Sept. 15, 1936. A. W. DIACK 2,054,535

COLOSTOMY BAG

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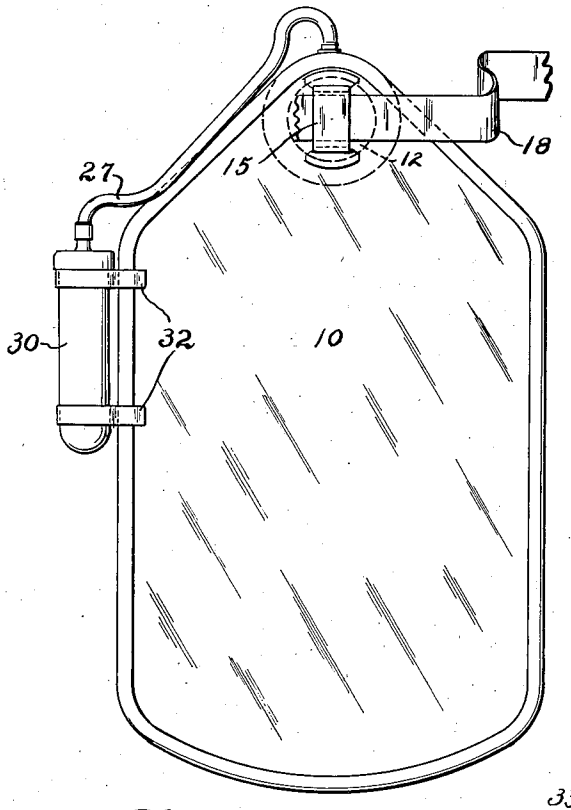

Fig. 2

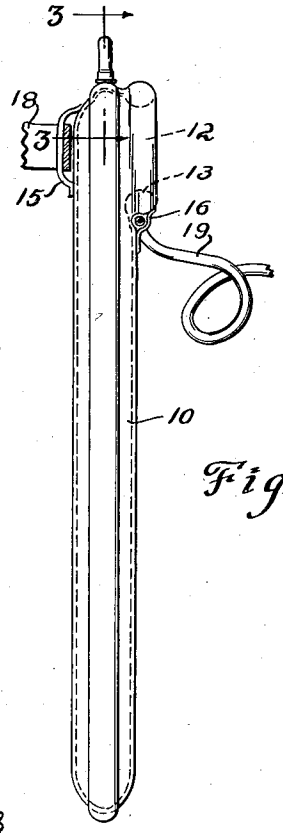

Fig. 1

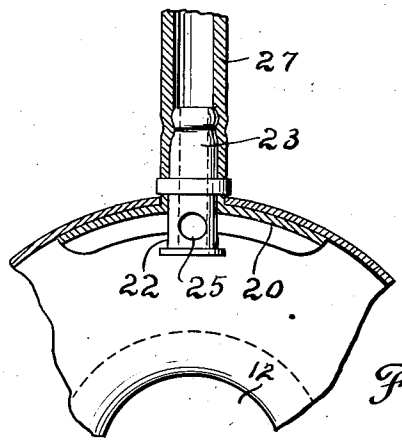

Fig. 3

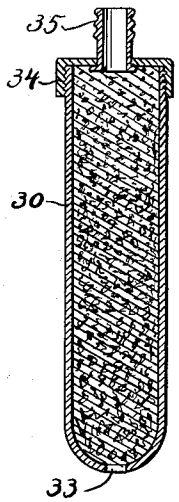

Fig. 4

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COLOSTOMY BAG

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2 Claims. (Cl. 128—283)

This invention relates to surgical appliances, and more especially to devices of the sort known as "colostomy bags", aiming particularly to provide an attachment to the same adapted to add greatly to the comfort of the wearer.

As a result of certain abdominal operations, it is necessary to provide an opening through the abdominal wall through which extends the end of the severed intestine. This so-called "artificial anus" then becomes the outlet for the feces. Owing to peristalsis and lack of complete nervous and muscular control, there is a more or less constant discharge of the contents of the bowel, solid, liquid, and gaseous. The comfort of the patient has been greatly enhanced by attaching a receptacle over the opening. This attachment, usually made of pliable material, is known as a "colostomy bag", and is quite successful in receiving and retaining the solids and liquids excreted. The bag is usually provided with a soft circular mouth of rubber or the like fitting over the artificial anus. The rim surrounding the mouth is also formed of pliable material on its side which is to be applied to the abdominal wall, so as to obtain close adaptation and virtual sealing, and is held in place by suitable body straps. The bag is periodically emptied when the toilet is made. This affords a convenient and not entirely uncomfortable device so far as liquid and solid material is concerned, but in many cases the gases and odors are not entirely retained, and their escape proves most embarrassing to the patient.

It is the object of this invention, therefore, to provide means by which such gases and disagreeable odors are rendered innocuous, and whereby distention of the colostomy bag from gas contained in it is prevented.

Other objects and advantages will be apparent from the following description, wherein reference is made to the accompanying drawing illustrating a preferred embodiment of my invention and wherein similar reference numerals designate similar parts throughout the several views.

In the drawing:

Figure 1 is a side elevation of a colostomy bag incorporating the principles of my invention;

Figure 2 is a front elevation of the same;

Figure 3 is an enlarged detail section taken substantially on the line 3—3 of Figure 1 and looking in the direction of the arrows;

Figure 4 is a substantially diametrical detail section of the purifying device.

My preferred construction for accomplishing the above mentioned ends, as shown in the drawing, comprises a limp bag 10, formed of soft rubber or the like, having a reduced top portion in which is an opening 12 facing the side which is to be applied to the body of the patient. The opening is surrounded by a soft rim as 13 to promote tight engagement as well as the comfort of the wearer. Loops as 15—16 may be provided for the reception of straps or other tying means as 18—19, which may be passed around the body of the patient to hold the bag in place, in the usual or any desired fashion.

In the particulars of its construction so far described, the bag will be recognized as similar to those now in use. Another outlet is provided in my improved bag, however, preferably at the top, for permitting the escape of gas. Such outlet (undesignated) is preferably reinforced by a similarly apertured valve supporting plate 20, secured therebeneath, and inside the bag in the illustrative construction shown. The plate 20 slidably supports the outlet valve and coupling member 22 which projects through and from the bag, being provided with a coupling portion as 23 at its outer end and an outlet opening as 25 at its end which normally projects into the bag, which opening may be opened by pushing in the element 22 and closed by pulling it out, as will be readily apparent.

To the portion 23 is connected a flexible tube 27, to which in turn is connected a deodorizing device in the form of a cartridge 30, detachably affixed to the bag, as by spring clips 32, and charged with some such absorbent material as cocoanut charcoal (40). The clips may be attached to the cartridge and adapted to slip over and retain themselves upon the rim of the bag by friction.

A suitable cartridge construction, shown in Figure 4, includes a generally cylindrical body portion having an outlet 33 in one end and to which is removably applied a screw cap as 34 having an inlet coupling 35 for attachment to the tube 27 which connects the cartridge 30 with the outlet of the bag.

When the cartridge is so attached to the bag and the valve opened, it will be seen that gases in the bag may readily find their way into the cartridge to be absorbed and purified, while when the charge is spent it may be readily renewed, during which time the valve may be closed.

While it will be apparent that the illustrated embodiment of my invention herein disclosed is well calculated to adequately fulfill the objects and advantages primarily stated, it is to be understood that the invention is susceptible to

variation, modification and change within the spirit and scope of the subjoined claims.

What I claim is:

1. A flexible colostomy bag having an inlet adapted to be substantially sealed against escape of gases from the bag when the bag is in use, and having a gas outlet, valving means enabling selective closing of said outlet, and a deodorizing device removably affixed to the bag and connected to such outlet and comprising a casing and a quantity of absorbent deodorizing material therewithin.

2. A flexible colostomy bag of flat construction having a marginal bead, an inlet adapted to be substantially sealed against escape of gas when the bag is in use, and a gas outlet, valving means enabling selective closing of said outlet, a deodorizing device removably clipped to the edge of said bag and over said bead, a flexible tube connecting said device and outlet, said device comprising a casing through which gases from the bag are directed containing a quantity of permeable deodorizing material.

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