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UTILITY CHAIR

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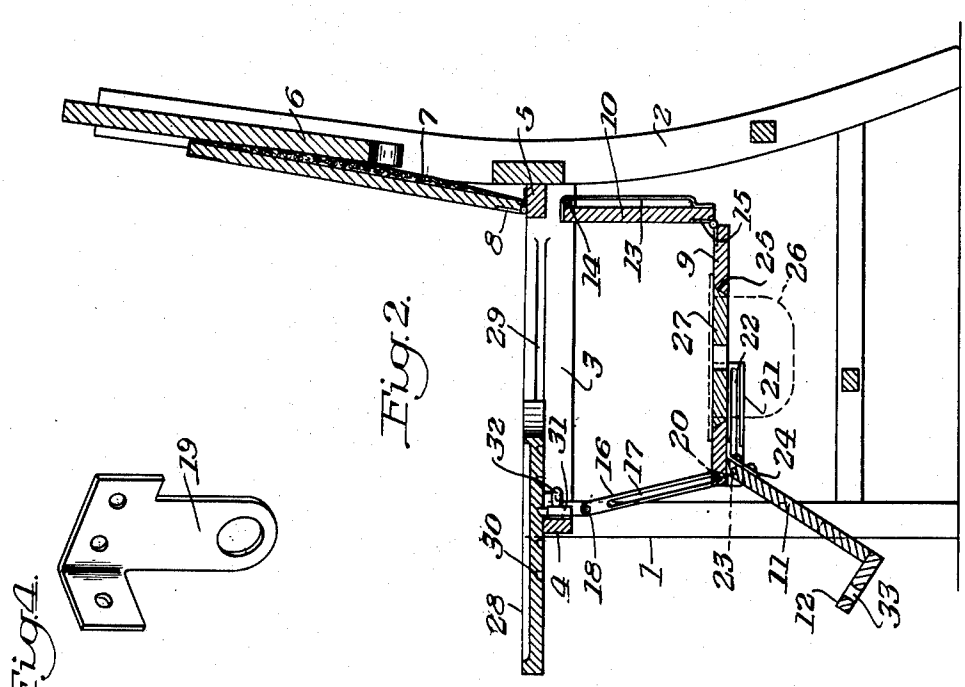

Fig. 2.

Fig. 4.

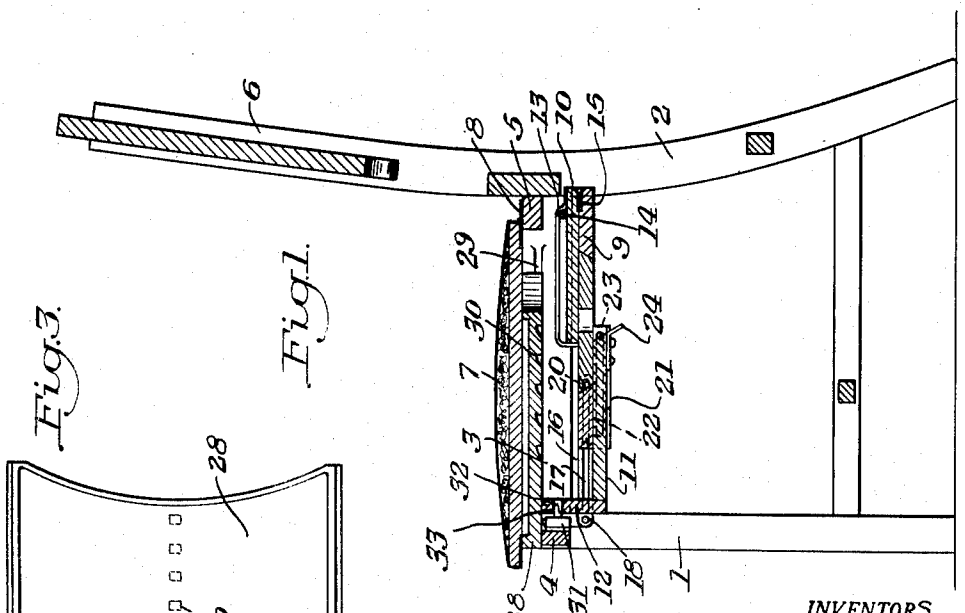

Fig. 1.

Fig. 3.

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UTILITY CHAIR

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1 Claim. (Cl. 155—31)

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This invention relates to a utility chair, and important objects and advantages thereof are to provide a chair of the character described, which combines and embodies novel means for readily and conveniently converting same into an infant's toilet stool that may be compactly collapsed in the chair structure so as to be barely discernible to a casual observer, which is simple in its construction and arrangement, durable and efficient in its use, and comparatively economical in its manufacture and use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the novel construction, combination and arrangement of parts herein specifically described and illustrated in the accompanying drawing, but it is to be understood that changes in the form, proportions and details of construction may be resorted to that come within the scope of the claim hereunto appended.

In the drawing wherein like numerals of reference designate corresponding parts throughout the several views:

Figure 1 is a vertical cross sectional view of the improved utility chair with the embodied toilet stool being disposed in the folded or collapsed position.

Figure 2 is a similar view with the toilet stool being disposed in the erected position.

Figure 3 is a top plan view of the stool tray embodied in the present invention.

Figure 4 is a perspective view of one of a pair of corner brackets supporting the front of the toilet stool structure.

Referring in detail to the drawing the improved chair is generally of the conventional type of kitchen chair construction, and includes the front legs 1 and the back legs 2. The upper ends of the front and back legs are joined together in the usual manner by a pair of side members 3.

The upper ends of the front legs 1 are joined together by a front rail 4, and a cross rail 5 is secured between the rear ends of the side members 3. The side members 3, in conjunction with the front and cross rails 4 and 5, provides a rectangularly-shaped frame structure at the upper ends of the legs.

The chair further includes a back rest 6, which projects upwardly from the back legs 2, and which is disposed rearwardly at a slight angle from the vertical in the usual manner. A chair seat 7, has its rear end attached to the cross rail 5 by a pair of friction hinges 8, and normally rests on and covers the entire frame structure at the upper ends of the legs 1 and 2, when the chair is being

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used as an ordinary chair, as shown in Figure 1.

The chair seat 7 may be shifted to the vertical position on its hinges 8 against the back rest 6, and when so positioned the chair seat will be disposed slightly rearward at an angle from the vertical, as illustrated in Figure 2. Such angular disposition of the vertically disposed chair seat together with the action of the friction hinges 8 will maintain the chair seat in the erected position until manually returned to its normal horizontal position on the chair structure.

The toilet stool is suspended from the rectangular frame structure of the chair, and comprises a toilet seat 9, a back 10, a leg rest 11, and a foot bar 12. When the toilet stool is in the erected position, as shown in Figure 2, the toilet seat 9 is disposed horizontally, the back 10 is disposed vertically, the leg rest 11 declines at an angle from the vertical, and the foot bar 12 is disposed upwardly at right angles with respect to the leg rest.

A slide bracket 13 is secured at the rear of each end of the back 10 and extends transversely across the latter. A cross rod 14, having its ends secured in respective side member 3 below the cross rail 5, extends through the slide brackets 13, and thereby shiftably suspends the back 10 from said cross rod 14.

The rear end of the toilet seat 9 is supported by the back 10 and is connected to the lower end of the latter by a pair of hinges 15. The front end of the toilet seat is supported by a pair of hangers 16, each of which is provided with a longitudinally extending slot 17. The upper end of each of the hangers is pivotally connected, by a pivot pin 18, to a corner bracket 19, which latter are secured at respective forward junctures of the side members 3 with the front rail 4. The lower ends of the hangers are slidably connected, by pivoting pins 20, which are fixed in the forward end of respective side edges of the toilet seat 9 and extend through the slots 17 in respective hangers 16.

A horizontally disposed connecting bracket 21 is secured against the forward portion of each side edge of the toilet seat 9 and projects below the underside of the latter. Each of the connecting brackets is provided with a longitudinally extending slot 22. The upper end of the leg rest 11 is pivotally and slidably joined with the connecting brackets by a pair of pivot pins 23, which are fixed in the upper ends of the side edges of the leg rest and extend through the slots 22 of respective connecting brackets 21.

A stop lug 24 is secured against the underside

of the rear end of the leg rest 11 to abut against the underside of the toilet seat 9 for the purpose of holding the leg rest at the proper angular declination forwardly of the vertical, as illustrated in Figure 2.

The toilet seat 9 is formed with a large, centrally disposed toilet opening 25, which is adapted for the insertion and suspension of a toilet receptacle 26 therein. A cover 27 is provided for closing the toilet opening 25 when the device is not in use for toilet purposes. It will be obvious that when the cover 27 is in the closing position in the toilet seat, the device will provide a suitable chair stool for an infant.

A shallow tray 28 is adjustably and removably mounted between the side members 3, and has its side edges slidably engaged in a pair of longitudinally extending grooves 29 which are formed on the inner side of respective side members. The tray rests upon the front rail 4 and the top edge thereof is disposed flush or below the top surface of the side members so as not to interfere with the chair seat 7 when the latter is in the normal horizontal position, as shown in Figure 1.

The underside of the tray 28 is provided with a plurality of aligned, spaced notches 30, which are adapted for engagement by a latch 31 for holding the tray in the adjusted position. The latch is secured against the inner side of the front rail 4 and includes an inwardly projecting operating knob 32. Each of the notches has a vertical inner wall and an inclined top wall, whereby the latch will automatically engage in respective notches when the tray is shiftably adjusted inwardly, but necessitates the manual release of the latch from the engaged notch to effect the outward adjustment of the tray or the removal of the latter from the chair.

The operating knob 32, of the latch 31, is employed for engaging in an aperture 33, in the foot bar 12, for supporting the toilet stool structure in the folded position, as shown in Figure 1.

In practice the operation of the improved chair is as follows: Assuming that all parts of the toilet stool are in the folded positions, as shown in Figure 1, the chair seat 7 is first shifted to the vertical position against the back rest 6, and the tray 28 is then removed from the chair structure. A rearward push against the foot bar 12 will shift the leg rest 11 rearwardly and thereby release the latch knob 32 from the aperture 33 in the foot bar, and allow the entire toilet stool mechanism to shift by gravity movement to the operative or erected position, as illustrated in Figure 2, after which the tray is replaced and adjusted in the chair to any position required.

To collapse the toilet stool to the folded position, the tray is first preferably removed. The leg rest 11 is elevated to extend horizontally and parallel to the toilet seat 9, and is then shifted rearwardly under and against the toilet seat the distance allowed by the slots 22 in the connecting brackets 21. The leg rest 11 and the imposed toilet seat 9 are now shifted rearwardly and upwardly, thereby causing the back 10 to shift forwardly on the slide brackets 13 and position itself horizontally and flatly on top of the toilet seat 9. After the leg rest, the toilet seat, and

the back have been so positioned against each other, the leg rest is drawn forward to engage the latch knob 32 in the aperture 33 in the foot bar 12 to support the assembly in the folded position. Due to the rearward projection of the slide brackets 13, the lower ends of the latter will abut against the chair structure to limit the rearward movement of the back 10 and toilet seat 9 when in their folded positions.

The present invention provides a most efficient device of its kind, which may be economically constructed and successfully employed as an ordinary chair or as a toilet stool in the manner herein set forth.

What we claim is:

A utility chair of the class described, comprising, in combination, a chair including a pair of side members and a front rail, each of said side members being provided with a longitudinally extending groove on the inner face thereof, a horizontally disposed collapsible toilet seat, a vertically disposed collapsible back having the lower end thereof hingedly connected to the rearward end of said seat, a slide bracket secured at the rear of each end of said back and extending transversely across the latter and having the upper end thereof shiftably attached to the rear end of respective side members, a pair of hangers having the upper ends thereof pivotally supported at the forward end of respective side members, each of said hangers being formed with a longitudinally extending slot, pivoting elements fixed in the forward end of respective side edges of said seat and extending slidably through said slots in respective hangers, a connecting bracket secured against the forward portion of each side edge of said seat and projecting below the underside of the latter and being provided with a longitudinally extending slot, a collapsible leg rest disposed forwardly at an angle from the vertical, pivoting pins fixed in the upper end of respective side edges of said rest and extending slidably through the slots in respective connecting brackets, a stop lug secured against the underside of said rest and engaging the underside of said seat for holding said rest in the angular position, a removable tray having the side edges thereof adjustably engaged in said grooves in respective side members, means carried by said rail operable for securing said tray in the adjusted position in said grooves, and means operable for holding said seat and said back and said rest in the collapsed positions.

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