

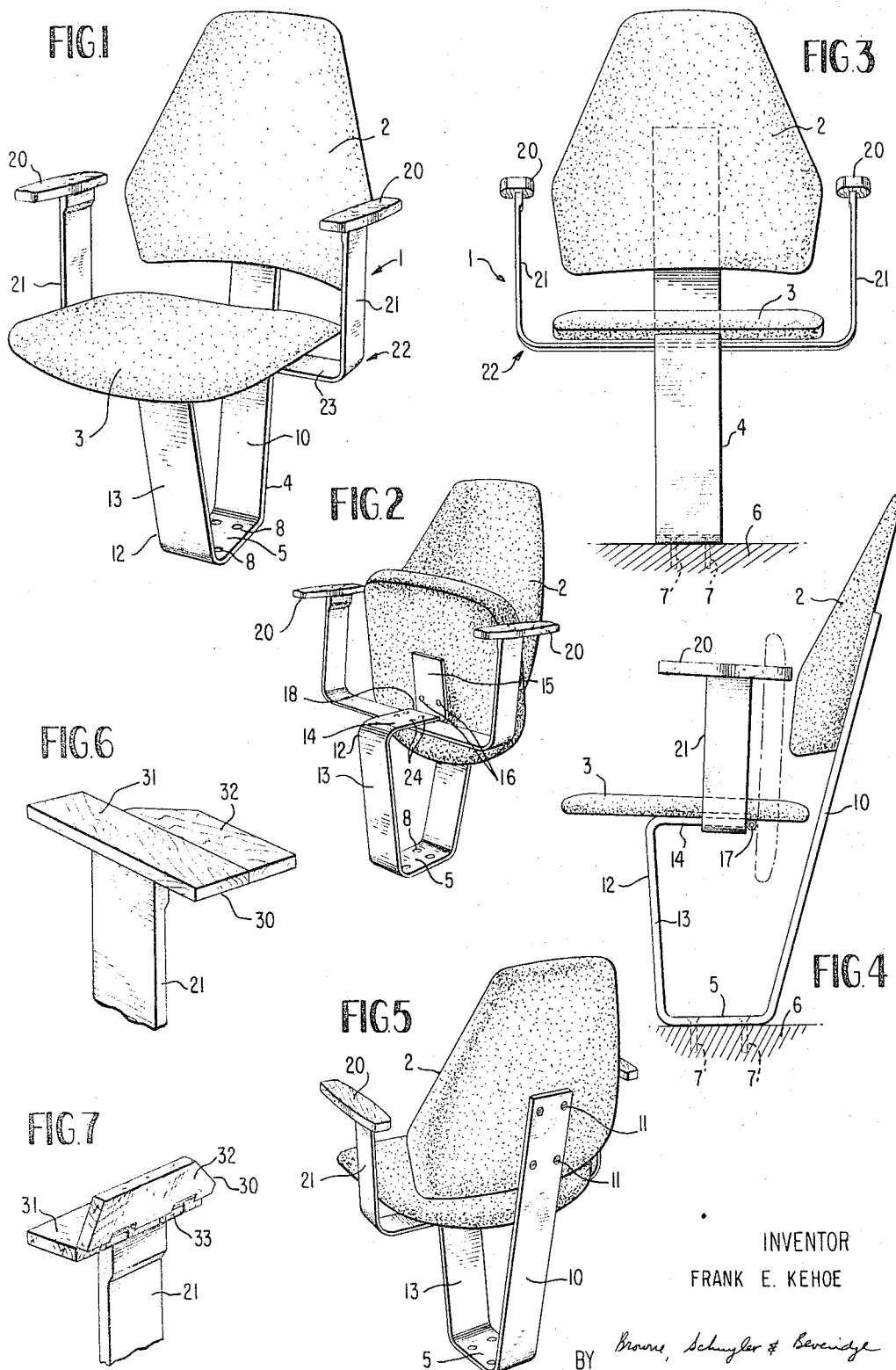
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CHAIR

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1

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CHAIR

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6 Claims. (Cl. 297-296)

This application is a continuation-in-part of my co-pending application Serial No. 417,989, filed December 14, 1964, now abandoned.

This invention relates to chair structures and more particularly to a single standard chair suitable for multiple seating.

Chair structures of the type commonly employed for multiple seating as in auditoriums, conference rooms, or the like are normally relatively massive and structurally complex. Such chairs are not only expensive to manufacture and difficult to install and maintain, but also present substantial obstruction and interference with cleaning and maintenance of the area in which they are used. Further, such chairs are not only specially designed for group use and are not suitable for independent use. Accordingly, it is an object of this invention to provide an improved single standard chair suitable for use independently or in groups for multiple seating.

Another object of this invention is to provide a chair structure having a single standard resiliently supporting a seat and a backrest independently of one another.

Another object of this invention is to provide a simplified chair structure having a single standard resiliently mounting a backrest and a seat for limited resiliently resisted movement and including arm rest mounted for movement with the seat and for limited resiliently resisted movement with respect to said seat.

Another object of the invention is to provide an improved chair structure having a seat resiliently mounted for limited movement and having a tablet arm mounted for movement therewith.

Other and further objects of my invention will become apparent from the following specifications, taken with the drawings, in which:

FIG. 1 is a perspective view of a chair according to the present invention;

FIG. 2 is a perspective view similar to FIG. 1 with the seat shown in the raised, non-use position;

FIG. 3 is a front elevation view of the chair;

FIG. 4 is a side elevation view of the chair, with the seat shown in phantom in the raised position;

FIG. 5 is a perspective view of the chair taken from the rear of the chair;

FIG. 6 is a perspective view of a tablet arm suitable for use with the chair; and

FIG. 7 is a perspective view showing the hinge structure of the tablet arm shown in FIG. 6.

Referring now to the drawings in detail, a chair embodying the present invention is illustrated generally by the numeral 1 and includes a backrest 2 and a seat 3 independently supported by a single standard 4. Standard 4 is formed from a single, elongated structural element such as a flat steel bar as illustrated in the drawings, and has sufficient resiliency to permit limited resiliently resisted movement of both the seat and backrest upon the application of pressure by a person occupying the chair. The standard 4 is shaped to include a substantially horizontal base section 5 intermediate the ends for engaging and supporting the chair on a suitable ground surface such as the floor illustrated at 6. Suitable means, such as screws 7 illustrated in phantom in FIGS. 3 and 4, extend through openings 8 in section 5 for securing the chair to the floor 6. Standard 4 includes a first cantilevered portion 10 integrally formed with and projecting upwardly

2

from one end of base section 5 for engaging and supporting backrest 2 mounted thereon by suitable means such as screws 11. A second cantilevered portion 12, integrally formed with and projecting upwardly from the other end of base section 5, includes a first generally vertical section 13 and terminates at its upper end in a second substantially horizontal, rearwardly extending platform 14 for supporting seat 3.

Seat 3 has a bearing plate 15 mounted on its bottom surface, as by screws 16, and a hinge 17 pivotally mounts bearing plate 15 onto the distal end 18 of platform 14 so that seat 3 is movable between a raised, non-use position illustrated in FIG. 2 and a substantially horizontal seating position with the bearing plate 15 resting upon and supported by the upper surface of platform 14 of the cantilevered portion 12 as illustrated in FIG. 4. The resilience of cantilevered section 13 and of platform 14 permit seat 3 to be inclined or rocked slightly about the upper end of section 13 as a person occupying the chair shifts his weight on the seat.

It is believed apparent that the relatively long, cantilevered segment 10 of the resilient support standard 4, projecting upwardly from the floor to support the backrest 3, permits the backrest to move back and forth with respect to seat 2 in accordance with the force applied to the backrest by a person occupying the chair. Also, the relatively long, cantilevered section 13, extending upwardly from the floor in a generally vertical direction, permits limited resiliently resisted movement of the seat in a horizontal direction toward and away from the backrest in response to pressure exerted on the seat. Thus, by simply shifting his position, a person occupying the chair may assume an upright seating position or a more reclined position as desired.

A pair of arm rests 20 are mounted one on each side of the chair, with the respective arm rests being supported on the upper free ends of the arms 21 of a substantially U-shaped support member 22. Arms 21 are integrally formed with a base section 23 extending substantially horizontally beneath seat 3 in vertically spaced relation thereto, with section 23 being fixedly secured to the under side of platform 14, as by screws 24. Thus, it is seen that any movement of platform 14, and the seat 3 supported thereon, will result in corresponding, simultaneous movement of arm rests 20. Also, support 22 is preferably constructed from a continuous structural element such as the flat steel bar illustrated in the drawings and has sufficient resiliency to permit limited resiliently resisted movement of the arm rests with respect to the seat 3. However, by spacing section 23 of support 22 vertically below the bottom surface of seat 3, the possibility of articles becoming clamped therebetween is virtually eliminated.

As an alternate construction, one or both of the arm rests 20 may be replaced by a writing or tablet arm 30 as illustrated in FIGS. 6 and 7. The tablet arm 30 includes a fixed portion rigidly mounted on the upper end of arm 21 and having a planar upper surface. A movable section 32 is mounted, as by hinges 33 for movement between a position illustrated in FIG. 6 wherein the planar upper surface of section 32 lies in the same plane as the upper surface of section 31 to form a continuous, smooth writing surface and a folded position wherein the upper surface of section 32 overlies the upper surface of section 31. Since tablet arm 30 is mounted for movement with seat 3, the occupant of the chair may readily use the arm 30 as writing surface since any movement of the arm will be coordinated with movement of the seat and therefore will not interfere with the writing.

From the above it can be seen that I have provided a sturdy, yet resilient, chair which may be easily and in-

expensively manufactured and which may be used individually or installed for multiple seating. The chair requires a minimum of maintenance and when installed in place for multiple seating, offers minimum obstruction to cleaning or maintenance of the supporting ground surface. When the chair is employed for multiple seating, as in a theatre, auditorium, or the like, the chairs are secured in place to the floor, in any desired spacing, by simply installing the screws through the bottom horizontal section of the single standard. Similarly, the individual chairs may be secured in place around conference tables, or the like, or alternatively, may be mounted on movable platforms or base such as a flat plate to permit the structure to be used and moved as an ordinary chair.

While I have described a preferred embodiment of my invention I wish it understood that I do not intend to be restricted solely thereto, but that I do intend to cover all embodiments thereof which would be obvious to one skilled in the art and which come within the spirit and scope of my invention.

What is claimed is:

1. A chair structure comprising a single standard supporting a backrest and a seat, said standard being formed from an elongated resilient structural member and including a substantially horizontal base portion intermediate its ends for fixedly supporting the chair on a floor surface, a first cantilevered portion on one end of said horizontal base portion and projecting upwardly and rearwardly from said base portion, means fixedly supporting said backrest on the upper free end of said first cantilevered portion for limited resiliently resisted movement therewith, a second cantilevered portion on the other end of said horizontal base portion and projecting upwardly and slightly forwardly from said base portion in a generally vertical direction, and hinge means mounting said seat on said second cantilevered portion for pivotal movement between a substantially horizontal seating position and a raised non-use position, said second cantilevered portion supporting said seat for resiliently resisted substantially horizontal movement forwardly from said base portion in a direction outward and away from said backrest, said first cantilevered portion supporting said backrest for resiliently resisted movement rearwardly from said base portion, the movement of said seat and said backrest permitting a person occupying the chair to assume a substantially reclined seating position.

2. The chair structure as defined in claim 1 wherein said second cantilevered portion terminates at its upper end in a substantially horizontal rearwardly extending platform, and said hinge means mounts said seat on the

distal end of said platform, said platform supporting said seat for resiliently resisted movement in a vertical direction.

3. The chair structure as defined in claim 2 wherein the bottom surface of said seat rests upon and is vertically supported solely by said platform when said seat is in said seating position.

4. The chair structure as defined in claim 2 including an arm rest at each side of said seat, and means mounting said arm rest on said second cantilevered portion independently of said seat for horizontal and vertical movement with said seat when said seat is in said seating position.

5. The chair structure as defined in claim 4 wherein said means mounting said arm rest comprises an elongated resilient support member fixedly secured to the bottom surface of said platform and extending laterally therefrom beneath said seat in vertically spaced relation thereto and terminating at each end in an integrally formed substantially vertical arm portion supporting said arm rests for resiliently resisted vertical movement with respect to said seat.

6. The chair structure as defined in claim 4 wherein at least one of said arm rests includes a fixed portion having a planar upper surface and a movable portion having a planar surface, said movable portion being hinged to one edge of said fixed portion for movement between a first position wherein said planar surfaces lie in a common plane forming a continuous work support and a second position wherein said second portion overlies said first portion.

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