CITY OF INDIANAPOLIS, IND.

REGULAR MEETING.

COUNCIL CHAMBER, CITY OF INDIANAPOLIS, IND. MONDAY, December 16, 1912.

The Common Council of the City of Indianapolis met in the Council Chamber, Monday evening, December 16, 1912, at 7:30 o'clock, in regular session, President Charles B. Stilz in the chair.

Present: The Hon. Charles B. Stilz, President of the Common Council, and 8 members, viz: Messrs. Johnson, McCarthy, Copeland, Rubens, Denny, Owen, Blumberg and Troy.

Absent, none.

Mr. Copeland moved that the reading of the Journal be dispensed with. Carried.

COMMUNICATIONS FROM THE MAYOR.

EXECUTIVE DEPARTMENT, CITY OF INDIANAPOLIS, INDIANAPOLIS, IND., December 4, 1912.

To the President and Members of the Common Council, City of Indianapolis.

GENTLEMEN: I return herewith with my approval the following ordiances:

General Ordinance No. 65, 1912, being an ordinance providing for the transfer of \$350.25 from certain funds to certain funds in and for the use of the Department of Public Safety and fixing a time when the same shall take effect.

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General Ordinance No. 68, 1912, being an ordinance providing for the transfer of \$1,650.00 from certain funds to certain funds in and for the use of the Department of Public Health and Charities and fixing a time when the same shall take effect.

General Ordinance No. 69, 1912, being an ordinance providing for the transfer of \$500,00 from certain funds to certain funds in and for the use of the Department of Public Health and Charities and fixing a time when the same shall take effect.

Appropriation Ordinance No. 47, 1912, being an ordinance appropriating the sum of \$75.00 to and for the use of the Executive Department and fixing a time when the same shall take effect.

Appropriation Ordinance No. 58, 1912, being an ordinance appropriating the sum of \$1,000.00 to and for the use of the Department of Public Health and Charities and fixing a time when the same shall take effect.

Appropriation Ordinance No. 60, 1912, being an ordinance appropriating the sum of \$3,500,00 to and for the use of the Department of Public Works and fixing a time when the same shall take effect.

Appropriation Ordinance No. 61, 1912, being an ordinance appropriating the sum of \$2,500.00 to and for the use of the Department of Public Works and fixing a time when the same shall take effect.

Appropriation Ordinance No. 62. 1912, being an ordinance appropriating the sum of \$2,500.00 to and for the use of the Department of Public Works and fixing a time when the same shall take effect.

Appropriation Ordinance No. 63, 1912, being an ordinance appropriating the sum of \$1,000.00 to and for the use of the Department of Public Works and fixing a time when the same shall take effect.

Appropriation Ordinance No. 64, 1912, being an ordinance appropriating the sum of \$3,184.00 to and for the use of the Department of Public Health and Charities and fixing a time when the same shall take effect.

Appropriation Ordinance No. 65, 1912, being an ordinance appropriating the sum of \$1,500,00 to and for the use of the Department of Public Health and Charities and fixing a time when the same shall take effect.

Appropriation Ordinance No. 66, 1912, being an ordinance appropriating the sum of \$2,800.00 to and for the use of the Department of Public Health and Charities and fixing a time when the same shall take effect.

Appropriation Ordinance No. 67, 1912, being an ordinance appropriating the sum of \$600,00 to and for the use of the Department of Public Health and Charities and fixing a time when the same shall take effect.

Appropriation Ordinance No. 68, 1912, being au ordinance appropriating the sum of \$3,550,00 to and for the use of the Department of Public Health and Charities and fixing a time when the same shall take effect. Appropriation Ordinance No. 71, 1912, being an ordinance appropriating the sum of \$9,000.00 to and for the use of the Department of Public Works and fixing a time when the same shall take effect.

I have the honor to remain

Very truly yours,

S. L. SHANK, Mayor City of Indianapolis.

REPORTS FROM CITY OFFICERS.

From the Board of Public Health and Charities:

Department of Public Health and Charities. Office of the Board. Indianapolis, Ind., December 11, 1912.

To the President and Members of the Common Council:

GENTLEMEN: The Department of Public Health and Charities hereby submits the following balances and expenditures of the various funds of the City Hospital for the month of November, 1912:

of the enty frostant for the month of froten	Expenses.	Balances.
Drugs	\$374.45	\$236.28
Dry goods	1,090.29	357.12
Electrical supplies		159.44
Engine room supplies	34.03	5.08
Furniture fund		352.61
Fuel	1,496.41	17.47
Flower Mission Hospital	552.15	564.18
Gas	130.86	61.90
Hardware	12.61	127.07
Horseshoeing	9.50	119.80
Incidentals	221.19	15.80
Laundry supplies		397.51
Nurses fund	647.94	817.72
Paints and painting	9.95	306,93 -
Plumbing supplies	44.77	247.47
Provisions	1,940.66	2,865.65
Printing and stationery	60.70	90.25
Queensware		39.11
Repairs to buildings	9.32	456.19
Salaries	2,858.93	2,912.17
Stable supplies	502.98	497.43
Surgical supplies	142.83	784.76
Telephones		7.05
Tuberculosis fund—		
Hospital (clinic \$102.12)	200.35	151.07
Contagious disease fund (Board of Health)	115.5 0	

\$10,455.42

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Total number of patients treated during the month of November, 1912 -7,886.

 $10,455.42 \div 7,886 = 1.32$, average cost of one patient per day. Very truly yours,

H. G. MORGAN, M. D.,

Secretary.

REPORTS FROM STANDING COMMITTEES.

From the Committee on Finance:

INDIANAPOLIS, IND., December 16, 1912.

To the President and Members of the Common Council of the City of Indianapolis:

GENTLEMEN: We, your Committee on Finance, to whom was referred Appropriation Ordinance No. 70, 1912, being "An ordinance appropriating the sum of \$32,000.00 to and for the use of the Department of Public Safety and fixing a time when the same shall take effect," beg leave to report that we have had said ordinance under consideration and would recommend that the same be amended by striking out of the title and Section 1 the words and figures Thirty-two Thousand (\$32,000.00) Dollars and inserting in lieu thereof the words and figures Eighteen Thousand (\$18,000.00) Dollars, and when said ordinance is so amended we would recommend that the same do pass.

Respectfully submitted,

WILLIAM H. JOHNSON, JAMES E. TROY, FRED C. OWEN, JOHN BLUMBERG, GEORGE B. RUBENS.

Mr. Johnson moved that the report of the committee be concurred in. Carried.

From the Committee on Finance:

INDIANAROLIS, IND., December 16, 1912.

To the President and Members of the Common Council of the City of Indianapolis:

GENTLEMEN: We, your Committee on Finance, to whom was referred Appropriation Ordinance No. 72, 1912, being "An ordinance appropriating the sum of \$500.00 to and for the use of the Department of Finance and fixing a time when the same shall take effect," beg leave to report that we have had said ordinance under consideration and would recommend that the same do pass.

Respectfully submitted,

WILLIAM H. JOHNSON. FRED C. OWEN, JOHN BLUMBERG, JAMES E. TROY, GEORGE B. RUBENS.

Mr. Johnson moved that the report of the committee be concurred in. Carried.

From the Committee on Finance:

INDIANAPOLIS, IND., December 16, 1912.

To the President and Members of the Common Council of the City of Indianapolis:

GENTLEMEN: We, your Committee on Finance, to whom was referred General Ordinance No. 59, 1912, being "An ordinance authoriz-(\$1,000) dollars each of the City of Indianapolis, Indiana, payable from the general revenues and funds of said city, or from the Sinking Fund of said City, or as may be required by law, for the purpose of procuring money to be used for the purpose of constructing build-ings for the use of the Department of Public Safety, on the property owned by the City at the southeast corner of Alabama Street and New York Street; providing for the time and manner of advertising sale of bonds and of the receipt of bids for the same, together with the mode and terms of sale; and fixing a time when the same shall take effect," beg leave to report that we have had said ordinance under consideration and would recommend that the same be amended as follows:

1. Strike out of the first and second lines on page 1, the words and figures one hundred and ten (110) and insert in lieu thereof the words and figures seventy-five (75).

2. Insert after the word "protection," line 16 of Page 1, the following: "And for storage and care of City Automobiles."

3. Strike out of line 17, page 1, the words "And its inhabitants." 4. Strike out of lines 24 and 25 on page 1, the words and figures "one lnmdred and ten thousand (110,000)" and insert in lieu thereof 5. Insert after the word "constructing" in line 4, page 2, the

word "such."

6. Strike out of line 6, page 2, the words and figures "one hundred and ten (110)" and insert in lieu thereof the words and figures "seventy-five (75)."

7. Strike out of line 9, page 2, the word "January" and insert in lieu thereof the word "February."

8. Strike out of line 10, page 2, the words and figures "one hundred and ten (110)" and insert in lieu thereof the words and figures "seventy-five (75)."

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9. Insert after the word "Headquarters" in line 11, page 2, the words "and City Garage."

10. Strike out of line 12, page 2, the word "January" and insert in lieu thereof the word "February."

11. Insert in line 14, of page 3, after the word "Headquarters" the words "and City Garage."

12. Strike out of lines 27 and 28, page 3, the words and figures "one hundred and ten (110)" and insert in lieu thereof the words and figures "seventy-five (75)."

13. Insert in line 28, of page 3, after the word "one" at the end of said line the figure "(1)."

14. Strike out of line 29, page 3, the words and figures "one hundred and ten (110)" and insert in lieu thereof the words and figures "seventy-five (75)."

15. Strike out of line 30, of page 3, the word "January" and insert in lieu thereof the word "February."

And when said ordinance is so amended we would recommend that the same do pass.

Respectfully submitted,

WILLIAM H. JOHNSON, FRED C. OWEN, JOHN BLUMBERG, JAMES E. TROY, GEORGE B. RUBENS.

Mr. Johnson moved that the report of the committee be concurred in. Carried.

From the Committee on Finance:

INDIANAPOLIS, IND., December 16, 1912.

To the President and Members of the Common Council of the City of Indianapolis:

GENTLEMEN: We, your Committee on Finance, to whom was referred General Ordinance No. 66, 1912, being "An ordinance providing for the transfer of \$1,500,00 from a certain fund to a certain fund in and for the use of the Department of Public Works and fixing a time when the same shall- take effect," beg leave to report that we have had said ordinance under consideration and would recommend that the same do not pass.

Respectfully submitted,

WILLIAM H. JOHNSON, Fred C. Owen, John Blumberg, James E. Troy, George B. Rubens.

Mr. Johnson moved that the report of the committee be concurred in. Carried.

From the Committee on Finance:

INDIANAPOLIS, IND., December 16, 1912.

To the President and Members of the Common Council of the City of Indianapolis:

GENTLEMEN: We, your Committee on Finance, to whom was referred General Ordinance No. 67, 1912, being "An ordinance providing for the transfer of \$1,500.00 from a certain fund to a certain fund in and for the use of the Department of Public Works and fixing a time when the same shall take effect," beg leave to report that we have had said ordinance under consideration and would recommend that the same do not pass.

Respectfully submitted,

WILLIAM H. JOHNSON, FRED C. OWEN, JOHN BLUMBERG, JAMES E. TROY, GEORGE B. RUBENS.

Mr. Johnson moved that the report of the committee be concurred in. Carried.

From the Committee on Finance:

INDIANAPOLIS, IND., December 16, 1912.

To the President and Members of the Common Council of the City of Indianapolis:

GENTLEMEN: We, your Committee on Finance, to whom was referred Appropriation Ordinance No. 69, 1912, being "An ordinance appropriating the sum of \$735.00 to and for the use of the Department of Public Safety and fixing a time when the same shall take effect," beg leave to report that we have had said ordinance under consideration and would recommend that the same do pass.

Respectfully submitted,

WILLIAM H. JOHNSON, FRED C. OWEN, JOHN BLUMBERG, JAMES E. TROY, GEORGE B. RUBENS.

Mr. Johnson moved that the report of the committee be concurred in, Carried.

From the Committee on Public Safety:

INDIANAPOLIS, IND., December 16, 1912.

To the President and Members of the Common Council of the City of Indianapolis:

GENTLEMEN: We, your Committee on Public Safety, to whom was referred General Ordinance No. 48, 1911, being "An ordinance fixing

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the salary and compensation of all officers and members of the Fire Force of the City of Indianapolis, Indiana," beg leave to report that we have had said ordinance under consideration and would recommend that the same be amended by striking out all of said ordinance and inserting in lieu thereof the following:

General Ordinance No. 48—1911: An ordinance fixing the salary and compensation of all officers and members of the Fire Force of the City of Indianapolis, Indiana, and fixing a time_when the same shall take effect.

SECTION 1. Be it ordained by the Common Council of the City of Indianapolis, Indiana, That the officers and members of the Fire Force · of the City of Indianapolis shall receive for their services the following salaries and compensation as hereinafter set forth, to-wit:

A. The Chief of the Fire Force shall receive a salary at the rate of thirty-two hundred dollars (\$3,200.00) per annum.

B. The First Assistant Chief and Superintendent of Fire Alarm Telegraph shall each receive a salary at the rate of sixteen hundred dollars (\$1,600) per annum.

C. The District Chiefs shall each receive a salary at the rate of fifteen hundred fifty dollars (\$1,550) per annum.

D. The Secretary and Assistant Superintendent of Fire Alarm Telegraph, shall each receive a salary at the rate of three dollars and seventy-five cents (\$3.75) per day.

E. The Captains, Cellar Inspector and Cable Splicer, shall each receive a salary at the rate of three dollars and fifty cents (\$3.50) per day.

F. The Lieutenants, Engineers, Chauffeurs and Electricians shall each receive a salary at the rate of three dollars and thirty-five (\$3.35) per day.

G. First Grade, each member after serving one year from regular appointment, as a private, shall receive a salary at the rate of three dollars (\$3.00) per day.

H. Second Grade, each member shall receive for the first year after appointment, as a private, a salary at the rate of two dollars and seventy-five cents (\$2.75) per day.

I. Substitute Firemen shall each receive a salary at the rate of two dollars and twenty-five cents (\$2.25) per day.

SECTION 2. The salaries and compensations enumerated in and provided for, in the foregoing section of this ordinance, shall be paid out of the funds of the City Treasury appropriated for such purposes, at the time and in the manner provided for by law.

SECTION 3. All ordinances and parts of ordinances in conflict herewith are hereby repealed.

SECTION 4. This ordinance shall be in full force and effect immediately on and after, the first day of January, 1913, and when said ordinance is so amended we would recommend that the same do pass. Respectfully submitted,

JOHN BLUMBERG, JAMES E. TROY. FRANK E. MCCARTHY,

Mr. Blumberg moved that the report of the committee be concurred in. Carried.

INTRODUCTION OF GENERAL AND SPECIAL ORDINANCES.

By Mr. Blumberg:

General Ordinance No. 72-1912-An ordinance regulating all matters concerning, affecting or pertaining to the construction, alteration, repairs or additions to, remodeling, removal, ownership, use or occupation of all buildings, parts of buildings, and structures of every nature whatsoever, in the City of Indianapolis, Indiana; also all improvements, machinery, equipment, furniture, fixtures, signs, electric wiring, appliances and appurtenances used in connection with such buildings, parts of buildings, or structures, or installed therein or thereon, and providing for the closing, the condenning and the stopping of the use thereof, the razing and wrecking of the same, and the removal of the wreckage; creating the office of the Commissioner of Buildings, with a chief clerk, stenographer, chief inspectors, and assistant inspectors, defining their duties and authority, fixing their compensation, requiring them to give bond, take an oath of office, and be selected by competitive examination before a Board of Examiners, providing for the appointment of such a board, the selection of their time and place of meeting, fixing their compensation, providing the kind of an examination to be given, and how the same shall be conducted; providing for arbitration before bringing suit against the City; fixing fire limits in said City; regulating the construction, maintenance, use and removal of signs, sign boards and bill boards in said City. Expressly repealing the following ordinances: General Ordinance No. 34 approved June 6, 1904, entitled "An ordinance providing for all matters concerning, affecting or relating to the construction, alteration, repair or removal of buildings, structures or appurtenances thereto erected or to be erected in the City of Indianapolis, Indiana." General Ordinance No. 5 approved March 19, 1906, entitled "An ordinance to amend Section 110 of an ordinance entitled 'An ordinance providing for all matters concerning, affecting or relating to the construction, alteration, repair or removal of buildings, structures or appurtenances thereto erected or to be erected in the City of Indianapolis, Indiana," "General Ordinance No. 94 approved November 4, 1907, entitled "An ordinance to amend Sections 36 and 147 of an ordinance entitled 'An ordinance providing for the matters concerning, affecting or relating to the construction, alteration. repair or removal of buildings, structures or appurtenances thereto erected or to be erected in the City of Indianapolis, Indiana." General Ordinance No. 12 approved April 22, 1908, entitled "An ordinance regulating the construction and regulation of moving picture theaters and licensing all persons to operate moving picture machines and prescribing the penalty for the violation thereof; and repealing all other ordinances and parts of ordinances in conflict herewith, and providing a penalty for the violation thereof, and fixing the time when the same shall take effect."

PART I.

BUILDING CODE.

SECTION 1. Be it ordained by the Common Council of the City of Indianapolis, Indiana, That there be and is hereby created in said City the office of Commissioner of buildings, with inspectors, assistants and clerical help under his direction and control, as follows, to-wit: A Chief Inspector of the Division of Construction with not less than two nor more than six assistant inspectors; a Chief Inspector of the Division of Boilers and Smoke, with not less than one, nor more than three assistant inspectors; a Chief Inspector of the Division of Boilers and Smoke, with not less than one, nor more than three assistant inspectors; a Chief Inspector of Wiring, with not less than one, nor more than three assistant inspectors; a Chief Inspector of Elevators and a Chief Clerk and a Stenographer to the Commissioner of Buildings. Said officers shall be appointed by the Board of Public Safety as hereinafter provided, and shall be subject to removal at the pleasure of said Board.

SECTION 2. DIVISION OF OFFICE.—(a) That all inspectors and assistant inspectors employed in the Division of Construction shall be known as Building Inspectors. (b) That all inspectors and assistant inspectors in the Division of Boilers and Smoke shall be known as Smoke Inspectors. (c) That all inspectors and assistant inspectors employed in the Division of Elevators shall be known as Elevator Inspectors. (d) That all inspectors and assistant inspectors. (d) That all inspectors and assistant inspectors.

SECTION 3. REMEDIAL ORDINANCE.—This ordinance is hereby declared to be remedial, and is intended to secure the beneficial interest and purposes thereof.

SECTION 4. QUALIFICATIONS.—The Commissioner of Buildings and the Assistant Inspectors of Buildings in the Division of Construction shall be competent architects, engineers, or practical builders, who have been engaged in the active duties of their occupation for at least five years.

SECTION 5. SHALL PASS EXAMINATION.—(a) The Commissioner of Buildings and his Assistant Inspectors of Buildings in the Division of Construction shall be required to pass an examination before a board composed of two regular architects, two master builders and the City Engineer of said City. (b) The architects and master builders shall be chosen by the Board of Public Safety, and shall be entitled to five dollars (\$5.00) each for such service, to be paid out of the general fund by the City Controller.

SECTION 6. TIME AND PLACE FOR EXAMINATION.—(a) It shall be the duty of the Board of Public Safety to designate a time and place and give public notice thereof, by publication at least three times in the official paper of said City when such board will convene for such examination. (b) Such examination shall be open to any architect, engineer or builder with practical experience in his occupation of at least five years. (c) All candidates shall be examined by such board in both the theory and practice of architectural construction, in the calculations of the strength of material, strength of a truss, stability of an arch- and in such further details as shall seem best to said board. SECTION 7. BOARD TO REPORT TO BOARD OF PUBLIC SAFETY.—After such examination, said Board shall report, in writing, to said Board of Public Safety, the names of such persons to whom certificates have been issued, and from such persons said Board of Public Safety shall appoint such officer and such assistants as may be deemed necessary to carry out the provisions of this code.

SECTION 8. OATH OF OFFICE.—(a) The Commissioner of Buildings and his Assistant Inspectors shall, before he or they enter upon the duties of his office, take and subscribe an oath before the City Clerk, to faithfully and impartially execute the duties of his office. (b) The Commissioner of Buildings shall give a bond in the sum of five thousand dollars (\$5,000) and each assistant inspector a bond in the sum of two thousand dollars (\$2,000), with some surety company, to be approved by the City Controller conditioned for the faithful performance of his duties.

SECTION 9. SHALL KEEP A RECORD OF ALL APPLICATIONS FOR PERMITS. —It shall be the duty of said Commissioner of Buildings to keep a record of all applications for permits, which shall be regularly numbered in the order of their issue; also a record showing the number, description and size of all buildings erected in the City during his term of office; of what material constructed, the aggregate of the number, kind and cost of all buildings, the inspection, removal and condemnation of buildings and all other matters proper to be recorded.

SECTION 10. SHALL INSPECT WHEN NOTHFIED.—It shall be the duty of the Commissioner of Buildings, upon being served with a notice requiring him to visit and inspect any building upon or in which work is being done, under any of the provisions of this code, to do so within forty-eight hours from the time_of receiving such notice.

SECTION 11. DUTIES OF COMMISSIONER.—It shall be the duty of the Commissioner of Buildings to sign all certificates and notices required to be issued under this code; to make complaint of all violations thereof to the Board of Public Safety; to keep in proper books for the purpose of a register of all transactions of the office and to submit to the Board of Public Safety a quarterly statement of all such transactions, and to enforce all of the conditions of this code.

SECTION 12. POWER OF COMMISSIONER.-(a) The Commissioner of Buildings shall have full power to pass upon any question arising under the provisions of this code, relative to the matter of construction or material to be used in the erection, alteration or repair of any building; provided, however, that should any question arise between the Commissioner of Buildings and the owner or architect of any building, or should the owner or architect object to any order or decision of said Commissioner, the matter shall be referred to the Board of Public Safety and its decision shall be final and couclusive. (b) The Commissioner of Buildings and his regularly authorized assistants are hereby given authority to enter any building in the City of Indianapolis in the performance of their duties, and to order and compel the immediate suspension of any necessary work being done in violation of the provisions of this code, and to prohibit the use of any materials or the maintenance or operation of any machinery in violation of the provisions of this code, or the violation of any ordinance of the City of Indianapolis. (c) No person shall continue the construction of any building, or use any machinery in or about any building after the Commissioner of Buildings or his regularly authorized assistants, have directed the suspension of the use thereof. (d) The Commissioner of Buildings and his regularly authorized assistants are hereby given authority to make such tests as may be necessary to determine the safety of the conditions of any building, material or machinery, which it becomes their duty under the provisions of this code to inspect, the

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cost of such test to be borne by the owner or agent, or the Commissioner of Buildings may require the owner or agents to make such tests as required, and a written statement furnished to the Department of Buildings of the same.

SECTION 13. SHALL EXAMINE ALL DANGEROUS BUILDINGS.—It shall be the duty of the Commissioner of Buildings to examine or cause to be examined all buildings reported to be dangerous or damaged by fire or accident, and to make a record of such examination, including the nature of the same, and the nature of the damage, with the name of the street and the number of the building, and the name of the owner, and to examine all buildings under application to be removed, raised, enlarged altered or built upon, if considered necessary, and to make a record of the conditions of the same.

SECTION 14. NOT TO BE ENGAGED IN ANY BUILDING BUSINESS.—The Commissioner of Buildings and his assistants of any division shall not, during their term of office, be employed or engaged, directly or indirectly, in any building business, or enter into any building business, or enter into any contract for building for others or for furnishing mateials, specifications or plans for buildings for others.

SECTION 15. SALARY.—The City Council of the City of Indianapolis shall, in all cases, fix the compensation of the employees in the office of the Commissioner of Buildings. The Commissioner of Buildings shall receive a salary at the rate of two thousand dollars (\$2,000.00) per annum. The clerk in the office of the Commissioner of Buildings shall receive a salary at the rate of one thousand dollars (\$1,000.00) per annum. The stenographer in the office of the Commissioner of Buildings shall receive a salary at the rate of six hundred dollars (\$600.00) per annum. The Chief Inspector and each assistant inspector in the Division of Construction shall receive a salary at the rate of one thousand two hundred (\$1,200.00) per annum. The Chief Inspector and each assistant inspector in the Division of Boilers and Smoke shall receive a salary at the rate of one thousand two hundred (\$1,200.00) per annum. The Chief Inspector in the Division of Elevators shall receive a salary at the rate of one thousand two hundred (\$1,200.00) per annum.

PART 2.

DEFINITIONS.

SECTION 16. ALTERATIONS.—Any change, addition or modification in construction or grade of occupancy.

AREA.—Open sub-surfaces adjacent to a building, street or lot line.

ATTIC STORY .- A story situated wholly or partly in the roof.

APPENDAGES.—Dormer windows, cornices, mouldings, bay or oriel windows, balconies, cupolas, domes, towers, spires, ventilators, or any other accessory projecting from a building.

APARTMENT.-See "Tenement House Law."

APARTMENT HOUSE.—See "Tenement House Law."

BASEMENT.—(a) A basement is a story partly but not more than onehalf below the level of the curb. (b) When a basement ceiling is more than five (5) feet above the curb line, it will be rated as the first story or ground floor in this code. (c) See "Tenement House Law."

BAY WINDOW,—A rectangular, curved or polygonal window which projects from the balance of the enclosing wall.

BUILDING LANE.—A line formed by the intersection of the outer face of the euclosing walls of a building and the surface of the ground.

BUILDING.—Any structure erected by art and fixed upon or in the soil, composed of several pieces and designed for use in the position in which so fixed.

CELLAR.—A cellar is that portion of a building below the first tier of floor beams or joist if partly or entirely below the level of the parking, street, or ground, and not suitable for habitation. See "Tenement House Law."

CURTAIN WALL.-A subordinate wall between two columns or other supporting members, being primarily a filling and having no share in the support of other portions of the structure.

COURT.-See "Tenement House Law."

DIVISION WALLS.—A wall that separates part of any building from another part of the same building.

DWELLING.—See "Tenement House Law." EXTERNAL WALL.—An external wall means every outer wall or vertical enclosure of a building other than a party wall.

FIRST STORY.—The story, the first of which is at or above the level of the sidewalk or adjoining ground; the other stories, one of the struc-tural subdivisions in the height of a structure between the top of a floor and the top of the floor next above. See "Basement and Mezzanine."

FOUNDATION.—That portion of wall below level of street cnrb, and where the wall is not on a street, that portion of wall below the level of the bottom of the first tier of floor beams or joist.

HEIGHT OF BUILDINGS.—Height of buildings measuring from the curb level at the center of the front of the building to the top of the highest point of flat roof; and for pitched roofs one-half the height of the highest gable or hipped roof, shall be taken as the highest point of the buildings.

HALL.—See "Tenement House Law."

LODGING HOUSE.—See "Tenement House Law."

MEZZANINE.—A partly low story or subordinate story, introduced in the height of a principal story, which will be rated as a story in this code.

TENEMENT HOUSE.—See "Tenement House Law."

YARD .- See "Tenement House Law."

PART 3.

FIRE LIMITS.

SECTION 17. FIRE LAMITS, BOUNDARIES—Commencing at the intersection of St. Clair street and West street; thence south with the center line of West street to North street; thence west with the center line of North street to the center line of Blake street; thence south on Blake street to Washington avenue; thence west to the east bank of White river: thence south following the east bank of White river to a point in line with McCarty street; thence east to and on the center line of McCarty street to a point in a line parallel with the southwest property line of Virginia avenue and one hundred and fifty (150) feet from and southwest of said property line to Prospect street; thence east on Prospect street to Shelby street; thence north on Shelby street to the center line of Hosbrook street; thence northwest on Hosbrook street to Cedar street; thence northeast on Cedar street to Elm street; thence northwest on Elm street to Pine street; thence on Pine street to Davidson street; thence on Davidson street to Massachusetts avenue; thence north to a point in a line parallel with the northwest property line of Massachusetts avenue and one hundred and fifty (150) feet northwest

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from said property line; thence southwest on said line parallel with the northwest property line of Massachusetts avenue and one hundred and fifty (150) feet from and northwest of said property line to St. Clair street; thence west on St. Clair street to the place of beginning.

PART 4.

PRELIMINARY REQUIREMENTS.

SECTION 18. PERMITS.—(a) No excavation shall be commenced, no wall, structure, building, tank, sign, sign board or bill board, or parts thereof, shall hereafter be built or constructed nor shall any boiler, stack, furnace, wiring or elevator be installed or altered in or on any building, structure or premises, in the City of Indianapolis, except in conformity with the provisions of this code, and a permit issued therefor. (b) No building already erected, or hereafter to be built, in the corporate limits, shall be raised, altered, moved or built upon in any manner, that would be in violation of any of the provisions of this code, or the approval issued thereunder. (c) All the provisions of this code shall apply with equal force to buildings both municipal and private.

SECTION 19. PLANS AND SPECIFICATIONS-(a) Before the erection, construction or alteration of any building or part of any building, structure or part of any structure, or wall, and before the erection of any platform staring or flooring to be used for standing or seating purposes, and before the construction or alteration of any boiler, stack, furnace, elevator or wiring of any building or structure is commenced, the owner or lessee or agent of either or the architect or builder employed by such owner or lessee in connection with the proposed erection or alteration, shall submit to the Commissioner of Buildings a detailed statement of the specifications, on appropriate blanks to be furnished to applicant by the Department of Buildings, and a full and complete copy of the plans of such proposed work, and such structural detail drawings of said proposed work as the Commissioner of Buildings may require. (b) All of which shall, when required by the Commissioner of Buildings, be accompanied with a statement in writing, sworn to before a notary public or Commissioner of Deeds, giving the full name and residence, street and number of the owner of said building, or proposed building, structure or proposed structure premises, wall, platform, staging, boiler, stack, furnace, elevator, wiring, sign or bill board. (c) Detailed statement of specifications and a copy of the plans, when required by the Commissioner of Buildings, shall be kept on file in the office of the Commissioner of Buildings, and the erection, construction, or alteration of said building, structure, wall, tank, platform, staging or flooring or any part thereof, and the construction or alteration of any boiler, stack, furnace, elevator or electric wiring, shall not be commenced or proceeded with, until said statements and plans shall have been so filed, and approved by the Commissioner of Buildings, and a permit thereon issued. (d) The erection, construction or alteration of such building, structure, platform, staging or flooring, and the construction or alteration of such boiler, stack, furnace, elevator or electric wiring, when proceeded with, shall be constructed in accordance with such approved detailed statements of specifications and copy of plans. (e) No changes are to be made in any plan or construction, after such approval, nuless approved by the Commissioner of Buildings in writing. (f) Nothing in this section shall be construed to prevent the Commissioner of Buildings from granting his approval for the erection of any part of a building, or any part of a structure, where plans and detailed statements have been presented for the same before the entire

plans and detailed statements of said building or structure have been submitted.

SECTION 20. REVOCATION OF PERMITS.—(a) Should the Commissioner of Buildings become convinced that the work under such approval or permit is not proceeding according to the detailed statement, plans and specifications upon which such approval or permit was issued, but is proceeding in violation of the law or ordinance, it shall be his duty to notify the owner or owners, or his or their agents, that the work is being constructed in violation of the approval, permit, and ordinance and that the same must be immediately rectified to conform with the building code or such approval or permit shall be revoked. (b) Notice to revoke a permit shall be in writing, signed by the Commissioner of Buildings and after such revocation of permit any contractor or workman performing any work in or about said structure, building or premises, shall be guilty of a misdemeanor. (c) Every permit shall be considered cancelled if active work is not commenced within two months of the date of issue. (d) It shall be the duty of the Commissioner of Buildings to approve or reject any plan filed with him pursuant to the provisions of this section within a reasonable time.

SECTION 21. ORDINARY REPAIRS.—Ordinary repairs of buildings or structures, the cost of which shall not exceed twenty-five dollars (\$25,00), may be made without notice to the Commissioner of Buildings, but such repairs shall not be construed to include the cutting away of any stone or brick wall or any portion thereof, the removal or cutting of any beams or supports, or the removal, change or closing of any staircase or fire escape or the rebuilding of any flue or chimney.

SECTION 22. DEMOLISHING BUILDINGS.—(a) When plans and detailed statements are filed with the Commissioner of Buildings for an existing building or part of an existing building to be demolished, such facts shall be stated in the statement so filed. (b) In demolishing any building, story after story, commencing with the top story, each story shall be completely removed. No material shall be placed upon the floor of any such building in the course of demolition, but the brick, timbers and other structural parts of each story shall be lowered to the ground immediately upon displacement. (c) The material to be removed shall be properly wet down to lay the dust incident to its removal. (d) The owner, architect, builder or contractor for any building, structure, premises, wall, platform, staging or flooring to be demolished shall give not less than twenty-four (24) hours' notice to the Commissioner of Buildings of such intended demolition.

SECTION 23. IF RAISED OR BUILT UPON.—No building already erected, or hereafter built, shall be raised or built upon in such manner that were such building wholly built or constructed after the passage of this ordinance it would be in violation of any provision thereof.

SECTION 24. FEE FOR PERMITS.—(a) For new buildings hollow sidewalks, additions to old buildings, the permit fee shall be one cent for every one hundred (100) cubic feet of contents of such new building, hollow sidewalks or additions to old buildings. The cubic contents to be measured to include every part of the building, hollow sidewalk or addition, from the bottom of foundation to one-half $(\frac{1}{2})$ of the highest part of roof or covering, provided however, that no permit fee shall be less than one dollar (\$1,00). (b) Moving buildings or tanks on the street from one location to another location, the permit fee shall be five dollars (\$5,00). (c) Permits for interior alterations, water tanks, platforms, stagings, boilers, stack, furnace, elevator or wiring to which the one hundred (100) cubic feet rate above mentioned can not be properly applied and the cost of which shall exceed twenty-five dollars (\$25,00) shall cost fifty cents (\$,50) for every five hundred (\$500,00) of the cost of such interior alteration, water tanks, platforms, staging, boilers, stack, furnace, elevator or wiring. Provided, however, that no permit fee shall be less than one dollar (\$1.00). (d) The permit fee for every sign, sign-board or bill-board hereafter constructed or erected under this code shall cost one dollar (\$1.00) for every five hundred dollars (\$500.00) or fractional part thereof above one dollar (\$1.00) of the cost of such sign, sign-board or bill-board. (e) The fee for permits shall be paid to the City Controller, on application issued and approved by the Commissioner of Buildings.

SECTION 25. INSPECTION OF ALL BUILDINGS IN GENERAL USE-PRECAU-TIONS IN BEHALF OF PUBLIC SAFETY-MAY REQUIRE REPAIRS OR ALTERA-TION IN SUCH CASES.—(a) The Commissioner of Buildings shall in-spect or cause to be inspected all public school buildings, public halls, churches, theaters, buildings used either for manufacturing or commercial purposes, hotels, apartment houses and other buildings or structures occupied or frequented by large numbers of people, for the purpose of determining the safety of such buildings or any parts of appliances or equipment thereof; the sufficiency of their doors, passageways, aisles, stairways, corridors, exits or fire escapes and generally their facilities for egress in case of fire or other accidents, and the strength of their floors, and he shall make return of all violations of the several provisions of this code to the Law Department for prosecution. (b) It shall be the duty of the Commissioner of Buildings, when any citizen represents that combustible materials are kept in any place in the city in an insecure manner, or that the doors, stairways, corridors, exits or fire escapes of any factory or workshop or other places of employment are insufficient for the escape of employes in case of fire, panic or accident, or do not comply with the provisions of this code; or that the flues, fire boxes, or heating apparatus in any building in the City are insecure or dangerous, or that any part of any building in the City is in an unsafe or dangerous condition or in any wise in contravention of this code, to make an examination of such place or building, and if such representation is found to be true, said Commissioner shall give notice in writing to the owner, occupant, lessee or person in possession, charge or control of such place or building, to make such changes, alterations or repairs as the ordinance of the City may require. Upon failure of parties so notified to comply with the said notice, the matter shall be placed in the Law Department for prosecution. (c) It shall be unlawful to continue the use of such building until the changes, alterations or repairs found necessary by the Commissioner of Buildings to make such building or part thereof, safe or to bring it into compliance with this code, shall have been made. (d) The Commissioner of Buildings shall have full power to pass upon any question arising under the provisions of this code, subject to the conditions, modifica-tions and limitations contained therein.

SECTION 26. BUILDINGS FOUND IN UNSAFE CONDITION—NOTICE TO OWNER—AUTHORIT¥ OF COMMISSIONER.—(a) Whenever the Commissioner of Buildings shall find any building or structure or part thereof in the city in such an unsafe condition as to endanger life, but in such condition that by the immediate application of precautionary measures such danger may be averted, he shall have authority, and it shall be his duty to forthwith notify, in writing, the owner, agent or person in possession, charge or control of such building or structure or part thereof, to adopt and put into effect such precautionary measures as may be necessary or advisable in order to place such building or structure or part thereof in a safe condition; such notice shall state briefly the nature of the work required to be done and shall specify the time within which the work required to be done shall be fixed by said Commissioner of Buildings, upon taking into consideration the condition of such building or structure or part thereof, and the danger of life or property which may result from its unsafe condition. (b) Whenever such Commissioner of Buildings shall be unable to find the owner of such building, structure or part thereof, or any agent or person in possession, charge or control thereof, upon whom such notice may be served, he shall address, stamp, and mail such notice to such person or persons at their last known address and in addition thereto shall place or cause to be placed the notice herein provided for upon such building at or near its principal entrance, in large letters, a notice as follows:

"THIS BUILDING IS IN A DANGEROUS CONDITION AND HAS BEEN CONDEMNED BY THE COMMISSIONER OF BUILDINGS."

(c) It shall be unlawful for any person, firm or corporation to remove said notice or notices without written permission from the Commissioner of Buildings. (d) If the owner, agent or person in possession, charge or control of such building or structure, or part thereof, when so notified, shall fail, neglect or refuse to place such building or structure, or part thereof, in a safe condition, or to adopt such precautionary measures as shall have been specified by said Commissioner within the time specified in such notice, in such case, at the expiration of such time it shall be unlawful for any person, firm or corporation to occupy or use said building or structure, or any part thereof until said building or structure or part thereof is placed in a safe condition; and in case where a building or structure, or part thereof, is in a dangerous or unsafe condition and has not been placed in a safe condition within the time specified in the notice of the Commissioner of Buildings, such building or structure, or such part thereof, shall be forthwith vacated, and it shall be unlawful for any person or persons to enter same except for the purpose of making repairs required by the Commissioner of Buildings and the ordinance of the City of Indianapolis. (e) If, at the expiration of the time specified in such notice for the completion of the work in order to render the building or structure safe, said notice shall not have been complied with, the Commissioner of Buildings shall refer the matter to the Board of Public Safety, together with such recommendations as he shall desire to make to the said Board of Public Safety. Whereupon it shall be the duty of the Board of Public Safety to cause notice to be served upon the owner. agent or person in possession, charge or control of such building or structure to appear before it upon a day named in such notice, to show cause why such building or other structure or parts thereof should not be condemned and the same removed. And the said Board of Public Safety shall thereupon hear and consider the recommendations of said Commissioner of Buildings and the objections thereto, if any, of such owner, agent or person in possession, charge or control and having satisfied themselves upon the matters presented, shall make final orders therein and if the report and recommendations of the Commissioner of Buildings shall be found correct and shall be approved, it shall be the duty of the Commissioner of Buildings to proceed forthwith to tear down or destroy that part of said building or structure that is in such unsafe condition as to endanger life or property, and the expense of tearing down any part of such building or structure shall be charged to the person owning or in possession, charge or control of such building, structure or part thereof and the said Commissioner of Buildings shall recover or cause to be recovered from such owner or person in possession, charge or coutrol thereof, the cost of doing such work, by legal proceedings, prosecuted by the Law Department.

SECTION 27. DWELLING HOUSE, WINEN A NUISANCE.—A dwelling house or any part thereof which is infected with contagious disease or is unfit for human habitation or dangerous to life or health by reason of want of repair or of defects in the drainage, plumbing, ventilation or of the construction of the same, is hereby declared to be a nuisance; and all of the rights, remedies and procedure given and provided in the next preceding section are hereby made applicable to the abatement of any such nuisance as is declared in and by this section as fully as though the rights, remedies and procedure provided for in the next preceding section were at length written out and provided for in the body of this section.

SECTION 28. MAY DIRECT FIRE DEPARTMENT TO REMOVE.—The Commissioner of Buildings shall have the authority to direct the Chief of the Fire Force or the Chief of the Fire Force may have authority to tear down or remove any defective or dangerous wall, flue or structure or any building or structure or part thereof, which may be or has been damaged by the cause of fire, when such dangerous wall, flue or structure endangers life or property.

(a) The Commissioner of Buildings or his assistants shall have power to stop the construction of any building or the making of any alterations or repairs of any building within said City when the same is being done in a reckless or careless manner or in violation of any ordinance and to order, in writing or by parole, any and all persons in any way or manner whatever engaged in so constructing, altering or repairing any such building, to stop and desist therefrom. (b) And the said Commissioner of Buildings shall have power to stop the wrecking or tearing down of any building or structure within said City when the same is being done in a reckless or careless manner or in violation of any ordinance or in such a manner as to endanger life or property, and to order any and all persons engaged in said work to stop and desist therefrom. When such work has been stopped by the order of said Commissioner, it shall not be resumed until said Commissioner of Buildings shall be satisfied that adequate precautions will be taken for the protection of life and property, and that said work will be proceeded carefully and in conformity with the ordinances of the City.

SECTION 30. ARBITRATION—APPEAL FROM DECISION.—(a) In all cases where discretionary power is given to the Commissioner of Buildings in questions relating to the security of any building or buildings or structures, or part thereof, and in all other cases where discretionary powers are given by ordinance to the Commissioner of Buildings any party or parties believing themselves injured or wronged by the decision of the Commissioner of Buildings must, before instituting any suit, make an appeal for arbitration as follows, to-wit: (b) Any person wishing to make an appeal shall do so within five days after written notice of the decision or order of the Commissioner of Buildings has been given. An appeal made later than five days after the serving of the notice of the Commissioner of Buildings shall not entitle the appellant to any arbitration. The request for arbitration shall be in writing and shall state the object of the proposed arbitration and the name of the person who is to represent the appellant as arbitrator. (c) The Commissioner of Buildings shall thereupon inform the appellant of the cost of such arbitration and such appellant shall, within twenty-four (24) hours from the receipt of such information, deposit with the Commissioner of Buildings the sum of money requested for defraying the expense of the same, which sum shall be fixed in each case by said Commissioner in proportion to the time it will take and the difficulty and importance of the case, but shall in no case be more than the cost of similar service in the course of ordinary business of

private individuals or corporations. As soon as such sum of money shall have been deposited with him, the Commissioner of Buildings shall appoint an arbitrator to represent the City and the two arbitrators thus chosen shall, if they can not agree, select a third arbitrator, and the decision of any two of these arbitrators shall, after investigation and consideration of the matter in question, be final and binding upon the appellant as well as the City, unless an appeal is taken therefrom, as provided in case of an appeal under a statutory arbitration, within five days thereafter.

SECTION 31. ARBITRATORS TO TAKE OATH—POWER TO EXAMINE WIT-NESSES.—The arbitrators shall themselves, before entering upon the discharge of their duties, be placed under oath by the City Clerk, to the effect that they are unprejudiced as to the matter in question and that they will faithfully discharge the duties of their position. They shall have the power to call witnesses and place them under oath, and their decision or award shall be rendered in writing, both to the Commissioner of Buildings and to the appellant. The fee deposited by the appellant with the Commissioner of Buildings to the arbitrators upon the rendering of their report and shall be in full of all costs incident to the arbitration.

SECTION 32. IN URGENT CASES—COMMISSIONER'S POWER FINAL.— Whenever the decision of the Commissioner of Buildings upon the safety of any building or any part thereof is made in a case which is so urgent that failure to properly carry out his orders to demolish or strengthen such building or part thereof may endanger life and limb, the decision and order of the Commissioner of Buildings shall be absolute and final.

SECTION 33. DUTY OF POLICE TO ASSIST COMMISSIONER IN ENFORCING PROVISIONS OF THIS CODE.—Whenever it shall be necessary, in the opinion of the Commissioner of Buildings, to call upon the Department of Police for aid or assistance in carrying out or enforcing any of the provisions of this code, he shall have the authority by the order of the Mayor of the City, so to do and it shall be the duty of the Department of Police, or any member of said department, when called upon by said Commissioner of Buildings under orders of the Mayor, to act according to the instructions of, and to perform such duties as may be required by said Commissioner of Buildings in order to enforce or put into effect the provisions of this code.

SECTION 34. BOND.—Any person, firm or corporation engaged in the wrecking of a building or other structure for which a permit is required, shall file with the City Controller a bond with sureties satisfactory to the City Controller in the sum of ten thousand dollars (\$10,000.00) to indemnify the City against any law suits brought or judgments obtained against the City of Indianapolis or any of its officials, resulting from accidents to persons or property during the wrecking operations, and no permit shall be issued for any wrecking work, except as herein above otherwise provided, until such bond is filed.

PART 5.

CLASSIFICATION OF BUILDINGS.

SECTION 35. CLASSIFICATIONS.—(a) All buildings as hereafter described, now existing or hereafter erected, altered or enlarged, shall be classified into four (4) classes, as follows: (b) Buildiags of the first class shall be taken to mean a building of fire proof construction throughout. The structural parts of which are wholly of brick, stonetile, concrete, iron, steel or other equally substantial non-combustible materials. (c) Buildings of the second class shall be taken to mean a building of metal or slow burning construction, wherein any floors and roofs are constructed of heavy dressed timbers, exposed beams, girders and planking and supported upon masonry walls, or on wooden or fireproofed iron or steel columns. (d) Buildings of the third class shall be taken to mean any building not of the first or second class, the external and division walls of which are wholly of brick, stone, concrete or other equally substantial or incombustible materials. (e) Buildings of the fourth class shall be taken to mean any building not of the first, second or third class.

SECTION 36. WHAT BUILDINGS SHALL BE FIRST CLASS.—(a) Every building hereafter erected, altered or enlarged to be used as a school building, place of instruction, assembly hall, church, hospital building, asylum, sanitarium, hotel or lodging house, having more than two stories above the basement and every building hereafter erected, altered or enlarged to be used as an association or a club building, tenement house or office building and having fifty or more rooms above the first story or more than three stories in height, above the basement, and every building hereafter erected, altered or enlarged to be used as a theater, seating one hundred (100) or more persons and having seats for spectators on the main floor or above, shall be a building of the first class. (b) Every building hereafter erected, altered or enlarged to a height greater than sixty feet above curb, shall be a building of the first class and shall comply in its construction with all the provisions of this code, regulating buildings of the first class.

SECTION 37. FIRST CLASS BUILDINGS.—(a) A building of the first class shall be constructed wholly of non-combustible materials with walls floors and roof construction of masonry, concrete or of iron or steel frame work, filled between and around with masonry, concrete, terra cotta or other durable, non-combustible and fire-resisting mate-(b) All columns, girders, beams, struts, and all structural memrials. bers shall be protected with fire-proof materials, so put on and held in place as to effectually protect such members from the effect of fire corrosion or abrasion. All exterior columns and all girders or other framing supporting more than one (1) story of masonry, shall be protected by a thickness at any exterior point of at least eight (S) inches of fire-proof material. (c) All structural members of buildings of this class, which may be subjected to unusual responsibility shall be especially protected and fire-proofed in such a manner as to effectually protect such members and their loads from risk of accident by fire or other-(d) All columns other than those above mentioned shall be wise. protected by fire-proofing not less than three (3) inches in thickness at any point. (e) Floor and roof beams and other framing shall be protected by fire-proofing not less than two (2) inches in thickness. (f) In all buildings of the first class wood may be used for the wearing surface of floors and the necessary sleepers for their attachment. In all buildings one hundred (100) feet or less in height wood may be used for window and door frames, sash, doors and finish around them, hand rails for stairs and wainscoting, except as provided in Section 257. In all buildings over one hundred (100) feet in height all window and door frames, sash, doors and finish around them, hand rails for stairs and wainscoting, and all other finish must be of metal or other incombustible material. Rough frames and nailing blocks of wood may be built into non-bearing partitions in buildings one hundred (100) feet or less in height. (g) There shall be no air spaces between the top of any floor construction and the floor boarding or behind any woodwork, but all such spaces shall be solidly filled with concrete or plaster or other fire-proofing materials.

SECTION 38. SECOND CLASS BUILDINGS.—(a) Buildings of the second class shall be constructed with walls of masonry or concrete of a thick-

ness required by Section 65. Walls at every floor level shall have masonry corbels or offsets of not less than four (4) inches upon which the floor planking shall rest. (b) When iron or steel columns, girders, beams or other structural parts are used, they shall be fire-proofed in the same manner as is required in Section 37 for buildings of the first class. (c) There shall be no hollow wooden partitions or any hollow or concealed places in any wooden construction and whenever wood shall be used it shall be solid; and it shall not be permissible in any second class building to so plaster, sheath or cover it with any materials as to leave any hollow space behind the same. (d) All planking and the wooden columns, girders, and beams shall be dressed. (e) The least dimensions of wooden columns, beams, joists or girders shall not be less than eight inches. (f) All columns and girders shall rest upon iron plates or post caps of sufficient size and thickness to receive the loads from such columns and girders and properly distribute the same to the supporting columns or masonry below, so as not to exceed the allowable strain for the various materials, as given in Part 6. (g) Floors and roofs shall be of dressed and tongued planking, not less than two and five-eights (25%) inches thick. This planking shall constitute the underfloor upon which shall be laid a top floor tongued and grooved material, and crossing the underfloor at an angle of not less than forty-five (45) degrees. All beams framing to girders or other beams shall be hung in approved iron or steel stirrups or hangers. (h) Roofs shall be of dressed and tongued planking, not less than two and one-fourth $(2\frac{1}{4})$ inches thick and the roof timbers shall not be less than thirty-six (36) square inches to be covered with incombustible roof covering.

SECTION 39. THIRD CLASS BUILDINGS.—(a) Buildings of the third class shall not have a height exceeding three (3) stories. (b) The floors and roof of such buildings may be of joist construction and partitions may be of stud and plaster or wood. (c) The roof of such building shall be covered with slate, tile, metal, gravel or other equally noninflammable materials.

SECTION 40. FOURTH CLASS BUILDINGS.—(a) No building of the fourth class shall be built over two (2) stories high. (b) Iron cladbrick or stone veneer and stucco buildings shall be considered as fourth class under this code.

SECTION 41. BUILDINGS WITHIN THE FIRE LIMITS.—(a) All buildings hereafter erected or enlarged within the district known as the fire limits, as described in Section 17, shall be erected or enlarged as first or scond class buildings. (b) It shall be unlawful to repair or alter any building other than a first or second class building within the fire limits if, in the opinion of the Commissioner of Buildings, such building has been damaged from any cause to the extent of sixty (60) per cent. of the cost of a similar new building and any such building shall be torn down and removed when in a dangerous condition, if so ordered by the Commissioner of Buildings. (c) Repairs on existing buildings of the first, second and third classes within the fire limits may be made involving the substitution of material or work made necessary by ordinary wear and tear.

SECTION 42. CLASS OF BUILDINGS CHANGED.—(a) When buildings, the uses of which bring them within any of the classes mentioned, are to be applied to the uses of any other classes of which a better system of construction is required, the construction and equipment of such buildings shall first be made to conform to the requirements of this code as specified for their intended use. (b) It shall be unlawful to use any such building for a new or different purpose than that for which its structure or purpose adapts it, unless its requirements to such new or different use for which it has been applied, with a permit for such alterations have been first obtained from the Commissioner of Buildings.

SECTION 43. WATER OUTLETS.—(a) There shall be provided in all factory, warehouse and mercantile buildings of the first and second class, approved water outlets for all floors so distributed, as to provide one outlet for every two thousand (2,000) square feet of floor area, these outlets to be set below the floor level and be arranged to convey water to the outside of such building. (b) All basement or cellar rooms of all buildings of the first and second class shall be provided with a floor outlet or outlets to be connected with the sever.

PART 6.

QUALITY OF MATERIALS.

SECTION 44. BRICK AND SAND.—(a) The brick used in all buildings shall be good, hard-well burned brick, or brick of 'a material that will stand a test as set out in Section 51. (b) When old brick are used in any wall, they shall be thoroughly cleaned before being used and shall be whole and good, hard, well burned brick. (c) The sand used for mortar in all buildings shall be clean, sharp grit sand, free from loam or dirt.

SECTION 45. MORTAR.—(a) Slacked lime mortar shall be made of one part of lime paste and not more than four parts of sand. All lime used for mortar shall be thoroughly burned, of good quality and properly slacked before it is mixed with the same. (b) Cement mortar shall be made of cement and sand in the proportions of one part of cement and not more than three parts of sand and shall be used immediately after being mixed. The cement and sand are to be measured and thoroughly mixed before adding water. Cement must be very finely ground and free from lump. (c) Cement and lime mortar mixed shall be made of one part of slacked lime paste, one part of cement and not more than three parts of sand to each. The quality of the respective parts to accord with the requirements before stated in this section.

SECTION 46. CEMENTS.—(a) Portland cement shall be held to mean such cement as shall consist of a mixture of argillaceous and calcareous materials, calcined together and subsequently ground to an impalpable powder and therefore to receive no addition of other substances except a maximum of two per cent. (2%) of gypsun of lime for the purpose of regulating the setting, and shall stand tests as provided in Section 146.

SECTION 47. CONCRETE.—(a) Concrete for foundations shall be made of at least one part of cement, two parts of sand and five parts of clean, broken stone of such size as to pass in any way through a two inch ring, or good gravel may be used in the same proportion as broken stone. The cement, sand and stone or gravel, shall be measnred and mixed as is prescribed for mortar. (b) All concrete shall be properly rammed into place and allowed to set without being disturbed.

SECTION 48. QUALITY OF TIMBERS.—(a) All timbers and wood beams used in any building shall be of good, sound material, free from rotlarge and loose knots, shakes, or any imperfection whereby the strength may be impaired and to be such size and dimensions as to sustain the loads as the purpose for which the building is intended. (b)

ALLOWABLE FIBRE STRESS PER SQUARE INCH.

rellow	white			
Pine	Pine	Oak	Hemlock	Spruce
_ 1000	800	1000	600	800
_ 600	400	600	500	400
80	40	80	-40	50
_ 400	250	400	275	320
$_{-1200}$	800	1000	600	800
$_{-1200}$	800	1000	600	800
	Pine 1000 600 80 400 1200	Pine Pine 1000 800 600 400 80 40 400 250 1200 800	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pine Pine Oak Hemlock 1000 800 1000 600 600 400 600 500 80 40 80 40 400 250 400 275 1200 800 1000 600

SECTION 49. STRUCTURAL METAL.—(a) Structural metal of its various kinds for various structural purposes shall be of a quality equal to that expressed by the specifications of the rules and requirements of the Board of Public Safety. Said rules and requirements, when officially made and adopted shall have the full force and effect of ordinances. (b) Connection between various structural members of metal of whatever kind, and connections and relations between metal and other building material of whatever kind shall be made, as to material, design and workmanship, in a manner to insure the full strength and safe efficiency of the various connected and related parts. (c) All structural metal work done under this ordinance shall be of the standard of the best engineering authorities, and as set out in Part 10.

SECTION 50. TESTS.—New structural material of whatever nature shall be subjected to such tests to determine its character and quality as the Commissioner of Buildings shall direct. The tests shall be made under the supervision of the Commissioner of Buildings or he may direct the architect or owner to file with him a certified copy of the result of test, such as he may direct shall be made.

SECTION 51. MASONRY WORK.—(a) The safe bearing load to apply to brick work shall be taken at eight (S) tons per superficial foot when line mortar is used. (b) Eleven and one-half $(11\frac{1}{2})$ tons per superficial foot when line and cement mortar mixed is used. (c) Fifteen (15) tons per superficial foot when cement mortar is used. (d) The safe bearing load to apply to Rubble stone work shall be taken at ten (10) tons per superficial foot when Portland cement is used. (e) Eight (S) tons per superficial foot when other than Portland cement is used. (f) Seven (7) tons per superficial foot when line and cement mortar mixed is used. (g) Five (5) tons per superficial foot when line mortar is used. (h) The safe bearing load to apply to concrete when Portland cement is used, shall be taken as set forth in Section 171.

SECTION 52. FACTORS OF SAFETY.—Where the unit strength for any material is not prescribed in this code, the relation of allowable unit stress to ultimate strength shall be as one to four for materials subjected to tension or transverse stress, as one to six for timber, and as one to ten for natural or artificial stones and brick or stone masonry.

PART 7.

LOADS AND FLOORS.

SECTION 53. FLOOR LOADS.—(a) The dead loads in all buildings shall consist of the actual weight of walls, floors, roofs partitions and all permanent construction. The live or variable loads shall consist of all loads other than dead loads. (b) Every floor shall be of sufficient strength to bear safely the weight to be imposed thereon, in addition to the weight of the material of which the floor is composed. (c) If to be used as a dwelling house, tenement house, apartment house, lodging house, hospital, asylum or sanitarium, each floor shaft

[Regular Meeting

be of sufficient strength in all its parts to bear safely upon every square foot of its surface not less than fifty (50) pounds. (d) If to be used for office, hotel, association or club purposes, not less than . seventy-five (75) pounds per every square foot above the first floor and for the latter floor, one hundred fifty (150) pounds. (e) If to be used as a school or a place of instruction, not less than one hun-dred (100) pounds per square foot. (f) If to be used for stable or carriage house purposes, not less than eighty-five (85) pounds per every square foot. (g) If to be used as a place for public assemblage, theater or church, not less than one hundred twenty-five (125) pounds upon every square foot. (h) If to be used for ordinary stores light manufacturing or light storage, not less than one hundred (100) pounds upon every square foot. (i) If to be used for a store where heavy materials are stored, warehouse, factories or other manufacturing or commercial purposes, not less than two hundred (200) pounds upon every square foot. (j) The strength of factory floors, intended to carry running machinery, shall be increased above the minimum given in this section in proportion to the degree of motion liable to be transmitted to the floor, as may be required by the Commissioner of Buildings. (k) The roofs of all buildings shall be proportioned to bear safely thirty (30) pounds upon every square foot, measured horizontally, in addition to the weight of materials composing the same. (1) For sidewalks over areas, the live loads shall be taken to be three hundred (300) pounds upon every square foot measured on a horizontal plane. (m) Vertical supports shall be of sufficient strength to bear safely the weight of each and every floor, depending upon it for support, in addition to the weight required as before stated to be supported safely upon said portion of said floor.

SECTION 54. STRUCTURAL LOADS,—(a) In all cases, provision shall be made for carrying the full superimposed dead loads. (b) Beams shall be proportioned to carry full live and dead loads. Beams, girders and columns shall be proportioned to carry full live and dead load of roof or other loads which are or may be constant, excepting as subsequently mentioned and as above indicated girders may be pro-portioned to carry eighty-five (85) per cent. of the superimposed live load and all of the dead load. (c) Columns not carrying roof loads or constant loads, may have their actual superimposed live loads reduced by five (5) per cent. for each succeeding lower floor until fifty (50) per cent. of the live load provided by Section 53 shall have been reached, when such reduced loads may be used for all remaining floors. (d) Proper provision shall be made for eccentric loading. (e) Structural members carrying elevators and elevator machinery shall be proportioned to carry twice the actual moving dead and live loads. (f) In warehouses, factories, school buildings, auditoriums or theaters, the girders and columns shall be proportioned to carry the full live and dead loads. (g) In any structure where it should appear that the live loads may at any time be constant on the floor or throughout the height of the structure or throughout any bay thereof. such live loads shall be treated as constant loads and no reduction shall be made therein for any superimposed loads.

SECTION 55. LOADS ON FLOORS TO BE SAFELY DISTRIBUTED.—(a) The weights placed on any floor in any building shall be safely distributed thereon. The Commissioner of Buildings may require the owner or occupant of any building or portion thereof to redistribute the loads on any floor or to lighten such loads, where he may deem the same to be necessary for the protection of life and property. (b) No person shall place, or cause or commit to be placed on any floor of any building any greater load than a safe load thereof to be estimated and ascertained as provided in Section 53.

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SECTION 56. STRENGTH OF FLOORS TO BE COMPUTED .-- (a) In all manufacturing and commercial buildings, where heavy materials are kept or stored or where heavy machinery is operated, it shall be the duty of the owner or occupant of such building to have the strength of the floors of such building and other supports computed by some competent person, to be employed by the owner or occupant, to estimate the weight which may be safely sustained per square foot of floor in such building and to reduce such an estimate to writing, stating the materials, sizes, distances apart and span of beams and girders, posts and columns supporting each floor in such building and the correctness of such estimate shall be sworn to by the person making the same, and it shall thereupon be filed in the office of the Commissioner of Buildings. (b) If the Commissioner of Buildings shall have cause to doubt the correctness of said estimates, he is empowered to revise and correct the same and for the purpose of such revision, the officers and employees of the Department of Building may enter any building and clear so much of any floor or portion thereof as may be required to make necessary measurements and examinations.

SECTION 57. NOTICE TO BE POSTED ON EACH FLOOR .- When the correct estimate of the weight that the floor in any manufacturing or commercial building will safely sustain has been ascertained, as provided in Section 56, the Commissioner of Buildings shall approve the same and thereupon the owner or occupant of said building or any portion thereof, shall post a copy of such approved estimate in a conspicuous place on each story of the building to which it relates.

PART 8.

EXCAVATIONS.

SECTION 58. DEPTH OF EXCAVATIONS,—(a) The legal depth for exvacations to the bottom of footings, shall be seven (7) feet for dwellings, flats and apartment houses and ten (10) feet for all other buildings, to be measured from the established grade for dwellings, flats and apartment houses and from the curb level at center of the main front of building on the property line of all other buildings, but in no case shall said exacation be less than seven (7) feet below the floor joists of dwellings, flats and apartment houses or eight (8) feet below the curb level of other buildings. (b) Whenever an adjacent excavation shall be carried to a greater depth than the legal seven (7) or ten (10) foot depth above given, it shall be the duty of the person making or causing such excavation to be made, to preserve any contiguous wall or walls from injury and sustain, protect and underpin the same below the legal seven (7) or ten (10) foot depth at his own cost and expense, so that said wall or walls shall be and remain practically as safe as before such exacavation was commenced. (c) He shall give timely written notice to adjoining property owners of his intention to do so and the adjoining property owners shall permit the occupancy of their grounds, or any buildings so that their walls may be underpinned and sustained. (d) If such contiguous wall or walls is not carried to a greater depth than the legal seven (7) or ten (10) foot depth above given, the owner or owners of such adjoining or contiguous wall or walls shall preserve their walls from injury and so sustain, protect and underpin the same at their own cost and expense to the legal seven (7) or ten (10) foot depth that the said wall or walls shall be and remain as safe as before such excavation was commenced. And said owner or owners of adjoining or contiguous wall or walls shall be permitted to enter upon the premises where such exacavation is being made for that purpose when necessary. SECTION 59. DEPTH OF FOUNDATIONS,—(a) Excavation for founda-

tion walls shall be two (2) feet for two story frame dwellings or buildings and eighteen (18) inches for one story frame dwellings or buildings. (b) Four (4) feet for all brick, stone, concrete and veneer buildings of whatever class. (c) The depth of exacavations to be taken from the established grade line for all class of buildings that set ten (10) feet or more from a public thoroughfare. Where the same sets ten (10) feet or less from a public thoroughfare, the established grade must be taken from the adjacent curb level.

SECTION 60. GROUND TEST.—(a) The Commissioner of Buildings may require any applicant for a permit to ascertain, by boring or other test, the nature of the ground upon which he proposes to build. (b) The soil to be tested shall be bored to a depth, not less than ten (10) feet below the bottom of the lowest footing, in as many places as may be necessary to discover its composition and condition. (c) The Commissioner of Buildings may require tests to be made on the bottom of excavations or footings and foundations to determine the actual boad necessary to produce settlement, and the amount of load imposed thereon shall be based upon data thus derived.

SECTION 61. LOADS TO BE CARRIED BY THE SOIL.—(a) The load carried by the soil shall be the total dead load and an average live load of not less than ten (10) pounds per square foot of all the floor area of the building when used as an office building, lodging or tenement house and an average live load of not less than twenty (20) pounds per square foot of all the floor area, where building is used for mercantile purposes, and an average live load of not less than sixty (60) pounds per square foot, of all the floor area, where such building is used as a warehouse. (b) Good solid, natural clay shall be deemed to safely sustain a load of three (3) tons to the superficial foot. For firm, coarse sand, stiff gravel four (4) tons per superficial foot. The area of footing courses shall be sufficient to meet this requirement.

PART 9.

GENERAL CONDITIONS.

SECTION 62. MATERIALS OF WALLS.—(a) The walls of all buildings other than those in class four shall be constructed of stone, brick, Portland cement, concrete, iron, steel or other hard, incombustible material and the several component parts of such building shall be as herein provided. (b) All buildings shall be enclosed on all sides with independent or party walls.

SECTION 63. WALLS AND PIERS.—(a) In all walls of the thickness specified in this code, the same kind or quality of materials may be used in piers or buttresses. (b) Bearing walls shall be taken to mean those walls on which the joist, beans, girders or trusses rest. (c) The walls and piers of all buildings shall be properly and solidly bonded together with close joints filled with mortar. The walls of each story shall be built up the full thickness to the top of the joist or beams above. (d) Proper bearings proportioned to weight to be sustained shall set under all columns or girders bearing on said piers. (e) Oblitic or stratified stone shall not be used in any part of the basement pier. (f) Piers shall not exceed in height ten (10) times their least dimension.

SECTION 64. FOUNDATIONS.—(a) All exterior foundations or walls of whatever class, excepting frame sheds or open shelter sheds less than two hundred (200) square feet area, shall have solid foundations, constructed of stone, brick, concrete iron, steel or other hard, incombustible material, and the several component parts as provided in this code. (b) All interior bearing walls throughout a foundation, cellar or basement of all buildings of class three (3) and four (4), must be of incombustible material, whether constructed solid or on piers or columns. (c) In no case shall a foundation be built on filled or frozen (d) Piles of wood intended to sustain a wall, pier ground. or post, shall be spaced not more than thirty-six (36) inches nor less than twenty (20) inches on centers, and they shall be driven to a solid bearing if practicable to do so, and the number of such piles shall be sufficient to support the superstructure proposed. No wood pile shall be used of less dimensions than five (5) inches at the small end and ten (10) inches at the butt for short piles, or piles twenty (20) feet or less in length, and twelve (12) inches at the butt for long piles, or piles more than twenty (20) feet in length. No wood pile shall be weighted with a load exceeding forty thousand pounds. When a wood pile is not driven to refusal, its safe sustaining power in tons shall be determined by the following formula: Twice the weight of the hammer in tons multiplied by the height of the fall in feet divided by least penetration of pile under the last blow in inches plus one. The Commissioner of Buildings, shall be notified of the time when such test piles of wood will be driven, that he may be present either in person or by representative. The tops of all piles shall be cut off. below the lowest water line. When required, concrete shall be rammed down in the interspaces between the heads of the piles to a depth and thickness of not less than twelve (12) inches and for one (1) foot in width outside of the piles. (e) Piles may be made of concrete, either reinforced or plain. Plain concrete piles must be molded 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 if put down by a water jet, may be molded, allowed to harden, and then driven or jetted into place. In case concrete piles are used, whether reinforced or otherwise, their bearing power shall be determined by putting in one or more test piles and loading them, after the concrete is sufficiently hard. The full working load in the structure shall not be more than one-half of the load under which the pile begins to settle. In no case, however, shall the load on a concrete pile exceed twentyfive (25) tons per square foot of cross-section of concrete, plus six thousand (6,000) pounds per square inch of any longitudinal steel reinforcement.

SECTION 65. THICKNESS OF WALLS.—The thickness of all exterior, party or division walls except as described in class one (1), or walls of veneered buildings or one story dwellings, flats or apartment houses, shall be of the following thickness, provided that all foundation walls, built of stone, are increased four (4) inches in thickness.

Concrete, Brick or Block.													
Height.	B	1	2	3	-1	5	6	7	8	9	10	11	12
One story	12	12											
Two stories		12											
Three stories	16	16	12	12									
Four stories	20	16	16	12	12								
		20											
		20											
Seven stories	24	20	20	20	16	16	16	12					
		24											
		24											
		24											
Eleven stories													
Twelve stories	32	28	28	24	24	24	20	20	20	16	16	16	12

WALLS MINIMUM THICKNESS IN INCHES.

SECTION 66. CURTAIN WALLS IN SKELETON CONSTRUCTION BUILDINGS. Buildings having a complete skeleton construction of steel or of reinforced concrete construction or a combination of both, may have exterior walls of reinforced concrete or brick twelve (12) inches thick, provided, howeyer, that such walls shall support only their own weight and at no time shall any other form of construction be used except that for which are submitted for approval to the Commissioner of Buildings. The wall shall not be over sixteen (46) feet in its horizontal dimension and not over twelve (12) feet in its vertical dimensions, unless increased four (4) inches in thickness.

SECTION 67. FOUNDATIONS FOR CLASS FOUR.—(a) Foundations for all buildings in class four shall not be less than eight (8) inches in thickness and if the horizontal length of such foundation is greater than thirty (30) feet, a cross wall or pilaster must be provided. In case of veneered frame buildings, flats, apartments, or dwellings the exterior foundation must be increased four (4) inches thicker than the above. (b) All foundation walls shall be provided with footings properly proportioned to carry the superimposed load on the soil where they are used. (c) In case where concrete blocks are used for foundation, the first course of blocks must be filled solid with cement. Also the last or bearing course must be filled or a plate the full thickness of the wall must be provided. (d) The division foundation wall of all double houses must have walls built eight (8) inches thick, the full length and to the height of the under side of finishing flooring.

SECTION 68. WHEN THICKNESS OF WALLS MAY BE REDUCED.—In flats, apartments or dwellings: the walls of the last story above the basement may be reduced four (4) inches from the thickness of walls as shown in table, Section 65, provided that no wall has a greater horizontal length than thirty (30) feet or a vertical height of ten (10) feet without a cross wall, or a pilaster not less than ninety-six (96) square inches.

SECTION 69. HEIGHT OF STORIES.—(a) The height of stories for all given thicknesses of walls in Section 65 shall not exceed (b) First story, sixteen (16) feet in the clear. (c) Second story, fourteen (14) feet in the clear, (d) Third story, twelve (12) feet in the clear, (e) Fourth and upper stories, eleven (11) feet in the clear, and if any story exceeds the foregoing heights, the walls of any such story and all walls below that story shall be increased four inches in thickness.

SECTION 70. HEIGHT OF BUILDINGS .- (a) No building or other structure hereafter erected, except if it be a spire, tower or smoke stack, shall be of a height exceeding two hundred (200) feet and if such building fronts on a street sixty (60) feet or less in width, then such building shall not exceed two and one-half (21/2) times the width of such street, measured from the sidewalk to the top of the roof covering, (b) The height of any tenement, lodging or apartment house hereafter erected, exclusive of any-roof appendages, shall not exceed one and one-half $(1\frac{1}{2})$ times the width of the widest street, alley or court upon which it abuts and no existing tenement, lodging or apartment house shall be increased beyond such height: provided, however, that any distance the building sets back from the lot line shall be added to the width of the street in making this computation. The height of a tenement, lodging or apartment house shall be the perpendicular distance measured in a straight line from the curb level to the highest point of the roof beams. (c) It shall be unlawful to hereafter erect any building or structure on the circular street known as Monument Place or to elevate any present structure thereon to a height exceeding eighty-six (86) feet from the established sidewalk level. No plans for any building to be erected on suid Momment Place or for the alteration, enlarging or for the improvement of any

building thereon shall be approved by the Commissioner of Buildings, nor shall any license or permit for any building be granted by any officer of said City if the height of such building or of such addition, alteration or repair shall exceed this height. (d) All buildings exceeding sixty (60) feet in height shall be buildings of the first class, as defined in Section 36.

SECTION 71. PARAPET FIRE WALLS.—(a) All division or party walls of class one and two shall be carried thirty (30) inches above the roof covering as a fire wall and shall be not less than the thickness of the wall below and shall be coped and covered with an approved incombustible material. (b) Division or party walls for all other buildings shall be carried up to a height not less than eighteen (18) inches above the roof covering at any point, and not less than the thickness of the wall below.

SECTION 72. DIVISION FURE WALLS,—(a) All apartment or flat buildings hereafter constructed, or erected, if more than three flats or apartments in width, shall have division walls of brick, stone or other incombustible material, of thickness of walls shown in table Sections 65, 66 and 68, extending from front to rear and from basement through roof as a fire wall. (b) In all buildings no floor area between fire walls of thickness as provided in Sections 65 and 75 shall exceed the following:

WHEN USED FOR RETAIL MERCANTILE BUSINESS.

•	Non-Fireproof Buildings Square Feet	Fireproof Buildings Square Feet
When fronting on one public thoroughfare_	6000	$^{-15000}$
When fronting on two public thoroughfare	es ·	
or extending from public thoroughfare t	0	
public thoroughfare	. 7200	18000
When fronting on three or more public tho	ľ	
oughfares	9000	22500
WHEN USED FOR ANY PURPOSE OTHER TH	IAN FLATS OR	APARTMENT
HOUSES OR RETAIL MERCANTI	le Business.	
When fronting on one public thoroughfare	. 5000	10000
When fronting on two public thoroughfare	es	
or extending from public thoroughfare t	to	
public thoroughfare		12000
When fronting on three or more public tho	r-	
oughfares	= 7500	15000

Provided, however, in case the foregoing described buildings are completely equipped with a system of approved automatic sprinklers, the area between the brick partition walls may be increased thirty-three and one-third $(33\frac{1}{3})$ percentum.

SECTION 73. BACKING OF WALLS FACED WITH ASHLER.—(a) In all walls which are faced with thin ashler, anchored to the backing, or in which the ashler has not alternate headers and stretchers in each course, or alternately heading and stretching courses, the backing of brick shall not be less than twelve (12) inches thick. Each stone of said ashler work shall be properly anchored. (b) The backing of all walls of whatever material it may be composed, shall be of such thickness as to make all walls conform as to thickness independent of the facing, with the requirements of this code.

SECTION 74. FIREPROOF WALLS FOR LIGHT AND VENT SHAFTS.—(a) In every building of class one, two and three hereafter erected, all the walls or partitions forming interior light or vent shafts, shall be built of brick or other approved fireproof material. (b) The walls of all light or vent shaft, whether exterior or interior, hereafter erected

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shall be carried up not less than thirty (30) inches above the level of the roof.

SECTION 75. HEIGHT OF HOLLOW THE PARTITION WALLS.—(a) Four (4) inch and six (6) inch hollow tile partition walls of hard burnt clay, porous terra cotta or other suitable fireproofing, set in cement lime mortar, may be built not exceeding in their vertical measurements fifteen (15) and twenty (20) feet respectively or one, story in height and in their horizontal measurements a length not exceeding twentyfive (25) feet, unless strengthened by a steel frame, cross walls, piers, columns or buttresses. (b) All such walls are to be carried on proper foundation or on iron girders or columns. (c) In no case, however, are such partition walls to be used as bearing walls or to support any load except their own weight.

SECTION 76. FIRE BLOCKING.—(a) All inside and outside stud walls, partitions, furring, stair carriages and joists, for all buildings hereafter erected shall be provided with two inch (2) block bridging neatly fitted between joists, studding, furring or carriage in such a manner as to prevent a passage of smoke, fire or heat from top to bottom of walls or partitions or through the length of the stair ramps and from end to end of joists. (b) This blocking shall be placed midway between bottom and top plate for stud walls, and into each span at each end of joist in such a manner as to completely cut off communication.

SECTION 77. BRIDGING.—There shall be one (1) row of two (2) inch by four (4) inch truss bridging for each twelve (12) feet length of joists or fractional part thereof. There shall be one (1) additional line of bridging for each additional six (6) feet in length or fractional part thereof.

SECTION 78. WOODEN GIRDERS OR LANTELS NOT ALLOWED.—It shall be unlawful to erect, construct or build any brick, stone or concrete, rear, front, party, division or partition wall upon wooden girders, rafters or lintels, or to support any such wall or part thereof by any wooden support whatever.

SECTION 79. ROOF OR FLOOR TIMBERS.—(a) Roof or floor timbers entering the same wall from opposite sides shall have at least four (4) inches of solid brick or concrete work between the ends of said timbers in buildings of the third class, and eight (8) inches in buildings of the second class. (b) Floor beams or joists shall have a bearing of at least four (4) inches at each end. (c) The butts or ends of all beams or joists entering the brick wall shall be cut on a splay of three (3) inches in their width. (d) Every trimmer or header, more than five (5) feet long, or tail joists used in floors of any building, except in dwellings, shall be hung in stirrup irons of suitable strength for the weight to be supported. (e) All floor beams, joists and headers shall be kept at least two inches clear of any wall inclosing a fire flue or chimney breast.

SECTION 80. LANING EXISTING WALLS.—(a) In case it is desired to increase the height of existing walls (party or independent), which are less in thickness than required under this code, same shall be done by a lining of brick work to form a combined thickness with the old wall, of not less than four (4) inches more than the thickness required for a new wall, corresponding with the total height of the wall when so increased in height. The said lining shall be supported on proper foundation. No lining shall be less than eight (8) inches in thickness and all lining shall be laid in Portland cement mortar and throughly anchored to the old brick wall with suitable wrought iron anchors placed two (2) feet apart and properly fastened or driven into the walls in rows, alternating vertically and horizontally with each other; the old walls being first cleaned of plaster or other coating where any lining is to be built against same. (b) No wall shall be lined less than twelve (12) inches in basement and all basement walls must project four (4) inches beyond the lining of the story above. (c) Skeleton steel or iron construction may be used with posts and girders supporting each story to be increased in height and carried up to full height of proposed building, resting on sufficient foundation, footings, and securely anchored to the existing walls.

SECTION S1. EXISTING PARTY WALLS.—Walls heretofore built for or used as party walls, whose thickness at the time of their erection, was in accordance with the requirements of the then existing ordinance, but which are not in accordance with the requirements of this codemay be-used, if in good condition, for the ordinary uses of party walls, provided the height of the same be not increased.

SECTION 82. SKYLIGHTS AND FLOOR LIGHTS.—(a) The term skylight shall be taken to mean and include flat, hipped, lautern, monitor, turret, dome, vertical or pitched saw-toothed construction, and all other covers placed over openings on roof for the admission of light. (b) All skylights placed on or in any building, in classes one and two, shall have the frame work and sash thereof constructed of metal or incombustible material and shall not be less than three (3) feet above the roof. In buildings of classes three and four, skylights of wood, if used, shall be covered inside and out with metal or other incombustible material. (c) All openings in roofs, for the admission of light, shall have metal frames and sash glazed with wire glass not less than one-fourth (1/4) inch thick or with glass protected above and below with wire screens of not less than No. 12 galvanized wire and not more than one (1) inch mesh. (d) Floor lights used for transmission of lights to floors below shall be constructed either of metal frames and bars or plates and if any glass in the same measures more than sixteen (16) square inches the said glass shall be provided with a mesh of wire either in the glass or under the same and the floor lights shall be of the same proportional strength as the floors or sidewalks, in which they are placed or else a railing four (4) feet high shall be built around the same.

SECTION 83. TANKS.—(a) Tanks containing more than five hundred (500) gallons of water or other fluid hereafter placed in any story or on the roof or above the roof of any building now or hereafter erected shall be supported on iron, steel or reinforced concrete beams of sufficient strength to safely carry the same, and the beams shall rest at both their ends on brick walls or on iron or steel girders or iron or steel columns, or piers of masonry. (b) Underneath any said water tank or on the side near the bottom of the same there shall be a short pipe or outlet not less than three (3) inches in diameter, fitted with a suitable valve having a lever or wheel handle to same to discharge the weight of the fluid contents from the tank in case of necessity, unless tank water is to supply automatic sprinkler. (c) Such tanks shall be placed where practicable at one corner of a building but shall not be placed over nor near the line of stairs or elevator shaft, unless the stairs or elevator shaft are enclosed with walls of sufficient strength to support the added load of the tank and contents. (d) Covers on top of the water tanks placed on roofs, if of wood, shall be covered with tin. (e) All wooden tanks shall be coopered with metal hoops, circular in section.

SECTION 84. METALLIC LEADERS FROM ROOFS.—(a) The roofs of all buildings shall be provided with proper metallic leaders for conducting the water away from the roofs in such a manner as shall protect the walls and foundations of such buildings or of adjacent buildings from injury. (b) In no case shall water from such leaders be allowed to flow upon adjoining walls or premises, or upon the sidewalks, but shall be conducted by proper pipes to the sewer. (c) If there should be no sewer available, then the water from such leaders shall be conducted by pipes, below the surface of the sidewalks to the street gutter, cistern or dry well.

SECTION 85. GROUND DAMPNESS.—In all cases where the nature of the soil is damp or contains water, suitable provisions shall be made to carry off such dampness or moisture by means of drainage tile laid inside or outside of the walls or both. Such drain tile shall be connected with a catch basin or other suitable device and thence discharged into a dry well or sewer.

SECTION 86. CORNICES.—(a) In all cases where a wall is finished in stone, concrete or terra cotta cornice sixty-five (65) percentum of the weight of the material for such cornice shall be on the inside of the outer face of the wall or shall be securely anchored so that the cornice shall be firmly balanced upon the wall. (b) Cornices of all buildings of the first, second and third class shall be constructed of noncombustible material and shall be well secured through the walls with anchors or metal brackets and in all cases the walls shall be carried up to the sheathing of the roof and where the cornice projects above the roof, the walls shall be carried up to the top of the cornice. (c) All exterior wooden cornices excepting for class four, that shall hereafter require to be repaired or replaced, shall be constructed of noncombustible material as required for new buildings.

SECTION S7. BALCONIES.—Projecting canopies or balconies for theaters, hotels, or public halls may be placed in front of the main entrance, provided said projections shall extend the full width of the sidewalk and be constructed of noncombustible material throughout, and no such canopies or balconies shall be at a less distance than twelve (12) feet above the grade of the sidewalk.

SECTION 88. BUILDINGS SHALL NOT PROJECT BEYOND BUILDING LINE. —The face of any wall, pilaster or column of any building above the sidewalk level shall not project beyond the building line, except pilnths, pilasters, columns, porticoes, or entrances of buildings, which may extend not to exceed eight (8) inches and shall not extend over one (1) story in height, but no such extended plinths, pilasters, columns or entrances shall be allowed on sidewalks of less than twelve (12) feet in width.

SECTION 89. STEPS OR STAIRS.—Steps or stairs to the first floor of any building or lot shall not project from the property line except where an open area is permissable under Section 95 of this code, and in no case shall such steps project beyond such area nor shall any such steps remain after any such area is closed or removed.

SECTION 90. ORIEL OR BALCONY WINDOWS.—Oriel or balcony windows shall not project over the street line more than three (3) feet and no such window shall be at a less distance than twelve (12) feet above the curb level.

SECTION 91. STAIRWAYS AND FIRE ESCAPES DESIGNATED.—(a) All buildings used for the sale and retail of dry goods and other articles of general merchandise, over two stories high, and all factories over two (2) stories in height and employing over fifty (50) people, must have over or near the entrance of each stairway, leading to the floor below, except the first floor, the word STAIRWAY. (b) All fire escapes at the entrance thereto, must be designated by the words FIRE ESCAPE. (c) All to be painted in legible letters, not less than six (6) inches high and shall be designated by a light.

SECTION 92. ELEVATOR SHAFTS, HOISTWAYS AND STAIRWAYS.—(a) In any building now existing and used for manufacturing or storage purposes, in which there exists any freight elevator or hoistway, not enclosed in walls, constructed of brick or other fireproof material and provided

with fire doors, the openings thereof through and upon each floor of said building shall be provided with, and protected by substantial guard or gate, and with good and sufficient automatic trap doors covered with tin on each side and edges, and properly counterweighted in accordance with the standard for fire doors so constructed, as to permit a substantial floor surface when closed. The guards or gates and railings shall be of such material and form of construction as may be approved by the Commissioner of Buildings. Such guards or gates shall be kept closed at all times except when in actual use, and the trap doors shall be closed at the close of business each day by the occupant or occupants of the building having use or control over the same. (b) All passenger or freight elevators hereafter placed in any building of any class, or used for any purpose more than two stories in height, shall be enclosed in suitable walls of brick, tile, concrete or wired glass, with suitable frame work of iron protected with fireproof material. (c) If the enclosing walls are of brick or tile laid in cement mortar or of concrete and not used as bearing walls, they may be eight (8) inches in thickness for not more than fifty (50)feet of their uppermost height and increased in thickness four (4) inches for the remaining lower portion or parts thereof. Where each story is carried on iron frame work, and burnt clay, tile or other approved materials are used, the walls shall not be less than six inches in thickness. (d) In all cases wherever an elevator goes to the top floor, the inclosing walls of the elevator shaft must be continued through the roof and provided with a skylight at least three-fourths (34) the area of the shaft, the glass to be not more than one-eighth $(\frac{1}{3})$ of an inch thick and covered above and below with strong wire netting. Wired glass shall not be used in skylights over elevator inclosures. (e) All door openings in any inclosure shall be provided with standard fire doors made solid for their full height and hung to rabbeted wrought iron or steel frames or to wrought iron eyes built into the wall and shall have iron, stone or cement concrete door sills of the full width and length of the openings, or lights of wired glass in approved metal frames may be placed in such doors, but no one pane shall exceed seven hundred and twenty (720) square inches in size. (f) Whenever stairways are inclosed, or a stairway surrounds an elevator shaft, the wall must be constructed of some incombustible material in the same manner. (g) All dumb waiter shafts, except in class four, shall be inclosed in suitable walls of brick, tile, concrete or of some incombustible material set in iron frames and provided with self-closing fireproof doors.

SCUTTLES ON FLAT ROOFS .- (a) All buildings having a SECTION 93. flat roof and two or more stories in height, shall have scuttle frames and covers or bulkhead and doors on the roof made of, or covered with, some fireproof material. (b) All such scuttles or bulkheads shall have stationary ladders or stairs, leading to the same and all such scuttles or bulkheads and ladders or stairs shall, at all times, be kept free from obstruction and ready for use. (c) No scuttle shall be less in size than two (2) feet by three (3) feet.

SECTION 94. VAULTS UNDER SIDEWALKS .- (a) In buildings where the space under the sidewalk is utilized, a wall shall be built to retain the roadway of the street or the side, end or party wall of such building of stone, brick or concrete not less than two feet thick, or the equivalent in segment arches, reinforced concrete or buttresses. (b) Openings in the roof of vaults for the admission of coal or light or for manholes or any other purpose shall be covered with glass set in iron frames or with iron covers, having a rough surface and rabbeted into or made flush with the sidewalk. (c) When any such cover is placed in any sidewalk, it shall be placed as near as practicable to the outside line of the curb, and must be closed at all times, except when necessary for the usual and proper use thereof.

SECTION 95. AREA, STAIRWAYS.—(a) No cellar stairway or open area shall extend into the sidewalk more than four and one-half $(4\frac{1}{2})$ feet on streets having walks eighteen (18) feet wide or more than three and one half $(3\frac{1}{2})$ feet on streets having sidewalks less than eighteen (18) feet and more than ten (10) feet wide, provided that no area or stairway shall project into the sidewalk upon streets having a sidewalk of less width than ten (10) feet and in no case shall any such stairway or open area exceed fifty (50) square feet on any one public thoroughfare. (b) All such stairways or open areas shall be properly protected by a smooth iron or brass railing with a safety gate or rail at the entrance.

SECTION 96. RUBBISH AND DEERIS.—(a) The Commissioner of Buildings and the Chief of the Fire Force or their authorized assistants shall inspect all buildings for the purpose of determining the general character of the premises with respect to the disposition of debris, rubbish or other waste and inflammable material and all means of access from one part of the structure to another. (b) All parts of all buildings shall be kept free from combustible material, not in actual use and shall be neatly arranged in a manner to provide passageways or aisles for the convenient movement and work of the fire force. (c) All openings, external and internal, shall be kept free from goods or material of any kind. (d) There shall be no rubbish, excelsior, paper, shavings or other inflammable material left in any part of any building except when the same is stored within a fireproof room, provided with standard fire doors.

SECTION 97. HOLLOW VITREOUS TILE AND BRICK.—(a) Hollow vitreous tile may be used in foundations for buildings of class four, provided no wall has over forty (40) feet in its horizontal length without a cross wall or pilaster and not over eight (8) feet in its vertical height and provided with proper footings. (b) Hard burned hollow brick may be used for the inside course of walls for buildings when well bonded into the solid brick walls and may be included in the measurement of the thickness of such walls provided, however, that the strength of walls so built shall be sufficient to properly support the dead and live loads they may have to sustain.

SECTION 98. LANING OF FRAME STRUCTURES.—(a) All frame structures shall be lined with seven-eighths (%) inch sheathing on the outside or in lieu thereof they may be lined with seven-eighths (%) inch dovetailed lath suitable for plastering on the inside. (b) Shiplap or drop siding may be placed on the outside of frame structures in lieu of lining or dovetailed lath, if not less than five-eighths (%) inches in its thinnest, part.

SECTION 99. BUILDING MATERIAL IN STREETS.—(a) Persons engaged in the erection, reconstruction, wrecking or repair of any building, may occupy the public space with building materials for such reasonable period as the Commissioner of Buildings shall decide. (b) The occupying of sidewalks or streets by articles not intended for immediate use from day to day in connection with the operations for which the permit has been issued will not be allowed, except that old brick or building materials taken from the building, and to be used in the new construction, may be stacked in front of the site of said building for a time to be linited by the Commissioner of Buildings. (c) The maximum area permitted to be occupied shall not extend beyond onethird (1-3) of the width of the street where there are no railway tracks. On streets containing railway tracks, the space to be occupied by building materials outside of curb shall depend on the width of the streets in front of the building under construction or repair. (d) Where the street between the curb and the nearest rail of the track is twenty (20) feet or more, the building materials shall be compactly stacked or arranged at all times to occupy not more than three-fourths (¾) the distance from curb to nearest rail therefrom and to leave at least five (5) feet clear between materials and nearest rail, and no teams, wagons, carts, barrows, hods, buckets, or other appliance, delivering or removing materials to or from the building shall obstruct any part of the space so reserved. (e) The gutter or waterway of any street, avenue or alley shall not at any time be obstructed by any building materials or by any earth, sand or gravel, but such gutters or alleyways must be at all times kept clear to allow the free passage in and along the same. (f) Any person having the use of any portion of the street or sidewalk shall cause red lights to be placed in a conspicuous place in front of all obstructions from dark until sunrise each night- during the time such obstruction remains.

SECTION 100. SIDEWALKS TO BE COVERED.—(a) Whenever any new building is to be erected or any building is to be remodeled or wrecked in the territory bounded by West street on the west, East street on the east, South street on the south and North street on the north, the owner, agent or contractor, for such new building, remodeling or wrecking shall, before proceeding with such work, first erect a safe and convenient inclosed passageway for the use of pedestrians, between the property line and the curb adjacent to such buildings or (b) Such inclosed passageway shall be so constructed as structures. to give a free and unobstructed passage for pedestrians not less than eight (8) feet in width and not less than eight (8) feet in heighth, provided, however, that in no case shall such passageway be required to be of a greater width than the established and existing sidewalk upon any street wherein such inclosed passageway shall be required. (c) The sides and roof of the same shall be constructed of material of sufficient strength to afford full and complete protection to pedestrians while passing through the same. The roof covering such inclosed passageway shall be water tight and the inside walls and ceilings thereof shall be painted or calcimined throughout the entire length thereof. (d) Such inclosed passageway shall be equipped with suitable lights of sufficient number and power to illuminate the same at all times. (e) Such inclosed passageway shall at all times be maintained in a clean and sanitary condition and be kept free from rubbish and litter.

SECTION 101. CURB OR PAVING—How TO REMOVE.—When, in the construction, alteration, repair or removal of a building, it shall be necessary to remove any of the paving or curb in the street in front of said building or in the alley adjacent thereto, either for the purpose of making excavation or for setting derrick posts the Commissioner of Buildings shall not issue a permit for said proposed work until the applicant for such permit presents to the Commissioner of Buildings a permit from the City Engineer for removing said paving or curb, together with an approved bond from the Board of Public Works for the amount of money necessary, according to the estimate of the City Engineer, to defray the expense of relaying said paving and resetting said curb.

SECTION 102. TEMPORARY SHEDS.—Temporary, one-story, frame sheds may be erected within the fire limits for the use of builders, adjacent to buildings in course of erection but shall be demolished or removed upon the completion of said building.

SECTION 103. SCAFFOLDING.—All scaffolds erected for use in the construction, repair, alteration or removal of buildings shall be safely supported and of sufficient width and properly secured to insure the safety of persons working thereon or passing under or by the same and to prevent the falling thereof or of any materials therefrom and any workman or mechanic, whose duties require him to use a scaffold, may notify the Commissioner of Buildings, in writing, calling attention to any defect or condition, which in the employee's opinion renders the scaffold dangerous, and the Commissioner of Buildings shall inspect the scaffold and take such action as is necessary.

SECTION 104. LIGHTS IN HOTELS, FLATS AND APARTMENT HOUSES.— It shall be the duty of each lessee, manager or custodian of any hotel, flat or apartment house to keep, during all hours of the night, such number of lights burning in the basement and halls thereof as to make all parts of such basement and hallways visible to persons of ordinary eyesight coming into the same.

SECTION 105. FIREPROOF SHAVING VAULTS.—(a) No building shall be used or occupied in whole or part for any of the trades or occupations hereinafter mentioned to-wit: (b) Planing mills, sash, door and blind factories, carpenter or cooper shops, wagon or carriage manufactories, cabinet and furniture factories, wood turning and veneer manufactories, box or shingle manufactories or any other woodwork factory or shop, unless such building, so occupied, shall have in connection with it a brick vault with fireproof doors of sufficient capacity to contain all the shavings, sawdust, chips or other light combustible refuse connected therewith and shavings and other light combustible refuse shall be removed each day from such premises to such vault and in no event shall the proprietors, owners, or lessees of the above named manufactories or shops allow combustible refuse to accumulate on any lot or in any building unless stored in such a brick vault.

SECTION 106. AWNINGS.—(a) Canvas awnings of the folding or hinged class or metal awnings may be erected beyond the building line, when the same are not less than eight (8) feet above the sidewalk. (b) Awnings with fixed iron posts and frames with covers of corrugated metal, or other permanent material, will be permitted, where, in the judgment of the Commissioner of Buildings, the interest of the public require such construction. (c) The frames of all awnings must be securely attached to the buildings and the posts of stationary awnings shall be set in iron or stone blocks, not more than twelve (12) inches from the outer edge of the curb. (d) No lettering shall be placed thereon except the name of the individual, firm or corporation transacting business in the building in front of which the awning is erected. (e) In no case shall awnings interfere with street lamps or trees. (f) Temporary covered ways across sidewalks or parkings may be permitted for a period not to exceed forty-eight (48) hours, such covered ways shall afford a free passage of at least six (6) feet in width along the middle of the sidewalk.

SECTION 107. SKATING RINKS.—(a) It shall hereafter be unlawful for a person, corporation or partnership to locate, build, erect and maintain or to establish and maintain any skating rink for roller skating within one hundred (100) feet of any lot on which is situated any dwelling house used for residence purposes, unless the consent of the owner of each and every such dwelling house shall have first been obtained. (b) It shall be unlawful to locate, build, erect and maintain or to establish and maintain any skating rink for roller skating within one hundred and fifty (150) feet of any lot line upon which there exists any church or public school building.

SECTION 108. FENCE.—(a) All partition or party fences shall be made and kept in good and sufficient repair by the owners of the ground on each side, at their joint expense; provided, that the ground on each side shall be inclosed, used or occupied. (b) If any person, whose duty it shall be to make or keep in good repair any fence or part of the fence, shall neglect or refuse to do so for five (5) days after the request being made by the other parties interested, or his agent, then it shall be lawful for the party so making the request of the aforesaid to make or repair the whole fence or part of the fence and recover one-half ($\frac{1}{2}$) of the expenses thereof from the person so refusing or neglecting. (c) No fence erected under the authority of these regulations shall be less than five (5) or more than seven (7) feet in height, excepting by consent of the parties interested on both sides of such fence and the permission of the Commissioner of Buildings. (d) If any person shall inclose ground adjoining that already inclosed and shall thereby be benefited by any fence before erected, the person so benefited shall pay therefor a just and reasonable compensation regarding the conditions of the fence at the time.

SECTION 109. STORM DOORS.—(a) Temporary storm doors may be erected in front of any entrance to any building, provided that the construction does not project more than three and one-half $(3\frac{1}{2})$ feet from the building line. Storm doors or any part thereof shall be erected or maintained only during the winter months of each year and-must be removed at any time on written orders of the Commissioner of Buildings, and in no case shall storm doors or inclosures be used as signs, display of goods or advertising. (b) Revolving doors shall not be used as storm doors or for any other purpose, unless the revolving wings of such revolving doors are so arranged that by the application of a force, slightly more than is necessary to revolve said doors, and which any person of ordinary strength is capable of exercising, all the wings of said doors fold flat on each other and in an outward direction or unless the revolving wings of said revolving doors are so arranged that they will readily collapse or remove by pressure or simple mechanical means to be approved by the Commissioner of Buildings, and leave sufficient opening for two, (2) or more persons to pass through, with a minimum width of not less than twenty-two (22) inches on each side of said collapsed door. (c) Where revolving doors are used as exits, they shall be credited as exits only to the extent of the clear space remaining when the doors are collapsed and all deficiency of required exits must be made up. by additional doors.

MOVING BUILDINGS.—(a) It shall be unlawful for any SECTION 110. person, firm or corporation to move any brick, frame or other building from one location to another unless same shall be altered or reconstructed so as to conform to the class governing the construction of such a building at the time of moving the same and in its new loca-(b) No building shall be moved to a new location within the tion. City limits without a permit to be first issued therefor by authority of the Board of Public Works. (c) The person desiring such removal shall file with the Commissioner of Buildings his written application therefor, setting forth the kind of building to be removed, its estimated original cost, its dimensions in extreme length, height and width, its present location and the particular lot or site to which it is proposed to be moved. The Commissioner of Buildings shall thereupon thoroughly examine said building and refer the papers aforesaid, relating to its removal to the Board of Public Works, together with his opinion endorsed in writing upon said application as to the present value of such building compared with the original cost and whether the proposed removal can be made without serious injury to person or property. The Board of Public Works may thereupon approve the issuing of a permit for such removal, designating therein the particular streets or alleys along which the removal shall be made, provided, however, that such building has not been damaged by wear and tear or other cause to an extent exceeding fifty (50) per cent.

of its first cost and that such removal can, in the opinion of the Board of Public Works and the Board of Park Commissioners, be made without serious injury to pavement, curb, shade trees or other public improvements. (d) The Board of Public Works shall require a bond to be executed by the person, firm or corporation, describing such removal with surety to the satisfaction of such Board, which bond shall be in terms and for such amount as said Board may prescribe, conditioned upon the strict compliance with the terms of the said permit as to the route to be taken and limit of time in which to effect such removal, and to repair or compensate for the repair, and to pay all damages whatsoever occasioned by or incident to such removal and to pay to said City of Indianapolis as liquidated damages an amount not exceeding fifty dollars (\$50.00), to be prescribed by said Board for each and every day's delay in completing such removal or any repair in damage to property or public improvement or in clearing public highways of all debris occasioned thereby. (e) With the is-suance of said permit, the said Board of Public Works shall cause written notice thereof to be given to the Superintendent of Fire Alarm and of telephone, electric light and others whose property may be affected by such removal. (f) It shall be unlawful to remove any building across any bridge over any waterway in the City of Indianapolis.

PART 10.

SKELETON CONSTRUCTION.

SECTION 111. SKELETON CONSTRUCTION. (a) The term "skeleton construction" shall apply to all buildings wherein all external and internal loads and stresses are transmitted from the top of the build-ing to the foundations by a skeleton or framework of metal or rein-forced concrete. (b) In metal frame skeleton construction the beams and girders shall be riveted or bolted to each other at their respective junction points, and where respective structural shapes are fastened together to resist stresses, shall be riveted. If columns made of rolled iron or steel are used, their different parts shall be riveted to each other, unless the columns are of rolled integral section, and the beams and girders shall 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 (4) bolts not less than three-fourths (34) inch in diameter, and the beams and girders shall be bolted to the columns. Bolt holes in flanges for connection from column to column shall be drilled. 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 to rigidly connect the beams and girders with each other in the direction of their length. Cast iron columns shall not be used which have a diameter less than six (6) inches nor a length of more than thirty (30) times their least lateral dimension or diameter. No cast iron column shall be used in a building over fifty (50) feet in height, nor shall the thickness of metal be less than three-fourths (34) inches. (c) All steel trusses shall be riveted and all steel work in buildings more than fifty (50) feet high and in a building whose height exceeds twice its width shall be riveted. (d) Wherever it is found impossible to rivet connections as herein described and such connections are bolted, cold rolled or turned bolts of exact fit and diameter in reamed holes may be used in place of rivets with not more than ninety (90) per cent. of the stresses permitted for field driven rivets. (c) All structural members which are temporarily bolted together shall be well bolted in every alternate hole. (f) After the bases or base plates and columns have been set in place, both shall be protected by a covering of cement concrete applied direct to the metal, measuring not less than two and one-half $(2\frac{1}{2})$ inches thick from the extreme projection of the metal, filled solid into all spaces and forming a continuous concrete mass from the grillage or other foundations to an elevation six (6) feet or more above the floor level nearest the column base plates or column stool. (g) All metal shall be clean and shall be free from loose rust and scale, and all metal except that to be embedded in concrete shall be protected with at least two (2) coats of metal protecting paint. (h) All structural details and workmanship shall be in accordance with accepted engineering practice. (i) All trusses shall be held rigidly in position, both temporarily and permanently by efficient lateral and sway bracing.

SECTION 112. MAXIMUM ALLOWABLE STRESSES AND SPECIAL REQUIRE-MENTS FOR METALS.—(a) The maximum allowable stresses in pounds per square inch in steel and iron shall not exceed the following:

per square men m steer and from si	nan not	erceed (T	ie ronowing	5:
]	Rolled	Cast	Wrought	Cast
	Steel	Steel	Iron	Iron
Tension on net section	16,000	16,000	12,000	
Maximum compression on gross				
section	14,000	14,000	10,000	10,000
Bending on extreme fibre	16,000	16,000	12,000	
Bending on extreme fibre tension				3,000
Bending on extreme fibre compres-				
sion				= 10,000
Bending on extreme fibres of pins	25,000			
Shear; shop driven rivets and pins	12,000			
Shear; field driven rivets	10,000			
Shear; on rolled steel shapes	12,000			
Shear; plate girder webs; gross				
section	10,000			
Shear; on brackets				2,000
Bearing; shop driven rivets and				
pins	25,000			

(b) The allowable compressive stresses per square inch for columns shall be determined by the following formula:

Steel	$17,100 = 57 \frac{L}{R}$	
Wrought Iron	$12,000 = 60 \frac{L}{R}$	
Cast Iron	$10,000 = 60 \frac{L}{R}$	

In the above formula:

L equals length in inches.

R equals least radius of gyration in inches.

(c) In no case shall the allowable compressive stress exceed that given in paragraph (a) of this section. (d) For steel columns filled with, and encased in concrete extending at least three (3) inches beyond the outer edge of the steel, where the steel is calculated to carry the entire live and dead load, the allowable stress per square inch shall be determined by the following formula:

$$18,000 = 70 \frac{L}{R}$$

but shall not exceed 16,000 pounds. (e) For steel columns filled with but not encased in concrete, the steel shall be calculated to carry the

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entire live and dead load. In this case the above formula may be used, but the allowable stress shall not exceed 14,000 pounds. (f) Stress due to eccentric loading shall be provided for in all compressive members. (g) The length of rolled steel compressive members shall not exceed one hundred twenty (120) times the least radius of gyration, but the limiting length of struts for wind bracing only may be one hundred fifty (150) times the least radius of gyration. The limiting length for cast iron columns shall be seventy (70) times the least radius of gyration. (h) Cast iron columns shall not be used in buildings of greater height than twice the least width, or in buildings over fifty (50) feet high.

SECTION 113. LIVE AND DEAD LOADS—STRESS.—(a) Wherever the live and dead load stresses are of opposite character, only seventy (70) per cent. of the dead load stress shall be considered as effective in counteracting the live load stress. (b) For stresses produced by wind forces combined with those from live and dead load, the unit stress may be increased fifty (50) per cent. over those given above; but the section shall not be less than required if wind forces be neglected.

SECTION 114. RIVETING TENSION.—(a) In proportioning tension members, the diameter of the rivet holes shall be taken one-eighth $(\frac{1}{8})$ of an inch larger than the nominal diameter of the rivet. (b) In proportioning rivets the nominal diameter of the rivet shall be used. (c) Pin-connected riveted tension members shall have a net section of the body of the member and the net section back of the pin hole, parallel with the axis of the member, shall not be less than the net section of the body of the member.

SECTION 115. PLATE GIRDERS—FLANGES—COMPRESSION.—(a) Plate girders shall be proportioned either by the moment of inertia of their net section, or by assuming that the flanges are concentrated at the center of gravity and a unit stress used such that the extreme fibre stress does not exceed 16.000 pounds per square inch, in which case one-eighth ($\frac{1}{8}$) of the gross section of the web, if properly spliced, may be used as flange section. (b) The gross section of the compression flanges of plate girders shall not be less than the gross section of the tension flanges; nor shall the stress per square inch in the compression flange of any beam or girder of a longer length than twentyfive (25) times the width exceed

 $20,000 = 160 \frac{L}{B}$

in which formula

L equals unsupported distance.

B equals width of flange.

(c) The flanges of plate girders shall be connected to the web with a sufficient number of rivets to transfer the total shear at any point in a distance equal to the effective depth of the girder at that point combined with any load that is applied directly on the flanges. (d) Webs of plate girders shall be provided with stiffeners over all bearing points, under all points of concentrated loading and elsewhere when required by good engineering practice. If steel columns of such a form that the same can be filled with and encased in concrete the steel and concrete can be figured for the steel and seven hundred fifty (750) pounds for the concrete L

encased in the steel work, provided — does not exceed one hundred twenty (120). R

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PART 11.

Reinforced Concrete.

SECTION 116. REINFORCED CONCRETE-DEFINITION-PLANS.-(a) The term "reinforced concrete" means a combination of metal imbedded in concrete to form a structure so that the two (2) materials assist each other to sustain all the stresses imposed. (b) Before any work to erect any reinforced concrete structure is commenced, complete drawings and specifications shall be filed with the Commissioner of Buildings, showing all details of the construction, including detail of working joints, the size and position of all reinforcing rods, stirrups or other forms of metal and design of supporting forms and giving the composition and proportion of the concrete; provided, however, that permission to erect any reinforced concrete structure does not in any manner approve the construction until after tests have been made of the actual construction to the satisfaction of the Commissioner of Buildings, and at no time shall any other form of construction be used except that for which drawings and specifications are submitted for approval to the Commissioner of Buildings. (c) If at any time plans and drawings for the construction of systems for reinforced concrete, do not come within the provisions of this Ordinance, the Commissioner of Buildings is empowered to appoint a committee of experts, of not over three, to pass upon such plans and drawings, whose decision shall be final as to such construction. The expense of such commission to be paid by the party submitting such plans and drawings or applying for a permit for the same. SECTION 117. CONCRETE.—The concrete for reinforced concrete struc-

SECTION 117. CONCRETE.—The concrete for reinforced concrete structures, except foundations and area walls, shall consist of a wet mixture of one (1) part of cement to not more than six (6) parts of aggregate, fine and coarse, either in the proportion of one (1) part of cement, two (2) parts of sand and four (4) parts of stone or gravel, or in such proportion that the resistance of the coucrete to crushing shall not be less than two thousand (2,000) pounds per square inch after hardening for twenty-eight (28) days. Concrete for foundations and area walls may be one (1) cement, two and one-half $(2\frac{1}{2})$ sand, five (5) broken stone mixture with ultimate strength of not less than seventeen hundred fifty (1,750) pounds.

SECTION 118. AGGREGATES.—(a) Fine aggregates shall consist of sand, crushed stone or gravel screenings, passing when dry a screen having one-fourth $(\frac{1}{4})$ inch diameter holes, and not more than six (6) per cent, passing a sieve having one hundred (100) meshes per lineal inch. It shall be clean and free from vegetable loam or other deleterious matter. (b) Coarse aggregate shall consist of crushed stone or gravel, which is retained on a screen having one-fourth $(\frac{1}{4})$ inch diameter holes and graded in size from small to large particles. The maximum size shall be such that all the aggregate will pass through a one (1) inch diameter ring. The particles shall be clean, hard, durable, and free from all deleterous material.

SECTION 119. PRISM.—Three prisms, eight (8) inch by eight (8) inch by sixteen (16) inch, shall be moulded from the concrete poured in each floor at the time of construction, and held for the disposal of the Commissioner of Buildings.

SECTION 120. RATIO OF MODULI OF ELASTICITY—ADDRESION—BOND.— (a) The calculations for the strength of reinforced concrete shall be based on the assumed ultimate compressive strength per square inch designated by the letter "U" given in the table below for the mixture to be used. (b) The ratio designated by the letter "R" of the modulus JOURNAL OF COMMON COUNCIL.

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of elasticity of steel to that of the different grades of concrete shall be taken in accordance with the following table:

MIXTURE.

1 cement, 1 sand, 2 broken stone, gravel	2,900	10
1 cement, 1½ saud, 3 broken stone, gravel	2,400	12
1 cement, 2 sand, 4 broken stone, gravel	2,000	15

SECTION 121. UNIT STRESSES FOR STEEL AND CONCRETE.-(a) The stresses in the concrete and the steel shall not exceed the following limits: (b) Tensile stress in steel shall not exceed one-third (1-3) of its elastic limit and shall not exceed 18,000 pounds per square inch. (c) Shearing stress in steel shall not exceed 12,000 pounds per square inch. (d) The compressive stress in steel shall not exceed the product of the compressive stress in the concrete multiplied by the elastic modulus of the steel and divided by the elastic modulus of the concrete. (e) Direct compression in concrete shall not exceed twentytwo (22) per cent. of its ultimate strength. Bending in extreme fibre of concrete shall not exceed thirty-seven and one-half $(37\frac{1}{2})$ per cent. of the ultimate strength. (f) Tension in concrete on diagonal planes, resulting from shear shall be one-fiftieth (1-50) of the ultimate compressive strength. (g) For a concrete composed of one (1) part of cement, two (2) parts of sand and four (4) parts of broken stone, the allowable unit stress for adhesion per square inch of surface of imbedment shall not exceed the following:

Pounds per square

inch

On plain round or square bars of structural steel______ 80 On plain round or square bars of high carbon steel_____ 50 On plain flat bars, in which the ratio of the sides is not more

than 2 to 1 ______ 50 On twisted bars when the twisting is not less than one complete twist in eight diameters ______ 100

twist in eight diameters ______ 100 (h) For specially formed bars, the allowable unit stress for bond shall not exceed one-fourth $(\frac{1}{4})$ of the ultimate bond strength of such bars without appreciable slip, which shall be determined by tests made by the person, firm or corporation to the satisfaction of the Commissioner of Buildings, but provided that in no case shall such allowable unit stress exceed one hundred (100) pounds per square inch of the specially formed bars.

SECTION 122. DESIGN FOR SLABS, BEAMS AND GIRDERS.—Reinforced concrete slabs, beams and girders shall be designed in accordance with the following assumptions and requirements: (a) The common theory of flexure shall be applied to beams and members resisting bending. (b) The adhesion between the concrete and the steel shall be sufficient to make the two (2) materials act together. (c) The steel to take all the direct tensile stresses. (d) The stress strain curve of concrete in compression is a straight line. (e) The ratio of the moduli of elasticity on concrete to steel shall be as specified in table in Section 120.

SECTION 123. MOMENTS OF EXTERNAL FORCES.—(a) Beaus, girders, floor or roof slabs and joists shall be calculated as supported, or with fixed ends, or with partly fixed ends, in accordance with the actual end conditions, the number of spans and the design. (b) The bending moment of slabs, beaus and girders uniformly loaded and simply sup-WL

ported shall be taken as $\frac{1}{8}$ where W equals total load and L equals

span. (c) The bending moments at the center and at intermediate

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supports of floor slabs, beams and girders continuous over two (2) or more supports shall be taken as $\frac{WL}{12}$. (d) Beams and girders supported at one (1) end and continuous at the other shall be considered as partially restrained with a bending moment of $\frac{WL}{10}$ at the center

and $\frac{1}{8}$ over intermediate supports. (e) The span length of beams

and slabs shall be taken as the distance between center to center of supports, but shall not be taken to exceed the clear span plus the depth of the beam or slab. Brackets shall not be considered as reducing the clear span. (f) In case of concentrated or special loads the calculations shall be based on the critical conditions of loading. (g) When the vertical shear exceeds one-fiftieth (1-50) of the compressive strength of the concrete the excess shall be carried by web reinforcement. (h) In "T" beams the width of the stem only shall be used in calculating the above shear. (i) When steel is used in the compression flange of beams or girders, the rods shall be tied in accordance with the requirements of vertical reinforced columns with stirrups connecting with the tension rods of the beams or girders. (j) All reinforcing steel shall be accurately located in the forms and secured against displacement and inspected by the representative of the architect or engineer in charge before any surrounding concrete be put in place. It shall be afterwards completely inclosed by the concrete, and such steel shall nowhere be nearer the surface of the concrete than two (2) inches for columns, two (2) inches for girders and beams, and one (1) inch, but not less than the diameter of the bar for slabs. (k) Longitudinal steel laid parallel shall be spaced not less than three times the diameter, and the mininum distance between bars shall be one (1) inch. (1) The bending moments of slabs that are reinforced in both directions and supported on four (4) sides and fully reinforced over the supports (the reinforce-WL

ment passing into the adjoining slabs) may be taken as -- for loads

in each direction, in which F equals 8, when the slab under consideration is not continuous or when continuous over one support, and F equals 12 at both center and supports when the slab is continuous over both supports. (m) The distribution of the loads, on square or rectangular slabs reinforced in both directions, shall be determined by the L3

formula $R = \frac{L3}{L3 + B3}$ in which R equals proportion of load carried by

the transverse reinforcement, L equals length and B equals breadth of slab. (n) Beams supporting rectangular slabs reinforced in both directions shall be assumed to take the proportions of load as determined by the formula in the above. (o) Exposed metal of any kind will not be considered a factor in the strength of any part of any concrete structure and the plaster finish applied over the metal shall not be deemed sufficient protection unless applied of sufficient thickness and so secured as to meet the approval of the Commissioner of Buildings.

SECTION 124. WEB REINFORCEMENT.—(a) Where the vertical shear, measured on the cross section of a beam or girder between the centers of action of the horizontal stresses, exceeds one-fiftieth (1-50) of the ultimate compressive strength of the concrete, the excess shear shall be carried by wed reinforcement. (b) Such web reinforcement, if in form of stirrups, shall extend from top to bottom of beam, and loop or connect to the horizontal reinforcement. (c) The horizontal reinforcement carrying the direct stress shall not be considered as web reinforcement. (d) If unattached stirrups are used they shall be vertical and pass under the main reinforcing bars. There shall be sufficient anchorage to develop the stirrup above the neutral plane without exceeding the adhesion specified. (e) In no case shall the vertical shear exceed one-fiftieth (1-50) of the ultimate compressive strength of the concrete. The tensile stress in the web reinforcement and the bond stress shall not exceed the stress fixed in Section 121. (f) Stirrups shall not be spaced further apart than three-fourths $(\frac{3}{4})$ of the depth of the beam. The load on any vertical stirrup shall be computed as the total horizontal shearing force on a plane just above the horizontal reinforcement, of length equal to the spacing of the stirrups and of the width of the beam. (g) If the reinforcing bars are bent up at approximately forty-five (45) degrees, and spaced not to exceed the depth between the centers of action of the horizontal stresses, they may be calculated to carry the excess vertical shear above one-fiftieth (1-50) of the compressive strength, provided the maximum vertical shear on a cross-section so reinforced shall not exceed one-thirtieth (1-30) of the ultimate compression strength.

SECTION 125. LIMITING WIDTH OF FLANGE IN "T" BEAMS.—(a) In the calculation of ribs, a portion of the floor slab may be assumed as acting in flexure in combination with the rib. The width of the slab so acting in flexure is to be governed by the shearing resistance between rib and slab, but limited to a width equal to one-fourth ($\frac{1}{4}$) of the span length of the ribs between supports and also limited to a width of three-fourths ($\frac{3}{4}$) of the distance from center to center between ribs, and overhanging width on either side also limited to four (4) times the thickness of the slab. (b) No part of the slab shall be considered as a portion of the rib unless the slab and rib are cast at the same time. (c) Where reinforced concrete girders support reinforced concrete beams, the portion of floor slab, acting as flange to the girder, nust be reinforced with rods near the top at right angles to the girder, to enable it to transmit local loads directly to the girder and not through the beams.

SECTION 126. SHRINKAGE AND THERMAL STRESSES.—Shrinkage and thermal stresses shall be provided for by introduction of steel, when necessary, not less than one-third $(\frac{1}{3})$ of one (1) per cent.

SECTION 127. FLAT SLAR CONSTRUCTION—DEFINITION.—A flat slab construction, within the meaning of this code is one in which a concrete slab of uniform thickness is supported directly upon an enlarged column head construction and is reinforced by rods laid in bands in the cross (directly from column to column) and diagonal (diagonally from column to column) directions, these rods being supported at the top of the slab over the columns and depressed to the bottom of the slab at the center of the spans.

SECTION 128. GENERAL—(a) The design of flat slab construction shall conform in general to the regulations of the general building code of the city of Indianapolis, except as superseded by the following provisions, (b) In the following Sections 129 to 139, W denotes the total load on one panel both dead and live, (c) L denotes the cross distance center to center of columns for square panels, or the same distance in an equivalent square panel of equal area for rectangular panels.

SECTION 129. COLUMN CAPITAL.—The column capital shall be not less than .225 L in dimension and its profile shall not fall inside of a line drawn from this periphery and making forty-five (45) degrees to the vertical.

SECTION 130. MOMENT OF EXTERNAL FORCES, FLAT SLAB,-(a) The

bending moment at the edge of the column capital shall be taken as $\frac{WL}{WL}$ on four (4) bands of reinforcing steel (one hundred eighty (180)

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degrees about the column). In the center of the span the moment shall WL

be taken as $\frac{WL}{30}$, divided in a substantially equal manner between two

(2) cross and two (2) diagonal bands of reinforcement. (b) For the WL center of the panel for wall panels the moment shall be taken as —

25 and all steel at the center of the panel shall be brought over the capital so as to be effective in tension at the column.

SECTION 131. TENSILE STRESS IN THE STEEL.—(a) The tensile stress in the steel shall be calculated in accordance with the provisions of Section 121 of this ordinance. (b) The amount of steel available to resist the bending moment shall be taken as the sum of total area of steel in the two (2) cross and two (2) diagonal bands. This total steel area shall be considered as concentrated at the center of gravity of the area of steel in the four (4) bands. (c) The width of bands shall not be greater than 0.4L. Substantially the same area of steel shall be used in both cross bands, and in both diagonal bands, and the steel area in any direction shall not exceed that in a direction at forty-five (45) degrees to it by more than fifty (50) per cent. Where lapped slab rods are considered in tension on both sides of a column the length of the lap shall be not less than 0.3L on each side of the column center.

SECTION 132. COMPRESSION IN CONCRETE.—(a) The compressive stress at a section of the floor at the column capital shall be calculated to resist the bending moment on the basis of a width of beam for each band equal to the width of band used in the calculation for tension plus three (3) times the depth of slab, provided this width is not more than one-half $(\frac{1}{2})$ the side of the equivalent square panel. (b) The compressive stress in the concrete of a beam of the width specified above shall be taken as that arising from the total tensile force on a steel area equal to eighty-five (85) per cent. of the steel area in one cross band plus one hundred nineteen (119) per cent. of the steel area in one diagonal band, such steel being stressed in tension to the value computed as directed in Section 131. (c) At the center of the span the compressive stress need be calculated only in one direction. (d) In the construction where the thickness of the floor is increased about the column by means of a drop the section of beam considered in compression shall not be wider than the dimension of the drop. The dimension of this drop shall be not less than .3L if square and shall have an equal diameter if of other shape.

SECTION 133. WALLS AND OPENINGS.—(a) At walls or openings, beams are to be constructed to carry concentrated loads when such loads exceed the designed load on the floor, (b) Reinforcing rods shall be embedded for a sufficient distance beyond points of critical stress to develop the designed stress in bond at sixty (60) pounds per square inch of surface.

SECTION 134. RECTANCULAR PANELS—(a) In rectangular panels, the long dimension shall not be greater than four-thirds (4-3) times the short dimension. (b) A complete design shall be made for a square panel of the same area as the rectangular panel, and the thickness and the diagonal band reinforcement so found shall be used in the rectangular panel. (c) The amount of steel found for the two (2) cross bands shall be so distributed as to provide for the greater moment on the longer band.

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SECTION 135. SHEARING STRESS.—The vertical shear shall be figured on the periphery of the capital and shall not exceed the area of the vertical section times five (5) per cent. of the ultimate compressive stress on the concrete.

SECTION 136. SLAB THICKNESS.—In no case shall the slab thickness for floors be less than one thirtieth (1-30) of the side of the equivalent square panel, nor less than one-thirty-fifth (1-35) of the side of the equivalent square panel for roof slabs.

SECTION 137. HEAD STEEL.—The slab steel passing over the head shall be firmly and securely held in its proper position as shown in the design drawings by a system of supporting rods proven adequate by experience. Small loose rods shall not be used for this purpose.

SECTION 138. SPLICING SLAB RODS—(a) Where it becomes necessary to lap slab rods for splicing, such splices being counted as single rods in tension, the length of the splice shall be sufficient to develop the designed tensile stress in bond at forty (40) pounds per square inch of surface. (b) At least fifty (50) per cent of all the slab steel shall be either continuous or lapped for a distance of 0.6L as noted in Section 131 over every interior column capital.

SECTION 139. TEST DEFLECTION.—(a) Flat slab construction shall be tested for workmanship as provided in Section 156 of this code. (b) When the deflection under this test load exceeds that specified, the amount of this deflection shall be noted and the deflection remaining after the floor has been unloaded seven (7) days shall be not over twenty (20) per cent. of the deflection under full test load.

SECTION 140. MINIMUM THICKNESS OF SLABS.—Reinforced concrete slabs shall not be less than four (4) inches thick for floors and three (3) inches thick for roofs.

SECTION 141. REINFORCED CONCRETE COLUMNS—LIMIT OF LENGTH— PER CENT. OF REINFORCEMENT—BENDING MOMENT IN COLUMNS—TYING VERTICAL RODS.—(a) Reinforced concrete may be used for columns in which the concrete shall not be leaner than a 1:2:4 mixture and in which the ratio of length to least side or diameter does not exceed fifteen (15), but in no case shall the cross section of the column core be less than sixty-four (64) square inches. (b) Longitudinal reinforcing rods must be tied together to effectively resist outward flexure at intervals of not more than twelve (12) times least diameter of rod and not more than twelve (12) inches. When compression rods are not required, reinforcing rods shall be used, equivalent to not less than one-half ($\frac{1}{2}$) of one (1) per cent. (.005) of the cross sectional area of the column; provided, however, that the total sectional area of the reinforcing steel shall not be less than one (1) square inch, and that no rod or bar be of smaller diameter or least dimensions than one-half ($\frac{1}{2}$) inch. (c) Axial Compression, on the concrete:

Columns whose $\frac{L}{D} = 18$ diameters.

			**	10 10
	Up to	0.12	From	12-18
	Diam.		Diam.	
•	Lbs.	%	Lbs.	%
Plain concrete columns	500	25	400	20
Columns with longitudinal reinforcement only_	500	25	400	20
Columns with reinforcement of bands or hoops_6	600	30	500	25
Columns with longitudinal reinforcement of				
from 1 to 4% and bands or hoops	750	$37\frac{1}{2}$	650	$32\frac{1}{2}$
Columns reinforced with structural steel shapes				
thoroughly encasing the concrete	750	$37\frac{1}{2}$	650	$32\frac{1}{2}$

Columns whose $\frac{L}{D}$ is greater than 18 diameters.

$$f'c = \frac{fc}{1 - 1} \frac{f(1) 2'}{f(0)}$$

where fc = allowable unit stress, given above for columns of 12 diameters; L = unsupported length of columns in inches;

D =least width, or diameter, of effective area of column in inches. Axial compression, on the steel.

Rods, shapes, or built-up members, when reinforcing the concrete 15 fc. (d) When beams or girders are made monolithic with or rigidly attached to reinforced concrete columns, the latter shall be designed to resist a bending moment equal to the greatest possible unbalanced moment in the beams or girders at the columns, in addition to the direct loads for which the columns are designed. (e) Such columus with longitudinal bars and hoops or spirals may be stressed axially not to exceed thirty-two (32) per cent. of the ultimate compressive strength of the concrete, the longitudinal steel being computed to carry its proportional load. The hoops or bands are not to be counted upon directly as adding to the strength of the column. No part of the concrete outside of the hooping shall be considered as a part of the effective column. (f) Proper provision must be made for transmitting the stresses from the longitudinal steel in columns to the footings.

SECTION 142. SPLICING.—(a) In columns, the splicing of longitudinals, having an area less than one and one-fourth $(1\frac{1}{4})$ square inches may be done by happing, the happed bars to be wired securely to each other. Longitudinals having areas in excess of one and one-fourth $(1\frac{1}{4})$ square inches shall be spliced by butting the bars squarely one over the other and tying the same securely together by some mechanical means that will not utilize the adhesive strength of the concrete. All such splices shall be made above floor levels, but not more than twelve (12) inches above the same. (b) In case butting splices are to be used, all columns not more than one-half $(\frac{1}{2})$ the number of bars may be jointed at one (1) floor level.

SECTION 143. STEEL COLUMNS ENCASED IN CONCRETE.—(a) Where structural steel columns in steel frame structures, or structures in which the loads are transmitted directly to steel columns, are encased in concrete, the structural steel shall be proportioned to carry one-sixteenth (1-16) of the live load only, plus all the dead load, and in no case shall the unit stress in the structural steel exceed sixteen thousand (16,000) pounds per square inch of net steel section nor shall the unit stress in the concrete exceed twenty-five (25) per cent. of the ultimate compressive strength as set forth in Section 120. In columns of this design the concrete shall be reinforced with spiral hooping of not less than 0.5 per cent. of the steel. The pitch of the spiral shall be uniform and not greater than one-tenth of the diameter of the hooping nor greater than three (3) inches. The spirals shall be secured at each intersection in such a manner as to insure the maintaining of its form and position. (b) No part of the concrete outside of the hooping shall be considered as part of the effective column section. (c) In latticed or open web structural columns it shall not be necessary to use the hooping specified above. (d) In buildings with columns of this design the height shall be limited to sixteen (16) stories or two hundred (200) feet in height, provided that the other requirements of this code for buildings of this height are complied with. All structural steel which is to be encased in concrete shall be wrapped with wire in such a man-

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ner as to insure the bonding of the concrete to the steel, and no structural steel which is to be encased in concrete shall be painted or oiled. (e) Before encasing structural steel in concrete, scale or rust of any appreciable amount shall be removed.

SECTION 144. CURTAIN WALLS.—(a) Concrete curtain walls shall have steel reinforcement of not less than three-tenths (3-10) of one (1) per cent. in each direction, vertically and horizontally, the rods spaced not more than twelve (12) inch centers and wired to each other at each intersection. (b) All bars shall be lapped for a length sufficient to develop their full stress for the allowable unit stress for adhesion. (c) Additional bars shall be set around openings, the verticals wired to the nearest horizontal bars, and the horizontal bars at top and bottom of openings shall be wired to the nearest vertical bars. (d) The steel rods shall be combined with the concrete and placed where the combination will develop the greatest strength, and the rods shall be staggered or placed and secured so as to resist a pressure of thirty (30) pounds per square foot, either from the exterior or from the interior on each and every square foot, of each wall panel.

SECTION 145. STEEL FOR REINFORCEMENT.-(a) Steel used for reinforcing purposes should meet the following physical requirements: (b) For structural steel grade ultimate tensile strength fifty-five thousand (55,000) to seventy thousand (70,000) pounds per square inch; yield point not less than thirty-three thousand (33,000) pounds per square inch: Minimum elongation in eight (8) inches one million four hundred thousand (1,400,000) divided by the tensile strength; should bend one hundred eighty (180) degrees when cold over a pin whose diameter is equal to the thickness of the bar. (c) For hard grade ultimate tensile strength shall not be less than eighty thousand (80,000) pounds per square inch; yield point not less than fifty thousand (50,000) pounds per square inch. (d) Minimum elongation in eight (8) inch one million two hundred thousand (1,200,000) divided by the tensile strength; should bend one hundred eighty (180) degrees when cold around a pin of a diameter equal to three (3) times the thickness of a bar when under three-fourths $(\frac{3}{4})$ inch in diameter, and should bend ninety (90)degrees when three-fourths $(\frac{3}{4})$ inch in diameter or over. (e) Deformed bars of structural steel grade when three-fourths (34) inch in diameter and over should bend one hundred eighty (180) degrees around a pin whose diameter is twice the thickness of a bar. Deformed bars of hard grade when three-fourths (34) inch in diameter and over should bend ninety (90) degrees around a pin whose diameter is four (4) times the thickness of a bar. In the case of cold twisted bars the minimum elongation shall be five (5) per cent.

SECTION 146. CEMENT TESTS.—(a) Only Portland cement shall be used in reinforced concrete construction. All cement shall be tested in carload lots, or in quantities equal to the same. Cement failing to meet the requirements of accelerated test shall be rejected. (b) Pats of neat cement must be allowed to harden twenty-four (24) hours in moist air, and then be submitted to the accelerated test as follows: A pat is exposed in any convenient way in an atmosphere of steam, and above boiling water, in a loosely closed vessel for three (3) hours, after which before the pat cools, it is placed in the boiling water for five (5) additional hours. To pass this test satisfactorily, the pat shall remain firm and hard, and show no signs of cracking, distortion or disintegration. (c) Portland cement, when tested, shall have a minimum tensile strength as follows: neat cement after one (1) day in moist air shall develop a tensile strength of at least one hundred seventy-five (175) pounds per square inch; after one (1) day in air and six (6) days in water shall develop tensile strength of at least five hundred (500) pounds per square inch, and after one (1) day in air and twenty-seven (27) days in water, shall develop a tensile strength of at least six hundred (600) pounds per square inch. Cement and sand tests composed of one (1) part of cement and three (3) parts of sand shall after one (1) day in air and six (6) days in water, develop a tensile strength of at least two hundred (200) pounds per square inch; and after one (1) day in air and twenty-seven (27) days in water, shall develop a tensile strength of at least two hundred seventy-five (275) pounds per square inch. (d) A certificate that the cement used has been tested and has met the requirements of this section and that the tests have been made in accordance with the rules and requirements of the Board of Public Safety, shall be furnished by the architect or engineer in charge to the Commissioner of Buildings.

SECTION 147. SAND.—The sand to be used for concrete shall be clean, hard, coarse sand of the grade known as torpedo sand, and free from loam or dirt, not less than forty-five (45) percentum shall be retained on a screen of four hundred (400) mesh to the square inch.

SECTION 148. STONE.—(a) The stone to be used in concrete shall be clean, crushed, hard stone or clean gravel of a size to pass through a one (1) inch mesh, and retained on one-fourth $(\frac{1}{4})$ inch mesh. If limestone is used, it shall be screened to remove all dust; if gravel is used, it shall be thoroughly washed. (b) Stone shall be drenched immediately before using.

SECTION 149. MIXING.—(a) All concrete shall be mixed in a mechanical mixer except when limited quantities are required, or when the conditions of the work make hand-mixing preferable; hand mixing to be done only when approved by the Commissoner of Buildings. (b) In all mixing, the separate ingredients shall be measured and shall be thoroughly mixed and must be uniform in color, appearance and consistency before placing.

SECTION 150. PLACING CONCRETE.-(a) In filling in concrete around reinforcing steel, the concrete must be worked continuously with suitable tools, as it is put in place. (b) Filling the forms completely and puddling afterward will not be permitted. (c) In placing concrete, the work shall be so laid out that partly set concrete will not be subjected to shocks from men wheeling or handling material. (d) When it is not possible to cast an entire structure in one operation, the work should be stopped; for columns at the underside of girders; for girders at a point midway between supports, unless a beam should occur at this point, in which case the joint should be offset a distance equal to twice the width of the beam: for slabs at the center of the span. (e) When work is resumed the concrete previously placed shall be cleared of all foreign material, drenched and slushed with mortar composed of one (1) part cement and one (1) part sand. (f) Beams and girders shall not be constructed over freshly placed columns without permitting a period of ten (10) hours to elapse to provide for settlement or shrinkage in (g) Before resuming work the top of the column shall be columns. cleansed of foreign matter, and if the column has become hard, the top shall be wet and slushed with the cement grout above specified. (h) When beams are designed as "T" beams, the slab shall be poured at the same time as the web.

SECTION 151. CONCRETE PLACED IN FREEZING WEATHER.—(a) When concrete work is carried on in freezing weather, material must be heated and such provisions made that the concrete can be put in place without freezing. (b) The use of frozen lumpy sand or stone, depending on hot water used in mixing to thaw it out will not be permitted. (c) All reinforced concrete shall be kept at a temperature above freezing for at least forty-eight (48) hours after being put in place.

SECTION 152. CONCRETE PLACED IN WARM WEATHER,-Concrete laid

in warm weather shall be drenched with water twice daily, Sunday included, during the first week after being put in place.

SECTION 153. CEMENT FINISH.—Cement finish added to the top of the slabs, beams or girders shall not be calculated in the strength of a member unless laid integrally with the rough concrete. No greater unit stress shall be allowed on such cement finish than on the rough concrete.

SECTION 154. FIREPROOF CONCRETE CONSTRUCTION.—Reinforced concrete construction will be accepted for fireproof buildings if designed as prescribed in this code. The aggregate for such concrete shall be clean, broken stone or clean, screened gravel, together with clean, coarse sand.

SECTION 155. REMOVAL OF FORMS.—(a) In no case shall the centers, forms, props or shores used in reinforced concrete construction be removed from any floor, roof, beam or slabs until approved by the Commissioner of Buildings, and at no time shall they be removed from under floors and roofs in less than two (2) weeks, except as provided herein. Column forms shall not be removed in less than four (4) days. The centering from bottom of slabs and sides of beams and girders may be removed after the concrete has set for one (1) week if the floors have obtained sufficient hardness to sustain the dead weight of the said floor. (b) No load or weight shall be placed on any portion of the construction until the concrete has fully set.

SECTION 156. TESTS.—(a) The contractor for the reinforced concrete construction shall make load tests on any portion of the work within a reasonable time after or during erection, as may be required by the Commissioner of Buildings. (b) Such tests must be made under the direction of the Commissioner of Buildings in his presence or in the presence of his representative, and must show that the construction will sustain a load twice the sum of the live and dead loads for which it was designed, without any sign of failure. (c) The construction may be considered as part of the test load. (d) Each test load shall cover two (2) or more panels and shall remain in place at least twenty-four (24) hours. (e) The deflection under the full test load at the expiration of twenty-four (24) hours shall not exceed one-eight-hundredth (1-S00) of the span. (f) These tests shall be considered as tests of workmanship only.

SECTION 157. TESTING LABORATORY,—All materials required to be tested to carry out the provisions of this code, must be tested by some recognized testing laboratory, and a certified copy of the test must be furnished the Commissioner of Buildings, when required.

SECTION 158. DWELLING CONSTRUCTION.—One (1) and two (2) story dwellings may be built outside of the fire limits in the City of Indianapolis with the exterior walls of reinforced concrete, when built the same as prescribed for curtain walls in Section 144, provided that no wall shall be less than eight (8) inches for foundation and six (6) inches for each story above and that the horizontal length of any wall is not over thirty (30) feet without a cross wall of the same construction, and that the vertical height is not greater than seven and one-half (7½) feet for the foundation and eleven (11) feet for each story.

PART 12.

CONCRETE BLOCK AND MASSIVE CONCRETE.

SECTION 159. CONCRETE BLOCK AND MASSIVE CONCRETE.—All massive concrete and concrete blocks hereafter used in the construction, alteration or repair of any building, structure or appurtenances thereof within the corporate limits shall be constructed in compliance with the following :

SECTION 160. CLASSIFICATIONS.—Concrete work as applied to building

construction within the meaning of this code is divided into two (2) classes as follows: (a) CONCRETE BLOCKS—Which will include the ordinary molded concrete blocks and lintels, sills, ornamental work affid facings constructed of separately molded or cast blocks of concrete. (b) MASSIVE CONCRETE—Concrete containing no steel reinforcement.

SECTION 161. CONCRETE BLOCKS.—(a) Concrete blocks shall be made of concrete composed of Portland cement, clean, sharp sand and clean gravel or crushed stone, free from loam or earthy matter, thoroughly mixed in the proportions of not more than one (1) of cement, two (2) of sand, and four (4) of gravel or stone. No particles are to be larger than three-fourths (³/₄) inch, and are to grade gradually to small particles, commonly called "grit." These proportions may be varied as the case requires, if approved by the Commissioner of Buildings. All foundations and walls constructed of concrete blocks must be of same thickness as required for thickness of walls of Section 65, except that ten (10) inch blocks may be used for the first story of a two (2) story dwelling. (b) The bed of the block will be considered as the thickness.

SECTION 162. HEIGHT.—(a) The maximum height of a story shall be fourteen (14) feet, any additional height shall be treated as additional story. (b) Buildings built of concrete block shall be limited in height to two (2) stories.

SECTION 163. AGE OF BLOCKS.—(a) Blocks shall not be used for building purposes until they are at least twenty (20) days old, and older if conditions require, as may be directed by the Commissioner of Buildings. (b) Blocks may have one (1) or more hollow spaces provided that not more than one-third $(\frac{1}{2})$ of each block is hollow.

SECTION 164. WALLS—(a) No wall shall be of greater length than fifty (50) feet unless supported by a cross wall or provided with pilasters. (b) Blocks must be laid in Portland cement mortar, mixed one (1) part cement to three (3) parts of clean, sharp sand, with not more than twenty-five (25) per cent. of hydrate of lime. The mortar must be mixed in small batches and used immediately. (c) All beds and vertical joints must be flushed full. (d) Block walls and piers must be started on substantial footings, built of solid masonry as provided in Section 67.

SECTION 165. HEADERS.—(a) Where walls or piers are built of more than one (1) block in thickness, every fourth course must be a header coarse, or every fourth block in each course must be a header. Blind headers may be used. (b) Where there is an offset in the thickness of walls, the offsetting course, or ledge course, must be built of solid blocks.

SECTION 166. PIERS AND BUTTRESSES.—(a) Piers and buttresses supporting lintels with a load in excess of five (5) tons, must be built of solid blocks for such distance below the bearing as may be required by the Commissioner of Buildings. Piers and pilasters supporting heavy loads must be built of solid blocks, and must be as large in area as réquired by the load, which in no case is to exceed ten (10) tons per square foot of area. (b) All piers are to have solid caps of masonry or metal. (c) Concrete lintels and sills shall be reinforced concrete, and any lintel spanning over five (5) feet in the clear shall rest upon solid concrete blocks.

SECTION 167. BRAND OF BLOCK.—(a) For the purpose of identification a brand must be permanently attached to every block, with the date of manufacture. (b) Each manufacturer of cement blocks must file in the office of the Commissioner of Buildings the name of manufacturer, the brand of the blocks and the location at which the blocks are manufactured.

SECTION 168. STRENGTH OF BLOCK.—(a) All cement blocks thirty (30) days old must be capable of standing an ultimate compression test of eight hundred (800) pounds per square inch of superficial area. No allowance shall be made for the hollow space. (b) All manufacturers of concrete blocks shall file with the Commissioner of Buildings at least once a year a bona fide copy of a test of four (4) blocks selected by the Inspector at random from the run of the yard. The test is to be made by reputable parties approved by the Commissioner of Buildings. The Commissioner of Buildings may order the test made at any time to determine the uniformity of the strength of the blocks.

SECTION 169. CONDEMNATION OF BLOCKS.—(a) The Commissioner of Buildings shall have authority to condenn any block or blocks that have not been made in accordance with these regulations or have not the required strength as determined by the test called for herein. (b) All such condemned block or blocks must be immediately destroyed or defaced in such manner as to render the same unfit for use.

SECTION 170. BLOCK USED FOR PARTY WALLS.—When concrete blocks are used for party walls, they must be made solid blocks.

SECTION 171. MASSIVE CONCRETE.—(a) Massive concrete may be used in general in the construction of footings, basement walls, heavy columns or piers, retaining and inclosing walls, supports or other construction requiring a heavy mass, and shall be designed in accordance with the following provisions. (b) Massive concrete when used for bearing walls or bearing partitions, columns, piers, foundations, machinery supports or other similar construction carrying only vertical loads shall be designed for a working load not greater than the values given below for various proportions of mixture. (c) One (1) part cement, two (2) parts sand and four (4) parts stone and gravel, twenty-two (22) tons per square foot. One (1) part cement, two and one-half $(2\frac{1}{2})$ parts sand and five (5) parts stone and gravel, twenty (20) tons per square foot. One (1) part cement, three (3) parts sand and six (6) parts stone and gravel, fifteen (15) tons per square foot. Provided no wall shall be less than thickness given in Section 65. (d) Massive concrete used for retaining walls or other construction throwing upon such work stresses other than vertical loads, shall be of special design, and the method of calculation for same shall be clearly indicated upon the plans, as fixed in Section 121.

SECTION 172. MIXTURE OF CONCRETE.—(a) Proportions of mixture as mentioned in Section 171 shall be understood to mean a mixture of mortar consisting of the cement and sand in the various proportions specified, combined with the respective parts of the aggregate, meaning the stone or grayel. (b) Cement shall mean a Portland cement as required by tests set out in Section 146. (c) Sand shall mean a clear, sharp sand free from loan, earth or vegetable matter, which will pass a four (4) mesh to the inch wire screen. A sand of varying size particles from largest to smallest will be preferred. (d) Stone shall mean a clean, hard broken stone, screened to remove the dust. In general all particles shall pass a two (2) inch ring. (e) Gravel shall mean a clean washed gravel, free from vegetable matter or refuse and same size as specified for broken stone. (f) Concrete may be used of a natural mix of gravel and sand where the proportions of the sand in the gravel is fifty (50) per cent. of the amount of the gravel, or in other words, one-third $(\frac{1}{3})$ of the total, but such proportions of sand to gravel must be determined accurately and as often as may be required before the use of such a natural mix will be allowed. Proportions of mixture must be clearly marked on each part of plans where a massive concrete is shown.

PART 13.

STAIRWAYS.

SECTION 173. FACTORIES, WAREHOUSES AND MERCANTILE BUSINESS .--(a) In every building hereafter erected or altered to be used as a factory, warehouse or mercantile business, two (2) stories or over in height with area between fire walls as described in Section 72, there must be provided at least two (2) stairways not less than three (3) feet six (6) inches in the clear placed as remote from each other as possible as follows: (b) For non-fireproof buildings; two thousand five hundred (2,500) square feet and not exceeding six thousand (6,000)square feet, not less than a total of seven (7) lineal feet. Six thousand (6,000) square feet and not exceeding seven thousand two hundred (7,200) square feet, not less than a total of nine (9) lineal feet. Seven thousand two hundred (7,200) square feet and not exceeding nine thousand (9,000) square feet, not less than a total of eleven (11) lineal feet. For fireproof buildings: Two thousand five hundred (2,500) square feet and not exceeding fifteen thousand (15,000) square feet, not less than a total of seven (7) lineal feet. Fifteen thousand (15,000) square feet and not less than eighteen thousand (18,000) square feet, not less than a total of eight (8) lineal feet. Eighteen thousand (18,000) square feet and not exceeding twenty-two thousand five hundred (22,500) square feet, not less than a total of nine (9) lineal feet. Provided, that in all buildings of either class five (5) stories or over in height, each line of stairways must be inclosed by fireproofed partitions and provided with approved fire doors as provided in Section 92. (c) All stairs shall have treads of uniform width and risers of uniform height throughout in each flight and the risers shall be not more than eight (8) inches in height and the treads, exclusive of nosings, not less than ten (10) inches.

SECTION 174. OFFICE BUILDINGS, HOTELS, FLATS AND APARTMENT HOUSES.—(a) In every building hereafter erected or altered to be used as an office building, hotel, flat or apartment house, two (2) stories or over in height, must be provided with stairways as follows: (b) For Office Buildings: Two thousand five hundred (2,500) square feet and not exceeding six thousand (6,000) square feet, not less than a total of four (4) lineal feet. Six thousand (6,000) square feet and not exceeding twelve thousand (12,000) square feet, not less than a total of six (6) lineal feet, Twelve thousand (12,000) square feet and not exceeding fifteen thousand (15,000) square feet, not less than a total of seven (7) lineal feet. (c) For hotels, flats or apartment houses there must be provided at least two (2) stairways not less than three (3) feet in the clear between hand rails, placed as remote from each other as possible as follows: One thousand (1,000) square feet and not exceeding two thousand five hundred (2,500) square feet, containing sixty (60) rooms or less, not less than a total of six (6) lineal feet. Two thousand five hundred (2,500) square feet and not exceeding five thousand (5,000) square feet, containing one hundred and twenty (120) rooms or less, not less than a total of eight (8) lineal feet. Five thousand (5,000) square feet and not exceeding ten thousand (10,000) square feet. containing two hundred (200) rooms or less, not less than a total of ten (10) lineal feet. Ten thousand (10,000) square feet and not exceeding fifteen thousand (15,000) square feet, containing three hundred and fifty (350) rooms or less, not less than a total of twelve (12) lineal feet. (d) All such stairs shall have treads of uniform width and risers of uniform height throughout in each flight, and the risers shall be not more than seven (7) inches in height and the treads, exclusive of nosings, not less than ten (10) inches, (e) These stairs shall be provided

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with proper banisters or railings and hand rails and kept in good repair, and when any stairway is adjacent to an elevator shaft the same must be inclosed in fireproofed walls as described by Section 92.

SECTION 175. PUBLIC HALLS, ROOF GARDENS, CLUB AND LODGE HALLS. —(a) In every building hereafter erected or altered to be used in partor as a whole as a public hall, roof garden, club or lodge hall, the width of the stairs shall be twenty (20) inches for every one hundred (100) persons of the aggregate seating capacity of all rooms, provided no stairway shall be less than four (4) feet wide in the clear, and that all public halls, roof gardens, club and lodge halls, two (2) stories or over in height are provided with at least two (2) separate and distinct stairways. (b) All such stairs shall be without winders and have the treads and risers of a uniform width and height as described in Section 174.

SECTION 176. THEATERS.—(a) Every building hereafter erected or altered and used as a theater or place of amusement shall have the stairways equivalent to twenty (20) inches for each one hundred (100) of seating capacity and no such stairway shall be-less than three (3) feet in the clear. (b) All such stairways shall have hand rails on each side thereof and when over six (6) feet in width shall be provided with a center hand rail of hard wood or metal, not less than two (2) inches in diameter. (c) In no case shall the risers of any stairs exceed seven and one-half (7½) inches in height or shall the treads, exclusive of the nosings, be less than ten and one-half (10½) inches wide. When stairs return directly on themselves a landing of the full width of both flights shall be provided. (d) The stairs turning at an angle shall have a proper landing without winders introduced at said turn.

SECTION 177. SCHOOLS AND CHURCHES.—(a) In all buildings here-after erected or altered for the use of any school or church, the stairways must be equivalent in width to thirty (30) inches to every one hundred (100) of seating capacity of the auditorium, assembly rooms and school rooms, provided, however, that the number of persons allowed in such buildings, at any one time, shall be limited by the width of stairways available as exits therefrom. (b) In every school house two (2) or more stories in height, two or more stairways shall be provided not less than four (4) feet in the clear and shall be placed at opposite ends of the building or as far apart as practicable. Fire escapes shall be provided on all school houses now or hereafter constructed, when, in the opinion of the Commissioner of Buildings, it is necessary for the safety of the occupants. (c) No riser in any stairway shall be over six and one-half (61/2) inches high or shall the tread be less than eleven (11) inches. (d) All stairways shall have railings on each side thereof and no stairway shall ascend a greater height than thirteen (13) feet without a level landing, the dimensions of which in the direction of the run of the stairs shall be of not less width than the width of the stairs. (e) No winders shall be permitted in any stairs. (f) Stairways which are over nine (9) feet wide shall be provided with intermediate hand rails with end newel posts.

PART 14.

TUEATERS AND PLACES OF AMUSEMENT-CLASSIFICATION AND CONSTRUC-TION,

SECTION 178. THEATERS.—Theaters will be taken to mean all buildings or any part of a building hereafter erected, altered or used for theatrical or operatic purposes or for public entertainment of any kind, where a stage or platform with stage, scenery, footlights or appurtenances or any part of either are employed; provided, however, that public halls, roof gardens, club or lodge halls, with a seating capacity not exceeding five hundred (500) shall not be classed as theaters within the meaning of the term as used in this section.

SECTION 179. CONSTRUCTION.—All buildings hereafter erected or altered shall be entirely of fireproof construction and shall be buildings of the first class, except where especially permitted by Section 191.

SECTION 180. APPROVAL.—(a) No building hereafter erected or altered for the aforesaid purpose shall be open to the public until the same has been inspected and approved by the Commissioner of Buildings and a certificate of approval issued therefor, and the Mayor of the City of Indianapolis shall have power, with the aid of the police, to take possession of, and close said building or any part thereof, until the Commissioner of Buildings shall issue such cer-tificate; provided, that such inspection must be made within fortyeight (48) hours after having received written notice from the owner or lessee that the building is ready for inspection. (b) In all cases, under the provisions of this part, whenever the Commissioner of Buildings may deem it for the public safety, necessary to limit the number of persons that shall be permitted to occupy the interior of any building as aforesaid, and the owner, lessee or manager neglects or refuses to comply with any order or requirement in relation thereto, the Mayor of the City is hereby authorized and required, upon application to him by the Commissioner of Buildings to take possession of and close said building, or perform such other acts in the premises as shall prevent the improper occupation of the same or the liability of accidents to the public and retain said possession until the Commissioner of Buildings shall permit said building to be released from said possession or closing by the Mayor upon the compliance with the order and requirements.

SECTION 181. FRONTAGE.—(a) Every theater hereafter erected or any building remodeled for the aforesaid purpose shall have all entrances for patrons front upon a public thoroughfare, with all emergency exits, not directly related to the main entrance, to face directly upon a public thoroughfare. (b) When the seating capacity exceeds one thousand five hundred (1,500), additional emergency exits must be provided, in which case the same may face upon a court not less than eight (8) feet in width, leading directly to some public thoroughfare without obstruction.

SECTION 182. ENTRANCES AND EXITS.—(a) When the auditorium of a theater has in it stairways or entrance to balcony, gallery or other floors above, or where the main entrance or passageway to such auditorium of a theater has in connection with same means of passage to thebalcony, gallery or other floors above such eutrance or passageway or entrances or passageways, in case more than one (1) is desired, shall have a total or combined width. including emergency exits of the first floor, not less than twenty-four (24) inches for each one bundred (100) persons, and in no case shall such entrance or entrances be less than twelve (12) feet. (b) Emergency exits and doors not directly related to the main entrance shall be provided with a space equivalent to twenty (20) inches for each one hundred (100) seating capacity for each auditorium, balcony and gallery. Each exit shall be at least five (5) feet in width and provided with doors. (c) All doors of exits of theaters now or hereafter erected shall open outward and the fastenings must be such as to readily yield to pressure from within or open from within at all times. without the use of a key or similar instrument.

SECTION 183. FIRE ESCAPES AND STAIRS.—(a) When the sides of the auditorium, balcony or gallery face on a public thoroughfare for emergency stairs or fire escapes, the walls of that portion of the building shall be set back or so arranged as to allow the construction of

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the emergency exits as hereinbefore prescribed in such a manner that they will not encroach on public space; provided when the same face on a sidewalk not less than fifteen (15) feet in width, a fire escape may be used on the sidewalk. (b) All fire escapes from the balcony or gallery shall be constructed according to the regulations of the State Bureau of Inspection. (c) All stairways shall be sufficient to sustain a weight of two hundred (200) pounds per square foot and provided with substantial hand rails on each side, and of width as provided in Section 176.

SECTION 184. FIRE DOORS AND WINDOWS.—(a) All window frames and sash, doors, trim and other interior finish leading to or from the auditorium, balcony or gallery, stage or dressing room must be of metal or of wood covered with metal, or of such other incombustible material that may be approved by the Commissioner of Buildings. (b) All glass, if used, must be of the standard wire glass.

SECTION 185. FLOOR LEVELS.—(a) The floor level of the auditorium shall be maintained within the limits of the first story thereof and where such floors are banked, the floor of the lowest bank shall not be above the sidewalk level. (b) The level of corridor at street entrance of the same shall not be more than six (6) inches above the level of the sidewalk at such entrance. (c) To overcome any difference of level in and between corridors, courts, lobbies, passages, auditorium and aisles on the ground floor, gradients shall be employed of not over one (1) foot in ten (10) feet with no perpendicular risers.

SECTION 186. BUSINESS IN FRONT OF AUDITORIUM.—(a) Nothing herein contained shall prevent the use of the front portion of any building for the purpose of offices or stores, provided that said offices or stores are not over fifty (50) feet in depth from the front building line, and that said offices or stores are separate from the auditorium, balcony, galleries and exits with continuous walls of brick or other fireproof materials. (b) If any part of the building above or below the auditorium, balcony or gallery is used for any business, the same must be separated by a substantial fireproof ceiling and floor construction.

SECTION 187. WORKSHOP, STORAGE AND PROPERTY ROOMS.—No workshop, storage or general property room shall be allowed above the auditorium or stage or under the same or in any of the fly galleries; provided, however, said rooms or shops may be located in the rear of or at the side of the stage, but in such cases, they shall be separated from the stage by a fireproofed wall and the opening leading into said partition shall have fireproofed doors on each side of the wall.

SECTION 188. PROSCENIUM WALLS.—(a) The stage shall be separated from the auditorium by a brick wall, not less than eighteen (18) inches thick or its equivalent the entire width of the building and topped out at least four (4) feet above the highest roof adjoining said fire wall. (b) There shall be no openings in this wall except the curtain or proscenium opening, and not more than two (2) others to be located at or below the stage level. These latter openings shall not exceed twenty-one (21) superficial feet each, with self-closing fireproof doors securely hung to rabbets. (c) The wall over the curtain or proscenium opening shall be carried by a fireproof iron or steel girder with a relieving arch above, of sufficient capacity and abutment or surely on each side of the opening to insure stability against the thrust of the arch. (d) The frame around the curtain or proscenium opening shall be filled in solid with incombustible material and securely anchored to the wall with iron.

SECTION 189. CURTAIN.—(a) The curtain or proscenium opening shall be provided with a metal fireproof curtain, or a curtain of as-

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bestos or other fireproof material, sliding at each end in grooves securely fastened to the brick wall and extending into such grooves to a depth of not less than six (6) inches on each side of the opening or such asbestos or fireproof curtain may be provided with steel cable guides, not less than one-fourth $(\frac{1}{4})$ of an inch in diameter, provided that such curtain is not over one-half $(\frac{1}{2})$ inch from the brick wall and laps over the stage opening at the sides and top not less than twelve (12) inches and that attached to said curtain at the top and bottom for the full width thereof shall be wrought iron or steel pipe not less than one-half $(1\frac{1}{2})$ inches internal diameter. (b) Said fireproof curtain shall be raised and lowered between each act or intermission, or raised and lowered and raised immediately before each performance. (c) The fireproof curtain shall be placed at least two (2) feet distance from the footlights at the nearest point. (d) Act drop curtains shall also be of fireproof material or material fireproofed.

SECTION 190. VENTILATORS.—(a) Over the stage shall be skylight ventilators, constructed of incombustible materials, having openings equal in area to one-tenth (1-10) the area of the stage floor having the whole top or sides so constructed and counterbalanced to open automatically, operated by cords from at least two (2) points near the exits on opposite sides of the stage and having an arrangement of at least two (2) combustible or fusible connections to open the ventilating valves automatically by the action of fire on the stage and shall be placed near the center and above the highest part of the stage. (b) Skylight covering of ventilators shall have sheet metal frames set with double thick glass, each pane thereof measuring not less than three hundred (300) square inches and immediately underneath the glass there shall be a wire netting. Wired glass shall not be used as a substitute for such netting.

SECTION 191. CONSTRUCTION OF STAGE FLOOR.—(a) That 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, provided that the joists and flooring on the under side shall be covered with tin or sheet metal or fire proof paint. No flooring used thereon shall be less than one and one-fourth $(1\frac{1}{4})$ inches in thickness. (b) The remaining part of the stage floor must be of fireproof construction.

SECTION 192. FLY GALLERIES.—The entire fly galleries shall be constructed of iron or steel beams, filled with fireproof materials and no wood boards or sleepers shall be used as covering over beams, but the said floors shall be entirely fireproof.

SECTION 193. RIGGING LOFT.—The rigging loft shall be fireproof except the floor covering of the same, and the gridiron shall be of either wrought iron or steel construction.

SECTION 194. STAGE SCENERY.—All stage scenery, curtains and decorating made of combustible material, and all the woodwork on or about the stage shall be painted or saturated with some incombustible material or otherwise rendered safe against fire.

SECTION 195. DRESSING ROOM PARTITIONS.—(a) The walls separating the employee or dressing rooms from the stage and the partitions dividing the dressing rooms, together with the partitions of every passageway from the same to the stage, and all other partitions on or about the stage, inclusive of stairways, shall be constructed of fireproof material. (b) All doors in any of said partitions shall be constructed of, iron or other fireproof material. (c) All shelving and cupboards in each and every dressing room, property room or other storage room shall be constructed of metal, slate or some fireproof material. (d) Whenever dressing rooms are placed under the stage, auditorium or any part of the theater, at least two (2) exits must be provided from the same to the floor above. (e) No oil lamps, candles or matches will be permitted in any dressing room, or under any part of the stage or auditorium.

SECTION 196. SEATS.—All seats in the auditorium, balcony or gallery, except those contained in the boxes, shall be firmly secured to the floor and no seat shall have more than six (6) seats between it and the aisles on each side, and no seat in the auditorium, except those contained in the boxes, shall be less than thirty-one (31) inches from back to back, measured in a horizontal direction and not less than twenty (20) inches in width from center to center of arm, and not less than thirty (30) inches from back to back and twenty (20) inches from arm to arm in the balcony or gallery. All platforms in balconies or galleries formed to receive the seats shall be not more than twentyone (21) inches in width of risers nor less than thirty-one (31) inches in width of platform.

SECTION 197. EXIT SIGNS—RED LIGHTS.—(a) Each and every exit which can be used in case of fire shall be designated by the word EXIT in plain English letters, not less than eight (8) inches in length and so situated immediately over or on the exit that they can be readily seen from any or all parts of the auditorium, balcony or gallery. (b) A red light shall be placed over each of said exits and kept burning during the time of the performance and no other fixed red light will be permitted in the auditorium, balcony or gallery and the fact that such red lights indicate an exit to be used in case of fire shall be conspicuously printed on the programme used in the theater. (c) All such exit lights must be independent and controlled by a separate circuit, with a switch or shutoff located in the box office or manager's office and controlled only in that particular place and shall remain lighted until the entire audience has left the theater.

SECTION 198. AISLES.—(a) All aisles on the respective floors, having seats on both sides of the same, shall not be less than three (3) feet wide, where they begin, and shall be increased in width towards the exit, in the ratio of one and one-half $(1\frac{1}{2})$ inches to five (5) running feet. (b) Aisles having seats on one side only shall be not less than two feet wide at their beginning and increased in width the same as aisles having seats on both sides. (c) All aisles and passageways shall be kept free of camp stools, chairs, sofas and other obstruction and no person shall be allowed to stand in or occupy any of the aisles excepting the space in the rear of the last row of seats.

of the aisles excepting the space in the rear of the last row of seats. SECTION 199. WATER CLOSETS.—Every theater shall be provided with, and there shall be maintained therein, suitable and separate water closets for men and women for the convenience of the patrons of said theater. Said closets shall be continuously kept open for use for a period of fifteen (15) minutes next proceeding the commencement of any entertainment or performance in said theater and until the close thereof.

SECTION 200. STEAM BOILER.—No steam boiler or furnace which may be required for heating or other purposes, shall be located under the auditorium or stage or in any passageway or stairway or exit and the space alloted to the same, whether at the rear or side of stage or auditorium, shall be enclosed by walls of masonry on both sides and the ceiling of such space shall be constructed of fireproof materials.

the celling of such space shall be constructed of fireproof materials. SECTION 201. REGISTERS OR RADIATORS.—(a) No floor register for heating shall be permitted in aisles or passageways. (b) No coil or radiator shall be placed in any aisle or passageway used as exit, but said coils and radiators shall be placed in recesses formed in the wall or partition to receive the same.

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SECTION 202. STAND PIPES.—(a) Stand pipes four (4) inches in diameter shall be provided with hose attachment on every floor and gallery as follows: (b) One (1) on each side of the auditorium in each tier, also on each side of the stage on each tier and at least one (1) in the property room and one (1) in the carpenter shop, if the same be contiguous to the building. (c) All stand pipes shall be kept clear from obstruction, said stand pipes shall be separate and distinct, receiving their supply of water direct from the street main and also siamese connection on main line and shall be fitted with regulation couplings of the Fire Department and be ready for immediate use at all times during the performance. (d) When the pressure of the street water service is not sufficient to provide an efficient working pressure at the hose nozzle or sprinkler outlet, then the stand pipes shall be kept filled with water by means of an automatic pump or pumps of sufficient capacity to supply all the fire lines connected therewith.

SECTION 203. SPRINKLERS.—(a) There shall be placed over the curtain opening the full width, a two and one-half $(2\frac{1}{2})$ inch perforated pipe or sprinkler supplied at each end by a two (2) inch rising main interconnected at the bottom to a three (3) inch fire line leading directly to the street with valves controlled from stage as near the exit as possible. (b) Automatic sprinklers shall be placed in the ceiling or below the roof of the stage and in the dressing rooms, carpenter shops and property rooms at such intervals as will protect every square foot of surface when said sprnklers are in operation.

SECTION 204. FIRE HOSE.—A proper and sufficient quantity of two and one-half $(2\frac{1}{2})$ inch hose fitted with regulation couplings of the fire department with nozzles attached thereto, with hose spanners at each outlet shall always be kept attached to each hose attachment.

SECTION 205, PORTABLE EXTINGUISHERS.—(a) There shall be provided hand pumps or other portable fire extinguishing apparatus, at least four (4) axes, two (2) twenty-five (25) foot hooks, two (2) fifteen (15) foot hooks and two (2) ten (10) foot hooks, on each tier or floor of the stage, to be hung on the wall in a conspicuous place. (b) There shall be kept ready for immediate use on the stage at least four (4) casks full of waer and two (2) buckets to each cask. Such casks and buckets shall be painted red.

SECTION 206. APPROVAL BY FIRE CHIEF.—All provisions in Sections 202, 203, 204 and 205 shall be placed in position and in such a manner as to conform to the requirements of the Chief of the Fire Department and shall be subject to his approval.

SECTION 207. INSPECTORS MAY ENTER.—The Commissioner of Buildings and his deputy inspectors shall have power and they are hereby authorized to enter any theater or other place of amusement within the limits of the city, without hindrance from any one for the purpose of examination and the enforcement of the provisions of this act, whenever same may be deemed necessary.

SECTION 208. WIRING.—All wiring, apparatus, etc., not specifically covered by special rules herein given, must conform to the rules and requirements of the Board of Public Safety. Said rules and requirements, when officially made and adopted, shall have full force and effect of ordinances.

SECTION 209. ELECTRIC CURRENT SERVICE.—(a) Where supply may be obtained from two (2) separate street mains, two (2) separate and distinct services must be installed, one (1) service to be of sufficient capacity to supply current for the entire equipment of theater, while the other service must be at least of sufficient capacity to supply current for all emergency lights. (b) Where supply cannot be obtained from two (2) separate sources, the feed for emergency lights must be taken from a point on the street side of main service fuses. By "emergency lights" are meant exit lights and all lights in lobbies, stairways, corridors, and other portions of theater to which the public have access, which are normally kept lighted during the performance. (c) Where source of supply is an isolated plant within same building, an auxiliary service of at least sufficient capacity to supply all emergency lights must be installed from some outside source, or suitable storage battery within the premises may be considered the equivalent of such service.

SECTION 210. STAGE.—All permanent construction on stage side of proscenium wall, except as hereinafter provided, must be approved conduit or armored cable.

SECTION 211. SWITCHBOARDS.—Switchboards must be made on noncombustible, non-absorptive insulating material, and where accessible from stage level, must be protected by a suitable guard rail to preveut accidental contact with live parts on the board.

SECTION 212. FOOTLIGHTS.—(a) Footlights must be wired in approved conduit or armored cable, each lamp receptacle being inclosed within an approved outlet box, or the lamp receptacle may be mounted in an iron or steel box, the metal to be of a thickness not less than No. 20 (twenty) U. S. sheet metal gauge, treated to prevent oxidation, so constructed as to inclose all the wires. (b) All wires to be soldered to lugs or receptacles and must be so wired that no set of lamps requiring more than one thousand three hundred twenty (1,320) watts nor more than twenty-four (24) receptacles shall be dependent on one (1) cutout.

BORDERS AND PROSCENIUM SIDE LIGHTS.-(a) Border SECTION 213. and proscenium side lights must be constructed of steel of a thickness not less than No. 20 (twenty) U. S. sheet metal gauge, treated to prethat the flanges of reflectors will protect lamps. (b) They must be so wired that no set of lamps requiring more than one thousand three hundred twenty (1,320) watts nor more than twenty-four (24) receptacles shall be dependent upon one cutout. (c) They must be wired with approved conduit or armored cable, each lamp receptacle to be inclosed within an approved outlet box, or the lamp receptacles may be mounted in an iron or steel box, metal to be a thickness of not less than No. 20 (twenty) U. S. sheet metal gauge, treated to prevent oxidation, so constructed as to inclose all wires, which must be soldered to lugs of receptacles. (d) They must be provided with suitable guard to prevent scenery or other combustible material coming in contact with lamps. (e) Cable for borders must be of approved type and suitably supported, conduit construction must be used from switchboard to points where cables must be flexible, to permit of the raising and lowering of border. (f) For the wiring of the border proper, wire with approved slow burning insulation must be used. (g) Borders must be suitably suspended, and if a wire rope is used, same must be insulated by at least one (1) strain insulator inserted at the border.

SECTION 214. STAGE AND GALLERY POCKETS.—(a) Stage and gallery pockets must be of approved types, controlled from switchboard, each receptacle to be of not less than thirty-five (35) ampere rating for arc lamps, nor fifteen (15) amperes for incadescent lamps, and each receptacle to be wired to its full capacity. (b) Arc pockets to be wired with wire not smaller than No. 6 (six) B. & S. gauge and incandescent of not less than No. 12 (twelve) B. & S. gauge. (c) Plugs for arcs and incandescent pockets must not be interchangeable.

SECTION 215. SCENE DOCKS.—Where lamps are installed in scene docks, they must be so located and installed that they will not be liable to mechanical injury.

SECTION 216. CURTAIN MOTORS,-Curtain motors must be of iron-

clad type and installed so as to conform to the requirements of the Commissioner of Buildings.

SECTION 217. CONTROL FOR STAGE FLUES.—(a) In cases where dampers are released by an electric device, the electric circuit operating same must be normally closed. (b) Magnet operating damper must be wound to take full voltage of circuit by which it is supplied, using no resistance device, and must not heat more than normal for apparatus of similar construction. (c) It must be located in a loft above scenery and be installed in a suitable iron box with a tight self-closing door. (d) Such dampers must be controlled by at least two (2) standard single pull switches mounted within approved iron boxes, provided with self-closing doors without lock or latch, and located one (1) at the electrican's station and the other as designated by the inspection department having jurisdiction.

SECTION 218. DRESSING ROOMS.—(a) Dressing rooms must be wired in approved conduit or armored cable. (b) All pendent lights must be equipped with approved reinforced cord, armored cable, or steel armored flexible cord. (c) All lamps must be provided with approved guards.

SECTION 219. PORTABLE EQUIPMENT.-(a) Arc lamps used for stage effects must conform to the following requirements: (b) Must be constructed entirely of metal except where the use of approved insulating material is necessary. (c) Must be substantially constructed, and so designed as to provide for proper ventilation, and to prevent sparks being emitted from lamps when same are in operation, and mica must be used for frame insulation. (d) Front opening must be or glass must be inserted, except in the case of lens lamps, where the front may be stationary, and a solid door be provided on back or side. (e) Must be so constructed that neither carbons nor live parts will be brought in contact with metal of hood during operation, and arc lamp frames and standards must be so installed and protected as to prevent the liability of their being grounded. (f) Switch on standard must be so constructed that accidental contact with any live portion of same will be impossible. All stranded connection in lamp and at switch and rheostat must be provided with approved lugs. (g) Rheostats must be plainly marked with their rated capacity in volts and amperes, and, if mounted on standard, must be raised to a height of at least three (3) inches above floor. Resistance must be inclosed in a substantial and properly ventilated metal case which affords a clearance of at least one (1) inch between case and resistance element. (h) A competent operator must be in charge of each arc lamp, except that one (1) operator may have charge of two (2) lamps when they are not more than ten (10) feet apart, and are so located that he can properly watch and care for both lamps.

SECTION 220. BUNCHES.—(a) Bunches must be substantially constructed of metal and must not contain any exposed wiring. (b) The cable feeding same must be bushed in an approved manner where passing through the metal, and must be properly secured to prevent any mechanical strain from coming on the connection.

SECTION 221. STRIPS.—(a) Strips must be constructed of steel of a thickness not less than No. 20 (twenty) U. S. sheet metal gauge, treated to prevent oxidation, and suitably stayed and supported and so designed that the flanges will protect lamps. (b) Cable must be bushed in a suitable manner when passing through the metal, and must be properly secured to prevent serious mechanical strain from coming on the connection. (c) Must be wired in approved conduit or armored cable, each lamp receptacle being inclosed within an approved outlet box, or the lamp receptacles may be mounted in an iron or steel box, metal to be of a thickness not less than No. 20 (twenty) U. S. sheet

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metal gauge, treated to prevent oxidation, so constructed as to inclose all wires. (d) Wires to be soldered to lugs of receptacles.

SECTION 222. PORTABLE PLUGGING BOXES.—(a) Portable plugging boxes must be constructed so that no current 'carrying part will be exposed, and each receptacle must be protected by approved fuses mounted on slate or marble bases and inclosed in a fireproof cabinet equipped with self-closing doors. (b) Each receptacle must be constructed to carry thirty (30) amperes without undue heating, and the bus-bars must have a carrying capacity equivalent to the current required for the total number of receptacles, and approved lugs must be provided for the connection of the master cable. SECTION 223. PIN PLUG CONNECTORS.—Pin plug connectors must be

SECTION 223. PIN PLUG CONNECTORS.—Pin plug connectors must be of an approved type, so installed that the female part of the plug will be on the live end of the cable, and must be so constructed that tension on the cable will not cause serious mechanical strain on the connection.

SECTION 224. PORTABLE CONDUCTORS.—Flexible conductors used from receptacles to arc lamps, bunches and other portable equipments must be approved stayed cable, except that for the purpose of feeding a stand lamp under condition where conductors are not liable to severe mechanical injury, an approved reinforced cord may be used provided cutout designed to protect same is not fused over six (6) ampere capacity.

SECTION 225, LIGHTS ON SCENERY.—Where brackets are used they must be wired entirely on the inside, fixture stem must come to the back of the scene and the end of stem be properly bushed.

SECTION 226. STRING OR FESTOONED LIGHTS.—(a) Wiring of string and festooned lights must be of approved type, joints to be properly made, soldered and taped, and staggered where practicable. (b) Where lamps are used in lanterns or similar devices, approved guards must be employed.

SECTION 227. SPECIAL ELECTRIC EFFECTS.—Where devices are used for producing special effects, such as lightning, water-falls, etc., the apparatus must be so constructed and located that flames, sparks, etc., resulting from the operation cannot come in contact with combustible material.

SECTON 228. AUDITORIUM.—(a) All wiring of auditorium must be installed in approved conduit, metal moulding or armored cable. (b) Exit lights must not have more than one (1) set of fuses between same and service fuses. (c) Exit lights and all lights in halls, corridors or any other part of the building, used by audience, except the general auditorium lighting, must be fed independently of the stage lighting, and must be controlled only from the lobby or other convenient place in front of the house. (d) All fuses must be inclosed in approved cabinets.

MOVING PICTURE SHOWS AND AIRDOMES.

SECTION 229. MOVING PICTURE SHOWS AND AIRDOMES.—Moving picture shows and airdomes will be taken to mean all buildings, rooms or inclosures hereafter erected or altered, or now used for the operation of moving picture machines with films of stereopticons with slides, adapted and used to project upon a screen or other surface, pictorial representations of any character which the public are admitted to view, upon payment of admission fee or otherwise, which buildings, rooms or inclosure have no stage, stage scenery or stage appurtenances except as herein described, and in which buildings, rooms or inclosure no spectacular, vandeville, burlesque, dramatic, operatic or other theatrical performance is given.

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SECTION 230. ROOMS FOR MOVING PICTURE SHOWS .- (a) All rooms or buildings, which have heretofore been erected for the use in the operation of or which may hereafter be erected for or used in the operation of moving picture machines shall be inspected and approved by the Commissioner of Buildings before the same shall be so used. (b) Every room used for such purpose shall be on the ground floor of such building and shall front on a public thoroughfare and in no case shall there be a means of communication in said room to any other room or buildng, nor shall any other business be operated in or connected with such room.

SECTION 231. WALLS.—(a) All exterior walls inclosing said room shall be of some incombustible material of thickness as required in Section 65 of this code. (b) The entire floor of the auditorium, foyer and the exits to the street shall be constructed of fireproof material throughout or if joist construction is used in such floor, the space between such joists must be filled to the depth of at least four (4) inches with fireproof material.

SECTION 232. EXITS.—(a) Every room used for such purpose shall have at least one (1) exit for every three hundred (300) seating capacity or fraction thereof, in additon to the front or main entrance, which exit shall open direct into a street, alley or courtyard, free from obstruction, with direct access therefrom to a public highway. (b) The doorways to the main entrance to such room shall not be less than five (5) feet in width and all additional doorways shall not be less than three (3) feet in width. (c) All doors must open outward and shall not be locked while the room is open to the public, or if locked, the fastenings must be such as to readily yield to pressure from within, without the use of a key or similar instrument. (d) Each exit shall be clearly indicated on the inside thereof by an illuminated red sign with the word EXIT thereon in plain English letters, not less than eight (8) inches in height.

SECTION 233. AISLES.—No aisle shall be less than three (3) feet in width and all aisles shall be kept free of camp stools, chairs or other obstruction and no person shall be allowed to stand in or occupy any of the aisles excepting the space in the rear of the last row of seats.

Section 234. SEATS.—(a) All seats shall not be less than thirtyone (31) inches from back to back and not less than eighteen (18) inches in width from center to center of the arm and shall be firmly secured to the floor and no seat shall have more than six (6) seats between it and the aisle. (b) No camp chairs or stools shall be used in said room.

SECTION 235. AIRDOMES.—(a) An airdome is defined to be an inclosure without a roof or covering with exterior walls or inclosure of some incombustible material, provided with entrances and exits the same as in Section 232. (b) No airdome shall be constructed, or operated within the fire limits as set out in Section 17. (c) Tents or canvas inclosures will not be permitted.

SECTION 236. SEATS.—All seats or benches of such airdome shall be not less than thirty-one (31) inches from back to back and eighteen (18) inches from center to center of arm and shall be securely fastened to the floor or ground. All aisles shall be the same as in Section 233.

SECTION 237. MACHINE INCLOSURES .- (a) All machines in moving picture shows and airdomes must be placed in an inclosure or housing, made of suitable fireproof material. (b) It must be properly ventilated, properly lighted and large enough for operator to walk easily on either side of or back of machine. (c) All openings into this inclosure must be arranged so as to be entirely closed by doors

or shutters constructed of the same or equally good fire-resisting material as the inclosure itself. (d) Doors or shutters must be arranged so as to be held normally closed by spring hinges or equivalent device.

SECTION 238. ARC LAMP.—Arc lamp used as a part of a moving picture machine must be constructed, so far as practicable, similar to arc lamps of theaters, Section 219, and wiring to same must not be less capacity than No. 6 (six) B. & S. gauge.

SECTION 239. TOP AND BOTTOM REELS.—(a) Top and bottom reels must be inclosed in steel boxes or magazines, each with an opening of approved construction at bottom or top, so arranged as not to permit entrance of flame to magazine. (b) No solder is to be used in the construction of this magazine. (c) The front side of each magazine must consist of a door spring hinged and swing horizontally and be provided with a suitable latch.

SECTION 240. RHEOSTATS.—Rheostats must conform to rheostat requirements for theater arcs, Section 219.

SECTION 241. AUTOMATIC SHUTTER.-(a) Automatic shutters must be provided and must be so constructed as to shield the film from the beam of light, whenever the film is not running at operating speed. (b) Shutter must be kept permanently attached to the gate frame.

Section 242. EXTRA FILMS.—Extra films must be kept in individual metal boxes, equipped with tight fitting covers and not more than four (4) films shall be allowed in the machine inclosure at any one (1) time and not more than two (2) feet of film shall be exposed in the machine inclosure.

SECTION 243. MACHINE OPERATION,-(a) All machines must be operated by hand. (b) Motors will only be permitted in the machine inclosure for rewind.

SECTION 244. FIRE EXTINGUISHERS .--- In all machine inclosures there shall be placed a three (3) gallon fire extinguisher, which shall be charged at all times or some other form of fire extinguisher approved by the Commissioner of Buildings.

SECTION 245. LICENSE.-(a) Every person, firm or corporation desiring to operate or conduct any moving picture show or airdome under the provisions of this Code shall first secure a license so to do and make application to the Commissioner of Buildings for a permit so to do. (b) Said Commissioner of Buildings being satisfied with the fitness and safety of such room or building where such moving picture show or airdome is proposed to be held, as defined in Section 229, shall issue approval for said license and upon the presentation of said approval to the City Controller and upon the payment of one hundred dollars (\$100.00) said Controller shall issue to said person, firm or corporation a license to operate or conduct such moving picture show or airdome for one (1) year from date of such license. (c) Said license shall set forth the exact location on the street where such moving picture show or airdome is located or proposed to be located, and no removal shall be made to any other location without first giving written notice to the Commissioner of Buildings and City Controller for approval. (d) No person, firm or corporation shall operate more than one (1) place of amusement on any one license. (e) Any license issued as herein set out may be transferred or assigned by giving a written notice to the Commissoner of Buildings and City Controller for approval. (f) No license shall be issued under this Code for a period less than one (1) year, and said license shall not be issued until said fee of one hundred dollars (\$100.00) is paid in full.

SECTION 246. OPERATOR.--(a) It shall be unlawful for any person

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firm or corporation to use, maintain or operate any moving picture machine in such moving picture show or airdome or any regular theater or for any public entertainment or lecture, unless the person so operating the same shall first submit to an examination before a Board of Examiners consisting of the Commissioner of Buildings, the Electrical Inspector and the President of the Common Council or any one (1) of said board, touching his qualifications thereof and receiving a license so to do. (b) All persons having submitted to such examination and having satisfied such board or any one (1) of said board of his qualifications as aforesaid, shall, upon the payment of the sum of five dollars (\$5.00) to the City Controller, upon application of the Commissioner of Buildings, receive a license entitling and permitting him to operate such machine for the period of one (1) year.

SECTION 247. ORCHESTRA.—Moving picture shows and airdomes shall be permitted to have an orchestra of not more than four (4) instruments, a piano or organ, but shall not be permitted to give any spectacular, vaudeville, burlesque, dramatic, operatic or other theatrical performance.

SECTION 248. WIRING.—All wiring apparatus, etc., not specifically covered herein, must conform to the rules and requirements of the Board of Public Safety. Said rules and requirements when officially made and adopted shall have the full force and effect of ordinances.

SECTION 249. TEMPORARY USE OF MOVING PICTURE MACHINES.— Nothing herein shall prevent the temporary use of a moving picture machine or stereopticon for the purpose of lectures in any public hall, club or lodge hall, school or church, when regulations are provided for in Sections 232, 233, 234, 237, 246 and a permit is first obtained from the City Controller on the approval of the Commissioner of Buildings.

SECTION 250. BOOTH—CARE OF.—In no case shall more than one (1) person, besides the regular machine operator, be allowed in a booth at any one (1) time. (b) No smoking will be permitted in any booth or matches be allowed in the same. (c) No paper, books, clothing or debris will be allowed in any booth and the booth must be kept clean and free from all inflammable materials at all times.

PUBLIC HALLS, ROOF GARDENS, CLUB AND LODGE HALLS.

SECTION 251. PUBLIC HALLS, ROOF GARDENS, CLUB AND LODGE HALLS.—Public halls, roof gardens, club and lodge halls shall be taken to mean any hall or building now or hereafter erected and used occasionally for lectures, concerts, fairs, bazaars or luncheons, comprising booths, stands or scenic representation.

SECTION 252. TEMPORARY CONSTRUCTION.—(a) Before the erection of temporary construction in any public hall, for the use of fairs, bazaars, luncheons and other forms of public entertainment, comprising booths, stands or scenic representation, the plans of such proposed work shall be filed with the Commissioner of Buildings and his approval obtained before such work is contemplated. (b) All such construction shall be so located in the hall as not to obstruct perfectly free access to all exits and such passageways leading to exits. (c) All scenic drapery, woodwork or other inflammable materials shall be treated with fireproof paint or compounds which may be approved by the Commissioner of Buildings.

SECTION 253. SEATS.—If seats are provided, the same rule shall apply for spacing and laying out the seats and aisles as provided in Sections 233 and 234.

SECTION 254. EXITS.—All exits shall be conspicuously indicated

by the word EXIT and all doors shall be opened outward as described in Section 232.

SECTION 255. SCENERY IN CLUB AND LODGE HALLS.—Nothing herein shall prevent the use of a limited amount of permanent scenery, curtains and appliances, to be used in a club or lodge hall, when the same is treated with fireproof paint or compounds approved by the Commissioner of Buildings.

SECTION 256. TEMPORARY BOOTHS AND STANDS.—Temporary one (1) story wooden or canvas-covered booths, sales stands or lunch counters, for fair and exhibition purposes or towers for observation purposes and structures for similar use may be constructed in such a manner and under such conditions as the Commissioner of Buildings may prescribe.

PART 15.

FIREPROOF SHUTTERS AND DOORS.

SECTION 257. FIRE DOORS, BLINDS OR SHUTTERS.—In every building three (3) stories or over in height, constructed or occupied for manufacturing, mercantile or warehouse purposes, fronting on a public thoroughfare, vacant lot or court which is less than forty (40) feet in width, every opening must be provided with approved fire doors, blinds, shutters or metal frames, sash and wired glass.

SECTION 258. How CONSTRUCTED.—(a) Every fire door, blind or shutter must be hung to iron hinge eyes or pin blocks, built into the wall. (b) All doors, blinds, or shutters shall be standard, constructed of pine or other soft wood of two (2) thicknesses of matched boards at right angles to each other and securely fastened and covered with tin on both sides and edges with folded lapped joints, the nails for fastening the same being driven inside the lap. (c) The hinges and bolts or latches shall be secured or fastened to the door or shutter by wrought iron bolts passing through the door or shutter and secured by nuts and washers on the opposite side, after the same has been covered with the tin and such doors or shutters shall be hung upon a wrought iron frame, independent of the woodwork on the windows and doors or to wrought iron hinges securely fastened in the masonry.

SECTION 259. METAL WINDOW FRAMES AND SASH AND WIRED GLASS. —On any opening, where the window frame and sash are of metal and the sash are glazed with wired glass, not less than one-fourth $(\frac{1}{4})$ of an inch in thickness, and each pane measuring not more than seven hundred twenty (720) square inches, the same shall be deemed an equivalent of and a substitute for fireproof shutters.

SECTION 260. SHUTTERS TO BE OPENED FROM OUTSIDE.—All shutters opening on fire escapes and at least one row vertically in every three (3) vertical rows on the front window openings, above the first story of any building shall be so arranged that they can be readily opened on the outside by the firemen.

SECTION 261. ROLLING METAL SHUTTERS.—No rolling iron or steel shutters shall be hereafter placed above the first story of any building and when used on the first story they shall be counterbalanced so that said rolling shutters may be readily opened by the firemen.

SECTION 262. INTERIOR WALL OPENINGS TO HAVE FIREPROOF DOORS. —All buildings herein specified, having openings in interior walls shall be provided and protected on each side of the wall by an approved automatic fireproof door where deemed necessary by the Commissioner of Buildings and to be provided with approved automatic self-closing devices.

SECTION 263. OUTSIDE AND INSIDE FIREPROOF SHUTTERS AND DOORS TO BE CLOSED AT NIGHT.—All occupants of buildings shall close all

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exterior and interior fireproof doors and blinds at the close of the business of each day.

PART 16.

CHIMNEYS, FLUES AND STACKS.

SECTION 264. NUMBER.—Each dwelling, tenement or apartment with rooms in which cooking is done, if a flue or chimney is provided the same must be built as hereinafter described.

SECTION 265. CONSTRUCTION OF CHIMNEYS AND FLUES .- (a) Chimneys shall be built of brick, stone or similar fireproof material and in no case shall a chimney rest upon a flooring of wood or timber construction. (b) Every chinney not forming a part of a wall shall rest upon the ground or other sufficient fireproof foundation. (c)Chimneys or flues, without reference to the purpose for which they may be intended, must be laid with solid joints, thoroughly filled with mortar and plastered on the outside where they pass through floors and partitions and between the ceiling joists and rafters, and for the entire height of interior, when flue lining is not used. (d) Wooden floor beams, studs and other woodwork must be framed around the flue at each and every story and be not less than two (2) inches distant therefrom.

SECTION 266. FOUNDATIONS OF CHIMNEYS.-(a) The foundations of chimneys, flues and stacks, whether inside or outside of buildings, or whether connected with the same or isolated, shall be designed and built in conformity with the provisions relative to foundations of this Code and in no case shall a chimney, flue or stack be built upon filled or frozen ground. (b) When the breast of a chimney or fireplace projects more than one (1) brick, it must be started and built on the same line from the foundation.

SECTION 267. CORBELLING OUT OF CHIMNEYS.—(a) Brick chimneys or flues projecting one $(1)^{+}$ brick or less and not starting from the foundation wall shall be securely built into the brick work of the walls to which they are hung and shall be supported by courses of brick corbelled out from the main wall, provided that no corbelled chimney or breast shall project more than four (4) inches on an eight (8) inch wall or more than eight (8) inches on all walls over eight (8) inches in thickness. (b) No flue shall be corbelled where it passes between floors, rafters or partitions.

SECTION 268. WALLING OF FLUES.-(a) Chimneys and flues less than two hundred fifty-six (256) square inches in area in all buildings shall have walls at least eight (8) inches thick, unless terra cotta or fire clay flue linings are used for their full height, in which case four (4) inches in thickness may be omitted. (b) If built of material other than brick, they shall have walls at least eight (8) inches thick and shall have an additional lining of brick work or terra cotta or fire clay flue lining. (c) All smoke flues, stacks or chimneys having a sectional area greater than two hundred fifty-six (256) square inches, but less than five hundred (500) square inches, shall be surrounded with walls not less than eight (8) inches thick. (d) Brick smoke flues, chimneys or stacks having a sectional area greater than five hundred (500) square inches shall have hollow walls in which the combined thickness of the inclosed walls shall be at least twelve (12) inches and the air space between the inner and outer walls shall not be less than two (2) inches. (e) For a distance of two (2) feet below the smoke outlet or at least ten (10) feet above it, such flue, chimney or stack shall be lined with fire brick laid in fire clay mortar together with the opening for smoke stack. (f) The walls back of flues in party walls shall in no case be less than eight (8) inches and between each flue in a group of flues, four (4) inches in thickness, provided in all cases in the surrounding wall of any flue, stack or chimney of any size shall be so proportioned that the brick work in the same will not be subjected to strains greater than the maximum strain for brick work.

SECTION 269. TOPPING OUT.—(a) All smoke flues, chimneys or stacks shall be topped out with brick, stone, terra cotta or cast iron, properly anchored and if such chimney, flue or stack is liable to emit sparks or if shavings or sawdust is used as fuel, it shall be covered on top with a heavy wire netting. (b) The tops of all smoke flues, chimneys or stacks shall extend at least two (2) feet above the highest point of a pitched roof or within six (6) feet of any other roof or woodwork and not less than four (4) feet above the roof of all flat roofs. (c) All flues or stacks carrying off the products of combustion of boilers, heating and power plants shall not be less than sixty (60) feet in height.

SECTION 270. AREA OF CHIMNEYS.—(a) No flue shall be less than eight (8) inches by eight (8) inches when used as a smoke flue, provided, that flues for use of gas stoves or gas grates may be of less dimensions. But no such flue shall be less than thirty-two (32) square inches. (b) Furnace flues shall not be less than eight (8) inches by twelve (12) inches. (c) Nothing in this Section shall be so construed as to permit the use of any flue on the inside or outside and connected with any part of a building without being walled in with brick or other fireproof material. (d) No flue hereafter constructed shall have more than one (1) connection to the same.

SECTION 271. METALLIC CHIMNEYS.—In manufacturing buildings, chimneys or smoke stacks built of iron or steel shall be thoroughly anchored or guyed and shall not be used in such a manner as to pass through the floors or roofs of the same, unless such metallic smoke pipes or chimneys are separated from any woodwork with a ventilating air space at least twelve (12) inches and surrounded by some incombustible material.

SECTION 272. HEARTHIS.—(a) All hearths or fireplaces shall rest on brick or Portland cement concrete trimmer arches not less than four (4) inches thick, the header kept at least two (2) feet from the face of the chimney breast. (b) The back of a fireplace shall not be less than eight (8) inches thick. (c) All centers shall be taken out under trimmer arches before the floor is laid and no person shall lay any hearth or any other than a brick or cement arch. (d) The jambs on each side of fireplace shall not be less than thirteen (13) inches wide and not less than twelve (12) inches thick. (e) No woodwork shall be used to carry or construct or for furring out any part of the chimney breast, but the same must be furred out with brick or other incombustible material and all corner chimneys containing fireplaces shall be built on each of the three sides with solid masonry the full size of base and height of story.

SECTION 273. GAS GRATES.—(a) Gas grates shall have hearths constructed of brick or Portland cement concrete trimmer arches, not less than four (4) inches thick, the header kept at least one (1) foot and six (6) inches from the grate front. (b) Gas grates must be surrounded by at least eight (8) inches of brick work and to rest on a solid foundation. No woodwork shall be placed within two (2) inches of any brick work surrounding the grate. (c) If a vent, flue or stack is used the same must be constructed as flues in Section 268.

SECTION 274. CHIMNEYS OR CUPOLAS.—(a) Iron cupola chimneys of foundries shall extend at least ten (10) feet above the highest point of any roof within a radius of thirty (30) feet of such cupola, and to be covered on top with a heavy wire netting or equipped with a

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suitable spark arrester. (b) No woodwork shall be placed within two (2) feet of any cupola.

SECTION 275. DANGEROUS CHIMNEYS AND FLUES.—(a) It shall be unlawful to maintain any chimney, flue, fireplace or heating apparatus on any premises when, in the opinion of the Commissioner of Buildings, they shall be dangerous or unsafe by reason of endangering the buildings of said or adjoining premises by fire or otherwise. (b) In all such cases the Commissioner of Buildings shall at once notify the owner, agent or other party having an interest in said premises to immediately make the same safe and upon the neglect of said person, so notified, to comply with the provisions of said notice, he may be found guilty of a misdemeanor.

PART 17.

FURNACES AND HEATING PLANTS.

SECTION 276. PORTABLE FURNACES.—The top of every portable furnace, not set in brick, shall be kept at least one (1) foot below the beams of ceilings, with at least two (2) inches of sand over the top of the furnace.

SECTION 277. WARM AIR PIPES.—(a) All warm air pipes, running above the first floor, conducting warm air from furnaces or radiators, shall be standard bright tin conductors, double thickness with air spaces of at least one-fourth $(\frac{1}{4})$ of an inch between the two (2) thicknesses running the entire length of the pipe, except that pipes inclosed in brick flues need not be a double thickness. (b) Horizontal furnace pipes in basement may be made single and shall be kept at least one (1) inch from any woodwork and when less than two (2) inches must be covered with fireproofed material. (c) Hot air pipes in or passing through closets shall be double with a space of one (1) inch between them.

SECTION 278. REGISTERS.—Hot air registers hereafter placed in the floor of any building shall have one-fourth $(\frac{1}{4})$ inch air space extending around their register boxes, guarded by tin on the outside.

SECTION 279. BRICK SET FURNACES.—(a) All brick set hot air furnaces shall have two (2) covers with an air space of at least four (4) inches between them. (b) The entire cover of the hot air chamber shall be either a brick arch or two (2) courses of brick laid on galvanized iron or tin supported on iron bars. (c) The outside cover which is the top of the furnace shall be made of brick or metal supported on iron bars and so constructed as to be perfectly tight and shall be not less than twelve (12) inches below any combustible ceiling or floor beams.

SECTON 280. DISTANCE FROM WOODWORK.—(a) All furnaces shall be placed at least two (2) feet from any wood or combustible partition, unless the partition is properly protected by a suspended metal shield, when the distance shall be not less than one (1) foot. (b) The cold air boxes of all hot air furnaces shall be made of metal, brick or other incombustible material. (c) No furnace shall be surrounded or inclosed by any combustible material for the purpose of forming air chambers.

SECTION 281. STEAM AND HOT WATER PIPES.—(a) Steam or hot water pipes shall not be placed within two (2) inches of any timber or woodwork, unless the timber or woodwork is protected by a metal shield, then the distance shall be not less than one (1) inch. (b) All steam or hot water heating pipes passing through the floors and ceilings or lath and plaster partitions, shall be protected by a metal tube passing entirely through floors and ceilings or partitions one (1) inch larger in diameter than the pipe, having a metal cap at the floor; and where they are running in a horizontal direction between a floor and ceiling, a metal shield shall be placed on the underside of the floor over them and on the sides of wood beams running parallel with said pipe. (c) All wood boxes or casings, inclosing steam or hot water heating pipes and all wood covers and recesses in walls, in which steam or hot water heating pipes are placed, shall be lined with metal. (d) All pipes or ducts used to convey air warmed by steam or hot water, shall be of metal or other fireproofed material. (e) All steam and hot water pipe coverings and boiler coverings shall consist of fireproofed materials only, to the approval of the Commissioner of Buildings.

SECTION 282. NOT PLACED ON WOOD CONSTRUCTION.—No brick set or portable furnace, boiler or drying room shall be placed on any wood or combustible floor or beams, and not less than three (3) feet in front and one (1) foot on the sides of all wood or combustible floors shall be protected by brick, concrete or other incombustible material.

SECTION 283. DRYING ROOMS.—All walls, ceilings and partitions inclosing drying rooms shall be made of fireproof materials.

SECTION 284. BOILER, COAL AND FUEL ROOMS.—(a) All high pressure steam boilers hereafter to be placed in any building, shall be placed in a fireproof room, the walls of which shall be constructed of brick, stone or concrete of not less than twelve (12) inches in thickness and all openings into such fireproofed room shall be provided with standard fire doors. (b) The ceiling or floor over all such boiler rooms and the ceiling or floor over all coal or fuel rooms in such building shall be constructed of concrete or masonry supported on iron, steel or concrete beams or masonry arches. (c) Every boiler room, when below ground or when under any sidewalk, shall have stationary iron ladders or stairs leading directly to a manhole or other opening to the outside or other adequate means of exit, which shall be approved by the Commissioner of Buildings.

SECTION 285. BOILER HOUSE.—All buildings hereafter erected for boiler houses, unless entirely of fireproof construction, shall have walls of either brick or stone, as required of buildings under Class three, and shall be so constructed that a clear space of at least eight (8) feet shall exist between any part of the boiler and the roof, ceiling or other woodwork.

SECTION 286. BAKE OVENS.—(a) Bake ovens are to rest on solid foundations or metal or concrete beams and columns. (b) The sides and ends shall be at least two (2) feet from any woodwork and the crown of arch at least four (4) feet from ceilings that have wood joists. (c) The hearth in front of bake ovens shall extend at least three and one-half $(3\frac{1}{2})$ feet beyond the face of said oven.

SECTION 287, PORTABLE SMELTING FURNACES.—Portable smelting furnaces or core ovens shall be set on incombustible hearths with an air space of at least five (5) inches between hearths and the bottom of such oven or furnace.

SECTION 288. SMOKE PIPE.—(a) No smoke pipe shall extend through any external wall, unless connected with a flue, chimney or stack, built as required by this Code. (b) No smoke pipe shall pass through any window, door, floor, roof or partition constructed of combustible materials except as provided in Section 271.

SECTION 289. SMOKE HOUSES.—(a) All smoke houses shall be of fireproof construction, with brick or concrete walls, iron doors and brick, concrete or metal roof, (b) An iron guard shall be placed over and not less than three (3) feet above the fire, and the hanging rails shall be of iron, and an iron grating shall be placed under the first

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row of hanging rails, and be not less than eight (8) feet above the floor of the fire-pit. (c) The walls of all smoke houses shall be at least three (3) feet higher than the roof of the building in which they are located, and shall be not less than twelve (12) inches in thickness and be coped with stone or its equivalent.

PART 18.

LIVERY AND FEED STABLES AND GARAGES.

SECTION 290. LIVERY AND FEED STABLES.—(a) It shall be hereafter unlawful for any person, partnership or corporation to locate, build and erect or to establish and maintain within the residence district of the City of Indianapolis any livery or feed stable within sixty (60) feet of any lot on which there is a dwelling house used for residence purposes. (b) For the use and purpose of this section, that part of the City lying without the following described territory shall be regarded as a residence district of this City. (c) Beginning at the point of inersection of the center lines of East and Ohio streets thence west on Ohio street to the center line of West street, thence south on West street to the center line of South street, thence east on South street to the center line of East street, thence east shall be erected, located or maintained within one hundred fifty (150) feet of any lot on which there is situated a church or public school building.

SECTION 291. GARAGES.—For the use and purpose of this Code a public garage is hereby declared to be any building or inclosure used for the care, repair or storage of motor vehicles for profit or any in which motor vehicles are kept for hire.

SECTION 292. GARAGE *AND BUILDINGS.—All public garages now or hereafter maintained, established or erected within the corporate limits of the City shall comply in every respect with Sections 39 and 41.

SECTION 293. GARAGE—WHERE LOCATED.—No public garage shall be located, erected or maintained within one hundred fifty (150) feet of any lot on which there is situated a church or public school building, unless such public garage was established at such place prior to the establishment of such church or school building.

SECTION 294. GARAGE ADJACENT TO RESIDENCE.—(a) Where any public garage is now or shall hereafter be located on any lot upon the same street and contiguous to a lot upon which there is a private residence, the front or side of such public garage shall not be nearer the front property line than the front of such residence, unless consent in writing shall first have been obtained from the owner of such residence. (b) The provisions of this section shall not apply to public garages now or hereafter located, established or maintained within the fire limits as described in Section 17.

SECTION 295. GARAGE WHEN A NUISANCE.—Every public garage erected or established in violation of this Code shall be deemed a nuisance and may be abated as such.

PART 19.

STORAGE OF OILS.

SECTION 296. CONSTRUCTION OF BUILDINGS FOR[®]STORAGE OF OILS.— (a) It shall hereafter be unlawful for any person, firm or corporation to build, construct or erect any building designed for the storage of crude petroleum, gasoline, naphtha, benzine, camphine, carbon oil, spirit gas, burning fluid, spirits of turpentine, coal oil, rock oil, earth oil, or any other liquid except such as will stand a test of one hundred fifty (150) degrees Fahrenheit according to the method of John Taliabue, except in conformity with this Code. (b) Buildings now or hereafter erected or designed for the storage of the fluids mentioned in the preceding paragraph must conform to the following provisions: (c) The walls shall be of brick, stone or concrete, and shall be not less than sixteen (16) inches thick nor more than sixteen (16) feet high. The lower floor of such buildings shall be at least three feet below the grade of the adjoining street and shall be made of earth, concrete or brick. The roof of such building shall be made of tile, metal or other incombustible material, and the outside walls of any such buildings having a flat roof shall extend at least eighteen (18) inches above the roof. The coping upon the roof of such buildings shall be made of incombustible material. Such buildings shall be detached from all other buildings, and shall be properly ventilated. Where any such building shall be located less than twenty-five (25) feet away from any other building or structure, the wall or walls of such oil storage building on the side or sides thereof within such distance of twenty-five (25) feet from any other building or structure shall have no windows or other opening therein; provided, however, that if such building cannot be so constructed that no outside wall thereof shall be less than twenty-five (25) feet away from any other building or structure, in such case, openings may be made in the wall of such building which is located farthest away from any other building or structure for the purpose of admitting light or providing means of acess thereto or egress therefrom. If such opening be a window the glass in such window shall be fire-resisting glass in metal frame, and such window shall be provided with steel shut-(d) No such building shall be occupied for any purpose other ter. than the storage of oils, and no person shall be permitted to use any such building as a sleeping apartment, or other dwelling place. (e) Such buildings and the equipment thereof, including the protection of the doors and windows, shall be constructed according to plans and specification submitted to and approved by the Commissioner of Buildings.

SECTION 297. STORAGE OF OILS .- (a) It shall be unlawful for any person, firm or corporation to keep or store crude petroleum, gasoline, naphtha, benzine, camphine, carbon oil, spirit gas, burning fluid, spirits of turpentine, coal oil, rock oil, earth oil, or any other liquid except such as will stand a test of one hundred fifty (150) degrees Fahrenheit, according to the method of John Taliabue, in any quantity exceeding ten (10) gallons upon or in any building, structure or premises, within the City, except in such building or structure as has been constructed in accordance with the provisions of Section 206, or in such tanks as provided in Section 298. (b) Where ten (10) gallons or less of any of the above mentioned oils or fluids, except such as will stand the test above mentioned, are kept upon or in any building or structure within the City, they must be kept in safety cans made of not less than 24 (twenty-four) gauge galvanized iron or other snitable metal approved by the Fire Chief, with opening or openings protected by self-closing stops and such safety cans must be of a type approved by the Fire Chief. (c) No gas, candle, oil or other like artificial light or lighted stove, gas grate or other open flame or electric switch or cutout of any kind shall be allowed within fifteen (15) feet of any receptacle or receptacles containing any of the oils or fluids mentioned in this Section, nor shall electric switches or cutouts be located closer than four (4) feet to the floor in rooms containing such oils or fluids.

SECTION 298. TANKS FOR STORAGE OF OILS .- (a) Any person, firm

or corporation desiring to use any space underneath the surface of the ground, or underneath any building in the City, except in such a building or structure as is authorized under the provisions of Section 296, for the construction, maintenance or use of any tank thereunder for the storage of any one (1) or more of the oils or fluids mentioned in Section 297 shall first obtain a permit so to do from the Commissioner of Buildings and no such permit shall be issued without first being approved by the Fire Chief, and if underneath any public street or alley the same must be approved by the Board of Public Works and said permit may be revoked by the Board of Public Safety at any time for a just cause. (b) Tanks for the underground storage of oils or fluids mentioned in Section 297 with the exceptions therein provided, shall be made of galvanized steel, open hearth basic steel or wrought iron of a gauge depending upon the capacity as follows: 14 (fourteen) U. S. gauge for capacities of one hundred eighty (180) gallons or less; 12 (twelve) U. S. gauge for capacities of one hundred eighty-one (181) to three hundred (300) gallons; 7 (seven) U. S. gauge for capacities of three hundred one (301) to four thousand (4,000) gallons; one-fourth (4_4) inch with three eighths (%) inch heads for capacities of four thousand (4,000) to ten thausand (10,000) gallons; three-eighths (%) inch for capacities of ten thousand (10,000) to twelve thousand six hundred (12,600) gallons. All portions of such tanks must be either riveted and soldered, or caulked, or welded or brazed together and made oiltight and shall be coated on the outside with tar, asphaltum or other rustresisting material. Every such tank exceeding four thousand (4,000)portable filling tanks) hereinafter mentioned, those located in buildings constructed under the provisions of Section 296 of this article and those located beneath or attached to buildings as hereinafter provided in this section, shall be placed and maintained with the tops at least two (2) feet under the surface of the ground. When located not less than two hundred (200) feet away from any building or structure or from any street, alley or public way, lumber yard or any other yard or place where combustible materials are kept or stored, such tanks may contain not to exceed twelve thousand six hundred (12,600) gallons each and when located less than two hundred (200) feet away from any building or other structure or from any street, alley, or public way, lumber yard or any other yard or place where combustible materials are kept or stored, may contain not to exceed one thousand (1,000) gallons each, provided, however, that the aggregate capacity of tanks located within thirty (30) feet of any building shall not exceed five thousand (5,000) gallons. No such tank shall have any openings or pipe connections, except on the top thereof nor shall it be connected either directly or indirectly with any public or private sewer, drain or catch basin. All pipes leading to or from such tanks shall be of galvanized wrought iron with heavy galvanized cast iron or brass fittings, protected against injury, and shall be so placed that the tops of such tanks shall be lower than the level of the lowest pipe in the building used in connection therewith, and all such tanks shall be so placed that no artificial lights shall be required while filling. Each tank shall be provided with a filler pipe of gavanized iron or brass not less than one and one-fourth (1¼) inches in diameter entering at the top of the tank and extending not less than four (4) inches below the top of the tank, the upper end of which said filler pipe shall terminate in a locked screw cap or metal filler box, which must be kept securely locked at all times, except when such tank is being filled, and each such tank shall also be provided with a galvanized iron vent pipe not less than one (1)

inch in diameter connected with the top of such tank and provided with a screen of thirty (30) mesh brass wire at or near the tank connection, and said vent pipe shall be carried up to the outer air at least ten (10) feet higher than the roof of any building in connection with such tank shall be used, and shall terminate in a gooseneck spark protector, the opening of which shall be covered with a thirty (30) mesh brass wire screen and shall be located at least twenty (20) feet from all windows in higher adjacent buildings. If there is no building within twenty (20) feet of such tank, said vent pipe shall terminate in a locked screw cap or other device which shall be approved by the Fire Chief. The installation of said tanks shall be subject to the supervision and approval of the Fire Chief and they shall not be covered up until the said Fire Chief has inspected them and found that the tanks and their equipment comply with the pro-visons of this section, and until said Fire Chief has issued to the owner thereof a certificate to that effect. (d) Tanks for the storage of one (1) or more of the oils or fluids mentioned in Section 297 of an aggregate capacity of not more than three hundred (300) gallons may be installed beneath buildings. Every such tank shall be inclosed by a casing of concrete at least six (6) inches in thickness and shall be so situated and constructed that the top of such tank shall be at least two (2) feet below the upper surface of the lowest floor, which shall be constructed of concrete not less than six (6) inches thick. The filling pipes of tanks installed underneath buildings as provided in this paragraph must terminate outside of the outer walls of said building in a locked-screw cap or other device of a design which shall be approved by the Fire Chief and said screw cap or device must be kept securely locked at all times except when such tank is being filled, and where any such filler pipe runs to a sidewalk, alley or public bighway it must terminate in a locked screw cap or other device of a design which shall be approved by the said Fire Chief and which shall be set flush with the surface of the sidewalk, alley or highway and provided with a locked iron cover, which must be kept securely locked at all times except when such tank is being filled. The filling pipes and the vent pipe of any such tank must be laid underneath the concrete floor of the building until they reach the outside of the outer wall of said building. Such tanks shall comply in all other respects with the provisions, conditions and requirements of the preceding paragraphs of this section; provided, however, that no such tank shall be constructed underneath any building any part of which is used for residence, hotel or lodging purposes. Such tanks must be supplied with pumps or other devices for the removal of the contents thereof which shall have been approved by the Fire Chief. Each pipe connecting such tank with the pump or the device for the removal of its contents shall be of galvanized iron or equal and must be so laid that no portion thereof is lower than its level at the point where such pipe is connected with the tank, and it shall be pitched upward from the tank to the pump or other device used for the removal of the contents of such tank, and said pipe shall be laid at least eighteen (18) inches below the surface of the ground, and all exposed portions thereof shall be properly protected. (e) Sealed portable filling tanks of a capacity of not more than sixty (60) gallons may be used inside of garages for the storage and handling of any one (1) or more of the oils or fluids mentioned in Section 297. Such tanks shall be constructed of not less than No. 7 (seven) U. S. gauge steel, supported on steel wheels not less than thirty (30) inches in diameter with rubber tires, and provided with an approved pump or other device for the removal of the contents thereof; and the hose, of length not to exceed eight (8) feet, through which the oil or fluid is

to flow. (f) Pressure tanks not exceeding six (6) gallons oil capacity constructed of not less than No. 18 (eighteen) U. S. gauge steel, and used in connection wieh lighting systems, approved by the Fire Chief, may be placed above ground and attached to the outside walls of buildings.

SECTION 299. OIL TANKS USED IN CONNECTION WITH ENGINES—GAS PRODUCERS, ETC.—Tanks for storing oils or liquids which will stand a test of one hundred fifty (150) degrees Fahrenheit, according to the methd of John Taliabue, used in connection with engines, gas producers, furnaces, ovens or other oil burning equipments, must be constructed in accordance with the provisions of Section 298 and, if installed inside of buildings, must be limited to an aggregate capacity of one thousand (1,000) gallons, and must be placed beneath the lowest floor in the manner specified for oils and fluids mentioned in Section 297; provided, however, that an auxiliary tank of a capacity not exceeding ten (10) gallons may be placed above the floor.

PART 20.

RESTRICTING THE MANUFACTURE AND HANDLING OF CAL-CIUM CARBIDE AND PRODUCTS THEREOF.

SECTION 300. PLANT.-(a) It shall be unlawful for any person, firm or corporation to erect or maintain any plant for the purpose of filling any tank or container with acetylene gas within the cor-porate limits of the City of Indianapolis except under the following conditions and restrictions: (b) Such plants shall not be maintained or such business engaged in within a radius of one (1) mile in any direction from the Soldiers' and Sailors' Monument in said City. (c)A danger zone of at least one hundred (100) feet shall be maintained between any building or buildings in which such acetylene gas is manufactured or compressed and the outside property line of the real estate containing such building or buildings. (d) Such property line shall be marked by a substantial fence or inclosure containing suitable signs on the outside thereof evidencing the nature of the business conducted within as a warning to the public. (e) No waste from any such plant or business shall be disposed of by means of any covered sewer. (f) Acetylene gas shall not be stored under a pressure of more than twelve (12) inches of water except in the tanks herein described, which tanks shall be completely filled with asbestos saturated with acetone. (g) Whenever acetylene gas is compressed the process shall be in at least three (3) stages. Each compression cylinder shall be surrounded by a water jacket. The gas shall be cooled between each stage of compression, the water being kept in constant circulation. (h) Such gas shall never be compressed to the point of liquidation. (i) No copper shall be used in the machinery, apparatus or equipment used in such business, in such a way as to come in contact with acetylene. (j) All buildings used in such business shall be buildings of the first class, Section 35. (k) No open light or flame shall be permitted in or about such plant or business. (1) In generating said gas the carbide of calcium shall be introduced into an excess of water, and water shall not be introduced into an excess of carbide. (m) Every possible precaution shall be used to prevent a flash of fire where filling generators with carbide of calcium. (n) Calcium carbide shall be stored only in air and water tight drums. No water or moisture shall be admitted into said drums. (o) All impurities shall be removed from such gas as far as possible. (p) Each such establishment or business shall maintain constant supervision to prevent carelessness of workman, defects in apparatus or

machinery and violations of the provisions of this code. In addition, duly authorized city officials shall be admitted at all times to such places for the purpose of inspection.

SECTION 301. STORAGE AND HANDLING.—(a) The storage and handling of tanks or cylinders containing acetylene gas under pressure in the City of Indianapolis shall be subject to the following rules and restrictions and it shall be unlawful to store or handle same otherwise. (b) All tanks shall be made of seamless steel, properly brazed or of other safe and approved type of construction, capable of withstanding tests of twelve hundred (1,200) pounds pressure to the square inch without rupture. They shall withstand strain beyond the point of usefulness at six hundred (600) pounds pressure to the square inch and shall be tested at the place of manufacture to a pressure of at least five hundred (500) pounds to the square inch. They shall be absolutely gas and water tight at the test pressure. When threaded fittings are provided, the length of the thread shall be equal to the diameter of the opening. Each tank shall be provided with an opening to which an accurate pressure gauge may be attached. Each tank shall also be supplied with one (1) or more fusible safety plugs so made as to release automatically at a temperature of three hundred (300) degrees Fahrenheit, Each tank shall be completely filled with asbestos or other approved porous material saturated with acetone. Such tanks shall be filled to a pressure of not to exceed two hundred fifty (250) pounds to the square inch at seventy (70) degrees Fahrenheit. (c) When any number of such tanks from ten (10) to twenty-five (25) are stored together, they shall be kept in fireproof boxes with self-closing covers and shall be separated from other kinds of stock and merchandise and arranged for ventilation to the outside of the building. (d) When more than twenty-five (25) such tanks are stored together they shall be kept in fireproof vaults or rooms which shall contain no open flame. Such vault or room shall be so arranged as to insure ample ventilation to the outside of the building.

PART 21.

CELLARS, WATER SYSTEM, ROTARY NOZZLES-INSPECTION OF CELLARS.

SECTION 302. WATER SYSTEM, ROTARY NOZZLES.—(a) It shall hereafter be unlawful for any person, firm or corporation to use, lease or permit to be used or leased, any building containing a basement, cellar or sub-cellar in which any goods or articles of merchandise of any kind are to be stored, or in which any manufacturing is to be carried on, without first providing in said basement, cellar or sub-cellar, as part of its construction and equipment with an approved system of automatic sprinklers, or with lines of wrought iron on galvanized iron water pipes with malleable iron fittings, said water pipes to have an area of not less than two and one-half ($2\frac{1}{2}$) inches in diameter for an area surface of four thousand (4,000) square feet or less, and for basements, cellars or sub-cellars requiring more than one (1) lateral line, then all lateral lines shall be connected together at both ends, making a complete circulating system, and the feed lines connecting the lateral lines together shall have an area equal to the combined areas of all lateral lines, and in no case shall a lateral line be less than two and one-half ($2\frac{1}{2}$) inches in diameter. (b) It shall also be unlawful for any such person, firm or corporation to omit to provide said lines of pipe with branches or iron water pipe running therefrom, not less than one and one-half ($1\frac{1}{2}$) inches in diameter. tary brass or non-rusting material nozzles, in the proportion of one (1) such nozzle to every four hundred (460) square feet of said area surface or fraction thereof, except where branch lines are used, then the smaller rotary nozzle, brass or other non-rusting material, of not less than three-fourths ($\frac{3}{4}$) inch diameter connection may be used, one (1) such nozzle to every two hundred (200) square feet of said area surface or fraction thereof. (c) And it shall likewise be unlawful for any person, firm or corporation to omit to provide said system or basement, cellar or sub-cellar pipes with as many Siamese connections on the outside of said building as may be designated and required by the Chief of the Fire Force. (d) Said Siamese connections to have an automatic check valve in each branch.

SECTION 303. NOTICE TO EQUIP.—It shall be unlawful for any person, firm or corporation owning or occupying any building in the City of Indianapolis already erected, containing a basement, cellar or subcellar, in which any goods or articles of merchandise of any kind are stored, or in which any manufacturing is being carried on, or in which basement, cellar or sub-cellar any such goods or articles are to be stored or manufacturing is to be carried on, to continue to so store any such goods or articles, or to continue to carry on any such manufacturing therein, after a notice of thirty (30) days has been served on such person, firm or corporation requiring such service to be installed, without having first provided said basement, cellar, or subcellar with a system of iron water pipes with automatic rotary brass or non-rusting material, nozzles and Siamese connections as provided for in Section 302 of this ordinance.

SECTION 304. FIRE CHIEF DUTIES.—(a) The Chief of the Fire Force of the City of Indianapolis shall require the system of pipe equipment described in Section 302 of this code, to be placed in any part of any theater, hotel, or public assembly hall in said City within thirty (30) days after giving notice to the owner or agent to do so, and it shall be unlawful for any such owner to neglect or refuse to so equip any such theater, hotel, or public assembly hall, when so notified by said Chief of the Fire Force, beyond the said space of thirty (30) days and it shall be unlawful for any person, firm or corporation, after said period, to use or permit any building to be used for a theater, hotel or assembly hall, unless the same be equipped as herein provided. (b) In any case where the owner of any such building already erected is not a resident of the City of Indianapolis, the notices provided for in Section 302, 303 and 304 hereof, may be served on any occupant, agent or representative of such owner, and such service shall be valid and legal service on the owner, lessor or lessee of such building.

SECTION 305. METALLIC STAND PIPES.—All factories, warehouses, mercantile business, hotels and office buildings, sixty (60) feet or over in height shall be provided with one (1) or more two and one-half $(2\frac{1}{2})$ inch or larger metallic stand pipe on the outside wall thereof, or on the inside of such building extending to and above the roof and so arranged that fire hose may be attached from the street to the same. All shall be provided with Siamese connections, provided and arranged subject to the approval of the Chief Fire Engineer.

SECTION 306. FIRE CHIEF SERVES NOTICE.—All notices authorized or required to be served on the owners of premises or occupants thereof, or their agents or representatives under the provision of this ordinance, shall be served by the Chief of the Fire Force or any assistants of said Chief of Fire Force, designated by him, in his name, and the return of services under the official name or signature of such Chief of the Fire Force shall be valid and binding on all parties.

SECTION 307. INSPECTOR OF CELLARS—DUTIES.—(a) There shall be

appointed by the Board of Public Safety, a competent person as inspector of cellars. (b) The person so to be appointed shall be nominated in writing to said Board by the Chief of the Fire Force and shall rank and receive the same compensation as a captain on the Fire Force and shall be and shall continue to be a regular member * of said Fire Force. (c) It shall be the duty of such inspector to inspect and examine all basements, cellars, sub-cellars and subways in the City, and to require that all ordinances pertaining to protection from fire in basements, cellars, sub-cellars and subways shall be enforced as provided for by ordinance now in effect and force, and he shall make written reports as to condition of all such basements, cellars, sub-cellars and subways directly to the Chief of the Fire Force of such City. (d) The examination and inspection of basements, cellars, sub-cellars and subways by such inspector, and his report shall cover all conditions affecting the safety of such premises regarding fire or conflagrations.

SECTION 308. INSPECTOR—POWERS.—(a) Such inspector shall have full power and authority to enter upon all cellars, sub-cellars, basements and subways for ahe purpose of making the inspection and examination herein required. (b) Upon refusal by the owners, agent or occupant of any premises containing any cellar, sub-cellar, basement or subway to permit said inspector to enter the same, said inspector shall thereupon obtain and present to said owner, agent or occupant a written order or authority by the Board of Public Safety, or by the Chief of the Fire Force to enter upon, examine and inspect such cellar, basement, sub-cellar or subway.

PART 22.

SIGNS, SIGNBOARDS AND BILLBOARDS.

SECTION 309. PERMIT.—No structure is to be used as a sign, signboard or billboard for advertisement of any sort or shall be built, placed or erected or hung upon or from the roof or outer wall of any building or upon any lot or ground without a permit from the Commissioner of Buildings.

SECTION 310. WIND PRESSURE.—All signs, signboards or billboards now in existence or hereafter erected and maintained shall be made, constructed and maintained of sufficient strength to withstand a wind pressure of thirty-five (35) pounds per square foot of surface without stressing the material beyond the safe limit of stress.

SECTION 311. BOND.—Every person, firm or corporation engaged in the business of erecting or hanging signs, signboards or billboards shall annually file with the City Controller a good and sufficient surety bond in the penal sum of five thousand dollars (\$5,000), to indemnify, save and keep harmless the City of Indianapolis from any and all causes, damages and expenses of any kind whatsoever, which may be suffered by the City because of neglect on the part of such person, firm or corporation in the constructing, hanging or erecting such signs, signboards or billboards.

SECTION 312. DRAWINGS AND SPECIFICATIONS.—Permits for signs, signboards and billboards shall be granted only upon the basis of representations made by proper drawings and specifications, indicating the location, disposition, quality of material and workmanship, full dimensions and manner of fastening the same to the structure.

SECTION 313. WIRING OF SIGNS.—All wiring and apparatus in signs, advertisments or displays using electric lights shall be installed in accordance with the rules and requirements as provided in Part 25 of this code.

SECTION 314. SIGNS NOT TO INTERFERE WITH FIRE DEPARTMENT.— No sign, signboard or billboard shall be constructed or erected in any way that will interfere with the proper and convenient protection of property by the fire department, or in any way conflict with public safety or convenience, nor shall any windows or doors be obstructed or the openings thereof interfered with, by any sign, signboard or billboard or other advertising structures; nor shall any sign be attached in any form, shape or manuer to a fire escape, or in such manner as to obstruct the same.

SECTION 315. MATERIAL.—(a) All signs, signboards or billboards hereafter erected or constructed within the fire limits, as described by Section 17, shall be of some incombustible material, properly supported, braced and stayed by iron or metal anchord, bolts, supports, chains, stranded cable or braces. (b) No wooden, glass or canvas sign shall now, or hereafter be permitted to project from any building or structure over any public highway within the fire limits. (c) No staples shall be used for securing any projecting sign to a building.

SECTION 316. OWNER'S OR SIGN WRITER'S NAME.—All signs, signboards and billboards shall have the owner's or sign writer's name painted thereon.

SECTION 317. HEIGHT.—(a) It shall be unlawful for any person, firm or corporation to construct, erect or maintain any solid sign, signboard or billboard upon the roof of any building over two (2) stories in height. (b) No such solid sign, signboard or billboard shall be more than four (4) feet in its vertical height on any building two (2) stories in height. (c) No such solid sign, signboard or billboard shall be more than ten (10) feet in its vertical height on any building one (1) story in height. (d) No such sign, signboard or billboard shall be constructed so that the base shall be less than one (1) foot or more than four (4) feet above the surface of such roof and every such sign, signboard or billboard shall be constructed with steel skeleton construction. (e) There shall be not more than one (1) such sign, signboard or billboard on the roof of any one (1) building on each street front.

318. ILLUMINATED ROOF SIGNS.—(a) Illuminated roof SECTION signs shall be defined as signs constructed, erected or maintained upon or over the roof of any building, which have all or any part of its letters, or which said sign may be constructed either in outline on incandescent lamps or which have painted flush or raised letters where the face of the sign presents a surface to be affected by wind pressure not in excess of the requirements of Section 310. (b) Every such sign shall be constructed with steel skeleton construction. (c) No illuminated roof sign shall be erected or maintained upon or over the roof of any building unless the frame work thereof shall be entirely of metal or some equally incombustible material. (d) The distance between the roof of said building or structure and the lower edge of such sign shall not be less than five (5) feet, the height of any such sign from the roof of the building or structure, to which the same is anchored or attached, shall not exceed twenty-five (25) feet. (e) No such sign shall be constructed on any building or structure which is over eighty feet in height. (f) No illuminated roof sign shall be constructed, erected, maintained or put in place until the person, firm or corporation desiring to construct, erect, maintain or put in place such sign shall have made application in writing, to the Commissioner of Buildings, submitting with such application, plans and specifications showing the size, nature and construction of the sign proposed to be erected.

SECTION 319. PROJECTING SIGNS.—(a) All projecting signs from

any building or structure now or hereafter erected within the fire limits as described by Section 17 shall be electric illuminated signs of metal or other non-combustible material. (b) No projecting sign shall project from the structural part of a building, or structure, or the property line, over any public highway in the City of Indianapolis more than four (4) feet from the face of the structural part of the building or property line, and no such sign shall be at a less distance than twelve (12) feet above the grade of the sidewalk or public thoroughfare. (c) Show cases for the display of goods which project more than six (6) inches from the property line will be classed as a sign under this code.

SECTION 320. WEIGHT OF SIGNS.—No projecting sign of any class herein referred to, mentioned or described, shall have a greater weight than eight hundred (800) pounds.

SECTION 321. ILLUMINATED REQUIREMENTS.—(a) All illuminated signs herein described must be fully illuminated at least six (6) nights each week from not later than one (1) hour after sunset until at least ten (10) o'clock p. m. (b) All illuminated projecting signs must have at least ten (10) lamps visible on each side and there shall not be less than sixty-four (64) candle power on each of said signs.

SECTION 322. SIGNEOARDS AND BILLEOARDS ON LOTS OR GROUNDS.— (a) It shall be unlawful for any person, firm or corporation to construct or erect any billboard or signboard upon a lot or ground to a greater height than twenty-five (25) feet from the established grade of said lot or ground. (b) The base of all billboards or signboards shall in all cases be at least eighteen (18) inches above the level of the ground and every such billboard or signboard shall be safely and securely anchored, or fastened and shall be so constructed, anchored and fastened that they will withstand the wind pressure as specified in Section 310.

SECTION 323. SIGNS RELATING TO THE SALE OR RENT OF REAL ESTATE. —Signs relating to the sale or rent of real estate may be constructed without a permit, when said sign does not exceed thirty (30) square feet; provided that such signs are securely erected as provided in Section 310.

SECTION 324. TEMPORARY BANNERS,—Temporary banners may be erected and maintained with the consent of the Board of Public Safety, and suspended across avenues and streets, and securely attached to buildings with the consent of the owners or lessees of such buildings, the lower part of which shall not be less than twenty-five (25) feet above the surface of such street or avenue.

SECTION 325. FLAT SIGNS.—Flat signs may be painted directly upon any wall, incombustible signboard or structure for the purpose of advertising or display when directly related to the tenant or owner of the wall or structure, without a permit, provided the signboard or other parts of the sign do not project more than six (6) inches from the property line.

PART 23.

SMOKE-SMOKE INSPECTOR.

SECTION 326. SMOKE.—The emission of dense black, or gray smoke from any smoke-stack, or chimney used in connection with any stationary steam boiler, locomotive or furnace of any description within the corporate limits of the City of Indianapolis, in any apartment house, office building, hotel, theater, place of amusement, school building, institution, locomotive, or any other structure in the City of Indianapolis, or in any building used as a factory, or for any purpose of trade, or for any other purpose whatever, except as a private residence, shall be deemed and is hereby declared to be a public nuisance.

SECTION 327. SMOKE INSPECTOR'S AUTHORITY.—The Smoke Inspector shall have authority to inspect, supervise and require all steam boilers or furnaces, either stationary or locomotives, and all other furnaces within the corporate limits of the City of Indianapolis, to be so constructed, or if already constructed, to be so altered or have attached thereto such efficient smoke preventives as to prevent the production and emission of such dense black and gray smoke therefrom, and he shall further have authority to supervise the igniting, stoking, feeding, and attending such steam boiler or other furnace fires, and he, or his duly appointed assistant, if any, shall have authority in the office of the deputy of the Commissioner of Buildings to enter any steam boiler or engine room, or any building not occupied exclusively as a private residence, and any person or persons hindering or obstructing him in the performance of such duty shall be deemed guilty of violating the provision of this ordinance.

SECTION 328. APPLICATION FOR PERMIT TO CONSTRUCT OR CHANGE FURNACE.—When any person shall be desirous of constructing or altering any steam boiler, locomotive or furnace within the corporate limits of the City of Indianapolis, he or they shall make application at the office of the Commissioner of Buildings for a certificate for that purpose and shall furnish a written statement giving the style and dimensions of such boiler or furnace, together with the height and size of stack or chimney, and the method of device to be adopted for preventing the emission of such dense black or gray smoke therefrom. If, in the opinion of the Commissioner of Buildings or Smoke Inspector it shall appear necessary, drawings of the above apparatus may be required.

SECTION 329. SMOKE—WHEN A NUISANCE.—The owner, agent, lessee or occupant of any building or structure of any description, from the smoke stack or chimney of which there shall issue or be emitted such dense black or gray smoke within the corporate limits of the City of Indianapolis, and the general manager or superintendent having charge of any boiler or locomotive within the City of Indianapolis, from the smoke stack or chimney of which there shall issue dense black or gray smoke, within the corporate limits of the City of Indianapolis, shall be deemed, and held to be guilty of creating a public nuisance and of violating the provisions of this code.

SECTION 330. SMOKE FROM LOCOMOTIVES.—The general manager, superintendent or other officer of any railroad or other company having in charge or control the operation of any locomotive or engine within the corporate limits of the City of Indianapolis, who shall cause, permit or allow such dense black or gray smoke to be emitted from such engine within said corporate limits, shall be deemed guilty of creating a public nuisance.

SECTION 331. SMOKE PREVENTIVES FOR FURNACES—(a) Every boiler, furnace, stove, range or tar kettle except in a private residence, used within the corporate limits of the City of Indianapolis, and in which bituminous coal is burned as fuel, shall be so constructed or altered or have attached thereto such efficient preventives as shall prevent the production and emission of such dense black or gray smoke therefrom. (b) No person or persons, association or corporation being the owner or lessee, or having control of any such boiler, furnace, stove, range or tar kettle shall use or allow the use of any such boiler, furnace, stove, range or tar kettle which shall not be so constructed, or if already constructed at the time of the passage of this code, which shall not be so altered, or shall not have attached thereto such efficient smoke preventives in good and efficient order and operation. (c) No person or persons, association or corporation being the owner or lessee or having control of any such boiler, furnace, stove, range or tar kettle within the territory bounded by Maryland street on the south, Capitol avenue on the west, New York street on the north and Alabama street on the east, shall use or continue to use bituminous coal in any such boiler or other furnace at any time when, for any reason whatsoever dense black or gray smoke shall be emitted therefrom. (d) Any person or persons, association or corporation being the owner or lessee or having control of any such boiler, furnace, stove, range or tar kettle within this designated territory who continues to use bituminous coal after dense black or gray smoke shall have emitted therefrom, and who does not substitute for such bituminous fuel other non-bitumnous fuel such as gas coke or anthracite coal, shall be deemed guilty of maintaining a nuisance.

SECTION 332. STOKING FURNACE.—Every person having charge of the igniting, feeding, stoking or attending to any such steam boiler or other furnace, or any smoke preventive attached thereto, shall so ignite, stoke, feed or attend such furnace fire, and shall keep such furnace and smoke preventives attached thereto in good and efficient order so that such dense black and gray smoke shall not be produced or emitted therefrom.

Section 333. SMOKE INSPECTOR'S DUTIES,---(a) It shall be the duty of the Smoke Inspector or his assistant to personally inspect all chimneys, steam generating plants, and all apparatus in use, and to make written reports of the same to the Board of Public Safety, and to keep a permanent record giving all essential facts relating thereto. (b) If, in the opinion of the Inspector, the escape of smoke is the dense black or gray smoke which is declared to be a nuisance within the meaning of this code, he shall make complaint to persons so maintaining said nuisance and defining its cause. In event that the cause thereof is unskillful hand stoking, he shall make immediate complaint against any and all such persons violating this ordinance. (c) In event that said nuisance is owing to the construction of the furnace, size or height of stack, connections or other engineering details relating to the boiler or furnace construction or connection, he shall make statement of the cause of nuisance and report to the owners or operators as to the necessary changes, alterations, or additions and fixing a limit of time for such changes, alterations or additions to be made, and in such case such time in no instance shall exceed two (2) months. (d) In the event, however, that it becomes necessary to install stokers three (3) months shall be given. (e) In the event that it should appear from the inspection of the Smoke Inspector that no change, appliances or alteration of the furnace, boilers, connections, stack or appurtenances thereto would eradicate said smoke nuisance and that said nuisance is owing to the steam generating plant being worked in excess of its normal capacity or if for other organic reason it can not be converted by such changes into a steam generating plant which is not a nuisance, then he shall report to the owners or operators as above mentioned the conditions of such plant and the required changes or additions necessary therein, so that it may not be operated as a nuisance. (f) Not more than two (2) months shall be allowed in which to make such change if tubular boilers are to be installed; and in the event of the installation of water tube boilers not to exceed three (3) months shall be given for such changes. (g) Notices as above shall be in writing, and at the expiration of the time allowance the Inspector shall make report as to the condition of the plant and in the event it is maintained as a nuisance, shall make complaint against any and all such persons violating this ordinance. (h) And whenever dense black or gray smoke shall be emitted from any smoke stack or chimney used in connection

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with any stationary boiler, locomotive, furnace or tar kettle of any description within the territory in the City of Indianapolis, bounded by Maryland street on the south, Capitol avenue on the west, New York street on the north, and Alabama street on the east, or in any building used as a factory or for any purpose of trading or for any other purpose whatsoever within said territory, any citizen of the City of Indianapolis may file in the City Court of the City of Indianapolis or any other court having jurisdiction, a complaint against the owner, agent, lessee or occupant of such building or structure or the manager, superintendent or other person in charge of such boiler, locomotive, furnace or tar kettle for such violation of the ordinance; and such proceedings may be instituted either with or without previous application to the Smoke Inspector or previous action by said officer; and such complaint shall be prosecuted in the name of the City of Indianapolis and the prosecution shall be begun by the filing of such complaint supported by the affidavit of the complaining citizen, and all proceedings shall be had as though said complaint or information were prosecuted by the proper officers of said City.

PART 24.

ELEVATORS.

SECTION 334. ELEVATORS—PERMITS MUST BE OBTAINED.—(a) No person or persons, company or corporation shall hereafter build or install or cause to be built or installed, any passenger or freight elevator_or rebuild or change or cause to be rebuilt or changed any part of the machinery, car, shaft or hatchway in any building, until the person or persons, company or corporation shall have filed with the Commissioner of Buildings a statement or specifications, or both if deemed necessary, by said Commissioner of Buildings, giving all required information in regard to the manner of construction, and the material to be used in or about said machinery, car, shaft or hatchway. (b) It shall not be lawful to proceed to build, install, rebuild or change any elevator without such permit.

SECTION 335. METAL PLATE SHOWING CARRYING CAPACITY.—The owner, lessee, manager or other person having charge or control of any elevator now in operation in the City of Indianapolis, and the manufacturers of elevators now or hereafter placed in buildings, shall cause to be fastened in a conspicuous place in said elevators, metal plates having suitable raised letters on same, which shall prescribe the number of pounds weight which said elevators, after proper test, have capacity to carry, but no more than seventy-five (75) per cent. thereof shall be carried thereon.

SECTION 336. QUALIFICATIONS OF PERSONS OPERATING ELEVATORS.—(a) The following qualifications necessary for persons who now are or shall hereafter be placed in charge of running any elevator in the City of Indianapolis are hereby prescribed, and no person shall be employed for such purpose or engaged therein unless he possess such qualifications. (b) He shall have at least ten (10) days' experience in running an elevator under the instructions of a competent person. (c) He shall be reliable and of industrious and sober habits. (d) He shall not be less than eighteen (18) years of age.

SECTION 337. WHEN OPERATOR IS INCOMPETENT OR DISQUALIFIED.— Whenever the Inspector of Elevators shall become satisfied that a person engaged in running any elevator is incompetent or disqualified for any cause to continue to run same, the said Inspector of Elevators shall forthwith notify the owner or person managing or controlling same and the person so notified shall thereafter be held responsible for the violation of this code.

SECTION 338. PASSENGER ELEVATOR INCLOSURE DOORS.—(a) All inclosure doors must be constructed according to Section 92, and made to slide, and must be provided with a lock so arranged that the doors can not be opened from the outside of the inclosure except by a key, said doors shall at all times be securely closed before starting the car. (b) Every passenger elevator with more than one entrance to, or exit from the car, shall be provided with a sliding door or doors on the inside of the car on each such entrance or exit. Each of such doors shall be securely closed before the elevator is put in motion.

SECTION 339. FREIGHT ELEVATOR INCLOSURE DOORS.—All freight elevator hatchways must be provided with standard fire doors as set out in Section 92, and must also be provided with automatic or self-closing gates, unless the elevator is in charge of a regular operator.

SECTION 340. SAFETY DOOR STOPS.—All freight elevators shall be provided with a safety device by which persons using the elevator at one (1) floor can lock the operating cable to prevent the moving of the elevator by persons on another floor during loading and unloading.

SECTION 341. AUTOMATIC DOWN SPEED GOVERNOR.—Every passenger elevator, except direct acting plunger, shall be provided with an automatic down-speed governor, and no elevator shall have a greater working speed than six hundred (600) feet per minute.

SECTION 342. PASSENGER ELEVATOR—DEFINITION—All elevators not designed for freight service exclusively, shall be classed as passenger elevators, and shall be subject to all the provisions of this ordinance relative to passenger elevators.

SECTION 343. AUTOMATIC TRIP OR SLACK CABLE STOP AND AUTOMATIC BRAKE.—All power-driven elevators, the cable of which wind around a drum, shall be provided with an automatic trip or slack cable stop, and with an automatic brake of sufficient strength to hold the car and its load at any point of its travel.

SECTION 344. TERMINAL STOPS.—(a) All power-driven elevators shall be provided with automatic terminal stops on the machine. (b) Full magnetic control and traction type elevator hatchway limit stops must be installed in addition to the automatic stop.

SECTION 345. ELECTRIC BRAKES—How APPLIED—All electric brakes must be applied by breaking the current.

SECTION 346. SAFETY DEVICE ON CABLE HOISTING ELEVATORS.—Every elevator, car or platform cable hoist that runs on guides shall be provided with an improved safety device which will prevent car from falling in case the cable breaks, or the machinery breaks, or gets out of order.

SECTION 347. CABLES—How CONSTRUCTED.—All hoisting or counterweight cables used on elevators shall be metallic cables with hemp centers.

SECTION 348. SIZE OF CABLES AND DIAMETER OF DRUM .--

	Diameter of Drum
Size of Cable.	and Sheave.
1/2 inch	24 inches
9-16 inch	28 inches
5% inch	
3/4 inch	36 inches
7/8 iuch	
1 inch	48 inches
	11 . Land the start of the II land of

SECTION 349. HEAD ROOM ABOVE CAR.—All elevators shall hereafter be installed in such a manner that when the floor of the car or platform is level with the top floor of the building, the guides and guide posts shall extend at least three (3) feet above the highest point of frame work of car or platform, and that there shall at such time be free head room above said highest point of frame work of car or platform at least to the level of the top of such guides and guide posts.

SECTION 350. DOUBLE SET OF GUIDE POSTS.—Freight elevators of over two thousand (2,000) pounds capacity and with platforms over fourteen (14) feet in length shall have a double set of guide posts.

SECTION 351. NUMBER OF CABLES.—(a) All freight elevators hereafter installed shall have no less than two (2) hoisting cables with suitable adjusters to equalize the bearings. (b) No passenger elevator hereafter installed shall have less than two (2) hoisting cables, two (2) car counterweight cables and two (2) drum counterweight cables. (c) All ropes and cables shall be independently fastened at their terminals. (d) Cables must have enough friction on drums or sheaves to prevent same from slipping with or without load, or at any point of travel.

SECTION 352. SHEAVES AND DRUMS.—All sheaves and drums must be keyed on shaft.

SECTION 353. SIDEWALK ELEVATOR DOORS.—(a) All doors covering sidewalk elevator holes shall have the top surface roughed and when doors open, shall only open sufficient time for proper service and must be protected with suitable guard while open. (b) All sidewalk elevators must be provided with automatic stop connected with operating device so as to stop the car or platform within six (6) feet of door when the same is not open. (c) No power-driven sidewalk elevator shall be operated until the doors above the same have been opened and the opening properly safeguarded.

SECTION 354. POWER OF INSPECTORS.—The Commissioner of Buildings and his assistant elevator Inspectors shall have the power and they are hereby authorized to enter any building within the City of Indianapolis without hindrance from anyone, for the purpose of examining elevators and for the enforcement of the provisions of this code, whenever the same may be deemed necessary, and the engineer and operator having charge of any elevator shall assist such inspector or inspectors to such an extent that he or they may be able to make a careful and thorough examination of every portion of the operating machinery connected with any such elevator.

PART 25.

ELECTRIC WIRING FOR LIGHT, HEAT AND POWER.

SECTION 355. WIRE INSTALLATION.—All electrical wires and apparatus shall be installed in accordance with the rules and requirements of the Board of Public Safety. Said rules and requirements, when officially made and adopted, shall have the full force and effect of ordinances for electrical wiring and apparatus.

SECTION 356. PERMITS, APPLICATIONS AND CERTIFICATES.—(a) Any individual, corporation, co-partnership, company or organization desiring to install or place any electrical wiring or electrical apparatus shall make application to the Inspector twelve (12) hours before the time of desiring to start such installation. (b) Such application to be made on a blank furnished by the Inspector. (c) No electrical work or wiring shall be put to use or connected to service wires or any other source of electrical energy until the certificate is issued. (d) Records of electrical inspection shall be kept in a book on file in the office of the Inspector.

SECTION 357. ELECTRIC WORK—INSPECTION.—(a)—No electrical work or wiring shall be put to use or connected to service wires or any

other source of electric energy until inspected and accepted. (b) When such electrical work or wiring is found to have been installed in such a manner as is conflicting with the provisions of this code, the Commissioner of Buildings is hereby authorized and empowered to remove fuses, cut the wires or otherwise render the system inoperative until such defects have been corrected and the department notified in writing that the work may be again inspected and approved.

SECTION 358. IRON CONDUIT AND ARMORED CABLE REQUIRED—WOOD MOULDING PROHIBITED.—(a) All wiring hereafter installed within the territory known as the fire limits as described in Section 17, approved metal conduit or armored cable will be required for all concealed wiring and for all exposed wiring in basement and attics. (b) Wood moulding will not be permitted for any kind of work in this district. (c) Approved metal conduit or approved armored cable will be required for all wiring in any of the following classes of buildings whereever located. Buildings occupied as asylums, sanitariums, hospitals, theaters, moving picture shows and air domes, state, county and city public buildings, public schools and livery stables, provided, however, that minor alterations and repairs may be made in existing systems when approved by the Inspector in writing.

SECTION 359. CUTTING OF WIRES.—No person shall maliciously cut, disturb, alter or change or cause to be cut, altered or changed any electrical apparatus or electrical wires in such a manner as to render same inoperative or defective or not in accordance with the provisions of this code.

SECTION 360. COVERING OF CONCEALED WIRING.—No so-called concealed wiring shall be lathed over or in any manner covered from sight until inspected and accepted.

SECTION 361. DEFECTIVE APPARATUS AND MATERIAL.—(a) The Commissioner of Buildings may condemn any electrical work or apparatus which is not, or has not been installed according to the provisions of this code. (b) The person or persons owning or using the same shall immediately cause the condenmed work to be corrected to comply with the requirements of the rules. (c) If the person owning or operating the defective apparatus, or wires, does not cause them to be corrected promptly upon the notice of the Commissioner of Buildings, the Inspector may remove the fuses, disconnect the wires or by other means completely disconnect the condenmed work and no person shall connect the same until the condenmed work has been corrected and inspected and a certificate furnished by the Commissioner of Buildings.

PART 26.

PENALTIES-REPEAL.

SECTION 362. PENALTIES—Excepting as otherwise specifically meutioned within this code, none of its provisions shall be construed to affect any building or part of any building now finished or in course of construction. Any person, firm, corporation or agent who shall violate any provision of this code shall be subject, upon conviction thereof, to a fine not less than ten dollars (\$10,00) or more than one huudred dollars (\$100,00) for each offense or upon failure to pay may be imprisoned until such fine is paid not exceeding minety (90) days. The continued violations of any provisions shall constitute a separate offense for each and every day such violation of any provisions hereof shall continue.

SECTION 363. REPEAL.—(a) All ordinances and parts of ordinances in conflict herewith are hereby repealed, and expressly repealing the following ordinances. (b) General Ordinance No. 34 approved June 6,

1904, entitled "An ordinance providing for all matters concerning, affecting or relating to the construction, alteration, repair or removal of buildings, structures or appurtenances thereto erected or to be erected in the City of Indianapolis, Indiana." (c) General Ordinance No. 5 approved March 19, 1906, entitled "An ordinance to amend Section 110 of an ordinance entitled 'An ordinance providing for all matters concerning, affecting or relating to the construction, alteration, repair or removal of buildings, structures or appurtenances thereto erected or to be erected in the City of Indianapolis, Ind." (d) General Ordinance No. 94 approved November 4, 1907, entitled "An ordinance to amend Sections 36 and 147 of an ordinance entitled 'An ordinance providing for the matters concerning, affecting or relating to the construction, alteration, repair or removal of buildings, structures or appurtenances thereto erected or to be erected in the City of Indianapolis, Indiana." (e) General Ordinance No. 12 approved April 22, 1908, entitled "An ordinance regulating the construction and regulation of moving picture theaters and licensing all persons to operate moving picture machines and prescribing the penalty for the violation thereof." SECTION 364. This ordinance shall be in full force and effect from

SECTION 364. This ordinance shall be in full force and effect from and after its passage and publication once each week for two (2) consecutive weeks in the Indianapolis Commercial, a daily newspaper of general circulation printed and published in the City of Indianapolis, Indiana.

Which was read a first time and referred to the Committee on Public Safety.

ORDINANCES ON SECOND READING.

Mr. Johnson called for Appropriation Ordinance No. 69, 1912, for second reading. It was read a second time.

Mr. Johnson moved that Appropriation Ordinance No. 69, 1912, be ordered engrossed, read a third time and placed upon its passage. Carried.

Appropriation Ordinance No. 69, 1912, was read a third time and passed by the following vote:

Ayes, 8, viz.: Messrs. Johnson, McCarthy, Copeland, Rubens, Denny, Owens, Blumberg and Troy.

Noes, 1, viz.: President Charles B. Stilz.

Mr. Johnson called for Appropriation Ordinance No. 70, 1912, for second reading. It was read a second time.

Mr. Johnson moved that Appropriation Ordinance No. 70, 1912, be amended as recommended by the committee. Carried.

Mr. Johnson moved that Appropriation Ordinance No. 70, 1912, be ordered engrossed as amended, read a third time and placed upon its passage. Carried.

Appropriation Ordinance No. 70, 1912, was read a third time and passed by the following vote:

Ayes, 7, viz.: Messrs. Johnson, Copeland, Rubens, Owen, Blumberg, Troy and President Charles B. Stilz.

Noes, 2, viz.: Messrs. McCarthy and Denny.

Mr. Johnson called for Appropriation Ordinance No. 72, 1912, for second reading. It was read a second time.

Mr. Johnson moved that Appropriation Ordinance No. 72, 1912, be ordered engrossed, read a third time and placed upon its passage. Carried.

Appropriation Ordinance No. 72, 1912, was read a third time and passed by the following vote:

Ayes, 9, viz.: Messrs. Johnson, McCarthy, Copeland, Rubens, Denny, Owen, Blumberg, Troy and President Charles B. Stilz.

Noes, none.

Mr. Johnson called for General Ordinance No. 59, 1912, for second reading. It was read a second time.

Mr. Johnson moved that General Ordinance No. 59, 1912, be amended as recommended by the committee. Carried.

INDIANAPOLIS, IND., December 16, 1912.

To the President and Members of the Common Council of the City of Indianapolis:

GENTLEMEN: I move that General Ordinance No. 59, 1912, be amended as follows: First, by striking out the figures 1943 in line 12, page 2, and inserting in lieu thereof the figures "1918."

Second, by striking out the words "nineteen hundred and forty-three" in line 18, page 3, and inserting in lieu thereof the words "nineteen hundred and eighteen."

GEORGE L. DENNY.

Which motion carried by the following vote:

Ayes, 6, viz.: Messrs. Copeland, Rubeus, Denny, Owen, Troy and President Charles B. Stilz.

Noes, 3, viz.: Messrs. Johnson, McCarthy and Blumberg.

Mr. Johnson moved that General Ordinance No. 59, 1912, be ordered engrossed as amended, read a third time and placed upon its passage. Carried.

General Ordinance No. 59, 1912, was read a third time and passed by the following vote:

Ayes, S, viz.: Messrs. Johnson, McCarthy, Copeland, Rubens, Denny, Owen, Troy and President Charles B. Stilz.

Noes, 1, viz.: Mr. Blumberg.

Mr. Johnson called for General Ordinance No. 66, 1912, for second reading. It was read a second time.

Mr. Johnson moved that General Ordinance No. 66, 1912, be stricken from the files.

The roll was called and General Ordinance No. 66, 1912, was stricken from the files by the following vote:

Ayes, 9, viz.: Messrs. Johnson, McCarthy, Copeland, Rubens, Denny, Owen, Blumberg, Troy and President Charles B. Stilz.

Noes, none.

Mr. Johnson called for General Ordinance No. 67, 1912, for second reading. It was read a second time.

Mr. Johnson moved that General Ordinance No. 67, 1912, be stricken from the files.

The roll was called and General Ordinance No. 67, 1912, was stricken from the files by the following vote:

Ayes, 9, viz.: Messrs. Johnson, McCarthy, Copeland, Rubens, Denny, Owen, Blumberg, Troy and President Charles B. Stilz.

Noes, none.

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Mr. Rubens called for Appropriation Ordinance No. 20, 1912, for second reading. It was read a second time.

Mr. Rubens moved that Appropriation Ordinance No. 20, 1912, be stricken from the files.

The roll was called and Appropriation Ordinance No. 20, 1912, was stricken from the files by the following vote:

Ayes, 5, viz.: Messrs. McCarthy, Copeland, Rubens, Denny and Owen. Noes, 4, viz.: Messrs. Johnson, Blumberg, Troy and President Charles B. Stilz.

Mr. Blumberg called for General Ordinance No. 48, 1911, for second reading. It was read a second time.

Mr. Blumberg moved that General Ordinance No. 48, 1911, be amended as recommended by the committee. Carried.

Mr. Blumberg moved that General Ordinance No. 48, 1911, be ordered engrossed as amended, read a third time and placed upon its passage. Carried.

General Ordinance No. 48, 1911, was read a third time and passed by the following vote:

Ayes, 6, viz.: Messrs. McCarthy, Copeland, Rubens, Owens, Blumberg and Troy.

Noes, 3, viz.; Messrs. Johnson, Denny and President Charles B. Stilz.

Mr. McCarthy called for General Ordinance No. 47, 1911, for second reading. It was read a second time.

MR. PRESIDENT: I move that Section 1 of General Ordinance No. 47, 1911, be amended as follows:

SECTION 1. Be it ordained by the Common Council of the City of Indianapolis, Indiana, That the officers and members of the Police Force of said city shall receive the following salaries and compensation, to-wit:

A. The Superintendent of Police shall receive a salary at the rate of thirty-two hundred dollars (\$3,200,00) per annum.

B. The Captains of Police and the Captain of Detectives shall each receive a salary at the rate of seventeen hundred and forty dollars (\$1,740.00) per annum.
C. The Lieutenants of Police and Lieutenant of Detectives shall

C. The Lieutenants of Police and Lieutenant of Detectives shall each receive a salary at the rate of fifteen hundred dollars (\$1,500.00) per annum.

D. The Sergeants of Police and Detectives shall each receive a salary at the rate of thirteen hundred and twenty dollars (\$1,320.00) per annum.

E. The Bailiff of the City Court shall receive a salary at the rate of one thousand dollars (\$1,000.00) per annum.

F. Each Cornerman of the Police Force shall receive a salary at the rate of three dollars and fifty cents (\$3.50) per day.

G. Each Bicycleman, Wagonman and Turnkey of the Police Force shall receive a salary at the rate of three dollars and twenty-five cents (\$3.25) per day.

cents (\$3.25) per day. H. Each patrolman hereafter appointed, for the first twelve months or a calendar year of service shall receive a salary at the rate of two dollars and seventy-five cents (\$2.75) per day; each Patrolman after having served twelve months or a calendar year shall receive a salary at the rate of three dollars (\$3.00) per day. Also strike out of the last

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line of section 4 the figures "1912" and insert in lieu thereof the figures "1913.".

FRANK E. MCCARTHY, JAMES E. TROY.

Which motion carried by the following vote:

Ayes, 5, viz.: Messrs. McCarthy, Copeland, Rubens, Owen and Troy. Noes, 4, viz.: Messrs. Johnson, Denny, Blumberg and President Charles B. Stilz.

Mr. McCarthy moved that General Ordinance No. 47, 1911, be ordered engrossed as amended, 'read a third time and placed upon its passage. Carried.

General Ordinance No. 47, 1911, was read a third time and passed by the following vote:

Ayes, 5, viz.: Messrs. McCarthy, Copeland, Rubens, Owen and Troy. Noes, 4, viz.: Messrs. Johnson, Denny, Blumberg and President Charles B. Stilz.

On motion of Mr. McCarthy, the Common Council, at 10:00 o clock P. M., adjourned.

ATTEST:

Clerk

TRADES IN A TO COUNCIL