CHAPTER 343.

[H. F. No. 866.]

AN ACT TO REGULATE AND CONTROL THE CONSTRUCTION OF BUILDINGS AND STRUCTURES, AND THE DISPOSITION OF DAN-GEROUS STRUCTURES WITHIN THE LIMITS OF THE CITY OF ST. PAUL.

Be it enacted by the Legislature of the State of Minnesota:

SECTION 1. All buildings and structures hereafter constructed within the limits of the city of St. Paul, Ramsey county, Minnesota, as well as the disposition of all or any dangerous structures within said limits, shall be in accordance with this act, and subject to all its provisions. The Common Council of said city shall have power to fix the fire limits of said city, and contract or extend the same as they may deem best.

SEC. 2. Any wooden building within said limits may be altered or repaired in any manner approved by the inspector of buildings, provided neither its area nor height is increased.

SEC. 3. No bay-window or other structure shall be placed on any building so as to project over any public way or square, without the permission of the Common Council given after due notice and hearing, and then only in such manner as shall be approved by the inspector.

SEC. 4. No wall of any building now erected, or hereafter to be built or erected, shall be cut off or altered without a permit so to do having been first obtained from the inspector. Every temporary support placed under any structure, wall, girder, beam or column during the erection, finishing, altering or repairing of any building, or part thereof, shall be equal in strength to the permanent support required for such construction.

Every brick building hereafter erected more than thirty Sec. 5. (30) feet in width, except exclusively dwellings, tenement or lodging houses, public buildings, railroad stations and stables, shall have one (1) or more brick or stone partition walls running from front to rear and carried up to the full height of the building. Said wall or walls may be four (4) inches less in thickness than is called for by the provisions relating to the thickness of external walls for a brick building to be used for the same purpose, unless the wall is used for a floor-bearing, which in no case shall be less than twelve (12) inches; these walls shall be so located that the space between any two (2) of the floor-bearing walls of the building shall not be over twenty-five (25) feet. Girders or iron beams and columns may be substituted for partition walls in buildings not more than one hundred (100) feet in width, and shall be made of sufficient strength to bear safely the weight which they are intended to support in addition to the weight of material employed in their construction, but when wooden columns or wooden girders are used, the columns shall not be further apart than twelve (12) feet.

SEC. 6. No opening or doorway shall be cut through a party wall of a brick building without a permit from the inspector; and every such doorway or opening shall have top, bottom and sides of stone, brick or iron; shall be closed by two (2) sets of wrought iron or metal covered doors (separated by the thickness of the wall) hung to rabbeted iron frames, or to iron hinges in brick or stone rabbets; shall not exceed ten feet in height by eight (8) feet in width, and every opening other than a doorway shall be protected in a manner satisfactory to the inspector.

SEC. 7. No timber, except lathing strips, shall be used in any wall of any brick building except arch forms for interior arched openings.

SEC. 8. No side wall of a brick building shall be carried up in advance of the rear wall.

SEE. 9. All walls of a brick building on which the ends of beams rest, shall be anchored at each tier of beams, at intervals of not more than ten (10) feet apart, with good, strong wrought iron anchors at least one-half $(\frac{1}{2})$ inch by one and one-half $(1\frac{1}{2})$ inch, well built into the walls and fastened at the top of the beams; and where the beams are supported by girders, the ends of the beams resting on the girders shall be butted together, end to end, and strapped with wrought iron straps or tie irons, at the same distances apart and in the same beams as the wall anchors and shall be well fastened.

SEC. 10. All piers shall be built of the best quality of good. wellburnt hard brick laid in cement and sand mortar, and well wet when laid in warm weather.

SEC. 11. Brick piers under lintels, girders or columns of brick buildings over one (1) story high shall have a cap iron at least two (2) inches thick, the full size of the pier.

SEC. 12. Brick piers and buttresses shall be bonded with through courses, leveled and bedded, each course, and where their foundations rest on piles, a sufficient number shall be driven to insure a proper support.

SEC. 13. Every metal column in a brick building shall rest on an iron plate of not less thickness than two (2) inches. Wooden columns supporting girders and floors in such buildings shall set on one and a half $(1\frac{1}{3})$ iron plates with sockets and counter-sinkages.

SEC. 14. All chimneys hereafter built within the fire limits of said city, shall be built of brick, stone or other incombustible material; shall be plastered on the outside below the roof after having been inspected, and shall have a footing of masonry or iron supported by iron, or corbels of brick or stone. No chimney shall be hung to an eight (8) inch wall, or bear or rest upon wood. No chimney corbelled from a wall shall project more than the thickness of the wall.

SEC. 15. All brick flues shall hereafter be built of merchantable brick, thoroughly slushed, and flush jointed, be smoothly plastered inside with mortar from top to bottom below the roofing; be securely built into a brickwork of the walls to which they are hung; shall be topped out to at least four (4) feet above the highest part of the roof with brick or stone, and the topping out shall not have more than two (2) inches projection, unless covered by a cap of approved incombustible material, properly secured; and in no case shall a nail be driven into the masonry of any flue. SEC. 16. All floor timbers, headers and trimmers of every brick building hereafter erected or altered in which a chimney is to be built in a brick wall, shall be placed distant two (2) inches from the outside of every chimney flue, and the space between such brickwork and timbers shall be closed by a proper fire stop of incombustible material.

SEC. 17. If any chimney, flue or heating apparatus on any premises shall, in the opinion of the inspector, endanger the premises, the inspector shall at once notify, in writing, the owner or agent of said premises. If such owner or agent fails for a period of fortyeight (48) hours after the service of said notice upon him to make such chimney flue or heating apparatus safe, he shall be liable to a fine of not less than twenty (20) nor more than fifty (50) dollars for every day's continuance thereof, to be paid into the treasury of said city.

SEC. 18. Every smoke pipe in a building entering a chimney flue shall be at least twelve (12) inches from every wooden floor, ceiling or partition, shall be guarded by a soapstone ring not less than four (4) inches in thickness extending through the partition, or by a double metal collar with an air space not less than four (4) inches around the same when running through any stud or wooden partition; and no smoke pipe shall project through any roof, external wall or window.

SEC. 19. The smoke pipe of every furnace shall be kept at least one (1) foot distant from all beams and ceilings not protected by a shield of tin plate, at least two (2) inches from said beams or ceiling; and no smoke pipe shall be placed nearer than twelve (12) inches to any beam or ceiling, unless the beam or ceiling are plastered, in which case the pipe may be within six (6) inches of the plastering, if protected by the above described shield; and the top of all heating furnaces set in brick shall be covered with brick, supported by iron bars, and so constructed as to be perfectly tight; said covering to be in addition to and not less than six (6) inches from the ordinary covering to the hot air chamber.

SEC. 20. No furnace and no range set in masonry shall hereafter be placed or its location changed in any building except as the inspector shall approve.

SEC. 21. The top of every heating furnace not set in brick shall be kept at least six (6) inches below the beams or ceiling with a shield of tin plate made tight, suspended not less than two (2) inches below the said beams or ceiling, and extending one (1) foot beyond the top of the furnace on all sides. If the ceiling over a furnace is plastered the top of the brickwork may be kept within six (6) inches of the ceiling.

SEC. 22. All hot air register boxes hereafter placed in the floors or partitions of buildings shall be set in soapstone, or some other equally incombustible material, borders not less than two (2) inches in width, firmly set in plaster of Paris or gauged mortar, or such other protection as shall in the judgment of the inspector be equivalent to soapstone; shall be made of tin plate with a flange on the top to fit the grooves in the soapstone, and shall have an open space of one (1) inch on all sidés, extending from the underside of the ceiling, below the register, to the soapstone in the floor or partition; the outside of said space covered with a casing of tin plate, tight on all sides and extending from the underside of the aforesaid ceiling up to and under the said soapstone; register boxes of fifteen (15) by twenty-five (25) inches or more shall have a space of two (2) inches.

SEC. 23. In all classes of buildings, excepting private dwellings, the common council shall determine what kind of fire escapes, their number and location, shall be necessary for each and every building, prohibiting the use of the common bent ladder irons as fire escapes in the front, rear, or side external walls. No women or children shall be employed in any building as operatives unless there are a proper number of exits provided, and owners of buildings provided with a fire escape shall keep the same in constant good repair. Stairs on the outside of buildings are to be fire proof metal and shall have railed landings at each story above the first, and shall connect with each story of the building by doors or windows, and no person shall place any obstruction upon any fire escape. Fire escapes may project over the line of any public street, highway or causeway when ordered by the inspector. The inspector may also require the erection of stand pipes on any building he may be of the opinion that the same is necessary for the prevention of fires or its extension.

SEC. 24. All floors shall be constructed to bear a safe weight, per superficial foot, exclusive of materials as follows: For dwellings, tenements or lodging houses, one hundred (100) pounds; for buildings for light mechanical purposes and for public buildings, one hundred and fifty (150) pounds; for storehouses, warehouses, machine shops, armories, drill rooms and riding schools not less than two hundred and fifty (250) pounds. These requirements shall apply to all alterations as well as to new buildings.

In all calculations for the strength of materials to be used in any building, the proportion between the safe weight and breaking weight shall be as one to three for all beams, girders and other pieces subjected to a cross strain; and as one to six for all posts, columns, and other vertical support, and for all tie-rods, tie-beams, and other pieces subject to a tensile strain; and the requisite dimensions of each piece of material are to be ascertained by computation by rules given by the best authorities, using for constants in the rules only such numbers as have been deduced from experiments on materials of like kind with that proposed to be used. All mortar and cement shall be of the best quality for the purpose for which they are applied, and shall be properly mixed.

SEC. 25. The owner or other party having an interest in any building, staging, or other structure, or anything attached to or connected with a building or other structure, which shall be unsafe, so as to endanger life, shall immediately, upon notice received from the inspector of buildings, cause the same to be made safe and secure or taken down; and where the public safety requires immediate action the inspector may enter upon the premises with such assistants as may be necessary, and cause the said structure to be secure or taken. down without delay, and the passers-by to be protected at the expense of such owner or party interested. No staging or stand for observation purposes shall be constructed or occupied upon the roof of any building in said city.

SEC. 26. Every building which shall appear to the inspector to be specially dangerous in case of fire, by reason of bad condition of walls, overloaded floors, defective construction, decay, or other causes, shall be held to be unsafe; and the inspector, besides proceeding as provided in the preceding section, shall also affix a notice of the dangerous character of the structure to a conspicuous place on the exterior wall of said building; and any person removing such notice so affixed, shall be liable to a fine of not less than ten (10) nor more than fifty (50) dollars for each and every offense, to be paid into the treasury of said city.

SEC. 27. The owner or party having an interest in the unsafe building or structure mentioned in the two preceding sections, being notified thereof in writing by the inspector, shall forfeit and pay a fine to the use of said city for every day's continuance thereof after such notice, a sum not less than ten (10) nor more than fifty (50) dollars, on complaint before any court of competent jurisdiction.

SEC. 28. No explosive or inflammable compound or combustible material shall be stored or placed under any stairway of any building, or used in any such manner as to obstruct or render egress hazardous in case of fire.

SEC. 29. The overheads immediately beneath the floors of the auditorium, lobbies, hall-room, galleries, stairways, landings and corridors of public buildings, shall be protected by some incombustible material, such as wire lathing and plastering; and the stair carriages and framing shall be pugged solid to line of treads, risers and landing floors, with some incombustible material.

SEC. 30. No building now or hereafter built shall be altered until it has been examined and approved by the inspector as being in a good and safe condition to be altered as proposed, and the alteration so made shall conform to the provisions of this act, and any ordinance of the City of St. Paul in relation thereto.

SEC. 31. No wall of any building except single dwellings now built or erected, or hereafter to be built or erected, shall be cut off or altered without a permit so to do having first been obtained from the inspector. Every temporary support placed under any structure, wall, girder, beam or column, during the erection, furnishing, altering or repairing of any building, or part thereof, shall be equal in strength to the permanent support required for such construction.

And the walls and roof of every building shall be strongly braced from the beams of each story until all the bearing parts of the construction are completed, unless omitted by consent of inspector.

SEC. 32. Piles driven for a wall to rest upon, shall be not less than five (5) inches in diameter at the smallest end, and shall be spaced not more than three (3) feet on centers, in the direction of the length of the wall, and nearer, if required by the inspector. The inspector shall determine the grade at which piles shall be cut off. SEC. 33. Walls not exceeding twenty (20) feet in height where piling is necessary, may rest on a single row of piles, if deemed advisable by the inspector; walls exceeding twenty (20) feet in height shall rest on not less than two rows of piles. Extra piles shall be driven where required by the inspector.

SEC. 34. All brick walls and buttresses shall be of merchantable well shaped bricks, well laid and bedded, with well filled joints in lime or cement mortar, and well flushed up at every course with mortar; and all brick used during the warm months shall be wet at the time they are laid, and shall be dry at the time they are laid during the cold months.

SEC. 35. No building hereafter erected, excepting churches and grain elevators, shall exceed a height greater than eighty (80) feet to the highest point from the level of the sidewalk, exclusive of chimneys and party walls above the roof, unless constructed throughout of incombustible material, excepting interior finish.

SEC. 36. No continuous vertical recess, chase or flue, shall be made in any party wall so deep that it will leave the thickness at the back less than eight (8) inches at any point, and no recess of any kind shall be made in any eight (8) inch wall. No horizontal recess shall be made in any wall except by a special permit from the inspector. No continuous vertical recess other than flues in stacks shall be nearer than seven (7) feet to any other recess.

SEC. 37. In the erection or alteration of any building within the fire limits the material of which, in whole or in part, is other than brick, stone or wood, the thickness of walls, of such material, and the method of construction, shall be such as the inspector shall approve.

SEC. 38. The roof of any frame building in the fire limits (that is more than one story high) that is damaged by fire less than fifty (50) per cent. of the cost of a new similar roof, may be repaired. If the roof is damaged more than half its value, the entire roof shall be taken off, and a new roof put on, having a covering of incombustible material; in no case shall the highest point of the new roof exceed the highest point of the old roof; but if a flat roof is substituted for a pitched roof the walls of the building may be extended to meet the requirements of such change in the pitch of the roof.

SEC. 39. Any similar building having a pitched roof covered with shingles, or other combustible materials, may have a flat roof of incombustible material substituted for the pitched roof, the walls of the building carried up to meet the requirements of such change in the pitch of roof; provided always, that the highest point of such flat roof shall not exceed the highest point of the roof to be removed.

SEC. 40. Sheds within the fire limits not exceeding twelve (12) feet in height from the ground at the highest part thereof, and not exceeding two hundred and fifty-six (256) feet and privies not exceeding ten (10) feet and twelve (12) feet high, may be constructed of wood. Such shed and privies shall be separate structures; such shed shall not be located on the front part of any lot, nor shall they be used as a dwelling, or for any business pur-

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pose whatever, nor shall more than one shed be erected on any one building lot. A room may be partitioned off in such shed for a privy.

SEC. 41. Shelter sheds may be constructed having incombustible roofing notover twenty (20) feet high from the ground to the highest point of roof, the roof to be supported on sufficient posts or piers. Such sheds shall have no enclosing walls or wooden floors.

SEC. 42. Any elevator building may be constructed of wood externally protected by an envelope of incombustible material. The walls of the first story shall be of masonry not less than twenty (20) inches thick. All window frames and sash in superstructure shall be of iron. The opening in the body of the building and its engine house shall have suitable iron shutters.

SEC. 43. Plank or board partitions in any one (1) story shall not aggregate more than four hundred (400) superficial feet, measured on both sides. Partitions in hotel buildings and tenement houses made of scantling, to be lathed and plastered, both sides shall be filled in with brickwork eight (8) inches high in the best manner. Scantling partitions shall not be used as supports of any floor or roof (except dwelling houses exclusively).

SEC. 44. Smoke houses shall be constructed throughout of incombustible material, with ventilators at or near the top, and guards not less than four (4) feet above the fire bed, sufficient to prevent the meats from falling into the fire. If they open into other buildings, such openings shall be protected by iron doors or shutters properly and thoroughly constructed.

SEC. 45. The owner, architect or builder shall pay for permit for obstruction of street, one dollar (\$1) for the first month, and two dollars (\$2) per month thereafter for each month that any material or debris remains on the street.

All ordinances and parts of ordinances of said city now Sec. 46. in force, relating to the building limits, fire limits and the inspection and survey of buildings are hereby legalized and shall remain in force until amended or repealed by said city, and said city is hereby authorized and empowered to provide by ordinance such provisions, rules and regulations and penalties as shall carry out and enforce the provisions of this act. Provided, however, That said council shall not pass any ordinance, or adopt any resolution which shall in any manner contravene, or make inoperative any of the provisions of this act, or the building ordinance number three hundred and forty (340) of said city or of any other ordinance which may be passed hereafter providing for the inspection, regulation and control of all buildings and structures within the limits of said city. And all officers elected or appointed under the provisions of said ordinances or the ordinances or acts repealed, shall continue to hold office for the terms for which they were elected or appointed and until their successors are elected or appointed in accordance with this act, unless sooner removed.

SEC. 47. Any court having equity jurisdiction in term-time or vacation, may, on the application of the inspector of buildings, by any suitable process or decree in equity, enforce the provisions of this act and the ordinances in force at the time relating to the inspection, survey and control of the construction of all buildings and structures within the limits of said city, and may, on such application issue an injunction to restrain the use or occupation of any building or structure in the city of St. Paul, erected, altered, maintained, repaired, or used in violation of this act and the ordinances in relation thereto.

SEC. 48. Any person violating any of the provisions of this act, shall be punished by fine not exceeding one hundred dollars (\$100), to be paid into the treasury of said city, unless another penalty is specifically provided herein.

SEC. 49. The inspector of buildings may in his discretion estimate the cost of any proposed building or structure for which a permit is applied, and in case of any disagreement relative thereto, said inspector may, before the issuance of any permit, require the owner, agent, architect or builder to make an affidavit sworn to and subscribed before a competent officer of the actual cost of proposed building when completed.

SEC. 50. This act shall take effect and be in force from and after its passage.

Approved March 1st, 1887.

CHAPTER 344.

[H. F. No. 223.]

AN ACT TO PROVIDE FOR THE APPROPRIATION, BY THE COUNTY COMMISSIONERS OF STEARNS COUNTY, OF MONEY FROM THE REVENUE FUND OF SAID COUNTY TO AID IN SURVEYING, IM-PROVING, BUILDING AND REPAIRING PUBLIC ROADS, BRIDGES AND CULVERTS IN SAID COUNTY.

Be it enacted by the Legislature of the State of Minnesota:

SECTION 1. That the board of county commissioners of Stearns county be, and it hereby is authorized and empowered to appropriate and expend under the direction of the said board or a committee of its members by it appointed, money from the revenue fund of said county to survey, re-survey, vacate, improve, build, repair and aid in the surveying, re-surveying, vacating, improving, building and repairing of any public road or highway, or the street of any incorporated city or village, or any bridge or culvert on any public road or highway, or the street of any incorporated city or village in said county now kept in repair by the town, village or city in which said public road, highway or street of any incorporated city or village may now or hereafter be located.