

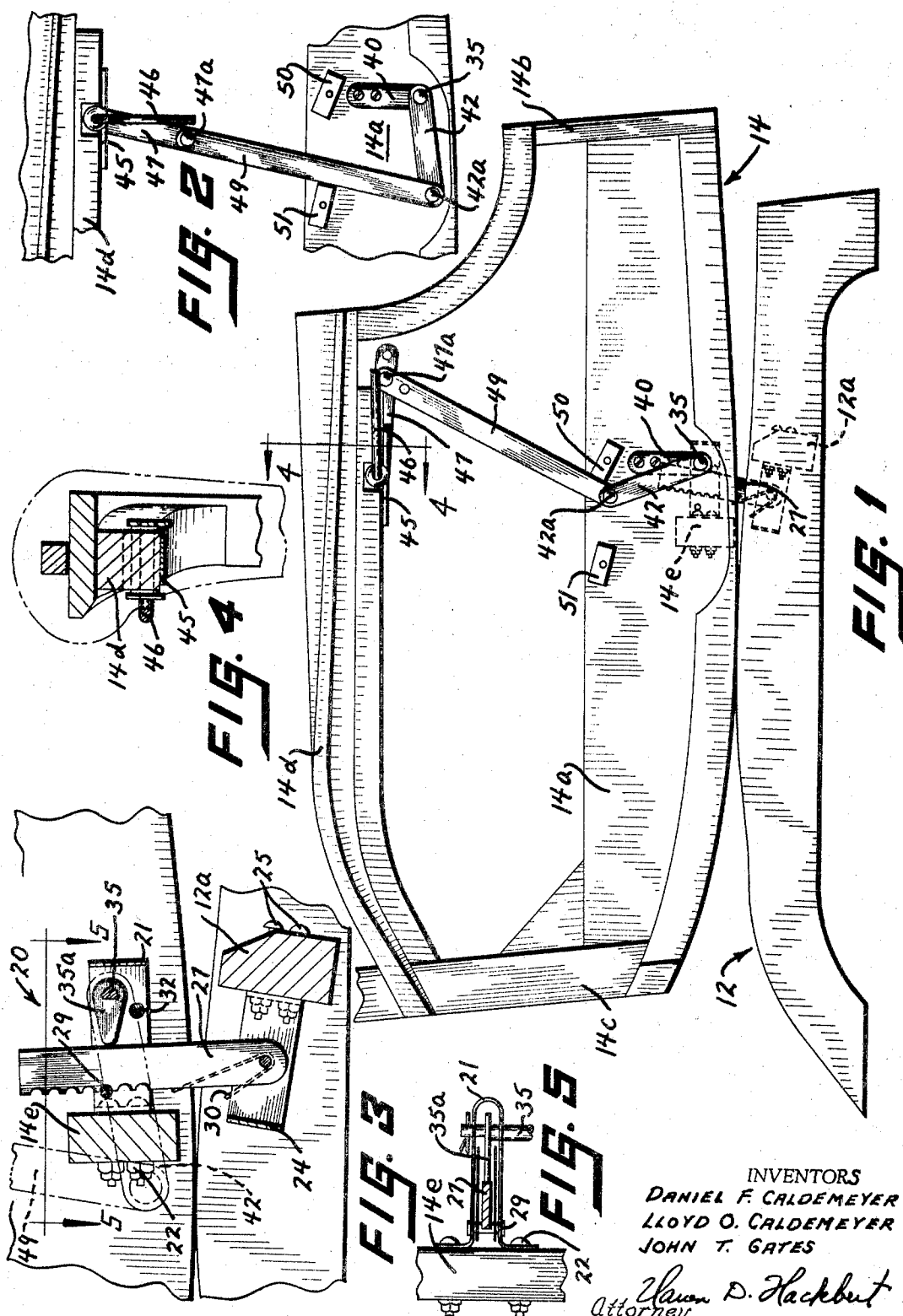
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COMBINATION RECLINING AND ROCKING CHAIR

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COMBINATION RECLINING AND ROCKING CHAIR

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3 Claims

ABSTRACT OF THE DISCLOSURE

A combination reclining and rocking chair having a locking arrangement characterized by a control handle virtually concealed in one position beneath an arm of the chair and providing fingertip operation by the user.

As is known, the popularity of combination reclining and rocking chairs is widespread. Such chairs are of the type which permit use as a conventional rocking chair, or, in the alternative, locked in any desired position and used as a reclining chair. A handle conventionally controls the aforesaid positioning operation, where, however, the handles in present use are mostly unsightly, being disposed in the mid-area of a side of the chair, and providing a problem of aesthetics in connection with clean-line and high-legged styling.

In accordance with the present invention, a control handle is provided for the locking arrangement for a combination reclining and rocking chair which is disposed immediately beneath the arm of such chair, connecting to the locking mechanism through a linkage system. The control handle is operable by the user through fingertip movement, is clean-lined in appearance, and is virtually unnoticeable in one of its positions of use, affording an over-all styling advantage not present in prior structures.

A better understanding of the present invention will become more apparent from the following description, taken in conjunction with the accompanying drawing, wherein:

FIG. 1 is a view in side elevation of the invention disposed on the framework of a typical combination reclining and rocking chair, where the control handle is in a position for rocking action;

FIG. 2 is another view of the control arrangement defining the invention, in this instance, however, the control handle being in a position for locking the movable frame portion where desired;

FIG. 3 is an enlarged view of the locking mechanism where the control handle is in position of FIG. 2;

FIG. 4 is a view in vertical section, taken at line 4—4 of FIG. 1 and looking in the direction of the arrows, showing the control handle in one position immediately beneath the upholstered arm of a chair; and

FIG. 5 is a view in horizontal section, taken at line 5—5 of FIG. 3 and looking in the direction of the arrows, showing certain details of the locking mechanism.

For the purposes of promoting an understanding of the principles of the invention, reference will now be made to the embodiment illustrated in the drawing and specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended, such alterations and further modifications in the illustrated device, and such further applications of the principles of the invention as illustrated therein being contemplated as would normally occur to one skilled in the art to which the invention relates.

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Referring now to the figures, the invention is shown in connection with a combination reclining and rocking chair such as of the type described and claimed in the pending Caldemeyer et al. United States patent application Ser. No. 478,568, filed Aug. 10, 1965, now Patent No. 3,371,958, entitled Combination Reclining and Rocking Chair, and where the locking mechanism is generally of the type described and claimed in the Daniel F. Caldemeyer United States Patent No. 2,606,594, issued Aug. 12, 1952, and entitled Combination Reclining and Rocking Chair Having a Fixed Base and Track.

In any event, and basically, the instant reclining and rocking chair comprises a fixed or stationary frame portion 12, and a movable frame portion 14 mounted directly thereon. In this connection, the movable frame portion 14 is defined by a plurality of elements, including a side member 14a, a front member 14b, a rear member 14c, and an arm frame member 14d, for each side, although only one side is shown in the drawing for invention clarity. Moreover, the reclining mechanism is also omitted in the drawing for invention clarity.

As should be evident from FIGS. 1, 3 and 5, a cross member 12a on the stationary frame portion 12, and a cross member 14e on the movable frame portion 14, serve to position locking mechanism 20. As a matter of background, the locking mechanism 20 typically comprises a bracket 21 mounted, as by bolt means 22, onto the cross member 14e. Another bracket 24 is mounted by bolt means 25 onto the cross member 12a, where such bracket 24 positions a ratchet bar 27. The latter is continually urged into a non-locking position, i.e., away from a co-operating roller element 29 on the bracket 21, through a spring member 30.

A stop 32, also disposed on the bracket 21, limits the movement of the ratchet bar 27. A cam 35a mounted on a shaft 35, and controlled by means of the invention, described more fully herebelow, serves to move the ratchet bar 27 to a locking position with roller element 29 (FIG. 3) and to release same to a non-locking position (FIG. 1).

Considering the invention in detail, a linkage system is provided comprising a bracket 40 secured to the side member 14a of the movable frame portion 14, serving as positioning means for one end of the over-all arrangement. The shaft 35 is rotatable through an opening in the side member 14a and through an opening in the bracket 40, where a linkage 42 has an end fixedly secured to such shaft 35. Another bracket 45 serves to position the other end of the linkage mechanism on the undersurface of the arm frame member 14d. A control arm 46 rotates on such bracket 45, being fixedly connected to a linkage 47, so that movement of the control arm 46 results in corresponding movement of the linkage 47.

Another linkage 49 interconnects the linkage 42 and the linkage 47 in pivotal relationship at 42a and 47a. Stop means 50 and 51 are typically provided on the outer surface of the side member 14a, respectively limiting and steadying the linkage 49 when in the position of either FIGS. 1 or 2.

When the user wants the chair to operate as a rocker, the control arm 46 is in the position of FIG. 1, being virtually unnoticeable (a typical upholstery line is shown in phantom in FIG. 4) and yet readily available for fingertip operation. At this time, the cam 35a is not bearing against the ratchet bar 27, where the latter actually is resting against the stop 32 (see FIG. 3) in view of the action of spring member 30.

When the control arm 46 is moved to the position of FIG. 2, linkage 47 moves with the control arm 46, causing movement of the linkage 49, and, accordingly, movement of the linkage 42 and the corresponding rotation of the shaft 35 and the cam 35a. At this time, and as evident in FIG. 3, the cam 35a has forced the ratchet bar 27 into

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engagement with the roller element 29 on the movable portion 14 of the frame, resulting in locking.

In other words, through a new and novel linkage arrangement forming part of the control and locking mechanism, the invention has permitted the use of a readily reachable control handle to replace the rather obtrusive control handles formerly used on such type of chairs. Obviously, and as stated, the control arm is virtually concealed in one of its positions, and its location and appearance lends for better styling than possible heretofore. In other words, by the use of a rather unobtrusive appearing but yet effective fingertip operated control handle, better aesthetics are achieved for a combination reclining and rocking chair.

It should be understood that the above-discussed control arrangement is susceptible to various changes within the spirit of the invention. For example, the actual appearance of the control arm itself might be changed from chair style to chair style, and the linkage system made operable with other forms of locking devices.

We claim:

1. A control arrangement for a chair having a movable frame portion and a fixed base portion comprising a locking mechanism mounted between said movable frame portion and said fixed base portion, a control arm for said locking mechanism disposed proximate the arm of said chair for fingertip control by the user and mostly concealed beneath the curvature of said chair arm at a first position, and a movable linkage system interconnecting said control arm and said locking mechanism.

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2. A control arrangement for a chair having a movable frame portion and a fixed base portion comprising a locking mechanism mounted between said movable frame portion and said fixed base portion, and a control arm for said locking mechanism disposed proximate the arm of said chair for fingertip control by the user and mostly concealed beneath the curvature of said chair arm at a first position, said control arm interconnecting said locking mechanism through an arrangement where a first linkage is fixedly secured to said control arm, a second linkage is fixedly secured to a camming shaft forming part of said locking mechanism, and a third linkage pivotally interconnects said first linkage and said second linkage.

3. The locking arrangement of claim 2 where stop means are disposed on a portion of said movable frame portion in selectively engageable relationship by said third linkage.

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