Feb. 13, 1934. L. R. BICKEL 1,947,373

COMMODE CHAIR

Filed May 20, 1931 2 Sheets-Sheet 1

Fig. 1.

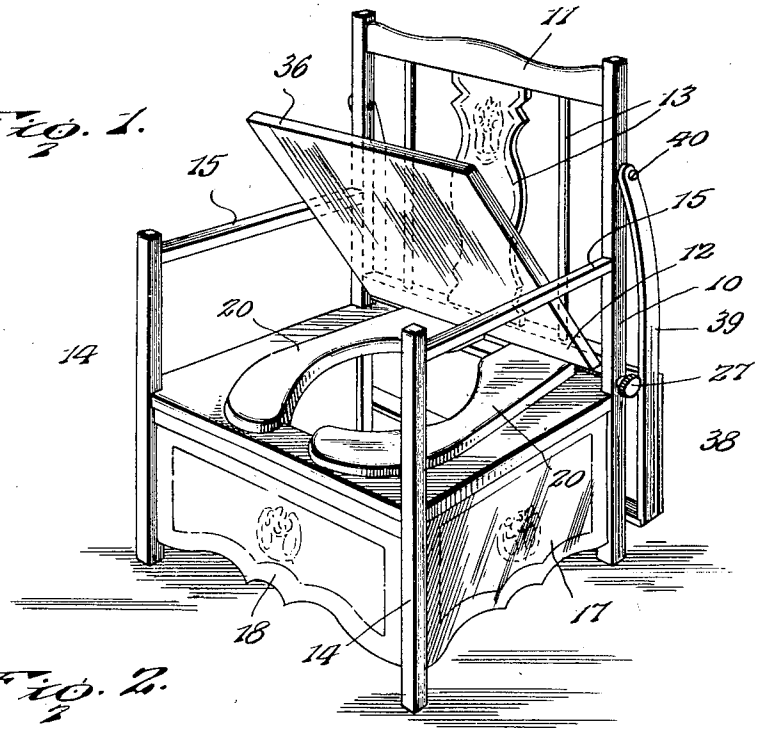


Fig. 2.

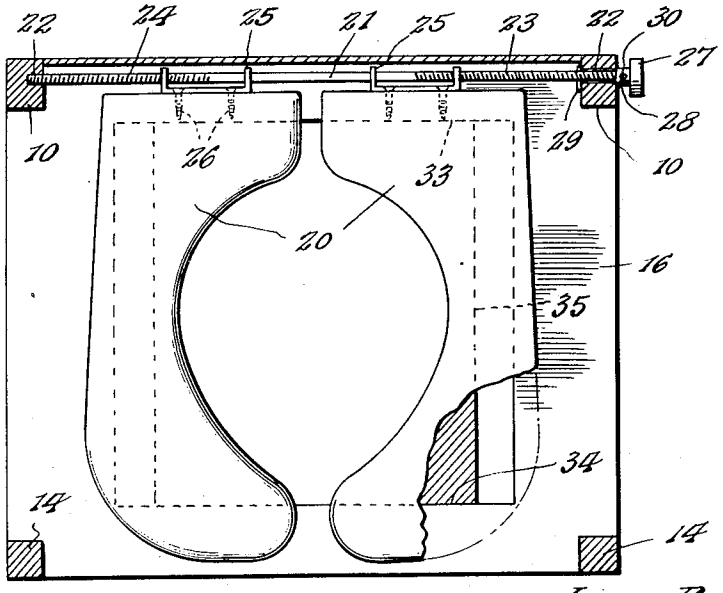
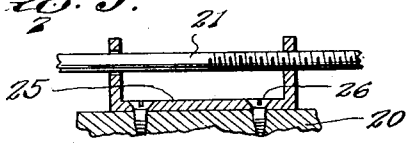


Fig. 5.



Inventor

Leon R. Bickel.

By Lacey & Lacey,

Attorneys

Feb. 13, 1934. L. R. BICKEL 1,947,373

COMMODE CHAIR

Filed May 20, 1931 2 Sheets-Sheet 2

Fig. 3.

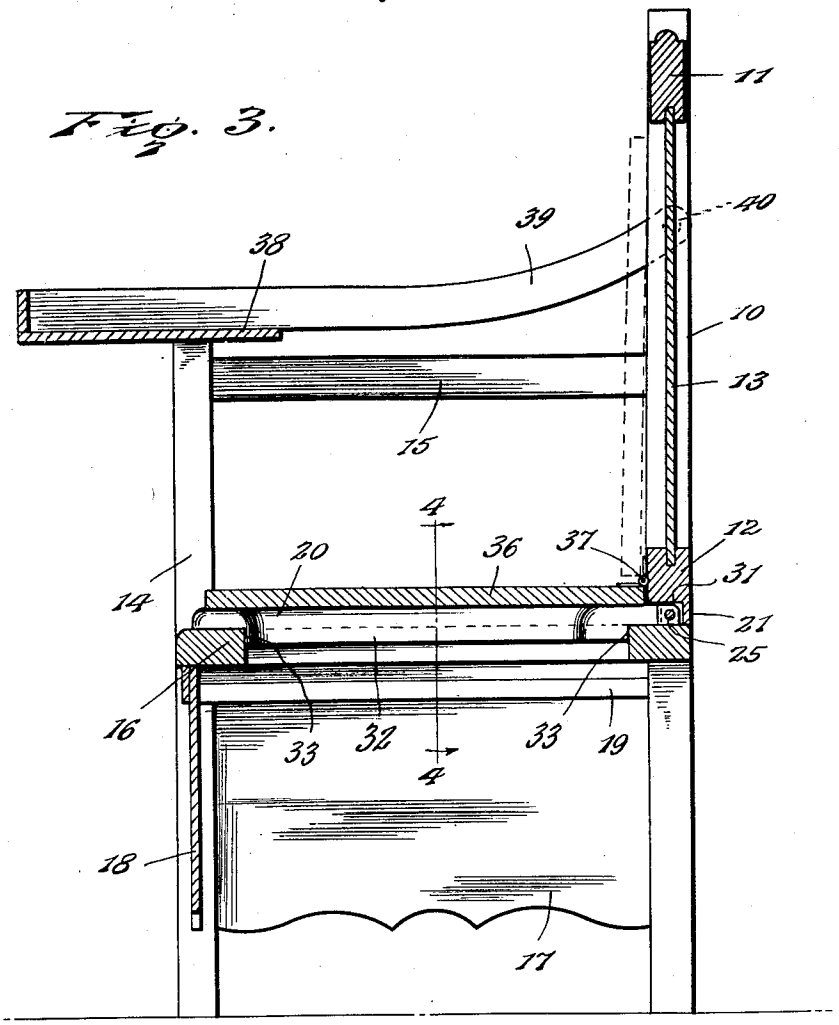
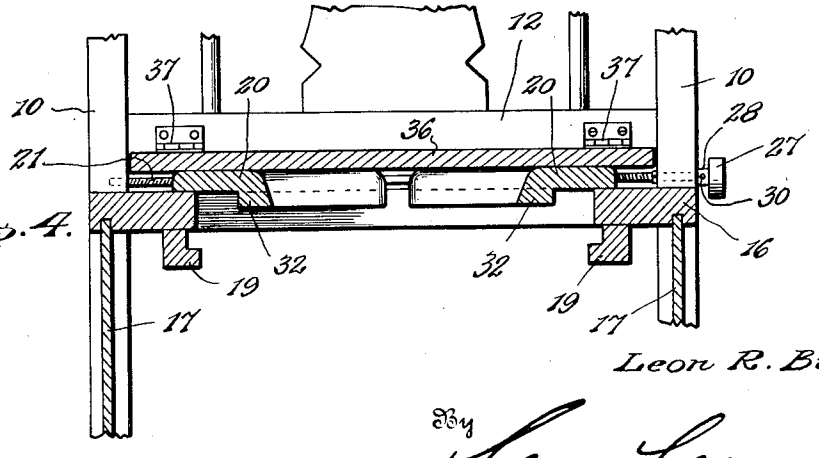


Fig. 4.



Inventor

Leon R. Bickel.

By Lacey & Lacey, Attorneys

Patented Feb. 13, 1934 1,947,373

UNITED STATES PATENT OFFICE

1,947,373

COMMODE CHAIR

Leon R. Bickel, Upper Darby, Pa.

Application May 20, 1931. Serial No. 538,808

8 Claims. (Cl. 155—31)

This invention relates to commode chairs and has for an object to provide adjustable seat sections and means for adjusting the sections carried by the uprights of the back of the chair, which uprights provide strong, rigid supports for the adjusting means so that the same will not easily get out of order.

A further object is to provide the back of the chair with a bottom rail having a recess in the front face which houses the screw and nuts constituting the adjusting means for the seat sections, so that these parts are concealed and, at the same time, are protected from being tampered with.

A still further object is to provide the seat sections with reinforcing members on the bottom faces, which members present outer edges against the front and rear edges of a rectangular opening in the seat frame of the chair to accurately guide the adjustable seat sections during movement thereof, the margins of the seat sections projecting outwardly beyond said reinforcing members and forming bearing flanges for adequately supporting the seat sections on the seat frame.

A still further object is to provide reinforcing members on the bottom faces of the seat sections, said members extending to the curved inner edges of the sections and providing increased thickness at said edges to promote comfort.

With the above and other objects in view the invention consists in certain novel details of construction and combinations of parts hereinafter fully described and claimed, it being understood that various modifications may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming part of this specification,

Figure 1 is a perspective view of a commode chair embodying my improvements,

Fig. 2 is a cross sectional view showing the seat sections and adjusting means in plan,

Fig. 3 is a vertical sectional view of the chair,

Fig. 4 is a cross sectional view taken on the line 4—4 of Fig. 3, and

Fig. 5 is a detail sectional view of one of the U-shaped nuts of the adjusting means.

Referring now to the drawings in which like characters of reference designate similar parts in the various views, the commode chair is shown to comprise a back having uprights 10 connected by an upper cross rail 11 and a lower cross rail 12, both rails being connected by vertical braces 13. The front uprights 14 are connected at the top by arm rests 15.

A substantially square seat frame 16, best shown in Fig. 2, is secured in any preferred manner to the front and rear uprights, and, below the seat frame, said uprights are connected by side boards 17 and a front board 18, best shown in Figs. 3 and 4, to form an enclosure for a container which may be hung from cleats 19 secured to the bottom face of the seat frame 16.

In carrying out the invention, I provide a pair of seat sections 20 which rest on the seat frame 16. These sections are mounted for relative movement with respect to each other so as to be slid away from each other or toward each other.

To accomplish adjustment of the seat sections, I provide a rod 21, the ends of which are journaled in openings 22 formed in the uprights 10 of the chair back adjacent to the seat frame 16. The uprights are preferably formed substantially rectangular in cross section to provide strong, rigid bearings for the ends of the rod. The rod is provided near one end with a right screw thread 23 and, near the opposite end, with a left screw thread 24.

Substantially U-shaped nuts 25 are secured to the rear edges of the respective seat sections 20 preferably by means of wood screws 26 passed through the nuts between the legs thereof, as shown best in Fig. 5. One leg of each nut, of course, is threaded to receive the respective screw thread of the rod 21.

A knob 27 is secured to a projecting end of the rod 21 for the purpose of rotating the rod to feed the nuts 25 therealong in opposite directions to adjust the seat sections relatively to each other. A collar 28 on the knob and a removable pin 29 passed through the rod engage the contiguous upright 10 of the chair back and hold the rod against endwise movement. By removing the pin 29 and backing out the securing screw 30 of the knob collar, the rod 21 may be dis-assembled from the uprights 10 when desired.

By referring to Fig. 3, it will be seen that the bottom rail 12 of the back is provided with a rabbet or recess 31 in the front face of the lower edge thereof, within which the rod 16, rear ends of the seat sections, and the nuts 25, are received and completely housed. This recess thus conceals the adjusting mechanism of the seat sections from view while, at the same time, guards said mechanism against being tampered with.

By now referring to Figs. 2 and 4, it will be seen that the seat sections 20 are provided on the bottom faces with reinforcing members 32. These

members are preferably formed of the same material as the seat sections 20 and may be rigidly secured to the latter in any preferred manner. The front and rear edges 33 and 34 of the members slidably engage the corresponding edges of the rectangular opening defined by the seat frame 16, as clearly shown in Fig. 2. Said edges 33 and 34 consequently form guides for directing sliding movement of the seat sections 20 toward and away from each other. The outer longitudinal edges 35 of the members 32 form stop shoulders to engage the side edges of the opening defined by the seat frame 16 and limit outward movement of the seat sections. It will be particularly observed that, as best shown in Fig. 4, the inner curved edges of the reinforcing members 32 extend flush with the corresponding inner curved edges of the seat sections and provide additional thickness at the inner edges of the seat to promote comfort. Furthermore, the margins of the seat sections project outwardly beyond the reinforcing members and provide bearing flanges for slidably supporting the sections on the seat frame.

As best shown in Fig. 3, the chair is preferably equipped with a seat cover 36 which may be hinged, as shown at 37, to the bottom rail 12 of the back, and, also, preferably the chair is equipped with an arm tray 38, the legs 39 of which are hinged by pintles 40 to the uprights 10 of the back in the usual manner.

It is thought from the above description that the construction and operation of my invention will be thoroughly understood without further explanation.

Having thus described the invention, I claim:

1. A commode chair having a recessed back rail, uprights connected by the rail, a seat of relatively movable sections, a seat frame supporting said sections, and means carried by the uprights and housed within the recess of said back rail for adjusting said sections laterally with respect to each other.

2. In a commode chair, a back rail having a rabbet formed therein, uprights connected to the ends of the rail, a pair of relatively movable seat sections, a rod housed in said rabbet and journaled at the ends in said uprights, screw threads on said rod, and nuts carried by said sections projecting into said rabbet and engaging said screw threads.

3. A commode chair comprising a seat frame, relatively movable seat sections thereon, means for moving the sections relatively to each other, and reinforcing members on the bottom faces of said sections having the front and rear edges slidably engaging the corresponding edges of the opening defined by said seat frame for directing sliding movement of the sections, the outer lateral edges of said members forming stop shoulders to engage the lateral edges of said opening defined by the seat frame to limit movement of the sections outwardly with respect to each other.

4. A commode chair having a back provided with spaced uprights and a rail connecting said uprights, there being a recess formed in the front face of said rail, a rod having the ends journaled in said uprights and housed in said recess, means for rotating the rod, said rod being provided with screw threads near the ends pitched in opposite directions, a pair of seat sections, a seat frame slidably supporting the sections, and nuts secured to said sections and engaging respective screw threads of said rod.

5. A commode chair including a seat frame, relatively movable seat sections supported by said frame, uprights at the rear edges of said frame, a back rail connecting said uprights and having a recess in the front face, substantially U-shaped nuts carried by said sections each having spaced legs thereof projecting into said recess, and a rod rotatably mounted in said uprights and housed within said recess, said rod having screw threads at the ends pitched in opposite directions and engaging said nuts.

6. A commode chair comprising a seat frame, relatively movable seat sections thereon, means for sliding the sections relatively to each other, and reinforcing members on the bottom faces of said sections projecting into the opening defined by the seat frame to provide increased thickness of the seat sections and having front and rear edges slidably engaging the corresponding edges of the opening defined by said seat frame for directing sliding movement of said sections.

7. A commode chair comprising a seat frame, relatively movable seat sections mounted to slide toward and away from each other on said frame, reinforcing members on the bottom faces of said sections projecting into the opening defined by the seat frame and having side edges adapted to engage the corresponding edges of said opening to limit outward sliding movement of the sections, said sections projecting outwardly beyond said reinforcing members and forming bearing flanges, said flanges engaging the top surface of said frame and supporting the sections on the frame, and means for sliding said sections relatively to each other.

8. In a commode chair, front and rear uprights, a seat frame supported between said uprights, a back rail connecting said rear uprights, a seat formed of relatively movable sections supported upon said frame, the rear ends of the seat sections extending underneath of and contiguous to the back rail, adjusting means carried by said rear uprights adjacent said back rail, and connections between the rear ends of the seat sections and said means underneath the back rail for moving said sections relative to each other, the back rail and said rear ends of the seat sections housing said connections from exposure.

LEON R. BICKEL.