May 21, 1968 E. M. GRANT 3,383,712

BEDPANS

Filed Sept. 13, 1965

FIG. 1.

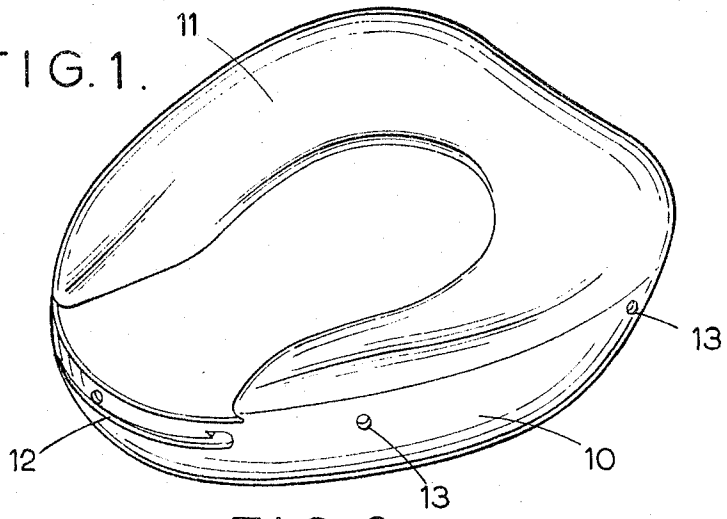


FIG. 2.

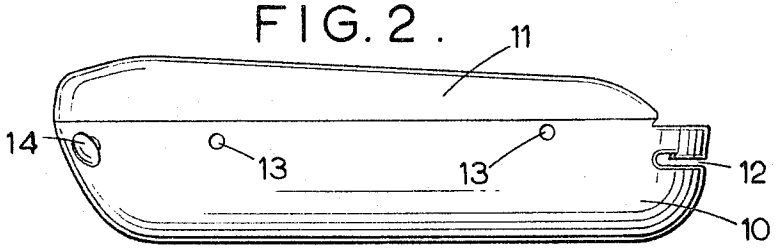
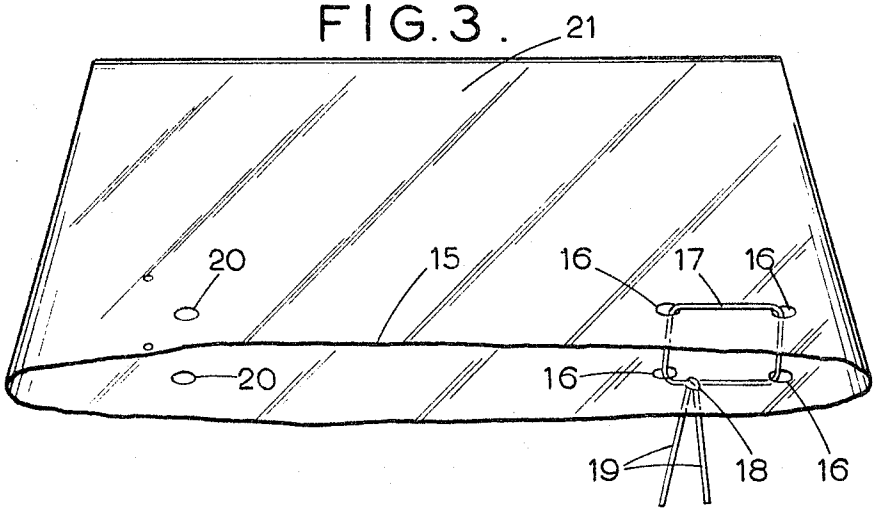


FIG. 3.



INVENTOR
ELSIE MARY GRANT

BY

Linton and Linton

ATTORNEYS

United States Patent Office 3,383,712 Patented May 21, 1968

3,383,712

BEDPANS

Elsie M. Grant, Farley Green Cottage, Albury, Guildford, Surrey, England

Filed Sept. 13, 1965, Ser. No. 486,713
10 Claims. (Cl. 4—112)

ABSTRACT OF THE DISCLOSURE

The present invention is concerned with a bedpan and detachable liner therefor, which bedpan has a plurality of projections on the exterior of one end and an abutment surface in the opposite end thereof. The liner is in the form of an open top container with holes adjacent the open top thereof and is of a water-impermeable flexible sheet material. The liner is detachably inserted in the bedpan with the projections extending through some of the liner holes and other of the liner holes have an elastomeric loop therethrough which bunches up the liner adjacent thereto and which bunched portion of the liner resiliently engages said bedpan abutment surface.

Background of the invention

Although in general use until now, there have been many objections to the use of conventional bedpans in hospitals. Apart from the disagreeableness of the work of cleaning bedpans after use, it has been found extremely difficult to ensure that the bedpans are really clean. Matter often becomes encrusted on the underside of the seat of the bedpan and is extremely difficult to remove. The work of cleaning is extremely time consuming, and the risk of cross-infection between patients in a hospital is great. Automatic bedpan washers have been proposed but these have not proved to be particularly effective.

In order to avoid these difficulties and disadvantages of conventional bedpans, it has been proposed to use a bedpan with a disposable lining. Accordingly, the invention provides a bedpan adapted to receive a removable liner, having at least one projection at one end and an abutment at the other end for engaging and retaining said liner.

According to a further feature of the invention, there is provided a liner, for use with a bedpan, comprising a container, with one open end, of water-impermeable, flexible sheet material having at least one hole through said material at one side of and adjacent said open end, and an elastic loop passing through at least two holes in the material at the opposite side of and adjacent said open end.

According to yet another feature of the invention, there is provided a bedpan having a removable liner of water-impermeable, flexible sheet material adapted to prevent soiling of the bedpan, said liner having at least one hole in said material engaging a projection at one end of said bedpan, and an elastic loop passing through at least two holes in the material engaging an abutment surface at the other end of said bedpan.

The advantages of using a linear on a bedpan are considerable. The liners are extremely inexpensive, and are comfortable for the patient. They cut down noise and smell, and save a lot of time and labor for nurses. The bedpans themselves remain clean, and therefore the previously necessary unpleasant work of cleaning them is avoided. The risk of cross-infection is removed, and the machines formally used for washing bedpans, which were expensive to install and maintain are no longer required.

Description

In order that the invention shall be clearly understood,

an exemplary embodiment thereof will now be described with reference to the accompanying drawings, wherein:

FIGURE 1 shows a perspective view from above a bedpan according to the present invention;

FIGURE 2 shows a side elevation of a bedpan in FIGURE 1; and

FIGURE 3 shows a liner for the bedpan in perspective.

The bedpan shown in FIGURES 1 and 2 is seen to be of substantially conventional shape. It consists of a base or container part **10** and a seat part **11**. It is moulded in polypropylene, or any other suitable rubber or plastics material. At the front edge of the base **10** there is provided a slot **12** which provides an abutment surface serving as an anchorage for a liner. The slot has broader portions at its ends to provide further security against the liner becoming loose. Around the upper part of the base are a series of holes **13**, and at the rear of the base are two projecting studs **14**. The studs **14** also serve as anchorage for a liner.

The liner, as seen in FIGURE 3, consists of an envelope of polythene which is open along one edge **15**. Near one end of that edge are pairs of spaced holes **16** in both sides of the envelope, through which is threaded a loop of elastic thread **17**. The loop **17** is tied at **18** and has loose ends **19**. Towards the other end of the open edge **15** are aligned holes **20**.

In use, the open edge **15** is spread outwardly into an oval shape to fit over the seat part **11** of the bedpan. The holes **20** are engaged over studs **14** at the rear of the bedpan, and the elastic loop **17** is stretched across the front of the bedpan and allowed to engage slit **12**. The closed portion **21** of the envelope is then pressed downwardly into the inside of the bedpan and smoothed outwardly under the seat portion **11** and flat onto the inside of the base part **10**. The holes **13** are needed to allow the escape of air from inside the bedpan as the liner is pushed into it.

The liner may alternatively be arranged by placing the part **21** of the container inside the bedpan first, and then spreading the open edge **15** outwardly over the seat part until holes **20** locate over buttons **14**, and the elastic thread **17** locates in slit **12**.

Once used, the free edge **15** of the liner is released from the bedpan and gathered together with both hands. The left hand is brought down to grasp the liner just above the contents, and the right hand then grasps the liner above the left hand and is moved upwardly to near the top of the liner to squeeze out any trapped air. The left hand can then be used to wind the free ends **19** of the elastic thread **17** around the liner in order to seal the contents. Conveniently a bucket is provided with a wire rack for receiving a number of soiled liners.

The liner may be made of two thin polythene sheets which are heat sealed along the bottom and side edges. Alternatively, the liner may be formed from a tubular sheet of polythene by sealing the bottom edge alone. The sizes of the holes in the liner are not critical, but the holes **20** are advantageously slightly smaller than the head of the buttons **14**. This ensures that the rear edge of the liner cannot easily become inadvertently freed from the bedpan.

The soiled liner may be burnt without being further handled or emptied, but if containing urine only, may be emptied before burning. Using these liners, the bedpans are never soiled, and thus there is no difficulty in keeping them clean, or with cross-infection. The bedpan need not be cleaned between each use, but merely needs to be sterilised after one patient has left the hospital and before use by another.

The buttons at the rear of the bedpan may take any form which enables the liner to be held substantially

without slipping, and may be moulded integrally with the bedpan during manufacture, or attached afterwards, as may be convenient. In addition, the form of the abutment surface provided in the above example by a slot is not critical and may be provided in any other suitable manner.

What I claim is:

1. A liner for use with a bedpan, the liner comprising water-impermeable flexible sheet material in the form of a container open at one end and having a plurality of pairs of holes through both sheets of the material near to and aligned parallel to the open end thereof, said holes being spaced apart over a minor proportion of the periphery of the container and located also, near one of the two sheet ends other than the sealed end or the open end, and a length of elastomeric material threaded through said holes and defining a closed loop, said loop elastically bunching said proportion of the periphery.

2. A liner according to claim 1 wherein the container is defined by two opposed rectangular panels of said material closed along the major portion of their respective adjacent boundaries and open along a longer side of said rectangles, to form the container.

3. A liner according to claim 2 wherein the liner is provided with four holes through which said length of elastomeric material is threaded.

4. A liner according to claim 3 wherein two of said holes are provided adjacent one another in one panel and the other two said holes are provided adjacent one another in the other panel substantially opposite said first two holes.

5. A liner for use with a bedpan, the liner comprising a tubular sheet of water-impermeable, combustible, flexible sheet material sealed at one end of the tube to form a container open at one end and providing two opposed panels formed by the halves of the tubes extending to the two sides of the sealed end of the tube, said panels being rectangles and being open along a longer side thereof wherein the container has at least four holes through the material near to the open end thereof, two of which holes are disposed adjacent one another in one panel and two other of which holes are disposed adjacent one another substantially opposite said first two holes in the other panel, both pairs of holes being located near the same one of the two opposed closed edges, and a length of elastomeric material threaded through said four holes and defining a closed loop, said loop bunching a minor proportion of the periphery of the container, and said length of elastomeric material also defining free ends for sealing the contents in said liner after use.

6. A liner according to claim 1 having a plurality of further holes through the material thereof near to the open end thereof and remote from said first mentioned holes.

7. A bedpan adapted to receive a removable liner, a plurality of projections located adjacent one end of the bedpan, each projection comprising a button having a narrow stem and a relatively larger head, an abuttment surface located at the opposite end of the bedpan, said abutment surface being defined by the upper edge of an elongated slot formed in the end wall of the bedpan, said edge extending at each end upwardly and backwardly towards the center part of said elongated slot, whereby a suitable liner having button holes and a loop of elastomeric material elastically bunching a proportion of its periphery can be received and releasably retained in said bedpan with the holes engaged over said buttons and the bunched portion resiliently engaged under said abutment surface.

8. A bedpan according to claim 7 having a plurality of holes formed through the material of the sidewall thereof to permit escape of air trapped between the liner and the bedpan as said liner is inserted into the bedpan.

9. A liner for bedpan, which bedpan has a plurality of projections on the exterior of one end thereof and an abutment surface at the opposite end of the bedpan comprising an open end container of water-impermeable flexible sheet material having a plurality of adjacent holes, a length of elastomeric material threaded through said holes and providing a closed loop for engaging the abutment surface of the bedpan with said container extending into said bedpan and said container having further holes remote from said first mentioned holes, each for engaging one of the projections on the bedpan.

10. A bedpan with liner comprising a bedpan having a plurality of buttons on an exterior end thereof and a slot in the opposite end thereof with an upper edge defining said slot having each end extending upwardly and backwardly towards the center of said slot, an open end container of water-impermeable flexible sheet material having a plurality of holes each detachably receiving one of said buttons therethrough and a second plurality of holes, and a loop of elastomeric material extending through said second plurality of holes and resiliently engaged under said slot upper edge.

References Cited

UNITED STATES PATENTS

1,632,645	6/1927	Deluna	4—112
2,304,631	12/1942	Ensing	4—112
2,320,845	6/1943	Bolton	4—112
3,066,315	12/1962	Huber	4—112

FOREIGN PATENTS

908,451	10/1962	Great Britain.
112,392	12/1962	Pakistan.

LAVERNE D. GEIGER, *Primary Examiner.*

D. MASSENBERG, *Assistant Examiner.*