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H. A. SEGAL

3,471,870

EXCREMENT RECEPTACLES

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FIG. 1

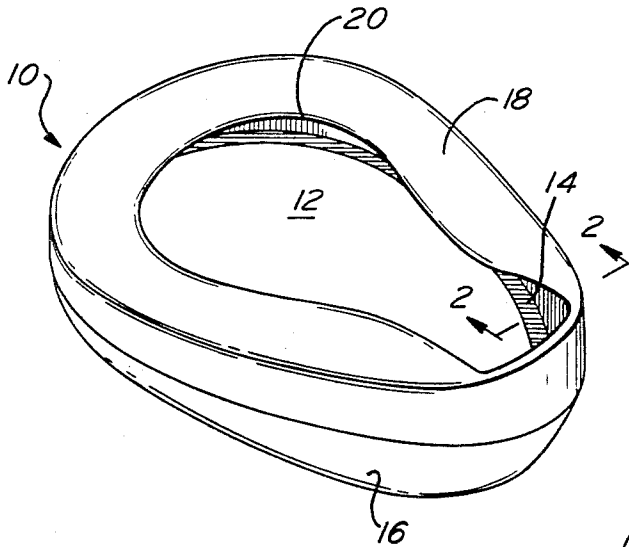


FIG. 3

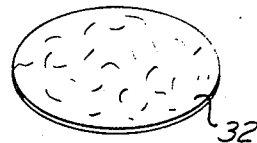


FIG. 2

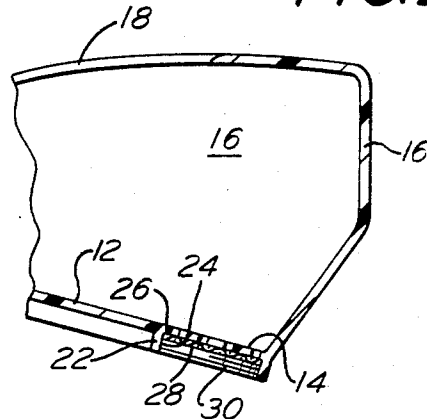
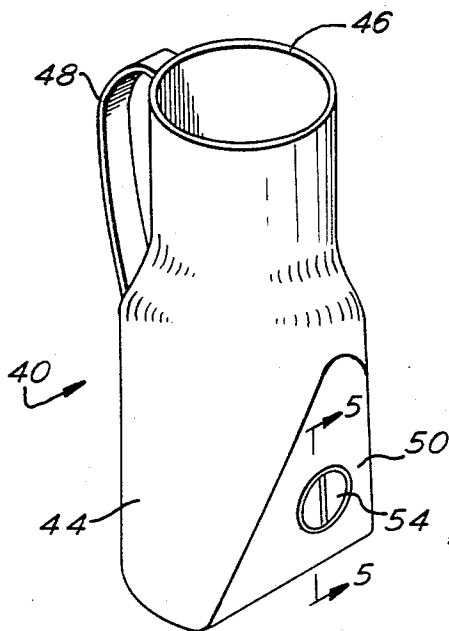


FIG. 4

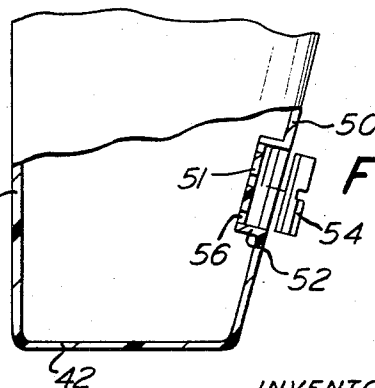


FIG. 5

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EXCREMENT RECEPTACLES

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3 Claims

ABSTRACT OF THE DISCLOSURE

Excrement receptacles having deodorant retainers formed therein.

This invention relates to an excrement receiver. More particularly this invention relates to a bedpan and urinal having receptacles therein for removably retaining deodorant material.

Hospitals, nursing homes and similar institutions must provide patients confined to a bed with bedpan service. Such service is particularly objectionable primarily because of the odor that often results. Present procedures require that the bedpan or urinal be removed by hospital personnel who cover the excrement receivers while they are being transported to a special receiver for disposing of the excrement. Thereafter, the bedpan or urinal is dipped or washed with a disinfectant and then returned to the patient.

As indicated above, this entire procedure can be made quite objectionable by the odor of the excrement. Moreover, if the urinal or bedpan is not immediately removed from the patient's room, as is often the case with urinals, the odor can permeate the entire room. It therefore is an object of the present invention to provide a new and improved excrement receiver which includes means for reducing or removing the odor of the excrement.

Another object of the present invention is to provide an excrement receiver which includes a receptacle for returning a deodorant which will overcome the odor emitted by excrement.

A still further object of the present invention is to provide an excrement receiver which includes a receptacle in which a deodorizer can be removably positioned.

Yet another object of the present invention is to provide an excrement receiver which includes a receptacle for retaining a deodorant and which is urine activated.

For the purpose of illustrating the invention, there are shown in the drawings forms which are presently preferred; it being understood, however, that this invention is not limited to the precise arrangements and instrumentalities shown.

FIGURE 1 is a perspective view of a bedpan constructed in accordance with the present invention.

FIGURE 2 is a partial transverse sectional view of the bedpan shown in FIGURE 1 taken along the line 2-2.

FIGURE 3 is a perspective view of a semi-permeable element for use in a deodorant retaining means.

FIGURE 4 is a perspective view of a urinal constructed in accordance with the present invention.

FIGURE 5 is a partial transverse sectional view of the urinal shown in FIGURE 4 taken along the line 5-5.

Referring now to the drawing, wherein like numerals indicate like elements, there is shown in FIGURE 1 a perspective view of a bedpan designated generally as 10. As shown, the bedpan includes a bottom wall 12 having a trough 14 formed about the periphery thereof. The trough 14 is lower than the remainder of bottom wall 12 so that fluids will collect therein when the bedpan is used.

The bedpan further includes side walls 16 which extend generally vertically upwardly from bottom wall 12 and

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are integral therewith. A top wall 18 is integral with side wall 16 and projects inwardly therefrom above the bottom wall 12. The top wall 18 has a conventionally shaped opening 20 therein.

As best shown in FIGURE 2, a cylindrical flange 22 projects outwardly from the bottom wall 12. Flange 22 is integral with bottom wall 12, preferably within the trough 14.

As shown, wall 12 extends across the area defined by the flange 22 and is provided with a plurality of openings 24 so as to provide communication between the interior and exterior of the bedpan 10 through the area surrounded by the flange 22. The openings 24 are entirely within the area defined by flange 22.

Threads 28 are formed on the interior wall of flange 22. A threaded closure 30 is adapted to be threadedly engaged with threads 28. Flange 22 together with closure 30 define a receptacle for retaining a deodorant. In the preferred embodiment, the deodorant is a solid disc of material which is clamped and positioned between the shoulder 26 and closure 30. The disc of deodorant is held against the shoulder 26 by the force of the closure 30 which is tightened against the deodorant. Preferably, the disc of deodorant is of the type that would be liquid activated. However, other types of deodorants may be used.

If desired, a large circular opening could be formed in the area now occupied by the small openings 24. This opening would be smaller in diameter than flange 22 so as to define a circular shoulder, such as shoulder 26, projecting inwardly from the wall of flange 22. A wafer, 32, of semi-permeable material could then be positioned within the flange 22 against the shoulder 26. Wafer 32 is made of any well known material that will permit gaseous fluids to pass through it but is not so coarse as to allow liquid to pass.

In this embodiment, the deodorant would be a solid disc of material which would be clamped into position between the wafer 32 and the closure 30. The wafer 32 is held in position against the shoulder 26 by the force of the closure 30 which is tightened against the deodorant.

In the preferred embodiment, the bedpan 10 and closure 30 are made of an autoclavable plastic. There are a large number of such plastics available on the market, such as, for example, the autoclavable plastic sold under the trademark "Zylon."

Although the flange 22 and opening 24 can be positioned anywhere in the bottom wall 12 or in the side wall 16, it is preferably positioned in the bottom wall 12 within the trough 14. As thus positioned, the deodorant can be liquid activated. Moreover, by positioning the openings 24 in the trough 14, it is unlikely that they would be covered by excrement thereby reducing the effectiveness of the deodorant.

If desired, the bedpan 10 can be provided with additional flanges 22 and closures 30 constructed as set forth above.

Referring now to FIGURES 4 and 5, the principles of the present invention as shown in connection with a urinal designated generally as 40. As shown, the urinal 40 includes a generally planar bottom wall 42 which is integral with a generally bottle-shaped side wall 44. Side wall 44 is preferably cylindrical in cross section except as will be explained below and of lesser diameter adjacent the mouth 46 than it is adjacent the bottom wall 42. A handle 48 of any convenient shape is attached to the side wall 44.

In the preferred embodiment, the side wall 44 includes a generally planar section 50 which is triangularly shaped and extends at an obtuse angle with the bottom wall 42. Planar section 50 is integrally joined with the bottom wall 42 and the side wall 44. Planar section 50 provides

a surface upon which the urinal 40 can rest when it is used.

A circular flange 52 is integral with and extends from the planar wall 50. The interior of flange 52 is threaded and receives a removable closure 54 having mating threads formed thereon.

A portion 51 of the planar wall 50 curves inwardly and is provided with a plurality of apertures 56. Apertures 56 provide communication between the interior of urinal 40 and the interior of flange 52. The bulging portion 51 provides a recess within which the flange 52 may be positioned so that its outermost extension is generally flush with the wall 50. In this way, the flange 52 and closure 54 will not interfere with the stability of the urinal 40.

In use, a disc of solid deodorant is positioned with the flange 52 against the opening 56 in wall 50. The closure 54 is threaded into the flange 52 and bears against the disc of deodorant thereby retaining it. The flange 52, wall 50 and closure 54 may be regarded as a receptacle for the disc of solid deodorant.

If desired, a structure similar to that illustrated in FIGURE 3 can be substituted for the perforations in wall 50. Thus, a semi-permeable wafer can be used to separate the interior of the urinal 40 from the deodorant.

In the preferred embodiment, the flange 52 is positioned in the planar section 50 adjacent the bottom wall 52. As thus positioned, it is closest to the area where most of the urine collects and where it will activate the deodorant. However, those skilled in the art would readily recognize that the flange 52 could be positioned in the bottom wall 42 or in the side wall 44 opposite to where it is presently positioned.

The urinal 40 is preferably made of an autoclavable plastic, such as set forth above for the bedpan 10.

The present invention has several advantages over devices previously described in this art. For example, see Patents 535,241 and 638,270. Some of the advantages of the present invention should be apparent from what has been set forth above. The present invention is clearly advantageous over devices such as that described in Patent 535,241. The present invention is relatively uncomplicated and requires no special machinery. The deodorant is easily replaced and the entire apparatus is sterilizable by autoclaving. The deodorant is particularly positioned and is effective over the entire time that the excrement receiver is being used. Devices constructed in accordance with the present invention has distinct advantages over appliances such as are disclosed in Patent 638,270. Thus, the deodorant can be protected from the excrement and is usable until it is exhausted. Moreover, there is no necessity to cover the entire bottom of the bedpan with the deodorant. As described, the receivers 10 and 40 can be readily washed and reused by the same patient, as is the current practice. Sterilization is done at less frequent intervals.

The present invention has applications other than those which are described above. By way of example, the invention can be used in a child's toilet, sometimes known

as a training toilet. Such devices include a toilet seat and portable receptacle cooperating therewith.

The present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof and, accordingly, reference should be made to the appended claims, rather than to the foregoing specification as indicating the scope of the invention.

I claim:

1. A portable human waste receptacle including a bottom wall and integral side walls, a large opening for introducing and removing human waste in said receptacle opposite said bottom wall, one of said bottom and side walls having a cylindrical flange having threads thereon and being formed integrally therewith, said cylindrical flange defining a wall portion within the confines of said flange, at least one opening smaller than said large opening opposite said bottom wall in said wall portion communicating between the interior and exterior of said receptacle, an imperforate closure having threads thereon for mating with the threads on said cylindrical flange, said cylindrical flange and said closure cooperating with said wall portion to define a chamber, a deodorant adapted to be inserted in said chamber between said closure and said wall portion.

2. A receptacle as set forth in claim 1 including a wafer of semi-permeable material within said chamber, said receptacle being a bedpan.

3. A receptacle as set forth in claim 1 wherein said receptacle is made of an autoclavable plastic.

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