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G. A. STANFORD
DISPOSABLE URINAL BAG
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3,095,578

FIG. 1

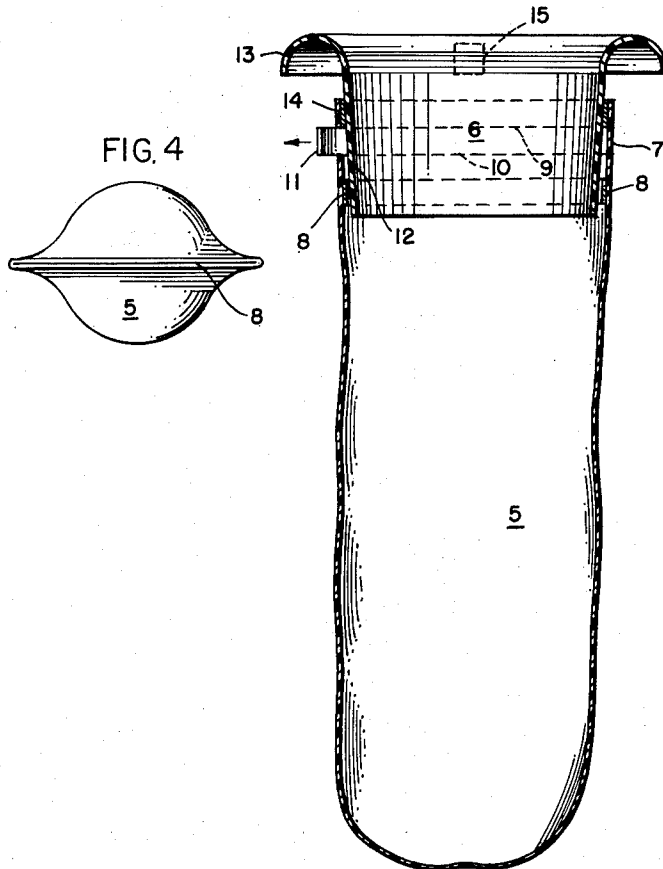


FIG. 4

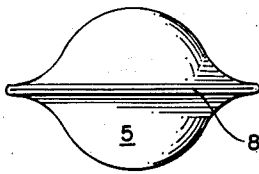


FIG. 2

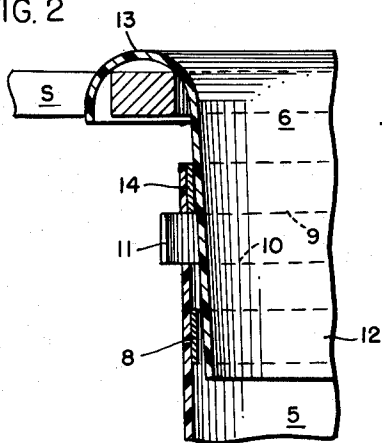
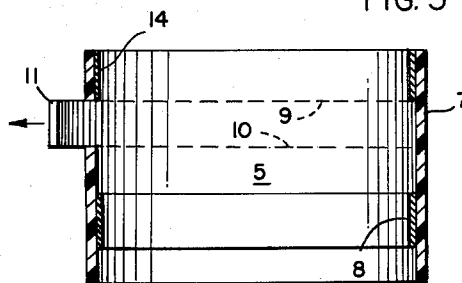


FIG. 3



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DISPOSABLE URINAL BAG
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5 Claims. (Cl. 4—110)

This invention relates primarily to disposable urinal bags for use by immobilized male patients.

Hospitalized male patients, who are more or less confined to beds, often present a problem in the practical and sanitary collection and disposal of urine. For patients where it is extremely difficult to use the conventional male urinal a more usable form of urinal is disclosed in my United States Patent No. 2,956,287 issued October 18, 1960.

The main objects of this invention are to provide an improved form of receptacle for the convenient and sanitary collection and ultimate disposal of urine from male patients; to provide an improved form of disposable receptacle having an integral collar adapted for suspension of the receptacle by the collar from a holder which is adjustable to substantially any convenient position for use by immobilized male patients; to provide an improved collar-suspended disposable receptacle of this kind adapted for facile separation from the supporting collar and quick sealing to insure retention of the contents for transfer to the laboratory or to a disposal station; and to provide an improved collar-suspended disposable urinal receptacle especially adapted for use with an adjustable ring support of the type shown in the afore-said patent.

A specific embodiment of this invention is shown in the accompanying drawings in which:

FIGURE 1 is a vertical sectional view of an improved collar-suspended disposable receptacle in the form of a flexible bag constructed in accordance with this invention.

FIG. 2 is an enlarged, fragmentary, sectional view of the collar-suspended bag showing the manner of its engagement with a suspending ring;

FIG. 3 is a cross-sectional view of the upper end of the bag prior to attachment to the collar; and

FIG. 4 is a reduced-size upper-end view of the bag containing a quantity of fluid and sealed after removal from the supporting collar.

The primary concept of this invention is to provide a collapsible bag suspended from an integral rigid, or semi-rigid, supporting collar from which the bag is quickly separable without the use of instruments; which bag is provided with self-contained means for sealing the open end to permit convenient transfer of the contents to a disposal station.

A disposable bag 5, embodying the foregoing concept, is suspended from a collar 6 and has incorporated therein a tear strip 7 for quick and convenient severance of the bag 5 from the collar 6 to permit an immediate sealing of the open end of the detached bag 5 by means of a band 8 of a suitable pressure-sensitive adhesive applied to the inner surface of the bag adjacent the tear strip.

The bag 5, as here shown, is made from any suitable flexible plastic material that is impervious to liquid. Adjacent to its open end is a pair of parallel weakening lines 9 and 10 which define the tear strip 7. These weakening lines may be perforations or scores formed in the plastic material in the process of producing the balloon-like bag 5. The tear strip 7 terminates in a short tab 11 extending beyond a longitudinal seam of the bag for gripping by the fingers to sever the tear strip 7 from the bag 5 when it is desired to detach the bag 5 from the collar 6.

The collar 6 is a molded body made of plastic or a

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heavy-grade paper material, having sufficient rigidity to serve as a support, and is contoured to provide a neck 12 tapered axially inward from an outwardly-curved perimetrical flange 13. The neck 12 of the collar 6 is embraced by the open end of the bag 5 and is permanently bonded thereto by a ring 14 of a suitable adhesive. The arcuate-shaped flange 13 is so shaped to seat over a ring-type support "S" mounted on a suitable standard such, for example, as shown in the afore-said patent. Obviously, being designed for use with such a standard-supported ring, as that shown in the afore-said patent, the curved flange 13 is notched at 15 to seat over the radial extension on the ring whereby it is secured to a supporting standard.

The band 8 of pressure sensitive adhesive extends around the inner surface of the bag 5 adjacent its open end and a short distance below, i.e. inwardly from, the tear strip 7. Preferably, this adhesive band 8 is made of that dry-sealing type of adhesive which is dry and non-tacky and which when dry will adhere only to itself, that is, under normal conditions of use it will not adhere to anything else, and for that reason the bag is normally free from the collar 6 at this point. Otherwise, the lower end of the collar 6 may be suitably coated to prevent adherence of the adhesive band 8 thereto.

As shown, the collar 6 extends below the adhesive band 8. This is preferable since it obviates the possibility of skin touch to the adhesive 8, avoids the possibility of wetting the adhesive during use of the bag, and avoids the possibility of the adhesive contacting itself when the bag is packaged.

Also because of the tapered collar, a quantity of these collar-supported bags 5, semi-collapsed as shown in FIG. 1, may be stacked in nested relation, one within another, in the hospital floor supply room ready for instant use as occasion may require, and without any danger of the adhesive band 8 sticking to the outside of the nested inner bag.

A disposable bag 5, constructed in accordance with this invention, is used in the following manner:

The bag 5, integrally attached to its collar 6, is removed from a stack, or supply, of such units and dropped through the supporting ring "S" to seat the flange over the ring with the bag 5 hanging downwardly below the ring, as shown in FIG. 1. Being flexible, the bag will readily accommodate itself for any height of the supporting ring relative to the bed surface. After the intended use, the bag 5 is gripped by one hand of an attendant directly below the tear strip 7 and then, with the fingers of the other hand, the attendant grips the tab 11 and with a circling movement around the bag 5, below the support ring S, rips off the tear strip 7. With this other hand free of the tear strip 7, the attendant then flattens and presses together the margins of the open end of the bag 5 and runs his fingers along the outside surface of the bag over the adhesive band 8 whereupon the bag 5, severed from the collar 6, becomes sealed (see FIG. 4) for transfer either to the laboratory for testing of the bag contents or to a disposal station.

Although such collar-suspended container is here shown and described for use for collecting urine from immobilized patients, it is quite apparent that such a container may be used for many other purposes. It could be placed at bed-side for collection of disposable tissues and/or bandages. It could be used in the kitchen for the collection of garbage; and in other places it could be used for the accumulation of miscellaneous trash. In any event, the bag is readily removable from the supporting collar and is easily sealed against spillage of its contents.

The main advantages of this invention reside in the provision of a flexible, readily disposable, bag having a

stiff and integral supporting collar which permits quick and easy mounting of the bag on a supporting ring by merely dropping the bag through the ring; in the fact that the bag, when containing a quantity of fluid, can be removed from the supporting ring without pulling the bag through the ring; in the arrangement whereby the bag can be readily sealed by self-contained means against spillage or contamination of its contents; in the improved construction of the bag whereby it is readily detachable from the collar without removing the collar from the supporting ring; and in the construction which permits the bags to be packaged in nested stacked arrangement for convenience in shipping, handling, and storage.

Although but one specific embodiment of this invention has been herein shown and described it will be understood that details of the structure shown may be altered or omitted without departing from the spirit of the invention as defined by the following claims.

I claim:

1. A container for the collection of disposable matter comprising,

(a) a tubular supporting collar having an outwardly projecting flange,

(b) a bag having its open end embracing and peripherally adhered to the collar,

(c) a tear strip integrated with the bag below the adherence to the collar and severable from the bag to release the bag from the collar, and

(d) a band of pressure-sensitive adhesive disposed interiorly around the bag below the tear strip to reseal the open end of the bag remaining after release of the bag from the collar.

2. A container for the collection of disposable matter as defined in claim 1 wherein the collar is of a molded material and the bag is of a disposable plastic material.

3. A container for the collection of disposable matter as defined in claim 1, wherein the bag is embracively

mounted on the collar and the collar extends into the bag beyond the band of pressure-sensitive adhesive.

4. A container according to claim 1 wherein the bag is embracively mounted on the collar and the collar is inwardly tapered below the flange to extend into the bag beyond the band of pressure-sensitive adhesive.

5. A container for the collection of disposable matter comprising,

(a) a molded supporting collar tapered axially inward toward one end and having an outwardly-extending flange at the opposite end for suspension of the collar from a ring-shaped support,

(b) a disposable bag of plastic material having its open end embracively adhered to the collar below said flange and telescopingly receiving said collar,

(c) a tear strip integrated with the bag by parallel circumferential lines of weakening below the adherence of the bag to the collar and terminating in a peripherally-exposed finger-grip tab, and

(d) a band of pressure-sensitive adhesive of the dry-sealing type that adheres only to itself disposed interiorly around the bag below the tear strip for resealing the open end of the bag after release of the bag from the collar,

(e) said collar extending into said bag beyond said band of pressure-sensitive adhesive.

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