Jan. 20, 1959 R. H. YOHE 2,869,547

COLOSTOMY IRRIGATOR

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Fig. 1.

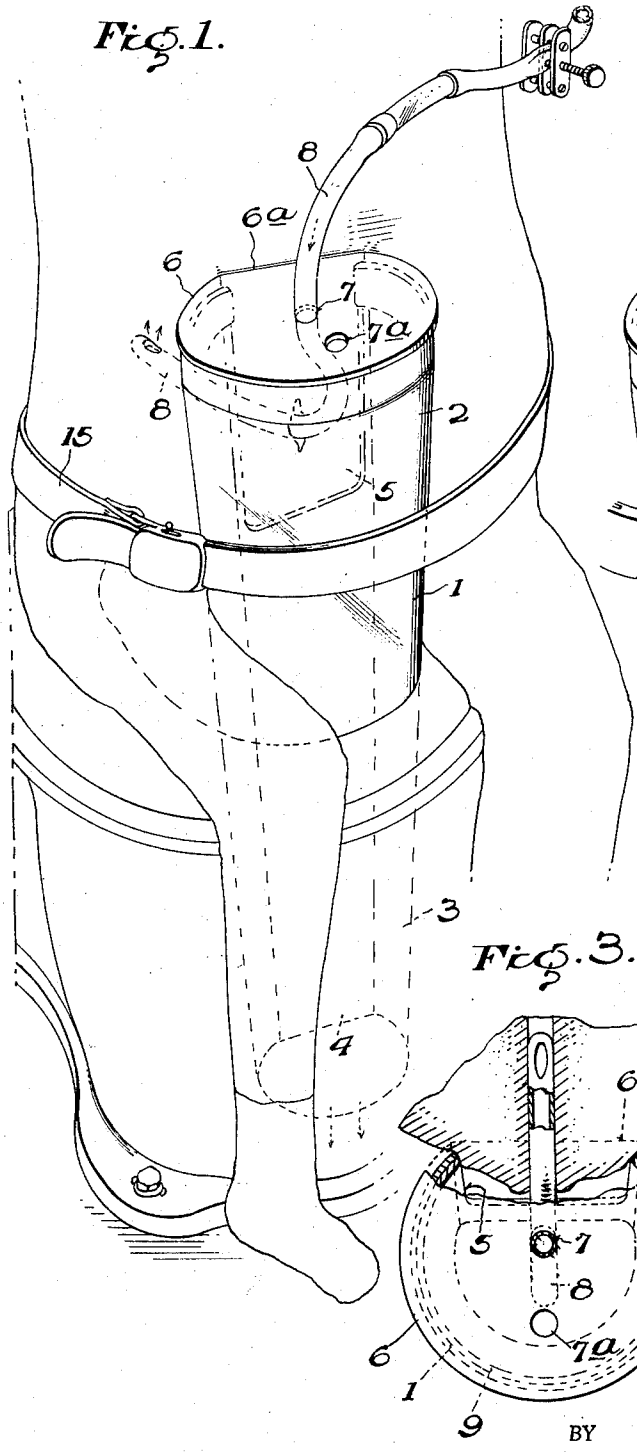


Fig. 2.

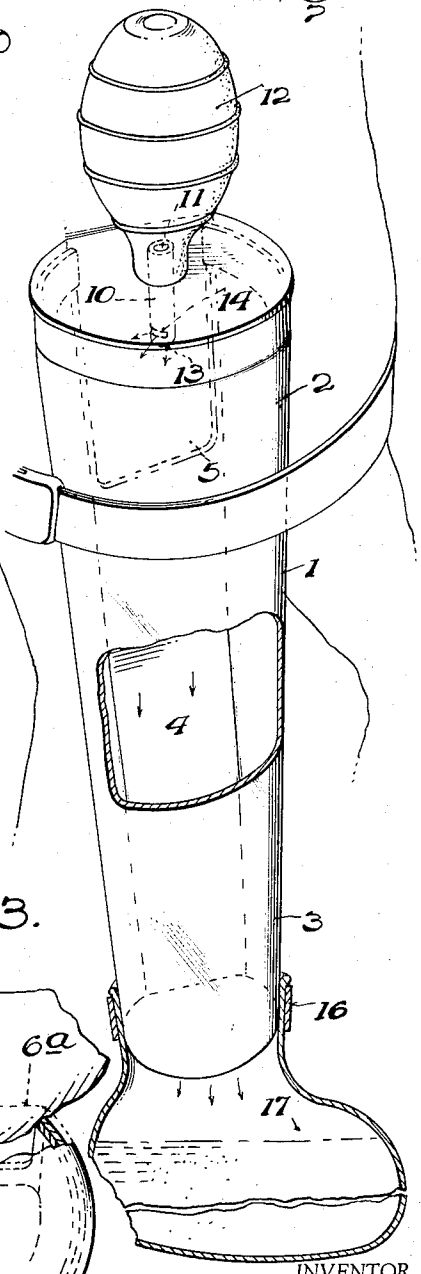


Fig. 3.

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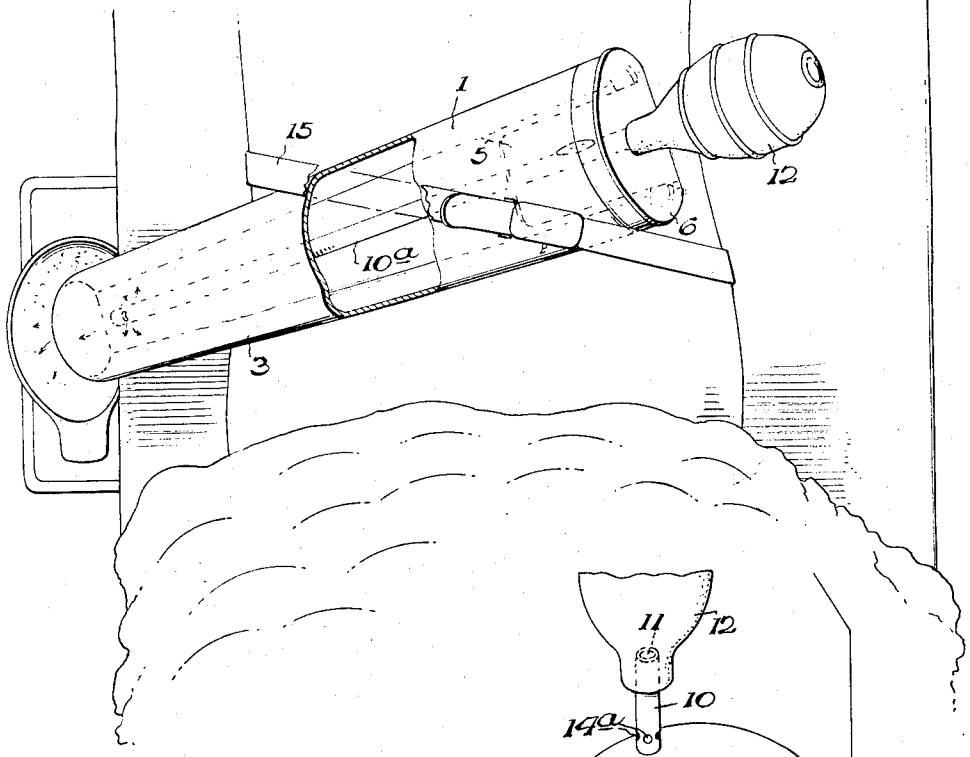
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Fig. 4.



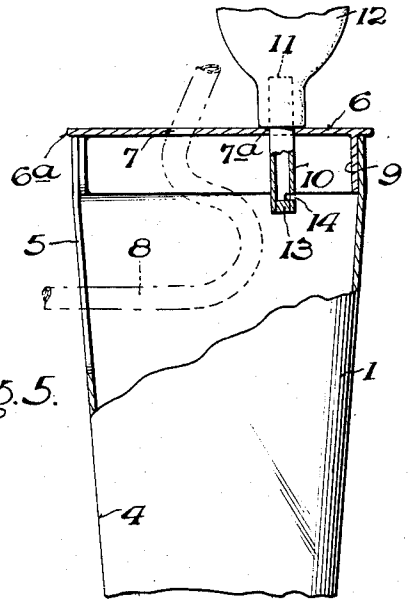


Fig. 5.

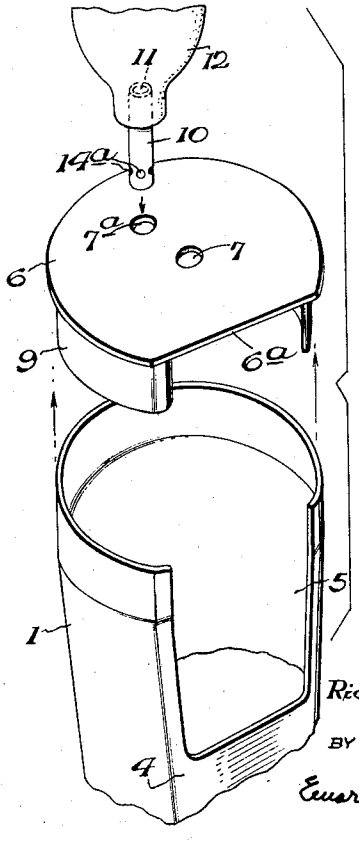


Fig. 6.

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COLOSTOMY IRRIGATOR

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4 Claims. (Cl. 128—283)

This invention relates to an irrigation device, particularly adapted for use by persons who have had a colostomy operation although it may conceivably be used for other purposes.

A colostomy is a surgical opening made in the abdominal wall and located in the frontal area of the abdomen. When such an operation is performed, the colon or a portion thereof is removed and as a result normal evacuation of the bowels is impossible. Colostomy patients are therefor required to perform this normal bodily function by means of various irrigation contrivances adapted to supplant such function. The devices presently on the market are not only awkward and complicated to use, but are generally unsanitary due to the difficulty in cleaning them after use.

Accordingly, it is the primary object of my invention to provide a colostomy irrigating device which is simple to use and has parts which are easy to maintain in a sanitary condition due to their generally smooth surfaces and lack of corners and crevices in which fecal matter could collect.

Another object of my invention is to provide a completely removable cover means for the discharge receptacle which affords an effective seal against escape of air or liquid while the device is in use.

Another object of my invention is to provide a colostomy irrigating device which may be used with equal facility in either a sitting or prone position.

A still further object is to provide a simple flushing means for cleaning the device after and/or during use.

These and other objects and advantages of the invention will appear more fully from the following description, considered together with the accompanying drawings.

In the drawings:

Fig. 1 is a perspective view showing the device attached to the body and positioned for use while in a sitting position with the irrigating tube in place in the body cavity.

Fig. 2 is a perspective view showing one example of the flushing means inserted in the cover and a discharge collecting container attached to the lower end of the receptacle.

Fig. 3 is a top plan view partly in section, showing the body engaging flat side of the cover and receptacle pressed firmly against the body.

Fig. 4 is a plan view showing the position of the receptacle when used while in a prone position.

Fig. 5 is a perspective view partly in section, showing the flushing means, cover and upper part of the receptacle in assembled relationship.

Fig. 6 is a perspective view showing the flushing means, cover and upper part of the receptacle in disassembled relationship.

Similar reference characters designate corresponding parts in the several figures of the drawings.

The numeral 1 designates an open ended tubular receptacle whose upper receiving end 2 is preferably die formed to provide a planar cover receiving seat and is thereafter tapered toward the bottom discharge end 3.

The arrangement just described gives a tight fit between the cover and receptacle, but it would still be in the scope of the invention, if the receiving end 2 was formed as a continuation of the taper of the body. The receptacle has a body engaging flat side wall 4, and adjacent the upper edge of said side wall, there is provided an opening 5 adapted to overlie the colostomy opening in the wall of the abdomen.

A cover 6, of substantially circular shape, includes a flat marginal edge 6_a corresponding to flat side wall 4 of receptacle 1 and is insertable into the upper receiving end 2 of the receptacle. When in position, the circumferential edges of cover 6 extend beyond the upper edge of receptacle 1 so as to seal the upper end of the receptacle. An opening 7 is provided in the top surface of cover 6 and it is through this opening that a catheter tube 8 is passed when it is to be inserted into the colostomy opening. It is preferred that this opening 7 be made so that its side wall is angularly disposed, for example at an oblique angle, in relation to the top planar surface of cover 6 or said side wall may be at a 90° angle in relation thereto.

When inserting the tube 8 to the desired depth in the colostomy opening a slight amount of slack is left in the tube so as to form a partial loop. The sides of the tube will be bent against the side wall of opening 7 holding the tube in position and preventing its complete ejection from the colostomy opening by peristaltic action of the bowel. This holding effect is more positively obtained by making opening 7 at an oblique angle but the desired effect remains even though the angle be one of 90°.

A second opening 7_a may be provided in the cover 6 for receiving a spraying tube 10 when it is desired to flush the receptacle while the irrigation process is taking place.

The cover 6 is further provided with a side wall 9 depending from its top surface, inset from the circumferential edges thereof to conform with aforesaid cover receiving seat 1. This side wall 9 does not extend around the entire circumference of the cover 6 but both ends terminate at the flat side thereof so as to be in registry with the opening 5 in the flat side wall of receptacle 1. Thus, when the cover is put in place it will form an effective seal against the escape of air or liquid from the receptacle while the irrigating operation is being performed.

As a means for flushing the receptacle during or after use and while still attached to the body, I provide a spraying tube 10, previously referred to, which may be made of plastic or other suitable material. Said tube has an open upper end 11 connected to a source of water supply, such as a water faucet, reservoir syringe or bulb type syringe 12, as shown in Fig. 2, and also is provided with a sealed lower end 13. A horizontal opening 14 (Fig. 5) is located just above the sealed end 13 of the tube and upon applying pressure to the syringe and rotating it, water will be discharged laterally through opening 14 and sprayed against the wall of the receptacle 1 and also against the colostomy opening thereby effecting a complete cleaning operation. Although I have only shown a single opening 14, there may be provided a plurality of smaller openings 14_a, if desired, as shown in Fig. 6.

Although my device would normally be used so as to discharge into a commode or bed pan, situations may arise which would make it desirable to provide a flexible, waterproof container or bag which may be disposable or reusable and could be readily attached to the lower discharge end 3 of receptacle 1. To meet such situations I provide a container or bag 17 which may be attached to and detached from the discharge end 3 by means of a sealing ring 16. Said ring is made to conform to the

cross-sectional shape of the outer lower end of the receptacle **1** and includes tapered and flat portions. To attach the bag, the throat thereof is slipped over the end **3** of receptacle **1** and the sealing ring **16** is then passed upwardly both over the bag and the receptacle to a point where it will frictionally secure the bag in place. To remove the bag from the receptacle, the ring **16** is moved downwardly and the bag may be removed and suitably disposed of.

Although the receptacle and cover may be made of any suitable material, I prefer to make them out of any suitable plastic because it is light in weight and is easy to clean and keep in a sanitary condition. The receptacle may be made of either opaque or transparent plastic but I prefer that the cover be transparent so as to permit complete control of manipulation of the catheter tube and observation of the irrigation process.

My device is used in the following manner:

First, the patient places a belt **15**, preferably made of plastic, around his waist very loosely. Next, the receptacle **1** is slipped between the abdomen and the belt with the opening **5** on the flat side wall **4** of the receptacle in such a position that the opening of the colostomy is located towards the bottom of said opening **5** and completely encircled thereby. The catheter tube **8** being attached to a source of water supply, is fed through the opening **7** in the top surface of cover **6** and inserted into the colostomy opening to the proper depth. The cover is then moved into place in the upper receiving end **2** of the receptacle **1** so as to form a tight seal against the escape of air or liquid. The belt is then drawn tightly about the waist and the receptacle **1** and by doing so, the edges of the opening **5** and the flat edge of cover **6** are pressed firmly against the flesh surrounding the colostomy opening thereby forming a tight seal against the escape of air or liquid at this point also, as illustrated in Fig. 3.

If the cover is of the type provided with a single opening, after the required amount of water has entered the body opening, the catheter tube is withdrawn through the opening **7** in cover **6** without moving said cover from its sealing position, and in its place is inserted the hand bulb syringe **12** which has been filled with water. When the catheter tube is removed from the body opening, the fecal matter from the body discharges into the upper receiving end of the receptacle and passes down through the lower discharge end thereof into the commode, as shown in Fig. 1, or bed pan, as shown in Fig. 4. While the draining or discharging is taking place, the patient may flush the walls of the receptacle and that part of the body immediately surrounding the colostomy, by merely squeezing the syringe **12** and slowly rotating it thereby spraying water through the opening **14** and against the walls of the receptacle. All of this is accomplished, without changing the position of the receptacle **1** or removing cover **6**. When the flushing operation is completed, the apparatus has been thoroughly cleansed and may be stored away for future use.

If the cover is of the type which has the opening 7_a as well as opening **7**, complete withdrawal of catheter tube **8** is unnecessary since spraying tube **10** is already in place in opening 7_a and the patient may flush the receptacle during discharge of the fecal matter.

If the patient is bedridden, the apparatus may be used with equal facility by merely placing the receptacle **1** diagonally across the body as illustrated in Fig. 4. When thus used, the lower discharge end of the receptacle is placed in a bed pan or in the bag or container **15** previously described. In place of the spraying tube **10**, a longer spraying tube 10_a may be used so as to enable the patient to direct the spray not only aginst the top wall of receptacle **1** but throughout the entire length and effect as thorough a cleaning operation as if the receptacle were in a vertical position.

I claim:

1. A colostomy irrigator comprising in combination, a tubular receptacle of downwardly substantially tapered formation and having an open upper receiving end and an open lower discharge end and having at least one flat body engaging side wall, a body engaging opening in said flat side wall adjacent the upper receiving end of said receptacle, a smooth surfaced wall opposite said body engaging opening, a removable transparent cover member inserted into the upper end of said receptacle to form a seal against escape of gas, air, moisture and liquid, said cover member having an opening in its top surface and flushing means for said receptacle connected to said cover through said opening.

2. A colostomy irrigator according to claim 1 wherein said cover member comprises a top surface having an additional opening therein, said additional opening receiving a catheter tube and having its wall portion formed at an oblique angle to the top surface of said cover member so as to maintain said catheter tube in positive engagement with the colostomy opening, and a spraying tube of said flushing means connected to said cover through the said first opening for flushing said receptacle during the irrigation process.

3. A colostomy irrigator according to claim 1 wherein said flushing means includes an elongated tube rotatably connected to said cover means and having an open end and a closed end, said open end being connected to a source of water supply, said closed end having adjacent thereto a lateral orifice through which water may be discharged against the side walls of said tubular receptacle.

4. A colostomy irrigator according to claim 1 wherein said cover member comprises a top surface having a flat marginal edge, a side wall depending from said top surface and inset from the circumferential edge thereof, both ends of said side wall terminating at the flat marginal edge of the top surface of said cover member to provide an opening therein to register with said body engaging opening in said flat side wall.

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