

R. McCORD.
CLOSET SEAT HINGE.
APPLICATION FILED SEPT. 2, 1911.

1,018,722.

Patented Feb. 27, 1912.

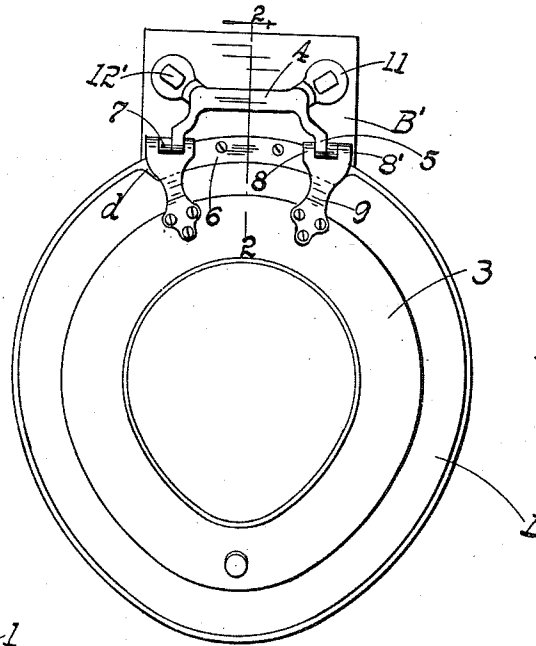


FIG. 1.

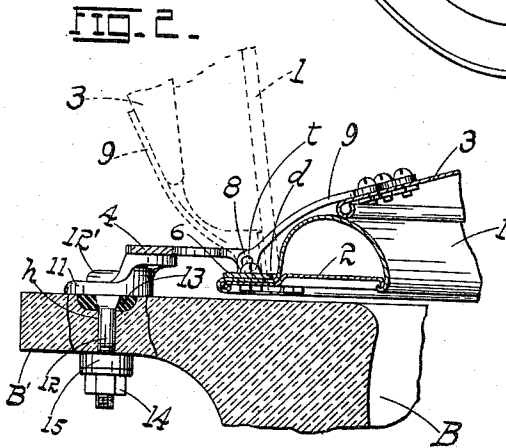


FIG. 2.

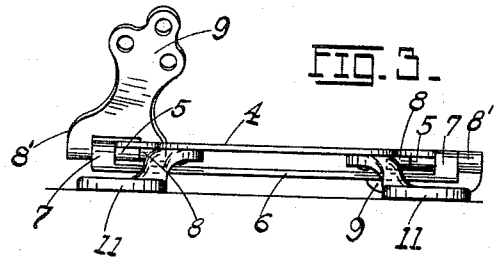


FIG. 3.

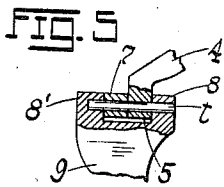


FIG. 5.

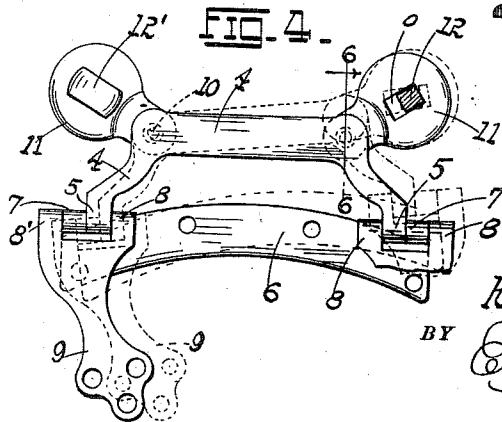


FIG. 4.

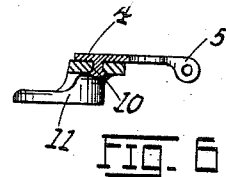


FIG. 6.

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CLOSET-SEAT HINGE.

1,018,722.

Specification of Letters Patent.

Patented Feb. 27, 1912.

Application filed September 2, 1911. Serial No. 647,362.

To all whom it may concern:

Be it known that I, RALPH McCORD, citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Closet-Seat Hinges, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in closet-seat hinges; and it consists in the novel construction of hinge more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a top plan of a closet-seat showing my invention applied thereto; Fig. 2 is an enlarged vertical cross-section taken on the line 2—2 of Fig. 1; Fig. 3 is a rear elevation of the hinge with one of the lid hinge-straps or leaves down and the other swung to full open position; Fig. 4 is an enlarged top plan of the hinge (with one of the lid straps broken) showing the manner of its adjustment; Fig. 5 is a sectional detail through the hinge axis of the oscillating parts; and Fig. 6 is a cross-sectional detail on the line 6—6 of Fig. 4.

The object of my invention is to construct a hinge which will allow the seat to be adjusted to the bowl no matter to what degree the holes, in the bowl which receive the bolts by which the hinge is secured, may be out of perfect transverse alinement.

The advantages of the construction will be better apparent from a detailed description of the invention which is as follows:

Referring to the drawings, B, represents the bowl, 1, the upper convex metal section and 2, the bottom plane section of the hollow shell constituting the seat as well understood in the art. The lid 3 is likewise preferably made of sheet metal. Secured to the rear extension B' of the bowl is a U-shaped plate 4 the terminals of whose arms are formed into perforated loops 5. Secured to the rear of the seat in a depression *d* pressed in the metal for the purpose, is a hinge-leaf 6 conforming in curvature to the curvature of the seat, the rear corners of the leaf having formed thereon perforated loops 7, 7, alining with the loops 5 of the plate 4 and engaging the loops 5 exteriorly (Fig. 4). Embracing the loops 5, 7, thus assembled are the perforated loop 8 and the socketed lobe 8' forming the inner forked ter-

minial of a lid strap 9, the outer ends of the straps being connected to the lid 3. The straps 9 are convexed rearwardly so that when the lid is swung back they will engage the arms of the plate 4 and thus arrest the lid before the same can strike the wall or flush-pipe (dotted position Fig. 2) usually behind the bowl.

Swiveled about studs 10 on the under side of the plate 4 at the bases of the arms thereof are anchor pieces or feet 11 having enlarged or expanded bases, the same being adapted to receive the bolts 12 which enter the holes *h* formed in the extension B', a suitable gasket 13 being interposed between the member 11 and the bowl, and on the under side the parts are fastened securely by a nut 14 between which and the bowl extension are interposed washers 15, (Fig. 2). The upper ends of the bolts 12 terminate in large oblong heads 12' which cover the rectangular slots or openings *o* formed in the feet or anchors 11, the portion of the bolt immediately adjacent the head 12' being preferably square in cross-section so as to engage the straight sides of the opening *o* and keep the bolt from turning.

In the application of the hinge to the seat, the leaf 6 is first secured to the seat and the several loops 5, 7, 8, 8', are alined for receiving the hinge pins *t* (Fig. 5) and the straps 9 are secured to the lid 3. Thereupon the bolts 12 are passed through their respective feet 11 and into the holes *h* formed for their reception in the bowl B and the nuts are screwed taut. It is of course desirable that the seat when dropped shall be disposed symmetrically about the axes of the bowl (the longitudinal and transverse axes) and to accomplish this is the object of the swiveled connection between the feet 11 and the plate 4. After the bolts 12 are dropped into position as just described, the plumber carefully oscillates the plate 4 about the studs 10, thus carefully adjusting the seat into perfect symmetry about the axes of the bowl. In this adjustment the feet are free to play over the bolts, the elongations of the openings *o* permitting of such play, the bolts freely rotating about their axes to adjust themselves to any movement to which the feet are subjected. Once the adjustment is concluded, the feet are made fast by simply driving home the nuts 14 on the bolts their full limit and the operation is completed.

By making the upper end of the bolt square, the bolt can not turn in the slot *o*, thus allowing the head 12' to be always presented lengthwise of the slot, and since the head is comparatively large, the slot is always covered by the head. If the holes *h*, *h*, which receive the respective bolts 12 were always bored so that a line connecting their centers were precisely at right angles to the longitudinal axis of the bowl, the adjustment referred to, and the swiveling of the feet 11 to the plate 4 would be unnecessary; but it is to adapt the seat to any bowl no matter how out of true the holes are bored that the present improvement was devised. The dotted position of the parts in Fig. 4 represent a rather exaggerated adjustment, the holes *h* being as a rule more nearly in proper position.

Having described my invention what I claim is:

1. In a closet-seat hinge, a plate, a hinged leaf carried thereby and adapted to be secured to the seat, straps hinged to the plate and secured to the lid, and swiveled anchor feet carried by the plate and adapted to be secured to the bowl.

2. In combination with a closet-bowl, a seat and lid therefor, a plate terminating in arms extending toward the seat, a leaf secured to the seat and provided with terminal perforated loops engaging the outer

sides of the perforated terminals of the arms of the plate, straps having inner forked perforated looped terminals adapted to aline with the loops of the leaf and the perforations of the arms of the plate, said straps being secured to the lid, anchor members swiveled at the bottom of the opposite ends of the plate at the bases of the arms, the anchors being provided with elongated slots, and securing bolts passed through said slots into the bowl, substantially as set forth.

3. In a closet-seat hinge, a plate, a hinged leaf carried thereby and adapted to be secured to the seat, straps hinged to the plate and secured to the lid, and swiveled anchor feet carried by the plate and adapted to be secured to the bowl, the anchors being provided with elongated slots, for the purpose set forth.

4. In a closet-seat hinge, a main plate carrying the hinged members or leaves, and swiveled anchor feet provided with elongated openings or slots having parallel sides for the reception of securing bolts, the latter having square formations engaging the sides of the slots for the purpose set forth.

In testimony whereof I affix my signature, in presence of two witnesses.

RALPH McCORD.

Witnesses:

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