

May 12, 1959

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2,885,688

PORTABLE TOILET

Filed Nov. 3, 1955

FIG. 1

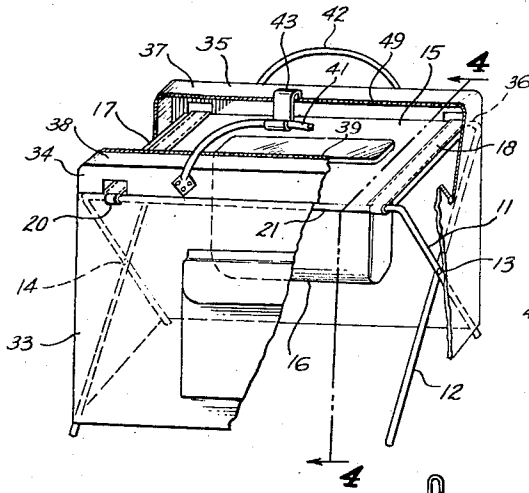


FIG. 2

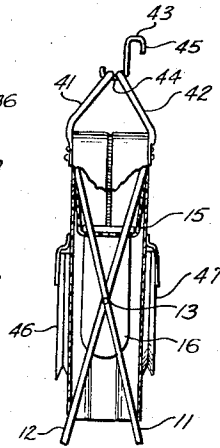


FIG. 3

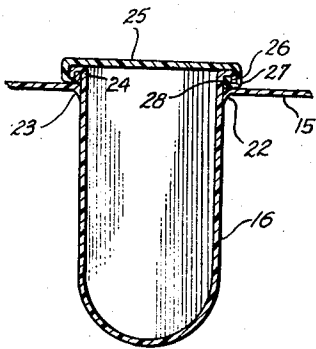


FIG. 4

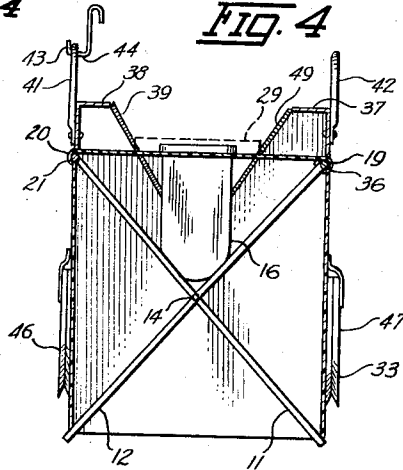


FIG. 5

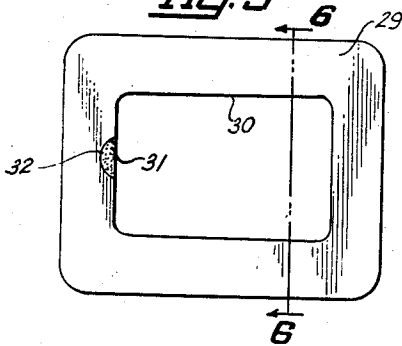
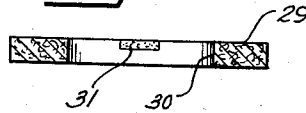


FIG. 6



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PORTABLE TOILET

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Application November 3, 1955, Serial No. 544,686

2 Claims. (Cl. 4—135)

This invention relates to a portable toilet and more particularly one which includes a sealed container and a frame which may be folded into a compact unit for easy storage.

It is a primary object of my invention to provide a light, collapsible framework adapted to hold a sealed container such that the device may be stored in a limited space in any position without creating unsanitary conditions.

It is yet another object of my invention to provide a device of the type described having compartments therein for storage of the required necessities, such as toilet tissue.

It is a still further object of my invention to provide a container of plastic material having an interlocking sealed cover.

It is still another object of my invention to provide a device which may be hung from a window ledge or the like.

Yet another object of my invention is to provide a disposable seat pad for use in conjunction with a container.

Other and further features and objects of the invention will be more apparent to those skilled in the art upon a consideration of the accompanying drawings and following specifications, wherein is disclosed a single exemplary embodiment of the invention, with the understanding, however, that such changes may be made therein as fall within the scope of the appended claims, without departing from the spirit of the invention.

In said drawings:

Figure 1 is a view in perspective of a portable toilet constructed according to my invention, having a portion of the outer cover cut away to show the internal structure.

Figure 2 is an end view of the device shown in Figure 1, with the frame folded for storage, the end portion thereof having been cut away to show the position of the internal structure.

Figure 3 is an enlarged cross sectional view of the container to show a means of joining the covered portion of the container to provide a seal therefor.

Figure 4 is an end view in cross section of the device as shown in Figure 1 taken at line 4—4 of Figure 1 and showing the toilet in an opened position.

Figure 5 is a top view of the seat pad to be used in conjunction with the device shown in Figure 4, and

Figure 6 is a view in cross section of the seat pad shown in Figure 5 taken at line 6—6 thereof.

Referring now to the drawings, and more particularly to Fig. 1; the main supporting frame is comprised of the tubular framework including two U-shaped members 11 and 12 in which the downwardly extending legs on either side are crossed and joined by rivets at 13 and 14 to provide a pivotal joint. This framework is preferably formed of steel tubing.

Supported on the upper rails of this framework is the seat portion 15. It is this seat portion which carries the

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container 16. The seat portion is formed of an elastic plastic sheet and carries two reinforcing cross members 17 and 18. Both of these reinforcing members are hinged to the same frame member, as at 19 of Figure 4, and are adapted to extend across the width of the structure when it is fully open. Each reinforcing member is provided with a hook 20 at the end opposite the hinge, this hook being adapted to engage the upper rail 21 of the U-shaped frame member such as 11. These reinforcing members are stitched into place in the plastic seat member 15.

The container 16 may be of any shape, but it is preferable that it be somewhat longer than it is wide. The container is also of plastic and is fused into seat portion 15, as at 22 and 23 of Figure 3. The upper lip 24 of the container extends for a slight distance above the plane of the seat portion 15.

A cover 25 is provided for this container and it is this cover which must be so constructed as to secure a watertight sealed relationship between the cover and the container. The cover member 25 is also preferably formed of plastic.

To secure this seal, I have provided an outwardly extending L-shaped projection 26 which extends around the entire lip 24 of the container. The container cover is provided with a downwardly extending mating L-shaped lip 27 having an inwardly and upwardly projecting flange 28 which engages the channel-like portion in the container 11, which is formed by the L-shaped projection 26 when the lid and container are joined together by snapping the lid in position.

To maintain a completely sanitary condition in use, I have provided a seat pad 29 which is shown in detail in Figures 5 and 6. This seat pad contains an inner opening 30 which is of the same general configuration of the open end of the container 16. It is of such a shape as to extend outwardly from the container in all directions for a substantial distance and is preferably made of a cellulose material which is inexpensive and may be discarded after use. To further improve the sanitary properties, I have provided a deodorant pellet 31 which is inserted in the seat pad at one end thereof in a recessed portion 32 provided for that purpose.

The entire unit is further enclosed in a cover portion 33. This cover portion is adapted to enclose the entire supporting structure and may be formed of plastic or canvas. The cover portion is supported on the frame by means of two longitudinal steel flap members 34 and 35, which are mounted on the opposite rails 21 and 36. The cover portion carries inwardly extending flaps on either side, such as 37 and 38, which in turn are provided with matching longitudinal zipper sections 39 and 49. When the device is folded, as shown in Figure 2, these mating zipper sections are joined in the conventional manner to provide a closed bag which, in outward appearance, would be similar to a conventional suitcase.

To enable the device to be carried or stored, a pair of handle members 41 and 42 are attached to the steel plates 34 and 35. These handle members extend upwardly in an arc above the top of the bag. They are joined together by S-shaped clamp 43 which is attached to one of the handles. The base portion of the S-shaped clamp at 44 is sufficiently large to permit the opposite handle to be carried therein. The upper flange 45 is sufficiently large to allow the clamp to be used as a hook member and hung over any suitable supporting surface, such as a window ledge or the like.

On the opposite sides of the cover portion are located two pockets 46 and 47. These pockets are provided to carry necessary accessories, as for example toilet tissue in pocket 46 and the seat pads in pocket 47.

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From the foregoing description, it will be apparent that I have provided a portable, sanitary toilet which, in usage, can be easily stored and will remain in a sanitary condition at all times. It will be noted that when the device is folded or collapsed, as in Figure 2, the container still remains in a substantially upright position and that the cover portion is finally locked in position on the container. To provide additional sanitary precautions, the top portions of the outer cover are joined and closed by a slide type fastener, the closure providing an additional shield should there be any inadvertent failure of the container itself.

It will be at once apparent that the device can be stored after usage for a considerable length of time, and that it may be emptied and cleaned at any suitable time.

Although I have described a specific embodiment of my invention, it is apparent that modifications thereof may be made by those skilled in the art. Such modifications may be made without departing from the spirit and scope of my invention as set forth in the appended claims.

I claim as my invention:

1. In a portable toilet, a foldable frame comprising a pair of rigid U-shaped members positioned with the open end downwardly, the leg portions thereof being pivotally joined, a seat portion having a container centrally positioned therein, said seat portion being hingedly mounted between the upper portion of said frame members and having reinforcing means therein adapted to interconnect said U-shaped members, said container and seat being adapted to drop downwardly within the perimeter of said frame member when said frame member is in a folded position an upwardly extending plate mounted on the

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upper portion of each of said U-shaped members, a cover portion positioned on said plate members and extending downwardly therefrom and enclosing a substantial portion of said frame to maintain a moisture barrier about said frame and said container, flap members extending inwardly from the upper extremities of said plate members, and slide fastener means positioned on the inner edge of said flap members to secure a closure therebetween, said plates being of sufficient height and said flaps of sufficient width to hold said cover portion outwardly and upwardly from said seat portion and said container when said frame member is folded inwardly thereon said frame and said plate members forming a rigid protective structure about said container to prevent longitudinal thrusts thereagainst.

2. In a device as set forth in claim 1, including yieldable handle members positioned on each of said upwardly extending plates, and hook means positioned to interconnect said handle members at the uppermost portion thereof.

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