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CHILD'S TOILET SEAT

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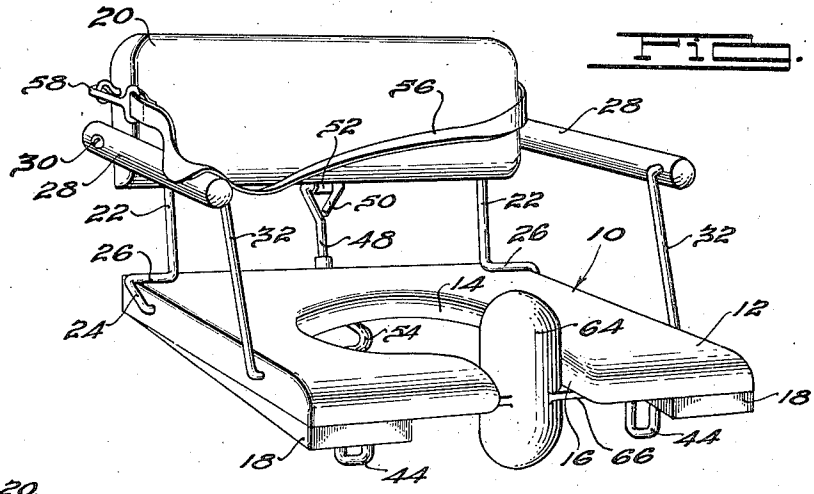


FIG. 1.

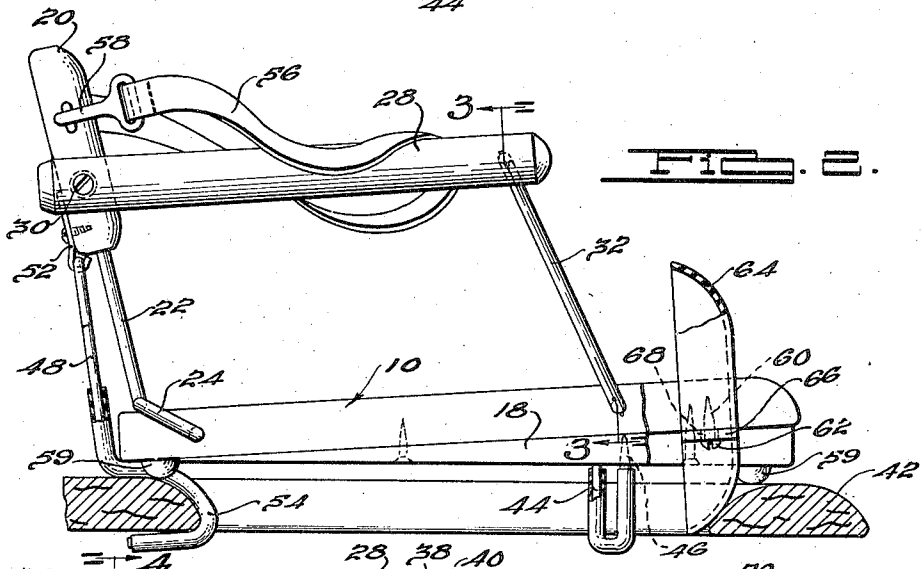


FIG. 2.

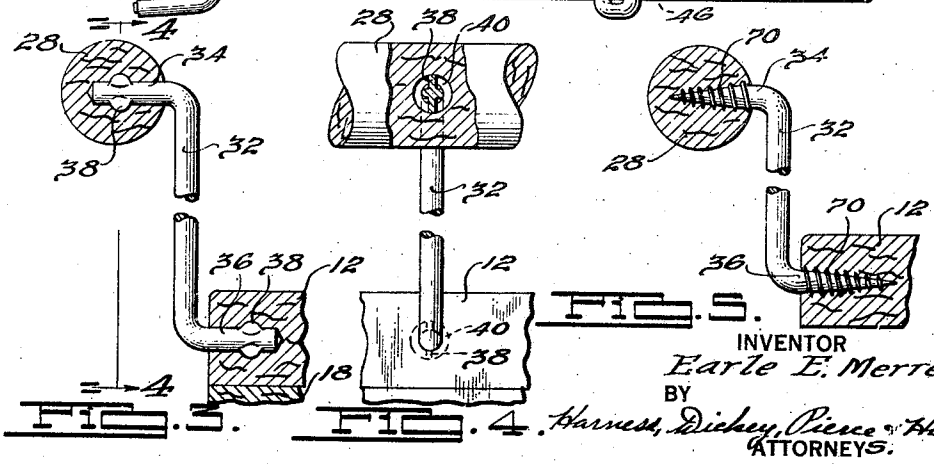


FIG. 3. FIG. 4. FIG. 5.

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CHILD'S TOILET SEAT

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4 Claims. (Cl. 4—239)

This invention relates to improvements in child's toilet seats which may be attached to conventional toilet seats.

Objects of the invention are to provide an improved child's toilet seat which may be attached to a conventional toilet seat and cannot become accidentally displaced therefrom; to provide an improved positive securing construction which is relatively simple to manufacture; to provide an improved child's toilet seat which will assist in child training; to provide an improved construction for pivotally mounting the back and arms of the seat relative to the base; to provide an improved safety strap mounting; and to provide a sanitary guard or shield attachment for the seat which may be conveniently attached to, and removed from, the seat.

Other objects of the invention will become apparent from the following specification, the drawing relating thereto, and the appended claims.

In the drawing in which like numerals are used to designate like parts in the several views throughout,

Fig. 1 is a perspective view of a child's toilet seat embodying features of the present invention;

Fig. 2 is a side elevational view illustrating the toilet seat shown in Fig. 1 applied to a conventional toilet seat, which seat is shown in cross-section;

Fig. 3 is a cross-sectional view taken substantially along the line 3—3 of Fig. 2;

Fig. 4 is an elevational view, showing a portion in cross-section, taken substantially along the line 4—4 of Fig. 3; and

Fig. 5 is a cross-sectional view similar to Fig. 3 showing another structure for pivotally mounting the arms to the base.

It is, of course, recognized that child's toilet seats, which are adapted to be attached to the conventional toilet seats, are old, and the present invention is directed to improvements over the known types of child's toilet seats.

The present child's toilet seat is designed to assist in child training; and in the present invention wedge shaped members are provided on the under surface of the base of the seat with the greatest thickness of the wedge shaped members adjacent the front of the base so that when the seat is attached to the conventional toilet seat the front edge of the child's toilet seat is raised to a level above that of the rear of the base. This raised front construction reduces the training time of an infant as the slant causes the infant to lean forward in a natural position raising the legs and pressing the abdomen against the thighs. This tightens the skin over the buttocks and expands the rectal opening for free and easy bowel evacuation.

The back and arms of the seat are pivotally attached to the base so that the seat may be folded into a compact unit, the manner of pivotally attaching the back and arms to the base presenting several features which insure rugged construction and one in which the parts cannot be separated from each other. In connecting the back to the base the connecting rod extends into the wooden back across the grain of the wood thereby lessening the danger of breakage of the back due to splitting.

The present invention also provides novel means for centering and attaching the child's toilet seat to the conventional toilet seat in the form of U-shaped members, which engage the inner surface of the conventional toilet seat, and a hook member, which is hinged to the back; and when in assembled position with the conventional toilet seat the hooked portion engages the inner surface of the toilet seat and the back to prevent accidental displacement of the child's toilet seat.

A safety strap is attached to the sides of the back fitting just under the arms of the infant and holding the infant without pressure on the delicate abdominal diaphragm.

Also in the present invention a pliable rubber sanitary shield or urine guard is provided for convenient fastening to the toilet seat by a simple buttoning operation.

For a better understanding of the invention reference may be had to the drawing and in Figs. 1 and 2 a child's toilet seat generally indicated at 10 is shown having a base 12, preferably formed of wood. The base 12 is provided with a substantially central opening 14 therethrough and an opening 16 at substantially the center of the front edge extending from the front edge of the interior opening 14.

To obtain the raised front construction the base may be made of a single piece of wood having greater thickness at the front than at the rear, or blocks or other means may be employed under the front to thereby raise it to a level higher than the rear; but it is preferable from the standpoint of economy in manufacture to construct the base 12 of a piece of wood of uniform thickness and secure wedge shaped members 18 on the under surface of the base 12 along its sides with the greatest thickness of the wedge

shaped member 18 adjacent the front edge of the base.

A back 20, preferably of wood, having the grain of the wood extending in the direction of the length of the back is pivotally secured to the base 12 by means of bars 22 having end portions which extend into the back 20 through the lower edge thereof so that they cross the grain of the back 20, and having lower extremities in the form of hooks 24 which extend into the sides of the base 20 adjacent the rear thereof. The hooks 24 have shoulder portions 26 which bear against the upper surface of the base 12 when the back is in its rearmost position and thereby limits the backward movement of the back.

Arms 28 are provided and are pivotally connected to the sides of the back 20 by means of screws 30, or the like, and are pivotally connected at their front ends to the base 12 by means of elongated rods 32. The rods 32 have oppositely extending bent ends 34 and 36, respectively, substantially normal to the longitudinal axis of the rods 32. The portions 34 and 36 have radially outwardly displaced portions, or barbs, or ears 38; and as the portions 34 and 36 extend into the arms 28 and the base 12, respectively, by rotating the arms and base relative to the rods 32 substantially circular grooves 40 are formed within the arms and base below the surface thereof. The walls of the grooves 40 engage the sides of the outwardly offset portions or ears 38 when the arms are pivoted relative to the base so that the rods 32 are securely held relative to the arms and the base and cannot become accidentally displaced therefrom. That portion of the hook 24 extending into the base 12 is preferably secured in a like manner to the base 12.

In order to properly center and attach the child's toilet seat 10 to a conventional toilet seat 42, means are provided including U-shaped members 44 which engage the inner surface of the seat 42 adjacent its front and prevent forward movement of the seat 10 when the two seats are in assembled position. The U-shaped member 44 has one of its legs 46 longer than the other and the end of the leg 46 is screw threaded for securing the U-shaped member 44 to the under side of the child's toilet seat 10. This provides an improved manner of attaching the stop members as the U-shaped members 44 may be conveniently screwed into the under surface of the seat until the ends of the shorter legs abut against the under surface of the seat. Also in this construction the U-shaped members or stops 44 may be turned to fit the child's toilet seat to conventional toilet seats of varying sizes.

A hook 48 having a triangular shaped eye 50 is pivotally secured to the back 20 substantially at its center by means of a hooked bracket 52, or the like. By providing the triangular shaped eye 50 pivotal movement of the hook 48 relative to the back 20 is limited to movement in a single plane, which facilitates attaching the seat to the conventional toilet seat. The lower hooked portion 54 of the hook 48 is adapted to hook over and under the toilet seat 42 as illustrated in Fig. 2.

A safety strap 56 is secured to the sides of the back 20 by means of snap hooks and eyes 58. By securing the safety strap to the back, besides having the advantage pointed out above of fitting under the infant's arms, this structure also has the advantage of preventing the child's toilet seat 10 from becoming disengaged with the conventional seat 42 if the infant leans forward. It is evident that by the structure described if the infant leans forward the movement will also tend to pull the back 20 forward which will force the hook 54 backwards more tightly engaging the seat 10 to the seat 42, and making upsetting due to tilting impossible.

Rubber buttons 59 are preferably provided on the under surface of the seat 10 engaging the seat 42; and rubber sleeves are preferably provided over the members 44 and hook 54 to prevent scratching or marring the finish of both seats.

Screws 60 having heads 62 are secured to the under surface of the base 12 on opposite sides of the opening 16 with the heads spaced from the under surface of the base. A cup-shaped sanitary shield 64, preferably made of pliable rubber, and having horizontally extending portions 66 with openings 68 extending therethrough is provided, and is adapted to be attached to the seat by buttoning the horizontal extending portions over the heads 62 through the openings 68. The upper surfaces of the horizontally extending portions 66 engage the under surface of the seat when the shield is in its assembled position and thus assist in steadying and securing the shield in place. By making the shield of the soft pliable rubber material danger of injury to the child is lessened and the shield may conveniently be attached to and removed from the seat by the simple buttoning operation.

In Fig. 5 a modified structure for pivotally securing the rod member 32 to the arms 28 and base 12 is illustrated, and in this modification the oppositely extending portions 34 and 36 have screw threaded ends 70, of either pointed or machine threads, which may be screwed into the arms 28 and the sides of the base 12. Such a structure permits pivotal movement of the arms relative to the base 12 but prevents accidental displacement of the rod members 32 relative to the arms and base.

Formal changes may be made in the specific embodiments of the invention described without departing from the spirit and substance of the invention, the scope of which is commensurate with the appended claims.

What is claimed is:

1. A child's toilet seat, adapted to be positioned on a conventional toilet seat, comprising a base, a back and side arms pivotally attached to said base, U-shaped members attached to the under side of said base adjacent the front thereof and adapted to engage the inner surface of said conventional toilet seat to prevent forward movement of said base on said conventional toilet seat when the base is attached thereto, one of the legs of said U-shaped members being of greater length than the other leg, and being screw threaded adjacent its end, the threaded portions of said U-shaped members extending into the base with the ends of the other legs of said members abutting against the under surface of said base, and means engaging said child's toilet seat adjacent the rear thereof having a portion which is adapted to engage the inner surface of said conventional toilet seat at the rear thereof to prevent accidental displacement of said base relative to said conventional toilet seat.

2. A child's toilet seat adapted to be positioned on a conventional toilet seat comprising a base, a back and side arms pivotally attached to said base, U-shaped members attached to the

under side of said base adjacent the front thereof, and adapted to engage the inner surface of said conventional toilet seat to prevent forward movement of said base on said conventional toilet seat when the base is attached thereto, one of the legs of said U-shaped members being of greater length than the other leg and being screw threaded at its end, the threaded portions of said U-shaped members extending into the base with the ends of the other legs of said members abutting against the under surface of said base, and means pivotally engaging said back and having a hook portion which is adapted to engage the inner surface of said conventional toilet seat at the rear thereof to prevent accidenal displacement of said base relative to said conventional toilet seat.

3. A child's toilet seat adapted to be positioned on a conventional toilet seat, comprising a base, a back pivotally attached to said base, and side arms pivotally attached to corresponding sides of the back and the base, the pivotal attachment between the sides and the base comprising rods having oppositely bent end portions extending into the sides and base respectively, the bent end portions having radially outwardly displaced portions which form substantially circular confining grooves within the arms and base, respectively, below the surfaces thereof.

4. A child's toilet seat adapted to be attached to a conventional toilet seat, comprising a base, a wooden back pivotally attached to said base by rod members, said rod members each having a portion which extends into said wooden back across the grain thereof and a portion which extends into a side of said base adjacent the rear thereof, the rod adjacent the last named portion being offset to form a shoulder that bears against the base and limits the backward movement of the back, and side arms pivotally attached to corresponding sides of the back and the base, the pivotal attachment between the sides and the base comprising rods having oppositely bent end portions extending into the sides and base respectively, the bent end portions having radially outwardly displaced portions which form substantially circular confining grooves within the arms and base respectively below the surfaces thereof.

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