

Oct. 29, 1968

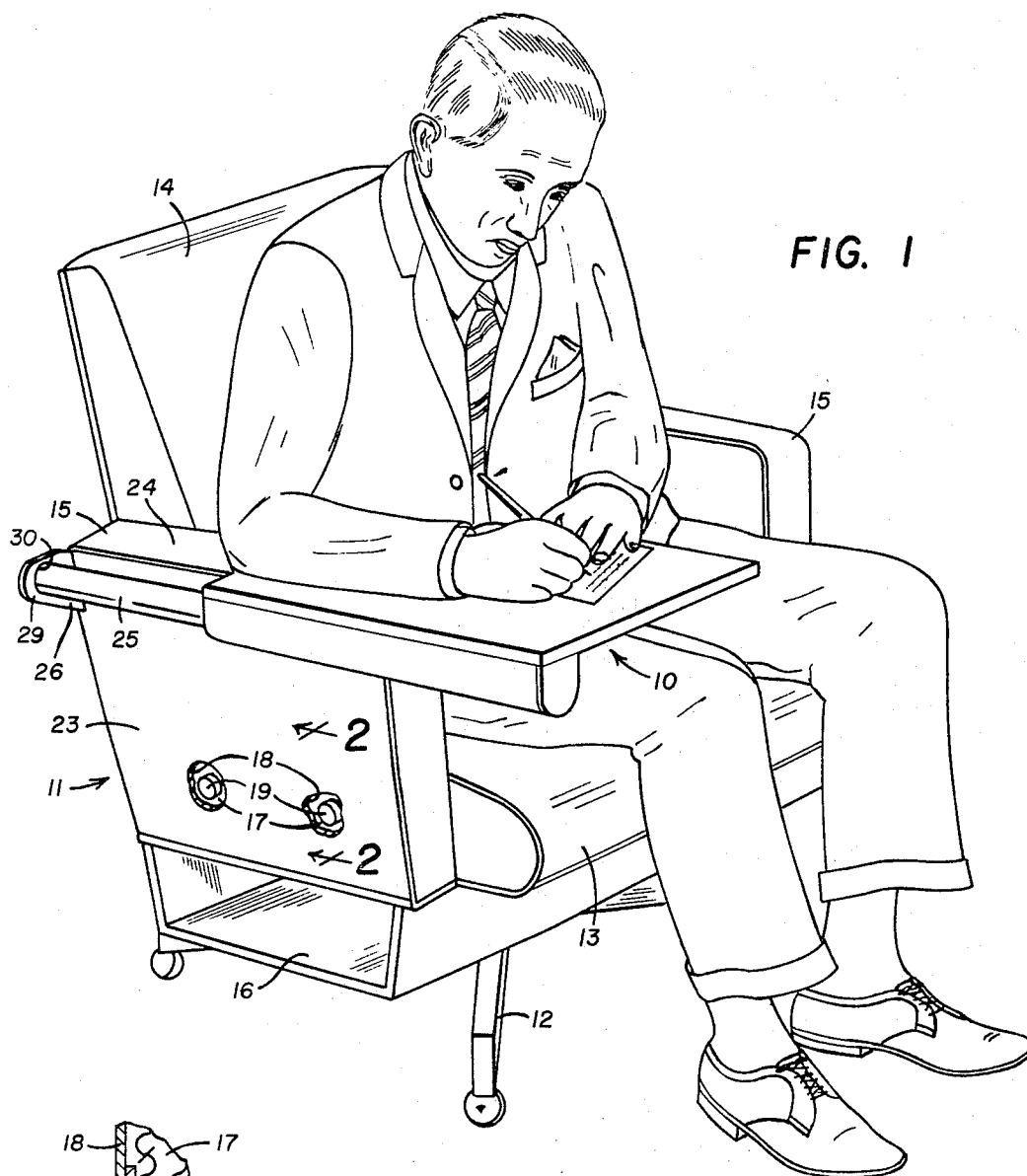
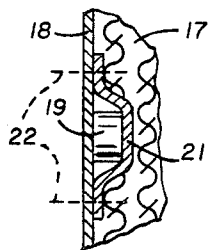
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3,408,104

WRITING ARM TYPE CONFERENCE CHAIR

Filed April 10, 1967

3 Sheets-Sheet 1



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3 Sheets-Sheet 2

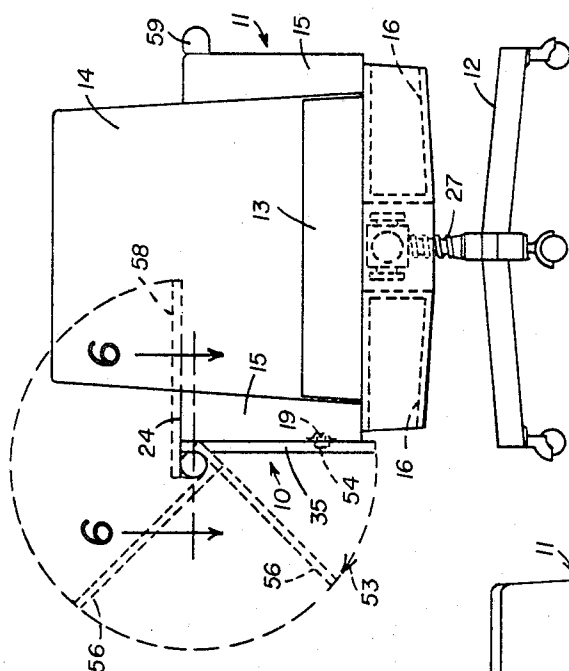


FIG. 4

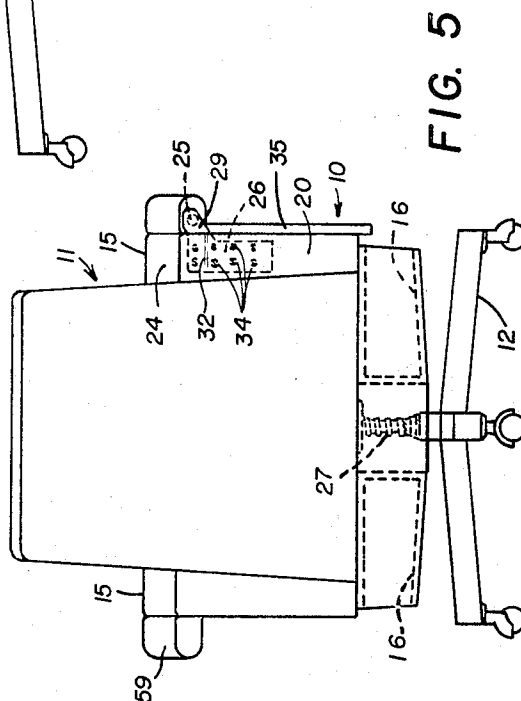


FIG. 5

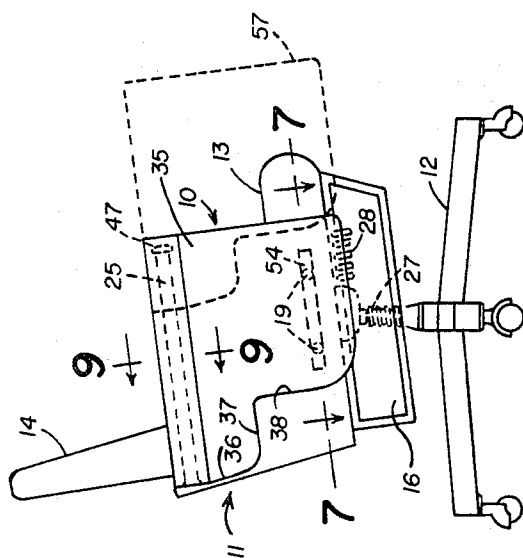


FIG. 3

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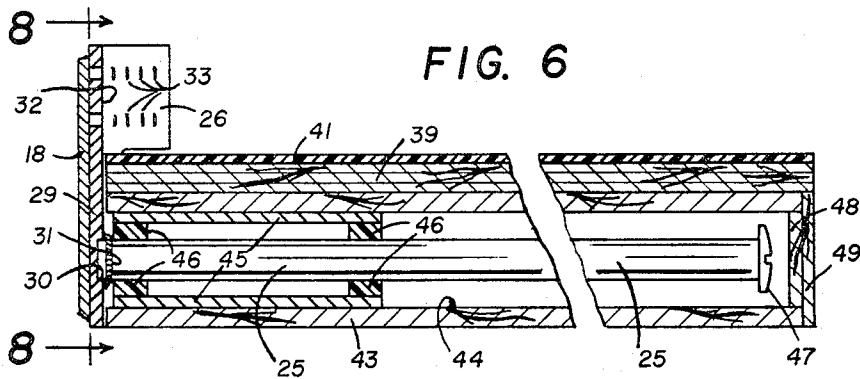
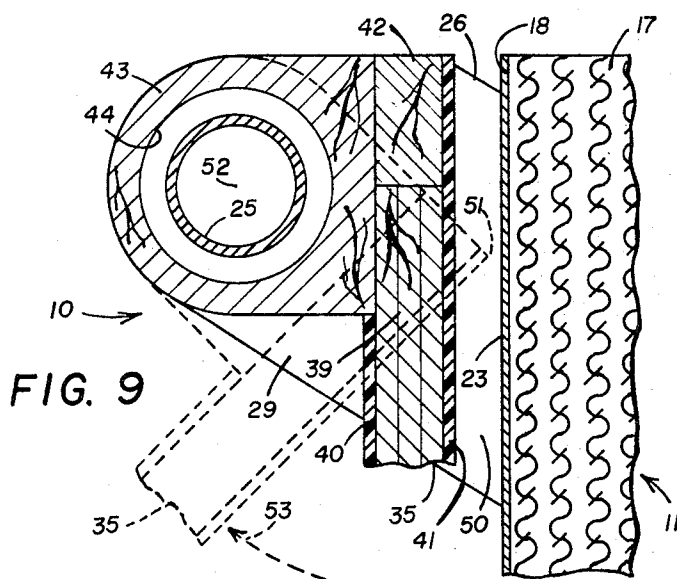
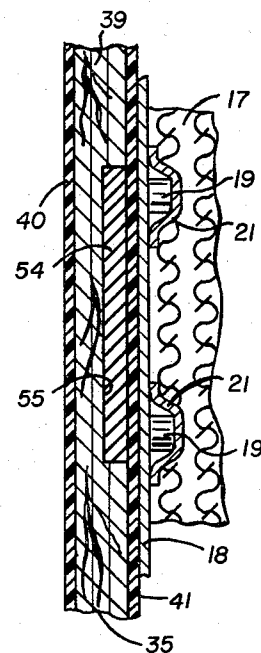
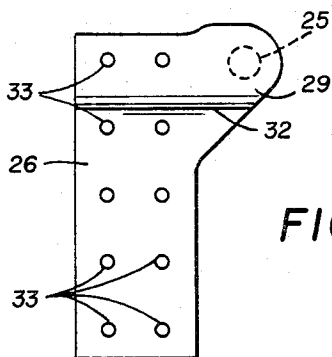
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3 Sheets-Sheet 3



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WRITING ARM TYPE CONFERENCE CHAIR
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9 Claims. (Cl. 297—162)

ABSTRACT OF THE DISCLOSURE

A caster supported, fully upholstered executive chair having fixed side arms, a tiltable back, and a swivel or rotating type seat adjustable for height, has a writing arm cantilevered and supported on one of the side arms for swinging and axial movements between storage and writing positions. Concealed magnets secure the writing arm in storage position at the side of the chair and permit easy release of the arm for movement over and in front of the chair occupant.

State of the prior art

This invention relates to an article of furniture and more particularly to an executive type conference chair which selectively can be used for writing purposes as well as for normal conference use.

Conference chairs of the type herein considered conventionally are handsomely upholstered, caster supported, swivel seated, tiltably backed, provided with underseat storage space, and otherwise well appointed for the comfort and convenience of executives in conference.

Designers of such chairs, however, typically have neglected, or have been unable to find a practical way of adapting the same so as to functionally afford in conjunction therewith, when desired, a table or desk type support surface to facilitate the taking of notes, the making of sketches, or upon which to perform other such writings while at conference.

Summary of the invention

According to the present invention, an executive type conference chair which is fully upholstered and has fixed side arms is provided with a tabletop contoured to fit the occupant of the chair and movable rotationally and axially from a position of use to a position adjacent the side surface of one of the arms of the chair. A shaft supported at the back of the chair extends along this chair arm at the top level thereof, and a hinge member secured to the tabletop and bored to receive the shaft provides for the axial and rotational movements of the tabletop to enable the same to move between its positions of use and storage. In the position of use, the tabletop is supported in part by the arm to which it is hinged. In the storage position, a magnetizable plate carried by the tabletop is attracted and releasably held by spaced magnets secured near the bottom of the chair beneath the covering of the side of the chair.

Objects of the invention

An important object of the invention therefore is to provide a chair of the character described wherein an arm rest constituting a writing surface may be foldably placed in writing position by a simple operation.

A further object of the invention is to provide means whereby the writing arm rest may also be placed in fold-away position and held securely thereat.

Yet another object is to provide a foldable writing arm type conference chair in which all hardware fittings pertaining to the functions thereof are substantially concealed.

A still further object is to provide a chair of the character described which is relatively simple in design, construction, and operation and yet is attractive, inexpensive, and well suited and adapted for its intended purpose.

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struction, and operation and yet is attractive, inexpensive, and well suited and adapted for its intended purpose.

An additional object resides in the provision of an executive type conference chair in which the aesthetic and symmetrical decor is maintained notwithstanding its functional utility.

These objects, together with various ancillary objects and features of the invention, are fulfilled by a chair which has been constructed in accordance with the preferred embodiment of the invention and which is illustrated in the accompanying drawings wherein:

Brief description of the drawings

FIG. 1 is a view in perspective of the chair showing the writing arm in its position of use by the occupant;

FIG. 2 is a fragmentary sectional view, somewhat enlarged, taken along the line 2—2 of FIG. 1;

FIGS. 3, 4 and 5 respectively are side, front and back elevational views of the chair;

FIG. 6 is an enlarged sectional view of the writing arm as seen along the line 6—6 of FIG. 4;

FIG. 7 is an enlarged partial sectional view of the writing arm and its securing magnets as viewed along the line 7—7 of FIG. 3;

FIG. 8 is a detail view of the arm support bracket as seen along the line 8—8 of FIG. 6;

FIG. 9 is a fragmentary cross section as viewed along the line 9—9 of FIG. 3.

The specification

Referring now to the drawings for a more complete understanding of the invention, and first more particularly to FIG. 1, the numeral 10 generally designates a writing arm which constitutes the invention per se and which presently will be described in detail. The writing arm is foldably supported on a conventional executive type conference chair, generally designated 11, having the usual caster supported base 12, seat 13, back 14, fixed side arms 15, and side pocket storage areas 16 disposed beneath the seat for storage of papers, and the like. A chair of this type conventionally has the arms and back cushion fully upholstered, as indicated at 17, with suitable materials such as standard padding covered with a durable and attractive material 18 such, for example, as "Naugahyde," and the seat cushion is formed, for example, of rubberized horsehair covered with a suitable material such as "Fabric Jans Risom Textiles."

A pair of spaced magnets 19 are embedded in the upholstery padding 17 behind the cover 18. Each magnet is secured in position as by a pocket 21, FIG. 2, suitably formed of the cover material and stitched, or otherwise secured, to cover 18 as indicated at 22. The magnets, as will be described later, serve to hold the arm 10 in its folded or stored position against the sidewall 23 of chair arm 15.

Arm 10 bears against and is partially supported by the upper surface 24 of chair arm 15, the remainder of the support being provided by a cantilevered tubular steel shaft 25 which is secured to a bracket 26, in turn, secured to the back 20 of the arm 15, FIG. 5. In its position of use, as disclosed in FIG. 1, and as disclosed further by the dashed line showings of FIGS. 3 and 4, writing arm 10 is moved forwardly on shaft 25 so as to provide ample clearance for the chair occupant in the writing position of FIG. 1.

Additional features of conference chair 11 are disclosed in FIGS. 3 and 4 from which it may be seen that in addition to the sub-seat storage feature 16 the chair has the usual height and tilt adjustable support shaft 27 and inclination adjustment assembly 28.

Referring to FIGS. 5, 6 and 8, bracket 26 is a metal plate member having a laterally displaced portion 29

which is apertured at 30 to receive shaft 25, the two being suitably secured together as by welding indicated at 31, FIG. 6. The upper portion of bracket 26, including its laterally displaced portion 29, is bent at a slight angle of about $8\frac{1}{2}^\circ$ from the lower portion of the bracket, the region of bend being indicated at 32. Thus, shaft 25 is extended parallel to the top surface 24 of the chair, and the main portion of bracket 26, exclusive of its laterally displaced portion 29, is caused to follow the inclined back surface 20 of the chair arm 15, FIGS. 3 and 5. This main bracket portion is disposed beneath the chair covering at back surface 20 and has a plurality of holes 33 to receive fasteners 34 for rigidly securing the bracket to the chair arm.

Writing arm 10 per se comprises a main table top piece 35 which is generally square-shaped except that one corner has a cut-away portion defined by the angularly directed edge 36, FIG. 3, which extends parallel to arm surface 20, and the right angularly directed edges 37 and 38 all of which merge in rounded corners with each other and with the peripheral edges of the top piece to provide the aforementioned clearance and ease of access for the chair occupant.

Top piece 35 preferably is formed as a composite including a plywood core 39, FIG. 9, walnut plastic laminate facing sheets 40 and 41, and a peripheral walnut edge or band 42. Facing sheet 40, as best seen in FIG. 9, extends to a walnut shaft 43 of half-round configuration which is rigidly secured as by a suitable bonding material or cement to the plywood core 39 and to edge strip 42 along the upper edge portion of the top piece as viewed in the folded position of writing arm 10. Shaft 43 has a longitudinal bore 44 for a purpose presently to be described.

As may best be seen in FIG. 6, the writing arm shaft 43 is sleeved onto the arm support shaft 25 for rotational and axial sliding movements thereon. To this end, an aluminum sleeve 45, having spaced Teflon bushings 46 which are journaled on shaft 25, is pressed into bore 44 at the back end of shaft 43. The free end of shaft 25 is threaded internally to receive cap screw 47 which becomes engaged by the end of sleeve 45 when the writing arm is slid along shaft 25 to its forward position, thus limiting further forward movement of the arm. The forward end of bore 44 is suitably closed as by the press-fit wood plug 48 having the walnut Formica facing 49 which thus caps the forward end of shaft 43.

When arm 10 is in its folded position, FIG. 9, top piece 35 is positioned in closely spaced relation to the sidewall 23 of chair 11, there being a clearance gap 50 which is just sufficient to freely pass the upper corner edge 51 of the top piece as the arm is rotated about its shaft axis 52 in the direction of arrow 53 to its position of use as disclosed in FIG. 1. Since in the folded position of arm 10 its top piece 35 is disposed vertically and laterally of axis 52, the tendency of the top piece, under the influence of gravity, is to swing out at the bottom. To offset this tendency and to hold the arm rearwardly in its folded position, the aforementioned magnets 19 are employed to perform a releasable holding function.

To this end, an elongated magnetizable plate 54 is disposed in a suitable recess 55 provided in core 39 of arm top piece 35 so that plate 54 lies just beneath the walnut plastic facing sheet 41 with the ends of the plate disposed in confronting relation to the spaced magnets 19. As a result of this arrangement, the top piece snaps into the fully folded position of the arm, as disclosed in FIG. 4, when the arm, as viewed in FIG. 3, has been moved fully rearwardly for the folding operation.

To move arm 10 to its position of use, top piece 35 is grasped near the bottom thereof, as viewed in FIGS. 3 and 4, and a slight outward pull releases the hold effected by magnets 19 and plate 54. The arm is then rotated, as indicated by the series of dashed lines 56, FIG. 4, and simultaneously slid axially forward to the dashed line

position 57 of FIG. 3 until the arm comes to rest in its position of use as indicated by the dashed lines 58 of FIG. 4.

In order to give an appearance of symmetry to the chair 11, an arm extension 59 may be added to the opposite side arm 15.

From the foregoing, it will now be apparent that a modified conference type arm chair has been provided which is well adapted to fulfill the aforesaid objects of the invention and to fulfill a need in business and industry where it happens, on occasion, that a group of executives are called together for an informal meeting and find no conference table available.

The invention may be embodied in other forms or carried out in other ways without departing from the spirit or essential characteristics thereof. The present embodiment of the invention is therefore to be considered as in all respects illustrative and not restrictive, the scope of the invention being indicated by the appended claims, and all changes which come within the meaning and range of equivalency of the claims are intended to be embraced therein.

Having thus described the invention, what is claimed as new and useful and desired to be secured by Letters Patent is:

1. The combination with a fully upholstered executive type conference chair having a back, a seat, and rigid side arms, of a writing arm comprising a table top member foldably secured to one of said side arms and movable from a foldable position adjacent the side surface thereof rotationally and axially forward to a horizontally disposed position above the seat level and forwardly of the back of the chair, means for releasably securing said table top member in said folded position thereof, said releasable securing means comprising a pair of magnets disposed in spaced relation near the bottom of the chair and beneath the covering for said side surface of the chair, and a magnetizable plate carried by said top member and attractable by said magnets as the top member is moved into its folded position.

2. The combination as in claim 1, said table top member comprising non-magnetic core and facing sheets, said magnetizable plate being recessed into said core in subadjacency to the facing sheet which lies adjacent to said chair side surface when the table top is in its folded position.

3. The combination with an executive type conference chair having a back, a seat, and rigid side arms, of a writing arm comprising a table top member foldably secured to one of said side arms and movable from a foldable position adjacent the side surface thereof rotationally and axially forward to a horizontally disposed position above the seat level and forwardly of the back of the chair, said writing arm further comprising an elongated metal shaft disposed at the top level of said one of said side arms and displaced laterally therefrom and extending co-extensively therewith, a bracket secured to said shaft at the rear end thereof, means for securing said bracket to the back surface of said one of the side arms, and said table top member having a hinge portion extended laterally therefrom, said hinge portion having an elongated bore for receiving said shaft in rotational and axial sliding relation thereon whereby the table top member in the horizontal position of use thereof is supported in part on the top surface on said one of the chair arms and is supported in remaining part by said shaft.

4. The combinations as in claim 3 and further characterized by a metal sleeve disposed within said elongated bore and having internally disposed bearings at the ends of the sleeve for journaling engagement with said shaft.

5. The combination as in claim 4 and further comprising fastening means at the free end of said shaft for releasably retaining said table top member thereon.

6. The combination with an executive type conference chair having a back, a seat, and rigid side arms, of a

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writing arm comprising a table top member foldably secured to one of said side arms and movable from a foldable position adjacent the side surface thereof rotationally and axially forward to a horizontally disposed position above the seat level and forwardly of the back of the chair, said table top member being contoured to accommodate the chair occupant when the top member is in its position of use, and said top member being a composite of a core and quality wood-simulating plastic facing sheets and quality wood edge strippings.

7. The combination as in claim 3, further characterized in that the chair is fully upholstered and said bracket having a chair-secured portion disposed beneath the chair covering at said back surface of the chair.

8. The combination as in claim 5 and further comprising means for plugging the forward end of said elongated bore to conceal said fastening means in the end of the shaft.

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gated bore to conceal said fastening means in the end of the shaft.

9. The combination as in claim 3 and further comprising a laterally extending member secured to the other of said chair side arms in matching relation to said hinge portion of the table top member.

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