

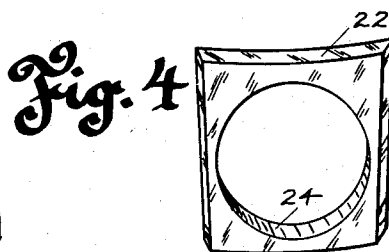
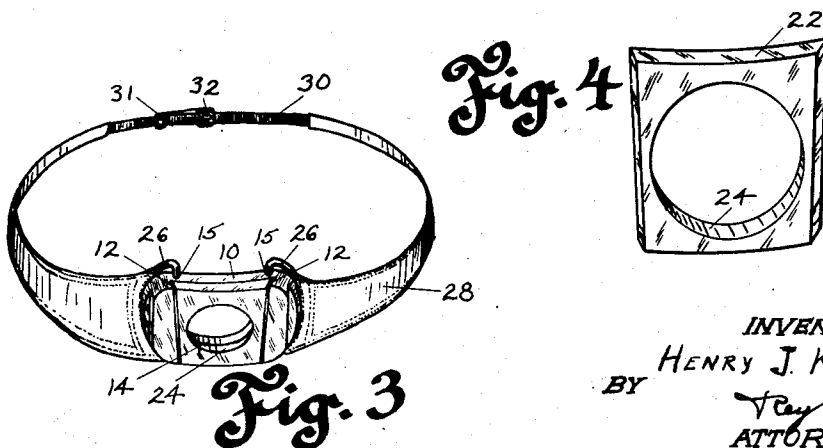
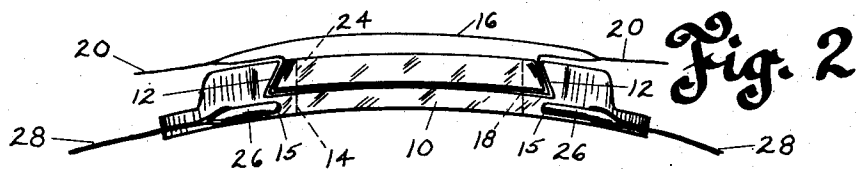
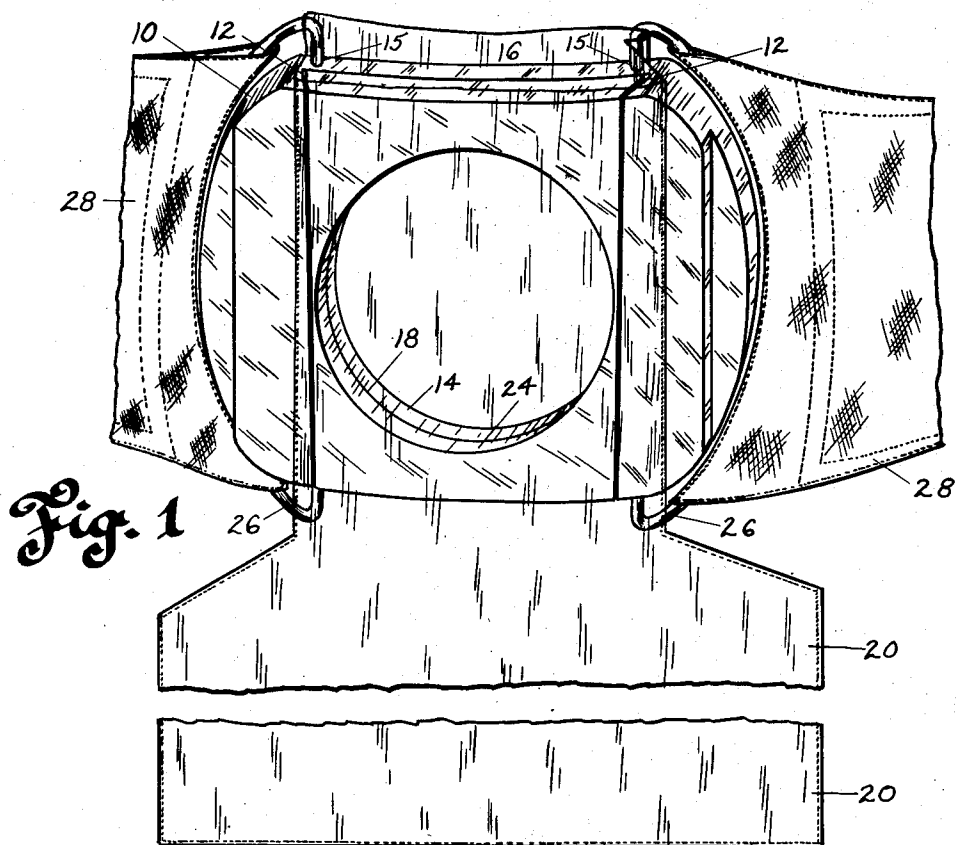
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SURGICAL APPARATUS

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SURGICAL APPARATUS

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This invention relates to improvements in surgical apparatus. More particularly, this invention relates to an improved support and pouch that can be set adjacent a surgical opening to receive and hold any discharge from that opening.

It is therefore an object of the present invention to provide an improved support and pouch which can be set adjacent a surgical opening to collect and hold any discharge from that opening.

In the treatment of human diseases and ailments it is sometimes necessary to form an opening in the patient's anatomy and to maintain that opening for indefinite periods of time. Where a periodic or continuous discharge is anticipated from that opening, provision must be made to receive and hold that discharge. One operation that occasionally requires the maintenance, for a short time, of an opening in the patient's anatomy is an appendectomy performed after the appendix has burst; the opening permitting draining of undesired fluids from the abdominal cavity. Another operation requiring the maintenance of an opening in the patient's anatomy is a colostomy, wherein the large intestine is caused to extend through the abdominal wall. A generally similar operation is an ileostomy, wherein the small intestine is caused to extend through the abdominal wall. After these and other operations have been performed, it is necessary to receive and hold the discharges from the surgical openings made during those operations.

Various methods and apparatus have been proposed to facilitate the receiving and holding of such discharges; and one method contemplates the placing of a large quantity of cotton or gauze adjacent the opening. The cotton or gauze will, when used in sufficient quantities and when properly set adjacent an opening, receive and hold the discharge from that opening; but that gauze or cotton must be removed and replaced frequently. That removal and replacement is not only a very expensive procedure but it usually entails considerable irritation and chafing of the skin, because the cotton or gauze is usually held in place by adhesive tape; and the removal and replacement of adhesive tape tends to irritate and chafe the skin. One apparatus, that has been proposed to receive and hold the discharge from a surgical opening, consists of an absorbent pad that can be placed against the skin of the patient and that has an opening therethrough in register with the surgical opening, a two-piece cup of stiff material that has an opening in register with the opening through the pad, and a

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water-resistant liner or bag within the cup. The discharge is supposed to pass through the openings in the pad and cup into the liner or bag; and the bag is supposed to hold that discharge until the two pieces of the cup are separated for removal of the bag. However, the bag must be quite small, because the two-piece cup must be small enough to be worn; the bag is held rather loosely within the cup and the discharge could fail to reach the bag but instead could engage and soak through the absorbent pad; no provision is made for venting gases; and the entire apparatus must be moved away from the user's anatomy before the absorbent pad can be replaced. Another apparatus which has been proposed has an apertured support of rubber, a bag with its open end extending through the aperture of the support and spread over the surface of that support, a stopper that extends into the aperture of the support, and a coating of wax over the open end of the bag, the stopper and the support. This apparatus does not provide for the venting of gases; it can only be assembled with difficulty since the wax must be melted and applied evenly to the bag, the stopper, and the support; the entire apparatus must be moved away from the person of the user before the bag can be separated from the support; and the use of a stopper increases the likelihood that the opening in the apparatus will get out of register with the surgical opening. The absence of a vent is quite serious because the gases that are sometimes attendant upon a discharge can force the bag and support away from the user's body and permit soiling and staining of the user's clothing. Moreover, the action of the organs of the body can sometimes create a suction which, in the absence of a vent for the bag, can draw part of the organs into the apparatus. In addition, the use of rubber against the skin is very undesirable because rubber chafes the skin and has an unpleasant "feel." Still another apparatus, that has been proposed to receive and hold the discharge from surgical openings, consists of a large rubber pouch which is held directly adjacent the skin around the surgical opening by a wide belt. This pouch has an opening at the top thereof and it is stiffened adjacent that opening to insure ready flow of the discharge into the pouch. However, that stiffness of the pouch makes it awkward for the user to move his limbs. Moreover, the heavy weight and large size of the pouch and belt cause excessive perspiration of the skin under the belt and pouch, and this perspiration permits the pouch to slip and uncover the sur-

gical opening with consequent soiling of the user's clothing. In addition, the vent provided in the pouch is quite small and can easily become clogged; and when clogged it permits the gases attendant upon some discharges to force the pouch away from the user's anatomy. Yet another apparatus that has been used consists of a stiff metal cup that is filled with absorbent material and has its open end held adjacent the surgical opening. This cup is heavy; it frequently permits the discharge to escape and stain the user's clothing; and it is so bulky that it is discernible beneath the user's clothing. For these various reasons, the various methods and apparatus intended to receive and hold the discharge from surgical openings are objectionable. The present invention obviates these objections by providing a support and pouch which are light in weight, provide full venting, are made of materials other than rubber, and are readily assembled and disassembled while the support is held adjacent the surgical opening.

The support provided by the present invention has a curved surface. The curvature of that surface is such that the support fits snugly against the user's anatomy; and thus it does not have to be deformed to fit the user's anatomy.

Because of this, less pressure need be exerted on the support; and the lessened pressure minimizes perspiration and also minimizes discomfort. It is therefore an object of the present invention to provide a support with a surface that is curved to fit the user's anatomy.

The support provided by the present invention has spaced holding surfaces that hold a retainer. The retainer can fit within the pouch and holds it fixedly in position relative to the support, or it can directly engage the support and hold itself in position. However, the retainer and pouch can easily be removed from the support without necessitating moving of that support. This is greatly superior to prior arrangements wherein replacement of the pouch required removal of the support from the user's person. It is therefore an object of the present invention to provide a support with holding surfaces that receive a retainer alone or a retainer and a pouch surrounding the retainer, and that permit replacement of the pouch without any movement of the support.

The pouch provided by the present invention is of such flexible material that the user can transmit pressure through the pouch to the retainer and thereby secure that retainer to or separate it from the support without directly touching that retainer. In this way, the user can avoid contact with the discharge on the retainer or within the pouch. It is therefore an object of the present invention to provide a pouch which will transmit pressure to the retainer and permit handling of that retainer without direct contact with the retainer.

The pouch provided by the present invention is of flexible but moisture-resistant material, and it can be made quite inexpensively. As a result, while the pouch is sturdy enough to be cleaned and used repeatedly, it can also be folded up and disposed of readily. This makes it possible to avoid the objectionable task of cleaning the pouch and aerating it to minimize unpleasant odors. It is therefore an object of the present invention to provide a pouch that is of flexible, moisture-resistant material and can be made inexpensively.

The support provided by the present invention is held adjacent the user's anatomy by a belt

which has a relatively unyielding portion adjacent the support but has a readily yielding portion oppositely disposed of the support. With such an arrangement, no stretching of the belt occurs adjacent the support, instead all such stretching is restricted to that portion of the belt which is in contact with the opposite side of the user's anatomy; and the stretching which must occur, during breathing or eating, will be done easily without any shifting of the support. It is therefore an object of the present invention to provide a support with a belt which has relatively unyielding portions adjacent the support and has a readily yielding portion oppositely disposed of said support.

Other and further objects and advantages of the present invention should become apparent from an examination of the drawing and accompanying description.

In the drawing and accompanying description two preferred embodiments of the present invention are shown and described but it is to be understood that the drawing and accompanying description are for the purpose of illustration only and do not limit the invention and that the invention will be defined by the appended claims.

In the drawing,

Fig. 1 is a broken, perspective view of a support, pouch, belt and retainer made in accordance with the principles and teachings of the present invention.

Fig. 2 is a partial, plan view of the support, pouch, belt and retainer shown in Fig. 1.

Fig. 3 is a perspective view of the support, belt, and retainer shown in Figs. 1 and 2, and

Fig. 4 is a perspective view of the retainer used with the support of Figs. 1-3.

Referring to the drawing in detail, the numeral 10 denotes a support which can be placed adjacent a surgical opening in the user's anatomy. The rear surface of the support 10 is arcuate in configuration, and that surface closely conforms to the curvature of the front portions of an adult person's abdomen. The curvature of the rear surface of the support eliminates any need of deforming the support. The support 10 can be made of any suitable material that is substantially non-porous, is stiff, is unaffected by perspiration, will not chafe or irritate the skin, and to which the user is not allergic. One material that is very satisfactory is Plexiglas, a clear plastic material of considerable strength; such material being understood to be formed from acetone, acetone cyanohydrin, methanol, and methyl methacrylate. That material is desirable because it is relatively non-porous, is light in weight, and is readily cleaned.

The support 10 has two spaced holding surfaces 12 on the front surface thereof; and those surfaces are inclined relative to the front surface of the support 10 and are also inclined relative to each other. The planes defined by the holding surfaces 12 converge in front of and below the support 10; and those holding surfaces coact with the support 10 to provide a recess which has a generally frusto-triangular configuration in elevation and plan.

An opening 14 is provided in the support 10, and that opening is spaced between the holding surfaces 12. Four openings 15 are provided in the upper and lower surfaces of the support 10; two of the openings 15 being in the top surface and two of the openings 15 being in the bottom surface of the support 10. The openings 15 are close to the side edges of the support 10. The top and

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bottom surfaces of the support 10 are straight while the two side edges are arcuate.

The numeral 16 denotes a pouch of thin, flexible, moisture-resistant, non-absorbent material. A number of plastic materials and treated fabrics could be used but polyethylene is preferred because of its superior strength and durability. The pouch 16 has an upper portion which is somewhat wider than the space between the two holding surfaces 12 on the support 10 and which is approximately as high as the support 10, and it has a bottom portion 20 which is considerably wider and deeper than the support 10. The pouch 16 can be made in a number of ways, but it is preferably made by heat-sealing two pieces of polyethylene together.

The material of which the pouch 16 is made must be thin enough and flexible enough so the rear wall of that pouch can be fitted into the recess formed by the holding surfaces 12 and the front surface of support 10. At such time, the front wall of pouch 16 will extend forwardly of the support 10 and its holding surfaces 12. The pouch 16 has an opening 18 in the rear wall thereof; and when the rear wall of pouch 16 is fitted into the recess, formed by holding surfaces 12 and the front surface of support 10, the opening 18 will be in register with the opening 14 in support 10. The opening 18 is the same size as opening 14 and will be immediately adjacent that opening, and thus any discharge from the surgical opening has immediate and full access to pouch 16. This discharge will move from opening 18 to the large bottom 20 of the pouch, and that bottom can be made large enough to receive all of the discharge normally expected from the surgical opening. The top of the pouch 16 is not sealed but instead is left open, and it will remain open while the pouch is in use.

The numeral 22 denotes a retainer which is used with the support 10. It is desirable to make this retainer of the same material as support 10, but retainer 22 can be made of any suitable material. The retainer 22 has an opening 24 in the approximate center thereof, and that opening is the same size as the opening 14 in support 10 and the opening 18 in the pouch 16. The side edges of the retainer 22 define planes which converge in front of and below the retainer, and which are generally parallel to the planes defined by the holding surfaces 12 on support 10. The side edges of retainer 22 coact with the front and rear surfaces of that retainer to give that retainer a generally frusto-triangular configuration in elevation and plan; and those side edges fit between the holding surfaces 12 on support 10.

The retainer 22 is dimensioned so it can fit within the top portion of pouch 16 and so the pouch and retainer can both fit within the recess formed by the holding surfaces 12 and the front surface of support 10. When the retainer 22 and pouch 16 are positioned between holding surfaces 12 on support 10, the side edges and rear wall of that retainer will press the rear wall of the pouch tightly against the holding surfaces 12 and front surface of support 10. The clearance between the rear wall of pouch 16 and the holding surfaces 12 and front surface of support 10 will preferably be so small that it will be scarcely visible to the unaided eye; that clearance being greatly exaggerated in Fig. 2 for the purposes of illustration. The engagement of retainer 22 and pouch 16 with support 10 will place the openings 14, 18 and 24 in register, thus providing a large unobstructed passage for the discharge from the

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surgical opening; and the holding surfaces 12 of support 10 and the side edges of retainer 22 will coact to resist further downward movement of pouch 16 or retainer 22.

The support 10 and its retainer 22 are held in position adjacent a surgical opening in the anatomy of the user by a belt 28 which has relatively non-elastic portions adjacent the support 10 and has a readily extensible portion 30 oppositely disposed of that support. The relatively non-elastic portions of belt 28 are preferably of a washable, strong fabric such as duck, and the readily extensible portion 30 is preferably of a washable elastic. Because the readily extensible portion 30 is disposed on the opposite side of the user's anatomy from the support 10, any yielding of the belt must occur on the opposite side of the user's anatomy; and that yielding will have little or no effect upon the position of the support 10. As a result, the user can bend, stoop, stretch, and turn without causing the support 10 to change position. An adjusting element 31, of usual design and construction, is provided intermediate the ends of the readily extensible material 30 to enable one size belt to accommodate a number of persons of different sizes. Hook and loop fasteners 32, of usual design and construction, are also provided intermediate the ends of the portion 30 to facilitate the fitting of the belt and support around the body of the user.

The belt 28 is secured to the support 10 by spring hooks 26 which pass through headings at the ends of the belt 28, and the hooks seat in the openings 15 in the top and bottom of the support 10. These hooks provide full support for the top and bottom of the support 10; but they can easily be separated from the support 10 by bending them until one or the other of their ends slips out of one of the openings 15, and they can easily be separated from the belt 28 by withdrawing them from the headings at the ends of that belt. As a result, each and every one of the elements of the apparatus provided by the present invention can be separated from the other elements, and all of those elements can be fully cleaned and sterilized.

In use, the rear surface of the support 10 is placed directly against the bare skin of the user; and this is very desirable since that surface is smooth and is completely free from rough spots. No part of the retainer, pouch, or belt can interpose itself between the support and the user's skin, and thus complete freedom from raw edges is fully assured. The support 10 will be set so the opening 14 therein encircles the surgical opening in the anatomy of the user. Thereafter the belt 28 will be passed around the body of the user, and the adjustable element 31 adjusted to place a slight tension in the resilient portion 30 when the hook and loop fasteners 32 are closed. This tension need not be great since the support is light in weight, is curved to fit the body and will thus not need to be deformed, and will not tend to dislodge itself from its position adjacent the surgical opening.

The small amount of tension required in the belt 28 is of great value since it minimizes perspiration of the skin beneath the belt, thus keeping the belt and the support from becoming slippery from perspiration. In addition, that small amount of tension obviates the need of a wide, heavy belt which would hamper the movements of the user and which would roll and become uncomfortable.

Once the support 10 has been set in position

adjacent the surgical opening, the belt 28 will hold it there; and thereafter the retainer 22 can be slipped inside the pouch 16 through the open top thereof and can be set so the opening 24 in the reainer 22 is in register with the opening 18 in the pouch 16. The front wall of the pouch 16 can then be grasped and drawn away from the front surface of retainer 22, thereby pulling the rear wall of pouch 16 tightly against the rear surface and the side edges of retainer 22. When this is done, the rear wall of pouch 16 acts as a skin or coating for the retainer 22; and that retainer 22 and pouch 16 can be handled as a unit and can be inserted between the holding surfaces 12 on support 10. As the retainer 22 and pouch 16 move downwardly between the holding surfaces 12, the openings 24 and 18 in retainer 22 and pouch 16 will move into register with opening 14 in support 10; and those openings will be held in register thereafter by the coaction of holding surface 12 and the side edges of retainer 22. Even if the discharge from the surgical opening were to be quite heavy, the weight of that discharge could not displace the pouch 16 or retainer 22 because the wedging action of holding surfaces 12 and the side edges of retainer 22 increases as the downward forces on retainer 22 increase. As a matter of fact, the weight of the discharge will merely tend to seat the pouch 16 and retainer 22 more solidly in support 10. Once the retainer 22 and pouch 16 have been set in position in support 10, the front wall of the pouch can be released; and thereafter its upper end will assume the position shown in Fig. 2 and serve as a vent.

The flexibility of the material of which the pouch 16 is made is such that the front wall of that pouch will bend and flatten out beneath the clothing of the user and thus be inconspicuous, but will permit that front wall to bend and yield as the discharge from the surgical opening passes through the opening 18 in the pouch 16. Any gases that escape with the discharge will readily be vented through the open top of the pouch 16; and that top will always be held vertically above the opening 18 by the support 10 and retainer 22, thus preventing accidental removal of the contents thereof.

When, after one or more discharges, the pouch 16 requires emptying, the user need only retire, grasp the front wall of the pouch 16 tightly enough to cause it to hold retainer 22, and then move the pouch 16 and retainer 22 upwardly. A piece of disposable tissue can be held in readiness to clean the opening 14 in the support 10 and to clean the exposed skin between the surgical opening and the periphery of opening 14. The walls of the pouch 16 immediately below the bottom of retainer 22 can then be pressed together to force the retainer 22 upwardly through the open upper end of pouch 16, thus making it possible to grasp the upper end of retainer 22 with a piece of disposable tissue. In this way, the pouch 16 and retainer 22 are separated from the support 10, and the retainer 22 is separated from the pouch 16 without any risk of the user's hands contacting the discharge from the surgical opening.

The retainer 22 can be cleaned with water, if available, or with a piece of disposable tissue, and the pouch 16 can be cleaned or can be discarded. The retainer can then be inserted within the cleaned pouch or a fresh pouch, and the retainer and pouch assembled with the support. The entire procedure requires but a few seconds,

and it can be done neatly without undressing to any substantial degree.

With either of these constructions, great freedom of movement can be enjoyed by the user; and users of these constructions have been enabled to play athletic games such as football, basket ball and tennis, and they have also been enabled to move quickly, as in dancing, hiking, or the like. The constructions also do not interfere with bending of the limbs since the pouch will readily yield if engaged by a limb. Moreover, the user is more willing to engage in activities since the constructions do not bulge or show through the user's clothing.

The constructions can be made quite compact; supports and retainers usable for colostomy and ileostomy patients being no more than a quarter of an inch ($\frac{1}{4}$) thick each. The pouches can be made of material of about two hundredths (0.02) of an inch thick; thus making the overall thickness of the apparatus less than one half ($\frac{1}{2}$) an inch. The support is approximately four (4) inches wide and three (3) inches high and the opening 14 is approximately two (2) inches in diameter. Consequently the support 10 has a very substantial area in contact with the body and it avoids undue pressures on the area adjacent the surgical opening; and this is desirable since it avoids discomfort for the user. The pouch is about four (4) inches wide at the top and about five and one half ($5\frac{1}{2}$) inches wide at the bottom; and the overall length of the pouch is about ten (10) inches. The relatively non-elastic portions of belt 28 are about three and one half ($3\frac{1}{2}$) inches wide while the readily extensible portion 30 is about one half ($\frac{1}{2}$) inch wide.

Whereas two preferred embodiments of the present invention have been shown and described, it should be obvious to those skilled in the art that various changes may be made in the form of the invention without affecting the scope thereof.

What I claim is:

1. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support of stiff material, said support having a curved surface thereon, said curved surface being adapted to engage that portion of the anatomy of the user which surrounds said surgical opening, an opening through said support, holding surfaces on said support, said holding surfaces defining planes that converge in front of and below said support, said holding surfaces co-operating with a surface on said support to define a recess that is frusto-triangular in elevation and plan, a pouch spaced from the user by said support, said pouch being of flexible material that can be bent and fitted between the holding surfaces on said support, an opening adjacent the top of said pouch to vent gases, an opening in said pouch below said top to permit inlet of discharge, said inlet opening being registerable with the opening in said support, said pouch being bendable by the clothing of the wearer to lie flat against said support but also being bendable to permit passage of discharge into said pouch, a retainer adapted to be wholly disposed within said pouch and to releasably secure said pouch to said support, an opening in said retainer that is registerable with said inlet opening in said pouch and said opening in said support, the edges of said retainer defining planes that converge in front of and below said retainer, said

retainer being of frusto-triangular configuration in elevation and plan, and a belt to hold said support adjacent a surgical opening, said belt having wide, relatively inflexible portions adjacent said support but having a narrow, readily-extensible portion oppositely disposed of said support, said belt being releasably secured to said support, said pouch being bendable to permit grasping of said retainer without requiring the user's hands to contact said retainer.

2. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support of stiff material, said support having a curved surface thereon, said curved surface being adapted to engage that portion of the anatomy of the user which surrounds said surgical opening, an opening through said support, holding surfaces on said support, said holding surfaces defining planes that converge in front of and below said support, said holding surfaces cooperating with a surface on said support to define a recess that is frusto-triangular in elevation and plan, a pouch spaced from the user by said support, said pouch being of flexible material that can be bent and fitted between the holding surfaces on said support, an opening adjacent the top of said pouch to vent gases, an opening in said pouch below said top to permit inlet of discharge, said inlet opening being registerable with the opening in said support, said pouch being bendable by the clothing of the wearer to lie flat against said support but also being bendable to permit passage of discharge into said pouch, a retainer adapted to be wholly disposed within said pouch and to releasably secure said pouch to said support, an opening in said retainer that is registerable with said inlet opening in said pouch and said opening in said support, the edges of said retainer defining planes that converge in front of and below said retainer, said retainer being of frusto-triangular configuration in elevation and plan, and a belt to hold said support adjacent a surgical opening.

3. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support of stiff material, said support having a curved surface thereon, said curved surface being adapted to engage that portion of the anatomy of the user which surrounds said surgical opening, an opening through said support, holding surfaces on said support, said holding surfaces cooperating with a surface on said support to define a recess that is frusto-triangular in elevation and plan, and a retainer, said retainer being of frusto-triangular configuration in elevation and plan.

4. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support of stiff material, said support having a curved surface thereon, said curved surface being adapted to engage that portion of the anatomy of the user which surrounds said surgical opening, an opening through said support, holding surfaces on said support, said holding surfaces defining planes that converge in front of and below said support, a pouch spaced from the user by said support, said pouch being of flexible material that can be bent and fitted between the holding surfaces on said support, an opening adjacent the top of said pouch to vent gases, one wall of said pouch having a portion thereof that is below said opening and is selectively movable toward and away from said

support to selectively restrict and prevent the flow of gases to said opening, an opening in said pouch below said top to permit inlet of discharge, said inlet opening being registerable with the opening in said support, said pouch being bendable by the clothing of the wearer to move toward and lie flat against said support and largely close said vent opening but also being bendable to permit passage of discharge into said pouch and to permit opening of said vent opening, and a retainer that has edges which are registerable with said holding surfaces on said support and that engages said pouch and secures said pouch to said support, the edges of said retainer defining planes that converge in front of and below said retainer.

5. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support, an opening through said support, a pouch spaced from the user by said support, an opening adjacent the top of said pouch to vent gases, one wall of said pouch having a portion thereof that is below said opening and is selectively movable toward and away from said support to selectively restrict and permit the flow of gases to said opening, a second opening in said pouch that is registerable with said opening in said support, said pouch being bendable by the clothing of the wearer to move toward and lie flat against said support and largely close said vent opening but also being bendable to permit passage of discharge into said pouch and to permit opening of said vent opening, and a retainer that is registerable with said support and that engages said pouch and releasably secures said pouch to said support.

6. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support, an opening through said support, a pouch spaced from the user by said support, an opening adjacent the top of said pouch to vent gases, one wall of said pouch having a portion thereof that is disposed below said opening and is selectively movable toward and away from another wall of said pouch to selectively restrict and permit the flow of gases to said opening, a second opening in said pouch that is registerable with said opening in said support, a retainer that is registerable with said support and that secures said pouch to said support, and interfitting surfaces on said retainer and said support, said pouch being of flexible material and bending and fitting between the interfitting surfaces on said retainer and said support.

7. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support, an opening through said support, holding surfaces on said support, a pouch, an opening in said pouch that is registerable with said opening in said support, a retainer that is dimensioned to fit between said holding surfaces on said support and that engages said pouch and releasably secures said pouch to said support, an opening in said retainer that is registerable with said openings in said pouch and said support, the edges of said retainer having surfaces complementary to the holding surfaces on said support, and a second opening in said pouch, said second opening in said pouch being larger than said retainer and serving as a vent, said retainer being dimensioned to be insertable into said pouch through said second opening and to fit wholly within said pouch, the wall of said pouch

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having a portion thereof that is disposed below said second opening and is selectively movable toward and away from another wall of said pouch to selectively restrict and permit the flow of gases to said second opening.

8. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support, an opening through said support, holding surfaces on said support, a pouch spaced from the user by said support, an opening adjacent the top of said pouch to vent gases, one wall of said pouch having a portion thereof that is below said opening and is selectively movable toward and away from said support to selectively restrict and permit the flow of gases to said opening, a second opening in said pouch that is registerable with said opening in said support, said pouch being of flexible material that can be bent and fitted between the holding surfaces on said support, said pouch being bendable by the clothing of the wearer to move toward and lie flat against said support but also being bendable to permit passage of discharge into said pouch, a retainer that is dimensioned to fit wholly within said pouch and is dimensioned to fit between said holding surfaces on said support and that engages said pouch and releasably secures said pouch to said support, and an opening in said retainer that is registerable with said second opening in said pouch and said opening in said support, the edges of said retainer having surfaces complementary to the holding surfaces on said support.

9. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support, an opening through said support, holding surfaces on said support, a pouch, an opening in said pouch that is registerable with said opening in said support, a second opening in said pouch to serve as a vent, one wall of said pouch having a portion thereof that is disposed below said second opening and is selectively movable toward and away from another wall of said pouch to selectively restrict and permit the flow of gases to said opening, and a retainer that engages said pouch and releasably secures said pouch to said support, said retainer being held by the holding surfaces on said support, said retainer being dimensioned to be wholly disposed within said pouch, said second opening being larger than said retainer to permit the inser-

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tion of said retainer into said pouch through said second opening.

10. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support, an opening through said support, holding surfaces on said support, said holding surfaces defining elongated, flat planes that converge in front of and below said support, a pouch, an opening in said pouch that is registerable with said opening in said support and a retainer, the edges of said retainer defining elongated, flat planes that converge in front of and below said retainer, said retainer having its edges registerable with said holding surfaces on said support and engaging said pouch to secure said pouch to said support.

11. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support, an opening through said support, elongated, flat holding surfaces on said support that are inclined relative to each other to provide a wedging action, a pouch, an opening in said pouch that is registerable with said opening in said support, and a retainer, said retainer having surfaces thereon which are registerable with said surfaces on said support and engaging said pouch to releasably secure said pouch to said support.

12. Apparatus that can be placed adjacent a surgical opening to receive and hold the discharge from that opening and that comprises a support of stiff material having the form of an arcuate plate, an opening through said support, a pouch, an opening in said pouch that is registerable with said opening in said support, spaced guides on said support, and a retainer, said guides being spaced apart to receive and hold said retainer, said retainer engaging said pouch and securing said pouch to said support, said guides being elongated and flat.

HENRY J. KLOTZ.

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