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A. MILLER ETAL

3,362,407

COLOSTOMY APPLIANCE

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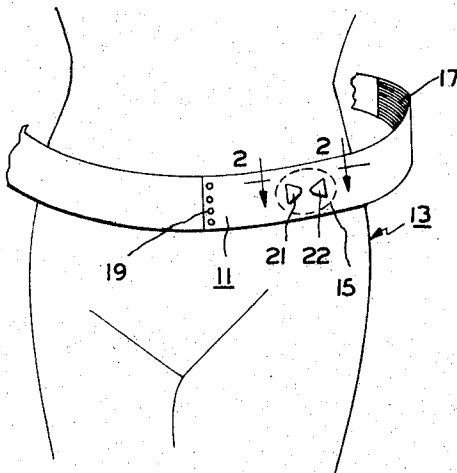


FIG. 1

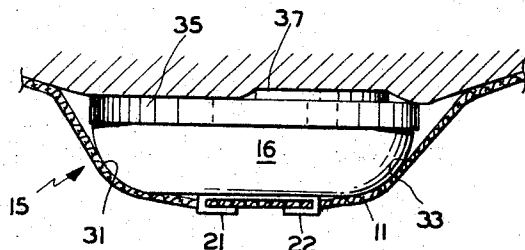


FIG. 2

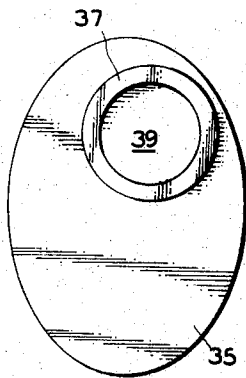


FIG. 3

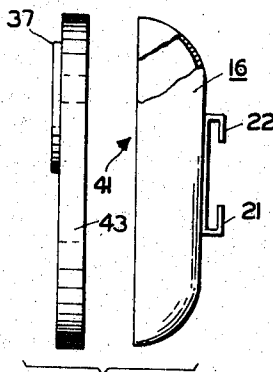


FIG. 4

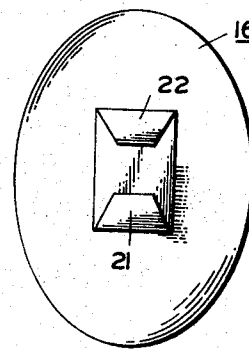


FIG. 5

INVENTORS
ARCHIBALD MILLER
HARRY C. DICKINSON

BY *Fisher, Christen, Sabol & Caldwell*
ATTORNEYS

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COLOSTOMY APPLIANCE

Archibald Miller, 1739 28th St. N. 33713, and Harry C. Dickinson, 711 13th St. S. 33702, both of St. Petersburg, Fla.

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ABSTRACT OF THE DISCLOSURE

The appliance has a body and a cover with the cover being flat and adapted to be removed from the body member for cleaning purposes. The appliance is oval in configuration and the lid has an offset receiving opening with a protruding lip therearound, which is also flat and substantially parallel to the flat cover. The appliance is snugly fitted against the user, being built with the flat lip being flush with the user's body and at least a portion of the flat lid being flush against the body. The appliance avoids the absorbent pads interposed between prior art colostomy cups and the user.

The present invention relates to a colostomy appliance and, more particularly, to a novel container with suitable supporting means.

The subject invention contemplates a unique approach to the resolution of the basic problems of the colostomy users. Heretofore, appliances were useful only between irrigation periods. In extreme contrast, the present invention provides an appliance which eliminates the necessity for irrigation entirely and accommodates all discharges. This is effected without sacrifice to user security but in fact in a manner which enhances security and additionally protects the surgical opening from injury.

Additionally, the subject appliance avoids adhesive to body contact, eliminates bags and plastic sheet material, as well as odor collecting rubber cushioning sections and rubber suction devices while providing a positive fit with dependable retention.

The foregoing is achieved through the provision of an ellipse or oval-shaped receptacle or container which includes, preferably, a conforming cover with an offset opening disposed near one end thereof and in a position toward the upper edge when the container is in place relative to the patient.

The opening has a perimetrical lip which slightly protrudes from the cover or face thereof. The back of the container is provided with a pair of spaced apart hooks fixed relative to the opening in order that the receptacle may be positively supported on the patient's body in proper position.

The cover is adapted to snugly fit the mouth of the body portion of the container and is removable for cleaning and sterilizing operations. The body portion preferably has sidewalls which taper inwardly toward the back thereof. The cover and back are substantially parallel and the thickness is minimal—of the order of one inch or so.

The appliance includes a supporting belt, preferably of several thicknesses of unbleached sheeting, including an elastic panel adapted to be seated against the patient's lower back. The belt is wider than the conjugate axis of the container and includes a pair of spaced apart eyelets to receive the container hooks to orient the container with its transverse axis extending substantially parallel to the belt when in position. The belt is adapted to be fastened about the body of the patient snugly, by virtue of the elastic panel, to retain the container with its opening in communication with the surgical opening of the patient.

It is known that most surgical openings are located

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approximately 4 to 5 inches from the hip bone and about 2 inches below the waist. The supporting belt disposes the receptacle against the patient's body with the receptacle being oriented with the opening end in the direction of the hip bone and further with the opening near the top of the receptacle, such that leg movement will not cause the hip bone to press against the receptacle and dislodge it, the bulk of the container being disposed away from hip bone. Even stooping, bending or twisting does not cause relative movement between the offset opening of the uniquely contoured cup relative to the surgical opening. This configuration and offset opening permits fluid drop and retention below the surgical opening while adding better balance to the appliance.

The supporting belt is simple, inexpensive and effective in protecting the receptacle from clothing moving relative to it and in eliminating odor. It is, of course, more rigid than an all-flexible belt but its elastic panel provides an effective holding action while maintaining a smooth and even contour to present an unobtrusive appearance.

With the foregoing in mind, among the other objects of the invention is the provision of a novel colostomy cup if unique configuration particularly adapted for location and retention relative to a surgical opening of a human body.

A further object is the provision of an oval-shaped colostomy receptacle having an offset opening with protruding lip for communication with the surgical opening to provide positive positioning, odor elimination and protection of the body in the area.

It is still a further object of the invention to provide such a receptacle in combination with a supporting means which aids in odor elimination while also assisting in the positive retention feature.

The description will now be amplified in connection with the detailed showing of a preferred embodiment of the invention as depicted in the drawings wherein:

FIGURE 1 illustrates the positioning of the receptacle by supporting means relative to a human form.

FIG. 2 is a top plan view of the receptacle, showing also a portion of the retaining means in section.

FIG. 3 is a front view of the receptacle illustrating particularly the cover thereof.

FIG. 4 is a view in side elevation of both the body portion and the cover portion, comprising the receptacle, and

FIG. 5 is a back view of the receptacle showing principally the back of the body portion thereof.

With reference to FIG. 1, the retaining means is depicted in the form of a belt 11 in position with respect to the human form 13 to properly fix the supported receptacle 15.

The belt 11, although shown in broken view, is adapted to fit approximately 2 or more inches below the waist of a human form 13, in a snug manner, occasioned by the elastic panel 17 which forms a portion of the belt 11. The belting material is principally comprised of 4 layers of unbleached sheeting approximately 4 inches wide. The elastic panel 17 is preferable of the order of 9 inches in length, and, as illustrated, is disposed to the rear of the wearer 13. The belt is readily fastened by snap fasteners 19, or the like, and is designed to fit the individual.

At a location approximately 4 to 5 inches in from the wearer's hip bone, the belt 11 includes a pair of spaced apart eyelets (not shown) through which the hooks 21 and 22 of the receptacle 15 tightly pass to affix the container 15 to the belt 11. As will be noted the width of the belt 11 exceeds the width of the container 15 to assist in odor elimination and also to prevent movement of clothing from disturbing the container position.

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In FIG. 2 the hooks 21 and 22 are more clearly visible in their association with the belt 11. Also, the tapered side walls 31 and 33 of the body portion 16 of the container 15 are apparent. The container cover 35 is shown in position against the human form (illustrated by the hatching) as is also the protruding lip 37 of the cover or lid 35 which communicates with the much smaller surgical opening (not shown).

The container or cover opening 39 is best seen in FIG. 3 where it is illustrated as preferably circular with the lip 37 depicting an annular protruding ring, best seen in FIG. 3 and 4. Also, from FIGS. 3 and 4, it will be noted that the cover 35 conforms to the mouth 41 of the container body 16 and is adapted to fit tightly thereover with the cover flange 43 overlying a portion of the body 16.

In FIG. 3, the ellipse or oval-shaped container, depicted by the cover 35, has its transverse axis (not shown) in the vertical direction and its conjugate axis (not shown) in the horizontal direction. The length of the container along the transverse axis is preferably approximately 4 inches, and the width of the container along the conjugate axis is of the order of 3 inches. The diameter of the opening 39 is preferably $1\frac{3}{4}$ inches and the width of the container 15, with cover 35 in place, is approximately one inch. This receptacle has a capacity of about 8 ounces.

Also, from FIG. 3 it may be noted that the center of the container opening 39 is offset from both the transverse and conjugate axes, but the center is located further from the conjugate axis than the transverse axis.

FIGS. 4 and 5 depict the hooks 21 and 22 as being fabricated from a single piece of metal or plastic, welded or cemented to the back of the container body 16.

It should be emphasized that the appliance of this invention does away with the necessity of daily irrigation of the intestines which is an unpleasant chore but is necessary to normal functioning of the digestive tract. With this appliance in place, a small amount of mineral oil is taken orally until the intestinal tract is well regulated. The use of a stainless steel or other suitable metal or plastic material for the container prevents it from being affected by body acids or the mineral oil. It has been found that the use of a folded paper napkin with a round hole cut in the center and placed between the skin and the appliance prevents chafing and also acts as an absorbent factor in the event of any spillage.

While the preferred embodiment of the invention has been illustrated and described, nevertheless, modifications will occur to those skilled in the art from a reading hereof, and it is therefore intended that the subject invention be limited only by the appended claims.

What is claimed is:

1. A colostomy appliance for the body of a user having a surgical opening comprising a substantially oval-shaped container body having an open mouth, a cover adapted to fit snugly over the mouth of the container, said cover

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being removable for cleaning the container body and cover, said body having a transverse axis longer than its conjugate axis, said body being characterized by side walls generally tapering inwardly toward the back thereof, said cover having a single circular opening therethrough the center of which is offset a longer distance from the conjugate axis than from the transverse axis to locate the opening primarily in an upper end quadrant of the oval configuration, an annular lip disposed about the circular opening and protruding externally from the cover, said cover and lip characterized by substantially flat parallel surfaces for fitting the lip flush against the user's body adjacent to the surgical opening with the lip depressing the user's body adjacent the opening and the cover being flush against the user's body over a substantial portion of the cover, said body in its operative position oriented with its transverse axis generally parallel to the user's waist and the opening in said cover being disposed in the direction of the adjacent hip bone of the user, a pair of spaced apart hooks externally affixed to the back of the container, and releasable belt means maintaining the recited flush positioning.

2. The colostomy appliance of claim 1 wherein the releasable belt means comprises a supporting belt adapted to fit the user's body slightly below the waist, said belt having a width in excess of the conjugate axis of said container body, said belt having a pair of spaced apart eyelets to receive said hooks at a predetermined location relative to a hip bone of the user's body, said hooks being fixed relative to said cover opening and the eyelets of the belt to dispose said opening toward the top of the container and in the direction of the hip bone of the user's body, an elastic panel comprising a section of the belt adapted to be disposed on the back side of the user's body, and means for snugly fastening the belt about the user's body whereby the elastic panel maintains the cup in position relative to the user's body regardless of body movement.

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RICHARD A. GAUDET, *Primary Examiner*.

C. F. ROSENBAUM, *Examiner*.