

[72] Inventor Carl H. Rickmeier, Jr.
Sheboygan, Wis.
[21] Appl. No 840,287
[22] Filed July 9, 1969
[45] Patented Aug. 10, 1971
[73] Assignee The Vollrath Co.
Sheboygan, Wis.

Primary Examiner—Laverne D. Geiger
Assistant Examiner—Edward J. Earls
Attorney—Morsell & Morsell

[54] **BEDPANS**
1 Claim, 9 Drawing Figs.

[52] U.S. Cl. 4/112
[51] Int. Cl. A61g 9/00
[50] Field of Search 4/112, 113;
128/275, 292, 295; 220/97 C, 97 D; D83/1

[56] **References Cited**
UNITED STATES PATENTS
D. 216,058 11/1969 Painter et al. Des.83/1 (6)

ABSTRACT: A disposable plastic bedpan is so designed that a plurality of said pans can be stacked in semineesting relation to conserve space. In addition, said bedpan is formed with outwardly and downwardly directed side flanges which engage the mattress when someone is seated thereon on a bed to provide stability and minimize the possibility of tipping, which side flanges also serve as handles to facilitate the withdrawal of the pan, and which side flanges provide increased strength and rigidity and permit the use of relatively lightweight inexpensive plastic in the manufacture of said disposable bedpan.

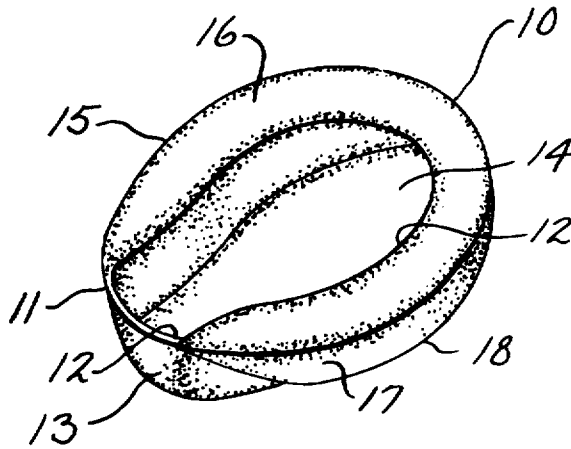


Fig. 1

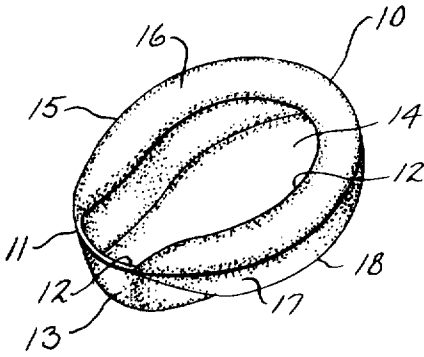


Fig. 2

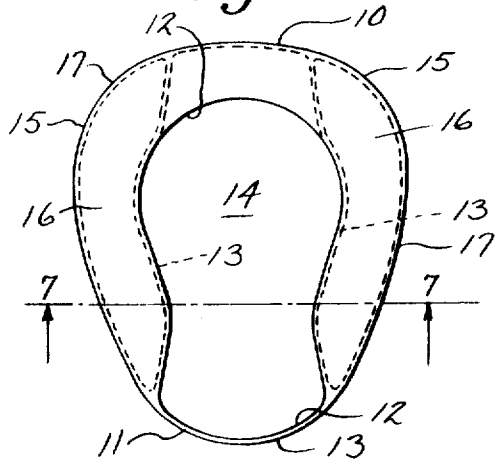


Fig. 3

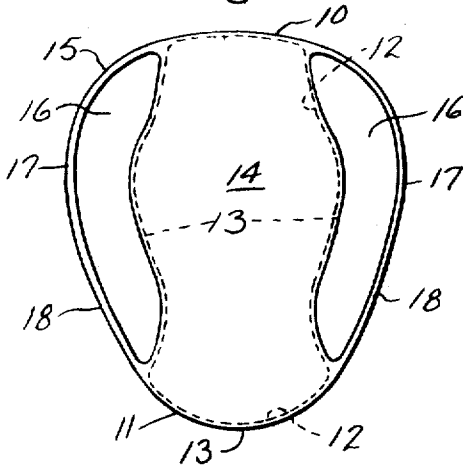


Fig. 4

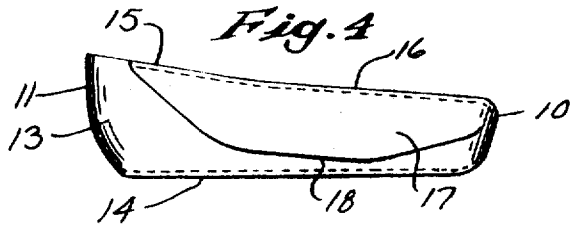


Fig. 5

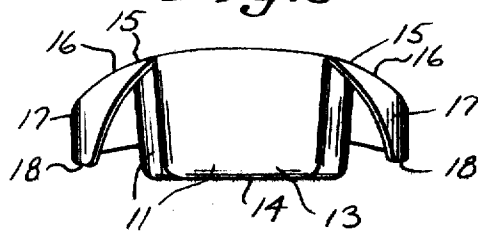


Fig. 6

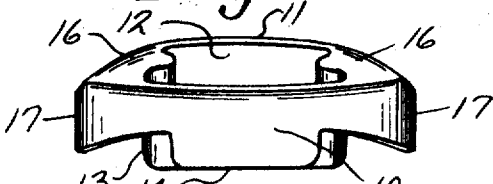


Fig. 7

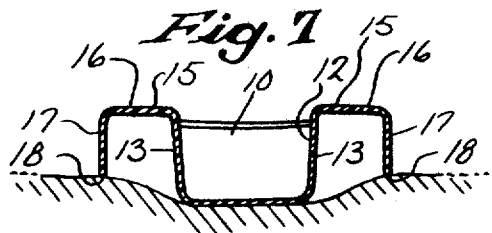


Fig. 8

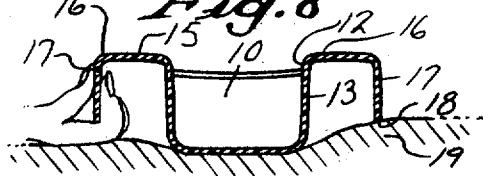
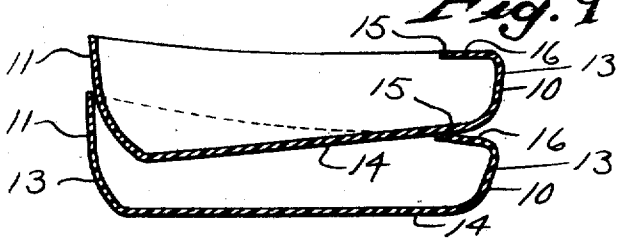


Fig. 9



INVENTOR
CARL H. RICKMEIER, JR.

BY

Morsell + Morsell

ATTORNEYS

BEDPANS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to bedpans, and particularly to disposable bedpans for use in hospitals.

2. Description of the Prior Art

Heretofore the conventional practice in hospitals and the like has been to use bedpans formed of stainless steel or similar relatively expensive material, and after use by one patient the bedpan is thoroughly sterilized and sanitized before reuse by another patient. Not only is the initial cost of such stainless steel bedpans high, but the repeated sanitization or autoclaving of such conventional pans is time-consuming and relatively expensive. It has been found, in fact, that the use of inexpensive disposable plastic bedpans of the type characterizing the present invention for each patient is not only more satisfactory from a sanitation standpoint, but the overall cost is comparable to or even less than the use of conventional reusable bedpans.

SUMMARY OF THE INVENTION

The present invention provides a molded plastic bedpan for use in hospitals and the like which pan is sufficiently low in cost to permit the same to be economically disposed of after use by a patient, in contrast to the stainless steel bedpans heretofore used which are not only relatively costly but which must be thoroughly sterilized before use by succeeding patients, which is time-consuming and expensive.

A further object of the present invention is to provide a novel bedpan which is so designed that a plurality of said pans can be compactly stacked for convenient shipment or storage.

A further object is to provide a new and improved bedpan design featuring outwardly and downwardly directed wings or side flanges which add rigidity and permit the use of relatively thin gauge, inexpensive plastic in the manufacture of the bedpan.

A further object of the invention is to provide a bedpan having novel, outwardly extending side flanges, as described, which flanges are designed to engage the mattress when a patient is seated thereon to prevent said pan from tipping.

A further object is to provide a bedpan having novel side flanges, as described, which flanges function as handles to facilitate the withdrawal of the pan sideways from beneath a patient.

A further object of the invention is to provide a novel bedpan which is so designed that it can be injection molded in contrast to the more expensive and less satisfactory blow-molding process heretofore used.

A further object is to provide a novel and improved bedpan which is provided with a specially designed undercut rear portion to prevent splashback.

Still further objects of the present invention are to provide a new and improved plastic bedpan which is strong and durable, which is comfortable, which is light in weight and easily handled, and which is otherwise particularly well adapted for its intended purposes.

BRIEF DESCRIPTION OF THE DRAWING

Referring now more particularly to the drawing, wherein the same reference numerals designate the same parts in all of the views:

- FIG. 1 is a perspective view of the new bedpan;
 FIG. 2 is a top plan view of the pan;
 FIG. 3 is a bottom plan view of the bedpan;
 FIG. 4 is a side elevational view of said pan;
 FIG. 5 is a front elevational view;
 FIG. 6 is a rear elevational view;
 FIG. 7 is a transverse vertical sectional view, taken along line 7-7 of FIG. 2, showing the bedpan positioned on a mattress;

FIG. 8 is a similar vertical sectional view illustrating the use of a side flange to withdraw the pan; and

FIG. 9 is a longitudinal vertical sectional view showing a pair of bedpans in stacked relation.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now more particularly to FIGS. 1-3 of the drawings, it will be seen that the improved bedpan comprising the present invention is of a generally oval shape in plan view, including a rearward end 10 and a narrower, more tapered forward end 11. Extending inwardly from the pan forward end is a contoured top opening 12 which is defined by a continuous, slightly downwardly and inwardly tapered sidewall 13 depending therebelow, and formed integrally with said continuous sidewall 13 is a flat bottom 14.

Forming the top of the bedpan is a flange 15 which commences a short distance rearwardly of the pan forward end and extends substantially around the periphery thereof, as illustrated, and which includes a flat horizontal surface 16 which extends laterally outwardly and is then deflected downwardly at substantially a right angle to provide a vertical portion or wing 17 spaced from the pan sidewall 13. The bottom edge 18 of said flange vertical portion terminates somewhat above the plane of the pan bottom wall 14 and is angled downwardly and rearwardly somewhat as best appears in FIG. 4. As a result it is possible for an attendant to get his fingers under said flange (FIG. 8) and utilize the same as a handle when withdrawing the pan laterally from beneath a patient.

A further important function of said downwardly extending side wings or flanges 17, the lower edges of which terminate at a point spaced above the pan bottom, as described, is that when the pan is positioned for use on a bed, the weight of the patient seated thereon causes deformation and depression of the resilient mattress 19, as shown in FIG. 7, with the result that the longitudinal bottom edges 18 of said flanges engage the mattress surface and function to stabilize the pan and eliminate the possibility of the same inadvertently tipping. This is an important feature of the present invention and nothing comparable is to be found in prior, conventional bedpan designs.

Still another important function of the novel right-angularly deflected side flanges 15 characterizing the present invention is that said flanges add considerable strength and rigidity to the pan. The result is that relatively light-gauge and inexpensive plastic material can be used in the manufacture of the present bedpan, which is particularly important in a unit like the present invention which is intended to be discarded after use by one patient. It has been found that polyethylene or polypropylene, molded in any desired color, are well suited for use in the manufacture of the present invention but a number of other low cost plastic materials could also be utilized, and the invention is not to be limited in this respect.

As best appears in FIG. 2, the flat top portion 16 of the flange 15 extends completely around the rearward portion of the pan, thus providing an undercut portion therebelow and functioning as an effective antisplashback means. In addition, as hereinabove mentioned, the sidewalls 13 of the pan are tapered downwardly and inwardly somewhat from the true vertical, thereby providing a draw which permits the unit to be injection molded, which is not only less expensive than the blow molding process heretofore used but which provides a superior finish.

With reference now more particularly to FIG. 9 of the drawings, it will be seen that the present bed pan is so designed that there is a distinct rearward taper, as well as the downwardly and inwardly tapered taper of the sidewalls as hereinabove described. The result is that when one pan is positioned on top of another the forward end portion 11 of the upper pan fits partially within the pan therebelow, with the rearward portion 10 of said upper pan seated on the horizontal flange portion 16 at the rear of the lower pan. Due to the rear-

wardly tapered design of said pans the top surface of the upper pan remains substantially horizontal, and any reasonable number of additional pans can be similarly stacked thereon. With the illustrated seminesting stacking arrangement considerable valuable space is conserved when storing or shipping a plurality of said containers, which is a very important advance in the art.

From the foregoing detailed description it will be seen that the present invention provides a new and improved bedpan structure designed particularly for use in hospitals and which has a number of advantages over the bedpans in present use. For one thing, the pan comprising the present invention is molded of low cost plastic material which permits it to be economically disposed of after use by one patient. This is in contrast to the stainless steel bedpans heretofore used which are not only relatively costly but which must be tediously autoclaved before use by succeeding patients.

In addition, the improved bedpan comprising the present invention is provided with novel outwardly and downwardly directed side flanges which not only add strength and permit the use of relatively thin inexpensive material, but which stabilize the pan to prevent tipping, and which flanges function as handles to facilitate the withdrawal of the pan from beneath a patient.

A still further important advantage is that the novel bedpan comprising the present invention is so designed that a plurality of said pans can be stacked in compact form to conserve valuable space.

It is to be understood that while one preferred embodiment of the invention has been illustrated and described herein numerous variations or modifications thereof will undoubtedly occur to those having skill in this art. What is intended to be covered herein, therefore, is not only the illustrated form of the present invention but also any and all variations or modifications thereof as may come within the spirit of said invention.

I claim:

1. A one-piece molded plastic bedpan comprising: a sub-

stantially oval, open-top pan having a rearward end and a forward end, the vertical dimension of said pan being tapered from its forward end toward its rearward end; a downwardly and inwardly inclined sidewall extending completely around said pan; a substantially flat bottom integral with said sidewall; a substantially horizontally extending flange formed on the top of said sidewall having a portion extending inwardly at the rearward end of said pan and two outwardly extending portions disposed between the forward and the rearward ends of said pan, said flange commencing at a point spaced rearwardly from the pan forward end and extending around the periphery of the pan to a point on the opposite side of said pan spaced equally distant from said pan forward end whereby the pan forward end portion is devoid of said horizontal extending flange member; an integral vertical flange element extending downwardly from the outer marginal portion of each of the outwardly extending portions of said horizontal flange in spaced relation to said pan sidewall, said vertical flange elements each having a bottom longitudinal edge which is spaced above the plane of the pan bottom a distance sufficient to permit the insertion of an attendant's fingers thereunder when said bedpan is resting on a surface but which vertical flange is of sufficient depth so that the bottom edge thereof will engage the surface of a mattress when a patient is seated on said bedpan to form stabilizing means adapted to prevent said pan from tipping, the tapered contour of said pan sidewall together with the design of the pan forward portion which is devoid of said horizontal flange permitting a plurality of said pans to be stacked one upon another in a manner whereby the forward end portion of a pan is inserted partially into the forward end portion of the pan therebelow and with the rearward portion of the upper pan biased upwardly and resting on the flat flange portion at the rear of said lower pan, the said rearwardly tapered vertical dimension of said pans providing a substantially flat, horizontal top surface when said pans are in said stacked condition.

40

45

50

55

60

65

70

75