June 17, 1930. E. A. ZUNDEL 1,764,137

CLOSET CHAIR

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FIG. 1

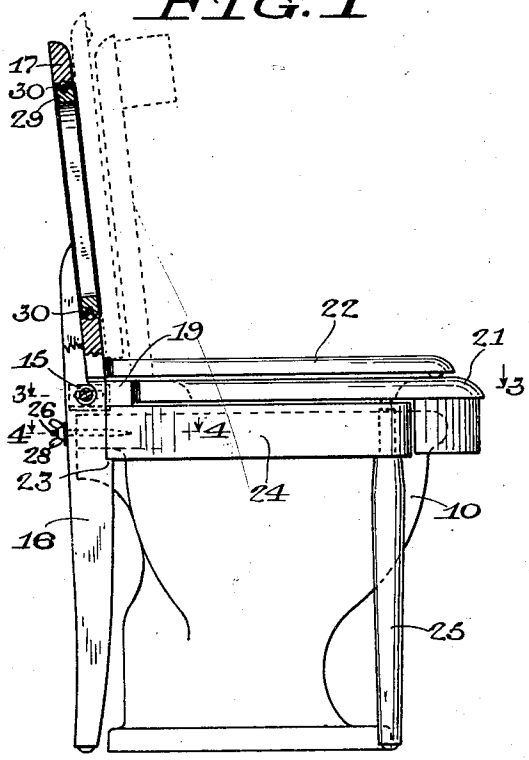


FIG. 2

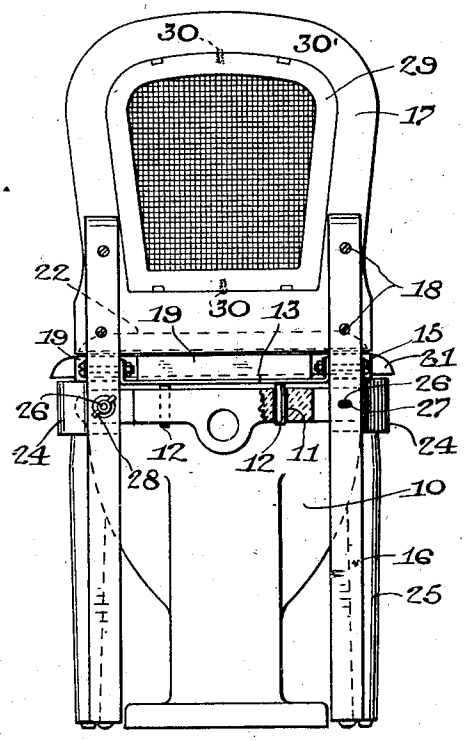


FIG. 3

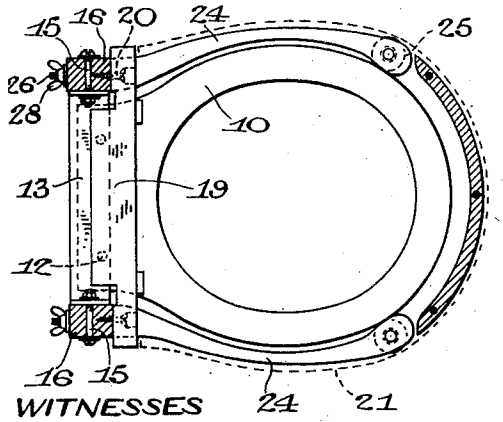


FIG. 4

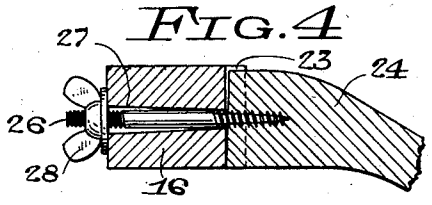
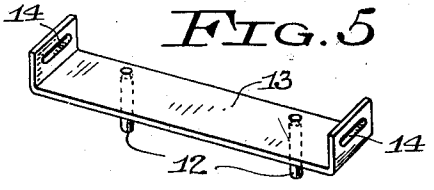


FIG. 5



WITNESSES

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FIG. 6

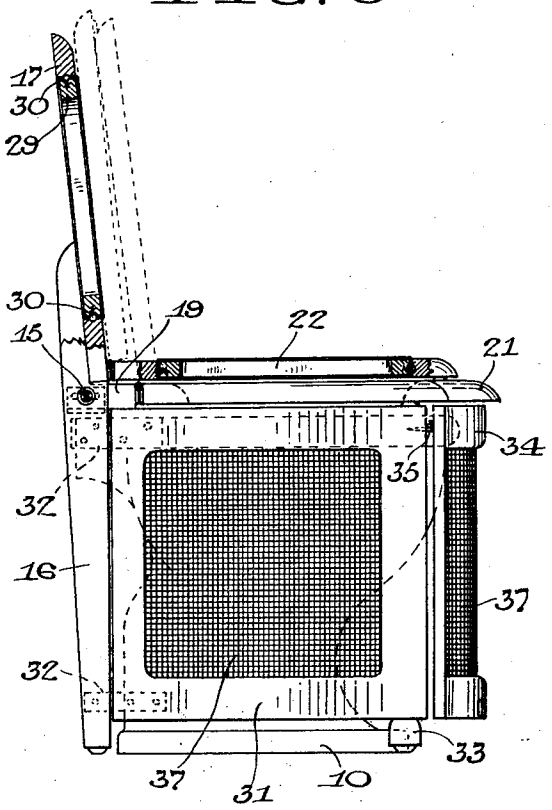


FIG. 7

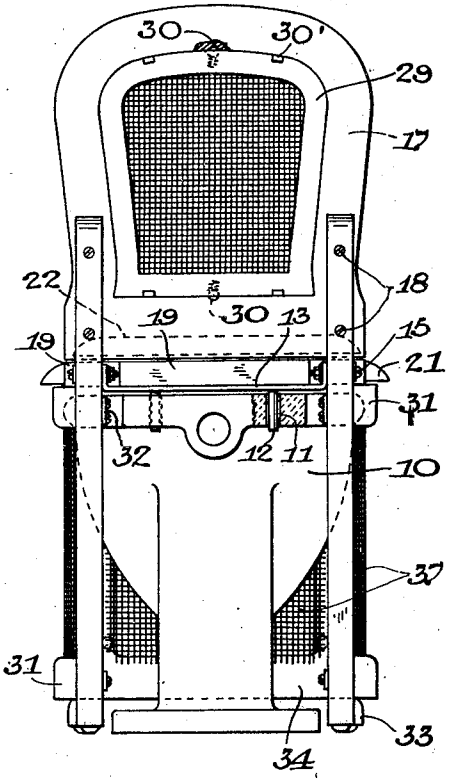


FIG. 8

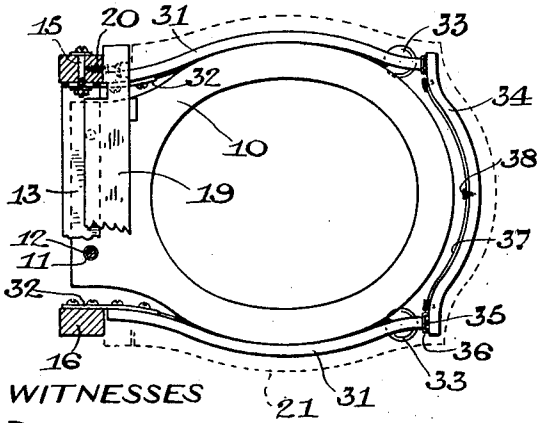
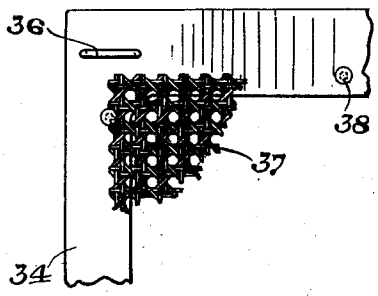


FIG. 9



WITNESSES

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UNITED STATES PATENT OFFICE

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CLOSET CHAIR

Application filed September 27, 1928. Serial No. 308,613.

This invention has for its object to provide a closet chair having the appearance of an ordinary chair and provided with side members capable of swinging and carrying the front legs so as to be adaptable to closets of different sizes and shapes.

An object of the invention is to perfect details of construction of chairs of this character covered by my United States Letters Patent for water closet chairs No. 1,557,919, dated October 20, 1925, and by my pending application for closet chairs, Serial No. 139,445, filed October 4, 1926.

One purpose of the invention is to provide a novel means for positioning the side wings carrying the front legs.

Another object of the invention is to provide an adjustable member for coupling the closet chair with the closet bowl for establishing a definite fixed relation between them.

Another object of the invention is to provide such a closet chair with cane or the like coverings for the seat and the back and for side and front skirts, which coverings may be readily removed for cleaning or for renewing the same.

With the above and other objects in view the invention consists in the closet chair as herein claimed and all equivalents.

Referring to the accompanying drawings in which like characters of reference indicate the same parts in different views,

Fig. 1 is a side elevation partly in section of one form of closet chair constructed in accordance with this invention;

Fig. 2 is a rear view thereof with the flange of the closet bowl sectioned to show the pin connection therewith;

Fig. 3 is a sectional plan view on the plane of line 3—3 of Fig. 1;

Fig. 4 is an enlarged sectional view of the adjusting connection for one of the side wings;

Fig. 5 is a perspective view of the adjustable coupling plate for providing the pin connections between the closet chair and the closet bowl;

Fig. 6 is a side elevation partly in section of another form of the invention with skirts or screens for hiding the closet bowl;

Fig. 7 is a rear view thereof;

Fig. 8 is a sectional plan view, and

Fig. 9 is a detail view of a fragment of the front skirt or screen.

In these drawings, 10 indicates a water closet bowl of any usual construction having a rear flange with spaced vertical openings 11 therethrough which are usually provided to receive the seat hinge connections. In the present instance, however, instead of bolts occupying these openings 11, a pair of parallel pins 12 loosely fit in said openings to position the closet chair with respect to the closet bowl. Such pins 12, as seen in Fig. 5, are carried by a metal plate 13, preferably nearer one edge than the other, and the ends of the plate are turned upwardly to form attaching ears with transversely extending horizontal slots 14, through which bolts 15 are passed, as in Fig. 3, to adjustably mount the plate on the rear leg members 16. The rear leg members 16 are secured to a chair back 17, as by means of screws 18, and a cross-piece 19 is secured to said leg members as by means of screws 20.

Hinged to the cross-piece 19 is a closet seat 21, while hinged to the chair back 17 is the seat cover 22. The seat 21, and in fact the entire chair frame, may be adjusted relative to the closet bowl 10 to properly position it with respect thereto by sliding the plate 13 on the bolts 15 through the range of adjustment afforded by the transverse slots 14. However, should a greater range of adjustment be desired, this is afforded by reversing the plate 13 so that the pins 12 project from the rear edge thereof instead of the front edge.

Seated in notches in the rear legs 16 between shoulders 23 thereof and the cross-piece 19 are side wings 24 preferably curved, as shown in plan in Fig. 3, to fit closely around the closet bowl and carrying front leg members 25 at their front ends. Screw studs 26 threaded in the rear ends of the wings 24 pass through splayed openings 27 in the rear leg members 16 and have thumb nuts 28 threaded thereon. As the wing members 24 bear against the rear leg members at their outer edge only the tightening of the

wing nuts causes them to swing in their seats so as to approach each other and embrace the closet bowl between them, thus bringing the front legs 25 close to the closet bowl irrespective of the size or shape of the latter.

The seat member is entirely independent of the closet bowl for its support as it is hinged to the rear leg members and rests on the front leg members.

The seat cover 22 or the chair back 17 or both may be provided with a removable panel 29 covered with cane fabric or the like, such panel being inset in a correspondingly shaped opening and removably held in place by spring ball clips 30 and angle stops 30′ so as to be readily cleaned or recovered.

In that form of the invention shown in Figs. 6 to 9 inclusive the support for the closet seat is afforded by screen frames 31 forming wings or skirts which have flexible connection with the rear leg members by means of spring hinges 32, the front lower corner of each screen frame being provided with a foot member 33 to bear on the floor. These screen frames 31 are preferably curved, as shown in Fig. 8, to fit fairly close around the closet bowl and are connected at their front by a somewhat similarly curved front panel or frame 34, the connection being such as to permit of the positioning of the side frames nearer together or farther apart according to the size and shape of the bowl embraced between them. Such connection as shown consists of hooks 35 on the front edges of the side frames 31 for engaging elongated horizontal cleats 36 on the rear of the front panel or frame 34. The curved panels or frames 31 and 34 are preferably provided with a covering of cane fabric 37, which may be readily removable therefrom as by engaging its edges beneath the heads of tacks 38 driven in the backs of said frames or panels. This enables the cane fabric to be readily removed for cleaning or renewal.

What I claim as new and desire to secure by Letters Patent is:

1. In a closet chair, a cross-piece having pins to fit in the vertical openings of a closet bowl flange for positioning the closet seat with respect to the closet bowl, said cross-piece being adjustable with respect to the closet chair for effecting adjustment of the closet chair to the closet bowl.

2. In a closet chair having leg members and a seat member supported thereby, a U-shaped connecting plate having transverse slots in its ends, bolts on the leg members passing through said slots, and pins on the connecting plate to fit in the vertical openings of the closet bowl flange for positioning the closet chair with respect to the closet bowl.

3. In a closet chair having leg members and a seat member supported thereby, a connecting plate adjustably mounted on the closet chair and reversible end to end and having pins projecting therefrom out of the central plane of the connecting means whereby the reversal of the connecting plate from end to end increases the range of adjustment thereof for positioning the closet seat with respect to the closet bowl.

4. In a closet chair having leg members and a seat member supported thereby, a U-shaped connecting plate having transverse slots in its ends, bolts on the leg members passing through said slots, and pins on the connecting plate nearer one edge thereof than the other for fitting in the vertical openings of the flange of the closet bowl to position the closet chair with respect to the closet bowl, said plate being reversible end to end to increase the range of adjustment afforded thereby.

5. A closet chair comprising rear leg members, a back member and a hinged seat member, side wings carrying front legs and mounted on the rear leg members, and clamping means for drawing the side wings and rear leg members together to cause the side wings to approach each other and embrace a closet bowl between them.

6. A closet chair comprising rear leg members, a back member and a hinged seat member, side wings carrying front leg members to support the seat member, and having a bearing at their outer edges on the rear leg members, clamping means for drawing the side wings and the rear leg members together to cause the side wings to move towards each other and embrace the closet bowl between them.

7. A closet chair comprising rear leg members, a back member and a hinged seat member, side wing members carrying front legs to support the seat member and having a bearing at their outer edges on the rear leg members, clamping screws on the side wing members passing through splayed openings in the rear leg members, and wing nuts threaded on the clamping screws for drawing the side wing members together to embrace the closet bowl between them.

8. A closet chair comprising rear leg members, a back member and a hinged seat member, side wings forming open panel frames pivotally connected to the rear leg members and constituting front leg members to support the seat member, and removable cane fabric covering the openings of said side wings.

9. A closet chair comprising rear leg members, a back member and a hinged seat member, side wings forming panel frames pivotally connected to the rear leg members and constituting front leg members to support the seat member, and a front panel connecting the front edges of the side wings in the various positions thereof.

10. A closet chair comprising rear leg mem-

bers, a back member and a hinged seat member, side wings forming panel frames pivotally connected to the rear leg members and constituting front leg members to support the seat member, a front panel connecting the front edges of the side wings in the various positions thereof, and removable cane fabric coverings for said panels.

11. In a closet chair or the like having leg members, a back member and a seat member, a removable panel frame therefor having a detachable covering of cane fabric.

In testimony whereof I affix my signature.

EUGENE A. ZUNDEL.