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PORTABLE TOILET DEVICE

Filed June 7, 1956

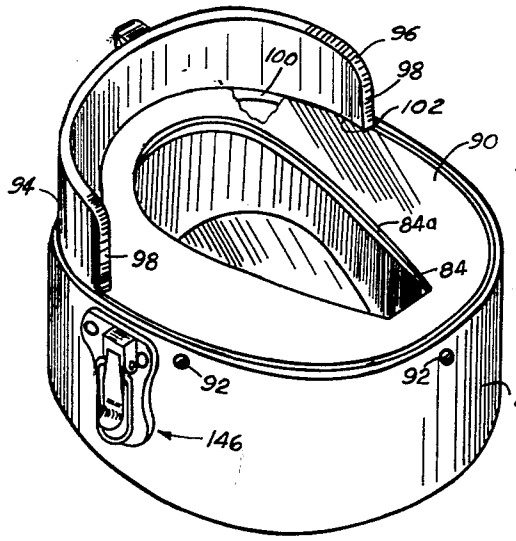


FIG. 1

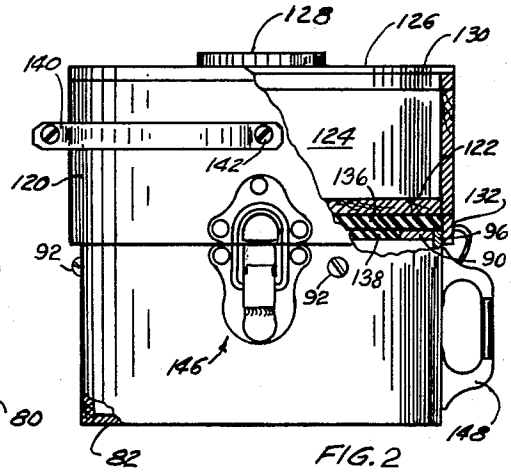


FIG. 2

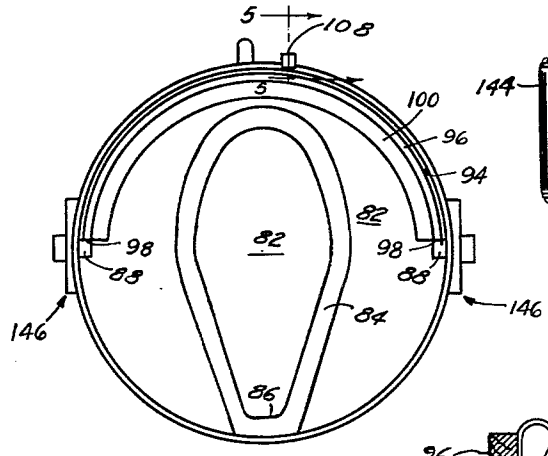


FIG. 3

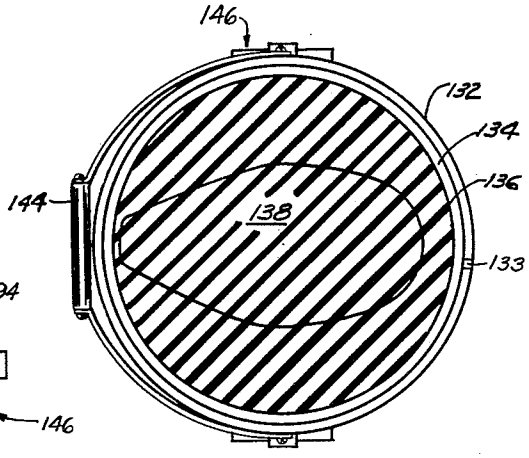


FIG. 4

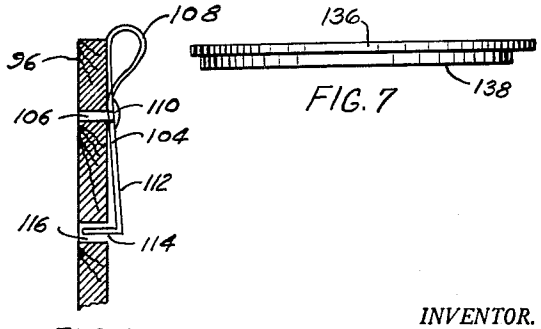


FIG. 5 FIG. 7

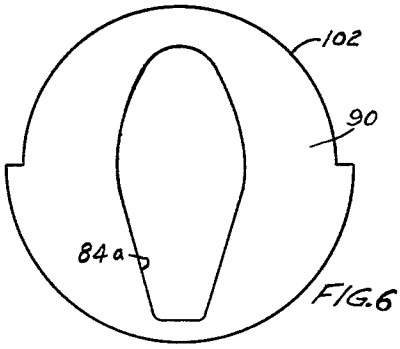


FIG. 6

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PORTABLE TOILET DEVICE

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9 Claims. (Cl. 4—135)

This invention relates generally to toilet devices and relates more particularly to improvements in portable toilet devices for small children.

There are various problems involved in providing portable toilet devices for small children, it being particularly important to have the devices compact and yet adapted to be quickly prepared for use.

It is therefore an object of the present invention to provide portable toilet devices that solve the above problems.

It is another object of the invention to provide devices of this character that when not in use are closed up in a compact and comparatively small unit.

Still another object of the invention is to provide devices of this character that may be quickly and easily prepared for use.

A further object of the invention is to provide devices of this character having upstanding back support means which is movable to a lowered out of the way position when the devices are closed.

A still further object of the invention is to provide novel and effective sealing means for sealing against escape of liquid and odors.

Another object of the invention is to provide devices of this character that is easy to handle for emptying, cleaning and the like.

Still another object of the invention is to provide devices of this character that has relatively few parts.

A further object of the invention is to provide devices of this character of simple and sturdy construction.

A still further object of the invention is to provide devices of this character of improved construction and relatively inexpensive to manufacture.

The characteristics and advantages of the invention are further sufficiently referred to in connection with the following detailed description of the accompanying drawings which represent preferred embodiments. After considering these examples, skilled persons will understand that many variations may be made without departing from the principles disclosed and we contemplate the employment of any structures, arrangements or modes of operation that are properly within the scope of the appended claims.

Referring to the drawings:

Fig. 1 is a perspective of an alternative arrangement with the cover removed and the back rest raised;

Fig. 2 is a side view of the same with the cover on and a portion broken away;

Fig. 3 is a top or plan view of the device with the cover removed;

Fig. 4 is a view of the under side of the cover;

Fig. 5 is a sectional view taken on line 5—5 of Fig. 3;

Fig. 6 is a plan view of the seat per se; and

Fig. 7 is a side view of the gasket.

Referring more particularly to Figs. 1 to 7, there is a casing, shown as cylindrical, having an upstanding wall 80 and a bottom 82. Within the casing is a pot, generally ovate or egg shaped in horizontal section and defined by

an upstanding wall 84, the bottom 82 of the casing also serving as the bottom for the pot. While the casing and pot may be made of separate pieces secured together by any suitable means in accordance with the material used therefor, said casing and pot may be of plastic and formed integrally, the arrangement being such as to readily lend itself to being molded as a single molding. The front end 86 of the pot engages the front part of the casing wall, the remaining portions of the pot wall 84 is spaced from the casing wall 80.

At diametrically opposite sides of the casing and within same, are upstanding flanges 88. These flanges may be formed integrally with the wall 80 of the casing, and serve as side supporting means for a horizontal seat 90 which rests on the top edge of the pot wall 84 and has the usual seat opening 84*a*. It is to be noted that the pot wall 84 and the flanges 88 are not as high as the wall 80 of the casing so that the upper surface of the seat 90 is in substantially the same plane as the top edge of said casing wall. Any suitable means may be used to secure the seat within the casing, such as, for example, screws 92.

At the back of the seat, and extending from one flange 88 to the other, said seat is arcuately recessed to provide a narrow, arcuate opening 94. This recess provides an arcuate opening for reception of an arcuate back support 96 disposed in the space between the pot and the casing wall 80 when said back support is in the lowered position. The back support has the same curvature in horizontal section as the curvature of the casing wall 80 and the ends 98 of said back support engage the respective flanges 88 and operably slide vertically on said flanges which retain said support in place when the latter is in the lowered position with the casing. An arcuate flange 100 is provided at the bottom of said back support and extends inwardly so as to engage the under side of the seat when the back support is raised, said seat having a relieved rear edge portion, indicated at 102, to accommodate said back support 96.

Means for raising and lowering the back support is provided and comprises a strip of resilient material 104 such as spring metal substantially centrally of the ends of said back support. The strip is secured to the back support intermediate the ends of said strip by means of a rivet 106 in aligned holes provided therefor in said strip 104 and back support 96. The strip 104 is turned outwardly and downwardly to provide a loop 108, the free end of said loop also being provided with an opening for said rivet so that said free end is secured under the head 110 of said rivet. Below the rivet the strip portion 112 normally inclines downwardly and outwardly and has an inturned end 114 freely received in a slot 116 provided therefor in the back support. When the back support is positioned within the casing the portion 112 of the strip 104 resiliently and frictionally engages the inner side of the adjacent casing wall portion so as to frictionally retain the back support in any vertically adjusted position. A slot 118 extends downwardly from the upper edge of the casing wall accommodates the loop 108 when the back support is in the lowered position and said loop provides means which may be grasped by the fingers to raise or lower said back support.

A closure for the casing is provided and comprises a cylindrical wall 120 having a bottom 122, said closure having an interior chamber 124 which may be used for diapers and other accessories. A cover 126 is provided for the closure and has a handle 128 and there is an annular, depending flange 130 spaced inwardly of the edge of said cover and fits within the upper free edge portion of the cylindrical wall. The bottom 122 is spaced upwardly of the bottom edge of the wall 120 to provide a depending flange 132 defining a cylindrical recess 134. The inside diameter of the recess 134 is

slightly greater than the outside diameter of the casing wall **80** so the upper end portion of the casing is received within said recess **134** as best shown in Fig. 2. Flange **132** has a notch **133** which extends upwardly from the free edge thereof to accommodate the loop **108** when the closure is on the casing.

Within the recess **134** and secured to the under side of the bottom **122**, which serves as a partition between the chamber **124** and recess **134**, is a gasket **136** of rubber or other suitable material. A central portion or area **138** of the gasket is thickened and conforms to the opening **84***a* of the seat to thereby provide a more effective seal for the pot. Alternatively there may be a part of the partition **122** which is thickened to extending the area **138** downwardly into the opening **84***a*.

A bail **140** is provided and pivoted at the ends to the closure by any suitable means such as screws **142**. The bail is also provided with a handle **144** of usual character.

Means for releasably securing the closure to the casing is provided and any suitable securing means may be used, such as the fasteners **146** which are of well known character.

At the back of the casing a handle **148** is provided and secured to the wall **80** of said casing by any suitable means such as screws, not shown. The handle **148** may be used to empty the pot. This handle may also be used in carrying the device.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description and it is thought that it will be apparent that various changes may be made in the form, construction and arrangement of the parts of the invention and the method of operation thereof without departing from the spirit and scope thereof or sacrificing all of its material advantages, the embodiments hereinbefore described being merely preferred ones.

We claim:

1. A portable toilet device for children, comprising: a casing having a bottom, and a substantially cylindrical wall upstanding from said bottom; a pot disposed in said casing, said pot being generally ovate in horizontal section and having the forward end adjacent the forward part of the casing wall, the remaining portions of the pot wall being spaced from the casing wall; a pair of inwardly extending vertical flanges arranged diametrically opposite each other at the sides of the casing; a seat, having the usual pot opening, disposed over said pot and the upper ends of said flanges, said seat having a relieved portion extending arcuately from substantially one flange to the other at the rear of said seat; back support means comprising a substantially semicircular back support member slidable in the space between the relieved portion of the seat and the adjacent wall of the casing; an inwardly extending arcuate flange along the bottom edge of said back support member for limiting upward movement of said back support member by engagement with the under side of said seat; yielding means on said back support member frictionally engaging the adjacent portion of the casing wall; handle means for said back support member for raising and lowering said back support means; a handle secured to the casing at the rear thereof; closure means for said casing and pot comprising a cylindrical wall having an inside diameter slightly greater than the outside diameter of the casing; a substantially horizontal partition in said closure spaced upwardly somewhat from the lower end of said closure wall to provide a recess into which the upper end portion of the casing is adapted to be received; gasket means on said partition and in said recess, said gasket means being adapted to provide effective closure means for the pot; the portion of the closure above said partition comprising a compartment; a removable cover for said compartment; handle means for said closure; and releasable latch means for securing the closure to the casing.

2. In a portable toilet device: a casing having a bottom, and a substantially cylindrical wall upstanding from said bottom; a pot disposed in said casing, said pot being generally ovate in horizontal section and having the forward end adjacent the forward part of the casing wall, the remaining portion of the pot wall being spaced from the casing wall; a pair of inwardly extending vertical flanges arranged diametrically opposite each other at the sides of the casing; a seat, having the usual pot opening disposed over said pot, said seat having a relieved portion extending arcuately from substantially one flange to the other at the rear of said seat; back support means comprising a substantially semi-circular back support member slidable in the space between the relieved portion of the seat and the adjacent wall of the casing; an inwardly extending arcuate flange along the bottom edge of said back support member for limiting upward movement of said back support member; yielding means on said back support member frictionally engaging the adjacent portion of the casing wall; handle means for said back support member for raising and lowering said back support means; a handle secured to the casing at the rear thereof; closure means for said casing and pot comprising a cylindrical wall having an inside diameter slightly greater than the outside diameter of the casing; a substantially horizontal wall in said closure spaced upwardly somewhat from the lower end of said closure wall to provide a recess into which the upper end portion of the casing is adapted to be received; and gasket means on said horizontal wall, said gasket means being adapted to provide effective closure means for the pot when the closure is disposed on said casing.

3. In a portable toilet device: a casing having a bottom, and a substantially cylindrical wall upstanding from said bottom; a pot disposed in said casing, said pot being generally ovate in horizontal section and having the forward end adjacent the forward part of the casing wall, the remaining portion of the pot wall being spaced from the casing wall; a pair of inwardly extending vertical flanges arranged diametrically opposite each other at the sides of the casing; a seat, having the usual pot opening, disposed over said pot and the upper ends of said flanges, said seat having a relieved portion extending arcuately from substantially one flange to the other at the rear of said seat; back support means comprising a substantially semicircular back support member slidable in the space between the relieved portion of the seat and the adjacent wall of the casing; an inwardly extending arcuate flange along the bottom edge of said back support member for limiting upward movement of said back support member by engagement with the adjacent under side of said seat; yielding means on said back support member frictionally engaging the adjacent portion of the casing wall; handle means for said back support member for raising and lowering said back support means; and a handle secured to the casing at the rear thereof.

4. In a toilet device: a casing having a bottom, and a substantially cylindrical wall upstanding from said bottom; a pot disposed in said casing, said pot being generally ovate in horizontal section, at least the back portion of the pot wall being spaced from the casing wall; a pair of inwardly extending vertical flanges at the respective sides of the casing; a seat for said seat having a relieved portion extending arcuately from substantially one flange to the other at the rear of the seat to provide an arcuate space along the back part of said casing wall; back support means comprising a substantially semicircular back support member slidable in the space between the relieved portion of the seat and the adjacent wall of the casing; means limiting upward movement of said back support member; and yielding means frictionally retaining the back support member in a raised position.

5. In a toilet device: a casing having a bottom, and a wall upstanding from said bottom; a pot disposed in said casing, said pot being spaced from the rear part of

the casing wall; a pair of substantially vertical flanges arranged opposite each other at the inner sides of the casing; a seat for said pot; and back support means, including a substantially vertical back support member slidably guided, by said flanges, in the space between the pot and back portion of the casing.

6. In a toilet device: a casing having a bottom, and a wall upstanding from said bottom; a pot disposed in said casing, said pot being spaced from the rear part of the casing wall; a pair of vertical guide flanges arranged opposite each other at the sides of the casing, the casing bottom and upstanding wall and said flanges being integrally moldable of plastic material; and back support means comprising a substantially vertical back support member slidable adjacent the rear part of the casing wall between a raised and a lowered position, said back support member being guided by said flanges.

7. In a portable toilet device: a casing having a bottom, and a wall upstanding from said bottom; a pot secured within said casing; a seat on said pot, said seat having a relatively large opening therein; closure means for said casing and pot comprising a vertical wall having inside dimensions slightly greater than the outside dimensions of the casing wall; a substantially horizontal partition in said closure wall spaced somewhat upwardly of the lower end of said closure wall to provide a recess into which the upper end portion of the casing wall is adapted to be received; and gasket means on the underside of the partition, said gasket means having a thickened central portion fitting into said seat opening and being

adapted to provide effective closure means for the pot when the closure is disposed on said casing.

8. In a toilet device: a casing having a bottom, and a wall upstanding from said bottom to define therewith a chamber for a pot; a pot disposed in said casing; a seat for said pot; a back support means, including a substantially vertical back support member; and guide means for said back support means, said back support means being slidably guided by said guide means between a lowered and a raised position.

9. The invention defined by claim 8, including a top device for the casing, said top device having a bottom wall and upstanding wall means defining with the bottom wall a storage chamber, said device being removably disposed on the casing; a cover for said device; and means for releasably securing said device to said casing.

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