July 6, 1954 G. S. WING 2,682,914

CHILD'S TOILET SEAT

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Fig. 1.

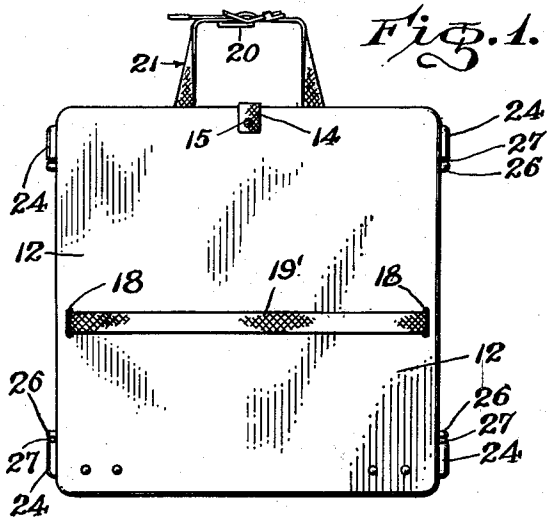


Fig. 2.

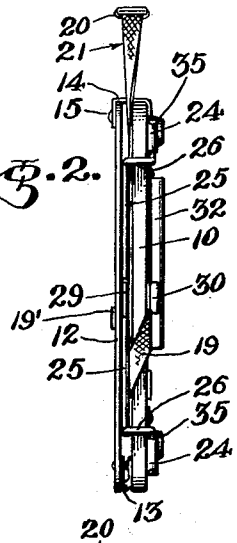
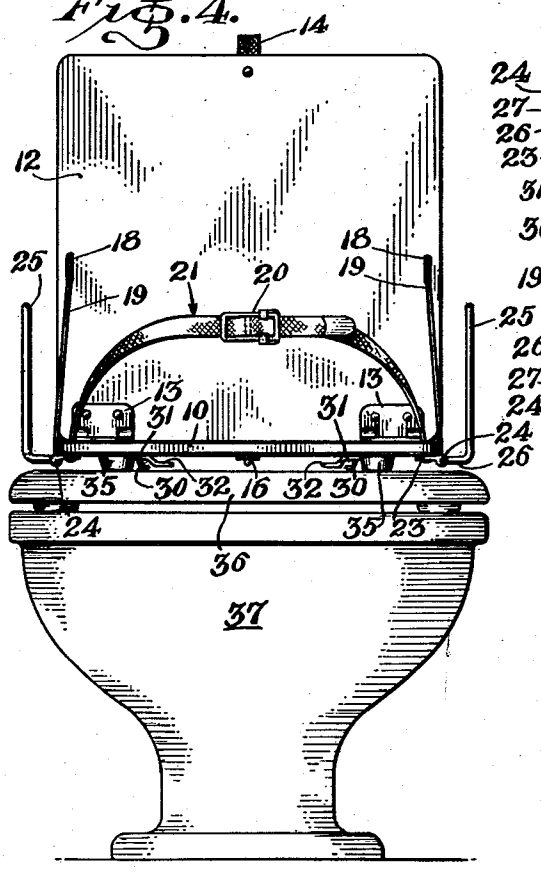


Fig. 4.



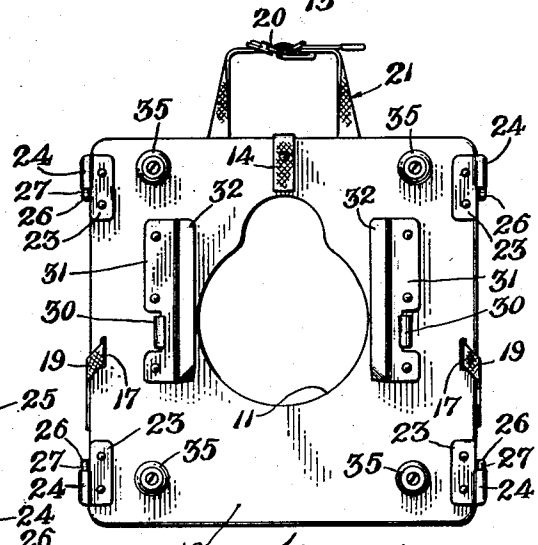


Fig. 3.

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Fig. 7.

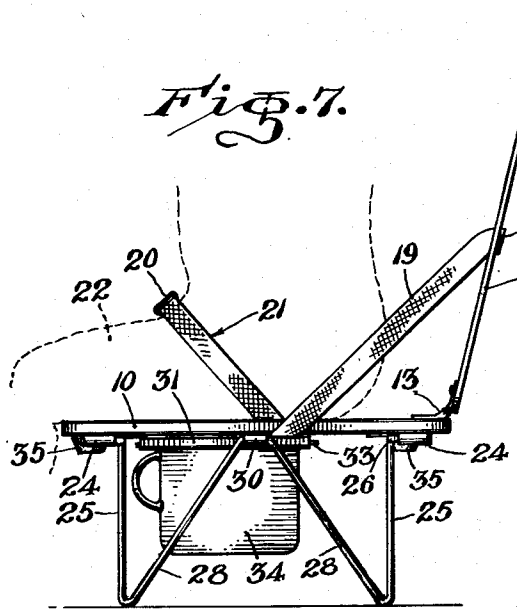


Fig. 6.

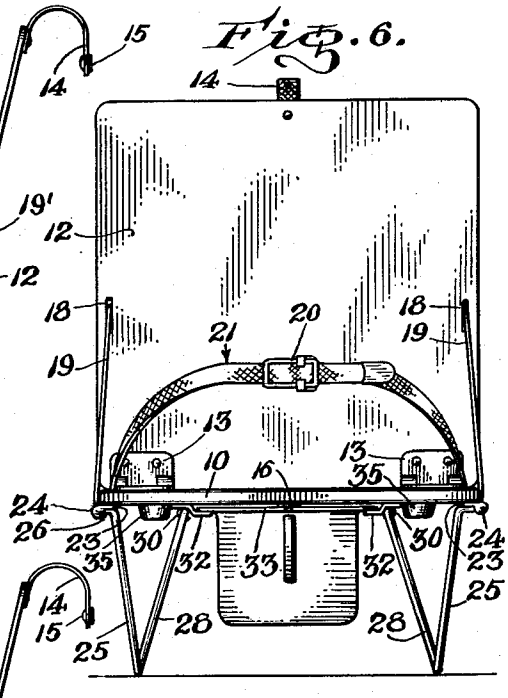


Fig. 5.

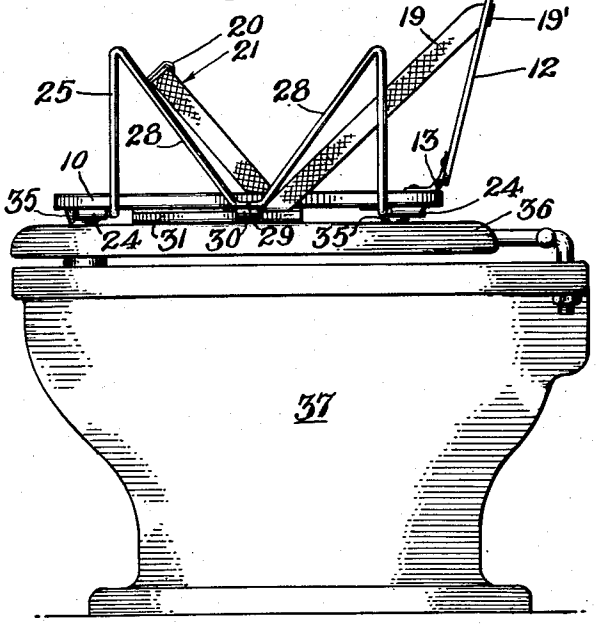


Fig. 8.

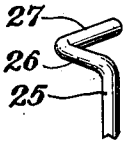
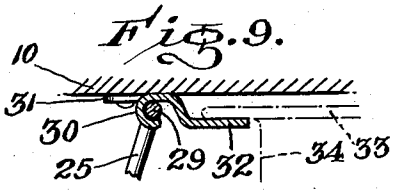


Fig. 9.



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CHILD'S TOILET SEAT

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Application July 3, 1950, Serial No. 171,855

5 Claims. (Cl. 155—31)

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This invention relates to toilet seats. Its general object is to provide a portable, folding child's toilet seat, foldable into a compact package that can be conveniently carried while traveling.

More particularly, the invention aims to provide a folding child's toilet seat that can be utilized as an auxiliary seat, attachable to a conventional toilet seat where a conventional toilet is available, and that can also be used in connection with a conventional child's mug or potty in places where a regular toilet is not available.

The invention further aims to provide a folding child's toilet seat having legs adapted to be shifted to positions in which they will support the seat elevated above a supporting surface, with a potty attached to the under side of the seat, or to a position in which the seat may be rested upon a conventional toilet seat, or to a position folded flatly against the seat.

A further object is to provide a novel supporting leg arrangement in combination with means for latching the legs in seat supporting positions, said latching means comprising simple hooks and the legs having means to bear against the seat in a manner to derive therefrom yielding spring pressure to hold the latched portions of the legs securely in engagement with said hooks, said bearing means having the additional function of accommodating hinging movement of the legs from a supporting position beneath the seat to folded positions lying against the upper side of the seat.

A further object of the invention is to provide a folding child's toilet seat having a novel arrangement of means for latching the folding legs in seat supporting positions, and means for supporting a potty adjacent the under side of the seat. In order to simplify construction, these two means are constructed integrally.

A further object of the invention is to provide a folding child's toilet seat having a folding backrest, together with a novel arrangement of straps having a multiplicity of functions including: (*a*) supporting the backrest in an operative position; (*b*) functioning as retaining means for holding a child in the seat; and (*c*) in the folded position of the seat, functioning both as a means to secure the members of the seat in the folded position and also as a handle for carrying the folded seat package.

Other objects will become apparent in the ensuing specifications and appended drawings in which:

Fig. 1 is a top side view of the folded seat;

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Fig. 2 is an end view of the folded seat;

Fig. 3 is an under side view of the folded seat;

Fig. 4 is a front view of the seat in operative association with a conventional toilet;

Fig. 5 is a side view of the same;

Fig. 6 is a front view of the seat in the alternative arrangement;

Fig. 7 is a side view of the same;

Fig. 8 is a detail perspective view of an end portion of a leg; and

Fig. 9 is a detail sectional view of a leg hinge.

As an example of one form in which my invention may be embodied, I have shown in the drawings a child's folding toilet seat embodying a flat seat member 10 having an opening 11 therein, and a backrest 12 hinged to the rear end of seat member 10 by hinges 13. The seat member 10 may be satisfactorily constructed from plywood and the back rest 12, from pressed wood or plywood. Each of these members is of rectangular shape, and they are of substantially the same length and width so as to fold against each other into a package in which their edges will substantially register. The back rest 12 is provided with a securing strap 14 having one part of a separable snap fastener 15 mounted in one end thereof, the other end being secured to the free end of the backrest 12 at the center thereof. The snap fastener part 15 is adapted to coact with a mating part 16 attached to the underside of the seat member 10 at the forward extremity thereof, for securing the seat member and back rest in collapsed position.

Adjacent the side extremities of the seat member 10 and intermediate the forward and rear corners thereof are a pair of slots 17. In the backrest 12, in corresponding positions adjacent to side extremities thereof are a pair of slots 18. A pair of strap portions 19 (which may as shown be the end portions of a continuous strap having a web part 19' lying against the rear face of the backrest 12) extend through the slots 18, thence around the side extremities of the seat member 10 and beneath the portions thereof lying between said side extremities and the slots 17, and thence upwardly through the slots 17. The web portion 19' connecting the strap portions 19 and the engagements of the strap portions 19 in the slots 18 serve to secure them to the back rest 12. The free ends of the strap portions 19 are adapted to be connected together by suitable connecting means such as a conventional buckle 20, to form a loop 21 to pass over the legs 22 of a child sitting upon the seat, thereby to hold down the body of the child on the seat. This holding func-

tion is supplemented by the portions of the strap portions 19 which extend diagonally between slots 18 and 17, these portions constituting side guards for restraining lateral movement of the child's body on the seat. These strap portions also function, in tension, to support the back rest 12 in an upstanding, operative position such as that shown in Fig. 7 in which it preferably is inclined somewhat rearwardly from the vertical.

Secured to the underside of the seat member 10, at the respective corners thereof, are fittings 23 each formed at its outer side with a hinge loop 24. Supporting legs 25 have at their respective ends, substantially right-angle bends 26 terminating in trunnions 27 which are normal to the common plane of legs 25 and bends 26 (see Fig. 8). The legs 25, in turn, are substantially normal to the common plane of trunnions 27 and bends 26. Trunnions 27 are received in hinge loops 24 whereby to provide hinged connections between the legs 25 and the side extremities of the seat member 10 on axes located closely adjacent the lower face of seat member 10.

Each pair of legs 25 is connected integrally by a re-entrant, roughly U-shaped brace 28 having a central part 29 that is substantially aligned with trunnions 27 (i. e., with legs 25 and brace 28 lying in a common plane) in an unstressed state of the leg unit. The leg unit (composed of parts 25, 26, 27, 28 and 29) is formed from heavy wire or metal rod with sufficient resiliency to allow the brace 28 and legs 25 to be sprung away from their normal positions in a plane normal to bends 26, to the positions shown in Fig. 6. In these positions, bends 26 funcrum against the fittings 23 and the center part 29 of brace 28 is received in a hook 30 which is formed in a fitting 31 (Fig. 3) secured to the underside of the seat member 10, adjacent a respective side of opening 11. Fitting 31 is formed with a slideway 32 to receive one side of the flange 33 of a child's potty or mug 34. The slideways 32 are arranged on the respective sides of opening 11, facing each other so as to support the mug between them, and beneath the opening 11. With the bends 26 fulcruming against fittings 23 and the legs 25 and braces 28 sprung laterally as in Fig. 6, the central part 29 will be retained, by the spring tension in legs 25 and braces 28, in secure latching engagement with hook 30.

Another function of the bends 26 is to traverse the thickness of seat member 10 in folded positions of the leg units 25 in which the leg units rest flatly against the upper face of the seat member 10. This position is shown in Fig. 2, the leg units being sandwiched between the back rest 12 and the seat member 10, occupying a space which is provided by the interposition of hinges 13 between the back rest and seat member in the folded position.

In the folded condition of the seat, the straps 19 are pulled tight through slots 18, extending the loop portion 21 beyond the forward ends of the seat member and back rest so as to provide a handle as illustrated in Figs. 1, 2 and 3, for carrying the folded package. The relatively short portions of the straps 19, drawn tight between the back rest and seat member, will now function to assist the securing strap 14 in holding the seat member and back rest in the collapsed condition.

It will be noted that the parts in the folded position form a relatively thin compact package.

Secured to the underside of the seat member 10 are resilient feet 35 to rest on the seat 36 of a conventional toilet 37. When the seat is used in this manner, the leg units 25, 28 are folded upwardly to intermediate positions, as shown in Figs. 4 and 5.

I claim:

1. In a child's folding toilet seat, a seat member, a back rest hinged to the rear end of the seat member for movement between an extended position projecting upwardly from said rear end and a collapsed position folded against the upper side of the seat member, and a pair of legs having at their upper ends substantially right-angled bends, hinges connecting said bends, to the respective side extremities of said seat member substantially in the plane of the underside thereof and adapted to bear against the underside of the seat, said hinges accommodating movement of said legs to positions in which they rest against the rear side of the back rest in the collapsed position thereof with said bends traversing the thickness of the seat member alongside said side extremities.

2. A seat as defined in claim 1, including latch hooks secured to the underside of said seat and facing inwardly away from the respective side extremities of the seat member, said legs having braces flexibly connected to their lower ends in the operative positions thereof, extending upwardly from said lower ends, and adapted to be sprung inwardly to engage in said hooks, with said bends fulcruming against the underside of the seat member just inwardly of said hinged connections to provide cantilever support for the legs in opposition to the pull of said hooks and thereby yieldingly urge said parts into secure engagement with said hooks.

3. In a child's folding toilet seat, a seat member, a pair of legs each having at one end a bend and a hinge connecting the end thereof to a side extremity of said seat member substantially in the plane of the underside thereof, a pair of latch hooks each spaced from and facing inwardly away from a respective side extremity of said seat member, each leg having a flexible brace secured to its lower end in the operative position thereof, extending upwardly from said lower end, and adapted to be sprung into a corresponding hook, with the corresponding bend fulcruming against the underside of the seat member just inwardly of said hinge to provide cantilever support for the legs in opposition to the pull of said hooks and thereby yieldingly urge said parts into secure engagement with said hooks.

4. In a child's folding toilet seat, a seat member having an opening, a pair of stamped sheet metal mug supporting slides attached to the underside of said seat alongside said opening, each of said slides having an integral hook facing said opening, a pair of legs each having at one end a hinged connection with a respective side extremity of the seat member, such as to allow the leg to swing from a position folded over the upper side of the seat member to a position extending downwardly substantially perpendicular to the plane of the seat member, in which latter position the leg will fulcrum against the seat member to resist loads constraining it inwardly, each leg having a flexible brace which, in said latter position, is secured to the lower end of the leg and extends upwardly therefrom, and is adapted, when sprung inwardly, to be received in an adjacent hook and to be retained therein by tension set up therein by said inward springing.

5. In a child's folding toilet seat, a seat mem-

ber, a pair of hooks attached to the underside of said seat member, said hooks being spaced and facing inwardly away from a respective side extremity of said seat member, a pair of legs each having at one end a hinged connection with a respective side extremity of the seat member, such as to allow the leg to swing from a position folded over the upper side of the seat member to a position extending downwardly substantially perpendicular to the plane of the seat member, in which latter position the leg will fulcrum against the seat member to resist loads constraining it inwardly, each leg having a flexible brace which, in said latter position, is secured to the lower end of the leg and extends upwardly therefrom, and is adapted, when sprung inwardly, to be received in an adjacent hook and to be retained therein by tension set up therein by said inward springing.

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