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2,585,716

DRAINAGE RECEPTOR

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Fig. 1.

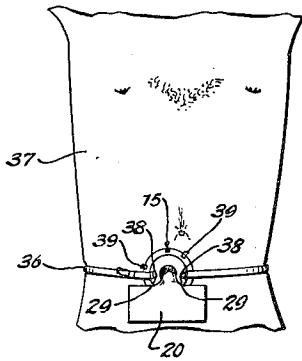


Fig. 2.

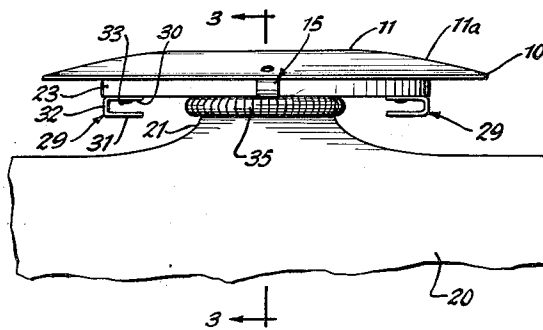


Fig. 3.

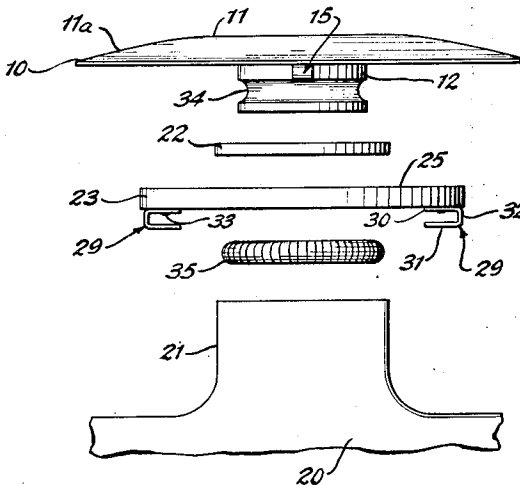
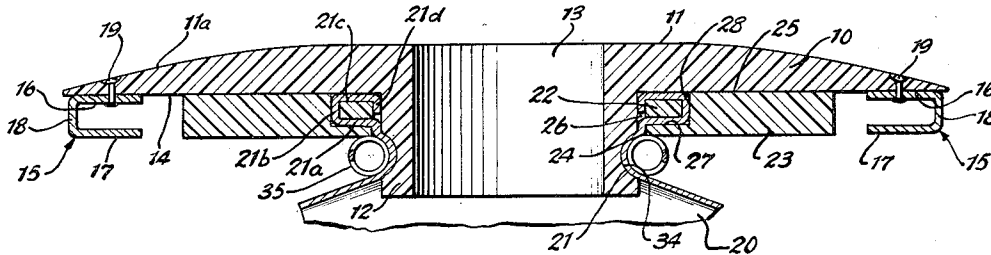


Fig. 4.

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DRAINAGE RECEPTOR

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5 Claims. (Cl. 128—283)

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The present invention relates to improvements in a drainage receptor for collecting the waste from the body of a person who has undergone an ileostomy or a colostomy operation and has for an object to provide a device of this kind which is supported by the body of the patient.

Another object of the present invention is to provide an improved receptor in which when adhesive means is employed to support it from the body of the patient the drainage receiving bag or container may be removed and a fresh one replaced without disturbing the adhesive means.

A further object of the present invention is to provide an improved device of this character comprising relatively few parts which can be quickly and easily assembled and disassembled for cleaning and the like.

A still further object of the present invention is to provide an improved receptor in which the several parts when in assembled relation set up leakproof joints between the several parts.

The present invention aims to provide an improved drainage receptor which when in position upon the body of the patient will lie substantially flat thereagainst so as not to create a bulky appearance.

The present invention also aims to provide an improved device of this character which will readily accommodate itself to movements of the body of the patient without dislodging the device from the proper position upon the body.

In one of its broad aspects the present invention contemplates an improved drainage receptor, comprising a body engaging plate having a passageway therethrough, a drainage receiving bag supporting disk having a through opening therein, a drainage receiving bag carried by the bag supporting disk and having an open mouth portion received by the opening in the disk and communicating with the passageway in the plate and means carried by the body engaging plate for holding the bag supporting disk in engagement with the body engaging plate for clamping the bag between the plate and disk.

With the foregoing and other objects in view, the invention will be hereinafter more fully described and more particularly pointed out in the appended claims.

In the drawings, in which the same parts are denoted by the same reference numerals throughout the several views:

Figure 1 is a front elevational view of the improved receptor constructed in accordance with the present invention and illustrated as applied to the body of a patient;

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Figure 2 is a side elevational view of the improved device with parts broken away;

Figure 3 is an enlarged sectional view taken on the line 3—3 of Figure 2 and looking in the direction of the arrows; and

Figure 4 is an exploded view of the various parts comprising the improved receptor.

Referring more particularly to the drawings, 10 indicates a body engaging member or plate which can be made of plastic, metal, or any other appropriate material and has an inner surface adapted to engage the body of the patient provided with a substantially flat centrally disposed portion 11 and a peripheral portion 11a which slopes outwardly from the flat portion towards the outer edge of the plate 10. The plate 10 has a substantially centrally disposed boss 12 and the plate and the boss have a through passageway 13. The plate 10 has an outer substantially flat surface 14 from which the boss 12 projects outwardly at substantially right angles thereto.

One member of a fastening element which can be in the form of a substantially U-shaped member generally indicated at 15 having spaced apart parallel legs 16 and 17 connected by a bridge piece 18 is attached to the outer surface 14 of the plate 10 near its outer peripheral edge by a rivet or the like 19. The rivet 19 extends through the leg 16 of the member 15 and through the plate 10 and has its head countersunk in the portion 11a of the inner surface of the plate 10. The member 15 is attached to the plate 10 so that its open end is facing the boss 12.

A similar member 15 is attached in a similar manner to the plate 10 at a point diametrically opposite to the first member 15. The members 15 can be made of any suitable material and can be molded integral with the plate 10.

A bag or container for collecting waste or drainage emanating from the incision made in the body of the patient is indicated at 20 and can be made of plastic or any other suitable leakproof substance which is disposable after use. The bag 20 has a neck 21, the open mouth portion of which is folded around a flat band 22 of substantially rectangular cross-sectional shape as indicated at 21a, 21b, 21c and 21d. The band 22 can be cut out of corrugated paper or other suitable material that is disposable after use.

A bag supporting disk 23 of plastic or other appropriate material has a substantially centrally disposed through opening 24 for receiving the boss 12 therethrough. The disk 23 has an inner flat face 25 which is adapted to snugly engage the outer surface 14 of the plate 10 when the

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parts are in assembled relation as shown in Figure 3. A socket or recess 26 is formed in the inner portion of the disk 23 and communicates at one side with the opening 24 of the disk and its inner end opens through the face 25 of the disk 23 so that the socket has a bottom wall 27 and a side wall 28.

The disk 23 has a pair of U-shaped fastening members 29 attached thereto at diametrically opposite points which are similar to the members 15. Each member 29 has a pair of parallel spaced apart legs 30 and 31 connected by a bridge piece 32. A rivet 33 extends through the disk 23 and the leg 30 of each member 29.

The boss 12 adjacent its outer free end is provided with an annular groove 34 for receiving a snap ring 35 which can be in the form of a coiled spring. The inside diameter of the spring 35 when in its normal contracted position is less than the outside diameter of the grooved portion of the boss 12.

The bag 20 can be made of any desired size or shape to fit the individual needs of the patient. It is also to be understood that the dimensions of the other parts of the device may be varied to meet the requirements of different individuals. The plate 10 and the disk 23 may be made in various shapes, such as oblong, square or oval.

In the use of the device, the surgeon or other operator will place the spring 35 around the neck 21 of the bag 20 and thread the neck 21 through the opening 24 in the disk 23. The band 22 will then be inserted into the open mouth of the bag 20 and the mouth portion of the bag will be folded around the band 22. The band 22 and the folded portion of the mouth of the bag will be inserted into the socket 26 in the disk 23 which will then be slipped over the boss 12 until the face 25 of the disk is brought into contact with the outer surface 14 of the plate 10. The spring 35 will then be snapped into the groove 34 of the boss 12. The location and size of the groove 34, the thickness of the disk 23 and the outside diameter of the spring 35 are such that the spring 35 when located in the groove will urge the disk into snug engagement with the surface 14 of the plate 10. The spring 35 will also serve to clamp a part of the neck 21 of the bag into tight engagement with the wall of the groove 34 to set up a liquid tight seal at this point against passage of any fluid passing from the incision of the patient through the passageway 13 of the plate 10 and boss 12.

Further fluid tight seals are set up between the folded portions 21a and 21b of the neck 21 of the bag and the bottom 27 and the side wall 28 of the socket 26, respectively, and between the folded portions 21c and 21d of the neck 21 and the outer surface 14 of the plate 10 and the outer wall of the boss 12, respectively.

When the device has been assembled as described above, the operator will then place a belt 36 about the waist of the patient indicated at 37. The belt 36 is provided at each of its free ends with an eyelet 38 which receive the leg 31 of the respective fastening members 29 on the disk 23 whereby the belt 36 will hold the assembled device in proper position over the incision so that the passageway 13 will be in communication with the incision to conduct any drainage therefrom and into the bag 20.

It will be noted that the disk 23 is positioned upon the boss 12 of the plate 10 so that the fastening members 15 and 29 are angularly spaced

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apart approximately ninety degrees. The fastening members are so disposed to prevent the fastening elements 15 from interfering with the connection between the eyelets 38 and the fastening elements 29. If necessary or desired, additional supporting means may be provided for the device in the form of double faced adhesive tape 39 or any other suitable adhesive which does not after removal require the cleaning of the body of the patient. The adhesive tape 39 is attached to the plate 10 and the body of the patient.

When the operator wishes to remove the bag 20, this can be done without disturbing the plate 10 and the adhesive 39 by disconnecting the eyelets 38 from the fastening members 29 and removing the spring 35 from the groove 34 of the boss 12. The disk 23 and the bag 20 can then be removed and a fresh bag 20 substituted. While the bag is being changed the eyelets 38 of the belt 36 can be engaged with the legs 17 of the fastening members 15 of the plate 10.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims.

What I claim is:

1. An improved drainage receptor comprising, a body engaging plate having a boss extending therefrom, said plate and boss having a through passageway adapted to communicate with an incision in the body of a person, a drainage receiving bag supporting disk having an opening therein through which said boss extends, a drainage receiving bag having an open mouth portion, a band about which the open mouth portion of the bag is folded, said disk being provided with a socket for receiving said band and the folded mouth portion of said bag, said boss having an annular groove, and a snap ring removably received by said groove for urging said disk, said band and the folded open mouth portion of said bag into engagement with said plate.

2. An improved drainage receptor as claimed in claim 1 characterized by the fact that a part of the open mouth portion of the bag is clamped snugly into said groove by said snap ring.

3. An improved drainage receptor as claimed in claim 2 characterized by the fact that the socket has a bottom wall and a side wall against which corresponding parts of the folded mouth portion of the bag are tightly clamped and that the plate and boss are provided with surfaces against which other parts of the folded mouth portion are tightly clamped by the snap ring.

4. An improved drainage receptor comprising, a body engaging plate having a passageway therethrough, a drainage receiving bag supporting disk having a through opening therein, a drainage receiving bag carried by said disk and having an open mouth portion received by the opening in the disk and communicating with the passageway in the plate, a band around which the open mouth portion of the bag is folded, said band and folded mouth portion being clamped between said plate and disk, and means carried by said plate for holding said disk in engagement with said plate for clamping the bag between said plate and disk.

5. An improved drainage receptor comprising, a body engaging plate having a boss, said plate and boss having a through passageway therein,

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a drainage receiving bag supporting disk having an opening therethrough for receiving said boss, a drainage receiving bag mounted on said disk, said boss having a groove therein, and retaining means comprising a coil spring removably received by said groove for holding said plate and disk in assembled relation.

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REFERENCES CITED

The following references are of record in the file of this patent:

10

Number
2,441,508

Number
239,582
802,823

6

UNITED STATES PATENTS

Name
Porcell ----- Date
May 11, 1948

FOREIGN PATENTS

Country
Great Britain ----- Date
Sept. 7, 1925
France ----- June 22, 1936