

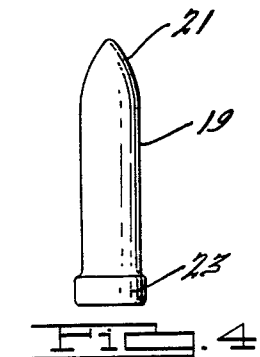
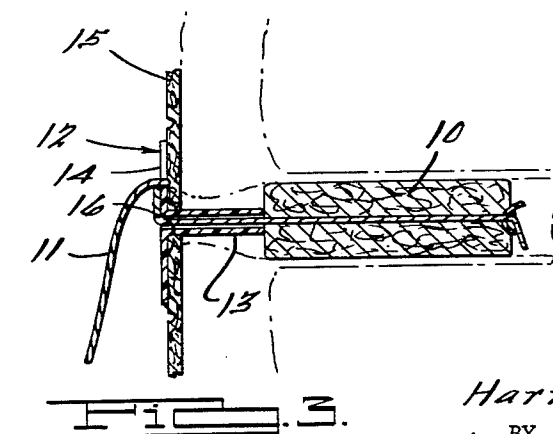
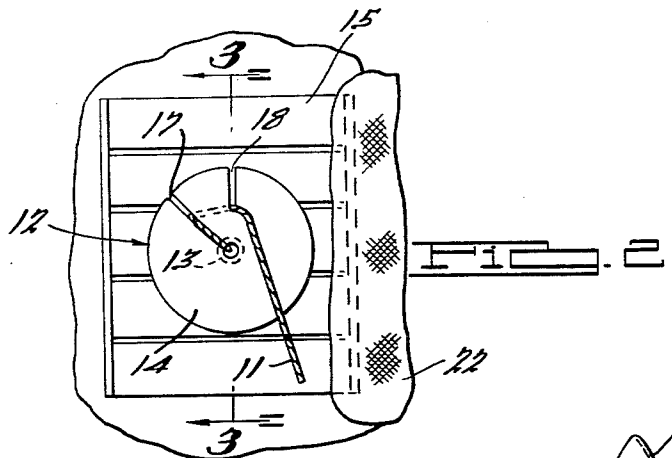
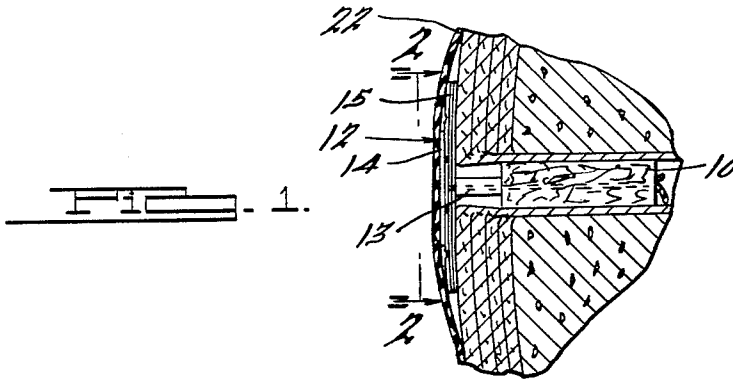
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COLOSTOMY APPLIANCE

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COLOSTOMY APPLIANCE

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7 Claims. (Cl. 128—1)

This invention relates to colostomy appliances and particularly to an appliance for plugging the end of the colon at the point of attachment to the abdominal wall.

A surprising number of people have had a colostomy operation performed upon them for one reason or another. Usually a portion of the colon is removed and the end is attached to the abdominal wall at an outlet cut therethrough. Once a day the intestines are flushed as by an enema through the outlet. The patient finds no discomfort with this manner of evacuation and any dissatisfaction resulting from the appliances available for closing and draining the outlet is avoided by the present apparatus.

The present invention pertains to an apparatus for closing and plugging the outlet and intestinal end in a manner to maintain comfort and provide freedom of movement for the patient. A plug of absorbent fabric material in the form of a cylinder is inserted through the outlet opening into the intestine. A headed tube has a pad slid over the tube against the head and a cord on the center line of the plug is drawn through the tube and head. The tube is inserted through the outlet into the intestine and while the head and pad are pressed against the abdominal wall, the cord is pulled outwardly to draw the plug against the end of the stem. The cord is secured in a pair of slots extending inwardly from the peripheral edge of the head to secure the plug in position. An elastic belt is then drawn over the abdomen to cover the head and pad and retain them against the abdominal wall. The pad and plug prevent any drainage from the intestine and outlet opening and permit any generated gas to immediately escape without noticeable odors, which is not true with other appliances now being employed.

Accordingly, the main objects of the invention are: to provide an appliance for closing the outlet provided in a colostomy operation which permits freedom of movement and prevents draining; to provide an absorbent plug for insertion in the intestine connected by a cord to a headed tube which extends therein and retains a pad against the abdominal wall; to provide an expendable appliance for closing the outlet from the colon through the abdominal wall which prevents seepage while permitting the escape of generated gas, and, in general, to provide a colostomy appliance which is simple in construction, practical in operation and economical in manufacture.

Other objects and features of novelty of the invention will be specifically pointed out or will become apparent when referring, for a better understanding of the invention, to the following description, taken in conjunction with the accompanying drawing, wherein:

Figure 1 is a sectional view of a colon grown to an outlet through the abdominal wall having an appliance therein embodying features of the present invention;

Fig. 2 is a view of the structure illustrated in Fig. 1, as viewed from line 2—2 thereof;

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Fig. 3 is a sectional view of the structure illustrated in Fig. 2, taken on the line 3—3 thereof; and

Fig. 4 is a view in elevation of a dilator employed with the appliance illustrated in Figs. 1 to 3.

The apparatus of the present invention embodies a plug 10 having a cord 11 secured thereto and projecting approximately from the center of one end thereof. The plug is made from a soft absorbent material having a length of approximately four times the diameter which may be one-half inch in diameter for example. It will be understood that the diameter may vary depending upon the diameter of the outlet and the adjacent portion of the colon. A button 12 in the nature of a sleeve 13 having a head 14 thereon has a pad 15 slid over the sleeve against the adjacent face of the head. The pad is made from absorption material having an aperture 16 in the center through which the sleeve 13 extends. A pair of slots 17 and 18 are radially disposed inwardly from the peripheral edge of the head 14 for locking the cord 11 to the button 12.

As illustrated in Fig. 4, a dilator 19 of a predetermined diameter having a tapered end 21 is employed to expand the outlet through the abdominal wall preferably each time before the appliance is inserted in the intestine. This is once each day and prevents the outlet from reducing in diameter as nature is attempting to reduce and close the outlet. After this is done, the plug is then inserted through the outlet into the adjacent portion of the intestine. Preferably the plug is disposed in an expendable sleeve from which it is pushed directly into the outlet and intestine. The cord 11 of the plug 10 extends through the hole in the sleeve 13 and head 14 and when pulled forwardly the end of the plug abuts against the end of the sleeve 13 in axial relation therewith. The cord 11 is then drawn into the apertures 17 and 18 as illustrated in Fig. 2 to retain the cord in position. The cord ties the button 12, pad 15 and plug 10 into unit relationship which retains the plug against moving farther inwardly into the intestine. An elastic belt 22 is then pulled up over the head 14 and pad 15 to retain them against the abdominal wall and prevent the outward movement of the button and plug.

With this apparatus, the plug 10 prevents any drainage and permits any generated gas to immediately escape without any accumulation. With the pad 15 and elastic belt 22 held against the abdomen, the patient has utmost comfort and freedom of movement and is handicapped in no way because of the change in position of the colon. By having the cord 11 disposed on the center of the plug 10, the plug is centered with the button and the colon which is desired for the proper functioning of the apparatus. The dilator 19 is of sufficient length to expand the muscles of the abdominal wall to maintain a full size to the outlet at all times. A flange 23 may be provided at the bottom of the dilator to limit its penetration into the outlet and intestine. It is within the purview of the invention to provide an aperture through the dilator through which a hose may be placed which seals off the aperture and outlet during the time a solution is passed into the intestine.

What is claimed is:

1. An apparatus for closing the outlet in an abdominal wall to which the colon is attached which includes, in combination, an absorption plug having a cord on one end, and a button having a hollow sleeve and a washer-like head, the cord passing through the sleeve and head for securing the plug in extension of said sleeve.

2. An apparatus for closing the outlet in an abdominal wall to which the colon is attached which includes, in combination, an absorption plug having a cord on one end, a button provided with a plurality of slots in which

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the cord is secured to maintain the plug in extension of said button, and a pad disposed over the button in abutting relation to said head.

3. An apparatus for closing the outlet in an abdominal wall to which the colon is attached which includes, in combination, an absorption plug having a cord on one end, a button provided with a plurality of slots in which the cord is secured to maintain the plug in extension of said button, a pad disposed over the button in abutting relation to said head, and an elastic belt maintaining said button and pad against the abdominal wall and the plug within said outlet and colon.

4. Apparatus for closing the outlet through the abdominal wall to which the colon is attached which includes, in combination, a plug having a cord extending from one end thereof, and a button having a head and a sleeve through which an aperture is provided for the cord which extends therethrough.

5. Apparatus for closing the outlet through the abdominal wall to which the colon is attached which includes, in combination, a plug having a cord extending from one end thereof, a button having a head and a sleeve through which an aperture is provided for the cord which extends therethrough, and a pad having an aperture through which said sleeve extends when the pad abuts said head.

6. Apparatus for closing the outlet through the abdominal wall to which the colon is attached which includes, in combination, a plug having a cord extending

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from one end thereof, a button having a head and a sleeve through which an aperture is provided for the cord which extends therethrough, and a pad having an aperture through which said sleeve extends when the pad abuts said head, said cord being secured to said head to limit the inward position of the pad within said colon.

7. Apparatus for closing the outlet through the abdominal wall to which the colon is attached which includes, in combination, a plug having a cord extending from one end thereof, a button having a head and a sleeve through which an aperture is provided for the cord which extends therethrough, a pad having an aperture through which said sleeve extends when the pad abuts said head, said cord being secured to said head to limit the inward position of the pad within said colon, and means secured over said button and pad to prevent the button and plug from moving outwardly of said outlet.

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