



## Theater

**Semper, Manfred**

**Stuttgart, 1904**

VII) London county council. Regulations made by the council on the 9th of February, 1892, with respect to the requirements for the protection from fire of theatres, houses, rooms, and other places of ...

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[urn:nbn:de:hbz:466:1-77708](https://nbn-resolving.org/urn:nbn:de:hbz:466:1-77708)

für das Parkett einschliesslich feiner Logen:

bis zu 270 Personen zwei Treppen zu je 1,50 m. Bei mehr als 270 Personen ist die Breite nach dem Verhältnis von 1 m für 90 Personen zu berechnen;

für die Ränge:

bis zu 240 Personen zwei Treppen zu je 1,50 m. Bei mehr als 240 Personen ist die Breite nach dem Verhältnis von 1 m für 80 Personen zu berechnen.

## VII.

### London County Council.

#### Regulations made by the Council on the 9th of February, 1892, with respect to the requirements for the protection from fire of theatres, houses, rooms, and other places of public resort within the Administrative County of London.

*These regulations shall, unless otherwise specified, apply to all theatres, houses, rooms, or other places of public resort within the Administrative County of London, to be kept open for the public performance of stage-plays, and to all houses, rooms, or other places of public resort within the said County, to be kept open for public dancing, music, or other public entertainment of the like kind, under the authority of letters patent from Her Majesty the Queen, her heirs or successors, or of Licences by the Lord Chamberlain of Her Majesty's Household, or by the London County Council, other than letters patent, or Licences which may have been granted for the first time before the passing of the above-mentioned Act.*

*In these regulations the expression "such premises" means a theatre, house, room, or other place of public resort to be kept open for any of the purposes aforesaid.*

#### Part I. Structural.

*1. Every person who for the first time after the making of these regulations shall be desirous of obtaining authority to open any such premises within the said County, shall first make an application in writing to the Clerk of the Council for a certificate under the above Act.*

*Such application shall contain a statement as to the nature and extent of the interest of such person in such premises, and the character of the entertainment for which such premises are proposed to be used, and be accompanied by complete plans, elevations and sections, drawn on tracing linen, to a scale of  $\frac{1}{16}$ th of an inch to a foot; and by a block plan showing the position of such premises in relation to any adjacent premises, and to the public thoroughfares upon which the site of such premises abuts, drawn to a scale of not less than  $\frac{1}{20}$ th of an inch to a foot.*

*Such drawings shall be coloured to distinguish the materials employed in the construction of the building; the width of all staircases, corridors, gangways, and doorways, together with the heights of the tiers, and other parts of the building.*

*The thickness of the walls, and scantlings of the various materials shall be clearly shown by figured dimensions; and the cardinal points shall be marked upon each plan.*

*Such drawings shall be accompanied by a specification of the works to be executed, describing the materials to be employed and the mode of construction to be adopted, together with such other particulars as may be necessary to enable the Council to judge whether the requirements of these regulations will, when such premises have been completed, have been complied with.*

*Such drawings shall also show the respective numbers of persons to be accommodated in the various parts of such premises, and the area to be assigned to each person, which shall not be less than 1 foot 8 inches by 1 foot 6 inches in the gallery, and not less than 2 feet 4 inches by 1 foot 8 inches in other parts of such premises.*

*Such drawings and specification to be deposited with the Council. A duplicate copy of approved drawings and specification shall be signed by the Chairman of the Committee and returned to the applicants.*

*2. One-half at least of the total length of the boundaries of the site of any such premises which consist of an entire building, and in case of a room or other such premises not consisting of an entire building, one-half at least of the total length of the boundaries of the site of the building of which such room or other such premises form part, shall abut upon public thoroughfares, of which one thoroughfare at least shall not be less than 40 feet wide, and of the remainder none shall be less than 30 feet wide if a carriageway, or 20 feet wide if a footway.*

1.  
Limits of  
regulations.

2.  
Interpretation  
of "such  
premises".

3.  
Applications  
and  
drawings.

4.  
Site.



If, in compliance with Regulation No. 10, an additional passage or way, should be necessary, it may be provided by means of a private passage or way.

Such passage or way shall not be less than 10 feet in width, and under the complete control of the owner of such premises, and no doors, windows or other openings of the adjoining premises shall communicate therewith, or overlook any portion of such passage or way.

5.  
Windows  
overlooking  
site.

3. No such premises shall be erected upon a site within 20 feet of any windows or other openings belonging to any other premises overlooking the site.

6.  
Walls.

4. All such premises shall be enclosed with proper external or party walls of brick or stone.

The thickness of such walls shall not be less than the thickness prescribed by the Metropolitan Building Act, 1855, for walls of similar height and length in buildings of the warehouse class.

7.  
Dressing-  
rooms.

5. Dressing-rooms shall be arranged in a separate block of buildings, or divided from the place of public resort by party walls, with only such means of communication therewith as may be approved by the Council.

All such dressing-rooms shall be constructed of fire-resisting materials, and connected with an independent exit leading directly into a thoroughfare or way.

All such dressing-rooms shall be ventilated to the outer air by windows in the external walls.

The walls of all such dressing-rooms shall be hung, for decorative purposes, only with materials completely adhering to the surface of such walls.

No such dressing-rooms shall be situated more than one storey below the street level.

Sufficient and separate w.c. and urinal accommodation, properly ventilated to the outer air, shall be provided for the use of the male and female artistes.

8.  
No theatre  
under or over  
any other  
building.

6. No theatre shall be constructed underneath, or on the top of, any part of any other building.

7. No such premises shall have more than three tiers or horizontal divisions including the gallery, above the level of the pit.

9.  
Number of  
tiers.

Where the front seats of the gallery are separated from the gallery by a partition, such seats shall not count as a separate tier.

10.  
Height of  
tiers.

8. Where the first tier or balcony extends over the pit, stalls, or arca, the height between the floor of the pit and the first tier shall not be at any part less than 10 feet, and the height between the floor of the highest part of the gallery and the lowest part of the ceiling over the same shall not be less than 12 feet.

11.  
Floor of pit.

9. In all such premises the floor of the highest part of the pit, or of the stalls where there is no pit, shall not be more than 6 inches above the level of the street adjoining the principal entrance to the pit, and the lowest part of the floor of the pit or stalls shall not be more than 15 feet below such level.

12.  
Entrances  
and exits.

10. Two separate exits, not leading into the same thoroughfare or way, shall be provided to every tier or floor of such premises.

If any tier or floor shall be divided into two parts, two separate exits, not leading into the same thoroughfare or way, shall be provided to each of such parts.

Such exits shall be arranged so as to afford a ready means of egress from both sides of each tier or floor, and shall lead directly into a thoroughfare or way.

13.  
Vestibules.

11. Where vestibules are provided, not more than three tiers or floors (or where such tiers or floors are divided into two or more parts, such parts of tiers or floors) shall communicate with one vestibule.

The width of each vestibule shall be at least one-third greater than the united width of all the doorways or passages that lead thereto.

The united widths of all the doorways or passages that lead from a vestibule towards a thoroughfare or way, shall be at least of the same width as such vestibule.

Not more than one exit from each separate part of a tier or floor shall be used as an entrance.

14.  
Proscenium  
wall.

12. In all such premises where a stage with a proscenium shall be erected, such stage shall be separated from the auditorium by a brick proscenium wall not less than 13 inches in thickness, and such wall shall be carried up the full thickness to a height of at least 3 feet above the roof, such height being measured at right angles to the slope of the roof, and shall be carried down below the stage to a solid foundation.

Not more than three openings shall be formed in the proscenium wall, exclusive of the proscenium opening.

No such opening shall exceed 3 feet in width and 6 feet 6 inches in height, and each of such openings shall be closed by a wrought iron door not less than  $\frac{1}{16}$ th of an inch in thickness in the panel, hung in a wrought iron frame so as to close of itself without a spring.



No openings formed in the proscenium wall shall, at the lowest part, be at a higher level than the floor of the stage.

All the decorations around the proscenium shall be constructed of fire-resisting materials.

13. The proscenium opening shall be provided with a fire-resisting screen to be used as a drop curtain, of such pattern, construction and gearing, and with such arrangements for pouring water upon the surface of the screen which is towards the stage as may be approved by the Council.

15.  
Proscenium  
opening.

14. The height of the wall plate carrying the rafters of the roof over the stage shall not be less than twice the height of the proscenium opening, such height being measured from the level of the stage at the curtain line.

16.  
Roof over  
stage.

An opening shall be formed in the roof near the back of the stage, of a superficial area at the base of at least  $\frac{1}{10}$ th of the superficial area of the stage. Such opening shall be covered with a lantern light, glazed on the top and sides, and be fitted with suitable exhaust cowls.

15. Every staircase, landing, lobby, corridor or passage intended for the use of not more than 400 persons of the audience, shall be formed of fire-resisting materials, and shall not be less than 4 feet 6 inches wide; but, if communicating with any portion of the house intended for the accommodation of a larger number of the audience than 400 persons, it shall be increased in width by 6 inches for every additional 100 persons until a maximum width of 9 feet be obtained.

17.  
Corridors,  
passages and  
staircases.

16. Every staircase for the use of the audience shall have solid square (as distinguished from spandril) steps of York or other stone or fire-resisting materials, to be approved by the Council, with treads not less than 11 inches wide and with risers not more than 6 inches high, without winders, in flights of not more than 12 or less than 3 steps each.

18.  
Staircases.

The treads of each flight of steps shall be of uniform width, and be pinned into brick walls at both ends.

The several flights of such steps shall be supported and enclosed upon all sides by brick walls not less than 9 inches thick, to be carried down to the level of the footings.

No staircase shall have more than 2 flights of 12 steps each without a turn.

All landings shall be 6 inches thick, be square upon plan, and have brick arches 9 inches deep turned under them in the middle of such landings.

Every staircase shall have a roof of fire-resisting materials to be approved by the Council.

A continuous handrail shall be fixed on both sides of all steps and landings, supported by strong metal brackets built into the wall.

Such handrails shall be chased into the walls, where the thickness of the walls will permit, but in all cases where the flights of steps re-turn, the newel wall shall be chased so as to allow the handrail to turn without projecting on the landing.

17. A clear passage or gangway not less than 3 feet wide shall be formed at the sides and in the rear of the seating in every part of such premises.

19.  
Gangways.

Such passages or gangways shall at all times be kept entirely free from chairs, flap seats, or other obstructions, whether permanent or temporary.

18. All constructional ironwork in such premises shall be embedded in fire-resisting materials in a manner to be approved by the Council.

20.  
Ironwork.

19. All workshops, store-rooms, wardrobe or painting rooms, in connection with such premises, shall be separated from such premises by brick walls not less than 9 inches thick.

21.  
Workshops,  
etc.

All openings in such walls shall be closed with self-closing wrought-iron doors hung in wrought-iron frames.

All such doors, if consisting of a single fold, shall be made to overlap, when closed, the door frame at least 3 inches; and, if made in two folds, such folds shall overlap each other, when closed, at least 3 inches on each side.

All floors and ceilings of such rooms shall be formed of fire-resisting materials.

All such rooms shall be ventilated by windows in the outer walls.

20. All limelight tanks, boilers with engines, and dynamos with engines, shall be each placed in a ventilated chamber or building of fire-proof construction.

22.  
Limelight  
tanks, boilers,  
and dynamos.

Such chambers or buildings shall be separated from such premises, and from each other, by brick walls and fire-proof floors without openings, and shall be enclosed upon one or more sides by external walls.

21. All scene docks or stores and property rooms in connection with such premises shall be enclosed by brick walls not less than 9 inches thick, and shall have floors and ceilings of fire-resisting materials.

23.  
Scene dock.



All openings from such docks, stores or rooms to such premises shall be closed by self-closing wrought-iron doors, hung in wrought-iron frames.

All such doors, if consisting of a single fold, shall be made to overlap, when closed, the door frame at least 3 inches; and, if made in two folds, such folds shall overlap each other, when closed, at least 3 inches on each side.

24.  
Enclosures.

22. No enclosure shall be allowed in any such premises where the public can assemble for any other purpose than to view the performance, except so far as the Council shall consider necessary for the provision of refreshment bars, or in the case of a theatre for the provision of a foyer.

25.  
Skylights.

23. All skylights, and the sloping sides of lantern lights, shall be protected by galvanized iron wire guards, securely fixed on the outside of such skylights or lantern lights.

26.  
Gas.

24. All such premises when lighted by gas shall have separate and distinct gas services and meters as follows—

- (a) To the stage;
- (b) To the auditorium;
- (c) To the staircases, corridors, and exits.

Such meters shall be placed in properly ventilated chambers of fire-proof construction.

All gas brackets shall be fixed without joints; and all burners within reach of the audience shall be fitted with secret taps, and be efficiently protected by glass or wire globes.

All gas burners within 3 feet of the ceiling shall have hanging shades of unflammable material to distribute the heat.

All gas pipes shall be made of iron or brass.

Where there is a stage or wings with scenery, the footlights or floats shall be protected by fixed iron-wire guards, and the burners shall be provided with glass chimneys.

The rows and lines, and gas burners in the wings (which must commence 4 feet at least from the level of the stage) shall be protected by fixed iron-wire guards.

All battens shall be hung by at least three wire ropes, and be protected at the back by a solid metal guard and wire fixed to a stiff iron frame at such a distance from the gas jets that no part of the scenery or decoration can become heated.

All movable lights shall be fitted with flexible tubes, and the gas in every case shall be turned off by the tap on the stage as well as by that on the flexible tube.

All flexible tubes shall be of sufficient strength to resist pressure from without.

An indicating gas plate shall be provided at a convenient place at the side of the stage.

27.  
Doors and fastenings.

25. All doorways used by the public shall be at least 4 feet 6 inches wide in the clear, with doors hung in two folds made to open outwards towards the thoroughfare or way.

All internal doors shall be so hung as not to obstruct, when open, any gangway, passage, staircase, or landing.

No door shall open immediately upon a flight of steps, but a square landing at least the width of the doorway shall be provided between such steps and such doorway.

All exit doors having fastenings shall be fastened by automatic bolts only, of a pattern to be approved by the Council; but where such doors are also to be used by the public for entrances, they shall be fastened with espagnolette or lever bolts only, of a pattern to be approved in each case by the Council, and fitted with lever handles at a height of 3 feet 6 inches from the floor.

All doors used for entrances, and all gates, shall be made to open both ways, and shall, when opened inwards, be locked back against the wall in such a manner as to require a key to release them.

All barriers and internal doors shall be made to open outwards, with no other fastenings than automatic bolts.

No locks, monkey-tail, flush or barrel bolts, or locking bars, or other obstructions to exit, shall be used on any doors, gates or barriers.

28.  
Ventilation.

26. All parts of such premises shall be properly and sufficiently ventilated in a manner to be approved by the Council.

All openings for ventilation shall be shown on the plans, and described in the specification, which shall be submitted to the Council for its approval.

29.  
Warming.

27. No fire-place shall be formed in any portion of the auditorium or stage of such premises.

All open fire-places or stoves in any other part of such premises shall be protected by strong fixed iron-wire guards and fenders, part of which may be made to open for all necessary purposes.



All heating apparatus shall be placed in a position to be approved by the Council, and enclosed upon all sides by brick walls not less than 9 inches thick, and shall be properly ventilated.

All hot water pipes or coils shall, where necessary, be recessed in the walls, or otherwise arranged so as not to diminish the clear width of the gangways.

Where such premises are heated by artificial means, the high pressure hotwater system with sealed pipes will be inadmissible, and either hot-air or the low pressure hot-water circulation system shall be adopted, having an open cold water supply cistern, and the pipes throughout the system shall be of galvanized wrought iron, with the exception of those in immediate contact with the boiler, which may be either of galvanized wrought iron or copper.

The boiler shall be made of wrought iron, copper, or mild steel, and shall be provided with a dead weight or other approved safety valve, which must be attached to the boiler by an independent galvanized wrought iron or copper pipe, and must not under any circumstances be fixed to the circulating pipes, and must be placed in such a position as will ensure protection from soot and dirt.

The term low pressure shall be understood to mean the pressure due to the vertical head of water between the boiler and the supply cistern.

28. All such premises containing a superficial area for the accommodation of the public of 1000 feet and upwards shall be provided with a sufficient number of hydrants, each of a diameter of not less than 2½ inches, to be connected by a 3-inch main with a Water Company's high pressure street main.

Each of such hydrants shall be provided with at least a 30-foot length of hose with fittings of the Metropolitan Fire Brigade pattern.

In all such premises where there is no constant supply of water, there shall be provided on the top of the proscenium wall, or at some other place to be approved by the Council, two cisterns, to be kept always filled with water.

Such cisterns shall be each capable of containing at least 250 gallons of water for every 100 persons of the audience to be accommodated in the building.

Such cisterns shall be properly protected from all danger from frost.

Fire mains shall be connected with such cisterns to hydrants to be fixed in such places and manner as may be approved by the Council.

29. Notice shall be given to the Clerk of the Council of any intended structural addition to, or alteration of, any such premises, in respect of which the Council may have granted a certificate under the said Act of 1878, to the effect that such premises were, on their original completion, in accordance with the Council's regulations.

Such notice shall be accompanied by plans, elevations and sections, block plan, and specification of the works to be executed similar to those required in the case of premises to be certified for the first time by the Council, and showing such intended addition or alteration.

The Council will, if necessary, cause a fresh survey of such premises to be made.

No doors, bolts or other fastenings, obstructions to the means of egress, flap seats or other means of diminishing or stopping up the gangways, shall be put, nor shall any alterations of a like nature be made to such premises without the previous consent of the Council being obtained thereto.

#### Part II. General.

30. Additional means of lighting, for use in the event of the gas or the electric light being extinguished, shall be provided for the auditorium, corridors, passages, exits, and staircases, by a sufficient number of oil or candle lamps, of a pattern to be approved by the Council, properly secured to an unflammable base out of the reach of the public.

Such lamps shall be kept alight during the whole time the public are in such premises.

No mineral oils shall be permitted to be used in such lamps.

31. Every theatre, and, where considered necessary by the Council, all other premises licensed by the Council, shall be connected with the nearest Fire Brigade Station by telephone.

32. All exit and other doors used by the public shall be indicated by painted notices in 3-inch white block letters upon a black ground.

Such notices shall be painted on the doors and walls at least 6 feet 9 inches above the floor.

The words "no exit" shall be painted at least 6 feet 9 inches above the floor, in 3-inch white block letters upon a black ground, upon all doors, in sight of the audience, which do not lead to exits.

30.  
Water  
supply.

31.  
Addition or  
alteration to  
premises.

32.  
Oil or candle  
lamps.

33.  
Fire alarm.



34.  
Precautions  
against fire.

33. Wet blankets or rugs, and buckets filled with water shall be always kept on the stage or in the flies, scene-docks, or wings, and attention shall be directed to them by placards legibly printed or painted, and fixed immediately above them.

Some person shall be held responsible by the management for keeping the wet blankets or rugs, and buckets ready for immediate use.

Hatchets, hooks and other appliances, for taking down hanging scenery in case of fire, shall be always kept in readiness for immediate use.

The regulations as to fire shall be always posted in some conspicuous place in such premises, so that all persons connected with such premises may be acquainted with such regulations.

### Part III. Electric Lighting.

35.  
Certificate.

34. Where the electric light is permitted in such premises, it shall be on condition that a competent electrical engineer do certify in writing to the satisfaction of the Council once in six months that the system is in proper working order.

36.  
Circuits.

(1.) All such premises when lighted by electric light shall have at least three separate and distinct circuits (a) for the stage (b) and (c) for the auditorium, corridors and exits.

The circuits referred to in (b) and (c) shall be so arranged that half the lights in each division of the auditorium and half those in each corridor and exit shall be on (b) and the other half on (c) circuit.

When the current is supplied by a public lighting company these circuits shall be taken separately from the street mains.

Under all circumstances complete metallic circuits must be employed.

Gas and water pipes shall never form part of any circuit.

The number of lamps shall be so sub-divided that no sub-circuit shall carry more than 65 amperes; and each sub-circuit shall start from a distributing board.

37.  
Conductors.

(2.) All conductors used within buildings shall be of copper, having a conductivity equal to not less than 98 per cent. of that of pure copper, and shall be so proportioned to the work they have to do that, if double the normal current be transmitted, their temperature shall not rise to above 150 degrees Fahr.

The conductors shall be insulated with pure and vulcanized india rubber.

The insulation resistance shall be not less than 300 megohms per statute mile, at 60 degrees Fahr., after one minute's electrification, when tested with at least 400 volts, and after 48 hours immersion in water.

The insulated conductors shall be protected on the outside by stout tape or braiding impregnated with preservative compound.

If it is desired to use any other means of insulation than that above specified, special permission shall be obtained from the Council, and no material shall be used which is not water-proof, or which will soften at a temperature below 170 degrees Fahr.

In all cases conductors conveying currents of high electro-motive force inside buildings, shall be specially and exceptionally insulated, and cased in, and the casing made fire-proof.

The positive and negative terminals connected to such conductors shall not be nearer to each other than 12 inches, and shall be efficiently protected from risk of contact.

Flexible conductors in connection with movable lights shall be insulated with vulcanized india rubber, and protected on the outside by a stout braiding; should any of these flexible conductors be damaged, it shall be at once replaced.

No circuit of this nature shall carry more than 10 amperes, and each circuit shall be protected by a double pole fuse.

38.  
Conductors,  
fixing and  
protection.

(3.) All conductors shall be efficiently protected from mechanical injury.

Where conductors pass through walls, fire-proof floors, or ceilings, they shall be protected by iron pipes or by glazed stoneware or porcelain tubes, and precautions shall be taken to prevent the possibility of fire or water passing along the course of the conductors.

In special cases, or where necessary for protection from the depredations of rats, mice, or other vermin, armour cables may be used. These need receive no further mechanical protection.

Lead covered cables shall not be used unless protected by external armour of iron or steel.

Metal fastenings for fixing conductors shall be avoided; but when unavoidable some additional covering shall be used to protect the conductor, unless armoured, from mechanical injury at the points of support.



If casing be used, it shall be of hard wood, and each conductor shall be laid in a separate groove; the cover shall be secured with screws.

Casings shall, as far as possible, be placed in sight, and the conductors shall always be accessible.

Joints in conductors shall be avoided, but when unavoidable, they shall be electrically and mechanically perfect. Soldering fluids shall not be used in making such joints.

(4.) All external conductors shall be specially insulated and laid in iron pipes properly jointed, and of ample size.

39.  
External  
conductors.

Such iron pipes shall be protected where necessary, and securely fixed and supported when not underground.

(5.) All exposed metal work, such as fittings, switch and fuse covers, &c., shall be efficiently insulated from the circuits.

40.  
Switches,  
cut-outs, &c.

All switches, cut-outs, ceiling roses, wall and floor sockets and lampholders, shall have unflammable bases.

All switches shall be of ample size to carry the currents for which they are intended without heating, and shall be so constructed that it will be impossible for them to remain in any position intermediate between the »on« and the »off« positions, or to permit of a permanent arc.

All circuits shall be efficiently protected by cut-outs, placed in positions easily accessible to the staff, but inaccessible to the public.

The main cut-outs shall be of such pattern and be fixed in such a position as to admit of quick replacement.

All circuits carrying a current of 20 ampères or more shall be provided with a cut-out on each conductor, and the two cut-outs shall not come in the same compartment.

All cut-outs shall be so constructed that fused metal in falling cannot cause a short circuit or an ignition.

All cut-outs shall be so marked as to show what circuit or lamps they control.

All wall or floor sockets shall be provided with fuses in their fixed portions.

The sockets for the stage shall be of hard wood with metal guards, care being taken to avoid risk of ignition, and they shall be of specially substantial construction.

(6.) Resistances for regulating the power of the lights shall be mounted on incombustible bases, and shall be so protected and placed at such a distance from any combustible material that no part of the resistance, if broken, can fall on such material.

41.  
Resistances.

Principal resistances shall be placed in a fire-proof room reserved for the purpose.

(7.) Arc lamps shall not be used inside buildings without special permission from the Council.

When they are used special precautions shall be taken to guard against danger from falling glass or incandescent particles of carbon.

42.  
Arc lamps.

All parts of the lamps, lanterns, and fittings which are liable to be handled (except by the persons employed to trim them) shall be insulated.

(8.) Where there is a stage, special care shall be taken that all works in connection with the lighting of the stage are carried out in as substantial a manner as possible.

43.  
Stage  
lighting.

No metal work in connection with the circuits shall be exposed or so fixed or constructed as to be liable to cause a short circuit.

Lamps on battens, footlights, &c., shall be protected by stiff wire guards, so arranged that no scenery or other inflammable material can come in contact with the lamps.

No readily combustible material shall be used in connection with any lamps on the stage in such a manner that it might come in contact with the lamps.

No soft or readily inflammable wood shall be used in connection with the lamps on the stage, and all wood shall be protected by unflammable material from the possibility of ignition by an arc between any two parts of the two conductors, or by heated particles from any conductor or part of a conductor which may connect together the two main conductors.

Where a number of lights, as in the footlights, battens, &c., are supplied under control of one switch, and protected by one single or double pole cut-out, as the case may be, the conductors shall be maintained throughout of such a section that they will be effectually protected by the cut-outs against heating.

The leads to the battens shall be specially guarded, particularly at the points where they join on to the battens, and a sufficient length shall be allowed to prevent the leads receiving any injury through any movement of the battens.



- The battens shall be suspended by at least three wire ropes attached to insulators on the battens.  
On no account shall the same battens be adapted for both gas and electric light.
44. Stage  
switchboard. (9.) A switchboard, containing all the necessary switches, cut-outs, and other fittings for the control and regulation of the stage lighting shall be fixed in some convenient position overlooking the stage.  
This board shall be inaccessible to all but the persons employed at such premises to work it.
45. Generating  
plant. (10.) Boilers, steam engines, gas engines and dynamos, when used for the supply of electricity to such premises shall be placed in such positions as shall be sanctioned by the Council.  
Gas engines shall be placed in rooms so adequately and continuously ventilated that no explosive mixture of gas can accumulate by any leakage through the engine in the event of any of the gas cocks being left turned on.  
A hood, connected with a pipe carried into the external air, shall be fixed over the ignition tube when this is used.
46. Batteries. (11.) Primary or secondary batteries shall be placed in rooms so adequately ventilated that no fan shall be necessary.  
The batteries shall be well insulated.
47. Transformers. (12.) Transformers used to transform either direct or alternating currents, together with the switches and cut-outs connected therewith, shall be placed in a fire and moisture-proof structure.  
Where the primary current is of high potential, such structure should be preferably outside the building.  
No part of such apparatus shall be accessible except to the persons in charge of its maintenance.  
No transformer which, under normal conditions of load, heats above 130 degrees Fahr., shall be used.  
Transformer circuits shall be so arranged that under no circumstances shall a contact between the primary and the secondary coils lead an electro-motive force of high pressure into the building. The term high pressure means in all cases pressure above 200 volts.
48. Insulation  
resistance. (13.) The insulation resistance of a system of distribution shall be such that the greatest leakage from any conductor to earth, when all branches are switched on, the lamps and motors being removed, shall not exceed one fifteen thousandth part of the total current intended for the supply of the said lamps and motors: the test being made at the usual working electro-motive force. Provided that this rule shall not be held to justify a lower insulation resistance than 5000 ohms, nor to require one higher than 5 megohms.
49. Supervision. (14.) The generating plant and switching gear shall be in the hands of thoroughly competent manipulators, and the engine room (if any) shall be inaccessible to the general public, and shall where possible have an independent entrance.
50. Plan of  
wiring. (15.) A plan of the wiring shall be always kept in a prominent position in the office of the manager of such premises.

## Part IV.

51. Power to  
modify or  
dispense with  
these  
regulations. 35. The Council reserves to itself the right from time to time, in any special case, to modify or dispense with these regulations.  
All applications for dispensations or modifications shall be made in writing, addressed to the Clerk of the Council, and contain a statement of the facts of the particular case, and the reasons why it is desired to modify or dispense with these regulations as applicable thereto.
52. Person  
responsible. 36. The person or persons in whose name the licence is granted will be held responsible by the Council for the carrying out of the above regulations, for the due management of such premises, and for the safety of the public and his or their employees in the event of fire.

## 11. Kapitel.

## Beispiele.

365. Uebersicht. Nachdem die für die wichtigsten Teile eines Theaters in Betracht kommenden Beziehungen und Erfordernisse eine eingehende Erörterung gefunden haben, erübrigt es noch, unter Zugrundelegung der gewonnenen Gesichtspunkte, einen Ueberblick