

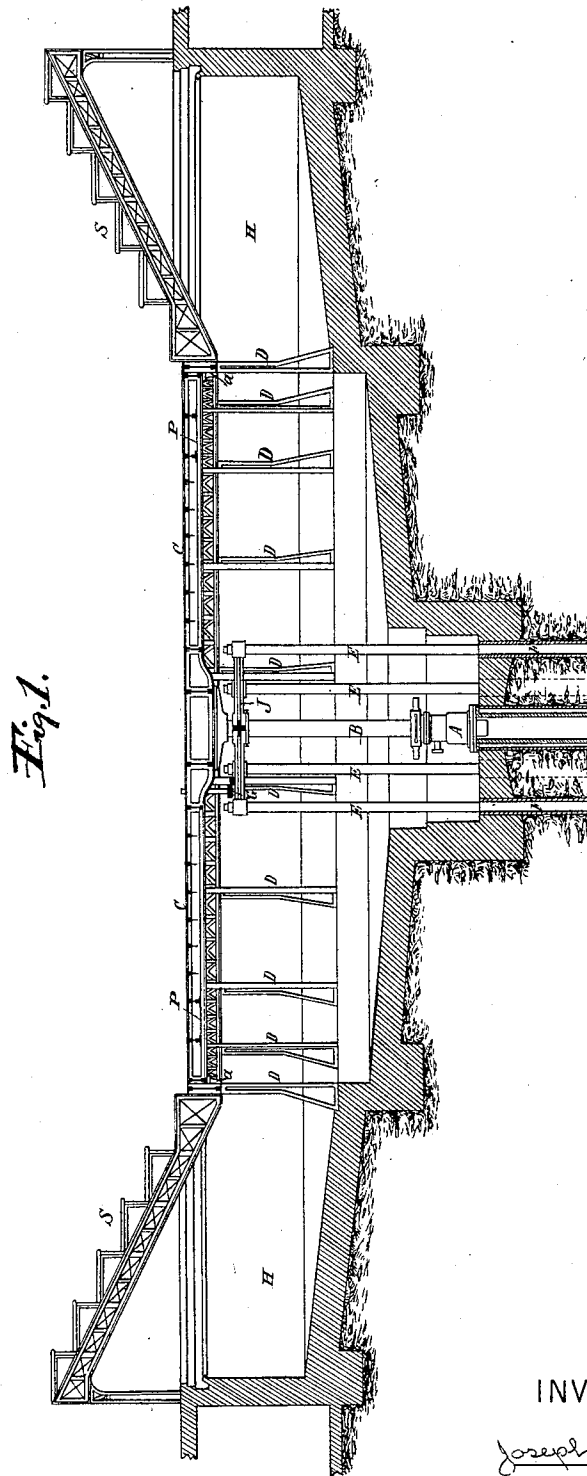
(No Model.)

2 Sheets—Sheet 1.

J. OLLER.
CIRCUS.

No. 367,055.

Patented July 26, 1887.



WITNESSES:

E. B. Bolton
Geo. Baindon

INVENTOR:

Joseph Oller

By his Attorneys,

Burke, Brainerd & Bennett

(No Model.)

2 Sheets—Sheet 2.

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Fig: 2.

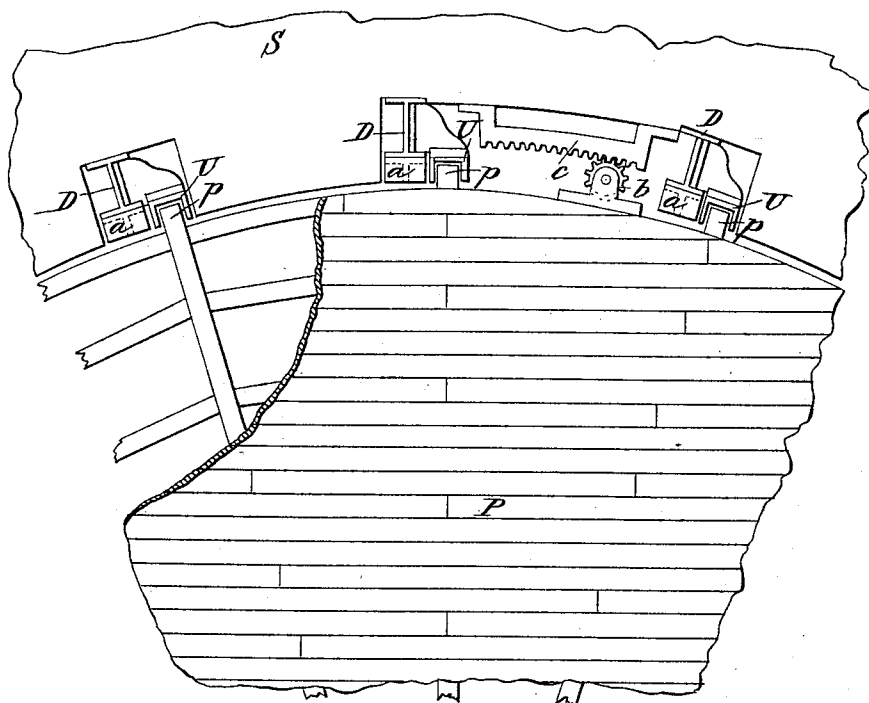
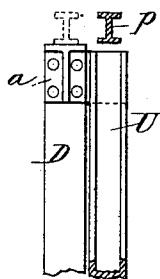


Fig: 3.



WITNESSES:

John A. Kennie.
George H. L. L. L.

INVENTOR:

Joseph Oller.

By his Attorneys,

Burke Fraser & Bennett

UNITED STATES PATENT OFFICE.

JOSEPH OLLER, OF PARIS, FRANCE.

CIRCUS.

SPECIFICATION forming part of Letters Patent No. 367,055, dated July 26, 1887.

Application filed April 22, 1886. Serial No. 199,771. (No model.) Patented in France November 26, 1885, No. 172,567; in England March 20, 1886, No. 3,920; in Germany March 23, 1886, No. 36,643; in Belgium March 23, 1886, No. 72,465; in Italy May 4, 1886, XX, 19,760, XXIX, 144; in Spain July 20, 1886, and in Austria-Hungary August 31, 1886, No. 12,451 and No. 42,210.

To all whom it may concern:

Be it known that I, JOSEPH OLLER, a subject of the King of Spain, and a resident of Paris, France, have invented certain new and useful Improvements in Circuses, (which invention has been patented in France by Patent No. 172,567, dated November 26, 1885; in Great Britain by Patent No. 3,920, dated March 20, 1886; in Germany by Patent No. 36,643, dated March 23, 1886; in Belgium by Patent No. 72,465, dated March 23, 1886; in Austria-Hungary by Patent No. 12,451 and No. 42,210, dated August 31, 1886; in Italy by Patent No. Reg. Gen. XX, 19,760, Reg. Att. XXIX, 144, dated May 4, 1886, and in Spain by Patent dated July 20, 1886,) of which the following is a specification.

This invention relates to structures in which to give exhibitions of the character of a circus, hippodrome, gymnasium, or menagerie.

The object of the invention is to enable the same central space inclosed by the auditorium, with its circular rows of seats for the spectators, to be used at will for the usual performance of the circus-ring, or for a pit in which to exhibit ferocious beasts, or for a basin or artificial pond of water in which to give aquatic exhibitions. To this end, in the space inclosed within the seats is constructed a deep pit capable of containing water, and in this pit a large circular horizontal platform is arranged, which can be raised to the level usually occupied by the ring or track in a circus, and can be lowered to the bottom of the pit. Hydraulic devices or any other mechanical power may be applied to raise or lower this platform. When it is elevated, it is covered with a thick carpet, which constitutes the circus-track. When it is lowered to the bottom of the pit, ferocious beasts may be admitted onto it in full view of the spectators, but far enough below them for safety; or instead, water may be admitted to the pit, covering the platform and having sufficient depth for swimming, diving, boating, and other aquatic representations.

In the accompanying drawings, Figure 1 shows a circus-edifice constructed according to my invention, the view being a vertical diametrical section. Fig. 2 is a fragmentary plan

of the platform and its guides, on a larger scale, and Fig. 3 is a fragmentary elevation of one of the guides and supports.

The building or hall is preferably circular, with circular rows of seats *SS* in the auditorium, as is customary in circuses, and a central track or ring, *C*. A large pit or basin, *H*, is constructed underneath the central track or ring, and also, if desired, extending underneath the seats, as shown. In the construction shown the basin *H* is twenty-four meters in diameter, and the ring *C* is 13.5 meters in diameter.

P is a horizontal circular platform, which is capable of rising or descending in the pit. In the construction shown it is supported on a central piston or plunger, *B*, which moves in a vertical hydraulic cylinder, *A*, sunk in the earth beneath the center of the pit or basin. By pumping water into this cylinder the platform is caused to ascend, and by permitting the water to escape the platform is caused to descend. The platform is guided by means of twenty (more or less) projections, *pp*, Fig. 2, which move in an equal number of vertical slideways, *UU*, fixed to a circular series of vertical posts or pillars, *DD*, which support the floor of the auditorium. The slideways or guides *UU* are of channel-iron and are fixed alongside of the pillars *DD*, as shown in Figs. 2 and 3.

The platform *P* has a wooden floor, on which may be laid a thick carpet, or which may be otherwise padded or cushioned to suit it for use as the circus track or ring *C*. When the platform is to be arranged for the ordinary exercises of a circus, it is raised by means of the hydraulic piston to a few centimeters above the proper position for it to occupy, so that the guiding-projections *pp* pass out of the tops of the guideways *UU*. At this time a pinion, *b*, which is carried by the platform, is in mesh with a rack, *c*, which is fixed to the stationary structure between two of the pillars, as shown in Fig. 2. A man on the platform then turns the pinion by means of a suitable key or crank, and thereby revolves the platform through an arc of a few degrees, sufficient to displace the projections *pp* from over the guideways *UU* until they stand over a series of brackets, *aa*,

which are fixed to the pillars D D. The platform is then lowered a few centimeters until the projections *p p* rest on these brackets, which then support the platform.

5 When the platform is to be lowered, it is first raised clear of the brackets and is then rotated in the reverse direction by means of the rack and pinion until the projections *p p* stand over the guideways U U, whereupon it is lowered into the pit.

10 In order to support the center of the platform without rendering it necessary to maintain the hydraulic pressure against the piston B, I provide five (more or less) posts or columns, E E, which are connected at their upper ends to a frame, J, surrounding this piston B. This frame J may be turned or displaced on its axis, a rack and pinion or other suitable device being employed for this purpose. The pinion is shown at G. When the platform is rising or falling, the columns E E move in a corresponding series of sockets or cylinders, F F, which are sunk in the ground; but when the platform is raised to its highest position the columns rise out of these sockets, and when the platform is displaced laterally the frame J and its columns E E are also displaced laterally, either with the platform or inversely thereto, so that the lower ends of the columns no longer coincide with their sockets. When the platform is lowered onto the brackets *a a*, the lower ends of the columns encounter at the same instant the solid floor or bottom of the pit, and thus afford a perfectly firm and unyielding support for the middle of the platform.

35 When the track is to be lowered to the bottom to replace it by a pond of water for aquatic exercises, the platform is lifted, as before described, to bring its guides into coincidence and the columns E E are turned back to coincide with the sockets F F. The platform is then lowered and descends into the basin of water.

45 The action of the platform in ascending and descending is the same as that of the car of an elevator, and it may be provided with any construction of guides or other accessories commonly used with elevators. Any known mechanical appliances which are applied to the operation of elevators may be applied to the operation of my circus—such as wire ropes, tackle, screws, or others. My apparatus may be modified in many respects without departing from what is essential to my invention.

I am aware that the stages of theaters have been provided with hydraulic apparatus for raising sections of the floor thereof and for raising and lowering various portions of the stage settings; but to this I make no claim. My invention is limited to a circus or similar place of amusement having a more or less complete circular or concentric auditorium inclosing a central opening which is normally filled by a platform, and with means for lowering this platform at will into a pit beneath.

I claim as my invention—

1. A circus constructed with an auditorium inclosing a central opening, and with a pit or tank beneath said opening capable of holding an artificial pond of water, in combination with a platform capable of ascending or descending in said pit, when raised closing the opening and when lowered being submerged in the water in said pit or tank, substantially as set forth.

2. A circus constructed with an auditorium inclosing a central opening with a pit or open space beneath said opening and with vertical guides disposed around said pit and extending up to said opening, in combination with a platform capable of ascending or descending in said pit and engaging said guides, and with supports for receiving the weight of said platform when fully elevated, substantially as set forth.

3. In a circus, the combination, with a pit, H, and guides D D, of a platform, P, capable of ascending and descending and engaging said guides, and when lifted above the tops of said guides capable of being rotatively displaced, and a series of supports, *a a*, on which said platform may rest, substantially as set forth.

4. The combination, with vertically-moving platform P, of columns E E, their sockets F F, and mechanism for displacing said columns out of coincidence with their sockets after they have been lifted out of the latter, whereby they constitute a support for the center of the platform, substantially as set forth.

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

JOSEPH OLLER.

Witnesses:

ROBT. M. HOOPER,
AMAND RITTER.