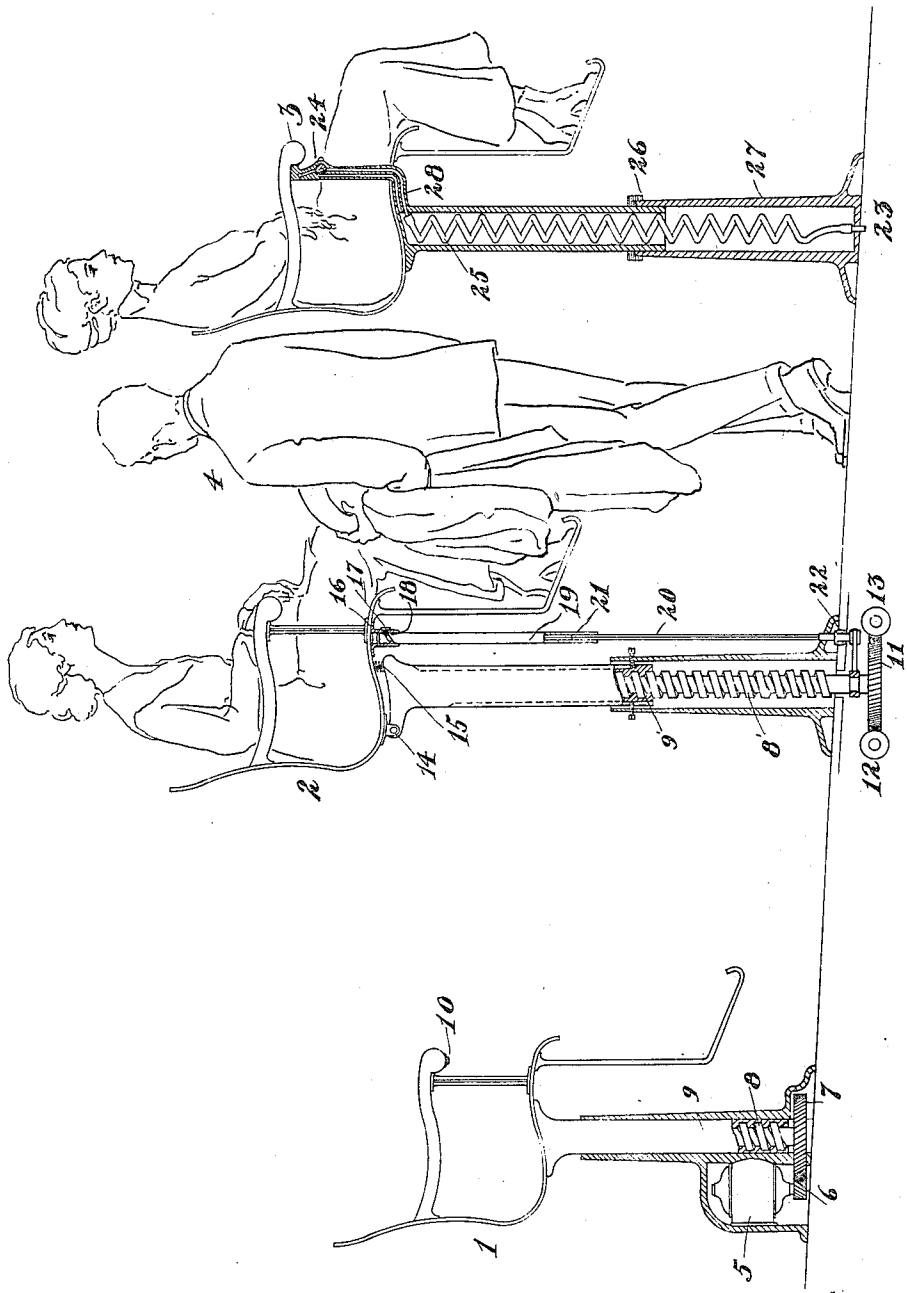
F. W ADSIT.

OPERA CHAIR.

APPLICATION FILED DEC. 4, 1916.

1,282,164. Patented Oct. 22, 1918.



Inventor:
Frank W. Adsit.
by C. D. Enochs
Attorney.

UNITED STATES PATENT OFFICE.

FRANK W. ADSIT, OF ST. PAUL, MINNESOTA.

OPERA-CHAIR.

1,282,164. Specification of Letters Patent. Patented Oct. 22, 1918.

Application filed December 4, 1916. Serial No. 135,263.

To all whom it may concern:

Be it known that I, FRANK W. ADSIT, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Opera-Chairs, of which the following is a specification.

This invention relates to improvements in opera chairs, and has for its object the providing of means whereby opera chairs may be raised or lowered individually at the will of the party occupying the chair.

With this and incidental objects in view the invention consists of certain novel features of construction and combination of parts, the essential elements of which are hereinafter described with reference to the drawing which accompanies and forms a part of this specification.

At the present time in theaters and moving picture houses, especially, the floor tips toward the stage to allow the view of the audience to be as little obstructed as possible by those sitting forward of them, but particularly in the moving picture houses there is a great deal of annoyance experienced on account of people coming in or leaving during the performance and obstructing the view of the individuals in the audience while they are passing in front of them in the rows to find a seat. My improved opera chair prevents this annoying condition.

The single figure in the drawing is a side elevation of three of my opera chairs arranged one behind the other.

In the drawing 1 is an opera chair embodying my invention, shown in its lowered position as unoccupied, while 2 is a similar chair occupied and in its elevated position. 3 is a similar chair occupied by the person sitting ahead of the person occupying the chair 2, and 4 represents a man passing between rows to a seat beyond the chair 2, without obstructing the view of the party occupying the chair 2.

The chairs 1, 2 and 3 are similar in construction, the only variation being in the manner in which they are raised and lowered.

5 is an electric motor adapted to drive a pinion 6 meshing with the gear 7, which in turn drives the screw 8, which registers with an internal nut in the piston 9 of the chair 1, so that when the screw 8 is turned in one direction, the chair will be raised, and when it is turned in the other direction the chair will be lowered, the running of the motor being controlled by the button 10, placed conveniently for the person occupying the chair.

The chair 2 has a similar screw 8′ meshing with an internal nut, so that the screw 8′ in this instance carries the worm gear 11, which is adapted to mesh with either of the constantly driven worms 12 and 13, one of which would run in a right-hand direction, and the other in a left-hand direction.

The top of the piston 9′ has hinged thereon at 14 the body of the chair proper at the back of the seat and supports the front of the chair by the spring 15.

The socket 16 mounted on the lower part of the chair has a pin 17 therein which registers with a spiral groove in the sleeve 19 extending downwardly therefrom so that when the chair is tilted forwardly the sleeve 19 will be rotated in an anti-clockwise direction, and the rotation of the sleeve 19 will also rotate the shaft 20, slidably mounted at 21 in the sleeve 19, about its pivoted support 22 and cause the worm gear 11 to engage with the constantly driven worm 13 and lower the chair, while if the chair is tilted backwardly the worm gear 11 will similarly be drawn into mesh with the oppositely running worm 12 and raise the chair.

In the construction shown with the chair 3, fluid is admitted from a reservoir at a point 23 under control of the valve 24, so that by the turning of this valve the fluid can be admitted into the hollow piston 25, slidably mounted at 26 in the cylinder 27, thus raising the chair and by turning the valve 29 90 degrees the air may be exhausted and the chair allowed to lower itself through its own weight and that of the person sitting thereon.

Flexible hose, preferably in spiral form, connects the point 23 to the pipe 28, leading to the valve 24, so as to maintain a constant fluid pressure as desired in any position of the chair.

While I have described my invention and illustrated it in one particular design, I do not wish it understood that I limit myself to this construction, as it is evident that the application of my invention may be varied in many ways within the scope of the following claims.

Claims:

1. In opera chairs with a row of chairs extending across an audience room, with

another row of chairs behind said first row of chairs extending also across said audience room, means for raising and lowering said chairs, whereby the chairs may be lowered to a position from which a person may step readily therefrom to the floor, and whereby said chairs may be raised so that a person walking in front thereof will not obstruct the line of vision to the front, and also the line of vision of those occupying the second row will not be obstructed by those occupying the first row.

2. The combination of opera chairs wherein a row of chairs is positioned in an audience room with another row of chairs behind said first row of chairs, and means for raising and lowering said chairs individually whereby the chairs may be lowered to a position from which a person may step readily therefrom to the floor, and whereby the chairs may be raised individually so that a person walking in front thereof will not obstruct the line of vision to the front.

FRANK W. ADSIT.