

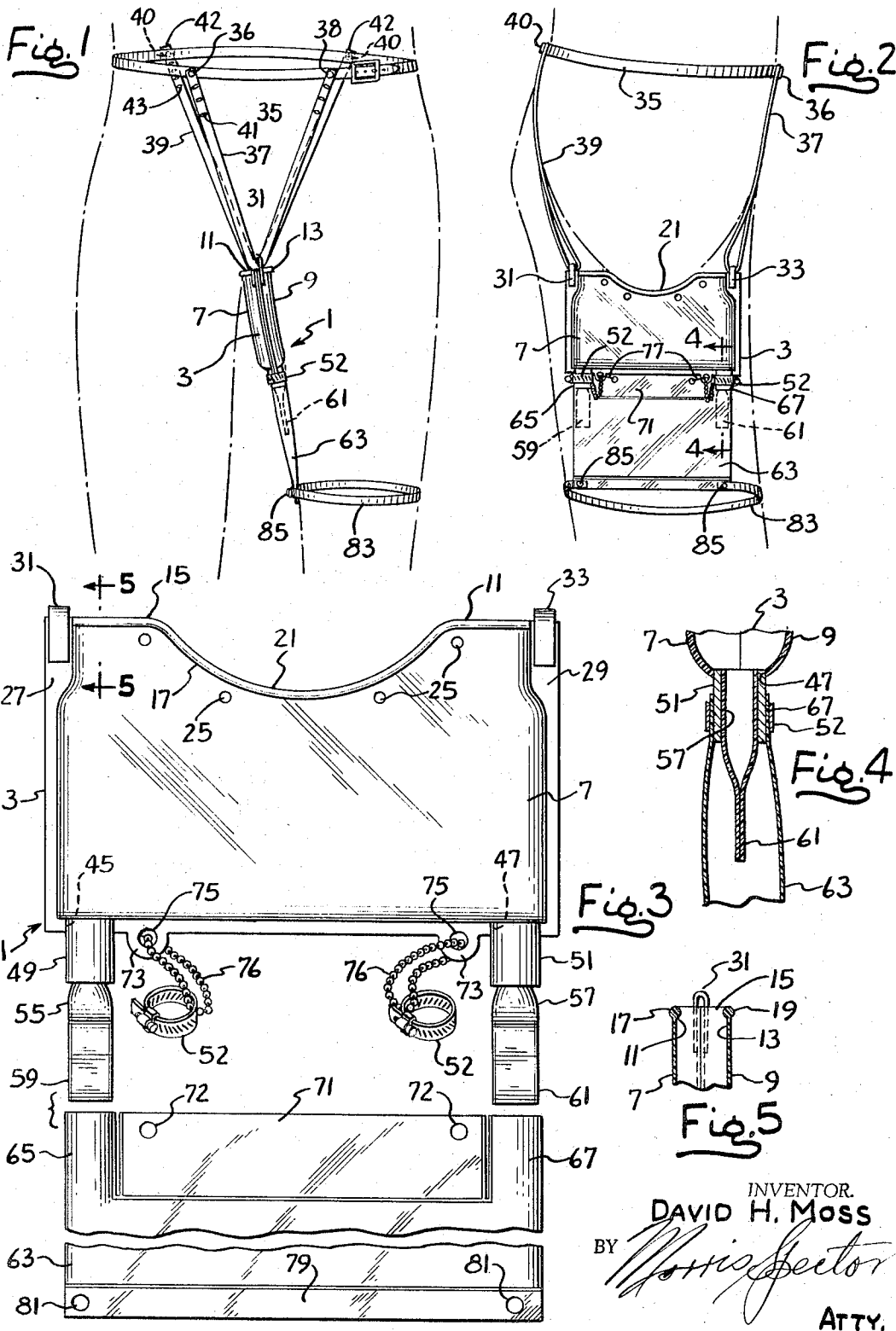
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BODY WORN URINAL WITH DETACHABLE RECEPTACLE

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3,306,296 A BODY WORN URINAL WITH DETACHABLE RECEPTACLE

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This invention relates to sanitary devices, and more particularly to improvements in sanitary urinals of the type worn by persons afflicted with certain urological diseases.

It is an object of the present invention to provide a sanitary urinal that may be worn in relative comfort by both male and female patients that have urological diseases of the type that render them incontinent.

It is a further object of the present invention to provide a urinal of the type stated that includes a urinal pouch with a detachable bag into which the urine from the pouch may drain. In the preferred embodiment of the present invention, the bag is a relatively inexpensive plastic bag that may be easily detached from the pouch and disposed of when filled, or after emptying, may be re-used. The pouch is a rubber-like material that is so designed that it may be readily turned inside out for cleaning, scrubbing and otherwise rendering the pouch sanitary.

It is another object of the present invention to provide a urinal of the type stated in which the top of the pouch is contoured to fit comfortably in the crotch of the patient in a manner such that the genital organs are deeply within the pouch.

It is an additional object of the present invention to provide a device of the type stated that may be worn by ambulatory or bedridden persons.

The attainment of the above and further objects of the present invention will be apparent from the following specification taken in conjunction with the accompanying drawing forming a part thereof.

In the drawing:

FIG. 1 is an end elevational view of a urinal device constructed in accordance with and embodying the present invention;

FIG. 2 is a side elevational view thereof;

FIG. 3 is a side elevational view, on an enlarged scale, of the device and showing the pouch separated from the disposable bag;

FIG. 4 is a fragmentary sectional view, on an enlarged scale, taken along line 4—4 of FIG. 2; and

FIG. 5 is a fragmentary sectional view, on an enlarged scale, taken along line 5—5 of FIG. 3.

Referring now in more detail to the drawing, which illustrates the preferred embodiment of the present invention, 1 designates a urinal device that comprises a pouch 3 that is formed of flexible rubber or rubber-like material that is water impervious and may be molded of one piece and in one operation. The pouch 3 has an elongated trough-like body having opposed sides 7, 9, the upper ends 11, 13 of which define a top opening 15 that extends substantially the full length of the pouch 3. The upper ends 13, 15 are, furthermore, formed with beads 17, 19, and the central portions of the upper ends 11, 13 are shaped to form inverted arcuate arches 21. If desired, a plurality of vent or port holes 25 may be formed in the sides 7, 9 just below the beads 17, 19. These holes 25 act as ventilators as when the pouch is compressed and released to provide a bellows-like action and cause air to circulate in the pouch. This helps the genitals from perspiring as would be the case if the pouch were a sealed container.

At its opposite ends, the pouch 3 may be thickened or otherwise reinforced at 27, 29 and to the sections 27, 29

are secured loops 31, 33. The loops 31, 33 may be any suitable material as, for instance, rubberized fabric, and may be cemented or otherwise secured in place. The pouch 3 is suspended from a suitable waist band or belt 35 through straps or tapes 37, 39 that pass through the loops 31, 33. The waist band 35 may be made of elastic webbing. In front of the abdominal part of the waist band are spaced buttons 36, 38. From one button is suspended the tape or strap 37 which is placed through the loop 31 and then attached to the other button. The back strap 39 is similar to the front strap. However, the upper ends of the back strap are not attached directly to the belt 35 but are attached to buttons 40 which are on loops 42 that slide on the belt 35. These sliding loops help to position properly the tapes. The two tapes 37, 39 form V-shaped suspensions to stabilize the pouch 3. The tapes 37, 39 have button holes 41, 43 so that their effective lengths may be adjusted to aid in positioning the inverted arches in the crotch of the person wearing the pouch, as shown in FIGS. 1 and 2. The inverted arches permit the pouch to be worn in relative comfort by either male or female patients with the genital organs within the pouch.

Formed at the bottom of the pouch 3 are spaced apart holes 45, 47 for receiving tubular rubber-like nipples 49, 51 that depend from the bottom of the pouch. Each nipple may have check valves which are preferably flexible tubular rubber members 55, 57 telescoped within the interior walls of the nipples 49, 51. The valves 55, 57 project downwardly below the nipples 49, 51 and are flattened to form flutter valves at their lower ends 59, 61. These flutter valves may be formed by flattening the tubular members by heat after the pouch has been removed from the mold. The flattened ends 59, 61 will spread apart to allow fluid to drain downwardly from the pouch 3 through the nipples 49, 51 and the valves, and the ends 59, 61 will thereafter resume their normal flattened shape to prevent back flow of liquid upwardly through the valves 55, 57 and into the pouch body 3.

Provided for cooperation with the pouch 3 is a water impervious bag 63. This bag 63 is preferably of a thin wall pliable plastic, such as polyethylene, and has at its upper end a pair of conduits 65, 67 spaced apart approximately the same distance as the spacing of the nipples 49, 51. The conduits 65, 67 may be slightly larger in diameter than the nipples so as to slip over the nipples 49, 51. Suitable clamps 52, 52 that are similar to hose clamps, clamp the conduits to the nipples to form liquid tight seals therewith. When the conduits 65, 67 are so telescoped over the nipples 49, 51, the flattened valve ends 59, 61 will lie within the bag 63 and there will be formed fluid tight, valved connections between the bag 63 and the pouch 3 that permits a flow of urine from the pouch into the bag and prevents a flow from the bag 63 back into the interior of the pouch 3.

Between the conduits 65, 67 the top part of the bag 63 may be cut away adjacent to the conduits 65, 67 in the provision of a marginally heat sealed flap 71 that may be pulled out of the way to allow for attachment or removal of the clamps 52. The bottom of the pouch body 3 may also integrally include flanges 73 in which there are holes 75 in which chain-like members 76, 76 may fit to secure the clamps 52 to the pouch 3. Conventional fasteners 77 such as loops of string or cord, the ends of which may be tied and untied, as the case may be, may be passed through holes 72 in the flap 71 and the holes 75 to secure the bag 63 removably in a depending fashion from the pouch 3. In lieu of tying the ends of each cord 77, the ends may have removable conventional fasteners.

The bottom of the bag 63 may also have a reinforced heat sealed band 79 that has holes 81 therein. A strap 83 having one or more buttons 85 that are passed through

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the holes 81, is wrapped about one leg of the wearer of the device to prevent the bag 63 and/or pouch 3 from swaying.

The bag 63 may be easily detached from the pouch by removing the strap 83, opening the fasteners 77, removing the clamps 52 and slipping the conduits 65, 67 off of the nipples 49, 51. The bag 63 may then be discarded and a new one attached. Periodically, the pouch 3 may be turned inside out for a thorough cleaning and sanitizing.

In compliance with the requirements of the patent statutes I have herein shown and described a preferred embodiment of the invention. It is, however, to be understood that the invention is not limited to the precise construction herein shown, the same being merely illustrative of the principles of the invention. What is considered new and sought to be secured by Letters Patent is:

1. A sanitary urinal device adapted for wear by both male and female persons, said device comprising a flexible rubber-like pouch having a trough-shaped body, said body having opposite sides the upper ends of which define at least in part an elongated top opening in the body that is substantially the full length of the body, said upper ends being beaded and being contoured to form inverted arches, means for suspending the pouch from the person wearing same so that the inverted arches fit into the crotch of the person with the genital organs of the person projecting into the top opening of the pouch, the bottom of said body having a pair of spaced discharge openings one adjacent to each end of the body, a nipple permanently secured to and depending from the

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pouch bottom at each discharge opening, a pliable thin gauge plastic bag having at its top upwardly projecting tubes that are spaced apart substantially the same distance as the spacing of the nipples and removably telescoping respectively therewith to provide conduits for draining liquid from the pouch into the bag, means forming a liquid tight seal at the telescopic connections, a check valve in each nipple for permitting liquid to flow from the pouch to the bag but preventing back flow of liquid from the bag to the pouch, each said valve comprising a flattened tubular member that projects downwardly from the nipple and extends into the bag, the top of the bag and the bottom of the pouch having means forming a flexible and removable connection between the two to suspend the bag from the pouch, and means by which the bag may be removably secured to one leg of the person to prevent the bag and pouch from swaying.

2. A device according to claim 1 in which the pouch suspension means comprises a belt having front and back tapes that pass through portions of the pouch and form V-shaped suspensions.

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