March 15, 1955 E. W. HOFFMEISTER 2,703,910

AMBULATORY AMPHITHEATRE

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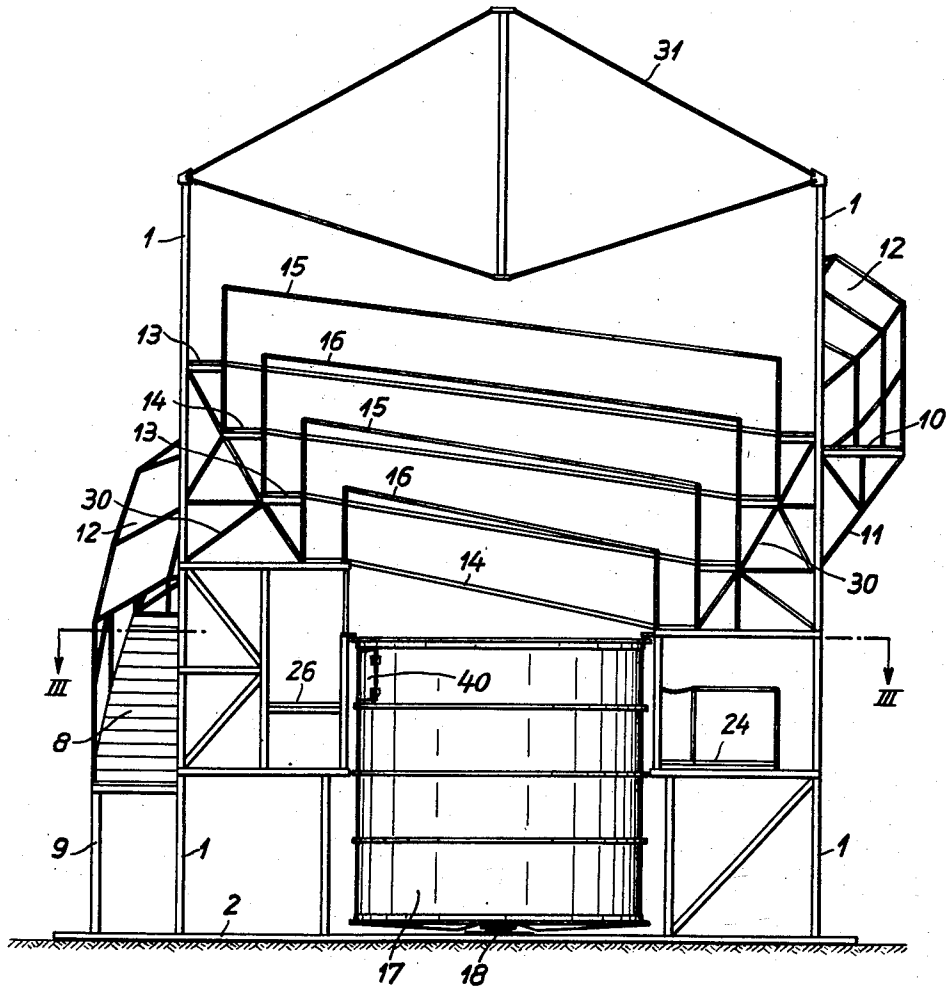
Fig.1



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AMBULATORY AMPHITHEATRE

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Fig. 2

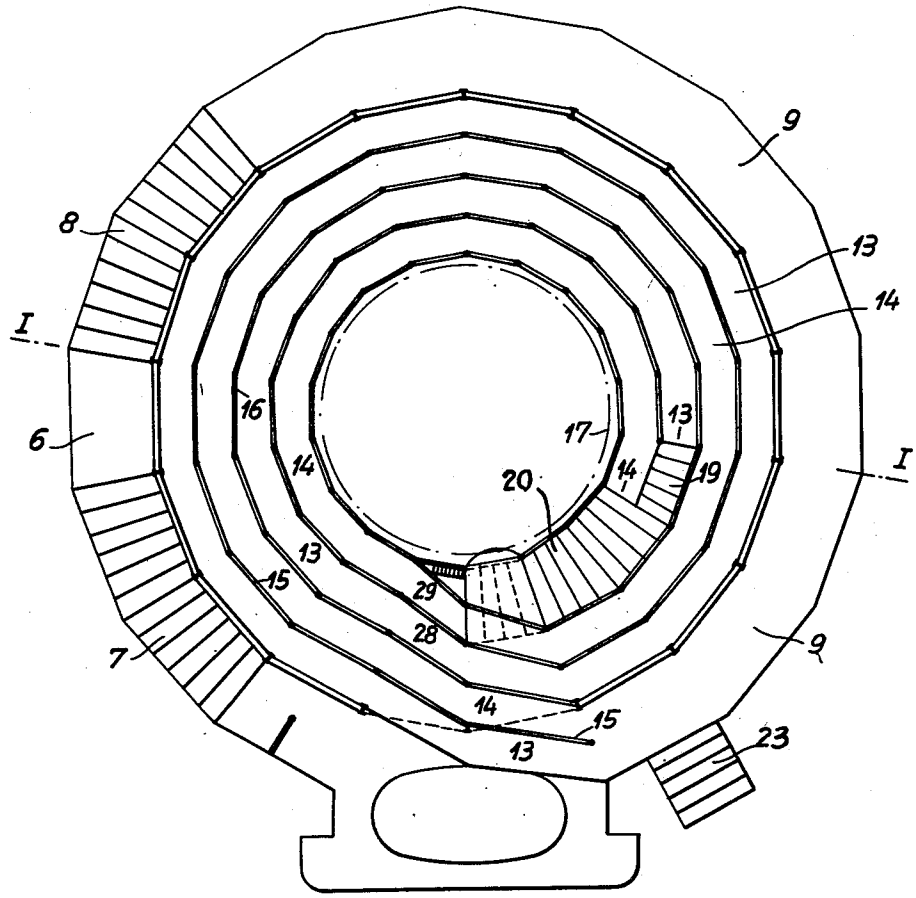

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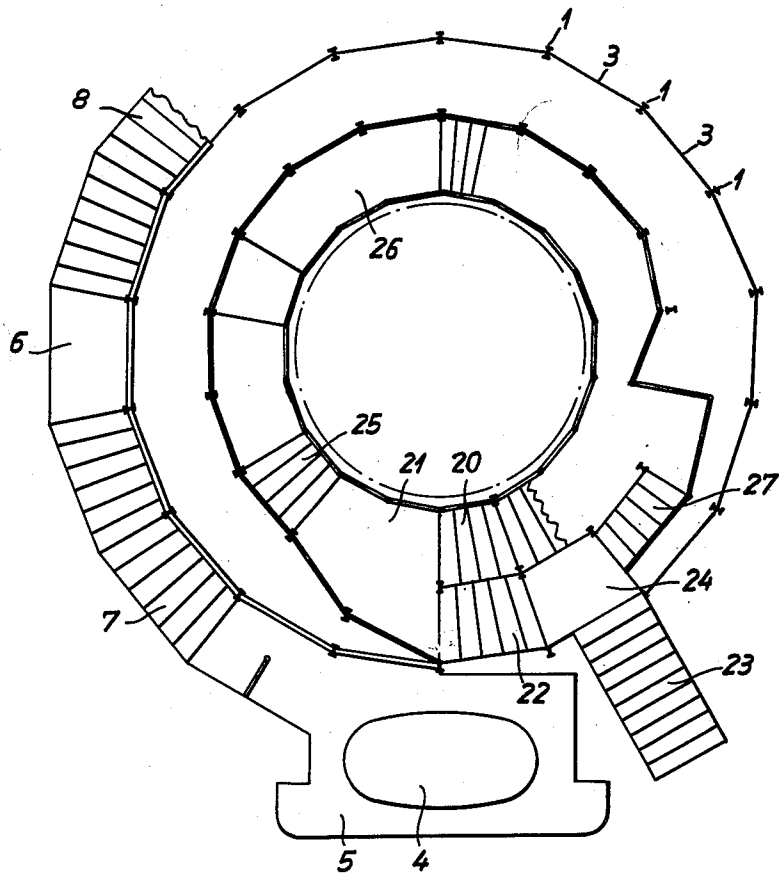
Fig. 3



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AMBULATORY AMPHITHEATRE

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Application January 11, 1952, Serial No. 266,051

5 Claims. (Cl. 20—1.12)

The invention concerns ambulatory amphitheatre structures wherein inclined galleries, for audiences composed of stationary and moving spectators, surround an arena or demonstration space on all sides.

The invention seeks to provide simple and straightforward gallery construction which not only enables all the spectators on the gallery to view the arena from all positions, but which also facilitates a continuous replacement of the audience as required. When the same performance is to be repeated in the arena of an ambulatory amphitheatre continuously at relatively short time intervals, the economic success of the business depends very largely on replacing a considerable part of the audience after each performance.

According to the invention, starting from the highest level of the amphitheatre two or more galleries separated from one another by balustrades extend adjacent one another and spaced from one another in vertical disposition in the manner of a multiple passage conical spiral, and are so arranged that the spectators travel round the arena in two or more, columns, each column using one of the galleries, before reaching the exit.

With a given holding capacity of the structure, i. e. with a given total length of galleries available, the invention considerably shortens the path through which the spectators must pass when descending from the highest level of the amphitheatre to the exit. By arrangement of two adjacent spiral paths separated from one another this path is halved, by providing three substantially spiral galleries the length of the path a spectator has to walk down is only one third of the total length of the galleries. For a given average walking speed the time taken by a spectator for the transit through the amphitheatre is correspondingly reduced.

Since the arrangement of the paths in the form of spatial spirals necessitates certain constructive complications for the erection of the amphitheatre structure, a simplified form of construction of the invention is characterised in that individual convolutions of the paths are circular in plan, and hence descend in helical lines and in each case cross by means of an inclined connection into the next following narrower path convolution.

The invention will be described further, by way of example, with reference to the accompanying drawings, in which:

Fig. 1 is a vertical section of an ambulatory amphitheatre structure viewed on the line I—I of Fig. 2;

Fig. 2 is a plan of the structure with roof removed; and

Fig. 3 is a horizontal section on the line III—III of Fig. 1.

The side wall of the actual amphitheatre housing is formed from stanchions **1** which are disposed approximately in a circle and stand on beams **2**, which are suitably arranged so as to lie on the earth floor. The wall surfaces **3** lying between the stanchions **1** are formed, for example, of sail-cloth which is stretched between the stanchions. Outside the side walls of the amphitheatre housing the pay office stands on a stage **5**, from which a gangway **6** in the form of a helical path leads up to and around the wall of the amphitheatre housing and is continued up to the highest level. This gangway comprises at its start the stairs **7** and **8** which are supported on the floor platform **2** by means of stanchions **9**, while the upper part of the path is constituted by an inclined rising runway **10**, which is attached by means of

a bracket-like support structure **11** externally to the main stanchions **1**. The whole gangway **6** is covered over by a roof or awning **12**, which can be formed of widths of sail-cloth.

At the position at which the spiral path reaches its highest point, it forks into two galleries **13** and **14**, which extend adjacent one another as a coincal spiral having multiple paths disposed in mutually spaced height relationship. These adjacent paths are separated from one another by balustrades **15** and **16** so as to prevent the spectators changing paths, and to enable them to rest on or against these balustrades when viewing the performance. It will be noticed that the galleries **13** and **14** are much narrower than the runway **10**.

In the example shown, the performance takes place in an upwardly open drum **17** which is rotatable about a vertical axis **18**. The spectators, who enter the amphitheatre at the beginning of the galleries **13** or **14**, are enabled to look down into the rotating drum from all positions on these two galleries.

The kind of exhibition and the construction of apparatus provided therefor is immaterial as regards the present invention. The drum **17** is therefore indicated only by chain-dotted lines in Figs. 2 and 3. It can obviously be replaced by other forms of apparatus.

At the end of the gallery **13**, which is disposed somewhat higher than the adjacent gallery **14**, the spectators coming from the gallery **13** arrive by way of a short stair **19** at the level of the gallery **14**. After this the spectators coming from both galleries **13** and **14** meet on a main exit platform **21** (Fig. 3) by way of a wide stair **20**.

On platform **21**, the exit from the galleries branches. One branch consists of wide stairs **22** and **23** and an intermediate platform **24** which lead down to the ground and the open air. Another branch leads down from the other side of the platform **21** by way of a stair **25** to a circular path **26**, which lies below the upper edge of the drum **17** and thus enables spectators to get to the interior of the drum through a door **40** in the vertical wall of the drum, in case some of the spectators may wish to ride in the drum. From the round path **26** one arrives by way of the stair **27** at the intermediate platform **24** and from there likewise by way of the stair **23** at the exit.

With the example shown the spectators on traversing the galleries **13** and **14** move nearly twice around the arena or central field of the amphitheatre formed by the drum **17**.

In the illustrated example these paths have circular plan and inclined cross galleries **28** and **29** are provided, which lead from a surrounding gallery of larger diameter to the adjoining surrounding gallery of smaller diameter.

The galleries **13** and **14** are carried by a suitable support structure **30**. At the top the amphitheatre is covered by a roof **31**, which likewise can be formed from stretched sail-cloth.

I claim:

1. An ambulatory amphitheatre comprising a substantially circular arena, a plurality of concentric gallery portions of substantially helical shape surrounding a major part of the circumference of said arena and being so disposed in relation to one another as to form outwardly ascending steps, inclined gallery portions surrounding the remaining minor part of the circumference of said area, each of said inclined gallery portions connecting one end of a first one of said concentric gallery portions with the opposite end of another one of said concentric gallery portions at least two steps above said first concentric portion.

2. A structure as claimed in claim 1 further comprising an entrance to said arena, an exit common to as many concentric gallery portions as there are steps over which any one of said inclined gallery portions extends, said exit including two branches, one of said branches leading to the outside and the other branch being connected to said entrance of said arena.

3. An ambulatory amphitheatre comprising an arena, a plurality of adjacent separate viewing galleries rising in receding convolutions and in the same direction around said arena, said plurality of galleries when considered in section having the relation of steps outwardly ascending, a common access to and a common exit from said

galleries, whereby spectators admitted to the amphitheatre will be caused to travel around in at least two distinct columns.

4. A structure as claimed in claim 3, said galleries being so constructed and arranged that all spectators thereon are able to view the arena from all positions, said common access being at the upper ends, and said common exit being at the lower ends of said galleries, said access and said exit being approximately as wide as the total width of said galleries.

5. A structure as claimed in claim 3, further comprising means for separating said galleries from one another, each gallery passing around said arena more than one complete turn.

References Cited in the file of this patent

Architectural Form, January 1946, page 85.