

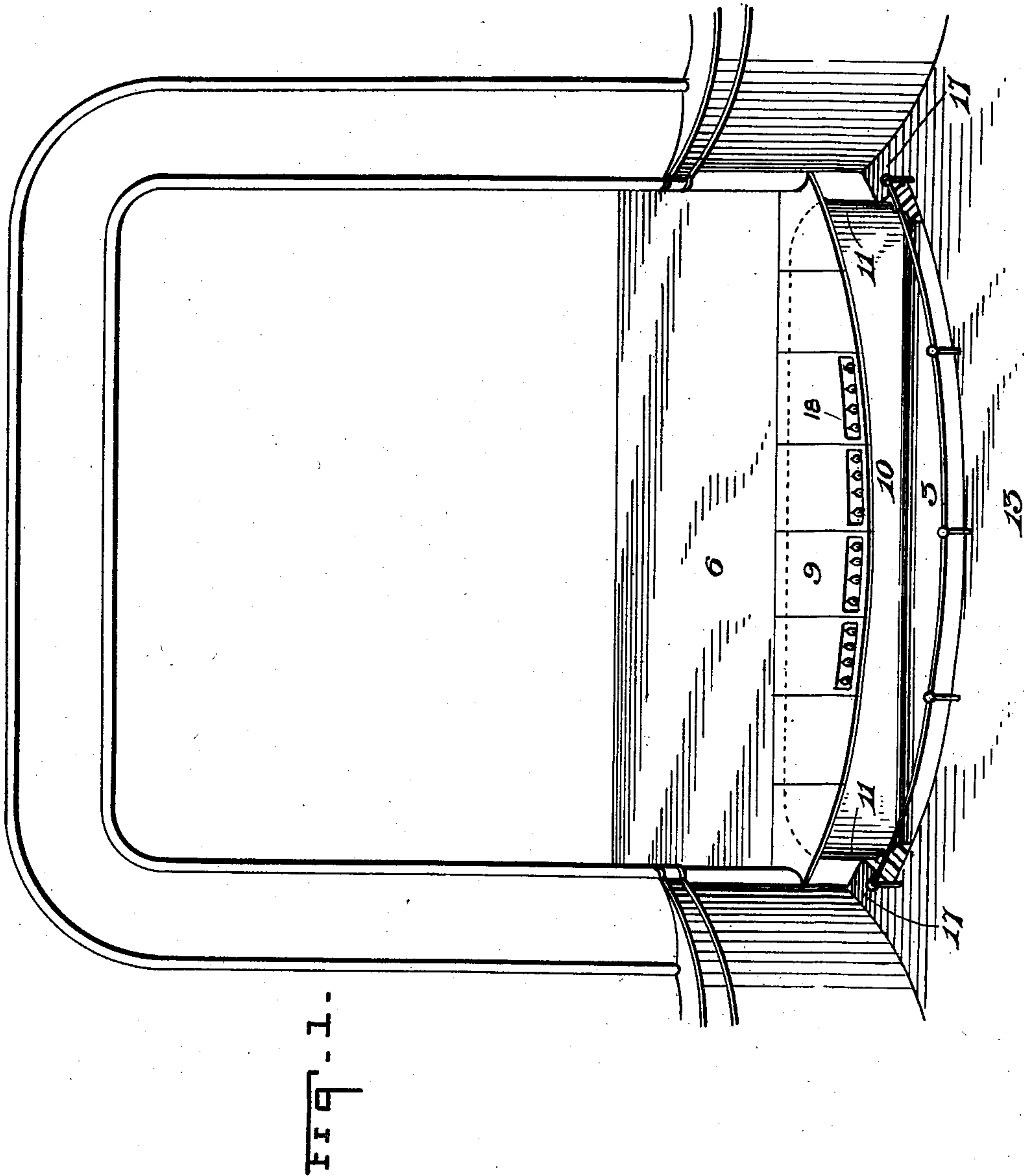
No. 754,711.

PATENTED MAR. 15, 1904.

A. SCHLECHTER.
THEATER BUILDING.
APPLICATION FILED DEC. 10, 1903.

NO MODEL.

3 SHEETS—SHEET 1.



Witnesses:

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3 SHEETS—SHEET 2.

Fig 2.

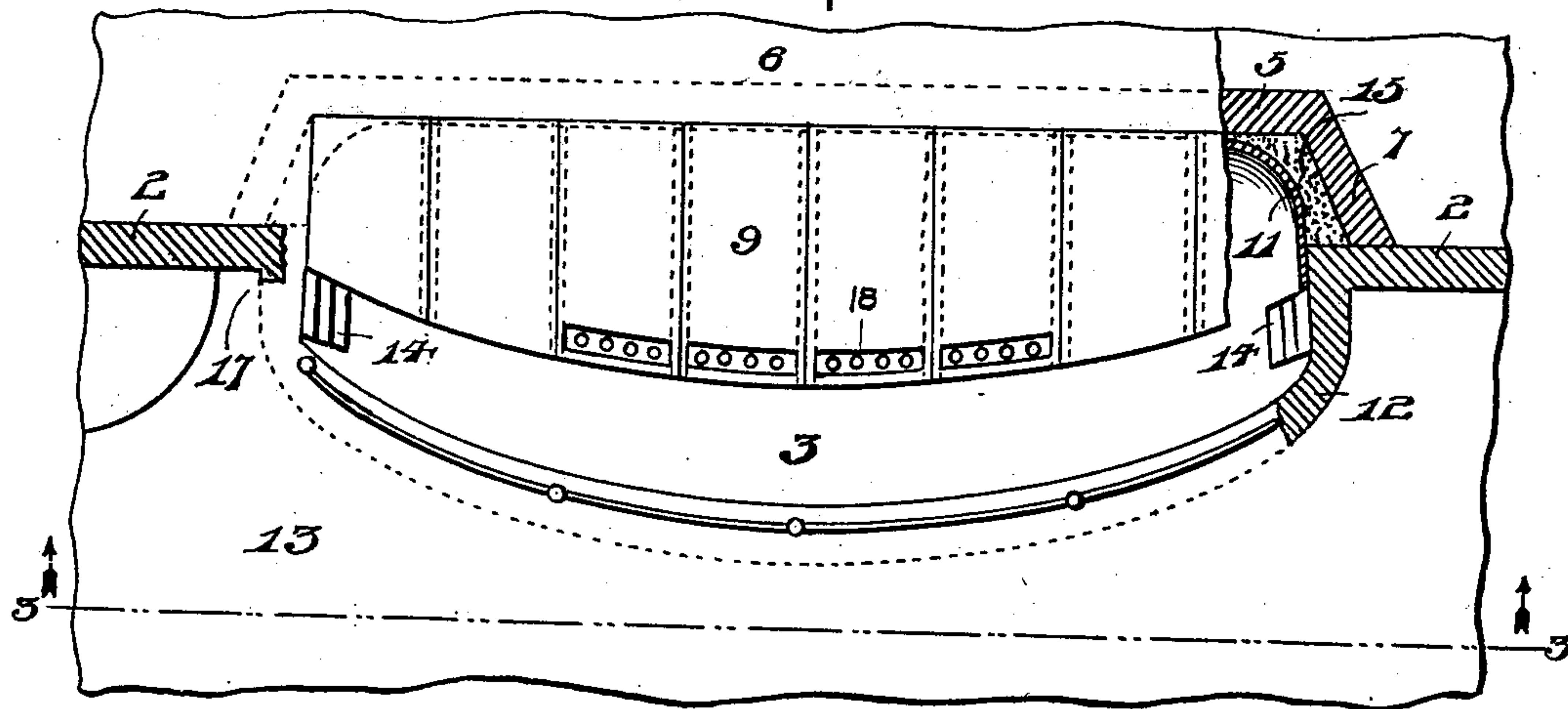
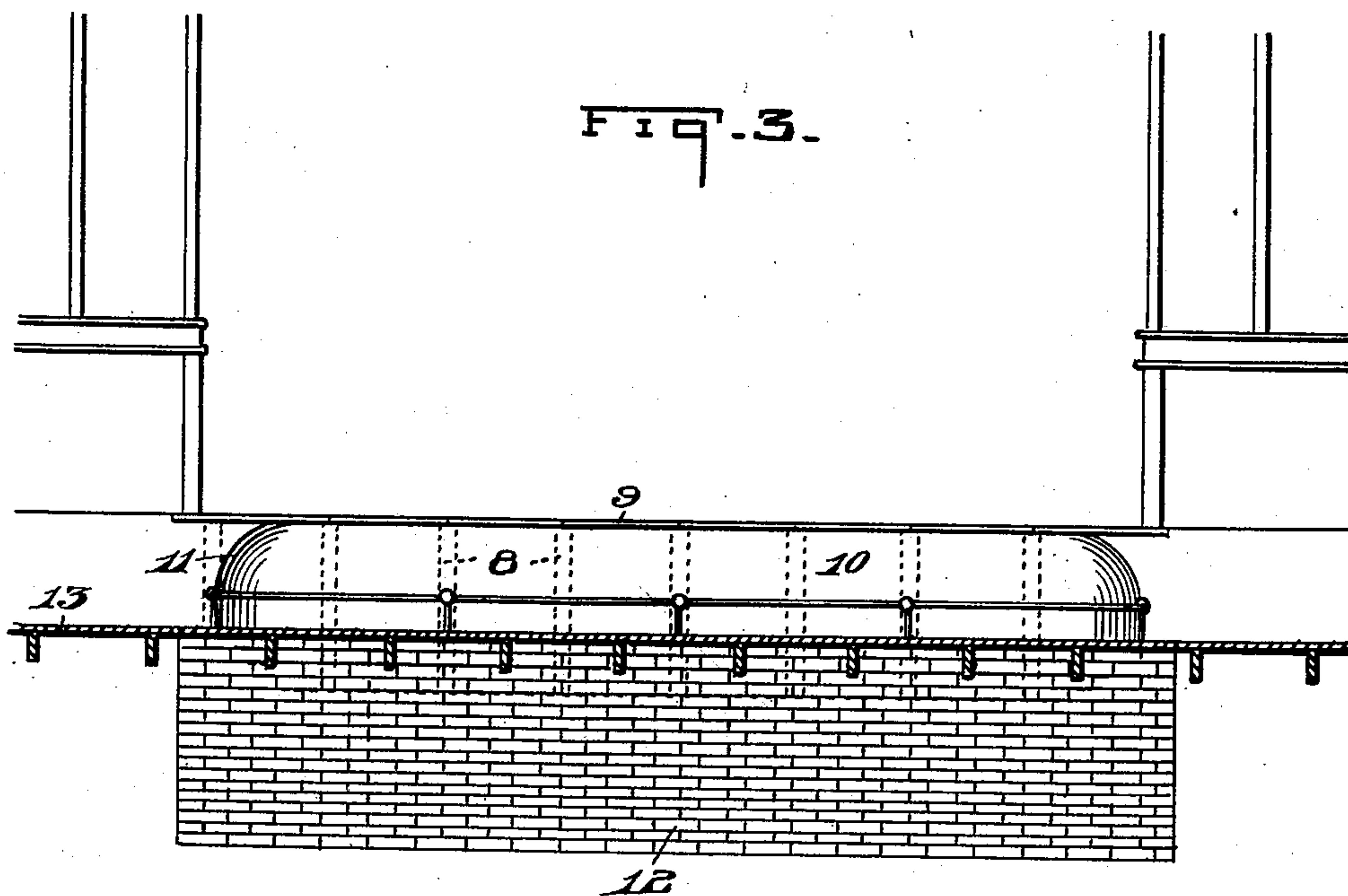


Fig. 3.



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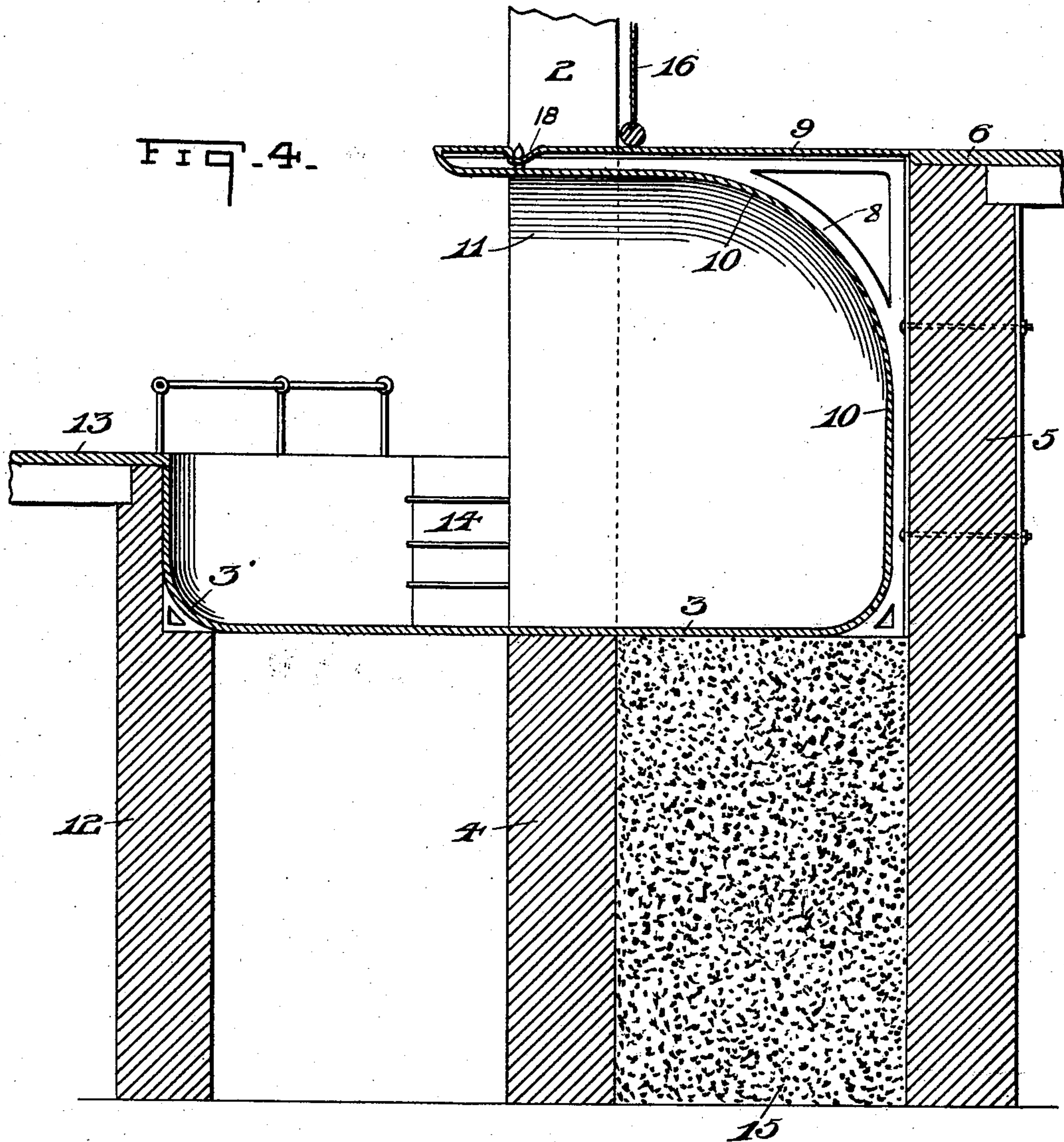
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3 SHEETS—SHEET 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

ADOLF SCHLECHTER, OF ALLEGHENY, PENNSYLVANIA.

THEATER BUILDING.

SPECIFICATION forming part of Letters Patent No. 754,711, dated March 15, 1904.

Application filed December 10, 1903. Serial No. 184,537. (No model.)

To all whom it may concern:

Be it known that I, ADOLF SCHLECHTER, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Construction of Theaters, &c., of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to the construction of theaters, concert-halls, and similar auditoriums; and one object is to so arrange the orchestra-pit that the musicians even when standing will neither interfere with or obstruct the
15 view of the audience nor disconcert the performers.

Another object is to so inclose the orchestra-pit save at the front and to so shape the interior thereof that all sound emanating therefrom will be thoroughly disseminated throughout the entire auditorium, there being no escape for any of the sound-waves at the rear of the pit and no opportunity for them to become pocketed or interrupted, as the pit is
25 practically devoid of corners, angles, and irregular surface decoration.

A further object of the invention is to provide a fireproof construction below and preferably supporting the front portion of the
30 stage, so that in the event of fire it is impossible for the flames to pass to or from the under portion of the stage, and as theater fires usually have their origin in the stage portions of the buildings the said fireproof construction, together with the proscenium-wall and
35 fire-curtain, holds the flames in check a sufficient time to enable the audience to depart in safety and in very many instances is sufficient to confine the fire to the stage.

40 In the accompanying drawings, Figure 1 is a perspective view of a portion of the interior of a theater constructed with my improved orchestra-pit and stage. Fig. 2 is a plan view, partly in section. Fig. 3 is an elevation and section taken on line 3 3 of Fig. 2.
45 Fig. 4 is a vertical cross-sectional view of the front of the stage and orchestra-pit.

Referring to the drawings, 2 designates the proscenium-wall, which at the base extends

the whole length of the orchestra-pit and reaches to the floor 3 of the latter, as indicated at 4, Fig. 4. At the rear of and parallel with wall 4 is fire-wall 5, which reaches to and supports the stage-floor 6. Wall 5 may vary in length, the length here shown being substantially the same as the width of the proscenium-arch. The ends of wall 5 connect with wall 2 by the short walls 7.

Secured to the front of wall 5 are brackets 8, which extend through and beyond the line of wall 2, and resting thereon are the iron or other non-combustible plates 9, which form a continuation of the wood stage-floor 6 and constitute the front of the stage. Secured to the under portions of the brackets are the ceiling and rear wall 10 of the orchestra-pit, the same being curved at the top and bottom, as shown, to avoid corners and other sound-confining recesses. The end walls 11 of the pit are also curved in egg-shell form, and a similar curvature 3' is formed at the juncture of pit-floor 3 and front wall 12.

13 is the parquet-floor, supported at the front by wall 12, and leading thereto from either end of the pit are steps 14, which constitute the only means for entering and leaving the pit.

My preferred construction herein disclosed places the greater portion of the orchestra-pit beneath the forward portion of the stage, there being sufficient head-room for the musicians to stand without inconvenience. The walls of the pit are preferably formed of or covered with white marble or tile, which is pleasant to the sight as viewed from the auditorium. The surface of said walls is smooth and continuous or unbroken, there being no doors, windows, or other openings therein, and being devoid of irregular decorations and draperies the sounds are projected in full and unbroken volume into the auditorium, the absence of corners or angles preventing the pocketing and distortion of sound-waves, while the curved or rounded surfaces of the pit-walls add materially to the tone and volume of the music, so that the most delicate strains may be distinctly heard in all portions of the house.

With a considerable portion of the orchestra-pit extended beneath the stage it does not encroach so far on the parquet as heretofore, thereby increasing the available area of the latter. The view of the audience is not obstructed by the musicians, and as they are almost entirely obscured from the performers the latter cannot be annoyed or disconcerted by their presence.

10 The space between walls 4 and 5 and walls 7 and 11 is filled with sand, clay, or other fire-resisting material 15, which forms an effective barrier to the passage of flames either to or from the stage portion of the building. Wall 15 5 at the rear of the pit and forming the back thereof is sufficiently thick to resist a fire, however intense. The usual wood floor 6 terminates a considerable distance inward from the curtain-line and is continued by the metallic plates 9, upon which the fire-curtain 16 drops, so that there is no material that can burn at the base of the curtain and weaken or destroy the latter.

As at present constructed, the stage extends 25 beneath and beyond the curtain, and the back wall of the orchestra-pit dropping from the front edge of the stage is generally constructed of inflammable material and provided with two or more doors leading to the space beneath 30 the stage, so that however effective the fire-curtain may be, in the event of fire on or beneath the stage it almost immediately breaks through beneath the curtain-drop and into the auditorium, owing to the strong upward draft in the latter. My improved construction renders that portion of the structure fireproof that heretofore has been most vulnerable and at the same time keeps the flames away from the fire-curtain. Combined with 40 this fireproof construction is the orchestra-pit of improved design, possessing the advantages above indicated.

Various minor details concerning the orchestra-pit—such as lighting, surface decoration, seating of musicians, &c.—may be varied to suit individual tastes, and the same is true as regards various details directly concerning my invention—such, for instance, as the relative widths of the orchestra-pit and 50 parquet. In the present adaptation the parquet is somewhat wider than the pit and at each end of the latter forms a narrow passage 17, which constitutes a landing for steps 14, also a space for a removable ladder or steps 55 to the stage, which may be utilized for emergency and other purposes, as may be required. Plates 9 may be slotted at 18 to receive the usual footlights.

I claim as my invention—

60 1. A theater constructed with an orchestra-pit extending rearward beneath the stage and through the plane of the proscenium-wall.

2. A theater constructed with an orchestra-pit extending rearward beneath the stage, the 65 walls of that portion of the orchestra-pit be-

neath the stage being rounded to prevent the formation of sound-retarding corners or angles.

3. A theater constructed with an orchestra-pit extending rearward beneath the stage, the 70 pit being entirely closed save at the front.

4. A theater constructed with an orchestra-pit extending rearward beneath the stage, the pit being closed save at the front and having its walls rounded to avoid corners or angles. 75

5. A theater constructed with an orchestra-pit extending rearward beneath the stage and accessible from the front only, the walls thereof being smooth and continuous or unbroken by doors, windows, or other openings. 80

6. A theater constructed with an orchestra-pit extending through the plane of the proscenium-wall, said wall extending the whole length of the orchestra-pit and reaching upward to the floor thereof. 85

7. A theater constructed with an orchestra-pit extending through and partially supported by the base portion of the proscenium-wall which reaches to the floor thereof, the stage overhanging the orchestra-pit, and a fire-wall 90 at the rear of the said pit and reaching to the stage-floor.

8. In a theater, the proscenium-wall, the orchestra-pit extending through the plane of said wall with the lower portion of the wall 95 extending the entire length of the pit and reaching upward to the floor thereof, a fire-wall back of the proscenium-wall and the orchestra-pit and extending upward to the stage-floor, and a filling of non-combustible material between said walls. 100

9. In a theater, the proscenium-wall, the orchestra-pit extending through the plane of said wall with the lower portion of the wall 105 extending the entire length of the pit and reaching upward to the floor thereof, a fire-wall back of the orchestra-pit and proscenium-wall and connecting at its ends with the latter, the fire-wall reaching upward to the stage-floor, and a filling of non-combustible material 110 between said walls.

10. In a theater, the stage thereof constructed with a non-combustible floor in the plane of the fire-curtain.

11. In a theater, the proscenium-wall, the 115 main body of the stage-floor stopping short of said wall, and a non-combustible floor portion forming a continuation of the main body of said floor and extending to said wall to receive the fire-curtain. 120

12. In a theater, the proscenium-wall, an orchestra-pit extending backward through the plane of said wall, and a stage-floor having a non-combustible front portion overhanging the orchestra-pit and adapted to receive the 125 fire-curtain.

13. In a theater, the proscenium-wall, a fire-wall at the rear of and parallel with the proscenium-wall and extending upward to the stage-floor, the stage-floor having a non-com- 130

bustible front portion extending to the proscenium-wall and adapted to receive the fire-curtain.

14. In a theater, the proscenium-wall, a fire-wall at the rear of the proscenium-wall and reaching upward to the stage-floor, forwardly-extending floor-supports secured to the fire-wall, and the stage-floor having a non-combustible front portion sustained by said supports and adapted to receive the fire-curtain.

15. In a theater, the proscenium-wall, a fire-wall at the rear of the proscenium-wall and extending upward to the stage-floor, an or-

chestra-pit extending through the plane of the proscenium-wall and rearward to the fire-wall, forwardly-extending floor-supports secured to the fire-wall and overhanging the orchestra-pit, and the stage-floor having a non-combustible front portion sustained by said supports.

In testimony whereof I affix my signature in presence of two witnesses.

ADOLF SCHLECHTER.

Witnesses:

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ALEX. S. MABON.