

(No Model.)

J. H. SMITH.
EXITS FROM THEATERS.

No. 254,717.

Patented Mar. 7, 1882.

Fig. 1.

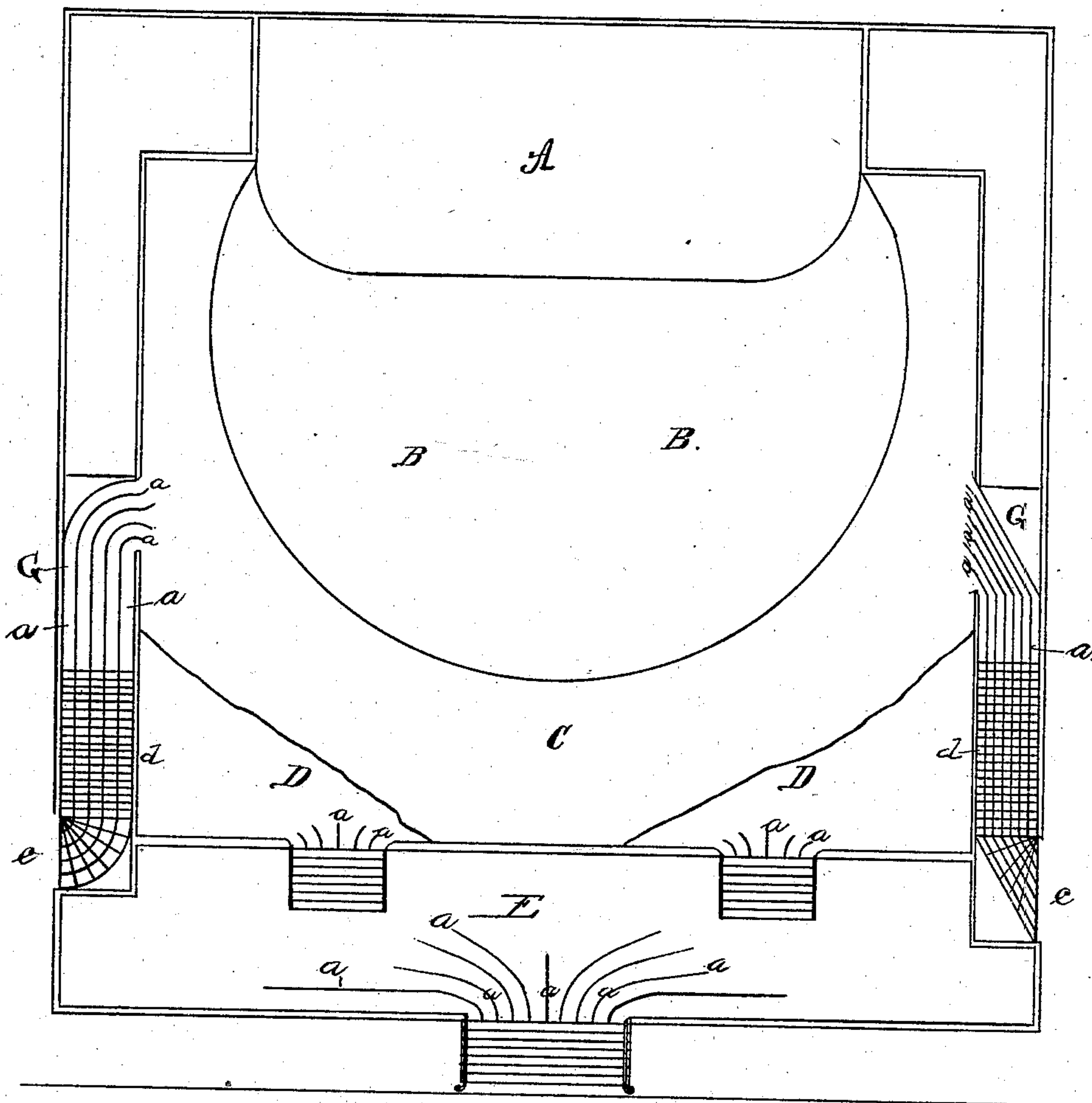
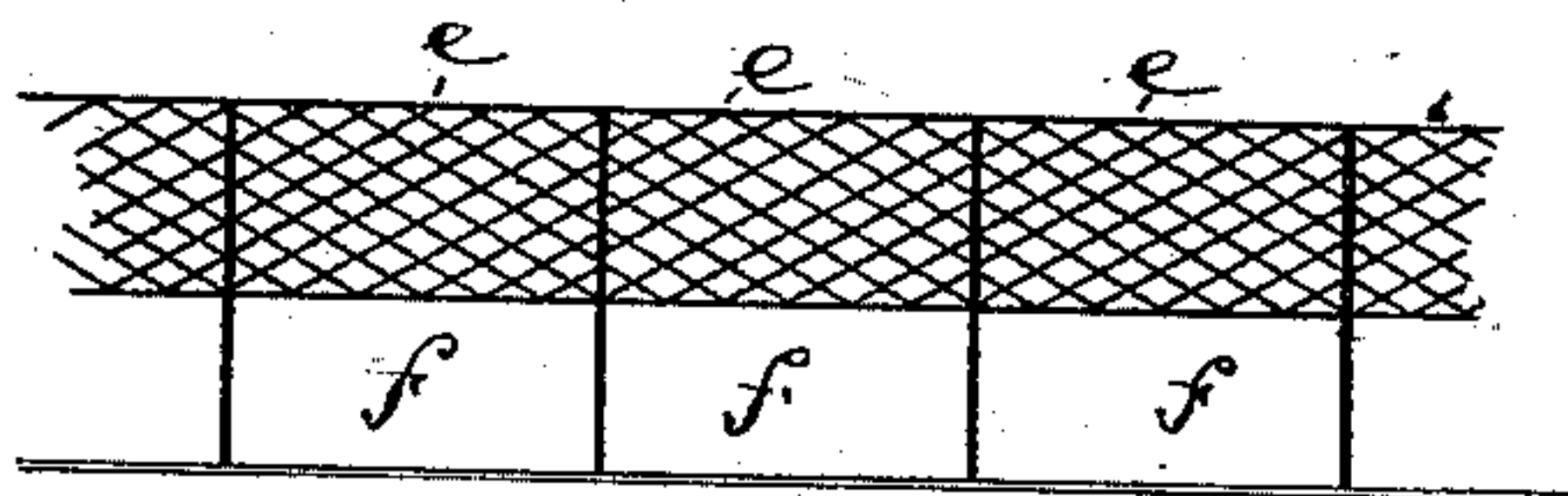


Fig. 2.



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EXIT FROM THEATERS.

SPECIFICATION forming part of Letters Patent No. 254,717, dated March 7, 1882.

Application filed December 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. SMITH, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have made Improvements in the Means of Exit from Theaters, Opera-Houses, Halls, &c., of which the following is a specification.

This invention relates to making a better and safer egress possible through the doorways, hallways, stairways, &c., of public places, like opera-houses, theaters, halls, &c., and is more particularly for preventing in case of fire, panic, &c., the loss of lives always caused by the doorways, hallways, and stairways becoming clogged by people mad to escape, who not only sacrifice themselves, but prevent, by blocking up such places of egress, in consequence of their struggles to escape, all those behind from getting out, and who become suffocated in a short time.

This invention does not relate to a mechanical fire-escape, but only simple devices to aid audiences in getting out by the usual means of exit provided in all houses.

The invention consists in dividing such doorways, openings, hallways, stairways, and especially those leading to the galleries, into long or short lines or divisions by means of partitions extending back from the stairway or hall into the room, gallery, or vestibule, so that said passages will allow in width but one person to pass along, each following the other in single file, thus effectually preventing two even from getting abreast in the same division, and thereby making it impossible to clog them by contact of bodies. From the main doorways on the lower floors, leading to dress-circle, parquette, orchestra, &c., the lines or divisions need only be a series of iron vertical open-work, but strong, partitions, or strong wire attached to iron posts. For example, if the width of the doorway allows for four persons abreast, three partitions only will be needed, these taking up the middle space, leaving an exit-space each side. These lines should extend a short distance into the lobby, orchestra, or gallery, as the case may be, and being entered by those desirous of getting out, but one abreast could file through each opening, and though hundreds might be behind they could not possibly block these lines up,

as each partition would divide them into single files, preventing contact in such passages, which is the great thing, and thereby any jam or clogging would be impossible. In the case of the galleries, where the hallways and stairways are usually narrow, I purpose extending these partitions the entire length of such halls and stairways from within the doorways clear to the street, if necessary. By this arrangement these passages could not become clogged, as they are always now in case of fire, &c., as there could be no contact of bodies, but a clear way for all in single files in as many lines as the width of the passages would allow to be erected. A great advantage of such construction is that in case of darkness or smoke these partitions would aid the people in finding their way out of such galleries and halls by simply following the wall of the partition on either hand.

Experience has taught that fire-escapes on the outside of buildings such as theaters, iron curtains, non-combustible scenery, tanks of water, &c., are of little avail in cases of panic, and that the greatest loss of life is caused by blocking up the narrow passages and doorways, by which all those behind are destroyed from inability to get forward in consequence of passages and exits being blocked by human beings wedged in and trampled on until they become an immovable mass.

In the drawings, Figure 1 represents a top plan of a theater with the roof removed, and Fig. 2 a side elevation of one partition.

A indicates the stage; B, the parquette; C, the gallery; D D, the hall and entrances to the family-circle, and E the hall and entrance to parquette, &c.

a a a represent lines of vertical partitions set in the doorways, their inner ends curved, as shown, and extending back from the stairway or hall into the room, gallery, or lobby, to make entrance therein between easier, especially from the sides of the halls, &c., the outer ends of these iron partitions usually coming flush with the walls of the doorways, &c., for as soon as the people are through such doorways, &c., danger of clogging is past. In the case of the galleries C these partitions would extend from the doorways through halls and stairways to the street-exits *c c*, as shown.

dd represent stairs in passage-ways G. Other parts of the house, like the stage-entrance, &c., may be also subdivided by such means—in fact, anywhere where danger of clogging exists or is possible. In some doorways these partitions might be removable, but to be always put in at night or previous to any performance. The expense of putting in these dividing-partitions would be small compared to fire-escapes and other devices now in use, and would be permanent, and could be made very ornamental in design, and in colors and gilt.

In Fig. 2 one of the iron and wire vertical divisions is shown, giving a complete protection, so far as the upper part of the person is concerned, by the screen-work *e*, leaving spaces *f* open below, so that getting from one to the other could be done by merely stooping down. This is in case of more people getting into one or more lines than in the others. Those behind in line can therefore get into the next ones, and persons behind them can also get into those less filled. Openings in the longer divisions may be made for ordinary use.

I claim—

1. The exits from public buildings provided with narrow passage-ways, allowing the audience to pass out single file, said passage-ways extending a greater or less distance into the corridors or rooms from the exits, and flaring at the inner ends thereof for a short distance in order to more readily receive the bodies of the outgoing crowd, as set forth.

2. The herein-described divisions for the exits of public buildings, placed at suitable distances apart across the entire corridor and extending from the exits of the several departments or portions of the building separately down the corridors and stairways to the final opening to the street, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN H. SMITH.

Witnesses:

J. R. DRAKE,
WM. H. RICE.