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STOMA RECEIVING APPLIANCE WITH SEALING SLLEEVE HAVING
ENLARGED ATTACHMENT PORTION
Filed May 13, 1958

3,021,843

FIG. 1

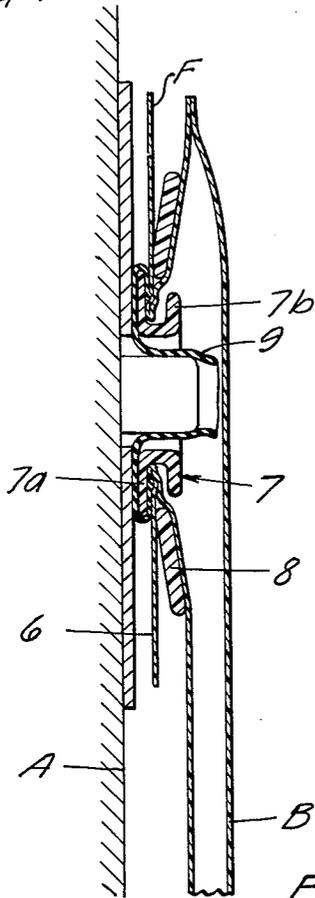


FIG. 2

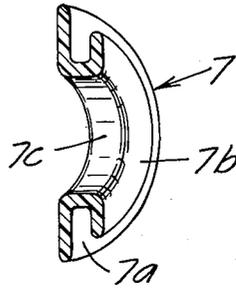


FIG. 3

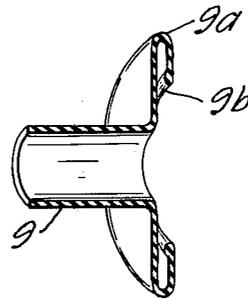


FIG. 5

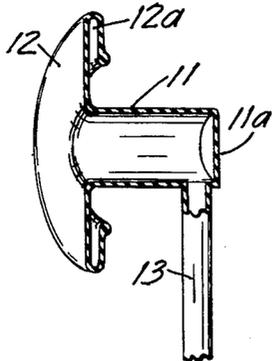


FIG. 4

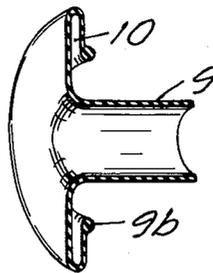
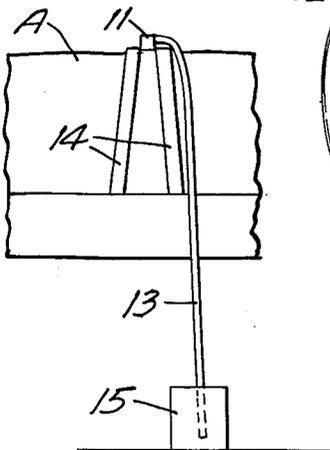


FIG. 6



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STOMA RECEIVING APPLIANCE WITH SEALING SLEEVE HAVING ENLARGED ATTACHMENT PORTION

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1 Claim. (Cl. 128—283)

This invention relates generally to a stoma receiving appliance and more particularly to such an appliance provided with a stoma embracing sleeve having an enlarged attachment portion.

While the stoma surrounding sleeve shown in my prior Patent No. 2,684,676 has proved to be extremely beneficial and highly successful in providing a seal around an outwardly protruding stoma, particularly on the smaller sized sleeves, I have found that it is frequently difficult and harmful to the attachment portion thereof to stretch the generally cylindrical sleeve member around a suitable sized mounting flange or ring, and when so stretched, the sleeve material will deteriorate much more quickly than would be the case if the same were only slightly stretched.

It is therefore an object of my present invention to provide a stoma embracing sleeve for sealingly engaging the outer surface of a stoma and provided with an enlarged attachment portion particularly adapted for connection with a mounting and supporting flange or ring without producing excessive stretching of the mounting portion of the sleeve.

It is another object to provide such an appliance wherein an elongated delivery conduit is connected with the stoma embracing sleeve to provide the only discharge receiving and carrying member, the sleeve otherwise completely sealing and enclosing said stoma therein, thus providing an appliance for carrying the discharge from the stoma directly to a remotely disposed large container to obviate the necessity of a receiving bag and the need of frequent changing thereof.

It is still a further object to provide an appliance of the class described wherein an interchangeable bag is mounted around said stoma to receive therefrom.

These and other objects and advantages of my invention will more fully appear from the following descriptions made in connection with the accompanying drawings wherein like reference characters refer to the same or similar parts throughout the several views, in which:

FIG. 1 is a longitudinal vertical sectional view showing a complete receiving appliance embodying my present invention;

FIG. 2 is a perspective view showing the sleeve mounting and positioning member;

FIG. 3 is a longitudinal sectional view of the sleeve shown in perspective as the same is manufactured;

FIG. 4 is a perspective view of the sleeve unit with a portion removed and showing the sleeve portion inverted in operative position and the enlarged mounting portion in operative attachment position;

FIG. 5 is a longitudinal sectional view of a modified form of my new sleeve; and,

FIG. 6 is a side elevational view of the sleeve shown in FIG. 5 in attached operative position.

As illustrated in the accompanying drawing, I provide a waterproof bag B made of any suitable material such as polyethylene and said bag is provided with an inlet opening in the upper portion thereof. A retaining flap F is connected to the back side of said bag surrounding said opening to reinforce the inner bag layer through which said opening extends and provide an attachment flap for purposes to be brought out hereafter.

A mounting member 7 having a retaining flange 7a formed on the inner portion (body side) thereof and a flange 7b of smaller diameter formed on the outer por-

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tion (side away from the body) thereof with said ring and flange spaced apart and connected by a generally cylindrical portion 7c extending therebetween to form a double flanged member providing a bag receiving groove between the two flanges. As shown in the accompanying drawing, the outer flange 7b is inserted through the opening in the bag and flap, and the material from which the bag and flap are constructed is sufficiently resilient to contract back to its normal size and closely fit into the groove formed between the outer flange 7b and the inner ring or flange 7a.

Suitable means are provided for anchoring the bag and mounting member to the body A of the wearer such as the annular anchoring member or belt ring 8 which has an inner opening slightly smaller than the flange 7a, but slightly larger than the flange 7b. This permits the anchoring member to be slipped over the bag and both ends of the bag drawn therethrough and permits the flange 7b to be inserted through the central opening of the anchoring member 8 to position said anchoring member in overlying relation around the outer peripheral portion of the larger retaining ring or flange 7a as best shown in FIG. 1.

A soft highly pliable sleeve member 9 made from any suitable material such as latex rubber has an enlarged attachment portion 9a with an opening 9b formed on the opposite side of the enlargement 9a from the sleeve 9. The opening 9b, in the form shown, has a reinforcing bead formed therearound and the sleeve is inverted into operative position and the enlargement portion 9a is in operative attachment position as shown in FIGS. 1 and 4. This forms a flange receiving pocket 10. The beaded opening 9b is stretched around the larger inner ring 7a as best shown in FIG. 1 and the sleeve 9 extends outwardly therefrom through the cylindrical portion of the mounting member 7 and resiliently surrounds the outwardly extending portion of the stoma in lightly embracing sealed relation therearound. This bulge 9a permits the sleeve to be readily mounted on the mounting flange 7a without excessive stretching thereof and greatly facilitates replacement of said sleeve as well as materially increasing the durability thereof. The sleeve produces a soft, highly flexible valve effect around the stoma and the slightly stretched enlarged attachment portion 9a forms an annular sealing wall between the sleeve and flange 7a of mounting member 7. This stretched portion lies in the plane of the surface of the inner flange 7a and combines with the sleeve to cushion the stoma and resiliently maintains the spaced relation between the stoma and the harder material of the surrounding mounting member 7 and prevents contact therebetween.

In FIGS. 5 and 6, a sleeve designated by the numeral 11 is provided and has an end closure 11a across one end thereof. An attachment flange or enlargement 12 is, in the form shown, integrally formed with the inner end of the sleeve 11 and is similar to the enlargement 9a of the form of the invention best shown in FIGS. 1, 3 and 4. The enlargement 12 is doubled back up on itself as best shown in FIG. 5, and provides a pocket 12a into which the attachment flange 7a can be readily inserted. A discharge conduit 13 communicates with the inside capped sleeve 11 and forms the only discharge opening therefrom to carry away material discharged from the stoma which is surrounded by the sleeve 11 in the same manner as sleeve 9 surrounds the stoma as illustrated in FIG. 1. It will be noted that the enlargement or attachment portion 9a has a diameter substantially greater than the diameter of the opening in the mounting member 7. This attachment may be connected to the body A of the wearer by a suitable belt structure 14 connected to the outer portion of an anchoring ring 8 which holds the mounting member 7 in place. Thus, if the patient is bedridden, a permanent

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delivery tube 13 is provided for carrying the stoma discharge and delivering the same into a suitable large container 15 mounted on the floor adjacent the bedside thus eliminating the necessity of changing the bags as is required with the form previously disclosed herein.

It will be seen that I have provided an improved and highly efficient stoma surrounding sleeve arrangement which constitutes a substantial improvement over the sleeve disclosed and claimed in my prior United States Patent No. 2,684,676.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts without departing from the scope of my invention which generally stated consists in the matter set forth in the appended claim.

What I claim is:

In a stoma receiving and collection appliance in combination with a bag made from highly flexible, waterproof sheet material and having an attachment flap sealingly connected thereto, said bag and flap having an aperture formed through the interconnected portions thereof, a substantially rigid annular mounting member defining an opening for loosely surrounding a stoma and having a circular flange integrally formed therewith, said interconnected portions of said bag and flap being mounted on said mounting member in close fitting relation therewith, a stoma engaging sleeve member extending through said opening and having a body for sealingly engaging the ex-

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terior of the stoma and having an enlarged integrally formed, resiliently stretchable, annular attachment portion detachably engaging said annular mounting member, said attachment portion extending first radially outwardly from the circumference of said sleeve body and then doubled over and extending inwardly to form a deep, annular internal channel with an outer overlying flange, said attachment portions having a normal unexpanded diameter, prior to stretching and attachment to the mounting member, greater than the opening in the mounting member so that the circular flange is positively and sealingly received within the annular channel of the attachment portion upon stretching of the same, and means for anchoring said annular mounting member to the body of a wearer in appropriate position to cause a stoma to project in spaced relation through the opening of said mounting member.

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