

June 3, 1969

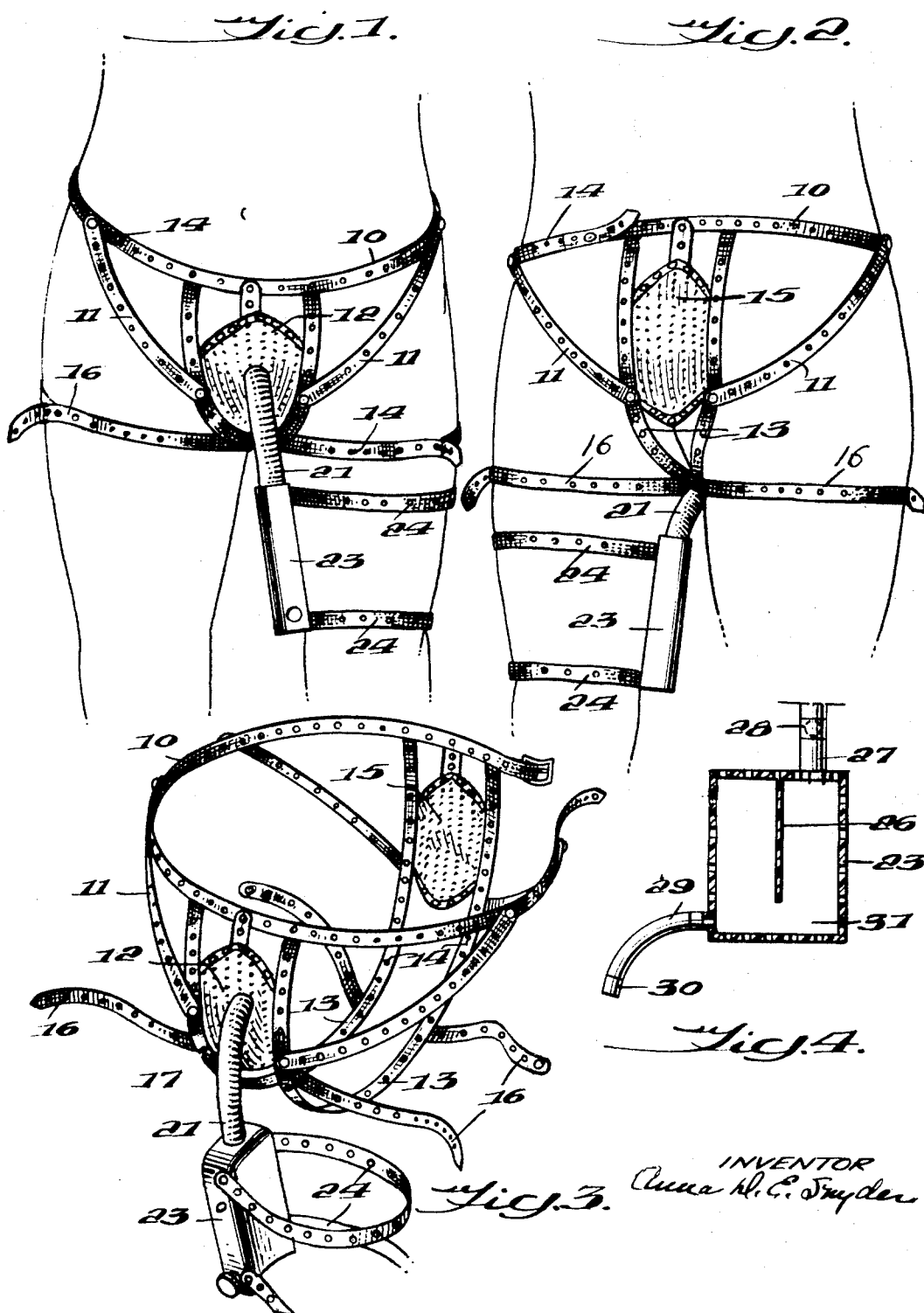
A. D. E. SNYDER

3,447,536

EXTERNAL WEARABLE URINAL AND RECTAL POUCH DEVICE

Filed Feb. 25, 1966

Sheet 1 of 2



June 3, 1969

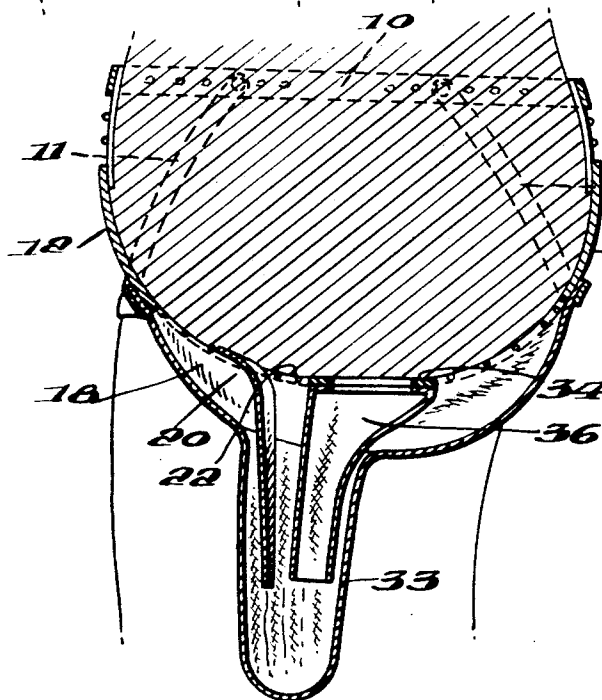
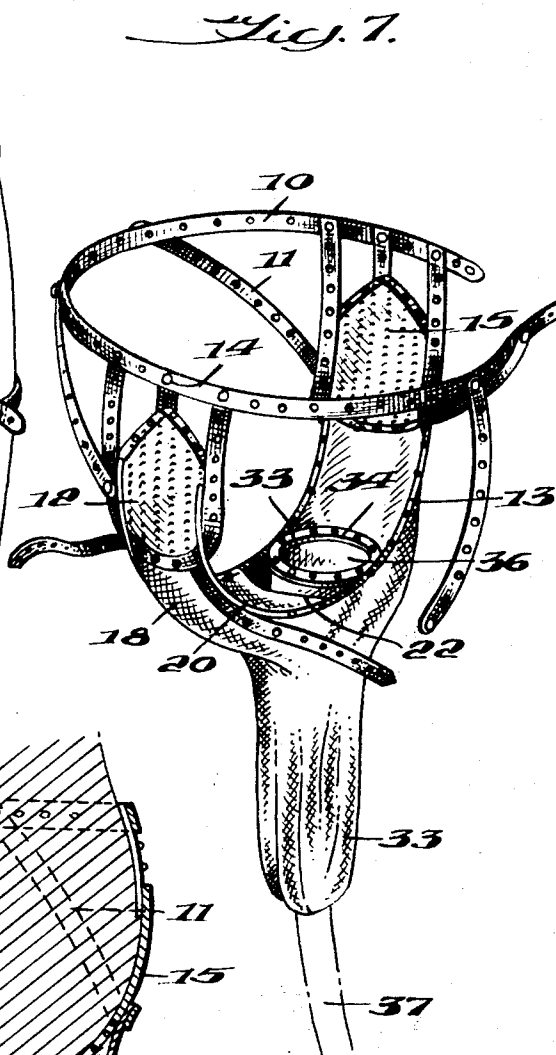
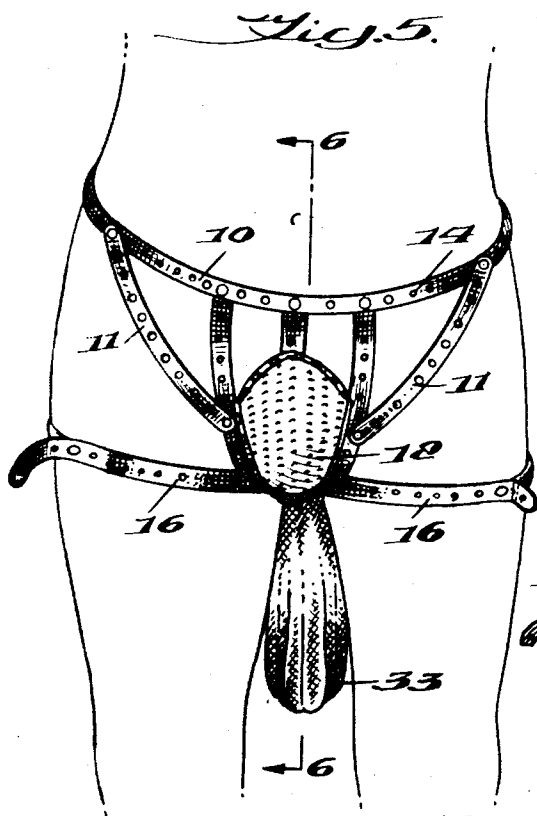
A. D. E. SNYDER

3,447,536

EXTERNAL WEARABLE URINAL AND RECTAL POUCH DEVICE

Filed Feb. 25, 1966

Sheet 2 of 2



INVENTOR
A. D. E. Snyder

1

2

3,447,536

EXTERNAL WEARABLE URINAL AND RECTAL POUCH DEVICE

Anna D. E. Snyder, 2430 Pennsylvania Ave. NW.,
Washington, D.C. 20037

Filed Feb. 25, 1966, Ser. No. 530,228

Int. Cl. A61f 5/44; A61H 15/00

U.S. Cl. 128—283

5 Claims

ABSTRACT OF THE DISCLOSURE

This device is an external repository for any discharges of the genito-urinary, anorectal or other lower trunk areas of the human body. It comprises a male urinal, or alternatively a perineal boat urinal for females or males and an attachable rectal pouch. This device is so constructed that all parts are attachable to and detachable from body conforming pubic and back pads, straps and belts, and each component part is provided with eyelets for joining one to another with hooks or snaps so that it can be made to fit tightly and securely on any body shape. This device will be of great help in overcoming physical, medical and psychological adversities due to abnormalities, operations or disease.

This invention relates to an external wearable urinal and rectal pouch device for persons who lack control of bodily functions or are subject to discharges or drainages from the excretory organs, and is so constructed that depending on the need a male or female urinal or a rectal pouch or a combination of these components may be assembled and worn.

Incontinency or even partial lack of control over the function of waste elimination is a major physical, medical and psychological problem; physical activity is greatly restricted, the more seriously affected individuals are confined to bed or wheelchair, and all require considerable attention to maintain bodily cleanliness. This invention is intended to overcome this problem. It comprises a urinal and a rectal pouch supported and held in place by a waist belt and several supporting intermediate belts, body conforming front and back pads to support the device and hold the urinal and rectal pouch firmly, snugly and comfortably in position, thigh belts or garters which are an added safety support, drain tubes, leg storage bags into which the body wastes pass, and a means for emptying said leg bags without the wearer disrobing; each element of this device may be detached for cleaning without removing the belts or straps or other parts.

There are several partially similar devices on the market but they seem to be deficient in many respects—discomfort to the wearer, a tendency to leak, difficulty in attaching, cleaning and removing, storage problems or inadequate security afforded to the user. Internal catheters irritate, are apt to cause infection and may be inserted only by a trained person. Other external devices are cumbersome and awkward to wear and to use and are poorly fitted to the body contours and shapes of wearers.

The object of this invention is to provide a urinal and rectal pouch which may be worn with confidence and which will assure security, avoid mental anguish and prevent embarrassment while comfortably carrying on normal activity and while in any position.

A second object of this invention is to provide an apparatus which is constructed so that there will be no leakage and in which all parts are attachable, detachable and adjustable.

Another object of this invention is to provide an apparatus which is so constructed that the leg storage bags may be emptied readily and simply without the wearer's disrobing and in which these leg bags are of sufficient size so as not to require constant attention.

Another object of this invention is to provide an apparatus which by the use of adjustable belts, garters, hooks, eyelets and the like, conforms to the body shape of the wearer, and is neither obvious nor bulky under clothing.

Another object of this invention is to provide an appliance which is worn externally and will not irritate the skin, bind, chafe or cause infection.

Another object of this invention is to provide an appliance which is securely affixed to the body and may not be easily removed by a disoriented wearer.

Another object of this invention is to provide an appliance which may be attached, removed, cleansed, and replaced by the wearer, attendant or nurse rapidly, and with a minimum of difficulty.

Another object of this invention is to provide an appliance which will greatly reduce the current need for cleaning and changing the patient, and changing the bed which will result in the saving of time and money.

A further object of this invention is to provide an appliance which may be worn by infants and others not trained.

With the foregoing and other objects in view which will appear as the description proceeds this invention consists of certain novel details of construction and combination of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangements of parts without departing from the spirit of the invention is claimed.

Referring to the drawings:

FIGURE 1 is a front view showing a male urinal.

FIGURE 2 is a back view.

FIGURE 3 is a perspective view of a male urinal.

FIGURE 4 is a sectional view of a leg storage bag.

FIGURE 5 is a front view showing a urinal and rectal pouch for both sexes.

FIGURE 6 is a sectional view taken along line 6—6 of FIGURE 5.

FIGURE 7 is a perspective view of a urinal and rectal pouch for both sexes.

In proceeding with this invention I have provided a waist belt 10 fitting snugly around the abdomen as the major means of support. Further support may be provided by a shoulder harness. This waist belt 10 is of a sturdy elasticized or like material and contains bushed eyelets 14 or the like which in combination with hooks, snaps or the like offers support and a variety of points of attachment to the supporting intermediate belts 11, straps and adjacent members. The waist belt 10 is adjustable and elastic in nature to conform to body contour and muscular movement. The belt 10 has a buckle or like device for easy attachment, adjustment and removal.

Attached to the waist belt 10 are intermediate belts 11 of similar material and construction and also having bushed eyelets 14 along their length. The upper ends of these belts 11 contain a hook, snap or the like and are attached to eyelets 14 in the waist belt 10. These intermediate belts 11 are attached by means of hooks, eyelets or snaps to a soft, perforated pubic pad 12 or cushion of washable rubber or like material the outer edges of which is also lined with bushed eyelets 14 or snaps so that it may be fitted snugly to the wearer, and so that, depending on the need and build of the wearer, as many regulatory intermediate belts 11 as are necessary may be attached. The pubic pad 12 which will lie closely but gently against the pubis is an additional means of support as it will follow the contours of the body, in addition to which it holds the urinal in place.

At the bottom of the pubic pad 12 two flat, ribbed, thin belts or straps 13 are attached which extend through each side of the groin or perineal area from front to back. These straps 13 have eyelets 14 or snaps along the outer

edges and so can be fitted to any wearer and may be worn as tightly as necessary.

As these straps 13 run over the coccyx or caudal area there is attached a lumbar pad 15 similar in material to the pubic pad 12 and also containing eyelets 14 or snaps. This lumbar pad 15, or back pad is secured by means of hooks, eyelets 14 and intermediate belts 11 so that it fits snugly against the body of the wearer. It too is a support and by adhering to the shape of the body insures that the appliance will be maintained in the proper position. For further security intermediate belts 11 extending from the waist belt 10 to the lumbar pad 15 are employed.

In addition to the waist belt 10, intermediate belts 11, the pubic 12 and lumbar 15 pads there is a garter or belt 16 which encircles each thigh. These thigh belts 16 are attached to intermediate belts 11, may be attached to the groin straps 13 if necessary, and give additional security, and prevent the apparatus from "creeping up" the body.

Provision is also made for intermediate belts 11 extending from the waist belt 10 to the thigh belts 16, and also for a belt positioned midway between the waist belt 10 and the thigh belts 16 and laterally encircling the body. This mid-way belt offers more stability to the apparatus.

All of the above mentioned belts and straps are adjustable, and are of an elasticized washable material non-injurious to the skin and non-finding. As many belts as are needed may be attached and worn so that no belt has to be fitted so tightly as to interfere with the individual's blood circulation.

As described above the belts, straps and pads are joined to each other by means of hooks, eyelets or snaps. Clearly they could easily be made in one piece or unit so that they are permanently secured to each other rather than detachable.

Centrally located in the lower portion of the pubic pad 12 is a urinary device in the form of a sheath 17 or envelope which encompasses the penis of a male, or for a female in the form of a boat 18 or shallow bag which covers the urethral orifice. This sheath 17, boat 18 or the like is of a plastic or like waterproof material that is flexible and washable. The urinary device constricts at the terminal end and forms a urine tube 21 through which the urine flows to a waterproof, leakproof leg storage bag 23 or container.

When the device is used by a woman the bottom of the boat extends along the perineal area. This forms a canal 20 which receives the urine which then flows through the drain tube 21 to the leg bag 23. This canal 20 is attached at the sides by means of eyelets 14, hooks or snaps to the aforementioned groin straps 13, and is attached at the back end in the same manner to the bottom of the lumbar pad 15. In the said canal 20 there is an interior curtain 22 or flap of plastic or like material to the rear of the urethral. This curtain 22 prevents the splash-back and drain-back of urine.

The leg storage bag 23 is attached by means of garters 24, hooks and eyelets 14 at mid-thigh. It is of a sturdy plastic or like material and the part of the bag 23 that rests against the thigh is padded to prevent chafing. The bag 23 is of a sufficient size to hold a large quantity of urine and need not be frequently emptied. It is vertically chambered being divided by a strip of stiff material 26 running down its center from the top to within about one inch from the bottom. This strip 26 prevents the bag 23 from bulging, sagging or collapsing and directs the flow and storage of the urine.

The urine flows from the urine tube 21 into the leg bag 23; the entrance 27 is also tubelike. At the entrance 27 there is a ball valve 28 or the like which admits the urine into the storage area of the bag 23 but prevents the reverse flow of urine into the tube 21 as the wearer reclines.

Near the bottom of the leg bag 23 is attached a thin plastic tube 29 through which the leg storage bag 23 may be emptied without the wearer's disrobing. This lower tube 29 is fitted with a permanently secured plug 30, clamp,

button or the like in its terminal end which is pulled out or loosened when the tube 29 is being used to empty the bag 23. When not being so used said tube 29 is folded back and held in place against the outer side of the bag 23 by means of a hook 31 slot or clamp which is attached near the bottom of the bag 23. Another feature of this lower tube 29 is that it enables a person without urinary control to be active and mobile without constant concern and worry about his unfortunate affliction. The need for emptying the bag 23 would generally correspond to the normal person's need for urinating. It is also worth noting that this apparatus is instantly adaptable to straight drainage which may be required in the case of some bed-ridden patients.

For people who are unable to control their bowels or who suffer from other anorectal disorders a rectal pouch 33 is provided. This pouch 33 of sturdy plasticized or like material is attached by means of eyelets 14, tabs and the like to the groin straps 13, and to the bottoms of the pubic 12 and lumbar pads 15. It is apparent that when a male wears a rectal pouch 33 a canal 20 similar to the aforementioned female canal 20 under and against the perineal area is used for added security and protection. In the case of a woman wearer this pouch 33 when worn in combination with the boat urinal 18 may be attached inside the canal 20 to the groin straps 13, or the two units may be made and assembled as one component and attached by means of eyelets 14, hooks or snaps to the groin straps 13, pubic pad 12, and lumbar pad 15.

Inside the pouch 33 and attached by tabs or the like to the groin straps 13 is a rectal ring 34 of soft rubber or the like with a stiff core. This rectal ring 34 fits snugly against the anus, and is maintained in the proper position by means of the groin straps 13 which in turn are held in position by the upward pull of the belts and pads. Joined to the bottom edge of the rectal ring 34 is a thin plastic or the like tube 36 which drops or descends a reasonable distance inside the rectal pouch 33. The ring 34 and tube 36 are of sufficient size to circumferentially encompass the anus and to receive the feces or discharges as they are evacuated from the body, and guide them into the pouch 33. The tube 36 and pouch 33 may be lubricated if necessary. By means of a plastic or the like lubricated drainage tube 37 the feces passes into a leg storage bag 23 attached to and held against the other leg (if a urinary device is also being worn). This tube 37 and leg bag 23 are similar to although larger than the urine tube 21 and storage bag 23 in means of attachment, material and construction.

In proceeding with this invention it has been my intention to design a device that would fit any person regardless of body shape, and by the use of belts, pads, eyelets and straps, and by having the urinal and rectal pouch adjustable and movable on the straps I have attempted to meet that requirement; furthermore, I have worked with the idea of easy adaptability in mind and have designed this device to meet the various needs of various patients, for example, this device can be built into, or attached to girdles and other undergarments, and for disturbed patients it can be worn with or built into a camisole like restraining garment.

The foregoing description and accompanying drawings clearly disclose one embodiment of this invention but it will be understood that this disclosure is merely illustrative and that changes may be made within the scope and spirit of the following claims.

I claim:

1. An external wearable urinal device comprising waist belt means, pubic pad and back pad means adapted to lay closely against the wearer's body: (a) said public pad and back pad means connected at one end to each other by groin straps and each connected at the other end to the waist belt means, (b) intermediate belt means extending from said waist belt means at points between said public and back pad means to and connected with

5

the lower portions of said pubic and back pad means respectively, (c) thigh belt means adapted to encircle the thighs of the wearer each connected to a respective side of said pubic and back pad means at diametric points, free ends of said thigh belt means adapted to be disposed on the outer surface of the wearer's thighs, (d) urinal means connected in fluid conducting engagement to the said pubic and back pad means and including a storage container having leg encircling straps providing for the support thereof, wherein all said belt means, pad means and straps are adjustable and elasticized and provided with eyelets, snaps and hooks as means of attachment and support providing the necessary belts and straps to conform to and support the device and the body of the wearer to prevent leakage.

2. A device as in claim 1 to which a rectal pouch is attached and held in place and which lies under the perineal area and in which pouch a soft rubber like rectal ring is attached to said groin straps and is provided with a stiff core and with a plastic like tube which is joined to said ring and hangs inside said pouch to guide rectal discharges into said pouch through said drainage tube and into a leg storage container; wherein said rectal pouch may be used in conjunction with said urinal means; and wherein said rectal pouch may be used independently of said urinal means.

3. A device as in claim 1 in which said urinal is a waterproof, plasticized, washable and flexible sheath like device for a male which constricts at its terminal end and forms a urine drainage tube which conducts the urine into said leg storage container.

4. A device as in claim 1 in which said urinal is a waterproof, plasticized, washable and flexible boat like device for a female which lies along the perineal area

6

attached to said groin straps and pad means forming a canal which constricts at its terminal end and forms a urine tube which conducts the urine into said leg storage container and in which canal there is a plastic like curtain placed behind urethral area to prevent splash back and drain back of urine.

5. A device as in claim 1 in which said leg storage container is a large, waterproof, plasticized leg bag with garter means attached to hold it against the thigh, and is vertically chambered down its center from top to near the bottom to prevent bulging, sagging and collapsing, and to direct flow and storage of urine; at bottom of said container is a plastic like tube provided with a permanently attached plug means in its terminal end through which said container may be emptied when required and which tube when not being so used is folded back and held in place against the outer side of said container by hook means; wherein at the top entrance of said container there is a valve-flap means to prevent flow back of urine from said container.

References Cited

UNITED STATES PATENTS

205,912	7/1878	Schilling	128—295
1,229,423	6/1917	Eckenrode	128—295
2,277,043	3/1942	Cohn	128—295
2,484,356	10/1949	Ribeiro et al.	128—295
2,648,335	8/1953	Chambers	128—295
2,706,985	4/1955	White	128—295
3,043,307	7/1962	Weston	128—295
3,306,296	2/1967	Moss	128—295
3,356,091	12/1967	Patterson	128—295

CHARLES F. ROSENBAUM, *Primary Examiner.*