Dec. 20, 1949 J. J. ROMAN 2,492,117

RETRACTING TYPE THEATER CHAIR

Filed July 26, 1946 2 Sheets-Sheet 1

Fig. 1

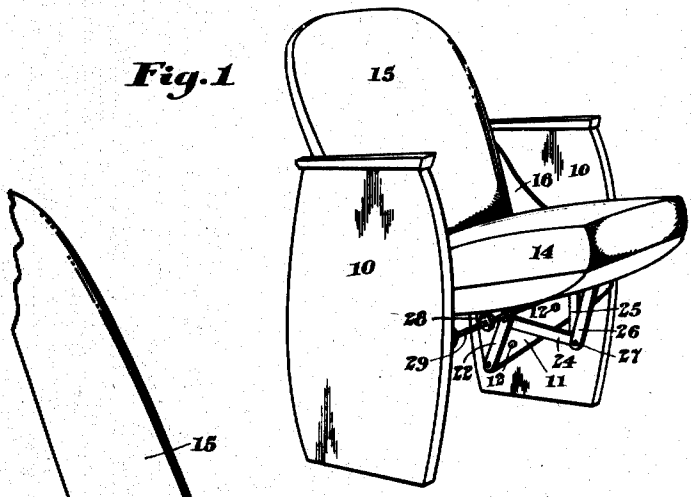
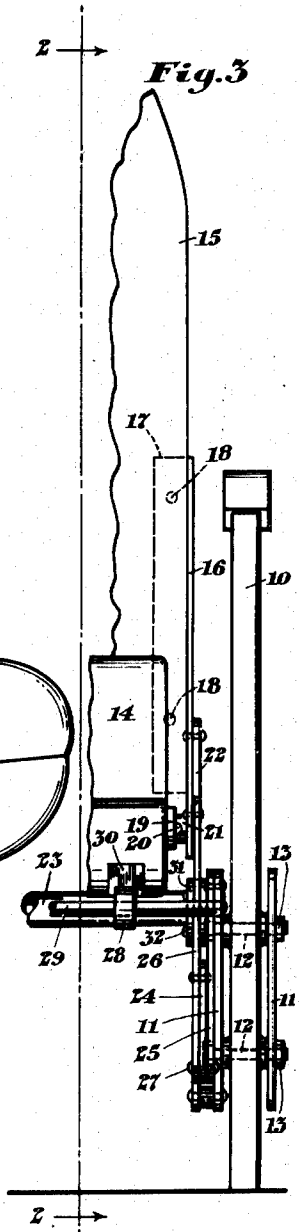


Fig. 2

Fig. 3



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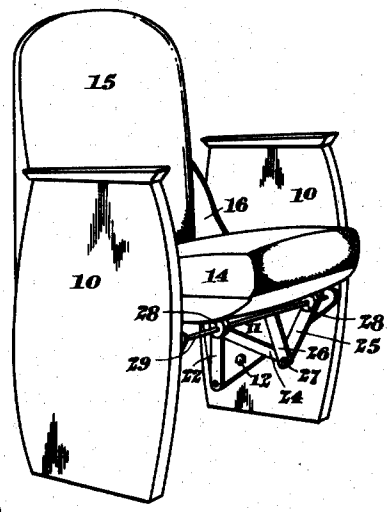
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Dec. 20, 1949 J. J. ROMAN 2,492,117

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Filed July 26, 1946 2 Sheets-Sheet 2

Fig. 4



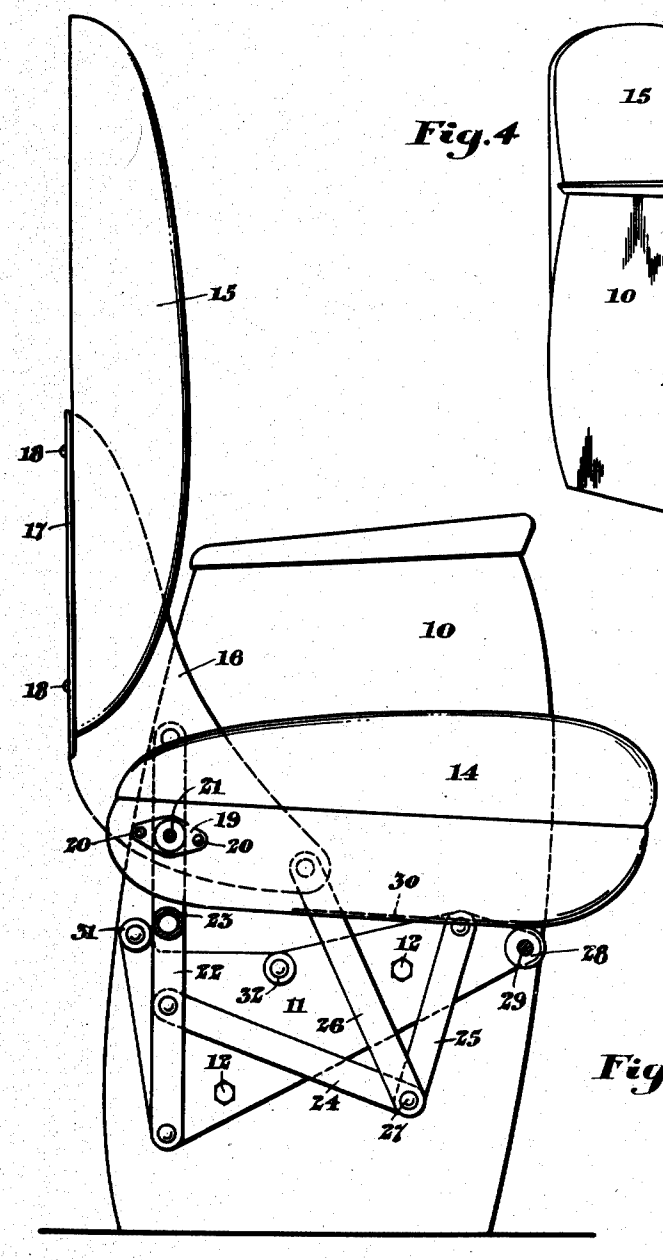


Fig. 5

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2,492,117

RETRACTING TYPE THEATER CHAIR

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Application July 26, 1946, Serial No. 686,545

4 Claims. (Cl. 155—116)

1

The present invention relates to chairs and more particularly to chairs of the retracting type for installation in theaters, auditoriums and the like.

The primary objects of the invention are to provide an improved chair of the retracting type wherein the chair occupant may move rearwardly in a sitting position in order to permit other theater patrons to pass in front of him; to provide such a retracting chair in which the mounting and operating parts are concealed from view below the level of the seat; to provide such a chair structure having mounting means whereby the seat and back assembly may be readily installed as a unit on preinstalled chair-supporting standards; to provide a retracting chair which may be easily and comfortably retracted and returned to forward position by the chair occupant; and in general to provide a retracting chair which is efficient in operation, reasonably economical in manufacture, and attractive in appearance.

An illustrative embodiment of the invention is shown in the accompanying drawings, wherein:

Figure 1 is a perspective view of a retracting chair in its forward position of occupancy;

Figure 2 is a sectional view of the same taken on line 2—2 of Figure 3, the seat and back of the chair being shown in side elevation and the chair parts being shown in their forward positions;

Figure 3 is a fragmentary front elevational view showing the left-hand side of the chair;

Figure 4 is a perspective view similar to Figure 1 and showing the chair in its rearwardly retracted position; and

Figure 5 is a sectional view similar to Figure 2 and showing the parts of the chair in their rearwardly moved positions.

Referring now in detail to these drawings, the retracting chair there shown is mounted upon a frame which comprises spaced, upright standards 10 which may be secured to the floor in any suitable manner and which may if desired be rigidly connected by a suitable cross-tie (not shown). As here shown, the only connections between the standards are the chair parts hereinafter described, and the word "frame" as herein used is intended to include such an arrangement as well as a unitary structure.

The chair proper generally comprises a seat and back assembly mounted upon mounting members 11 which may be readily installed as a unit on the standards by means of bolts 12 passing through apertures in the standards 10 and in the mounting members 11 of adjacent chairs (see

2

Fig. 3), and nuts 13 on the bolts 12 secure these parts in assembly.

The seat and back assembly comprises a chair seat 14 and a chair back 15 which are pivotally connected for relative movement by means of generally triangular side plates 16 on opposite sides of the chair having inwardly extending flanges 17 on which the chair back is mounted as by screws 18. The chair seat 14 has seat arms 19 secured as by screws 20 to the opposite sides of the seat and pivotally mounted at 21 on the side plates 16, and the chair seat is thus mounted turnably about a horizontal axis to a lowered position of occupancy and to a raised position for facilitating sweeping under the chair.

Rear supports 22 are provided for supporting the seat and back assembly in the rear, said rear supports 22 being pivotally connected at their lower ends to the mounting members 11 and at their upper ends to the side plates 16. A strut 23 is desirably provided for connecting the rear supports and thus increasing the stability of the structure.

The chair back 15 is supported forwardly of the rear supports 22 by means of sets of three links each on opposite sides of the chair. The three links 24, 25 and 26 of each set have a common pivotal connection which is designated 27, and the other ends of the links are respectively connected to a rear support 22, a mounting member 11, and a side plate 16 associated with the chair back 15. The link 26 thus has a "floating" movement.

The chair seat 14 is supported forwardly of its pivotal connection with the back by means of rollers 28 turnably mounted on an axle 29 whose opposite ends are connected to the upper forward ends of the mounting members 11, and the under side of the seat 14 is desirably provided with bearing surfaces 30 which bear on the rollers 28 during forward and rearward movements of the seat.

It will be seen by comparing Figures 2 and 5 of the drawings that as the chair is retracted by the occupant thereof, the seat moves rearwardly in a substantially horizontal path, while the back simultaneously moves rearwardly and assumes a near-vertical position thus minimizing the space required for retraction in the rear of the chair. When the occupant moves the chair forwardly the seat is returned to its more comfortable angular inclination shown in Figure 2. Rearward and forward movements of the chair are stopped by contact of the rear supports 22 with stop means comprising bumpers 31 and 32 respectively, which

bumpers are secured to the mounting members 11.

While but one specific embodiment of the invention has been herein shown and described, it will be understood that certain details may be altered or omitted without departing from the spirit of the invention as the same is defined by the following claims.

I claim:

1. In a chair, a frame, a seat and back assembly in which the seat and back are pivotally connected for relative movement, rear supports having their lower ends pivotally connected to the frame and having their upper ends pivotally connected to the rearward part of the seat and back assembly, means for supporting the back forwardly of the rear supports comprising sets of three links each on opposite sides of the chair, the links in each set having a common pivotal connection and having pivotal connections respectively with the frame, a rear support and the back, means for supporting the seat forwardly of its pivotal connection with the back, and stop means for limiting the forward and rearward movements of said seat and back assembly.

2. In a chair, a frame, a seat and back assembly in which the seat and back are pivotally connected for relative movement, rear supports having their lower ends pivotally connected to the frame and having their upper ends pivotally connected to the rearward part of the seat and back assembly, means for supporting the back forwardly of the rear supports comprising sets of three links each on opposite sides of the chair, the links in each set having a common pivotal connection and having pivotal connections respectively with the frame, a rear support and the back, rollers mounted on the frame for supporting the seat forwardly of its pivotal connection with the back, and stop means for limiting the forward and rearward movements of said seat and back assembly.

3. In a chair, spaced chair-supporting standards, mounting members adapted for attachment to said standards, a seat and back assembly in which the seat and back are pivotally connected for relative movement, rear supports having their lower ends pivotally connected to the mounting members and their upper ends pivotally connected to the rearward part of the seat and back assembly, means for supporting the back forwardly of the rear supports comprising sets of three links each on opposite sides of the chair, the links in each set having a common pivotal connection and having pivotal connections respectively with a mounting member, a rear support and the back, means on the mounting members for supporting the seat forwardly of its pivotal connection with the back, and stop means for limiting the forward and rearward movements of said seat and back assembly.

4. In a chair, spaced chair-supporting standards, mounting members adapted for attachment to said standards, a seat and back assembly in which the seat and back are pivotally connected for relative movement, rear supports having their lower ends pivotally connected to the mounting members and their upper ends pivotally connected to the rearward part of the seat and back assembly, means for supporting the back forwardly of the rear supports comprising sets of three links each on opposite sides of the chair, the links in each set having a common pivotal connection and having pivotal connections respectively with a mounting member, a rear support and the back, rollers mounted on the mounting members for supporting the seat forwardly of its pivotal connection with the back.

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