Jan. 29, 1924. 1,482,073

R. FERDINAND

FOLDING TOILET CHAIR

Filed Oct. 17, 1921

Fig. 1.

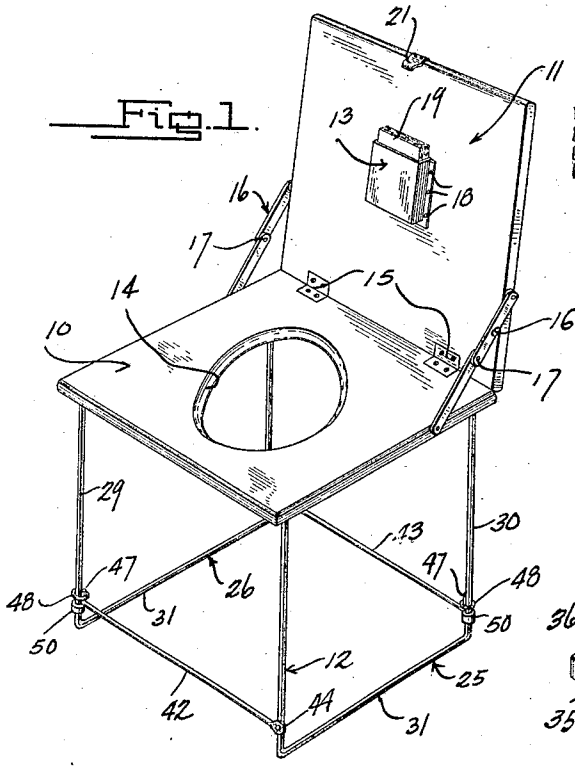


Fig. 4.

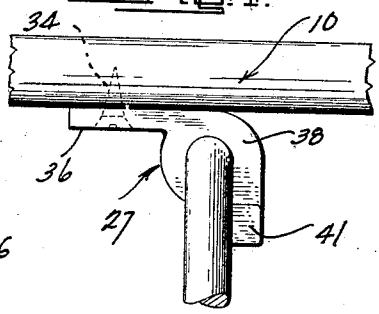


Fig. 5.

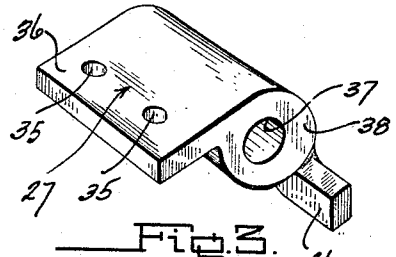


Fig. 2.

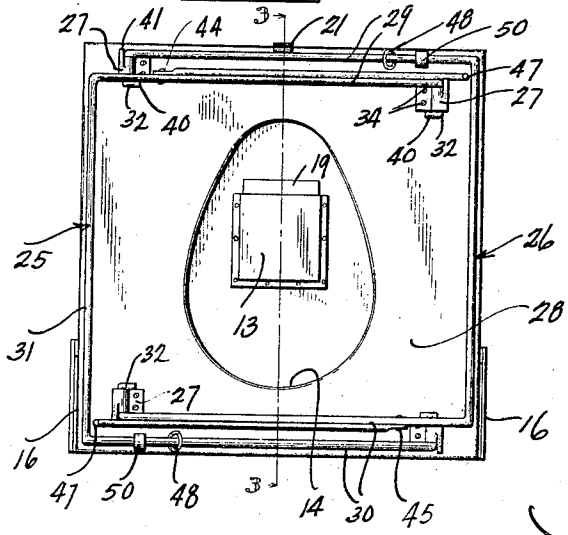
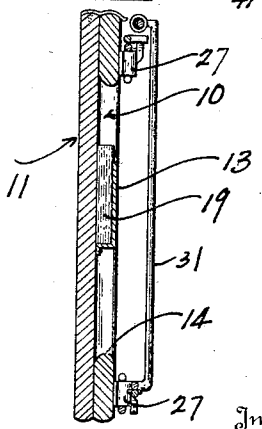


Fig. 3.



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UNITED STATES PATENT OFFICE.

RUTH FERDINAND, OF DE LAND, FLORIDA.

FOLDING TOILET CHAIR.

Application filed October 17, 1921. Serial No. 508,133.

To all whom it may concern:

Be it known that I, RUTH FERDINAND, a citizen of the United States, residing at De Land, in the county of Volusia and State of Florida, have invented certain new and useful Improvements in Folding Toilet Chairs, of which the following is a specification.

This invention relates to improvements in folding toilet chairs.

The primary object of the invention is the provision of a device of the above described character, including certain novel structural features, for rendering the same particularly desirable for campers, tourists and the like.

A further object of the invention is the provision of a folding chair of the above described character of compact formation, economically constructed, and including parts which cooperate to provide a sanitary device.

Other objects and advantages will be apparent during the course of the following detailed description.

In the accompanying drawing, forming a part of this specification, and wherein similar reference characters designate corresponding parts throughout the several views:

Figure 1 is a perspective view of the improved stool or chair and showing the same in upright position.

Figure 2 is a bottom view of the improved chair showing the same in a collapsed or folded condition.

Figure 3 is a cross sectional view taken through the stool in its folded condition, and taken on the line 3—3 of Figure 2.

Figure 4 is an enlarged fragmentary view showing a hinge as used in connection with certain details of the improved stool.

Figure 5 is a perspective view of a hinge element used in connection with the sanitary stool.

In the drawing, wherein for purposes of illustration is shown a preferred embodiment of my invention, the numeral 10 indicates a seating element, having a cover or lid 11 hingedly connected thereto; said seat 10 having a supporting structure 12 mounted thereon. A receptacle or paper container 13 is provided upon the lid 11.

The seat 10 may be of any approved material, such as wood, special composition, or the like, and is preferably square. The ordinary commode aperture 14 is provided in the chair seat 10.

The cover 11 is hingedly connected, as by elements 15, to the rear marginal edge of the seat 10 and adjacent the top surface thereof; said cover or lid 11 being preferably of the same square dimensions as the seat 10. Collapsible side supports 16 are provided for engaging the lateral edges of the seat 10 and lid 11; each of said brace structures 16 including a pair of elements hingedly connected as at 17, intermediate its connection with the seat and the lid, and whereby the lid 11 may be supported in substantially a vertical position, as illustrated in Figure 1, or folded compactly and directly over the seat 10, the brace structure 16 then being collapsed in abutting relation adjacent the lateral sides of said seat and cover, 10 and 11 respectively.

The receptacle 13 is preferably of rectangular formation, and attached as at 18 centrally of the lid 11 and upon its inside surface; the same having a pocket opening for receiving the ordinary sheets of paper 19. When the lid 11 is folded upon the seat 10, the receptacle 13 is disposed immediately in the aperture or opening 14; thus, permitting intimate abutting contact of the surfaces and cover.

When the lid 11 is upright, the top edges of the paper sheets 19 will be disposed upwardly, and for ready convenient removal. A spring catch 21 may be provided upon the forward or upper marginal edge of the lid or cover 11 and for detachably engaging the forward marginal edge of the seat 10, whereby the lid and seat may be detachably held together in secure manner when the unit is collapsed.

Referring now to the supporting structure 12, the same is of special formation, adapted particularly with the end in view of providing a neat and compact folding arrangement. The same includes a pair of substantially U-shaped legs 25 and 26, hingedly connected by special hinges 27 to the under surface 28 of the seat 10, and to adjacent opposite side marginal edges of said seat 10. The legs 25 and 26 are each preferably formed of round bar steel, or other suitable material of the best quality, and as small in cross section as is possible. The legs 25 and 26 are identical in formation, each including a pair of supporting arms 29 and 30 connected by a bight portion 31. The bight

portions 31 are the ground or surface engaging portions of the supporting structure 12. The upper ends of the arms 29 and 30 each have an inturned extension 32, the purpose of which will be subsequently described.

The hinges 27 are for detachable connection upon the bottom surface 28 of the seat 10 by detachable screw elements 34 engaging in the apertures 35 of the leaf 36. The hinges 27 are so positioned that the arms 29 and 30 of one leg 25 are staggered with respect to the arms 29 and 30 of its companion leg member 26, and substantially as illustrated in Figure 2. The inturned ends 32 upon the ends of the arms 29 and 30 are for oscillative reception in the apertures 37 of the hinged barrels 38; an outside or projecting portion 40 of each of the inturned extensions 32 being downturned to abut the outside edges of the hinges 27, substantially as illustrated in Figure 2, and to prevent disconnection of the arms 29 and 30, of said supporting legs 25 and 26. Thus, the extending portions 32 of the arms 29 and 30 of the legs are in alignment with respect to their hinge mountings upon one side of the seat 10, in such manner that when the legs are folded, the bight or ground engaging portions 31 will lie parallel to each other, and upon the opposite marginal edges of the seat, lying adjacent the surface 28 substantially as illustrated in Figure 2. Due to the staggered mounting of the legs 25 and 26, they are mounted entirely independent of each other as to their folding.

When the legs 25 and 26 are in their upright or vertical position for supporting the seat 10, the arms 29 and 30 of each engage a projection 41 of the hinge 27 to which the arms 29 and 30 are directly connected, and which projection 41 prevents further extension of the legs 25 and 26. In order to prevent liability of inward swinging or collapse of the legs 25 and 26 of the supporting structure 12, suitable cross arms 42 and 43 have been provided forwardly and rearwardly of the collapsible chair. It is preferred that the forward cross arm 42 be hingedly connected as at 44 to the arm 29 of the leg 25 immediately above the bight portion 31. Similarly, the rear cross brace 46 may be hingedly connected as at 45 to the arm 30 of the leg 26, and immediately adjacent the bight portion 31 of said leg 26. The cross pieces 42 and 43 are for horizontal disposition when the supporting structure 12 is in its upright position, the free ends of each of the cross pieces 42 and 43 being upturned, as at 47, for engagement with suitable sliding rings 48 mounted upon the opposite leg to which said cross braces are hingedly or pivotally connected. In order to support the cross braces 42 and 43, in horizontal position, suitable sleeves 50 may be provided upon the arms of the legs 25 and 26 to which the sliding rings 48 are attached, whereby the ends 47 of the cross braces 42 and 43 may rest immediately thereupon, and for supporting said free ends, whereby the rings 48 may securely engage the free upturned portions 47 of said cross pieces. Due to the pivotal connection of the brace pieces 42 and 43, they may assume abutting parallel positions with their respective arms 29 and 30 to which they are attached, when the supporting structure 12 is collapsed, substantially as illustrated in Figure 2.

From the foregoing, it can be seen that a simple and effective arrangement is provided, which is of the utmost utility. The large cover 11 will insure a sanitary arrangement of the seat 10 at all times. The supporting structure 12 is particularly desirable due to the relatively few parts, and staple support, which they provide.

Various changes in the shape, size and arrangement of parts may be made to the form of the invention herein shown and described, without departing from the spirit of the invention or the scope of the claims.

I claim:

1. A device of the class described, comprising a seat, U-shaped supporting legs, hinges for connecting said supporting legs to said seat whereby the same may be collapsed, cross pieces hingedly connected to each of said legs, each of said cross pieces having an upturned extension upon the free end thereof, and rings slidably mounted upon certain portions of said U-shaped legs for engaging the upturned ends of said cross pieces to securely mount said cross pieces in horizontal supporting position when said supporting legs are in upright position.

2. A device of the class described comprising a substantially square seat having an aperture therein, a pair of U-shaped supporting legs each including a pair of arms and a surface engaging bight portion, the free ends of said arms being inturned out of alignment with said arms, hinges mounted upon said seat and adapted for engaging the inturned ends of said arms to support said legs in swingable manner upon said seat, and cross members pivotally connected to certain arms of each of the legs, said cross members having extensions upon their free ends upturned with respect to alignment with said cross members, and means upon certain other of said legs for engaging the upturned ends of said cross members, whereby the same may assume substantially a horizontal position for supporting said legs in vertical position.

RUTH FERDINAND.