Dec. 4, 1945. G. M. GRILL 2,390,215

SWIVEL CHAIR

Filed Aug. 9, 1944 2 Sheets-Sheet 1

Fig 1

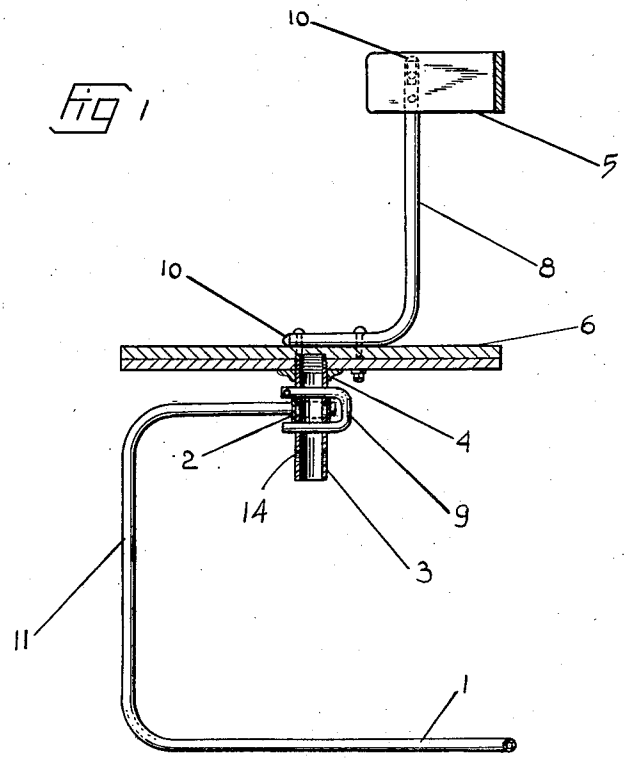
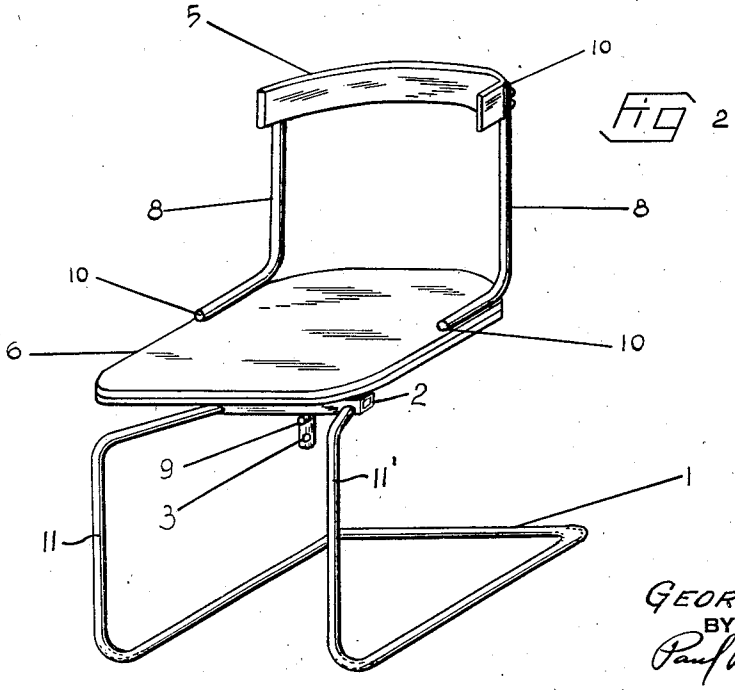


Fig 2



INVENTOR
GEORGE M. GRILL
BY
Paul B. Hunter
ATTORNEY

Dec. 4, 1945. G. M. GRILL 2,390,215

SWIVEL CHAIR

Filed Aug. 9, 1944 2 Sheets-Sheet 2

Fig 3

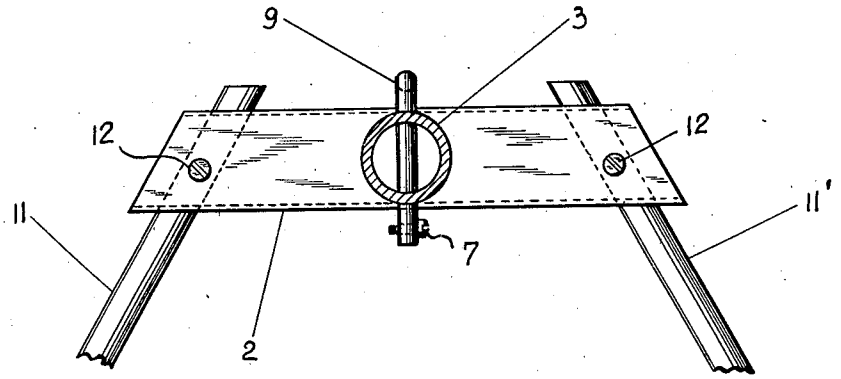


Fig 4

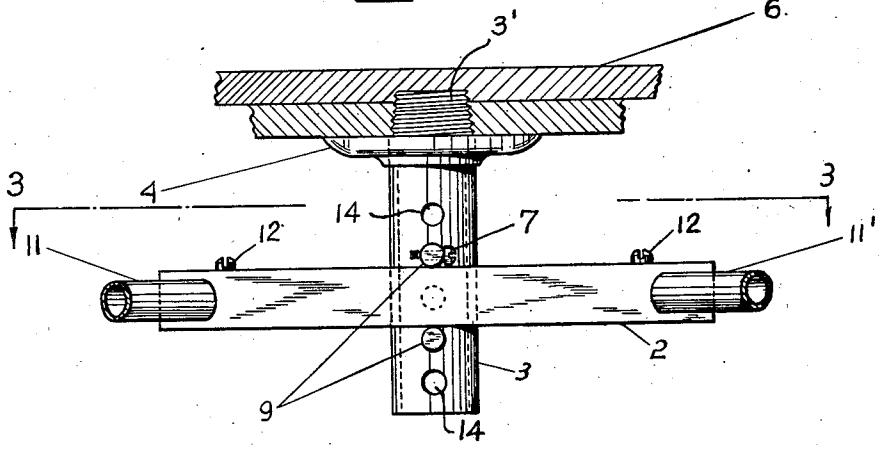
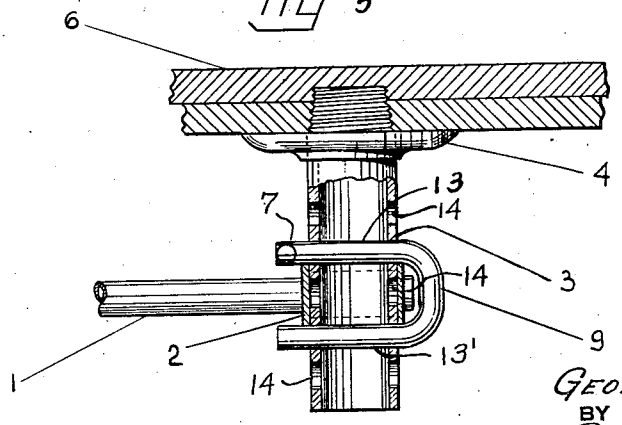


Fig 5



INVENTOR
GEORGE M. GRILL
BY
Paul B. Hunter.
ATTORNEY

Patented Dec. 4, 1945 2,390,215

UNITED STATES PATENT OFFICE

2,390,215

SWIVEL CHAIR

George M. Grill, Kew Gardens Hills, N. Y., assignor to Lewyt Corporation, a corporation of New York

Application August 9, 1944, Serial No. 548,665

4 Claims. (Cl. 155—95)

This invention relates, generally, to an improved chair construction, and the invention has reference, more particularly, to a novel construction of swivel chair having general utility.

One object of the present invention is to provide a novel swivel chair that is readily and easily adjustable as to height.

Another object of the invention is to provide a novel swivel chair that is of simple yet strong and durable construction, and which is inexpensive to manufacture, yet provides great flexibility as to swiveling through any desired angle, and which is especially valuable for use by children inasmuch as the seat is adjustable as to height, thereby allowing for the growth of a child.

Other objects and advantages will become apparent from the specification, taken in connection with the accompanying drawings wherein the invention is embodied in concrete form.

In the drawings,

Figure 1 is a vertical sectional view of the novel swivel chair of this invention;

Figure 2 is a perspective view of the chair of Figure 1;

Figure 3 is a fragmentary sectional view taken along the lines 3—3 of Figure 4;

Figure 4 is an enlarged fragmentary view of a portion of the seat-supporting structure looking from the front of the chair, i. e., toward the right in Figure 1; and

Figure 5 is a fragmentary sectional view taken at right angles to the structure shown in Figure 4.

Similar characters of reference are used in all of the above figures to indicate corresponding parts.

Referring now to the said drawings, the reference numeral 1 designates a tubular supporting frame having a U-shaped base together with uprights 11 and 11' having upper turned-back portions which underlie the seat of the chair and extend through the end portions of a transverse frame member or crossbar 2. This crossbar is shown as being of hollow construction of substantially rectangular cross-section and is apertured at its end portions for conformably receiving the turned-back portions of the uprights 11 and 11'. The ends of these turned-back portions are rigidly secured within the crossbar 2 as by the lock screws 12.

The chair seat 6 is shown as of laminated construction, although the same may be a simple unitary structure such as metal or composition, etc., if desired. This seat is attached at its under side to a supporting post or stud 3, which is shown as of tubular construction and may be threaded at 3' into the aperture provided in seat 6. This stud 3 is shown provided with an annular flange or collar 4 which may be secured to the seat 6 as by screws, if desired, or the same may merely abut the same as when the member 3 is threaded as at 3' into the seat 6. The stud or post 3 extends downwards through a conformable aperture in the crossbar 2 for turning within this crossbar while supported thereby.

To support the post 3 upon the crossbar 2, there is provided a yoke member 9, shown as having legs 13, 13', which are adapted to extend through vertically superimposed transverse apertures 14 provided in the post 3. A series of the apertures 14 is provided, the legs extending into alternate apertures within the post or stud, the yoke surrounding and resting upon the crossbar 2, thereby supporting post 3 and the seat upon this crossbar. By removing the yoke 9 and reinserting the same into the different holes, it is readily possible to raise or lower the seat 6 to any height desired.

In the figures shown, five of the holes 14 are provided, enabling three adjustments of the chair as to height. It will be noted that alternate holes of the post are spaced apart at a distance equal to the spacing of the legs 13, 13' of the yoke.

A screw 7 is shown threaded through the leg 13 and serves to prevent accidental dislodgement of the yoke from the post 3. The effective lengths of the legs 13, 13' are determined by the location of the screw 7; the effective lengths of these legs serving to determine the extent to which the chair may be swiveled, the limit of swivel being determined by the abutment of the connecting or central portion of yoke 9 against the rear surface of the crossbar 2. The longer the effective lengths of the legs, the greater the angle of swivel permitted.

The seat 6 is shown provided with a curved back rest 5 that is supported by tubular supports 8 secured at their upper end portions to the back rest 5 and at their lower end portions to the seat 6. The ends of the tubular steel supports 8 are shown closed by molded plastic closures 10, thereby enhancing the ornamental appearance of the chair.

It will be noted that in swiveling the chair, a swivel angle of 120° may be readily obtained with the back of the chair always remaining to the rear of the supporting frame. Owing to the fact that the extent of swivel can be readily controlled

by the effective lengths of the legs 13, 13', which in turn is determined by the position of the screw 7 on leg 13, the desired extent of swivel is readily obtained. Since the amount of swiveling is definitely limited, the complete undesired rotation of the chair is prevented.

Since many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A chair of the class described, comprising a supporting frame, a transverse crossbar carried by said supporting frame, a chair seat, a post supporting said chair seat and extending through an aperture in said crossbar and turnable within said aperture, and a yoke member having legs extending above and below said crossbar and through said post for supporting the latter upon said crossbar while permitting swivel motion of said post with respect to said crossbar.

2. A chair as defined in claim 1, wherein said yoke is provided with a stop member serving to prevent the same from becoming dislodged from said post, said yoke also serving to limit the extent of swivel of said chair seat.

3. A chair of the character described, comprising a supporting frame having an apertured cross-member, a seat provided with a depending supporting post extending downwardly through said apertured cross-member, said post having a plurality of vertically superimposed transverse apertures, a yoke member having legs extending through alterate apertures of said post and adjacent the upper and lower surfaces of said cross-member, said yoke serving to support said post upon said cross-member while permitting swivel action of the post thereon.

4. A chair of the class described, comprising a supporting frame, a transverse crossbar carried by said supporting frame, a chair seat, a post supporting said chair seat and extending through an aperture in said crossbar and turnable within said aperture, said post being transversely apertured, and a yoke member extending in overlapping relation to said crossbar and through said apertured post for supporting the latter upon said crossbar while permitting swivel motion of said post with respect to said crossbar.

GEORGE M. GRILL.