustible material which extends to the full height of the partition from the end or back of the boiler to at least five feet in front of it. In such case the distance shall be not less than two feet from all the sides and five feet from the front of the boiler, and all lath and plaster and wooden ceiling beams over the boiler and to a distance of not less than four feet in front of all such boilers shall be covered with incombustible material.

[1914, c. 782, sect. 3.]

No observation stand shall be constructed or maintained except in accordance with plans approved by the commissioner.

No closet of any kind shall be constructed under any staircase leading from the cellar or basement to the first story.

No boiler shall be placed or maintained under any public way.

No part of any structure, except cornices, permanent awnings, string courses, window caps and sills, bay windows, under such terms, conditions, regulations and restrictions as may be required by the mayor and board of aldermen, and outside means of egress, as otherwise provided, and signs as provided in chapter three hundred and fifty-two of the acts of the year eighteen hundred and ninety-five, shall project over any public way or square. No cornice or bay window shall so project more than three feet; nor more than twelve inches over a way of a width of thirty feet or less.

No building within forty feet of the property of any adjoining owner shall be erected for or converted to use as a stable, unless such use is authorized by the board of health after a public hearing. Written notice of such hearing shall be given to the adjoining owners, and published at least three times in at least two newspapers published in Boston, ten days at least before the hearing.

No material other than brick, tile, slate, metal, asbestos shingles or slag shall hereafter be used to cover or roof any building, or the tops and sides and outsides of the frames of any dormer window, or any other projection of the roof of any building, except wooden cornices on wooden frame buildings, but on flat roofs composition or tar and gravel may be used or such other quality of fire-resisting roofing as the commissioner may authorize. Nothing in this section shall be construed to prohibit the use of materials approved by the commissioner for repairing any roof now covered with wooden shingles, provided, that the building is not altered in height or otherwise generally reconstructed, nor to prohibit covering with such approved materials the roofs of buildings less than sixteen feet in height.

[1914, c. 782, sect. 3.]

No part of any first or second class building hereafter erected, except the eaves and cornices, shall be nearer than five feet to the line of any adjoining lot on any side on which such building has any opening in the outer wall thereof unless all such openings are protected by wire glass set in metal frames and sash.

MATERIALS.

Strength of Materials.

SECT. 14. The stresses in materials hereafter used in the construction of all buildings, produced by their own weight and the loads herein specified, shall not exceed the limits assigned in the following paragraphs of this section:—

· (a) Timber.
Unit Stresses in Pounds per Square Inch.

	On Extreme	Shearing	Compression
	Fibre of	Along	Perpendicular
	Beams.	the Grain.	to the Grain.
White pine and spruce. White oak Yellow pine (long-leaved).	1,000	80	250
	1,000	150	600
	1,500	100	500

Stresses due to transverse loads combined with direct tension or compression shall not exceed the extreme fibre stresses given above.

In computing deflection, the modulus of elasticity shall be taken as follows:—

					r ounus per
					Square Inch.
White pine,					750,000
Spruce, .					900,000
Yellow pine	(long	-leav	red),		1,300,000
White oak,			•		850,000
,					

Columns (centrally loaded).

For wooden columns with flat ends, where L is the length of the column, D is its least diameter, the average stress per square inch on a cross-section shall be limited as follows:—

L	Average Stress per Square Inch.					
D		Long-leaved Yellow Pine.				
0 to 10	630 595 560 525 490	900 850 800 750 700	810 765 720 675 630			

No column shall be used with a greater unsupported length than thirty times its least diameter.

For excentric loads see section sixteen.

(b) Wrought Iron and Steel. Unit Stresses in Pounds per Square Inch.

	Wrought Iron.	Steel.1
Extreme fibre of rolled beams or shapes Tension	12,000 12,000 12,000 9,000 15,000 18,000	16,000 16,000 16,000 10,000 18,000 22,500
Modulus of elasticity	27,000,000	29,000,000

For compression members twelve thousand for iron and sixteen thousand for steel, reduced according to the following formula:—

$$\frac{12,000 \text{ (or 16,000 for steel)}.}{1 + \frac{1}{20,000} \frac{L^2}{r^2}}$$

in which L is the length of the column in inches, and r is the radius of gyration in inches taken around the axis about which the column will bend (for free columns, the least radius of gyration).

The stresses due to transverse loads combined with direct tension or compression shall not exceed the extreme fibre stress given above for rolled beams and shapes, or in case of built members the above tension and compression stresses (see section sixteen).

Compression flanges of beams shall be proportioned to resist lateral flexure unless properly stayed or secured

¹ These stresses (except for rivets) are for steel having an ultimate tensile strength of from fifty-five thousand to sixty-five thousand pounds per square inch, an elastic limit of not less than one half the ultimate strength, and a minimum percentage of elongation in eight inches of one million four hundred thousand, divided by the ultimate strength.

against it. If the ratio of unsupported length of flange to width of flange does not exceed twenty, no allowance need be made for lateral flexure. If the ratio is seventy the allowable stress on the extreme fibre shall be one half of that above specified, and proportionally for intermediate ratios.

Shearing and bearing stresses on bolts shall not be higher than eighty per cent of those allowed by the above table. All connections in skeleton buildings, all splices in steel trusses and girders, and all connections of such trusses and girders to the sides of steel columns shall, if possible, be made by means of rivets rather than by bolts.

(c) Cast Iron.

Unit Stresses in Pounds per Square Inch.
Extreme fibre stress, tension, . . . 3,000
Extreme fibre stress, compression, . . . 16,000

Cast iron shall not be used for columns in buildings of more than seventy-five feet in height, nor in cases where the value of the length divided by least radius of gyration exceeds seventy.

Cast Iron Columns (centrally loaded and unsupported laterally).

Where the Length Divided by the Least Radius of Gyration Equals—	Average Stress per Square Inch of Section.	Where the Length Divided by the Least Radius of Gyration Equals—	Average Stress per Square Inch of Section.		
10. 20. 30. 40.	11,000 10,700 10,400 10,000	50	9,800 9,500 9,200		

(d) STONE WORK, IN COMPRESSION.

Stresses in Tons of Two Thousand Pounds per Square Foot. First quality dressed beds and builds, laid solid in mortar of one part Portland cement to three parts sand, or one part natural cement to two parts sand.

Granite,			60
Marble and limestone,			40
Sandstone.			30

In cases where poorer mortar is used, to avoid stain from cement, stresses shall be less than above, and must be approved by the building commissioner.

(e) Brickwork in Compression.

Stresses in Tons of Two Thousand Pounds per Square Foot.

- (1.) For first class work of hard-burned bricks, including piers in which the height does not exceed six times the least dimension, laid in:—
- (a) One part Portland cement, three parts sand, by volume, dry, 20

- (2.) For brick piers of hard-burned bricks, in which the height is from six to twelve times the least dimension:—

Mortar (a),				18
Mortar (b),				15
Mortar (c),				10
Mortar (d) .				7

(3.) For brickwork made of "light-hard" bricks, the stresses shall not exceed two thirds of the stresses for like work of hard-burned bricks.

(f) Concrete.

When the structural use of concrete is proposed, a specification, stating the quality and proportions of materials, and the methods of mixing the same, shall be submitted to the building commissioner, who may issue a permit at his discretion and under such further conditions, in addition to those stated below, as he sees fit to impose.

- A. In first class Portland cement concrete, containing one part cement to not more than six parts mixed properly graded aggregate, except in piers or columns of which the height exceeds six times the least dimension, the compressive stress shall not exceed thirty tons of two thousand pounds per square foot.
- B. In piers and columns of first class Portland cement concrete, containing one part cement to not more than five parts mixed properly graded aggregate, where the height of the pier or column is more than six times and does not exceed twelve times its least dimension, the compressive stress shall not exceed twenty-five tons of two thousand pounds per square foot.

By "aggregate" shall be understood all the materials in the concrete except the cement. Cinders concrete shall be used constructively only for floors, roofs and for filling.

Rules for the computation of reinforced concrete columns may be formulated from time to time by the building commissioner with the approval of the board of appeal.

In reinforced concrete beams or slabs subjected to bending stresses, the entire tensile stress shall be assumed to be carried by the steel, which shall not be stressed above the limits allowed for this material. First class Portland cement concrete in such beams or slabs, containing one part cement to not more than five parts mixed properly graded aggregate, may be stressed in compression to not more than five hundred pounds per square inch. In case a richer concrete is used, this stress may be

increased with the approval of the commissioner to not more than six hundred pounds per square inch.

In reinforced concrete the maximum shearing force upon the concrete, when uncombined with compression upon the same plane shall not exceed sixty pounds per square inch, unless the building commissioner with the consent of the board of appeal shall fix some other value.

If the imbedded steel has no mechanical bond with the concrete, its holding power shall not exceed the allowable shearing strength of the concrete.

(g) In General.

Under the prescribed loads, beams shall be so proportioned that the deflection shall not exceed one three hundred and sixtieth $(\frac{1}{360})$ of the span.

Stresses for materials and forms of material, not herein mentioned, shall be determined by the building commissioner. Provision for wind bracing shall be made wherever it is necessary, and all buildings shall be constructed of sufficient strength to bear with safety the load intended to be placed thereon, in addition to the weight of the materials used in construction.

No cutting for piping or any other purpose shall be done which would reduce the strength of any part of the structure below what is required by the provisions of this act.

Quality of Materials.

SECT. 15. All materials shall be of such quality for the purposes for which they are to be used as to insure, in the judgment of the building commissioner, ample safety and security to life, limb and neighboring property. The building commissioner shall have power to reject all materials which in his opinion are unsuitable, and may require tests to be made by the architect, engineer, builder or owner to determine the strength of the structural materials before or after they are incorporated in a building, and may require certified copies of results of tests made elsewhere from the architect, engineer, builder, owner or other interested persons.

Hollow cast iron columns, if used, shall be shown by measurements and tests satisfactory to the commissioner to be of practically uniform thickness, and free from blow holes.

MORTARS.

All mortars shall be made with such proportion of sand as will insure a proper degree of cohesion and tenacity, and secure thorough adhesion to the material with which they are used, and the building commissioner shall condemn all mortars not so made.

- (a) Mortar below the level of water shall be no poorer than one part Portland cement and three parts sand;
- (b) Mortar for first class buildings shall, for the lower half of their height, be no poorer than one part natural cement to two parts sand; and, for the upper half, no poorer than one part of natural cement, one half part of lime, and three parts of sand;
- (c) Mortar for second class buildings and for such parts of third class buildings as are below the level of the sidewalk, shall be no poorer than one part of natural cement, one of lime, and four of sand;
- (d) Mortar for third class buildings, above ground, shall be no poorer than one part lime and four parts sand.

The building commissioner may allow lime mortar in setting stone where cement will stain.

CONCRETE.

Concrete shall be used immediately after mixing; it shall not be placed in the work after it has begun to harden; and it shall be deposited in such manner and under such regulations as to secure a compact mass of the best

quality for the proportions used. Forms shall remain until the concrete has hardened so as to be able to carry its load safely, and shall be removed without jar.

The commissioner may require an applicant for a permit for the structural use of concrete to have an inspector satisfactory to the commissioner at all times on the work while concrete is being mixed or deposited, and such inspector shall make daily reports to the commissioner on the progress of the work.

CEMENT.

Cement shall conform to the specifications of the American Association for Testing Materials, as modified from time to time by that association.

REINFORCED CONCRETE.

Reinforced concrete slabs, beams or girders, if rendered continuous over supports by being unbroken in section, shall be provided with proper metal reinforcement at the top over said supports and may be computed as continuous beams, as hereinafter described.

The modulus of elasticity of the concrete, if not shown by direct tests, may for beams and slabs be taken as one fifteenth that of steel, and for columns one tenth that of steel.

The reinforcing metal shall be covered by not less than three fourths inch of concrete in slabs, and by not less than one and one half inches of concrete in beams and columns.

METHODS OF COMPUTATION.

Sect. 16. Beams or girders of metal or reinforced concrete shall be considered as simply supported at their ends, except when they extend with unbroken cross-section over the supports, in which case they may be considered as continuous.

The span of a beam shall be considered as the distance from center to center of the bed plates or surfaces upon which it rests. If it is fastened to the side of a column, the span shall be measured to the centre of the column.

In slabs, beams or girders continuous over supports, provision shall be made for a negative bending moment at such supports equal to four fifths of the positive bending moment that would exist at the centre of the span if the piece were simply supported; and the positive bending moment at the centre of the span may be taken equal to the negative bending moment at the support.

In the case of a slab of reinforced concrete with parallel ribs or girders beneath, the rib or girder may be considered to include a portion of the slab between the ribs, forming a T-beam. The width of the T-beam on top shall not exceed one third the span of the rib nor the distance from centre to centre of the ribs.

Reinforced concrete columns shall be proportioned on the assumption that the concrete and the steel are shortened in length in the same proportion. The steel members shall be tied together at intervals sufficiently short to prevent buckling.

If a column is loaded excentrically or transversely, the maximum fibre stress, taking account of the direct compression, the bending which it causes, its excentricity and the transverse load, shall not exceed the maximum allowable stress in compression.

If a tension piece is loaded excentrically or transversely, the maximum fibre stress, taking account of the direct tension, its excentricity and the transverse load, shall not exceed the maximum allowable stress in tension.

An excentric load upon a column shall be considered to affect excentrically only the length of column extending to the next point below at which the column is held securely in the direction of the excentricity. If a piece is exposed to tension and compression at different times, it shall be proportioned to resist the maximum of each kind, but the unit stresses shall be less than those used for stress of one kind, depending upon the ratio and the relative frequence of the two maxima.

Net sections shall be used in proportioning steel tension members, and in deducting rivet holes they shall be taken as one eighth of an inch greater in diameter than the rivets.

The length of a steel compression member between supports in any direction shall not exceed one hundred and twenty times its radius of gyration about an axis perpendicular to that direction.

The webs of plate girders shall be proportioned to resist buckling in cases where they are not supported laterally, according to the formula:—

$$\frac{15,000}{1 \frac{1}{3,000} \frac{d^2}{t^2}}$$

in which t = thickness of web, in inches; d = clear, unsupported dimension horizontally or vertically, whichever is the lesser.

In proportioning the flanges of plate girders, one eighth of the gross area of the web may be considered as available in each flange. If the length of the top flange unsupported laterally exceeds twenty times its width, the allowable stress shall be reduced, as in the case of rolled beams.

Pins shall be computed by assuming the forces in the bars to act at the centre of the bearing areas.

In riveted trusses the centre of gravity lines of members coming together at a joint shall, if possible, intersect at a point. Excentricity due to a non-fulfillment of this rule shall be allowed for in the computations. The centre of gravity of the rivets connecting one piece to another shall, in general, lie as nearly as practicable in the centre of gravity line of the piece.

CLASSIFICATION.

First and Second Class Buildings.

SECT. 17. Every building hereafter erected more than seventy-five feet in height, or hereafter increased in height to more than seventy-five feet, shall be a first class building. Every second class building hereafter erected and more than four stories in height, and any second class building now in existence and increased in height to more than four stories, shall have the first floor and the basement and cellar stories of first class construction. Every hotel, tenement house and lodging house hereafter erected covering more than three thousand five hundred square feet or more than five stories in height, shall be a first class building; and every building altered or enlarged and occupied or to be occupied as a hotel, tenement or lodging house to be in excess of sixty feet in height, or in excess of three thousand five hundred square feet in superficial area, or in excess of five stories in height, shall be a first class building. Every building hereafter erected within the building limits to be occupied as a permanent schoolhouse shall be a first class building. Every building hereafter erected as a theatre and every building hereafter altered to be occupied as a theatre shall be a first class building. Every building hereafter erected for, altered to or converted to use as a moving picture house shall be a first class building. All other buildings may be of second or third class construction.

[1914, c. 782, sect. 4.]

Except as herein otherwise provided, new buildings adapted for habitations, and not more than five stories in height, may be erected of second class construction, but no such building shall exceed three thousand five hundred square feet in superficial area or sixty feet in height. The first story or basement, or both the first story and basement, in such buildings, so constructed,

remodelled or enlarged, may be used for mercantile purposes, provided, that the first floor and the basement and cellar stories shall be of first class construction, and any stairway leading from the first floor to the basement or from the basement to the cellar shall be enclosed in masonry walls not less than eight inches thick or with two-inch solid metal and plaster partition, with self-closing fireproof doors at the top and bottom of said stairways.

[1914, c. 782, sect. 4.]

New buildings, of concrete, concrete blocks or brick, not over three stories in height, adapted for the occupancy of a single family and having a superficial area of not more than twelve hundred square feet, may be constructed with external and party or division walls of eight inches in thickness: provided, however, that where the party wall of a building thus constructed joins or becomes the party wall of another such building, the floor timbers in each of such buildings shall be so spaced or protected that their ends shall not approach nearer than within eight inches of each other.

Restriction of Areas.

Any first class building used above the first floor as a warehouse or store for the storage or sale of merchandise shall have all vertical openings protected by fireproof enclosures. Such enclosures shall, if enclosing stairs or escalators, have automatic doors, and all glass in said enclosure shall be wire glass.

Such buildings shall so be divided by brick walls built like party walls with the same openings allowed, that no space inside such buildings shall exceed in area ten thousand square feet, except that when any such building has a frontage of not less than fifty feet on each of two streets, such space may exceed ten thousand square feet in area, provided that buildings in which such extension of area beyond ten thousand square feet is permitted shall have automatic fire sprinklers installed, and means of ingress and egress satisfactory to the commissioner and the board of appeal.

Second class buildings used above the first floor as warehouses or stores for the storage or sale of merchandise shall so be divided by brick walls, built like party walls with the same openings allowed, that no space inside such buildings shall exceed in area ten thousand square feet, and no existing wall in any second class building shall be removed so as to leave an area of more than ten thousand square feet, nor shall any existing wall, separating areas which combined would exceed ten thousand square feet in area, have openings cut in it greater in area or number than is allowed by this act for party walls.

Every second class building more than three stories high and used above the first floor as a warehouse or store for the storage or sale of merchandise shall have all vertical openings for elevators and stairways, air or light shafts, through its floors protected by fireproof enclosures. Such enclosures shall be supported on fireproof supports and framing, and shall, if enclosing stairs or escalators, have automatic doors, and all glass in said enclosures shall be wire glass.

No building used above the first floor for the storage or sale of merchandise shall have less than two means of egress from every story, one of which means may be either an outside fire escape or through a brick wall closed by automatic doors into a building of the same class; except that an independent monumental stairway extending from the basement to the second floor may be constructed.

Buildings for Manufacturing Purposes.

Buildings outside the building limits and adapted exclusively for manufacturing, storage, mechanical or stable purposes, may be built under such conditions as the commissioner shall prescribe. If of wood such buildings shall not exceed forty-five feet in height.

Construction.

Height.

SECT. 18. No building, structure or part thereof shall be of a height exceeding two and one half times the width of the widest street on which the building or structure stands, whether such street is a public street or place or a private way, nor exceeding one hundred and twenty-five feet in any case. The width of such street, place or private way shall be measured from the face of the building or structure to the line of the street on the other side. If the street is of uneven width, the width shall be the average width of the part of the street opposite the building or structure; if the effective width of the street is increased by an area or setback, the space between the face of the main building and the lawfully established line of the street may be built upon to the height of two and one half times the width of the street.

All buildings or structures hereafter erected in any part of the city shall be subject to the restrictions imposed by chapter four hundred and fifty-two of the acts of the year eighteen hundred and ninety-eight, by chapter five hundred and forty-three of the acts of the year nineteen hundred and two, by chapter three hundred and eighty-three of the acts of the year nineteen hundred and five, and by chapter four hundred and sixteen of the acts of the year nineteen hundred and seven, so far as the restrictions imposed by said acts relate to the districts described therein; and shall also be subject to any restrictions lawfully imposed by the park commissioners of said city.

Excavations.

Sect. 19. All excavations shall so be protected, by sheet piling if necessary, by the persons causing the same

to be made, that the adjoining soil shall not cave in by reason of its own weight. It shall be the duty of the owner of every building to furnish, or cause to be furnished, such support that his building shall not be endangered by any excavation: provided, that the owner of any building which is endangered by an excavation carried by an adjoining owner more than ten feet below the grade of the street may recover the expense so caused of supporting such building from the persons causing such excavation to be made. All permanent excavations shall be protected by retaining walls. In case of any failure to comply with the provisions of this section the commissioner may enter upon the premises and may furnish such support as the circumstances may require. Any expense so incurred may be recovered by the city from the persons required by law to furnish the support.

Piling.

SECT. 20. All buildings shall, if the commissioner determines that piling is necessary, be constructed on foundation piles which, if of wood, shall be not more than three feet apart on centres in the direction of the wall, and the number, diameter and bearing of such piles shall be sufficient to support the superstructure proposed. The commissioner shall determine the grade at which the piles shall be cut. The commissioner may require any applicant for a permit to ascertain by boring the nature of the ground on which he proposes to build, and he may require an inspector satisfactory to the commissioner to be at all times on the work while piles are being driven, who shall keep an accurate record of the length of each pile, the weight and fall of the hammer, and the penetration of each pile for each of the last two blows of the hammer.

Plain concrete piles shall be made in place by methods which are reasonably certain to secure perfect, full sized piles. Reinforced concrete piles if properly designed to resist the shock of driving, and if driven with a cushion to lessen the shock or by a water jet, may be molded, allowed to harden, and then driven in place.

In case concrete piles are used, whether reinforced or not, their bearing power shall be determined by putting in one or more test piles and loading them after the concrete has hardened. The load allowed shall not be more than one half the load under which the pile begins to settle. In no case, however, shall the load on a concrete pile exceed that specified herein for concrete in columns. Concrete for piles shall have not more than five parts of properly made and mixed aggregate to one part of Portland cement; and the aggregate shall all be capable of passing through a one inch ring.

All wood piles shall be capped with block granite levellers, each leveller having a firm bearing on the pile or piles which it covers, or with first class Portland cement concrete, not less than sixteen inches thick, above the pile caps, containing one part of cement to not more than six parts of properly graded aggregate of stone and sand, the concrete to be filled in around the pile heads upon the intervening earth.

Foundations of First and Second Class Buildings.

SECT. 21. Foundations of first and second class buildings may be of brick, stone or concrete. The thickness shall be as stated in section twenty-three. Foundations of rubble stone shall be allowed only under buildings less than forty-five feet in height and for a depth of less than ten feet.

The walls and piers of every building shall have a foundation, the bearing of which shall be not less than four feet below any adjoining surface exposed to the frost, and such foundation, with the superstructure which it supports, shall not overload the material on which it rests.

Cellars.

SECT. 22. The cellar of every building, where the grade or nature of the ground so requires, shall be sufficiently protected from water and damp by a bed at least two inches thick over the whole, of concrete, cement and gravel, tar and gravel, or asphalt, or by bricks laid in cement. No cellar or basement floor of any building shall be constructed below the grade of twelve feet above mean low water, unless such cellar is made waterproof to the satisfaction of the commissioner. All metal foundations and all constructional metal work underground shall be protected from dampness by concrete, or by other material approved by the commissioner.

Thickness of Walls.

SECT. 23. Except as provided in section seventeen, the external walls above the foundation of houses for habitation of first or second class construction, and not exceeding sixteen hundred square feet in area and not over three stories high, shall be not less than eight inches thick for external walls and not less than twelve inches thick for party walls. In case any part of such building is adapted for any use other than habitation, all walls shall be not less than twelve inches thick. All other houses for habitation, not exceeding five thousand feet in superficial area and not exceeding five stories or sixty-five feet in height, above the basement, shall have all walls not less than twelve inches thick.

The external and party walls of every building of the first or second class, except houses for habitation, less than sixty-five feet in height shall be twelve inches thick in the upper two stories not exceeding twenty-five feet in height. In the section of two stories, but not exceeding twenty-five feet next below, the walls shall be sixteen inches thick. In the next lower section of three stories, but not exceeding thirty-seven feet, the walls shall be twenty inches thick,

and in each succeeding section of three stories, but not exceeding thirty-seven feet or any part thereof, the wall shall be four inches thicker than the section next above it. The foundation walls shall be at least four inches thicker than the required thickness of the walls of the first story. The thickness herein given shall apply to all masonry walls unless they are reinforced by a frame or skeleton of steel.

In reckoning the thickness of walls, ashlar shall not be included unless the walls are at least sixteen inches thick and the ashlar is at least eight inches thick, or unless alternate courses are at least four and eight inches to allow bonding with the backing. Ashlar shall be properly held by metal clamps to the backing or properly bonded to the same.

Anchors.

Sect. 24. All walls of a first or second class building meeting at an angle shall be securely bonded, or shall be united every five feet of their height by anchors made of at least two inches by half an inch of steel or wrought iron, well painted, and securely built into the side or partition walls not less than thirty-six inches, and into the front and rear walls at least one half the thickness of such walls.

Brickwork — Bonding.

Sect. 25. Every eighth course, at least, of a brick wall shall be a full heading or bonding course, except where walls are faced with face brick, in which case in every eighth course at least every other brick shall be a full header. No diagonal header ties shall be used.

Vaulted Walls.

Sect. 26. If the air spaces are headed over and the walls are built solid for at least three courses below the floor and roof beams, walls, if of brick, may be built hollow.

They shall contain, exclusive of withes, the same amount of material as is required for solid walls, and the masonry on the inside of the air space in walls over two stories in height shall be not less than eight inches thick, and the parts on either side shall be securely tied together with ties not more than two feet apart in each direction.

Walls Framed with Iron or Steel.

Sect. 27. Walls may be built in part of iron or steel or with a reinforced concrete or metal framework. In such metal framework the beams and girders shall be riveted to each other at their respective junction points. If columns made of rolled iron or steel are used, their different parts shall be riveted to each other, and the beams and girders resting upon them shall, if possible, have riveted connections to unite them with the columns. If cast iron columns are used, each successive column shall be bolted to the one below it by at least four bolts not less than three fourths of an inch in diameter, and the beams and girders shall be bolted to the columns. At each line of floor or roof beams, lateral connections between the ends of the beams and girders shall be made in such manner as rigidly to connect the beams and girders with each other in the direction of their length.

All party walls of skeleton construction shall have curtain walls of brick, not less than twelve inches thick.

All outside walls of skeleton construction shall have curtain walls which may be of masonry, terra-cotta, concrete, or reinforced concrete, constructed and supported under such conditions as the commissioner shall prescribe.

If the metal or other framework is so designed that the enclosing walls do not carry the weight of floors or roof, then the walls shall be of masonry or concrete construction and shall be thoroughly anchored to the iron skeleton, and whenever the weight of such walls rests upon beams or columns, such beams or columns shall be made strong

enough in each story to carry the weight of wall resting upon them without reliance upon the walls below them.

Party Walls Above Roof.

SECT. 28. In buildings less than forty-five feet in height all party walls shall be built to a height at least twelve inches above the roof covering, and shall be capped with stone, cement or metal securely fastened to the masonry. In all other buildings such walls shall be carried thirty inches above the roof.

Walls — Cornices.

SECT. 29. Where a wall is finished with a stone cornice, the greatest weight of material of such cornice shall be on the inside of the face of the wall. All cornices of second class buildings shall be of brick or covered with fireproof material, and the walls shall be carried up to the boarding of the roof; and where the cornice projects above the roof the masonry shall be carried up to the top of the cornice and covered with metal, like parapet walls.

Piers and Hearths.

SECT. 30. Piers and walls shall have caps or plates, where they are needed, sufficient properly to distribute the load.

Hearths shall be supported by trimmer arches of brick or stone; or shall be of single stones at least six inches thick, built into the chimney and supported by iron beams, one end of which shall be securely built into the masonry of a chimney or of an adjoining wall, or which shall otherwise rest upon an incombustible support. Brick jambs of every fireplace, range or grate opening shall be at least eight inches wide each, and the backs of such openings shall be at least eight inches thick. Hearths and trimmer arches shall be at least twelve inches longer on either side than the width of such openings, and at

least eighteen inches wide in front of the chimney breast. Brickwork over fireplaces and grate openings shall be supported by proper iron bars, or brick or stone arches.

Walls — Doorways in Party Walls.

SECT. 31. Openings for doorways in party walls shall not exceed one hundred square feet each in area, and each opening shall have two sets of fire doors separated by the thickness of the wall, hung in a manner satisfactory to the commissioner, except that the aggregate width of all openings in any story shall not exceed fifty per cent of the length of the wall in which such openings occur. Openings, not exceeding one hundred and forty-four square inches, constructed and protected as shall be approved by a writing signed by the fire commissioner, and filed with the commissioner, may be permitted in any wall or floor.

Fire Protection.

SECT. 32. All structural metal supporting or forming part of the frame, floors, roof or columns of any building, except as otherwise exempted in this act, shall be protected against the effect of heat.

This protection shall consist of concrete, or of porous terra-cotta or brick set in cement mortar. When block construction is used, it shall be clamped in place with steel clamps, or wrapped securely with number twelve galvanized-iron wire or metal lathing in such manner as to hold each block in place, and shall be plastered with lime or other mortar at least three fourths of an inch thick in addition to the protection.

The protection on all floor and roof beams shall be at least one inch thick, on all floor and roof girders and on all beams carrying masonry at least one inch thick on top and two inches thick elsewhere, on all columns carrying only floors three inches, and on all columns built into or carrying walls four inches.

If terra-cotta blocks are used for protection, such blocks may be hollow, but each face shall be solid, and no flange shall be less than one inch thick.

Plaster on wire or metal lath shall not be considered as a fire protection for steel or iron structural members, but may be used with an air space under arches as a suspended ceiling, provided that such arches have at least one inch of thickness of fireproofing under the flanges in addition to such ceiling, and that the metal lath and plaster are suspended separately from the arches and are not less than one inch below the same.

All protection shall be applied directly to the metal work and shall not be broken into nor interrupted by any pipes, wires, chases or conduits of any kind.

About isolated columns on the exterior of buildings, the thickness of protection may be reduced to one inch, when the same is covered with an outer shell of cast iron or steel.

When a column or girder is formed of built-up shapes, the spaces between flanges shall be filled solid with protecting material, but this protection need not extend more than one inch beyond the edges of projecting angles, bars or channels. The protection shall cover all lugs, brackets, braces, etc.

The metal work of all trusses carrying masonry or floor loads shall be protected, as hereinbefore described, but said provisions shall not apply to trusses which carry roof load only.

When a wall or partition is formed with a framework of angles, channels, or other built-up shapes, and such wall or partition is filled in flush with both faces of the frame with terra-cotta blocks, additional protection may be omitted.

The above requirements as to fireproofing shall not apply to iron or steel in second or third class buildings in any case in which the use of wood without fire protection would be permissible under this act.

In work in connection with alterations of existing buildings, the character and amount of protection for steel and ironwork shall be made satisfactory to the commissioner.

In positions where the protection of isolated or exposed columns is likely to be broken or damaged by trucks or merchandise, there shall be outside of the protection a guard at least five feet high of iron or wood, bound with wire or steel so as to be self-supporting.

Spaces between and behind all studding or furring shall be filled solid with bricks and mortar or other fireproof material for a space of five inches in height above the floor beams or plaster grounds. Spaces between the strap furring on brick walls shall be filled solid with mortar for five inches below the bottom of the floor beams. The spaces between stringers of stairs and joists of landings, unless unceiled or of fireproof construction, shall be stopped solid with wood, brick or terra-cotta or other approved material as often as twice in each flight of stairs. The spaces between floor beams on bearing partitions shall be stopped in a similar manner.

In every building of second or third class construction each floor shall be thoroughly stopped by a continuous layer of asbestos fabric, magneso calcite or other fireresisting material approved by the commissioner.

The tops of all heating furnaces and smoke pipes shall be at least one foot below the nearest wooden beams or ceiling. All ceilings immediately over a furnace or boiler, and for six feet on each side thereof, and all ceilings over indirect radiators shall, except under fireproof floors, be metal lathed and plastered.

All hot-air register boxes in the floors or partitions of buildings shall be set in soapstone or equally fireproof borders not less than two inches in width, shall be made of tin plate, and shall have double pipes and boxes properly fitted to the soapstone. Hot-air pipes and register boxes shall be at least one inch from any woodwork, and register boxes shall be fifteen inches by twenty-five inches, or larger, and their connecting pipes shall be two inches from any woodwork. If indirect hot water or indirect steam heat is used, the commissioner may modify or dispense with the foregoing requirements.

All vent or smoke pipes for stoves, furnaces or heaters, not including gas stoves, hereafter installed, shall be placed not nearer than twelve inches to any lath, plaster or board partition, ceiling or woodwork. Where such pipes pass through a lath and plaster or board partition, they shall be protected by ventilated metal collars at least six inches larger in diameter than the pipe. Where such pipes enter the chimney, the opening into the same shall be protected by a metal collar built at least four inches into the brickwork of the chimney. No such pipe shall pass through the roof or exterior wall of any building. Such pipes, when within eighteen inches of a ceiling, shall be protected by having the ceiling over them, and at least two feet wide, wire-lathed and plastered, or by having a shield of metal of the same width hung from the floor timbers, and at least six inches distant therefrom. Vent pipes to gas stoves, if placed nearer than three inches to any woodwork or lath and plaster partition, shall be protected with incombustible material.

[1914, c. 782, sect. 5.]

Fireproof Partitions.

SECT. 33. Partitions in buildings of first class construction shall be constructed of plastering applied to metal lathing, or to plaster boards, or to hollow blocks composed of cement, plaster, or terra-cotta. When block construction is used it shall be self-supporting above all openings, thoroughly bonded and set in Portland cement. The blocks shall start from the floor and shall be continuous to the floor above, except that in the upper

story, where there is a space between the ceiling of the top story and the roof, these partitions need not extend above the ceiling. If plastered on both sides the blocks shall be not less than four inches thick up to a height of fifteen feet, and shall be increased one inch for every additional eight feet or fraction thereof. The thickness of webs shall be not less than three fourths of an inch.

If partitions are not plastered on both sides, the thickness of blocks shall be one inch greater than as specified above.

Timbers in Walls of Second Class Buildings.

SECT. 34. The ends of all wooden floor or roof beams in second class buildings shall enter the wall to a depth of at least four inches. When the wall is eight inches thick it shall be corbelled or the beams shall be hung in metal hangers; and the ends of all such beams shall so be shaped or arranged that in case of fire they may fall without injury to the wall.

Alteration of Existing Buildings.

SECT. 35. Any building, except those of third class construction within the building limits, having not more than five floors above the mean grade of all the sidewalks, may be altered, remodelled or enlarged for use as a house for habitation using second class construction.

The first story or basement, or both the first story and basement, in such buildings may be used for mercantile purposes, provided that the walls and ceilings surrounding the area so used shall be fire-stopped to the satisfaction of the commissioner.

The height of any such building shall not be increased unless the walls and foundations conform to the provisions of this act. The number of stories of such a building shall not exceed five above the cellar or basement.

Every such building, more than thirty-three feet in height, so altered, remodelled or enlarged, shall be provided with at least two independent exits satisfactory to the commissioner.

Every such building, so altered, remodelled or enlarged, shall have, in addition to the exposure on the widest street, an exposure as long as the average width of the building, upon a space open from the ground to the sky, at least ten feet wide for the first three stories, and increasing in width five feet for the next two stories. If the proposed building is more than five stories in height, said space shall be twenty feet: provided, that if the basement and first story are adapted or enlarged for use for mercantile purposes, the exposure required by this section shall not apply to that part of the building; and provided, also, that sufficient space be retained on the lot for the storage of ashes or garbage.

Such exposure may be either upon private or public ways, or upon land which is dedicated for the use of the building, and may be divided and placed as approved by the building commissioner.

These spaces shall remain undiminished so long as the building is used for habitation.

If the building is situated on the corner of streets or private ways not less than ten feet wide the commissioner may approve the omission of the whole or part of this additional exposure.

If in the opinion of the commissioner the alteration proposed to be made in a building is of such extent as, when done, to produce a practically new structure or to impair the stability or increase the fire risk of the structure as a whole, then the whole structure shall be made to conform to the provisions of this act for a new structure of the same class. A building damaged by fire or other casualty may be repaired or restored so as to conform to its original condition, or may be reconstructed in some

or all of its parts, so as to conform to the requirements of this act for new buildings, as the commissioner may specify in his permit.

Every living room in a building adapted for habitation shall have a window on the open air of an area not less than ten square feet and distant in a three story building not less than six feet from any opposite wall; distant in a four story building not less than eight feet from any opposite wall; distant in a five story building not less than ten feet from any opposite wall. This shall not apply to the construction of third class buildings, except the provision for a window on the open air of an area.

The exposure required under this section shall apply to all buildings hereafter constructed adapted for habitation, except as is otherwise provided for tenement houses.

Floors - Loads.

SECT. 36. All new or renewed floors and stairs shall be so constructed as to carry safely the weight to which the proposed use of the building may subject them, and every permit granted shall state for what purpose the building is designed to be used; but the least capacity per superficial square foot, exclusive of materials, shall be:—

For floors of houses for habitation, fifty pounds.

For office floors and for public rooms of hotels and houses exceeding five hundred square feet, one hundred pounds.

For floors of retail stores and public buildings, except schoolhouses, or for light manufacturing, one hundred and twenty-five pounds.

For floors of schoolhouses, other than floors of assembly rooms, sixty pounds, and for floors of assembly rooms, one hundred and twenty-five pounds.

For floors of drill rooms, dance halls and riding schools, two hundred pounds.

For floors of warehouses and mercantile buildings, at least two hundred and fifty pounds.

For flat roofs, forty pounds.

For stairs, landings, platforms and fire escapes, seventy pounds.

The loads not included in this classification shall be determined by the commissioner.

The full floor load specified in this section shall be included in proportioning all parts of buildings designed for warehouses, or for heavy mercantile and manufacturing purposes. In other buildings, however, reductions may be allowed, as follows: for girders carrying more than one hundred square feet of floor, the live load may be reduced ten per cent. For columns, piers, walls and other parts carrying two floors, a reduction of fifteen per cent of the total live load may be made; where three floors are carried, the total live load may be reduced by twenty per cent; four floors, twenty-five per cent; five floors, thirty per cent; six floors, thirty-five per cent; seven floors, forty per cent; eight floors, forty-five per cent; nine or more floors, fifty per cent.

The commissioner may prescribe the maximum loads which may be imposed upon the floors of existing buildings.

No use or occupation of a building for a purpose other than that for which it is designed to be used, as set forth in the permit upon which it was erected, and no change in the use or occupation of a building which will increase the floor load beyond the capacity prescribed for such use and occupation shall be made unless upon application therefor the commissioner shall issue a permit on condition that the proposed use will not endanger the safety of the building or the health or safety of the occupants thereof.

[1914, c. 595, sect. 1.]

Shutters.

SECT. 37. In all first or second class mercantile or manufacturing buildings over thirty feet in height, out-

side openings in party walls, or in any rear or side wall within twenty feet of an opposite wall or building, shall have metal frames and sashes and shall be glazed with wire glass or shall be protected by shutters. Such shutters shall be covered on both sides with tin or shall be made of other substantial fireproof material, and hung on the outside, either upon independent metal frames or upon metal hinges attached to the masonry, and shall be made to be handled from the outside, and one such shutter in each room shall have a protected hand-hole eight inches in diameter.

Elevators.

Sect. 38. Elevators and hoists for freight which do not run above the first story may be constructed without fireproof enclosures. Freight and passenger elevators may be placed in areas or hallways where the same are continuous and unbroken, such elevators to be protected by metal grille. Except as above provided, all shafts for elevators, hoists, dumb-waiters, lifts, light and ventilating shafts or other air ducts shall be constructed of fireproof material. The tops of all such shafts shall be covered with fireproof material unless the shaft extends above the upper floor of the building, and in that case the shaft shall be carried at least three feet above the roof and shall be covered with a skylight. Such shafts, if for freight or passenger elevators, shall be of brick at least eight inches thick, or of metal covered on both sides with at least one inch of plaster applied immediately to the metal, or with some other equally substantial fireproof material.

Every opening into a shaft or hoistway shall be protected by self-closing gates, rails, trap-doors, or other equivalent devices.

Every elevator shall be provided with a safety attachment to prevent the falling of the car. The machinery over the elevator shall have underneath it a grille sufficient to protect the car from falling material.

Every opening into an elevator shaft or hoistway and every opening through a floor, other than a stairway, shall be closed when not in use.

All elevator shaft openings, other than openings into passenger elevator shafts, shall be furnished with metal covered or incombustible doors, hung in a manner satisfactory to the commissioner, and shall be provided with iron thresholds. Wire glass panels may be used in such doors. Outside windows or openings of every elevator shaft shall have three vertical iron rods, painted red, equally spaced off in such window or opening.

Freight elevators shall be equipped with a suitable danger signal to warn people of the approach of the elevator.

The space between the car and door of each landing shall be not more than two inches.

No elevator shall be used in any building until the same is approved in writing by the commissioner.

In case any freight or passenger elevator is not constructed or furnished in compliance with this act, or has become unsafe, the commissioner shall post a conspicuous warning and prohibition at each entrance to such elevator. It shall thereafter, until a new written permit is given by the commissioner, be a penal offence hereunder to operate the said elevator, or to remove or deface the said notice.

Freight elevator wells hereafter built on the line of the external wall of a building shall be so constructed that there shall be no recess in the outer wall along the whole line of the same, and that no more than four inches space shall be allowed between the platform of the car and the outer wall. The side of the platform and the line of the doorway shall be flush with the well-way, and the door openings from the said elevator well into the building shall be placed at least six inches back from the face of the well, so as to allow space enough for self-closing gates to operate between the door and the well opening. Outside openings to freight

elevators shall be protected by self-closing slatted gates, "vertical," with spaces not wider than two inches between the slats.

All elevators running at a speed of more than one hundred feet a minute, shall be operated by competent persons not less than eighteen years of age, and no other person shall operate or have the care or charge of such an elevator.

No elevator shall be operated by or placed in charge of any person under sixteen years of age.

No elevator shall hereafter be installed in any building without a permit having been granted therefor, and the applicant shall submit a plan showing the proposed location of the shaftway, the area and situation of the machine room, and the said plan shall be filed as part of the records of the department. All elevators hereafter installed shall be located so as to give easy and safe access to all the principal parts of the machinery for inspection and repairs.

All passenger elevators hereafter built operated by drum and cables, shall have an overspeed governor to prevent the car from descending at overspeed, and all passenger and freight elevators shall have a slack cable device to stop the machinery in case the car is held up or the cables part.

If any accident shall occur to any elevator affecting life or limb or damaging any part of the machinery or running parts of the elevator, it shall be the duty of the engineer or superintendent in charge immediately, before any repairs are made, or any broken pieces are removed, to notify the commissioner of the accident, before the elevator is operated again, so that the cause of the accident may be determined, any faulty construction remedied, and satisfactory repairs made.

All elevator cables hereafter installed that pass through bevelled sockets, the ends returning and refitting into the same, shall have in addition lead or babbitt metal poured into the ends of the socket, to prevent the possibility of the cable's slipping.

All manufacturers of elevators shall be required to test, in the presence of an inspector, the safety devices of every elevator installed before the same is turned over to the owners for use, and the commissioner shall be notified by the manufacturer at least twenty-four hours before such test is made. An inspector may require a test of the safety device of any elevator if in his judgment the same is required.

The commissioner may require additional safeguards on elevators, if in his judgment the condition, use or surroundings of the elevator demand them.

The commissioner may, with the approval of the mayor, appoint competent elevator inspectors in addition to those already detailed, one for every one thousand elevators and hoistways in the city of Boston.

Wooden Buildings.

SECT. 39. Every wooden building hereafter erected or enlarged, outside of the building limits, shall have a foundation of rubble, block granite or brick or concrete, carried up to the surface of the ground, and no round or boulder stone shall be used. Every such foundation, if of brick or concrete, shall be at least twelve inches thick, and if of granite shall be at least eighteen inches thick, and if of rubble shall be at least twenty inches thick, and shall be laid at least four feet below any surface exposed to frost and upon the solid ground or upon piles properly spaced.

- Every such wooden building hereafter erected or enlarged, the sills of which do not rest directly upon a foundation as above described but on an underpinning, shall have such underpinning made of brick, stone or concrete, and the underpinning, if of brick or concrete, shall be at least twelve inches thick, and if of stone shall be at least sixteen inches thick.

Every wooden building hereafter erected on soft or marshy land and used for a workshop or other like purpose, or as a temporary structure, may, if the commissioner approves, rest upon mud sills or blocks or on piles.

Every wooden building hereafter erected or enlarged shall have all its parts of sufficient strength to carry the weight of the superstructure, shall be built with sills, posts, girts, studs and plates properly framed, mortised, tenoned, braced and pinned in each story. The posts and girts shall be not less than four inches by six inches in cross section, and the studs shall be not more than twenty inches on centres, and no ledger board shall be used in any structure.

[1914, c. 782, sect. 7.]

Sect. 40. No wooden building hereafter erected, to be used as a habitation, shall be more than three stories nor more than forty feet in height above the first floor line; nor shall any part of such a building, eaves and cornices excepted, which is to be occupied by three or more families be placed nearer than five feet from any adjoining lot lines, and if built on land of the same owner it shall not be nearer than ten feet from any other building; nor shall any part of such wooden building, which is to be occupied by less than three families and is less than three stories in height, be nearer than five feet from the line of any adjoining lot; nor shall any lot line be moved nearer than five feet from any wooden building, or, if built on land of the same owner, nearer than ten feet from any other building, eaves and cornices excepted, unless in either case the wall on the side toward such lot or adjoining building is constructed as a brick or concrete wall not less than

eight inches thick and carried twelve inches above the roof, all openings therein to be protected by wire glass set in metal frames and sash. Wooden buildings hereafter constructed to form a block of two or more houses shall have brick or concrete party walls between adjoining houses, which shall be not less than eight inches thick, shall be carried twelve inches above the roof and shall be capped with a metallic covering.

No wooden building hereafter erected to be used in whole or in part as a habitation shall exceed twenty-two hundred square feet in area, and no such existing building shall be enlarged to exceed twenty-two hundred square feet in area. No wooden building hereafter erected to be used for purposes other than habitation shall exceed forty feet in height above the first floor line, and no such building, except buildings erected for the purpose of storing ice, which shall not be erected within five hundred feet of any other building, shall exceed twenty-two hundred feet in area unless the external parts are covered with incombustible material approved by the commissioner, and no such building shall exceed five thousand square feet in area in any event: provided, however, that nothing in this section shall be construed to affect the provisions of section nine of this act; and no such existing building shall be altered or enlarged to exceed forty feet in height above the first floor line or twenty-two hundred square feet in area, unless the external parts of the whole building are covered with incombustible material approved by the commissioner, or to exceed five thousand square feet in area in any event.

Wooden buildings erected for purposes other than habitation shall not be situated within five feet of the line of the lot unless the side wall on such line or lines be of brick or concrete, carried above the roof at least twelve inches and capped with a metallic covering. All

openings in such outer walls shall be protected by wire glass set in metal frames and sash.

[1913, c. 704, sect. 2; 1914, c. 248, sect. 1; 1914, c. 782, sect. 8.]

Flooring during Construction.

Sect. 41. If, in the erection of an iron or steel frame building, the spaces between the girders or floor beams of a floor are not filled and covered by the permanent construction of such floors before another story is added to the building, a close plank flooring shall be placed and maintained over such spaces during construction. If and when such flooring cannot be used without serious interference with the work of construction, such provision shall be made to protect the workmen from falling materials as will be satisfactory to the commissioner.

Additional Requirements for Tenement Houses.

Definitions.

Sect. 42. Certain words are defined as follows:—

(1.) A tenement house is any house, building, structure or portion thereof, occupied, or adapted for occupation, as a dwelling by more than three families living independently of one another and doing their cooking upon the premises, or by more than two families above the first story so living and cooking. A family living in a tenement house may consist of one or more persons.

An existing tenement house is any building erected as such or converted to such use or as altered for such use or so used before the passage of this act, and any building adapted for such use, provided that a permit was issued for the erection of said building before the passage of this act.

A tenement house hereafter erected is any tenement house other than an existing tenement house as above defined.

- (2.) A corner lot is a lot situated at the junction of two or more streets, or of two or more streets and alleys or open passageways not less than fifteen feet in width.
- (3.) A yard is an open unoccupied space on the same lot with a building and between the extreme rear line of said building and the rear line of the lot.
- (4.) A court is an open unoccupied space other than a yard on the same lot with a building. An inner court is a court not extending to a street, or alley, or open passageway, or yard. An outer court is a court extending to a street, or alley, or open passageway, or yard. A vent court is an inner court for the lighting and ventilation of water-closets, bathrooms, public halls, and stair halls only. An intake is a passageway connecting an inner court with a street, or alley, or open passageway, or yard.
- (5.) A shaft, whether for air, light, elevator, dumb-waiter, or any other purpose, is an enclosed space within a building, extending to the roof, and covered either by a skylight or by the roof. A vent shaft is a shaft used solely to ventilate or light water-closet compartments or bathrooms.
- (6.) A public hall is a hall, corridor, or passageway not within an apartment.
- (7.) A stair hall includes the stairs, stair landings, and those parts of the public hall through which it is necessary to pass in going from the entrance floor to the roof.
- (8.) An apartment is a room, or suite of two or more rooms, occupied or suitable for occupation, as a residence for one family.
- (9.) Repairs means any renewal of any existing part of a building, or of its fixtures or appurtenances, which does not lessen the strength of the building.

Fire-escapes.

SECT. 43. In all tenement houses hereafter erected more than three stories in height, and in every building

hereafter enlarged and occupied or to be occupied as a tenement house, more than three stories in height, there shall be provided one of the following means of egress in addition to the main and rear staircases; but if the first named means of egress is provided it may be considered as a rear staircase and no means of egress other than this and the main staircase need be provided:

- (1.) An enclosed stairway consisting of iron or reinforced concrete stairs, and stair landings, each not less than three feet in width in the clear, surmounted by a pent house not less than eight feet high. The stairway shall extend from the roof to the level of the ground, and shall open into either a street or passageway leading to a street; the said stairway shall be lighted to the satisfaction of the building commissioner and enclosed in walls of brick, stone, terra-cotta or concrete, and said walls may be within or without the line of the main wall of the building, but access to said stairway shall be only by doors through an external wall to balconies leading to the same, except at the roof where access to said stairway may be directly from the roof.
- (2.) Iron balconies connecting with adjoining buildings or with adjoining parts of the same house separated from each other by a brick, terra-cotta or concrete partition wall in which there are no openings except such as are protected with fireproof self-closing doors, and every suite above the first floor, shall have direct access to at least two means of egress, one of which shall be an enclosed stairway. The said balconies shall be not less than thirty inches wide and capable of sustaining a load of seventy pounds per square foot; railings shall be of iron, stone, terra-cotta or concrete, and three feet high, or higher if in the opinion of the commissioner a greater height is required for safety.
- (3.) Exterior fire escapes of iron with iron grated floors, and capable of bearing a load of seventy pounds

per square foot. The stair treads shall be of iron, and the pitch of the stairs shall not exceed sixty degrees.

Balconies shall be at least three feet four inches wide, and the stairs at least twenty inches wide. There shall be a landing at the foot of each flight, and at the level of the second floor there shall be cantilever ladders. The rails on all horizontal balconies and on the stairs shall be at least two feet ten inches high at all points.

[1914, c. 782, sect. 9.]

Bulkheads and Scuttles.

SECT. 44. Every tenement house of the first or second class hereafter erected shall have in the roof a fireproof bulkhead with a fireproof door to the same, and shall have fireproof stairs with a guide or hand rail leading to the roof, except that in such tenement houses which do not exceed sixty-five feet in height, such bulkheads may be of wood covered with metal on the outside and plastered on metal lathing on the inside; provided that the door shall be covered with metal on both sides.

Every other tenement house shall have in the roof a bulkhead or scuttle. No scuttle shall be less in size than two feet by three feet, and all scuttles shall be covered on the outside with metal, and shall be provided with stairs or stationary ladders leading thereto and easily accessible to all tenants of the building, and kept free from encumbrance, and all scuttles and ladders shall be kept so as to be ready for use at all times. No scuttle shall be situated in a closet or room, but all scuttles shall be in the ceiling of the public hall on the top floor, and access through the scuttle to the roof shall be direct and uninterrupted. Scuttles shall be hinged so as to readily open. Every bulkhead hereafter constructed in a tenement house shall be constructed as provided for tenement houses hereafter erected and shall have stairs with a guide or hand rail

leading to the roof, and such stairs shall be kept free from encumbrance at all times. No lock shall be placed on any scuttle or bulkhead door, but either may be fastened on the inside by movable bolts or hooks. All key-locks on scuttles and on bulkhead doors shall be removed. No stairway leading to the roof in a tenement house shall be removed.

SECT. 45. Every tenement house hereafter erected shall have a main staircase of fireproof material, extending from the entrance floor to the roof, and with a pent house constructed of incombustible material. The said staircase shall not extend below the entrance floor level and shall be enclosed in brick, terra-cotta or concrete walls, or by two-inch solid metal and plaster partitions. All door openings into suites shall have metal covered self-closing doors and metal covered frames. Public halls therein shall each be at least three feet wide in the clear, and stairs shall be at least three feet wide between the wall and the stair rail.

Each stairway shall have an entrance on the entrance floor from a street or alley or open passageway or from an outer court, or from an inner court which connects directly with a street or alley or open passageway. All stairs shall be constructed with a rise of not more than eight inches, and with treads not less than nine inches wide and not less than three feet long in the clear. Where winders are used all treads at a point eighteen inches from the strings on the wall side shall be at least ten inches wide.

In every tenement house all stairways shall be provided with proper balusters and railings kept in good repair. No public hall or stairs in a tenement house shall be reduced in width so as to be less than the minimum width prescribed in this section.

Public halls, stairs, elevator, light and ventilating

shafts and basements in all tenement houses hereafter erected more than three stories in height and having more than eight suites, and the basements of all such existing tenement houses shall be provided with a system of automatic sprinklers approved as to location, arrangement and efficiency by the building commissioner.

Public halls and stairs in all tenement houses now existing or hereafter erected more than three stories in height, and having more than eight suites, shall be provided with proper and sufficient lights to be kept lighted during the night.

In every existing tenement house, and in every tenement house hereafter erected more than three stories in height, and having more than eight suites, all elevators, vent and dumb-waiter shafts, shall be enclosed in the basement in masonry walls not less than eight inches thick, or with two inch solid metal and plaster partitions, with a fireproof self-closing door; and if in any such building a stairway leads from the first floor to the basement, such stairway shall be inclosed in masonry walls not less than eight inches thick, or with two inch solid metal and plaster partitions, and shall lead directly into a passageway inclosed in masonry walls of the same thickness, which passageway shall be not less than four feet wide and may have one fireproof self-closing door leading into the basement from said passageway, and shall connect with a street, alley or outer court through a self-closing door not less than three feet wide.

[1914, c. 782, sect. 10.]

Stair Halls, Construction of.

SECT. 46. In tenement houses hereafter erected which do not exceed five stories above the cellar or basement or sixty-five feet in height the stair halls shall either be constructed with iron beams and fireproof filling or shall be

filled in between the floor beams with at least five inches of cement deafening. In such houses the stairs may be of wood, provided that the soffits are covered with metal laths and plastered with two coats of mortar, or with good quality plaster-boards not less than one half inch in thickness made of plaster and strong fibre, and all joints made true and well pointed, and provided that such stairs are furnished with firestops.

Stair Halls, how Enclosed.

SECT. 47. In second class and third class tenement houses hereafter erected, the stair halls may be enclosed with wooden stud partitions, if such partitions are covered on both sides with metal laths or with good quality plaster-boards not less than one half inch in thickness, made of plaster and strong fibre, and all joints made true and well pointed, and provided that the space between the studs is filled in with brick and mortar or other incombustible material to the height of the floor beams.

Entrance Halls.

Sect. 48. Every entrance hall in every tenement house hereafter erected shall be at least three feet six inches wide in the clear, from the entrance up to and including the stair enclosure, and beyond this point at least three feet wide in the clear, and shall comply with all the conditions of the preceding sections of this act as to the construction of stair halls, except that in a fireproof tenement house hereafter erected the entrance hall may be enclosed with terra-cotta blocks not less than four inches thick and angle-iron construction, instead of brick walls. If such entrance hall is the only entrance to more than one stairway, that portion of said hall between the entrance and the stairway shall be increased at least eighteen inches in width in every part for each additional stairway.

Cellar Ceilings.

SECT. 49. In all tenement houses of the second or third class hereafter erected, the cellar and basement ceilings shall be lathed with metal laths and plastered.

Partitions, Construction of.

SECT. 50. In all tenement houses of the second or third class hereafter erected all stud partitions which rest directly over each other shall run through the wooden floor beams and rest upon the cap of the partition below, and shall have the studding filled in solid between the uprights to the depth of the floor beams with suitable materials.

Wooden Tenement Houses.

SECT. 51. Outside of the building limits, tenement houses not exceeding three stories in height above the basement, nor eighteen hundred square feet in area, may be erected of wood. No wooden tenement house shall be increased in height so as to exceed three stories above the basement or cellar.

Shafts.

SECT. 52. All elevator or dumb-waiter shafts hereafter constructed in any tenement house shall be fireproof throughout, with self-closing doors at all openings at each story. But nothing in this section shall be so construed as to require enclosures about elevators or dumb-waiters in the well-hole of stairs where the stairs themselves are enclosed in walls of incombustible materials, and are entirely constructed of fireproof materials as hereinbefore provided. Every vent shaft hereafter constructed in any tenement house shall have an intake of at least the dimensions provided for vent courts in section sixty-one, and shall be of the same minimum dimensions; and the skylight covering such vent shaft

shall be raised at all points at least one foot above the top of the walls of such vent shaft, and the space between the top of said walls and the skylight shall remain at all points open and unobstructed except for such supports essential to the stability of the skylight, as may be approved by the commissioner.

Bakeries and Fat Boiling.

SECT. 53. No bakery and no place of business in which fat is boiled shall be maintained in any tenement house which is not fireproof throughout, unless the ceiling and side walls of said bakery or of the said place where fat boiling is done are made safe by fireproof materials around the same, and there shall be no openings either by door or window, dumb-waiter shafts or otherwise, between said bakery or said place where fat is boiled in any tenement house and the other parts of the building.

Other Dangerous Businesses.

SECT. 54. All transoms and windows opening into halls from any part of a tenement house where paint, oil, spirituous liquors or drugs are stored for the purpose of sale or otherwise shall be glazed with wire-glass, or they shall be removed and closed up as solidly as the rest of the wall. There shall be between any such hall and such part of said tenement house a fireproof self-closing door.

LIGHT AND VENTILATION.

Yards.

Sect. 55. The requirements for yards hereinafter provided shall be deemed sufficient for all tenement houses.

Except in those cases hereinafter provided for, there shall be, behind every tenement house hereafter erected, a yard extending across the entire width of the lot, and

at every point open from the ground to the sky unobstructed, except by fire-escapes or unenclosed outside stairs.

The depth of said yard shall be measured from the extreme rear wall of the house to the rear line of the lot, and at right angles to said line, except that where there is an alley or open passageway in the rear of the lot the depth of the yard may be measured to the middle of said alley or open passageway. On an irregular lot of several depths, where there is more than one rear line to the lot, such yard may extend across the entire width of the lot in sections, provided that each section of the yard is in every part and at every point of the minimum depth hereinafter prescribed. Where the side lines of a lot converge toward the rear, the depth of the yard shall be such as to give it an area equal to the greatest width of the yard multiplied by the depth hereinafter prescribed.

Except on a corner lot, the depth of the yard behind every tenement house hereafter erected fifty feet in height or less shall be not less than twelve feet in every part. All yards without exception shall be increased in depth at least one foot for every additional ten feet of height of the building, or fraction thereof, above fifty feet.

Except as hereinafter otherwise provided, the depth of the yard behind every tenement house hereafter erected upon a corner lot shall not be less than six feet in every part. But where such corner lot is more than twentyfive feet in width, the depth of the yard for that portion in excess of twenty-five feet shall be not less than twelve feet in every part, and shall increase in depth as above provided.

Whenever a tenement house is hereafter erected upon a lot which runs through from street to street, or from a street to an alley or open passageway, and said lot is one hundred and fifty feet or more in depth, said yard space shall be left midway between the two streets, and shall extend across the entire width of the lot, and shall be not less than twenty-four feet in depth from wall to wall, and shall be increased in depth at least two feet for every additional ten feet in height of the building, or fraction thereof, above fifty feet.

When a tenement house hereafter erected does not front upon a street, a public alley, or a passageway, not less than fifteen feet wide, the requirements in this section as to yards shall apply to the front of such tenement house as well as to the rear. Neither the yard behind one tenement house nor any part thereof shall be deemed to satisfy in whole or in part the requirement of a yard in front of another tenement house.

Cases in which no Yard shall be required.

Sect. 56. No yard shall be required behind a tenement house hereafter erected upon a lot which abuts at the rear upon a railroad right of way, a cemetery or a public park.

No yard shall be required behind a tenement house hereafter erected upon a lot entirely surrounded by streets or by streets, alleys or open passageways, not less than fifteen feet in width, or by such streets, alleys, and passageways and a railroad right of way, a cemetery or a public park.

No yard shall be required behind a tenement house hereafter erected upon a lot less than one hundred and fifty feet deep and running through from street to street or from a street to an alley or open passageway not less than fifteen feet in width, or upon a corner lot adjoining a lot less than one hundred and fifty feet deep and running through from street to street, or from a street to such an alley or open passageway.

No yard shall be required behind a tenement house hereafter erected upon a corner lot adjoining a lot more than one hundred and fifty feet deep and running through from street to street or from a street to an alley or open passageway not less than fifteen feet in width; but if there be no yard, an outer court upon such corner lot shall extend from the street along the line of such adjoining lot to a point in line with the middle line of the block; the width of said court to be not less than the width of court prescribed in the ensuing paragraph.

No yard shall be required behind a tenement house hereafter erected upon a corner lot adjoining two or more lots any one of which bounds upon a single street, or alley, or open passageway not less than fifteen feet in width; but if there be no yard an outer court upon such corner lot shall extend from the street, or from such alley or open passageway along a lot line either to the extreme rear of an adjoining lot or to the extreme rear of said corner lot: provided, that the width of said court measured from the lot line to the opposite wall of the building, for tenement houses fifty feet or less in height, shall be not less than six feet in every part, and for every additional ten feet of height of the tenement house shall be increased one foot throughout the whole length of said court.

Courts.

SECT. 57. No court of a tenement house hereafter erected shall be covered by a roof or skylight, but every such court shall be at every point open to the sky unobstructed. Except such courts as are provided for in section fifty-six, all courts, except for fire-escapes, may start at the second tier of beams.

Outer Courts.

Sect. 58. The provisions of this section shall apply only to tenement houses hereafter erected. Where one side of an outer court is located on the lot line, the width of the said court, measured from the lot line to the opposite wall of the building, for tenement houses fifty feet or less

in height shall not be less than six feet in every part; and for every ten feet of increase or fraction thereof in height of such tenement houses, such width shall be increased one foot throughout the whole length of the court, and except where the court runs through from the yard to the street, said width shall never be less than one eighth of the length of the court.

Where an outer court is located between wings or parts of the same building, or between different buildings on the same lot, the width of the court, measured from wall to wall, for tenement houses fifty feet or less in height shall not be less than twelve feet in every part, and for every ten feet of increase or fraction thereof in the height of the said building, such width shall be increased two feet throughout the whole length of the court. The depth of such courts shall never exceed four times their width.

Wherever an outer court changes its initial horizontal direction, or wherever any part of such court extends in a direction so as not to receive direct light from the street or yard, or from an alley, or open passageway not less than fifteen feet in width, the length of that part of the court shall never exceed its width, such length to be measured from the point at which the change of direction begins. Wherever an outer court between parts of the same building is twelve feet or less in depth, its width may be one half its depth, provided that such width is never less than four feet in the clear. This exception shall also apply to every offset or recess in outer courts. And no window except windows of water-closet compartments, bathrooms, or halls shall open upon any offset or recess less than four feet in width.

Inner. Courts.

Sect. 59. The provisions of this section shall apply only to tenement houses hereafter erected. Where one side of an inner court is located on the lot line and the

building does not exceed fifty feet in height, the least width of the court shall be not less than eight feet, and the area of the court shall be not less than one hundred and twenty-eight square feet. For every ten feet or fraction thereof of increase in the height of the building above fifty feet the minimum width of such inner courts shall be increased by one foot, and the area thereof shall never be less than twice the square of such minimum width. Where an inner court is not located on the lot line, but is enclosed on all four sides, and the building does not exceed fifty feet in height, the least width of said court shall be not less than sixteen feet and the area not less than two hundred and fifty-six square feet. For every ten feet, or fraction thereof, of increase in the height of said building above fifty feet, the minimum width of such inner courts shall be increased by two feet, and the area of the court shall never be less than the square of such minimum dimension.

Vent Courts.

SECT. 60. Inner courts used solely for the lighting and ventilation of water-closets, bathrooms, public halls, or stair halls, or for interior fire-escapes, may be constructed in any tenement house, and shall be not less than fifteen square feet in area, nor less than three feet in the least horizontal dimension for buildings fifty feet or less in height. For every increase of the feet or fraction thereof in the height of such buildings the least dimension shall be increased by one foot, and the area by not less than eight square feet.

Intakes.

SECT. 61. Every inner court in a tenement house hereafter erected shall be provided with one or more horizontal intakes at the bottom. Such intakes, in vent courts, shall be not less than four square feet in area, so arranged as to be easily cleaned; in other inner courts they

shall be not less than three feet wide and seven feet high, and there shall be at least two open grille doors, containing not less than fifteen square feet of unobstructed openings, one at the inner court and the other at the street or yard as the case may be.

Nothing contained in the foregoing sections concerning outer and inner courts shall be construed as prohibiting windows in walls that cut off the angles of such courts, provided that the running length of the walls containing such windows does not exceed six feet.

Buildings on the Same Lot with Tenement Houses.

SECT. 62. No tenement house shall hereafter be so enlarged or its lot so diminished, and no building of any kind shall be hereafter so placed upon the same lot with a tenement house, as to decrease the minimum depth of yards or the minimum size of courts or yards prescribed in this act for tenement houses hereafter erected.

Rooms, Lighting and Ventilation of.

SECT. 63. In every tenement house hereafter erected there shall be in each room, except water-closet compartments and bathrooms, windows of a total area of at least one eighth of the floor area of the room, opening directly on a street or public alley or open passageway not less than fifteen feet wide or upon a yard or court of the dimensions hereinbefore specified, or upon a railroad right of way, cemetery or public park; and such windows shall be located so as properly to light all parts of the room. The top of at least one window shall be not less than eight feet above the floor, and the upper half of it shall be made so as to open the full width.

Every alcove in every tenement house hereafter erected shall be provided with an opening into a room, such opening to be equal in area to eighty per cent of that side of the alcove in which the opening is located; and the alcove shall have at least one window of not less than fifteen square feet of glazed surface opening as provided in this section.

Rooms, Size of.

SECT. 64. In every tenement house hereafter erected all rooms, except water-closet compartments and bathrooms, shall be of the following minimum sizes: In each apartment there shall be at least one room containing not less than one hundred and twenty square feet of floor area and provided with a chimney flue and thimble, except where said room is furnished with heat from a central heating apparatus, and every other room shall contain at least ninety square feet of floor area. Each room shall be in every part not less than eight and one half feet high from the finished floor to the finished ceiling; provided that only one half of an attic room need be eight and one half feet high.

No portion of a room in any such tenement house shall be partitioned off so as to form a room not conforming to the provisions of sections sixty-three and sixty-four, or so as to form an alcove not conforming to sections sixtythree and seventy.

Public Halls.

SECT. 65. Except as otherwise previded in section sixty-six, in every tenement house hereafter erected, every public hall shall have at least one window opening directly upon a street, a public alley or open passageway not less than ten feet in width, a railroad right of way, a cemetery or a public park, or upon a yard or court or a vent court as provided in section sixty. Either such window shall be at the end of said hall, with the plane of the window substantially at right angles to the axis of the hall, or there shall be at least one window opening as above prescribed in every twenty feet in length or fraction thereof of the hall; but this provision for one win-

dow in every twenty feet of hall-way shall not apply to that part of the entrance hall between the entrance and the first flight of stairs, provided that the entrance door contains not less than five square feet of glazed surface. At least one of the windows provided to light each public hall shall be at least two feet six inches wide and five feet high, measured between the stop beads.

Any part of a hall which is shut off from any other part of said hall by a door or doors shall be deemed a separate hall within the meaning of this section.

Windows for Stair Halls, Size of.

Sect. 66. In every tenement house hereafter erected the aggregate area of windows to light or ventilate stair halls on each floor shall be at least fifteen square feet: provided, however, that when there shall be, within the space enclosed by the stairway and its landings, from the second story upward, an open area for light and ventilation whose least horizontal dimension shall be equal to the width of the stairs, but in no case less than three feet, then the windows required in sections sixty-five and sixty-six may be omitted.

There shall be in the roof, directly over each stair well, in all tenement houses hereafter erected, without windows as above provided, a ventilating skylight provided with ridge ventilators, having a minimum opening of forty square inches, or else such skylight shall be provided with fixed or movable louvres. The glazed roof of the skylight shall not be less than twenty square feet in area.

Privacy.

SECT. 67. In every apartment of four or more rooms in a tenement house hereafter erected, at least one water-closet compartment shall be accessible without passing through any bedroom.

Basements and Cellars in Tenement Houses and other Buildings.

SECT. 68. In tenement houses hereafter erected no room in the basement or cellar shall be occupied for living purposes, unless all of the following conditions are complied with:—

- (1.) Such room shall be at least eight and one half feet high in every part from the floor to the ceiling.
- (2.) There shall be appurtenant to such room the use of a separate water-closet, constructed and arranged as required by section sixty-nine.
- (3.) Such room shall have a window or windows opening upon the street, an alley or open passageway not less than fifteen feet in width, a railroad right of way, cemetery or public park or upon a yard or court. The total area of windows in such room shall be at least one eighth of the floor area of the room, and one half of the sash shall be made to open full width, and the top of each window shall be within six inches of the ceiling.
- (4.) The floor of such room shall be damp-proof and waterproof, and all walls surrounding such room shall be damp-proof.

No room on any floor of any house or building now existing or hereafter erected, which floor is in whole or in part below the highest point of the curb of a public street or way in front and within twenty-five feet of the outside wall, and no room on any floor thereof, which floor is in whole or in part below the highest point of the ground adjacent to such building and within fifteen feet thereof, shall be occupied for sleeping purposes unless all of the following conditions are complied with:—

- (a.) Such room shall on at least one side abut on an outside wall of said building for a space of at least seven feet.
 - (b.) Such room shall have a window or windows open-

ing directly upon an open space not less than fifteen feet square, and open from the ground to the sky without obstruction; such window or windows shall have a total area of not less than ten square feet and not less than one eighth of the floor area of said room, and both halves of the sash of each window shall be made to open to their full width, and the top of each window shall be within six inches of the ceiling.

- (c.) At least sixty per cent of the area of any such room shall be above the level of the highest point of the ground within fifteen feet of the outside wall or walls of said room and in which the windows above required are situated.
- (d.) The floor of such room and all walls surrounding such room shall be damp-proof and waterproof.
- (e.) Such room shall be at least eight feet six inches in height in every part, from floor to ceiling: provided, that in tenement houses erected prior to the first day of August, nineteen hundred and seven, and in other houses and buildings erected prior to the first day of June, nineteen hundred and fourteen, it shall be sufficient if said room is seven feet in height over at least four fifths of its area.
- (f.) There shall be appurtenant to such room a watercloset, constructed and arranged as required by section sixty-nine, and used solely by the occupants of said room or by the household of which said occupants are members.
- (g.) No such room shall be occupied for sleeping purposes without a permit from the board of health, such permit to be posted in a conspicuous place in the main room of the apartment. A record of all such permits shall be kept in the office of the board of health.

[1914, c. 628, sect. 1.]

Water-closets in Tenement Houses hereafter erected.

Sect. 69. In every tenement house hereafter erected there shall be a separate water-closet in a separate com-

partment within each apartment of four or more rooms. Where apartments consist of less than four rooms there shall be at least one water-closet for every three rooms, and on the same floor with said rooms. Every such water-closet shall be placed in a compartment completely separated from every other water-closet, and such compartment shall be not less than two feet and four inches wide, and shall be enclosed with plastered partitions, or some equally substantial material, which shall extend to the ceiling. Such compartment shall have a window, opening directly, or through a straight horizontal shaft of the same dimensions as the window and not more than four feet long, upon a street, a railroad right of way, cemetery or public park or a vard or alley or open passageway not less than four feet wide, or upon a court vent or upon a covered passageway not more than twenty feet long and at least twenty feet wide, and twenty feet high. Every such window shall be at least one foot by three feet between stop beads; and the whole window shall be made so as to open readily. When, however, such watercloset compartment is located on the top floor and is lighted and ventilated by a skylight over it, no window shall be necessary, provided that the roof of such skylight contains at least three square feet of glazed surface and is arranged so as to open readily. Nothing in this section in regard to the separation of water-closet compartments from each other shall apply to a general toilet room containing several water-closets, hereafter placed in a tenement house, provided that such water-closets are supplemental to the water-closet accommodations required by law for the use of the tenants of the said house. Nothing in this section in regard to the ventilation of water-closet compartments shall apply to a water-closet hereafter placed in an existing tenement house, to replace a defective fixture in the same position and location. No water-closet shall be maintained in the cellar of any tenement house

without a permit in writing from the board of health; and said board shall have power to make rules and regulations governing the maintenance of such closets. Every water-closet compartment in any tenement house shall be provided with proper means of lighting the same at night. If fixtures for gas or electricity are not provided in such compartment, then the door of such compartment shall be provided with translucent glass panels, or with a translucent glass transom, not less in area than four square feet. The floor of every such water-closet compartment shall be made waterproof with asphalt, tile, stone or some other waterproof material; and such waterproofing shall extend at least six inches above the floor on all sides of the compartment except at the door opening, so that the floor can be washed or flushed without leaking. No drip trays shall be permitted. No water-closet fixtures shall be inclosed with any woodwork.

Lighting and Ventilation of Existing Tenement Houses.

SECT. 70. Excepting water-closet compartments and bathrooms, wherever a room in any tenement house has a window or windows of less than nine square feet of glazed surface opening on a street, a railroad right of way, cemetery, public park, alley or open passageway not less than ten feet in width, such window or windows shall be enlarged and provided with the above mentioned glazed surface, and wherever such room does not open as above provided, or opens upon an alley or open passageway less than ten feet in width or upon a shaft or upon a court less than six feet in its least dimension, then such room shall be provided with a sash window communicating with another room in the same apartment, having windows of at least the superficial area prescribed for the windows of rooms in tenement houses hereafter erected and opening on a street, a railroad right of way, cemetery, public park or alley or open passageway at least ten feet in width, or on a court or courts at least equivalent to the courts required in sections fifty-eight and fifty-nine; and such new sash window shall contain not less than fifteen square feet of glazed surface and shall be made so as to open readily. One wall of every alcove in an existing tenement house shall be provided with an opening equal in area to eighty per cent of the wall. No tenement house shall be so altered as to reduce the provisions for the light and ventilation of any room or alcove or public hall or stair hall below the requirements of this act.

Skylights.

SECT. 71. In every existing tenement house there shall be in the roof, directly over each stair well, a ventilating skylight, provided with ridge ventilators and also with fixed or movable louvres or movable sashes. But this section shall not apply to any tenement house now having windows as provided in section sixty-five or a bulkhead in the roof over the main stairs, which bulkhead is provided with windows made so as to open readily, and with not less than twelve square feet of glass in the top of the bulkhead. All skylights hereafter placed in any tenement house shall conform to the provisions of section sixty-six. All the existing dome lights or other obstructions to skylight ventilation shall be removed.

Where the public hall in an existing tenement house is not provided with windows opening as provided in section sixty-five, and where there is not a stair well as provided in section sixty-six, all doors leading from such public hall into apartments shall be provided with translucent glass panels of an area of not less than four square feet for each door; or such public hall may be lighted by a window or windows at the end thereof with the plane of the window at right angles to the axis of the hall, said window opening upon the street, a railroad right of way, cemetery,

public park, or an alley or open passageway at least ten feet in width, or upon a yard or court of the dimensions hereinbefore provided.

Water-closets in Existing Tenement Houses.

SECT. 72. In existing tenement houses the woodwork enclosing the space underneath the seat of all water-closets used in common by two or more families shall be removed and such space shall be left open. The floor or other surface beneath and around such closet shall be maintained in good order and repair, and the floors made waterproof to the satisfaction of the board of health.

Every such water-closet shall be located in a compartment completely separated from every other water-closet, and such compartment shall be ventilated to the satisfaction of the board of health. There shall be provided at least one water-closet for every three families or for every nine rooms in every existing tenement house.

Water Supply.

SECT. 73. In every tenement house hereafter erected there shall be in each apartment a proper sink with running water.

Every existing tenement house shall have water furnished in sufficient quantity at one or more places on each floor occupied by or suitable to be occupied by one or more families. The owner shall provide proper and suitable tanks, pumps or other appliances to receive and to distribute a sufficient supply of water at each floor in the said house at all times of the year, during all hours of the day and night.

The woodwork enclosing sinks located in the public halls or stairs shall be removed, and the space underneath the sinks shall be left open. The floors and wall surfaces beneath and around the sink shall be maintained in good order and repair.

Drainage of Courts and Yards.

SECT. 74. In every tenement house all courts, areas, intakes and yards shall be properly graded, drained and paved or otherwise surfaced to the satisfaction of the board of health.

Receptacles for Garbage and Ashes.

SECT. 75. The owner of every tenement house shall provide therefor suitable, covered, water-tight receptacles satisfactory to the board of health, for ashes, rubbish, garbage, refuse and other matter. No person shall place ashes, rubbish, garbage, refuse or other matter in the yards, open areas or alleys connected with, or appurtenant to, any tenement house except in suitable receptacles provided for the same.

[Repealed so far as inconsistent with 1907, c. 550, sect. 128; as amended by 1913, c. 586, sect. 1.]

Powers of the Building Commissioner.

SECT. 76. The commissioner shall not dispense with any of the requirements of sections forty-two to seventy-five, inclusive.

THEATRES.

Definition.

SECT. 77. Every building hereafter erected so as to contain an audience hall and a stage, with curtain, movable or shifting scenery, and machinery, adapted for the giving of plays, operas, spectacles or similar forms of entertainment, and of a size to provide seats for more than five hundred spectators shall be a theatre within the meaning of this act. No existing building not now used as a theatre shall be altered and used as a theatre, unless it conforms to the provisions of this act for a new theater.

Construction.

SECT. 78. Every theatre hereafter built shall be of fireproof construction throughout, except that the floor boards may be of wood, and the steel work of the stage, of the fly galleries, and of the rigging loft need not be fireproofed.

Open Courts.

SECT. 79. Every theatre built in a block not on a corner shall have an open court or passageway on both sides extending from the proscenium line to the line of the street on the front, or, in case the building abuts on a street both in front and rear, these passages may extend from the line of the front of the auditorium to the line of the rear street. These passages shall be at least six feet wide throughout their length, and shall not be closed by any locked gate or doorway. They shall immediately adjoin the auditorium, or a side passage or lobby directly connected therewith. These passages shall be open to the sky opposite the whole depth of the auditorium, but may be carried out to the street front or rear through passages enclosed by brick walls or other fireproof material equally efficient, and covered by a solid brick vault at least eight inches thick, each passage to be not less than eight feet wide and ten feet high throughout.

SECT. 80. Every theatre built upon the corner of two streets shall have one inner court on the side of the building away from the side street, such court to be of the same description as the courts provided for in the preceding paragraph.

Stores, etc.

SECT. 81. Nothing in this act shall be construed to prohibit the use of any part of a theatre building for stores, offices, or for habitation, provided that the parts so used shall be built with exits to the street entirely distinct from the rest of the building and shall be

separated from the rest of the building by solid partitions or walls, without any openings in the same.

Floor Levels.

SECT. 82. In all theatres, the entrances shall be not more than one step above the level of the sidewalk of the main street, and the stage shall be not more than five feet above the said level.

Proscenium Wall.

SECT. 83. The stage of every theatre shall be separated from the auditorium by a wall of fireproof construction, which wall shall extend the whole width of the auditorium and the whole height to the roof of the portion occupied by the stage. There shall be no openings through this wall except the curtain opening, one doorway each side behind the boxes, and one doorway which shall be located at or below the level of the stage. The doorways shall not exceed twenty-one superficial feet each, and shall have standard fire-doors hung in a manner satisfactory to the commissioner. The finish or decorative features around the curtain opening of every theatre shall be of fireproof material.

Curtain.

SECT. 84. The proscenium or curtain opening of every theatre shall have a fire resisting curtain reinforced by wire netting or otherwise strengthened. If of iron, or similar heavy material, and made to lower from the top, it shall be so arranged as to be stopped securely at a height of seven feet above the stage floor, the remaining opening being closed by a curtain or valance of fire-resisting fabric.

Stage Floor.

SECT. 85. The part of the stage floor, usually equal to the width of the proscenium opening, used in working

scenery, traps or other mechanical apparatus, may be of wood, and no flooring used thereon shall be less than one and one eighth inches in thickness.

Ventilators.

Sect. 86. There shall be one or more ventilators near the center, and above the highest part of the stage of every theatre, of a combined area of opening satisfactory to the commissioner, and not less than one tenth of the area of the undivided floor space behind the curtain at the stage floor level. The openings in every such ventilator shall be closed by valves or louvres so counterbalanced as to open automatically, which shall be kept closed, when not in use, by a fusible link and cord reaching to the prompter's desk, and readily operated therefrom. Such cord shall be of combustible material, and so arranged that if it is severed the ventilator will open automatically.

Skylight coverings for ventilators shall have sheet metal frames set with double-thick glass, each pane thereof measuring not less than three hundred square inches, or shall be protected with wire glass. If wire glass is not used, a suitable wire netting shall be placed immediately beneath the glass, but above the ventilator openings. Illuminating fixtures over the auditorium shall be suspended and secured in a manner approved by the commissioner.

Glass on illuminating fixtures over the auditorium shall be secured from danger of falling as the commissioner shall require, but in no case shall any glass more than six inches in diameter or length be hung over the auditorium unless protected from falling by a wire netting or similar device satisfactory to the commissioner.

Seats in Auditorium.

Sect. 87. All seats in the auditorium excepting those contained in boxes shall be spaced not less than thirty

inches from back to back, measured in a horizontal direction, and shall be firmly secured to the floor. No seat in the auditorium shall have more than six seats intervening between it and an aisle, on either side.

The platforms for seats in balconies and galleries shall nowhere have a greater rise than twenty-one inches, nor be less than thirty inches from back to back.

Aisles.

SECT. 88. All aisles on the respective floors in the auditorium, having seats on both sides of the same, shall be not less than thirty inches wide where they begin and shall be increased in width toward the exits in the ratio of one inch to five running feet. Aisles having seats on one side only shall be not less than two feet wide at their beginning and shall increase in width, the same as aisles having seats on both sides.

Changes in Level.

SECT. 89. All changes in the levels of the floors of such buildings, except under stairways, from story to story, and except the necessary steps in galleries and balconies rising toward the exits, shall be made by inclines of no steeper gradient than two in ten within the auditorium, and rising toward the exits, and one in ten for all others.

Lobbies.

SECT. 90. Preceding each division of the theatre there shall be foyers, lobbies, corridors, or passages, the aggregate capacity of which on each floor or gallery shall be sufficient to contain the whole number to be accommodated on such floor or gallery in the ratio of one square foot of floor room for each person.

Stage Doors.

Sect. 91. There shall be not less than two exit doors, each not less than three feet in width, located on opposite

sides of the stage, and opening directly upon a street, alley, court, or courtway leading to a public throughfare.

Room Exits.

SECT. 92. All rooms in theatres for the use of persons employed therein shall have passages to at least two independent means of exit.

Doors to Open Outward.

SECT. 93. All doors of exit or entrance shall open outward, and shall be hung so as to swing in such a manner as not to become an obstruction in a passage or corridor, and no such doors shall be fastened so as to be inoperative when the building is occupied by an audience.

False Doors.

SECT. 94. No mirrors shall be so placed as to give the appearance of a doorway or exit, hallway, or corridor, nor shall there be any false doors or windows.

Main Floor and First Gallery Exits.

SECT. 95. A common exit may serve for the main floor of the auditorium and the first gallery, provided that its capacity be equal to the aggregate capacity of the outlets from the main floor and the said gallery; and provided that the lowermost run of any exit leading from a gallery shall not open directly at right angles with the central axis of a common exit unless there is a clear space or landing of at least one and one quarter times the width of the exit between the foot of such exit and such centre line or nearest exit doorway.

Exits.

SECT. 96. Two distinct and separate exits shall be provided for each gallery and balcony above the main floor; and the same shall be located on opposite sides of the galleries.

All gallery or balcony exits shall start with a width of not less than four feet at the uppermost gallery.

Exits from balconies and galleries shall not com-

municate with the basement or cellar.

Aggregate Width of Exits.

SECT. 97. The aggregate width of all the exits previously described shall be estimated on a basis of not less than twenty inches for every one hundred persons for whom seats are provided in the sections of the auditorium served by the respective exits.

Emergency Exits.

SECT. 98. In addition to the exits previously described there shall be one exit from each side of each gallery, balcony, and main floor of auditorium, at least five feet wide, leading to exterior balconies not less than four feet wide and twenty feet long on each side of the auditorium. From such balconies there shall be staircases extending to the ground level, which may be counterweighted, with risers of not over eight and one half inches and treads of not less than nine and one half inches, exclusive of nosing. The aggregate width of these emergency stairs shall be not less than ten inches for every one hundred people served thereby, no single stairs being less than thirty inches wide. If counterweighted, these stairs shall be lowered during all performances.

Where all such stairs are in an interior court, each run shall be covered by a light awning of iron.

Nothing herein shall prohibit the building of emergency stairs and exits inside the walls of the building, provided that they are surrounded by a fireproof partition not less than four inches thick separating the exits and stairways from the audience room or auditorium.

Additional Requirements.

Sect. 99. The commissioner shall have power to require a greater number or capacity of exits than is herein prescribed.

In every theatre there shall be over every exit, on the inside, and over every opening to a fire-escape, on the inside, an illuminated sign, bearing the word "exit" or "fire-escape," respectively, in letters not less than four inches high. The lights for the exit signs, passages, stairs, lobbies, auditoriums, rear of auditoriums, balconies, galleries, and for the balconies and stairs outside the building, shall be so arranged that they can be turned on or off independently of the means provided on the stage or in any part of the building in the rear of the proscenium wall. Every exit sign shall be kept illuminated, and every outside balcony and fire-escape shall be kept well lighted during the performance, except outside exits during a performance before sunset.

Plans showing the exits and stairways shall be legibly printed so as to occupy a full page of every programme or play-bill.

In said buildings there shall be such number of gas pipe outlets as the commissioner may require, fitted with no less than two gas burners. Such burners shall be inspected and tried at least once in every three months by inspectors of the department, to ascertain if they are in proper working order. The inspector shall make a report of each visit, stating the condition of the burners and the action of the inspector in regard to them.

The commissioner shall have authority to order any defect in the working of such burners as are necessary for public safety to be remedied.

So much of this section as applies to the inspection of gas burners shall apply to buildings now used as theatres.

Stairs.

SECT. 100. The cut of the stair stringers shall not exceed seven and one-half inches rise, nor be less than ten and one half inches tread. There shall be no flights of stairs of more than fifteen or less than three steps between landings.

Landings of Stairs.

SECT. 101. Every landing shall be at least four feet wide. When straight stairs return directly on themselves, a landing of the full width of both flights, without any steps, shall be provided. The outer line of landings shall be curved to a radius of not less than two feet to avoid square angles. Stairs turning at an angle shall have a proper landing without winders introduced at the turn. No door shall open immediately upon a flight of stairs, but a landing at least two feet wider than the width of the door opening shall be provided between such stairs and such door. When two side flights connect with one main flight, no winders shall be introduced, and the width of the main flight shall be at least equal to the aggregate width of the side flights.

Hand Rails. 🙏

SECT. 102. All enclosed stairways shall have, on both sides, strong hand-rails, firmly secured to the wall, about three inches distant therefrom and about three feet high above the stairs.

All stairways eight feet and over in width shall be provided with a central rail of metal or hard wood, not less than two inches in diameter, placed at a height of about three feet above the centre of the treads, supported on wrought metal or brass standards of sufficient strength, securely bolted to the treads or risers of the stairs; and at the head of each flight of stairs, and on each side of

the landing, the post or standard shall be at least six feet in height, and the rail shall be secured to the post.

Measurements for Width of Stairs.

Sect. 103. The width of all stairs shall be measured in the clear between the hand-rails.

No winding or circular stairs shall be permitted.

Radiators Forbidden in Passageways.

Sect. 104. No coil or radiator or floor register shall be placed in any aisle or passageway used as an exit; but all such coils and radiators may be placed in recesses formed in the wall or partition to receive the same.

No boiler, furnace, engine or heating apparatus, except steam, hot water or hot air pipes or radiators, shall be located under the auditorium or under any passage or stairway or exit of any theatre.

Sprinklers and Standpipes.

There shall be at least two two-inch high-service standpipes on the stage of every theatre, with ample provision of hose nozzles at each level of the stage on each side, and the water shall be kept turned on during the occupation of the building by an audience. The said pipes shall in no case be sealed, and shall have two gates, one above the other, with a proper test or waste valve; the lower gate to be kept open at all times. The proscenium opening of every theatre shall be provided with a two and one half inch perforated iron pipe, or equivalent equipment of automatic or open sprinklers, so constructed as to form, when in operation, a complete water curtain for the whole proscenium opening, and there shall be for the rest of the stage a complete system of fire apparatus and perforated iron pipes, automatic or open sprinklers. Such pipes or sprinklers shall be supplied with water by high pressure service, and shall be at all times ready for use.

PLACES OF PUBLIC ASSEMBLY.

SECT. 105. Every building hereafter erected with a hall or assembly-room to contain a public audience of more than eight hundred persons, or with more than one superimposed gallery or balcony, shall be of fireproof construction throughout; except that halls or assembly-rooms, the mean level of the main floor of which is not more than five feet above the grade of the adjacent street, may have roofs of second class construction.

Every building hereafter erected with a hall or assemblyroom to contain an audience of more than six hundred persons, the main floor of which is raised more than fifteen feet above the level of the principal street upon which it faces, shall be of fireproof construction throughout.

The capacity of a hall or assembly-room shall be estimated on the basis of six square feet for each person.

If several halls or assembly-rooms are provided in one building, their aggregate capacity shall be considered as determining whether or not the building shall be of fire-proof construction, unless the several halls are enclosed by or separated from each other by fireproof walls, with fireproof doors in the same, in which case the building may be of second class construction.

No existing building shall be altered to contain a hall or assembly-room exceeding the foregoing dimensions, unless the whole building as altered shall conform to the provisions of this act.

All seats in places of public assemblage shall be spaced as hereinbefore provided, and, while such places of public assemblage are occupied by an audience, shall be secured in such manner as will be satisfactory to the building commissioner of the city of Boston. No temporary seats or other obstructions shall be allowed in any aisle, passageway or stairway of a place of public assemblage, and no

person shall remain in any aisle, passageway or stairway of any building during any performance.

[1912, c. 370, sect. 1.]

Every existing building containing a hall or assembly-room to which admission is not free, and to which the provisions of chapter four hundred and ninety-four of the acts of the year nineteen hundred and eight, relative to the licensing of public entertainments apply, shall have all the ways of egress from such building sufficiently lighted, and lighted in a manner satisfactory to the building commissioner, while the hall or assembly room is occupied by an audience.

[1913, c. 50, sect. 1.]

Moving Picture Shows.

Sect. 106. All moving picture shows shall be subject to the provisions of chapter one hundred and seventy-six and of chapter four hundred and thirty-seven of the acts of the year nineteen hundred and five, and of any amendments thereof or additions thereto now or hereafter made.

Exits, Etc.

SECT. 107. Every building hereafter erected containing a hall or assembly-room shall conform to all the aforesaid requirements as to exits, stairways, exit lights, aisles, and seats which apply to theatres, subject to such exceptions as the board of appeal shall approve.

Roof Gardens.

SECT. 108. Nothing herein contained shall prevent the placing of a roof garden, art gallery, or rooms for similar purposes above a theatre, provided the floor of the same forming the roof over such theatre shall be constructed of fireproof materials, and shall have no covering boards or sleepers of wood. Every roof over such garden or other

rooms shall have all supports and rafters of steel, and, if covered, shall be covered with glass or fireproof material, or both.

Exits from Roof Gardens.

SECT. 109. Exits from roof gardens may communicate with stairs leading from the auditorium of the theatre, but they shall be at least four in number, not less than four feet six inches wide, and distinct and separate from each other from roof to street.

Summer Theatres.

SECT. 110. Summer theatres, if built without the building limits, and located thirty feet distant from any other building or structure or adjoining lot lines, and of no greater seating capacity than seven hundred and fifty persons, and not more than one story high, without balconies, or galleries, may be constructed as follows:

The auditorium, without a cellar or basement, with open sides of double the number of exits as hereinbefore provided, opening directly into the surrounding courts or gardens at the grade level, and the adjoining dressing-rooms, may be of wooden construction, but the stage shall be enclosed in brick walls not less than twelve inches thick, or shall be plastered on metal lathing throughout: provided, that the openings leading to the dressing-rooms shall be provided with fire doors.

Otherwise, all protective features and arrangements shall comply with all previous sections of this title.

Existing Theatres.

SECT. 111. All stairs of theatres shall have throughout proper hand-rails on both sides firmly secured to walls or to strong posts and balusters. Stairways twelve feet or more wide shall have one or more intermediate rails not more than eight feet apart and properly supported.

No boiler, furnace, engine or heating apparatus, except steam, hot water or hot air pipes or radiators, shall be located under the auditorium nor under any passage or stairway or exit of any theatre.

In every theatre there shall be over every exit, on the inside, and over every opening to a fire-escape, on the inside, an illuminated sign, bearing the word "exit" or "fire-escape," respectively, in letters not less than four inches high. An emergency are light or its equivalent shall be installed in the auditorium, which light or lights, exit lights, and all lights in halls, corridors, or any part of the building used by the audience, except the general auditorium lighting, shall be fed independently of the stage lighting, and shall be controlled only from the lobby or other convenient place in the front of the house. Every exit sign shall be kept illuminated and every outside balcony and fire-escape shall be kept well lighted during the performance, except outside exits during a performance in the daytime and before sunset.

[1909, c. 313, sect. 1.]

The exits and openings to fire-escapes of all theatres shall open outward and have fastenings on the inside only. They shall be unfastened during every performance and shall be so arranged that they can easily be opened from within. Plans showing the exits and stairways shall be legibly printed so as to occupy a full page of every programme or play-bill.

No temporary seats or other obstructions shall be allowed in any aisle, or stairway of a theatre, and no person shall remain in any aisle, passageway or stairway of any such building during any performance.

[1908, c. 336, sect. 1.]

The proscenium or curtain opening of every theatre shall have a fire-resisting curtain of incombustible material, reinforced by wire netting, or otherwise strengthened. If of iron, or similar heavy material, and made to lower from the top, it shall be so arranged as to be stopped securely at a height of seven feet above the stage floor, the remaining opening being closed by a curtain or valance of fire-resisting fabric. The curtain shall be raised at the beginning and lowered at the end of every performance, and shall be of proper material, construction and mechanism.

There shall be one or more ventilators near the center and above the highest part of the stage of every theatre, of a combined area of opening satisfactory to the building commissioner, and not less than one tenth of the area of the proscenium opening. Every such ventilator shall have a valve or louvre so counterbalanced as to open automatically, and shall be kept closed, when not in use, by a fusible link and cord reaching to the prompter's desk, or any other place easily reached from the stage level and readily operated therefrom. Such cord shall be of combustible material, and so arranged that if it is severed the ventilator will open automatically.

[1909, c. 336, sect. 1.]

There shall be at least two two-inch high-service standpipes on the stage of every theatre, with ample provision of hose nozzles at each level of the stage on each side, and the water shall be kept turned on during the occupation of the building by an audience. The said pipes shall in no case be sealed and shall have a gate and check valve and shall have a test valve placed between the gate valve and check valve. The proscenium opening of every theatre shall be provided with a two and one half inch perforated iron pipe or equivalent equipment of automatic or open sprinklers, as the commissioner may direct, so constructed as to form when in operation a complete water curtain for the whole proscenium opening, and there shall be for the rest of the

stage a complete system of fire apparatus and perforated iron pipes, automatic or open sprinklers. Such pipes or sprinklers shall be supplied with water by high pressure service, and shall be ready for use at all times.

[1909, c. 336, sect. 1.]

PLUMBING.

Definition of Terms.

SECT. 112. The following terms shall have the meanings respectively assigned to them:—

"Repair of leaks" shall mean such repairs as are necessary to protect property, but do not involve any extensive change in construction.

"Y-branches" shall mean a branch at sufficient angle to direct the flow and prevent backing up.

"Air pipes" or "back air pipes" shall mean air pipes from traps that extend toward the main soil pipe or the outer air and connect with not more than three traps.

"Vent pipes" shall mean general lines of back air pipes connecting with more than three fixtures.

"Drain" shall mean that part of the drainage system of a building extending through basement or cellar to sewer.

"Soil pipe" shall mean that part of the drainage system of a building, of four inches or more internal diameter, between basement or cellar and the highest fixture in the building.

"Ventilation pipe" shall mean the extension of the soil pipe from the highest fixture to and through the roof.

"Surface drain" shall mean a connection with drain in the basement to allow egress of surface water or overflow.

"Fixture" shall mean any receptacle or outlet placed for the purpose of disposing of waste water or other matter, and connecting with the waste, soil or drain pipe of a building.

Registration.

Sect. 113. No plumber shall engage in or work at the business of plumbing unless he shall first have registered his name and place of business in the office of the commissioner, and no person shall by display of sign or plumbing material, or otherwise, advertise as a plumber unless he shall have been registered or licensed as such. Every master plumber shall conspicuously display his certificate or license within his place of business. Notice of any change in the place of business of a registered or licensed master plumber shall immediately be given by him to the commissioner.

Notices.

SECT. 114. Every plumber, before doing any work in a building, shall, except in the case of repair of leaks, file in the office of the commissioner a plan or sketch of the work to be performed; and no such work shall be done in any building without a written permit from the commissioner.

Connection with Sewer or Drain.

SECT. 115. The plumbing of every building shall be separately and independently connected outside the building with the public sewer, if such sewer is provided, or with a proper and sufficient private drain or sewer laid outside of the building, and if a sewer is not accessible with a proper cesspool. Several buildings may have a common sewer connection if such connection is approved by the commissioner and the superintendent of sewers.

Inspection and Tests.

SECT. 116. Pipes or other fixtures shall not be covered or concealed from view until approved by the commissioner, who shall examine or test the same within two working days after notice that they are ready for inspection. Plumbing shall not be used unless, when roughed in, the wastes, vents and back air pipes and traps are first

tested by water or sufficient air pressure in the presence of an inspector, when such testing is practicable.

Soil and Waste Pipes and Traps.

SECT. 117. The waste pipe of every independent sink basin, bath-tub, water closet, slop-hopper, urinal or other fixture shall be furnished with a separate trap which shall be placed as near as practicable to the fixture which it serves. A sink and set of three wash-trays may be connected to the house drain through one five inch round trap, when the outlet of the sink is not over three feet six inches from the nearest outlet from the wash-trays: and in such case the trap shall be above the floor. The outlet from each fixture shall enter the trap separately. Not more than four wash-bowls or sinks in a continuous line may be connected to the house drain through one five inch round trap. Two or more fixtures on the same level with not more than two feet of waste pipe and connecting into the soil or waste pipe not more than eighteen inches below the top water line of the trap, shall not require other vent than the continuation of the soil or waste pipe full size for its whole length. Lateral branches of soil or waste pipe, if more than twenty feet in length, shall be extended through the roof undiminished in size. All connections on lead waste and back air pipes and of lead pipes to brass ferrules and soldering nipples shall be full size wiped soldered branch, round or flange joints. Soil and waste pipes shall have proper T-Y or Y branches for all fixture connections. No connection to lead bends for water-closets or slop sinks shall be permitted, except the required back air pipe where a continuous vent is not practicable.

Earthenware traps shall have heavy brass floor plates soldered to the lead bends and bolted to the trap flange, and the joint made gas tight with red or white lead. Rubber washers for floor connections shall not be used.

Back Air Pipes, Vents, Etc.

Traps shall be protected from siphonage or air pressure by special iron or brass air pipes of a size not less than the waste pipes they serve; back air pipes shall not be connected to the trap or branched into the waste pipe, except where a continuous vent is not practicable, but a suitable non-siphon trap may be used without a back air pipe upon the approval of the commissioner. Back air pipes shall enter the waste pipe within eighteen inches from the trap and shall be a continuation of the waste pipe. Lead air pipes may be used only for short connections where they are exposed to view. Air pipes for watercloset traps shall be connected to the highest point of bend or trap, and may be of two inch bore if for not more than three fixtures and less than thirty feet in length; if for more than three fixtures or more than thirty feet in length they shall be of three inch bore. Air pipes shall be run as direct as practicable and if one and one half inches or less in diameter shall not exceed thirty feet in length. Two or more air pipes may be connected together or with a vent pipe; but in every such case the connection shall be above the top of the fixture. The trap for the upper fixture on a line of soil or waste pipe, within five feet of the stack in a horizontal line, shall not require a special air pipe, unless the outlet is branched into a stack more than eighteen inches below the top water line of the trap. Diameters of vent pipes shall be not less than two inches for main vents through less than seven stories; three inches for water-closets on more than three floors, and for other fixtures in more than seven stories. All vent pipes shall be increased one inch in diameter before passing through the roof. Vent lines shall be connected at the bottom with a soil or waste pipe or with the drain, in such a manner as to prevent accumulation of rust scale and properly to drip the water of condensation. Offsets shall be made at an angle of not less than forty-five degrees. Soil pipes or iron waste pipes, vents and back air pipes, shall be supported by clamps to the woodwork, iron drive hooks to brick walls, or bolted clamps to iron girders.

All traps, except for water-closets, not provided with special air pipes shall be suitable non-siphon traps and shall have at least a four inch water seal. Round traps shall be not less than four inches in diameter and eight inches long, and made of eight-pound lead. All trap screws shall be water sealed.

Chemical Laboratories.

Fixtures and waste pipes in chemical laboratories shall be installed in accordance with plans approved by the commissioner.

Stables.

The drainage of stable fixtures shall be constructed according to plans approved by the commissioner.

SECT. 118. In buildings where a series of bathrooms or kitchens are located directly over each other and have a common soil or waste pipe, the back air pipe required shall be a vent line connecting with each outlet branch close to the water-closet connection or outlet from the sink trap, each branch vent to connect to vent line above the top of the highest fixture on each floor, the vent line to connect to main vent line above the top of the highest fixture in the building.

In the case of batteries of water-closets or other fixtures the special air pipe from each trap may be omitted, provided that the soil or waste pipe, undiminished in size, is continued to a point above the roof or revented into the main soil pipe system above the top of the uppermost fixture.

The commissioner shall prepare explanatory sketches showing the method of construction described in this section.

Refrigerator Wastes and Drip Pipes.

SECT. 119. All drip or overflow pipes shall be extended to some place in open sight, and in no case shall any such pipe be connected directly with the drain pipe. No waste pipe from a refrigerator or other receptacle in which provisions are stored shall be connected directly with a drain or other waste pipe. The waste pipes from all other fixtures shall be connected directly with a drain pipe. Refrigerator wastes connecting with two or more stories shall be supplied with a trap on the branch for each floor and extended through the roof.

Water-Closets, Etc.

SECT. 120. Every water-closet or line of water-closets shall be supplied with water from a tank or cistern, and shall have a flushing pipe of not less than one and one quarter inches in diameter. Privy vaults shall be of brick and cement of a capacity of not less than fifty cubic feet, of easy access, convenient to open, and clean, and water tight. The inside shall be not less than two feet from the next lot and from any public or private way.

SECT. 121. The diameters of soil and waste pipes shall be not less than those given in the following table:—

				Inc	hes.
Soil pipes,					4
Main waste pipes,					
Main waste pipes for kitch					
floors,					3
Branch waste pipes for laun					
Branch waste for kitchen sin	aks,	. 1			$1\frac{1}{2}$
Branch waste for urinals,					
No branch waste for other f					

Except that, with the approval of the commissioner, a three inch soil pipe may be used for one water-closet where it is not practicable to use a four inch pipe.

Ferrules, Clean-outs, Etc.

Brass ferrules shall be of the best quality, bell-shaped, extra heavy cast brass, not less than four inches long and two and one quarter inches, three and one half inches, and four and one half inches in diameter, and of not less than the following weights:—

Diameters.					Weights.
$2\frac{1}{2}$ inches,					1 pound 0 ounces.
$3\frac{1}{2}$ inches,			•		1 pound 12 ounces.
$4\frac{1}{2}$ inches,	•		•		2 pounds 8 ounces.

One and one half inch ferrules shall not be used.

Soldering nipples shall be of heavy cast brass or of brass pipe, iron pipe size. If cast, they shall be of not less than the following weights:

$1\frac{1}{2}$	inches,				0	pounds	8 ounces.
2	inches,				0	pounds	14 ounces.
$2\frac{1}{2}$	inches,		•		1	pound	6 ounces.
3	inches,				2	pounds	0 ounces.
4	inches,				3	pounds	8 ounces.

Where clean-outs are used, the screw cap shall be of brass, extra heavy, and not less than one eighth of an inch thick. The engaging parts shall have not less than six threads of iron pipe size, and shall be tapered. Clean-outs shall be full size of trap up to four inches in diameter, and not less than four inches for larger traps.

The screw caps shall have a solid square or hexagonal nut, not less than one half inch high, with a least diameter of one and one half inches. The bodies of brass clean-out ferrules shall be at least equal in weight and thickness to the calking ferrule for the same size of pipe.

The use of lead pipes is restricted to short branches of

the soil and waste pipes, bends and traps, and roof connections of inside leaders. "Short branches" of lead pipe shall mean not more than:—

5 feet of $1\frac{1}{4}$ inch pipe. 5 feet of $1\frac{1}{2}$ inch pipe. 4 feet of 2 inch pipe. 2 feet of 3 inch pipe. 2 feet of 4 inch pipe.

The pipe shall be not less than the following average thickness and weight per linear foot:

Diameters.	Thicknesses.	Weights per Linear Foot.
$1\frac{1}{4}$ inches		2.50 pounds.
$1\frac{1}{2}$ inches	.14 inch	2.68 pounds.
2 inches	.15 inch	3.61 pounds.
$2\frac{1}{2}$ inches	.20 inch	5.74 pounds.
3 inches	.21 inch	7.54 pounds.
$3\frac{1}{2}$ inches	.22 inch	9.00 pounds.
4 inches	.23 inch	10.66 pounds.
$4\frac{1}{2}$ inches	$.24 \; \mathrm{inch}$	12.34 pounds.
5 inches	$.25 \; \mathrm{inch}$	14.50 pounds.
6 inches	.28 inch	18.76 pounds.
7 inches	.30 inch	23.27 pounds.
8 inches	$.32 \; \mathrm{inch}$	28.18 pounds.
9 inches	$.34 \; \mathrm{inch}$	33.70 pounds.
10 inches	.36 inch	40.06 pounds.
11 inches	.37 inch	45.02 pounds.
12 inches	.37 inch	48.98 pounds.

Brass pipe for soil, waste, vent and back air pipes shall be thoroughly annealed, seamless, drawn brass tubing, of not less than number thirteen Stubbs gauge.

No slip joint or unions shall be used on traps, waste, vents or back air pipes. Threaded connections on brass traps shall be of the same size as pipe threads for the same size of pipe, and shall be tapered. Connections between lead and iron shall be made by brass sleeves or screw nipples wiped to the lead and calked or screwed into the iron.

The following average thicknesses and weights per linear foot shall be used:—

Diameters.	Thicknesses.	Weights per Linear Foot.
$1\frac{1}{2}$ inches	.14 inch	2.84 pounds.
2 inches	.15 inch	3.82 pounds.
$2\frac{1}{2}$ inches	.20 inch	6.08 pounds.
3 inches	.21 inch	7.92 pounds.
$3\frac{1}{2}$ inches	.22 inch	9.54 pounds.
4 inches	.23 inch	11.29 pounds.
$4\frac{1}{2}$ inches	.24 inch	13.08 pounds.
5 inches	.25 inch	15.37 pounds.
6 inches	.28 inch	19.88 pounds.

Cast Iron Pipes, Etc.

Cast iron pipes shall be uncoated, sound, cylindrical and smooth, free from cracks and other defects, of uniform thickness and of the grade known to commerce as "extra heavy." If buried under ground they shall be coated with asphaltum or red lead.

Pipe, including the hub, shall weigh not less than the following average weights per linear foot:—

DIAMETERS.	Weights per Linear Foot.	DIAMETERS.	Weights per Linear Foot.
2 inches 3 inches 4 inches 5 inches 6 inches	13 pounds.	7 inches (not stock size), 8 inches	27 pounds. 33½ pounds. 45 pounds. 54 pounds.

All joints shall be made with picked oakum and molten lead run full, and be made gas tight. No cement joints nor connections between iron and cement or tile pipe or brick drains shall be made within any building.

Wrought Iron Pipe.

Galvanized wrought iron pipe shall be of not less than the following thickness and weight per linear foot:—

Diameters.	Thicknesses.	Weights per Linear Foot.
$1\frac{1}{2}$ inches	.14 inch	2.68 pounds.
2 inches	.15 inch	3.61 pounds.
$2\frac{1}{2}$ inches	.20 inch	5.74 pounds.
3 inches	.21 inch	7.54 pounds.
$3\frac{1}{2}$ inches	.22 inch	9.00 pounds.
4 inches	.23 inch	10.66 pounds.
$4\frac{1}{2}$ inches	.24 inch	12.34 pounds.
5 inches	.25 inch	14.50 pounds.
6 inches	.28 inch	18.76 pounds.
7 inches	.30 inch	23.27 pounds.
8 inches	.32 inch	28.18 pounds.
9 inches	.34 inch	33.70 pounds.
10 inches	.36 inch	40.06 pounds.
11 inches	.37 inch	45.02 pounds.
12 inches	.37 inch	48.98 pounds.

The threaded part of the pipe if less than one and one half inches long, shall be of the thickness and weight known as "extra heavy" or "extra strong."

Fittings on wrought iron vent or back air pipes shall be galvanized, recessed, cast iron threaded fittings. Fittings for "Plumber's tubing" shall be heavy weight, with sharp threads.

Fittings for waste or soil or refrigerator waste pipes of wrought iron or brass pipe shall be galvanized, cast iron, or brass, recessed and threaded drainage fittings, with smooth interior waterway and threads tapped, so as to give a uniform grade to branches of not less than one quarter of an inch per foot. All joints on wrought iron or brass pipe shall be screwed joints made up with red lead, and any burr formed in cutting shall carefully be reamed out.

Drain Pipes, Etc.

Sect. 122. Drain and connecting ventilation pipes, vents and back air pipes shall be of sufficient size, and made of extra heavy cast iron pipe if under ground, and if above ground shall be made of extra heavy cast iron, galvanized wrought iron of standard weight, or of not less than number thirteen Stubbs gauge brass pipe within the building, except that lead pipes may be used for short connections exposed to view. Cast iron drains shall extend not less than ten feet from the inside face of the wall, beyond and away from the building.

Drain pipes above ground shall be secured by irons to walls, suspended from floor timbers by strong iron hangers, or supported on brick piers. Proper man-holes shall be supplied to reach clean-outs and traps. Every drain pipe shall have a fall of not less than one quarter inch per foot, and shall be extended from a point ten feet outside the inside face of the wall, unobstructed, to and through the roof, undiminished in size, and to a height not less than two feet above the roof, and not less than one foot above the top of any window within fifteen feet, and not less than eight feet above the roof if the roof is used for drying clothes or as a roof garden. The drain pipe shall be supplied with a Y branch fitted with a brass clean-out or with an iron stopper, if required, on the direct run, at or near the point where the drain leaves the building, Changes in direction shall be made with curved pipes. and all connections with horizontal or vertical pipes shall be made with Y branches. Saddle hubs shall not be used. All drain pipes shall be exposed to sight within the building, if such exposure is practicable, and shall not be exposed to pressure where they pass through the wall.

Steam Exhausts, Etc.

No steam, or vapor, or water of a temperature over one hundred and thirty degrees Fahrenheit shall be discharged from any premises into any sewer, drain or catchbasin, nor shall any matter or thing be discharged into any sewer which may tend to cause an obstruction of the public sewer or a nuisance or a deposit therein or any injury thereto.

All high pressure steam boilers shall be connected with a blow-off tank of a capacity not less than thirty per cent of the largest boiler connected with such tank. The location of and the connections to said blow-off tank shall be subject to the approval of the superintendent of sewers.

No steam exhaust or steam drip, unless it be provided with a cooling tank of a capacity approved by the super-intendent of sewers, or unless it be connected with the blow-off tank, shall connect with any drain leading to the sewer. Every blow-off tank shall be supplied with a vapor pipe not less than two inches in diameter, which shall be carried above the roof and above the highest windows of the building.

The superintendent of sewers may require such additional means for cooling the blow-off tanks by the injection of cold water or otherwise as may be necessary to reduce the temperature of the water passing from the blow-off tank so that it shall not exceed one hundred and thirty degrees Fahrenheit.

Special Traps, Etc.

SECT. 123. Every building from which, in the opinion of the superintendent of sewers, grease may be discharged in such quantity as to clog or injure the sewer, shall have a special grease trap satisfactory to the superintendent of sewers. Every building in which gasoline, naphtha or other inflammable compounds are used for business pur-

poses shall be provided with a special trap, satisfactory to the superintendent of sewers, so designed as to prevent the passage of such material into the sewer, and ventilated with a separate pipe rising to a point four feet above the roof. All non-siphon traps shall be of a type approved by the commissioner. The waste pipe of every wash stand for vehicles shall be provided with a sand box of sufficient capacity.

The waste pipe from the sink of every hotel, eating house, restaurant or other public cooking establishment, shall be connected to a grease trap of sufficient size, easily accessible to open and clean, placed as near as practicable to the fixtures that it serves.

Roof Leaders and Surface Drains.

SECT. 124. Rain water leaders when connected with house drains shall be suitably trapped and, within the proposed surface drainage area, shall not be connected at the top of the stack, nor extended down through the interior of the building, except by special permit from the commissioner. Wherever a surface drain is installed in a cellar or basement, it shall be provided with a deep seal trap and back water valve. Drain pipes from fixtures in cellars and basements liable to back flow from a sewer shall be supplied with back water valves.

HAZARDOUS BUILDINGS AND APPLIANCES FOR POWER AND HEAT.

Sect. 125. No building shall be used for a grain elevator or for the storage or manufacture of high combustibles or explosives, or for chemical or rendering works, without a permit from the commissioner, and no engine, dynamo, boiler or furnace shall be placed in any building without a permit from the commissioner. Every application for such permit shall be in writing, shall be filed with the

commissioner, and shall set forth the character of the building, the size, power and purposes of the apparatus, and such other information as the commissioner may require. The commissioner may, after an examination of the premises described in the application, and after hearing the applicant and any objectors, issue a permit for placing a boiler or furnace on such premises, upon such conditions as he shall prescribe, or he may refuse such permit. If the application is for anything other than a boiler or furnace the applicant shall publish in at least two daily newspapers published in the city of Boston, and on at least three days in each, and, if so directed by the commissioner, shall also post conspicuously on the premises, a copy of the application, and shall deliver copies thereof to such persons as the commissioner may designate.

If no objection is filed with the commissioner before the expiration of ten days after the time of the first publication of notice, or within ten days of the delivery and first posting of the notice, if such delivery or posting is required, the commissioner shall, if the arrangement, location, and construction of the proposed apparatus is proper, and in accordance with the provisions of this act, issue a permit for the same. If objection is filed, the application shall be referred to the board of appeal, which may, in its discretion, require the deposit by the objector of a reasonable sum as security for the payment of the costs.

After such notice as the board shall order it shall hear the same, and shall direct the commissioner to issue a permit, under such conditions as it may prescribe, or to withhold the same. If the permit is refused, the applicant, and if it is granted, the objectors shall pay such costs as the board may order.

The commissioner may, from time to time, after public notice and hearing, prescribe conditions on which any or all boilers or furnaces may be maintained in buildings, and, if any person interested objects to such conditions and appeals from his decision establishing the same, the appeal shall be referred to the board of appeal, and thereupon said board shall prescribe the conditions.

Combustible Materials.

SECT. 126. No building adapted for habitation, nor any part thereof, nor the lot upon which it is located, shall be used as a place for the storage, keeping or handling of any combustible article, except under such conditions as may be prescribed by the fire commissioner. No such building nor any part thereof, nor of the lot upon which it is located, shall be used as a place for the storage, keeping or handling of any article dangerous or detrimental to life or health, nor for the storage, keeping or handling of feed, hay, straw, excelsior, cotton, paper stock, feathers or rags.

[Superseded by 1914, c. 795, sects. 6, 7.]

Enforcement of Act.

SECT. 127. Every structure and part thereof and appurtenant thereto shall be maintained in such repair as not to be dangerous. The owner shall be responsible for the maintenance of all buildings and structures. The lessee under a recorded lease shall be deemed the owner under the provisions of this act.

Powers of the Board of Health.

SECT. 128. The board of health may by vote limit the number of occupants who shall be permitted to dwell in any building or in any part or parts thereof. They shall cause a copy of any such vote to be served upon the owner of the building, his agent, tenant or other persons having the charge thereof. If the owner, agent, tenant, or other persons having charge of said building allow or permit more people than are permitted by said vote to occupy

the building or any part or parts thereof, said board may order the premises to be vacated, and they shall not again be occupied without the permission of the board, and the owner, agent, tenant or other persons having charge of said building shall forfeit not more than twenty dollars for every day during which he violates such order. The board may make such further regulations as to overcrowding, ventilation, the construction of water-closets, the lighting of hallways, and the occupation of buildings or parts thereof, not inconsistent with other laws, as they may deem proper. Said board may permit rooms in private stables to be occupied for sleeping purposes by grooms and coachmen.

No person shall place ashes, rubbish, garbage, refuse or other matter in the yards, open areas or alleys connected with or appurtenant to any such building except in suitable receptacles provided for the same.

Every building used for habitation by more than two families and every lodging house shall be carefully inspected at least twice a year under the direction of the board of health, and whenever said board has made an order concerning such a building a reinspection shall be made within ten days after the board has been informed that the order has been complied with.

[1913, c. 586, sect. 1.]

Enforcement — Jurisdiction in Equity.

SECT. 129. Any court having jurisdiction in equity or any justice thereof shall, upon the application of the city by its attorney, have jurisdiction in equity:—

To restrain the construction, alteration, repair, maintenance, use or occupation of a building, structure or other thing constructed or used in violation of the provisions of this act, and to order its removal or abatement as a nuisance;

To restrain the further construction, alteration, repair, maintenance, use or occupation of a building, structure or other thing, which is unsafe or dangerous;

To restrain the unlawful construction, alteration, repair, maintenance, use or occupation of any building, structure or other thing;

To compel compliance with the provisions of this act;

To order the removal by the owner of a building, structure or other thing unlawfully existing, and to authorize the commissioner, with the written approval of the mayor, in default of such removal by the owner, to remove it at the owner's expense.

Any person, the value of whose property may be affected by any decision of the board of appeal, may have the action of said board reviewed by the court by any appropriate process, provided that proceedings are instituted within thirty days after the date of such decision.

The person applying for the review shall file a bond with sufficient surety, to be approved by the court, for such sum as shall be fixed by the court, to indemnify and save harmless the person or persons in whose favor the decision was rendered from all damages and costs which they may sustain in case the decision of said board is affirmed.

In case the decision of the board is affirmed the court, on motion, shall assess damages, and execution shall issue therefor.

Any person having any duty to perform under the provisions of this act may, so far as may be necessary for the performance of his duties, enter any building or premises in the city of Boston.

JURISDICTION AT LAW.

SECT. 130. The municipal court of the city of Boston, concurrently with the superior court, shall have jurisdic-

tion throughout the city of prosecutions and proceedings at law under the provisions of this act, and also of all provisions of law relative to plumbing and gas-fitting.

PROCEDURE.

SECT. 131. Upon the entry of any case brought under the provisions of this act the court shall, at the request of either party, advance the case, so that it may be heard and determined with as little delay as possible.

Nuisance.

Sect. 132. A building or structure which is erected or maintained in violation of the provisions of this act shall be deemed a common nuisance without other proof thereof than proof of its unlawful construction, and the commissioner may abate and remove it in the same manner in which boards of health may remove nuisances under the provisions of sections sixty-seven, sixty-eight and sixty-nine of chapter seventy-five of the Revised Laws.

Whoever violates any provision of this act, or whoever builds, alters, or maintains any structure or any part thereof in violation of any provision of this act, shall be punished by a fine not exceeding five hundred dollars, except as hereinbefore provided.

[1913, c. 586, sect. 2.]

REPEALS.

SECT. 133. So much of chapter four hundred and ninetyteen of the acts of the year eighteen hundred and ninetytwo and of all acts in amendment thereof as is unrepealed is hereby repealed. So much of any other act as is inconsistent herewith is hereby repealed.

Sect. 134. This act shall take effect upon the first day of August in the year nineteen hundred and seven.

[Approved June 22, 1907.

CHAPTER 4, ACTS OF 1873.

AN ACT TO AUTHORIZE THE ERECTION OF WOODEN BUILD-INGS IN THE CITY OF BOSTON FOR SANITARY PURPOSES.

Be it enacted, etc.:

Section 1. The City of Boston is hereby authorized to erect, under directions of its board of health and inspector of buildings, any wooden buildings within the city, for hospital purposes, the same to remain only so long as said board deems it necessary: *provided*, that every such hospital shall be constantly guarded outside by a competent force of at least three of the police of said city.

SECT. 2. This act shall take effect upon its passage. [January 28, 1873.

CHAPTER 129, ACTS OF 1889.

AN ACT RELATING TO BUILDINGS IN THE PUBLIC PARKS OF THE CITY OF BOSTON.

Be it enacted, etc., as follows:

Section 1. The park commissioners of the city of Boston may erect in the parks of said city that now are or hereafter may be under their control, except the common, public garden and public squares, structures for the shelter and refreshment of persons frequenting such parks, and for other park purposes, of such materials and in such places as in the opinion of the fire commissioners of said city do not endanger buildings beyond the limits of the park. Section sixteen of chapter fifty-four of the Public Statutes and chapter three hundred and seventy-four of the acts of the year eighteen hundred and eighty-five shall not apply to such buildings.

SECT. 2. This act shall take effect upon its passage. [Approved March 18, 1889.

CHAPTER 323, ACTS OF 1891.

AN ACT RELATING TO THE LOCATION, LAYING OUT, AND CONSTRUCTION OF HIGHWAYS IN THE CITY OF BOSTON. AS AMENDED BY SECTION 4, CHAPTER 418, ACTS OF 1892.

Section 9. If any building shall hereafter be placed or erected in said city at a grade other than the grade therefor, recorded in the office of the city surveyor, and which the city surveyor shall furnish on the request of the owner of the land on which the building is to be placed, or if any building shall be placed or erected within the boundaries of any way shown on any of the plans hereinbefore provided for, after the filing of the plan as aforesaid, and not removed at the expense of the owner when required by said board of street commissioners, no damage occasioned to the estate, of which the land on which the building was so placed formed a part at the date of the first advertisement of the first notice given by said board, relating to the plan on which any part of said estate is shown, or to any part of said estate, by any subsequent establishment of any grade of any highway or by any subsequent change of any grade of any highway, shall be recovered by, or be paid to, the owner of the whole or of any part of such estate.

SECT. 11. This act shall take effect upon its passage. [Approved June 16, 1892.

CHAPTER 352, ACTS OF 1895.

AN ACT RELATIVE TO ADVERTISING SIGNS AND STRUCT-URES ENCROACHING ON PUBLIC WAYS IN THE CITY OF BOSTON.

Be it enacted, etc., as follows:

No person shall place or maintain any sign or advertising device upon any post in any public way in the

city of Boston other than by painting; nor place or maintain upon any building or other structure any sign projecting into any such way more than one foot, nor any other thing projecting into any such way more than four feet, nor any sign or other projection the lowest part of which is less than ten feet above the sidewalk thereof, except that any awning, lamp, illuminated sign, and the fixtures thereof, the lowest part of which is not less than seven feet six inches above the surface of the sidewalk. may, until the right to maintain the same is revoked, be maintained as it is at present, or, if hereafter placed, be maintained as specified in any permit issued therefor by the officer appointed to have charge of the repairs of such ways; and any person violating any of the preceding provisions for more than five days after he is notified by said officer that he is so doing shall be punished by a fine of two dollars for each day that such violation continues after said notice. [Approved May 2, 1895.

CHAPTER 463, ACTS OF 1897.

AN ACT RELATIVE TO FILING IN THE REGISTRY OF DEEDS NOTICE OF THE PENDENCY OF CERTAIN ACTIONS.

Section 13 of chapter 126 of the public statutes is hereby amended by inserting after the word "estate", in the second line, the words;—or the use and occupation thereof or the buildings thereon,—so as to read as follows;—Section 13. No writ of entry, petition for partition, or other proceeding, either at law or in equity, affecting the title to real estate, or the use and occupation thereof or the buildings thereon, shall have any effect as against persons other than the parties thereto, their heirs and devisees, and persons having actual notice thereof, until a memorandum containing the names of the parties to such proceeding, the court in which it is pending, the date of the writ or other commence-

ment thereof, the name of the city or town in which the real estate liable to be affected thereby is situated, and a description of such real estate sufficiently accurate for identification, is recorded in the registry of deeds for the county or district in which such real estate is situated; but this section shall not apply to attachments, levies of execution, or proceedings in the probate courts, nor to any case which is pending on the fifteenth day of June in the year eighteen hundred and seventy-seven.

[Approved June 4, 1897.

CHAPTER 452, ACTS OF 1898.

An Act Relative to the Height of Buildings on and near Copley Square, in the City of Boston.

Be it enacted, etc., as follows:

Section 1. Any building now being built, or hereafter to be built, rebuilt or altered in the city of Boston, upon any land abutting on St. James avenue, between Clarendon street and Dartmouth street, or upon land at the corner of Dartmouth street and Huntington avenue, now occupied by the Pierce building, so called, or upon land abutting on Dartmouth street, now occupied by the Boston Public Library building, or upon land at the corner of Dartmouth street and Boylston street, now occupied by the new Old South Church building, may be completed, built, rebuilt or altered to the height of ninety feet, and no more; and upon any land or lands abutting on Boylston street, between Dartmouth street and Clarendon street, may be completed, built, rebuilt or altered to the height of one hundred feet, and no more; provided, however, that there may be erected on any such building, above the limits hereinbefore prescribed, such steeples, towers, domes, sculptured ornaments and chimneys as the board of park commissioners of said city may approve.

SECT. 2. The provisions of chapter three hundred and thirteen of the acts of the year eighteen hundred and ninety-six, and of chapter three hundred and seventy-nine of the acts of the year eighteen hundred and ninety-seven, so far as they limit the height of buildings, shall not be construed to apply to the territory specified and restricted in section one of this act.

SECT. 3. The owner of or any person having an interest in any building upon any land described in section one of this act, the construction whereof was begun but not completed before the fourteenth day of January in the current year, who suffers damage under the provisions of this act by reason or in consequence of having planned and begun such construction, or made contracts therefor, for a height exceeding that limited by section one of this act for the locality where said construction has been begun, may recover damages from the city of Boston for material bought or actually contracted for, and the use of which is prevented by the provisions of this act, for the excess of cost of material bought or actually contracted for over that which would be necessary for such building if not exceeding in height the limit prescribed for that locality by section one of this act, less the value of such materials as are not required on account of the lmitations, resulting from the provisions of this act, and the actual cost or expense of any re-arrangement of the design or construction of such building made necessary by this act, by proceedings begun within two years of the passage of this act, and in the manner prescribed by law for obtaining payment for damages sustained by any person whose land is taken in the laying out of a highway in said city.

Sect. 4. Any person sustaining damage or loss in his property by reason of the limit of the height of buildings provided for in this act, may recover such damage or loss from the city of Boston, by proceedings begun within three years of the passage of this act, and in the manner

prescribed by law for obtaining payment for damages sustained by any person whose land is taken in the laying out of a highway in said city.

Sect. 5. This act shall take effect upon its passage. [Approved May 23, 1898.

CHAPTER 457, ACTS OF 1899.

AN ACT TO LIMIT THE HEIGHT OF BUILDINGS IN THE VICINITY OF THE STATE HOUSE.

Be it enacted, etc., as follows:

Section 1. Any building now being built or hereafter to be built, rebuilt or altered in that part of the city of Boston which lies within the following described territory, to wit:—Beginning at the corner of Beacon street and Hancock avenue, thence continuing westerly on Beacon street to Joy street, thence continuing northerly on Joy street to Myrtle street, thence continuing easterly on Myrtle street to Hancock street, thence continuing southerly on Hancock street and Hancock avenue to the point of beginning,—may be completed, built, rebuilt or altered to the height of seventy feet measured on its principal front and no higher: provided, however, that there may be erected on any such building above the limits hereinbefore described, such chimneys and ornamental features as the commissioner of buildings of the city of Boston may approve, but said ornamental features shall not be such as to increase the interior capacity of said buildings.

SECT. 2. If and in so far as this act, or proceedings to enforce it, may deprive any person of rights existing under the Constitution, any such person now owning land within the district above described, sustaining damages in his property by reason of the limitations of the height provided for in this act of any building on or to be placed on such land may recover from the Commonwealth such

damages, as determined by a jury of the superior court for the county of Suffolk, on his petition therefor filed in the office of the clerk of said court within one year after the passage of this act, such determination and payment of the damages to be made under the same rules of law, so far as applicable, as govern the determination and payment of damages for the taking of lands for highways in said city.

SECT. 3. This act shall take effect upon its passage. [Approved June 2, 1899.

CHAPTER 543, ACTS OF 1902.

An Act Relative to the Improvement of the State House and to the Height of Buildings on Beacon Street and Bowdoin Street in the City of Boston.

Section 1. Any part of any building abutting on or within forty-two feet of Bowdoin street between Allston street and Beacon street may be completed, built, rebuilt or altered to the height of one hundred feet above the highest grade of that part of said Bowdoin street on which the building abuts as such grade has been changed and established by the governor and council and no higher, and any part of any building on or within ninetyfive feet of Beacon street between the Classin building, so-called, and Park street may be completed, built, rebuilt or altered to the height of seventy feet above the highest grade of said Beacon street and no higher: provided, however, that there may be erected on any such building, such chimneys, pipes, water tanks, elevator houses and ornamental features which shall not increase the interior capacity of said building as the governor and council may approve.

SECT. 2. Any person owning land on or within forty-

two feet of Bowdoin street, between Allston street and Beacon street, or on or within ninety-five feet of Beacon street between the Claffin building, so-called, and Park street, whose property is damaged more than it is benefited by the improvement of the State House, consisting of the limitation of the height of buildings on said land, the laying out and grading of said streets, the removal of buildings between Hancock street and Bowdoin street, the reconstruction and extension of the State House and the construction of the park between Bowdoin street and the State House, may, within two years after the passage of this act, and not afterward, file in the office of the clerk of the superior court for the county of Suffolk, his petition for a jury to determine such damage, and a jury of said court shall thereupon determine the question, under the rules of law, so far as they are applicable, under which damages for the laving out of highways under the Revised Laws are determined. If the jury find that the petitioner is damaged more than he is benefited by said improvement they shall determine the amount of the difference, and the Commonwealth shall pay the same; and if the jury shall not so find, judgment shall be entered for the Commonwealth, costs taxed and execution issued therefor against the petitioner as in civil cases. The city of Boston shall repay to the Commonwealth all damages which the state shall be required to pay for the change of grade of Bowdoin street made under authority of the governor and council, and for all expenses incurred in making such change.

SECT. 3. Section two of chapter three hundred and eighty-two of the acts of the year nineteen hundred, as amended by section one of chapter five hundred and twenty-five of the acts of the year nineteen hundred and one, is hereby further amended by striking out all of said section two after the word "Commonwealth", in the seventeenth line, so as to read as follows: Section 2. The

governor and council may lay out said land for use as a park, with driveways, walks, grass plots, curbing and railing; may close Mount Vernon street from Beacon street to the state house arch; may construct a new approach to the state house from Bowdoin street and from Beacon street; may build retaining walls and fences; may change the grade of Mount Vernon street from Joy street to the state house as they shall deem to be most advantageous for an approach to the state house; may change the grade of Bowdoin street from Beacon street to Ashburton place so that the street will be substantially level in that part, and may widen Bowdoin street at any part to a width not exceeding fifty feet; may grade and construct said streets and relay the sewers, pipes, tubes, conduits and wires therein wherever necessary, and may provide for the proper storage of coal for the use of the Commonwealth.

SECT. 4. Section three of said chapter five hundred and twenty-five is hereby repealed.

Sect. 5. This act shall take effect upon its passage. [Approved June 28, 1902.

CHAPTER 242, ACTS OF 1904.

An Act to Regulate Public Lodging Houses in Certain Cities.

Section 1. In cities of over fifty thousand inhabitants every building not licensed as an inn, in which ten or more persons are lodged for a price of twenty-five cents or less for each person for a day of twenty-four hours, or for any part thereof, shall be deemed a public lodging house within the meaning of this act.

SECT. 2. The officer or board having charge of the police in any such city may license persons to keep public

lodging houses therein. No fee shall be charged for such license, and it shall expire on the thirtieth day of April next after the granting of the same. Every such license shall specify the street or other place and the number of the building, or give some other particular description thereof, where the licensee shall exercise his employment; and the license shall not protect a person exercising his employment in any other place than that so specified.

SECT. 3. No such license shall be granted in any such city until the inspector of buildings thereof, or the other officer or board having authority to administer the laws and ordinances in regard to the construction of buildings therein, has certified that the building is provided with sufficient means of escape in case of fire, and that suitable appliances are provided for extinguishing fires and for giving alarm to the inmates in case of fire; and such officer or board may from time to time require such alterations to be made or such additional appliances to be provided as may in his or their judgment be necessary for the protection of life and property in case of fire.

SECT. 4. No such license shall be granted in any such city until the board of health thereof has certified that the building is provided with a sufficient number of water closets and urinals, and with good and sufficient means of ventilation; and the said board may from time to time require the licensee thoroughly to cleanse and disinfect all parts of said building and the furniture therein, to the satisfaction of such board.

SECT. 5. In every public lodging house a register shall be kept in which shall be entered the name and address of each lodger, together with the time of his arrival and departure, and such register shall at all times be open to the inspection of the police.

SECT. 6. The keeper of every public lodging house shall at all times, when so required by any officer of the building

department, of the health department, or of the police department, give him free access to said house or any part thereof.

Sect. 7. Whoever keeps or holds himself out as keeping a public lodging house without being duly licensed as here-inbefore provided, and whoever is concerned or financially interested in any public lodging house, the keeper of which is not so licensed, shall be punished by a fine not exceeding one hundred dollars; and every keeper of a public lodging house who violates any provision of this act shall be punished by a fine of one hundred dollars, and the licensing board shall immediately revoke his license.

SECT. 8. Chapter four hundred and fourteen of the acts of the year eighteen hundred and ninety-four is hereby repealed.

Sect. 9. This act shall take effect on the first day of June in the year nineteen hundred and four.

[Approved April 20, 1904.

CHAPTER 129, ACTS OF 1911.

An Act to Regulate Public Lodging Houses in Certain Cities.

Section 1. The provisions of chapter two hundred and forty-two of the acts of the year nineteen hundred and four, regulating public lodging houses in cities of over fifty thousand inhabitants, shall also apply to all buildings in said cities maintained for furnishing lodging to transient persons, and not licensed as an inn, in which ten or more persons are lodged, notwithstanding that no price is charged for lodging.

Sect. 2. This act shall take effect on the first day of June in the year nineteen hundred and eleven,

[Approved March 11, 1911.

CHAPTER 333, ACTS OF 1904.

An Act Relative to the Height of Buildings in the City of Boston.

Be it enacted, etc., as follows:

Section 1. The city of Boston shall be divided into districts of two classes, to be designated districts A and B. The boundaries of the said districts, established as hereinafter provided, shall continue for a period of fifteen years, and shall be determined in such manner that those parts of the city in which all or the greater part of the buildings situate therein are at the time of such determination used for business or commercial purposes shall be included in the district or districts designated A, and those parts of the city in which all or the greater part of the buildings situate therein are at the said time used for residential purposes or for other purposes not business or commercial shall be in the district or districts designated B.

Sect. 2. Upon the passage of this act the mayor of the city shall appoint a commission of three members to be called "Commission on Height of Buildings in the City of Boston." The commission shall immediately upon its appointment give notice and public hearings, and shall make an order establishing the boundaries of the districts aforesaid, and, within one month after its appointment, shall cause the same to be recorded in the registry of deeds for the county of Suffolk. The boundaries so established shall continue for a period of fifteen years from the date of said recording. Any person who is aggrieved by the said order may, within thirty days after the recording thereof, appeal to the commission for a revision; and the commission may, within six months after its appointment, revise such order, and the revision shall be recorded in the registry of deeds for the county of Suffolk, and shall date back to the original date of recording. The members of the commission shall serve until the districts have been established as aforesaid; and any vacancy in the commission caused by resignation, death or inability to act shall be filled by the mayor, on written application by the remaining members of the commission or of ten inhabitants of the city. The members of the commission shall receive such compensation as the mayor shall determine.

Sect. 3. In the city of Boston no building shall be erected to a height of more than one hundred and twenty-five feet above the grade of the street in any district designated A, and no building shall be erected to a height of more than eighty feet above the grade of the street in any district designated B. These restrictions shall not apply to grain or coal elevators or sugar refineries in any district designated A, nor to steeples, domes, towers or cupolas erected for strictly ornamental purposes, of fireproof material, on buildings of the above height or less in any district. The supreme judicial court and the superior court shall each have jurisdiction in equity to enforce the provisions of this act, and to restrain the violation thereof.

SECT. 4. This act shall take effect upon its passage.

[Approved May 13, 1904.

[Order of December 3, 1904.]

June 7, 1904, the mayor of the city of Boston, under the provisions of chapter 333 of the Acts of 1904, appointed the Commission on Height of Buildings in the city of Boston, and they on July 5, 1904, made an order in accordance with the provisions of said chapter, which order is recorded in the Suffolk Registry of Deeds, Book 2976, page 45.

Order of July 5, 1904, as amended and revised by order of December 3, 1904.

- A. The boundaries of the Districts A, hereby established, are as follows, to wit:
- 1. Beginning on the northerly side of that part of the said city known as East Boston at the Chelsea Street

Bridge, thence running southeasterly, southerly and southwesterly through the centre of Chelsea street to Eagle square, thence westerly through said Eagle square and the centre of Eagle street to Glendon street, thence northerly through the centre of said Glendon street to Condor street, thence westerly through the centre of said Condor street to Border street, thence southerly and southwesterly through the centre of said Border street to Sumner street, thence southeasterly through the centre of said Sumner street to Orleans street, thence southwesterly through the centre of said Orleans street to Marginal street, thence southeasterly and easterly through the centre of said Marginal street to Jeffries street, thence northeasterly through the centre of said Jeffries street to Maverick street, thence northwesterly through the centre of said Maverick street to the location of the Boston, Revere Beach and Lynn Railroad, thence northerly and northeasterly along the said Railroad to the property of the said city known as Wood Island Park, thence southeasterly along the line dividing the said property of the said city from the property of the East Boston Company and the property of the Commonwealth to the harbor, thence southwesterly, westerly, northwesterly, northerly, northeasterly, and easterly along the said harbor and Chelsea creek, around the said East Boston to the point of beginning at said Chelsea Street Bridge; meaning to include in the said District A all those portions of wards one and two of the said city, as now established by law, which are situated within the boundary line hereinbefore described.

2. Beginning on the southerly side of that part of the said city known as Charlestown at the Charlestown Bridge, thence running northwesterly through the centre of said bridge and the approaches thereof to a point on said approaches immediately over the centre of the arch connecting Warren avenue with Water street, thence north-

easterly through the centre of said Water street to the property of the United States known as the United States Navy Yard, thence northwesterly along the southwesterly boundary line of said property of the United States to Chelsea street, thence northeasterly through the centre of said Chelsea street to Medford street, thence northwesterly and westerly through the centre of said Medford street to the junction of said Medford street, Bunker Hill street and Main street, thence northwesterly through the centre of said Main street to the property of the said city known as the Charlestown Playground, thence northeasterly along the southeasterly boundary of said Playground to the Mystic river, thence easterly, southeasterly, southerly and southwesterly along said Mystic river and the harbor around said Charlestown to the point of beginning at said Charlestown Bridge; meaning to include in the said District A all those portions of Wards three, four and five of the said city as now established by law, which situated within the boundary line hereinbefore described.

3. Beginning on the easterly side of that part of the said city known as the city proper at the Congress Street Bridge, thence running southeasterly across said bridge to that part of said city known as South Boston, thence northeasterly, easterly, southeasterly, westerly, southerly and easterly around the northerly part of said South Boston and the Reserved channel, so-called, to the point on the southerly boundary of said Reserved channel where Q street extended northerly would meet the said channel, thence southerly through the centre of said Q street to East First street, thence westerly through the centre of East First street to I street, thence southerly through the centre of said I street to East Second street, thence westerly through the centre of said East Second street to the junction of said East Second street, Dorchester street and West First street, thence northwesterly through the

centre of said West First street to Dorchester avenue, thence southerly through the centre of said Dorchester avenue to Dexter street, thence westerly through the centre of said Dexter street to Ellery street, thence southerly through the centre of said Ellery street to Southampton street, thence westerly through the centre of said Southampton street to Massachusetts avenue. thence northwesterly through the centre of said Massachusetts avenue to Albany street, thence northeasterly through the centre of said Albany street to East Dedham street, thence northwesterly through the centre of said East Dedham street to Harrison avenue, thence northeasterly through the centre of said Harrison avenue to Troy street, thence southeasterly through the centre of said Troy street to Albany street, thence northerly through the centre of said Albany street to Broadway, thence northwesterly through the centre of said Broadway to Washington street, thence northwesterly across said Washington street and through the centre of Pleasant street to Piedmont street, thence westerly through the centre of said Piedmont street to Ferdinand street, thence northwesterly through the centre of said Ferdinand street to Columbus avenue, thence southwesterly through the centre of Columbus avenue to a point where a line passing along the boundary line between the estates now numbered 352 and 356 on Boylston street and extended southeasterly would meet said point on Columbus avenue, thence from said point northwesterly along said line and between said estates above mentioned to a point in the centre of Boylston street opposite or nearly opposite the westerly boundary of the lot on which the Arlington Street Church now stands, thence easterly through the centre of said Boylston street to Tremont street, thence northerly and northeasterly through the centre of said Tremont street to Park street, thence northwesterly through the centre of said Park street to Beacon street,

thence northeasterly through the centre of said Beacon street to Bowdoin street, thence northerly through the centre of said Bowdoin street to Cambridge street, thence westerly through the centre of said Cambridge street to Staniford street, thence northerly through the centre of said Staniford street to Green street, thence northwesterly through the centre of said Green street to Leverett street, thence northwesterly through the centre of said Leverett street to the Charles river at Craigie Bridge, thence northeasterly, easterly, southeasterly, southerly and southwesterly by the said Charles river and the said harbor around the said city proper to the point of beginning at said Congress Street Bridge; meaning to include in said District A the whole of ward six and all those portions of wards seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen and seventeen of the said city, as now established by law, which are situated within the boundary line hereinbefore described.

- B. The boundaries of the Districts B hereby established are as follows, to wit:
- 1. All those portions of said wards one and two which are situated outside the line beginning and ending at said Chelsea Street Bridge hereinbefore established as the boundary of one of said Districts A.
- 2. All those portions of said wards three, four and five which are situated outside the line beginning and ending at said Charlestown Bridge hereinbefore established as the boundary of one of said District A.
- 3. The whole of wards sixteen, eighteen, nineteen, twenty, twenty-one, twenty-two, twenty-three, twenty-four and twenty-five of the said city, as now established by law, and all those portions of said wards seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen and seventeen which are situated outside the line beginning and ending at said Congress-street Bridge hereinbefore established as the boundary of one of said Districts A.

Meaning to include in the said Districts B all those portions of the said city not included in the Districts hereinbefore established as Districts A.

Wherever in this order the words "harbor," "river," "creek" are found, the same are intended to mean the furthest line towards deep water on said harbor, river or creek respectively on which the erection of wharves or other structures is permitted by the State and United States authorities.

[CHAPTER 383, STATUTE OF 1905.]

An Act Relative to the Height of Buildings in the City of Boston.

Be it enacted, etc., as follows:

Section 1. Within thirty days after the passage of this act the mayor of the city of Boston shall appoint a commission of three members to determine, in accordance with the conditions hereinafter provided, the height of buildings within the district designated by the commission on height of buildings in the city of Boston as district B, in accordance with chapter three hundred and thirty-three of the acts of the year nineteen hundred and four.

SECT. 2. Said commission shall immediately upon its appointment give notice and public hearings, and shall make an order establishing the boundaries of or otherwise pointing out such parts, if any, of said district B, as it may designate in which buildings may be erected to a height exceeding eighty feet but not exceeding one hundred feet, and the height between eighty feet and one hundred feet to which buildings may so be erected, and the conditions under which buildings may be erected to said height, except that such order may provide for the erection of buildings as aforesaid to a height not exceeding one hundred and twenty-five feet in that portion of said district B which lies within fifty feet from the boundary line separat-

ing said district B from the district designated by the commission on height of buildings in the city of Boston as district A in accordance with said chapter three hundred and thirty-three, provided said boundary line divides the premises affected by such order from other adjoining premises both owned by the same person or persons, and within sixty days after its appointment shall cause the same to be recorded in the registry of deeds for the county of Suffolk. Any person who is aggrieved by such order may, within sixty days after the recording thereof, appeal to the commission for a revision; and the commission may, previous to the first day of January in the year nineteen hundred and six, revise such order, and the revision shall be recorded in the registry of deeds for the county of Suffolk and shall date back to the original date of recording. The boundaries so established shall continue for a period of fifteen years from the date of the recording of the order made by the commission on height of buildings in the city of Boston under chapter three hundred and thirty-three of the acts of the year nineteen hundred and four. The members of the commission shall receive such compensation as the mayor shall determine.

Sect. 3. Within such parts of district B as may be designated by the commission as aforesaid (which may, except as hereinafter provided, include any parts of said district B affected by prior acts limiting the height of buildings) buildings may be erected to the height fixed by the commission as aforesaid, exceeding eighty feet but not exceeding one hundred feet, or one hundred and twenty-five feet as hereinbefore provided, and subject to such conditions as may be fixed as aforesaid by the commission; but within the following described territory, to wit:—Beginning at the corner of Beacon street and Hancock avenue, thence continuing westerly on Beacon street to Joy street, thence continuing northerly on Joy street to Myrtle street, thence continuing easterly on Myrtle

street to Hancock street, thence continuing southerly on Hancock street and Hancock avenue to the point of beginning, no building shall be erected to a height greater than seventy feet, measured on its principal front, and no building shall be erected on a parkway, boulevard or public way on which a building line has been established by the board of park commissioners or by the board of street commissioners, acting under any general or special statute, to a greater height than that allowed by the order of said boards; and no building upon land any owner of which has received and retained compensation in damages for any limitation of height or who retains any claim for such damages shall be erected to a height greater than that fixed by the limitation for which such damages were received or claimed.

Sect. 4. No limitations of the height of buildings in the city of Boston shall apply to churches, steeples, towers, domes, cupolas, belfries or statuary not used for purposes of habitation, nor to chimneys, gas holders, coal or grain elevators, open balustrades, skylights, ventilators, flagstaffs, railings, weather vanes, soil pipes, steam exhausts, signs, roof houses not exceeding twelve feet square and twelve feet high, nor to other similar constructions such as are usually erected above the roof line of buildings.

Sect. 5. This act shall take effect upon its passage. [Approved May 8, 1905.

[Order of July 21, 1905.]

Buildings may be erected on streets exceeding sixtyfour (64) feet in width, to a height equal to one and onequarter times the width of the street upon which the building stands; and, if situated on more than one street, the widest street is to be taken, the height to be measured from the mean grade of the curbs of all the streets upon which the building is situated, and not exceeding one hundred (100) feet in any event. If the street is of uneven width, its width will be considered as the average width opposite the building to be erected.

The width of a street shall be held to include the width of any space on the same side of the street upon which a building stands, upon or within which space no building can be lawfully erected by virtue of any building line established by the Board of Street Commissioners or the Board of Park Commissioners acting under general or special laws.

All streets or portions of streets upon which buildings may be erected on one side only shall be considered as of a width of eighty (80) feet as to that portion upon which buildings may be erected on one side only.

In the case of irregular or triangular open spaces formed by the intersection of streets, the width of the street shall be taken as the width of the widest street entering said space at the point of entrance.

No building shall, however, be erected on a parkway, boulevard or public way on which a building line has been established by either of said Boards acting under general or special laws to a height greater than that allowed by said general or special laws, nor otherwise in violation of Section 3 of said Chap. 383, Acts of 1905.

No building shall be erected to a height greater than eighty (80) feet unless its width on each and every public street upon which it stands will be at least one-half its height.

Nothing in this order shall be construed as affecting any condition or restriction imposed by deed, agreement or by operation of law on any property in said Districts B.

The said Commissioners further provide that buildings may be erected to a height not exceeding one hundred and twenty-five (125) feet in that portion of the District B as established by the Commission on Height of Buildings in its order dated December 3, 1904, recorded with Suffolk

Deeds, Book 3008, page 129, which lies fifty (50) feet westerly from the boundary line running from Columbus avenue to the centre of Boylston street, separating said District B from District A, as established by said order; provided, however, that said portion of District B is owned by the same person or persons who own the adjoining premises in District A.

REVISED ORDER OF NOVEMBER 20, 1905.

- 1. So long as the property owned by the city of Boston on Dalton, Belvidere and Scotia streets, bounded 205.5 feet on Dalton street, 250 feet on Belvidere street, and 184 feet on Scotia street, be said measurements more or less, shall be used for a Mechanic Arts High School, any building or buildings thereon may be erected to a height of one hundred (100) feet.
- 2. Add at the end of the third paragraph the words: "or by the Commonwealth or City," so that the concluding part of said paragraph shall read, "established by the Board of Street Commissioners or the Board of Park Commissioners acting under general or special laws or by the Commonwealth or City."
- 3. After the tenth word in the fourth paragraph insert the word "lawfully" so that said paragraph shall read: "All streets or portions of streets upon which buildings may lawfully be erected, etc."

CHAPTER 450, ACTS OF 1904.

An Act Relative to the Licensing and Inspection of Theatres and Public Halls.

Be it enacted, etc., as follows:

SECTION 1. In this act the term "theatre" shall mean a building or part of a building in which it is designed to make a business of the presentation of dramatic, operatic or other performances or shows for the entertainment of spectators, which is capable of seating at least four hundred persons, and which has a stage for such performances that can be used for scenery and other stage appliances. The term "public hall" shall mean any building, or part of a building, excluding theatres, armories and churches, containing an audience or assembly hall capable of seating four hundred persons, and used for public gatherings.

- SECT. 2. In Boston the mayor, and in all other cities and towns the chief of the district police, shall be the officer to issue licenses for theatres and public halls. The terms, conditions and form of each license shall be prescribed by the licensing officer, and all licenses shall expire on the first day of August in each year. Licenses shall be issued upon application: provided, that the applicant shall have complied with all provisions of law in respect to the theatre or public hall for which a license is sought.
- SECT. 3. Licensees shall be responsible, civilly and criminally, for non-compliance with laws applicable to the building covered by the license, and for non-compliance with the conditions of the license, and for any misrepresentation in the application. The licensing officer shall cause a complete inspection of all theatres and public halls to be made once in each month and as much oftener as practicable.
- SECT. 4. Every inspection shall cover all details relating to the condition of the building as regards the safety of life and property, and the inspector shall make a signed report as to all such details upon a tabulated inspection blank, the form of which shall be determined by the licensing officer. The forms of such blanks may be adapted to the conditions of each class of buildings included in the provisions of this act, but they shall be such as to enable the inspectors to report a rating on the points and in the form hereinafter specified, and shall include a detailed table of legal requirements, with a statement as to compliance or non-compliance with each. All inspectors

inspecting theatres during the month shall collate the report of their inspections and rate each theatre or public hall on the following points in the following form:—

- 1. Compliance with existing laws, non-compliance in any particular to be specified.
- 2. The following ratings of each building as to the safety of the audience in the judgment of the inspectors in the light of improved methods of insuring safety.

Condition, whether poor, fair, good or excellent.

- a. Structural condition.
- b. Facility of escape of audience.
- c. Heating apparatus.
- d. Water supply.
- e. Lighting apparatus.
- f. Condition of fire apparatus.
- g. Condition of sprinklers.
- h. Curtains.
- i. Protection against neighborhood hazard.
- j. General condition of appliances and apparatus.
- k. General condition of stage.

Rating as a whole.

With regard to safety of audience.

And such other points as in the opinion of the licensing officer may be suitable. These reports and ratings shall be signed by the inspectors and rendered to the licensing officer on the last day of every month, and shall give the date of all inspections made during the month, with such remarks upon the condition of each theatre and public hall as may be suitable to give notice of danger or to give confidence in the safety of such buildings. After each inspection of a theatre or public hall, the inspector shall post a notice in conspicuous type in the entrance to such theatre or hall in the following form:—

"This theatre (or hall) has been inspected by official inspector (name of inspector) on (date)."

Sect. 5. The licensing officer may call upon any department, board and officer in the city or town where a building is situated to cause a competent inspection thereof to be made, on any matter as to which the licensing officer desires information, and to report such inspection, together with recommendations relating to such building, to the licensing officer, and it shall be the duty of such department, board or officer, when so requested, to cause such inspection and report to be made. Each department, board and officer may inspect buildings included within the provisions of this act at any time, and report inspections and recommendations to the licensing officer, who shall take such action thereon as he may see fit.

Sect. 6. The full inspection reports shall be kept on file by the licensing officer, but, except as hereinafter provided, they shall not be open to examination by the public until the expiration of one month from the time when they were rendered, except with the consent of the licensing officer. Each licensee shall be entitled to examine the full reports of his own building at any time. The licensing officer shall make a full report annually of the condition of all theatres and public halls, and the report shall be a public document, open to examination by the public at all times. The reports of inspectors shall be public records of matters of public interest, and a fair publication of these reports, or part thereof, or comment thereon, by any person, in newspapers or otherwise, shall be privileged.

Sect. 7. The licensing officer may, in his discretion, in case of emergency, suspend inspections for a period not exceeding one month, and may when in his opinion the circumstances warrant, after the first monthly inspections, issue a permit exempting a public hall, but not a theatre, from regular inspection for not more than six months, on condition that he be notified by the licensee of any substantial change in the conditions. Such permit shall not prevent inspection at any time during the period specified.

Sect. 8. A certified copy of the monthly ratings and conclusions of the inspectors in respect to any licensed building shall be delivered or mailed by the licensing officer to the licensee at the building. If any inspector shall report that the laws or the conditions of the license are not complied with by any licensee, it shall be the duty of the licensing officer to notify the licensee, fixing a time within which he shall comply with the law and the conditions of the license. If, at the expiration of such time there has not been such compliance, the licensing officer shall give a hearing to the licensee, and if upon investigation he shall find that there is cause, he shall revoke the license. The licensing officer shall have power, if, in his opinion, the public safety requires it, to order any theatre or public hall to be closed pending a hearing upon the revocation of the license for such building, and any person failing to comply with such order may be punished by fine not exceeding one thousand dollars.

Sect. 9. Any licensee may post upon his premises a certified copy of the complete table of ratings and conclusions relating to the building covered by his license, but he shall not post an incomplete copy of such table.

Sect. 10. Except in Boston, whoever is aggrieved by any order or decision of a licensing officer may apply to a judge of the superior court sitting in equity for the county in which the building affected by such order or decision is situated, for the appointment of a board of appeal of three disinterested persons to examine the premises and hear the parties and render a decision in writing and under oath, to be filed in the office of the clerk of courts in said county within ten days after such hearing, and the majority of said persons shall decide whether the whole or a part of the order or requirement shall be complied with, and the licensing officer shall make his order or decision conform to the decision of the said board of appeal. If the decision is not unanimous the dissenting member of the board

shall file a written statement of his reasons, under oath. The compensation of the members of such board of appeal and the taxation of costs in such cases shall be governed by sections twenty and twenty-one of chapter one hundred and four of the Revised Laws. In Boston the appeal shall be to the board of appeals as provided in sections twelve and thirteen of chapter four hundred and nine-teen of the acts of the year eighteen hundred and ninety-two.

SECT. 11. Any court having equity jurisdiction may, upon the application of the licensing officer, enforce by any suitable process or decree, the provisions of this act and any order or requirement of any person made by authority of this act.

SECT. 12. Any person having any duties or powers under this act may in the performance of his duty enter any building included within the provisions of this act and any person who wilfully obstructs his entry may be punished by fine not exceeding one thousand dollars.

SECT. 13. Any person having any duty to perform under this act in connection with the licensing or inspection of buildings who wilfully makes any false statement or report or any false record of any statement, report or rating as to any building shall be punished by a fine of not more than one thousand dollars or by imprisonment for not more than one year. Any licensee under this act who wilfully makes any false statement or representation in his application for a license shall be punished by a fine of not more than one thousand dollars or by imprisonment for not more than one year.

SECT. 14. Any officer or person having any duty in any way connected with the inspections provided for by this act, who requests for himself or another, or accepts or uses any ticket or pass or privilege or admission, to any theatre or public hall, for which he is to pay or has paid either nothing or a price less than that demanded of the public generally, and any owner, proprietor, manager, lessee, agent or employee of any theatre or public hall, or any other person who issues, delivers, offers or allows any such ticket, pass, privilege or admission to any such officer or person or to any other person at the request, solicitation, procurement, or with the connivance of any such officer or person shall be punished by a fine of not less than one hundred nor more than one thousand dollars.

Sect. 15. So much of section one hundred and seventy-two of chapter one hundred and two of the Revised Laws and of any other act as is inconsistent herewith is hereby repealed, and all local ordinances, by-laws and regulations of any kind inconsistent herewith are hereby annulled. The penalty provided in section one hundred and seventy-three of said chapter one hundred and two shall apply to all acts specified in said section one hundred and seventy-three and done without a license under this act.

Sect. 16. This act shall take effect on the first day of September in the year nineteen hundred and four.

[Approved June 9, 1904.

CHAPTER 347, ACTS OF 1905.

An Act to Prohibit the Obstruction of Means of Egress from Buildings.

Section 1. Any article or thing placed upon a fire escape or an outside means of egress of any building is hereby declared a common nuisance. Any court authorized to issue warrants in criminal cases may, upon complaint under oath made by any police officer that any article or thing is placed or maintained upon a fire escape or outside means of egress of any building, issue a warrant to bring such article or thing when found before a court having jurisdiction of the same, and all articles or things seized

under the authority of such a warrant shall be disposed of as provided in sections three to eight inclusive of chapter two hundred and seventeen of the Revised Laws relative to articles seized under clause eleven of section one of said chapter. Any owner, lessee, tenant or occupant of any building who maintains or permits to remain upon any fire escape or outside means of egress of any building any article or thing for more than twenty minutes shall be punished by a fine of not more than one hundred dollars. The existence of any article or thing upon a fire escape or outside means of egress of any building shall be prima facie evidence that such article or thing was so placed, maintained or permitted to remain by the occupant of the premises having access from said building to said fire escape or outside means of egress.

SECT. 2. Every stairway of every building shall be kept free and unobstructed, and any person who permits any article or thing to remain in any stairway of any building in such a manner as may impede the egress of any person lawfully in said building, or the egress of any person lawfully entitled to enter said building shall be punished by a fine of not more than five hundred dollars. The existence of any article or thing in any such stairway in any building shall be *prima facie* evidence that it was placed or permitted to remain therein by the owner, lessee, tenant or occupant of the building.

[Approved April 28, 1905.

-CHAPTER 437, ACTS OF 1905.

An Act to Regulate the use of the Cinematograph in Churches and Other Public Buildings.

The provisions of chapter one hundred and seventy-six of the acts of the year nineteen hundred and five, being an act entitled "An Act to regulate the use of the cine-

matograph," shall apply to the use, keeping, exhibition and inspection of cinematographs which are to be used, kept or exhibited in any church or other public building, whether such use, keeping or exhibition is on premises licensed or not licensed for entertainments.

[Approved May 23, 1905.

CHAPTER 416, ACTS OF 1907.

AN ACT RELATIVE TO THE HEIGHT OF BUILDINGS ON RUTHERFORD AVENUE IN THE CITY OF BOSTON.

Section 1. The width of Rutherford avenue in the Charlestown district of the city of Boston, between Chapman street and the Mystic river tracks of the Boston and Maine Railroad crossing the northerly part of said avenue, shall be considered as eighty feet in respect to the height of buildings that may be erected on the southwesterly and westerly side of said avenue, between the points mentioned, so as to permit the erection of buildings to the height of one hundred feet, as provided for buildings erected on streets of the width aforesaid in district B by the commission appointed on height of buildings in the city of Boston, under chapter three hundred and eighty-three of the acts of the year nineteen hundred and five.

SECT. 2. This act shall take effect upon its passage. [Approved May 16, 1907.

CHAPTER 463, ACTS OF 1907.

An Act Relative to the Licensing of Theatres and Public Halls in the City of Boston.

SECTION 1. In Boston the mayor shall be the officer to issue licenses for theatres and public halls, and he may require such changes in the structural condition of any

building before issuing a license, as, in his opinion, the public safety requires, but no changes shall be ordered in excess of the statutory requirements then in force for a new building of like character. Whoever is aggrieved by any order or decision of the mayor in respect to changes that he may require in the structural condition of any building before issuing a license as aforesaid shall have the right of appeal to the board of appeals established by chapter four hundred and nineteen of the acts of the vear eighteen hundred and ninety-two, or to any similar or succeeding board of appeals which may hereafter be established for the city of Boston. Said board on receipt of the appeal shall within five days thereafter examine the premises and hear the parties and render a decision in writing within ten days after such hearing, and the majority of the board shall decide whether the whole or a part of the order or requirement made by the mayor in respect to structural changes shall be complied with, or whether a license for said building shall be issued; and the mayor shall make his order or requirement in respect of structural changes and the issuing of said license conform to the decision of said board. If the mayor has granted a license as aforesaid he shall not revoke or suspend the same except by giving five days' written notice to the licensee of his intention so to do, and his reasons therefor, and if the licensee is aggrieved by said notice of revocation and said reasons he may appeal to the board of appeals, who shall within five days from date of his appeal examine the premises and hear the parties, and render a decision in writing within three days after such hearing; and the majority of the board shall decide whether the license shall be revoked, and the mayor shall make his action conform to the decision of the board and shall not revoke the same without the approval of the board.

Sect. 2. This act shall take effect upon its passage. [Approved May 28, 1907.

CHAPTER 254, ACTS OF 1909.

An Act Relative to Entertainments Given in Private Dwellings.

Section one hundred and seventy-three of chapter one hundred and two of the Revised Laws, as amended by section five of chapter four hundred and sixty of the acts of the year nineteen hundred and four and by section one of chapter three hundred and nine of the acts of the year nineteen hundred and seven, is hereby further amended by adding at the end of the section the words: - or to entertainments given in a private dwelling, except in apartments thereof having a seating capacity of four hundred or more,—so as to read as follows:—Section 173. Whoever offers to view, sets up, sets on foot, maintains, carries on, publishes or otherwise assists in or promotes any such exhibition, show or amusement, without such license, shall be punished by a fine of not more than five hundred dollars for each offense. The provisions of this section and of the last preceding section, however, shall not apply to public entertainments by religious societies in their usual places of worship for a religious or charitable purpose, or to entertainments given in school buildings by, or for the benefit of, the pupils thereof, and under the supervision of the principal or teacher in charge of the school classes therein, or to entertainments given in a private dwelling, except in apartments thereof having a seating capacity of four hundred or more.

CHAPTER 284, ACTS OF 1910.

AN ACT RELATIVE TO THE CONSTRUCTION, ALTERATION, INSPECTION, AND MAINTENANCE OF BUILDINGS IN THE CITY OF BOSTON.

Be it enacted, etc., as follows:

Section 1. It shall be the duty of the building commissioner of the city of Boston to enforce all provisions

of law relative to the construction, alteration, inspection and maintenance of buildings which are or may be applicable to said city, heretofore enforced by the district police, except the provisions of chapter four hundred and sixty-five of the acts of the year nineteen hundred and seven, relative to the inspection of steam boilers, the provisions of chapter three hundred and seventy of the acts of the year nineteen hundred and four, as amended by chapter two hundred and eighty of the acts of the year nineteen hundred and five and by chapter five hundred and two of the acts of the year nineteen hundred and eight, relative to the keeping, storage, use, manufacture, sale, handling and transportation of explosive or inflammable fluids or compounds or other explosives, the provisions of chapter four hundred and thirty-three of the acts of the year nineteen hundred and four, relative to the powers and duties of the detective department of the district police in connection with the investigation or prevention of fires, and the provisions of chapter five hundred and fourteen of the acts of the year nineteen hundred and nine, and acts in amendment thereof or in addition thereto, relative to labor, so far as the provisions of said chapter are enforced by the district police.

SECT. 2. All acts and parts of acts inconsistent herewith are hereby repealed.

SECT. 3. This act shall take effect upon its passage. [Approved March 25, 1910.

CHAPTER 571, ACTS OF 1910.

AN ACT TO AUTHORIZE THE COLLECTION OF FEES FOR PERMITS AND LICENSES ISSUED BY DEPARTMENTS OF THE CITY OF BOSTON.

Be it enacted, etc., as follows:

Section 1. The heads of the various departments of the city of Boston may establish, subject to the approval of the mayor, reasonable fees or charges for the issuance of permits and licenses by said departments: *provided*, *however*, that the charge for a permit to make excavations in any street or sidewalk shall not exceed fifty cents.

SECT. 2. The authority given in the preceding section shall not deprive any of the officials named in section twenty-eight of chapter four hundred and eighty-six of the acts of the year nineteen hundred and nine of any authority given therein to fix the charges for permits and licenses.

SECT. 3. This act shall take effect upon its passage. [Approved May 26, 1910.

CHAPTER 129, ACTS OF 1911.

An Act to Regulate Public Lodging Houses in Certain Cities.

Be it enacted, etc., as follows:

SECTION 1. The provisions of chapter two hundred and forty-two of the acts of the year nineteen hundred and four, regulating public lodging houses in cities of over fifty thousand inhabitants, shall also apply to all buildings in said cities maintained for furnishing lodging to transient persons, and not licensed as an inn, in which ten or more persons are lodged, notwithstanding that no price is charged for lodging.

Sect. 2. This act shall take effect on the first day of June in the year nineteen hundred and eleven.

[Approved March 11, 1911.

CHAPTER 342, ACTS OF 1911.

AN ACT TO REGULATE THE CONSTRUCTION OF GARAGES IN THE CITY OF BOSTON.

Be it enacted, etc., as follows:

Section 1. A garage hereafter erected within the fire limits of the city of Boston shall be of first class construc-

tion. A garage hereafter erected in any other part of that city shall be either of first or second class construction.

- SECT. 2. By the term "garage" is meant a building or that part of a building wherein are kept five or more automobiles or motor cars charged with or containing a volatile inflammable liquid for fuel or power. Wherever hereafter any part of an existing building is converted into a garage, the garage shall be deemed to embrace all the building not separated from the garage proper by fireproof construction satisfactory to the building commissioners, and such building or part of a building shall be of first class construction.
- SECT. 3. By the term "volatile inflammable liquid" is meant any liquid that will emit inflammable vapor at a temperature below one hundred degrees Fahrenheit, when tested in the open air.
- SECT. 4. The penalty for violation of this act shall be a fine of not less than ten and not more than fifty dollars a day, so long as the violation continues.

[Approved April 27, 1911.

CHAPTER 259, ACTS OF 1912.

AN ACT RELATIVE TO THE CONSTRUCTION OF GARAGES IN THE CITY OF BOSTON.

Existing buildings upon premises numbered 337 on Newbury street, in Boston, are exempt from the provisions of chapter 342, Acts of 1911, but only while such buildings remain of their present size and in their present location: provided, however, that no part of said buildings shall be used as a dwelling.

[Approved March 18, 1912, and took effect.

CHAPTER 280, ACTS OF 1913.

AN ACT TO AUTHORIZE THE MAYOR OF THE CITY OF BOSTON TO GRANT PERMITS FOR SPECIAL MOVING PICTURE EXHIBITIONS IN CHURCHES, HALLS OR OTHER BUILDINGS.

Be it enacted, etc., as follows:

Section 1. The mayor of the city of Boston may grant permits in writing for special exhibitions of moving pictures in churches, halls or other buildings in that city which, in his opinion, are in safe condition for said exhibitions, and he may prescribe regulations for the proper conduct of the same: provided, however, that such special exhibitions shall be subject to the laws of the commonwealth and the regulations of the district police relating to the use of the cinematograph or similar apparatus.

Sect. 2. A fee of two dollars shall accompany each application for a permit hereunder.

Sect. 3. This act shall take effect upon its passage. [Approved March 12, 1913.

CHAPTER 572, ACTS OF 1913.

An Act Relative to Building Lines in Cities and Towns.

Be it enacted, etc., as follows:

Section 1. Section one hundred and three of chapter forty-eight of the Revised Laws is hereby amended by striking out the words "parallel to, and," in the third line, by striking out the word "twenty-five" in the fourth line, and inserting in place thereof the word:—forty,—and by inserting after the word "line," in the ninth line,

the following: - and except that buildings or parts of buildings existing at the time of the establishment of the building line may be permitted to remain and to be maintained to such extent and under such conditions as may be prescribed in the vote establishing such building line, so as to read as follows: — Section 103. If the city council of a city or if a town accepts the provisions of this section or has accepted the corresponding provisions of earlier laws, a building line not more than forty feet distant from the exterior line of a highway or town way may be established in the manner provided for laying out ways, and thereafter no structures shall be erected or maintained between such building line and such way, except steps, windows, porticos and other usual projections appurtenant to the front wall of a building, to the extent prescribed in the vote establishing such building line, and except that buildings or parts of buildings existing at the time of the establishment of the building line may be permitted to remain and to be maintained to such extent and under such conditions as may be prescribed in the vote establishing such building line. Whoever sustains damage thereby shall have the same remedies therefor as for damages sustained by the laying out of a town way.

Sect. 2. This act shall take effect upon its passage. [Approved May 2, 1913.

CHAPTER 577, ACTS OF 1913.

An Act to Regulate the Erection and Maintenance of Garages in the City of Boston.

Be it enacted, etc., as follows:

Section 1. In the city of Boston no building shall be erected for, or maintained as a garage for the storage, keeping or care for hire of automobiles until the issue of a permit therefor by the board of street commissioners of

the city after notice and a public hearing upon an application filed with said board. The application for the permit shall be made by the owner of the parcel of land upon which such building is to be erected or maintained and shall contain the names and addresses of every owner of record of each parcel of land abutting thereon.

- SECT. 2. The notice required by the preceding section shall include a copy of the application and an order of said board specifying the time and place of the public hearing, and shall be given by publication once in each week for three successive weeks in some one newspaper regularly published in said city, and by mailing by prepaid registered mail a copy to every owner of record of each parcel of land abutting on the parcel of land on which the building proposed to be erected for, or maintained as a garage is to be, or is situated, and the cost of such notice and proceedings shall be borne by the applicant.
- SECT. 3. At the time and place specified in the notice for the hearing the said board shall hear all parties interested, and after giving consideration to the interests of all owners of record notified, the general character of the neighborhood in which is situated the land or building referred to in the application, and the requirements of public convenience, shall determine whether or not the application shall be granted and a permit issued.
- SECT. 4. The provisions of this act shall not apply to a building maintained as a garage for the storage, keeping or care for hire of automobiles at the time of the passage of this act, but any enlargement of, or addition to any such building shall be subject to the provisions of this act.
- Sect. 5. Whoever erects or maintains a garage in violation of this act shall be subject to a fine of not less than ten nor more than fifty dollars for every day during which such violation continues. [Approved May 2, 1913.

[1912, c. 259; 1911, c. 342.]

CHAPTER 680, ACTS OF 1913.

AN ACT RELATIVE TO SIGNS, AWNINGS AND OTHER PROJECTIONS IN PUBLIC WAYS IN THE CITY OF BOSTON.

Be it enacted, etc., as follows:

Section 1. The board of street commissioners of the city of Boston is hereby authorized to grant permits, to fix the fees therefor, not exceeding one dollar for any one permit, and to make rules and regulations for the placing and maintaining of signs, advertising devices, clocks, marquees, permanent awnings, and structures projecting into, or placed on or over the public highways of said city, and to prescribe penalties for a breach thereof not exceeding five dollars for each day during which such sign, advertising device, clock, marquee, permanent awning, or structure is so placed or maintained contrary to the rules and regulations made by the board of street commissioners after five days' notice to remove the same has been given by the said board, or by a police officer of said city.

- Sect. 2. All signs, advertising devices, clocks, marquees, permanent awnings and structures authorized by the board of street commissioners as provided in the preceding section, shall, after the passage of this act, be subject to the requirements of the building commissioner of the city of Boston as to their construction and physical connection with the buildings to which they are to be attached.
- SECT. 3. This act shall not apply to the poles, wires, conduits and appurtenances necessary to the operation of steam railroads, street railways, gas, electric light, heat and power companies, or to companies engaged in the business of transmission of intelligence by electricity or other agency.
- SECT. 4. Chapter three hundred and fifty-two of the acts of the year eighteen hundred and ninety-five, and all other acts and ordinances, or parts thereof, inconsistent herewith are hereby repealed.

Sect. 5. This act shall take effect three months after its passage. [Approved May 19, 1913.

CHAPTER 729, ACTS OF 1913.

AN ACT RELATIVE TO DRY HOUSES IN THE CITY OF BOSTON. Be it enacted, etc., as follows:

SECTION 1. No building or part of a building hereafter erected or altered in the city of Boston shall be used for kiln drying lumber unless such building or part of a building is of fireproof construction approved by the building commissioner.

SECT. 2. All acts and parts of acts inconsistent herewith are hereby repealed.

Sect. 3. This act shall take effect upon its passage. [Approved May 29, 1913.

CHAPTER 540, ACTS OF 1914.

An Act Relative to the Qualifications of Inspectors of Masonry Construction Employed by the Commonwealth or by Counties, Cities and Towns.

Be it enacted, etc., as follows:

Section 1. Persons employed by the commonwealth, or by the metropolitan board or commission, or by any county, city or town, as inspectors of masonry construction, shall have had at least three years practical experience in masonry construction, but shall not be required to have technical knowledge as engineers, architects or draftsmen, unless they have other duties for which such knowledge is necessary. The provisions of this section shall apply only to persons whose principal duty is the inspection of masonry construction, consisting of stone, brick or substitutes therefor.

Sect. 2. All acts and parts of acts inconsistent herewith are hereby repealed.

Sect. 3. This act shall take effect upon its passage. [Approved May 19, 1914.

CHAPTER 287, ACTS OF 1914.

An Act Relative to the Business of Plumbing. Be it enacted, etc., as follows:

Chapter five hundred and thirty-six of the acts of the year nineteen hundred and nine is hereby amended by striking out section ten and inserting in place thereof the following new section: - Section 10. Every person engaging in the business of plumbing as a master plumber, or working at the business of plumbing as a journeyman plumber, not having been registered or licensed as herein provided; and every person engaging in or working at the business of plumbing in a city or town where he has been forbidden so to do under the provisions of section four of this act; and every person engaged in the business of plumbing as a master plumber or employing plumber who engages or employs any person to work as a journeyman plumber who has not been registered or licensed as provided by this act; and every person violating any provision of this act or any rule or regulation made hereunder shall be punished by a fine not exceeding fifty dollars for each offence. [Approved April 2, 1914.

CHAPTER 566, ACTS OF 1914.

An Act to Prohibit the Locking of Doors of Buildings in Which Operatives are Employed.

Be it enacted, etc., as follows:

Chapter five hundred and fourteeen of the acts of the year nineteen hundred and nine is hereby amended by

striking out section ninety-three and inserting in place thereof the following new section:— Section 93. No outside or inside doors of any building in which operatives are employed shall be so locked, bolted or otherwise fastened during the hours of labor as to prevent free egress. Any person having charge of any such building or of any room thereof, any exit door of which shall be found to be so locked, bolted or otherwise fastened during the hours of labor as to prevent free egress, shall be punished by a fine of not less than twenty-five dollars nor more than five hundred dollars or by imprisonment for not more than one year, or by both such fine and imprisonment.

[Approved May 22, 1914.

CHAPTER 782, ACTS OF 1914.

AN ACT TO AMEND THE BUILDING LAW OF THE CITY OF BOSTON.

Section 6. Elevators hereafter installed shall be provided with such shaftway enclosures and doors as may be required by the regulations of the Massachusetts board of elevator regulations. All shafts for light and ventilation and skylights over such shafts shall be constructed of like materials and in a like manner as required for elevator shafts, and all window openings in the same, except in exterior walls, shall be protected by metal frames and sash and wired glass.

SECT. 11. The provisions of this act, so far as they are the same as those of existing statutes, shall be construed as continuations thereof and not as new enactments.

SECT. 12. All acts and parts of acts inconsistent herewith are hereby repealed, but nothing herein contained shall be construed to modify the powers and duties conferred and imposed upon the board of appeals by sections

six, seven and eight of chapter five hundred and fifty of the acts of the year nineteen hundred and seven.

Sect. 13. This act shall take effect ninety days after its passage. [Approved July 7, 1914.

CHAPTER 786, ACTS OF 1914.

An Act Exempting a Certain Parcel of Land in the City of Boston from Restrictions as to the Height of Buildings.

Be it enacted, etc., as follows:

Section 1. The parcel of land situated in the city of Boston bounded by Washington street, Lovering place, Harrison avenue and Asylum street is hereby exempted from the provisions of chapter three hundred and thirtythree of the acts of the year nineteen hundred and four and chapter three hundred and eighty-three of the acts of the year nineteen hundred and five, relative to the height of buildings, and is relieved from the restrictions as to height placed thereon by the commissioners on the height of buildings in the city of Boston acting under the authority of said statutes: provided, however, that nothing herein shall authorize the erection on said parcel of a building exceeding one hundred and twenty-five feet in height above the grade of the sidewalk on Washington street in front of said parcel, nor the erection of any building thereon except in accordance with a permit duly granted therefor by the building commissioner of the city of Boston.

Sect. 2. This act shall take effect upon its passage. [Approved July 7, 1914.

CHAPTER 791, ACTS OF 1914.

AN ACT RELATIVE TO THE OPERATION OF THE CINEMATO-GRAPH AND TO THE EXHIBITION OF MOTION PICTURES.

Be it enacted, etc., as follows:

SECTION 1. No cinematograph, or similar apparatus, involving the use of a combustible film more than ten inches in length, shall be kept or used for the purpose of exhibiting such films in or upon the premises of a public building, public or private institution, schoolhouse, church, theatre, special hall, public hall, miscellaneous hall, place of assemblage, or place of public resort, until such cinematograph or similar apparatus has been inspected and approved by an inspector of the building inspection department of the district police, who shall have placed thereon a numbered metal tag; nor until a booth, or enclosure, which has been inspected and approved by such an inspector and his certificate issued therefor, has been provided for said apparatus; nor until such precautions against fire as the chief of the district police may specify have been taken by the owner, user or exhibitor therefor: provided, however, that no such cinematograph or similar apparatus shall be operated with oxyhydrogen gas, socalled, or with limelight. In addition, in the city of Boston, the location of any booth or enclosure surrounding said apparatus, shall be approved by the building commissioner, who may order such additional precautions against fire as he may deem necessary.

SECT. 15. Any person, firm, corporation or association of persons, keeping or using a cinematograph or similar apparatus contrary to the provisions hereof, or in violation of any rule or regulation made by the chief of the district police, or, in the city of Boston, in violation of any regulation or requirement made by the building commissioner in

accordance with the provisions hereof, shall be punished by a fine of not less than fifty nor more than five hundred dollars.

SECT. 16. Chapters five hundred and sixty-five and five hundred and sixty-six of the acts of the year nineteen hundred and eight; chapter two hundred and eighty-one of the acts of the year nineteen hundred and nine; chapters forty-eight and four hundred and forty of the acts of the year nineteen hundred and eleven; chapter one hundred and eighty-two of the acts of the year nineteen hundred and twelve and all acts and parts of acts inconsistent herewith are hereby repealed. [Approved July 7, 1914.

CHAPTER 28, REVISED LAWS.

SECT. 16. In a city which by a vote of its city council, or in a town which by vote of a town meeting, accepts this section, or has accepted the corresponding provisions of earlier laws, the board of park commissioners may, in accordance with the provisions of section one hundred and three of chapter forty-eight, establish a building line distant at no point more than twenty-five feet from any exterior line of a parkway, boulevard or public way on which a park abuts; and the extreme height to which buildings upon such parkway, boulevard or public way may be erected shall be seventy feet exclusive of such steeples, towers, domes, cornices, parapets, balustrades, sculptured ornaments, chimneys and roofs as such board may approve. Whoever sustains damage by the establishment of such building line shall have the same remedy therefor as if his land were taken for the laying out of a highway.

[1896, c. 313; 1897, c. 379.]

CHAPTER 33, REVISED LAWS.

Sect. 19. A fence or other structure in the nature of a fence which unnecessarily exceeds six feet in height and is

maliciously erected or maintained for the purpose of annoying the owners or occupants of adjoining property, shall be deemed a private nuisance. Any such owner or occupant who is injured either in the comfort or enjoyment of his estate thereby may have an action of tort for damages according to the provisions of chapter one hundred and eighty-six.

[1887, 348; 148 Mass. 368, 407; 150 Mass. 482; 162 Mass. 544.]

CHAPTER 48, REVISED LAWS. BUILDING LINE.

Section 103. If the city council of a city or if a town accepts the provisions of this section or has accepted the corresponding provisions of earlier laws, a building line parallel to, and not more than twenty-five feet distant from, the exterior line of a highway or town way may be established in the manner provided for laying out ways, and thereafter no structures shall be erected or maintained between such building line and such way, except steps, windows, porticos and other usual projections appurtenant to the front wall of a building, to the extent prescribed in the vote establishing such building line. Whoever sustains damage thereby shall have the same remedies therefor as for damages sustained by the laying out of a town way.

[Chap. 462, of 1893.]

CHAPTER 101, REVISED LAWS.

Section 1. In a city or town in which the city council or the inhabitants accept the provisions of this and the four following sections or have accepted the corresponding provisions of earlier laws, the mayor and aldermen or selectmen, after notice in writing to the owner of a burnt, dilapidated or dangerous building, and a hearing, may

adjudge it to be a nuisance to the neighborhood, or dangerous, and may thereupon make and record an order prescribing the disposition, alteration or regulation thereof. The city or town clerk shall deliver a copy of the order to a constable, who shall forthwith serve an attested copy thereof upon such owner, and make return of his doings thereon to said clerk.

SECT. 2. An owner who is aggrieved by such order may, within three days after the service thereof upon him, apply to the superior court for a jury. The court shall issue a warrant for a jury, which shall be impanelled by the sheriff within fourteen days after the date of the warrant in the manner provided in chapter forty-eight; or, instead thereof, if the applicant for a jury so elects and after such notice as the court shall order to the adverse party, it shall order a trial to be had at the bar of the superior court, in the same manner as other civil causes are there tried by jury.

SECT. 3. The jury may affirm, annul or alter such order; and the sheriff, if the trial is before him, shall return the verdict to the next sitting of the court for acceptance; and the verdict, whether before the sheriff or in the superior court, being accepted, shall take effect as an original order.

SECT. 4. If the order is affirmed, the applicant shall pay the costs; if it is annulled, he shall recover damages and costs against the city or town; and if it is altered, the court may render such judgment as to costs as justice shall require.

SECT. 5. The mayor and aldermen of a city or selectmen of a town shall have the same power and authority to abate and remove any such nuisance as is given to the board of health of a city or town by the provisions of sections sixty-seven, sixty-eight and sixty-nine of chapter seventy-five.

[1855, c. 469, sects. 1 to 6; G. S., c. 87, sects. 1 to 4; 128 Mass., 36, 347.]

CHAPTER 104, REVISED LAWS.

Section 29. The keeper of a hotel, boarding or lodging house or family hotel containing one hundred or more rooms, and being four or more stories high, shall have therein at least two competent watchmen, each properly assigned, and each on duty between the hours of nine o'clock at night and six o'clock in the morning. The keeper of every hotel, boarding or lodging house or family hotel containing fifty or more but less than one hundred rooms, and being three stories high, shall have between said hours at least one competent watchman on duty therein. In all such hotels, lodging houses or family hotels, the halls and stairways shall be properly lighted at night, and a red light shall be kept during the night at the top and bottom of each flight of stairs; and one or more proper alarms or gongs, capable of being heard throughout the house, shall always remain easy of access and ready for use in each of said buildings to give to the inmates warning of fire. The keeper of every such hotel, boarding or lodging house or family hotel shall keep a notice descriptive of such means of escape conspicuously posted in every sleeping room.

[1883, c. 251, sect. 1; 1884, c. 223, sect. 2.]

SECT. 32. Whoever neglects or refuses to provide watchmen as required by the three preceding sections shall be punished by a fine of not more than one thousand dollars for each offence, and whoever violates any of the other provisions of said sections shall be punished by a fine of not less than fifty nor more than five hundred dollars.

SECT. 52. The supreme judicial court or the superior court shall have jurisdiction in equity to restrain the illegal placing, maintenance or use of any building, structure or other thing. It may, upon the petition of a city or town, by its attorney, for such relief, require the removal of any such building, structure or other thing by the

owner, and may authorize the city or town, in default of such removal by the owner, to remove it at his expense. The provisions of this section shall apply to all such structures or other thing so placed which were maintained or used prior to, as well as after, the second of May in the year eighteen hundred and ninety-nine. Upon such petition, the defendant shall be presumed to have acted without a license or authority until he proves the contrary.

[1899, c. 326, sect. 52, as amended.]

CHAPTER 9, ORDINANCES OF 1912.

Concerning Control of Building Operations.

In the Year One Thousand Nine Hundred and Thirteen.

Be it ordained by the City Council of Boston, as follows:

Section 1. All persons who shall hereafter take personal charge or control of the work of construction, alteration, removal or tearing down of buildings or structures in the City of Boston shall be qualified by education, training, or experience for the performance of that duty in a manner which shall preserve public safety and conform to the laws, ordinances, rules and regulations relating to the construction, alteration, removal or tearing down of buildings or structures in the City of Boston.

SECT. 2. The qualifications of such persons shall be determined by a board of examiners as hereinafter provided; and no permit for the doing of work described in section one of this ordinance shall be issued by the building commissioner unless the application for a permit therefor contains the name, address and signature of a person who is duly licensed, as hereinafter provided, to take personal charge or control of such work; provided, however, that a permit may be granted if no person licensed

as aforesaid has been named in the application therefor whenever the work in question is of minor importance, and, in the opinion of the building commissioner, stated in writing with his reasons therefor upon the application for such permit, the work is of such simple character that its execution will not endanger the safety of the public, or of any person engaged thereon.

SECT. 3. There shall be in the building department a board to be called the board of examiners. Said board shall consist of three members to be appointed by the mayor in accordance with the provisions of sections nine and ten of chapter four hundred eighty-six of the acts of the year nineteen hundred nine. Each member shall receive ten dollars for every day or part thereof of actual service but not more than one thousand dollars in any year. The first appointments shall be for one, two and three year terms, respectively, and succeeding appointments shall be for terms of three years.

SECT. 4. The board shall, as soon as practicable after the appointments of the members have become operative, meet and organize by the selection of a chairman and a secretary; and shall hold examinations, under reasonable rules and regulations adopted by it, of persons desiring to be registered as qualified to have charge or control of the construction, alteration, removal, or tearing down of buildings or structures. The first examination shall be held within thirty days after the date of the organization of the board, and shall be advertised once a week for three successive weeks in the daily papers published in the City of Boston, and in the City Record. Due notice of subsequent examinations shall be posted in the offices of the building department and of the board of examiners and published in the City Record.

The board shall establish various classes of persons to be registered, shall determine the qualifications required for each class, and after examination shall register in each class the persons found to possess the requisite qualifications therefor. The name and address of each person so found to be qualified, with the designation of the class in which he is registered, shall thereupon be certified by the board to the building commissioner who shall make a record of the same which shall be open to public inspection.

SECT. 5. Any person who shall by affidavit, together with such other evidence as may be required by the board, show to the board that prior to the passage of this ordinance he has had charge or control of the construction, alteration, removal or tearing down of buildings or structures in the class in which he applies to be registered, and shall satisfy the board that he is qualified by education, training or experience to have charge or control of such work, may, without any other examination, be registered in said class and be certified to the building commissioner as a person qualified within such class.

Sect. 6. The building commissioner, upon the payment of a fee of two dollars, shall issue a license to each person certified by the board, and such license shall not be transferred. The fees received by the board and by the building commissioner shall be paid over to the city collector at least once a week.

Sect. 7. A person who has been duly licensed as aforesaid shall be entitled to have charge or control of any work described in section one of this ordinance, in the class in which he is registered, until his license is revoked or suspended by the building commissioner upon the order of the board. No license shall be revoked or suspended except upon proof of charges, filed with the board by the building commissioner or other person, specifying that the licensee has been careless or negligent in the performance of his duty in connection with work under his charge or control, or has caused or permitted a violation of the

building laws in connection therewith, or that such laws have been violated in connection with such work when the licensee knew, or, in the exercise of due diligence, should have known, that such violation had occurred. Upon learning of such carelessness, or neglect of duty, or of such violation of law, the building commissioner shall file charges with the board and prosecute the same. Upon the filing of such charges by the building commissioner, or other person, the board shall give to the licensee notice of a hearing upon the charges, which shall be held by the board not less than seven days after the date of said notice. The notice shall be by personal service or by registered mail and shall state the time and place of the hearing and contain a copy of the charges. At such hearing the licensee may be represented by counsel, and the building commissioner may be assisted by a representative of the law department of the city.

SECT. 8. If, for any cause, a person licensed as herein provided, shall cease to have charge or control of any work described in section one of this ordinance before such work is finished, the work shall stop until another person duly licensed for the doing of such work has been placed in charge thereof.

Sect. 9. Whenever the board shall determine that a sufficient number of persons has been licensed in the various classes, it shall post notice of such determination in the offices of the building department and of the board and publish the same in the City Record. No person shall, by reason of anything contained in this ordinance, be denied a permit by the building commissioner or suffer any penalty until after the expiration of thirty days from the date of said publication in the City Record.

SECT. 10. Whoever violates any provision of this ordinance shall be punished by a fine of not more than fifty dollars for each offence.

Sect. 11. This ordinance shall take effect upon its passage.

IN CITY COUNCIL, January 27, 1913.

Passed. James Donovan, City Clerk.

Approved January 28, 1913.

JOHN F. FITZGERALD, Mayor.

A true copy.

Attest:

James Donovan, City Clerk.

Ordained by authority of chapter 713, Acts of 1912.

CHAPTER 4, ORDINANCES OF 1913.

CONCERNING THE BUILDING LIMITS.

In the Year One Thousand Nine Hundred and Thirteen.

Be it ordained by the City Council of Boston, as follows:

Section 1. Section twenty-seven of chapter forty-five of the Revised Ordinances of 1898 is hereby amended by striking out said section and inserting in place thereof a new section, as follows:

Section 27. The building limits referred to in section nine of chapter five hundred and fifty of the acts of the year 1907 are hereby extended, defined and established as follows:

All that portion of the city which is included within a line beginning at the intersection of the boundary lines between the City of Boston and the cities of Somerville and Everett; thence by the boundary lines between the City of Boston and the cities of Everett and Chelsea to the intersection with the centre line of Trumbull street extended northerly; thence by said centre line of Trumbull street and said centre line extended southerly to the Harbor line; thence by said Harbor line to its intersection with

the easterly line of Pier No. 5 belonging to the Boston and Albany Railroad Company; thence by a straight line across Boston Harbor to its intersection with the Harbor line at the easterly corner of Pier No. 1 in South Boston; thence by the Harbor line in the northerly, easterly and southerly portions of South Boston to an angle in said Harbor line nearly opposite the intersection of the centre line of Columbia road with the centre line of location of the Old Colony Railroad; thence by a straight line to the said intersection; and by the centre lines of Columbia road, Blue Hill avenue, Seaver street, Columbus avenue, Atherton and Mozart streets, Chestnut avenue, Sheridan, Centre and Perkins streets, South Huntington avenue, Castleton street and the centre line of said Castleton street extended to the boundary line between the City of Boston and the town of Brookline; thence by said boundary line to a point therein one hundred feet southwest of Washington street in the Brighton district; thence by a line parallel to and one hundred feet southwesterly from the centre line of Washington street to an angle formed by the intersection of said line with the extension of a line parallel to and one hundred feet northwesterly of the centre line of Market street: thence by said extension and said line parallel to and one hundred feet northwesterly of the centre line of Market street to a point one hundred feet south of the centre line of Western avenue; thence by a line parallel to and one hundred feet south of the centre line of Western avenue and said line extended to a point in the boundary line between the City of Boston and the town of Watertown south of Watertown Bridge, so called; thence by said boundary line and the boundary lines between the cities of Cambridge and Somerville to the point of beginning.

Also those portions of Ward 26 upon or within one hundred feet of the following named streets and squares:

Everett square, so called; Fairmount avenue from River street to the Neponset river; River street from the location of the Boston & Providence Railroad to Winthrop street; Hyde Park avenue on the easterly side from the northerly side of Oak street to Everett street; Hyde Park avenue on the westerly side from the northerly side of Pine street extension, so called, to a point on said Hyde Park avenue opposite the southerly line of Everett street; Harvard avenue from River street to Winthrop street; Maple street from River street to a point one hundred and eighty feet southerly therefrom; Central avenue from River street to Winthrop street; Davison street from Fairmount avenue to a point three hundred feet northeasterly therefrom; Grove street; Pierce street from Fairmount avenue to a point three hundred feet northeasterly therefrom; Knott street from Fairmount avenue to a point three hundred feet easterly therefrom; Railroad avenue from Fairmount avenue to a point three hundred feet northeasterly therefrom; Station street from the Neponset river to a point three hundred feet northeasterly from Fairmount avenue; Walnut street from Fairmount avenue to a point three hundred feet southwesterly therefrom; Maple street from Fairmount avenue to a point one hundred and twenty-five feet westerly therefrom.

This ordinance became operative July 1, 1914.

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References in this Index are to Pages and Sections of the Existing Law.

Note.—When an asterisk (*) is placed before a figure, see, also, regulations of 1914 for escalators and elevators for the Commonwealth of Massachusetts.

When a dagger (†) is placed before a figure, see sect. 4, chap. 806, Acts of 1913.

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