Feb. 6, 1934. J. HEINKEL 1,946,140

CARRIER CHAIR FOR WATER CLOSET BOWLS

Filed May 22, 1933

FIG-1

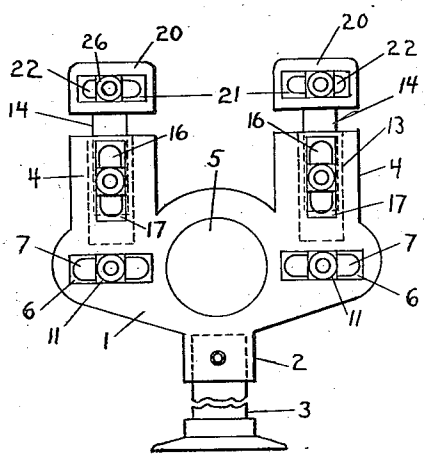


FIG-2

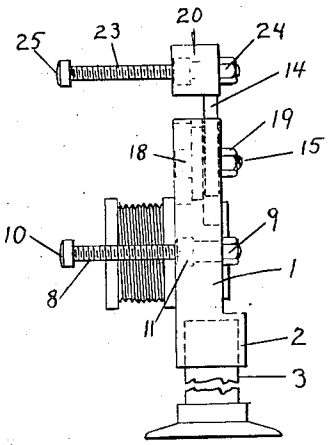
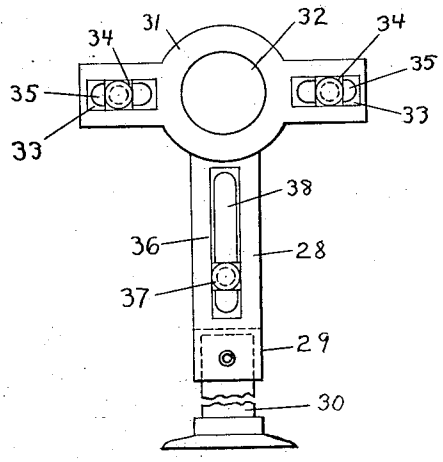


FIG-3



INVENTOR.
John Heinkel,
BY Walter N. Haskell,
his ATTORNEY.

Patented Feb. 6, 1934 1,946,140

UNITED STATES PATENT OFFICE

1,946,140

CARRIER CHAIR FOR WATER CLOSET BOWLS

John Heinkel, Rock Island, Ill.

Application May 22, 1933. Serial No. 672,259

3 Claims. (Cl. 4—252)

My invention pertains to a carrier chair for water closet bowls, and has for its chief purpose to increase the scope and utility of such devices. It has been the practice of the manufacturers of closet bowls to make them in different sizes and shapes, with variations in the spacing of the bolt holes in said bowls or in flanges thereon by means of which said bowls are bolted to the chairs. On account of such variation in the positioning of the holes it has been impossible for wholesalers and jobbers to keep the chairs in stock. The supporting plates of the carrier chairs have been made of a sufficient size to include any lay-out of such openings, the holes being later bored in such plate to correspond with the positions of the bolt-holes in the bowl.

The chief purpose of the present invention is the production of a chair having the bolt openings already provided therein, and capable of an adjustment of a universal character, so that they can be readily manipulated for use with a bowl of any size, or to conform to any lay-out of bolt-holes therein. This makes it possible for the chairs to be kept in stock by dealers in such articles, and supplied for use with any make of bowl.

It has also been the practice in the art mentioned to provide the bowls and chairs with two pairs of said bolts at different heights, as for the siphon jet type of bowl, or with a pair of bolts above and single bolt below, used with the blow-out type. Both of said methods of support are shown and set forth herein.

In the drawing:—

Fig. 1 shows a preferred form of the invention in front elevation, with the several pairs of bolts removed.

Fig. 2 is a side view thereof.

Fig. 3 is a view similar to Fig. 1, showing a modified form of the invention.

In Fig. 1 is shown a form of the invention which comprises a plate 1, provided on its lower edge with a socket 2, to receive the post of a stand 3, supported at some point beneath the chair. In some cases a foot is substituted for the stand, supported on the floor of a building, or on a sub-floor just below the same. The plate 1 has a pair of upward extensions 4, and in the body of the plate is a pair of horizontal recesses 6, in rear of which are slots 7 through which pass bolts 8, threaded throughout their entire lengths, and provided in rear of the plate 1 with nuts 9. On the other ends of said bolts are finish nuts 10 for engagement with some part of a closet bowl. Each of said bolts is also fitted with a nut 11, positioned slidably in the recess 6, and of a form to be non-rotatable therein. The plate 1 is also provided centrally with an opening 5, for the passage and support of a connection between the bowl and discharge pipe in rear thereof.

By lateral movement of the nuts 11 in the recesses 6 the bolts 8 can be positioned so as to conform with the location of openings in the bowl therefor. They are then secured in such positions by tightening the nuts 9. Connections of the bolts can then be made with the bowl in the usual manner.

In the rear faces of the extensions 4 are vertical channels 13, in which are slidable bars 14, held in place by stud-bolts 15, passing through slots 16 between the channels 13 and recesses 17 in the front faces of the arms 4. The heads 18 of the bolts 15 are slidable in said recesses, and are held from movement therein by nuts 19, bearing against the bars 14.

Fixed on the upper ends of the bars 14 are T-heads 20, provided in their front faces with horizontal recesses 21, in rear of which are slots 22 for the passage of a pair of bolts 23, also threaded throughout their lengths, and provided on their rear ends with nuts 24 and on their front ends with finish nuts 25 for connection with a bowl. The bolts 23 are also provided with nuts 26, slidable in the recesses 21, and capable of being held in adjusted positions therein by the nuts 24.

After the positions of the bolt openings in a closet bowl have been determined the positions of the pairs of bolts 8 and 23 is made to conform thereto, by first establishing the vertical spacing between said pairs of bolts. This is done by loosening the nuts 15 and moving the bars 14 upwardly or downwardly as required, and again locking such bars in the adjusted positions. If necessary, a lateral adjustment is then made of the bolts 8 or bolts 23 by loosening the nuts on the inner ends thereof and moving the nuts 11 or 22, as required. The nuts are then tightened, with the bolts in position for connecting with the bowl. This adjustment of the position of the bolts can be made with the chair on a bench or other support, and before the same is positioned in the wall of a building. In some cases, where a number of bowls are to be used in a piece of construction work the chairs can all be prepared for connecting up with the bowls before being shipped to the piece of work, all ready for being assembled.

In Fig. 3 is shown a form of the device wherein there is a central standard 28, provided with a socket 29 for connection with a stand 30. Mount-

ed on said standard is a T-plate 31, centrally of which is an opening 33 for the passage of a bowl connection. In the ends of said T-plate are recesses 33, in which are slidable nuts 34, to receive bolts similar to the bolts 23, to pass through slots 35 in the rear of the recesses and have fastening means similar to those shown for the bolts 23. In the standard 28 is a vertical recess 36, in which is slidable a nut 37, fitted to receive a single bolt like the bolts 8, and provided with fastening means such as are shown therefor. In rear of the recess 36 is a slot 38, for vertical adjustment of a bolt passing through the same, and in the case of closet bowls arranged for connection with a closet chair by means of three bolts, the positions of the bolts can be made to conform with said openings, as in the four bolt construction above described.

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

1. A device of the class described, comprising a plate, provided with a pair of horizontal recesses and slots in the rear thereof, bolts passing through said recesses and slots and provided with nuts on both of said ends, nuts on said bolts slidable in said recesses, auxiliary plate supported above said first-named plate and provided with horizontal recesses and slots in rear thereof, means for vertical adjustment of said auxiliary plates, bolts passing through said last-named recesses and slots and provided with nuts on their ends, and nuts on said last-named bolts slidable in the recesses in said auxiliary plates.

2. A carrier chair, comprising a plate provided with horizontally disposed recesses in one of its faces, and slots in rear of said recesses, extensions on said plate provided with vertical recesses, slots in rear thereof, and vertical channels in rear of said slots, bars slidable in said channels, means for holding said bars in adjusted positions, T-heads supported by said bars, provided with horizontal recesses and slots in rear thereof, bolts in said first-named recesses, nuts on said bolts slidable in said recesses, nuts on said bolts for locking said slidable nuts in position, bolts in said last-named recesses and slots, nuts on said last-named bolts slidable in the recesses, and nuts on said last-named bolts for holding said slidable nuts in place.

3. In combination with a main plate provided with a horizontal recess and slot in rear thereof, a bolt engaging means slidable in said recess, and auxiliary plate supported from said main plate and provided with a recess and slot in parallel relation with said first-named recess and slot, and bolt engaging means slidable in said last-named recess.

JOHN HEINKEL.