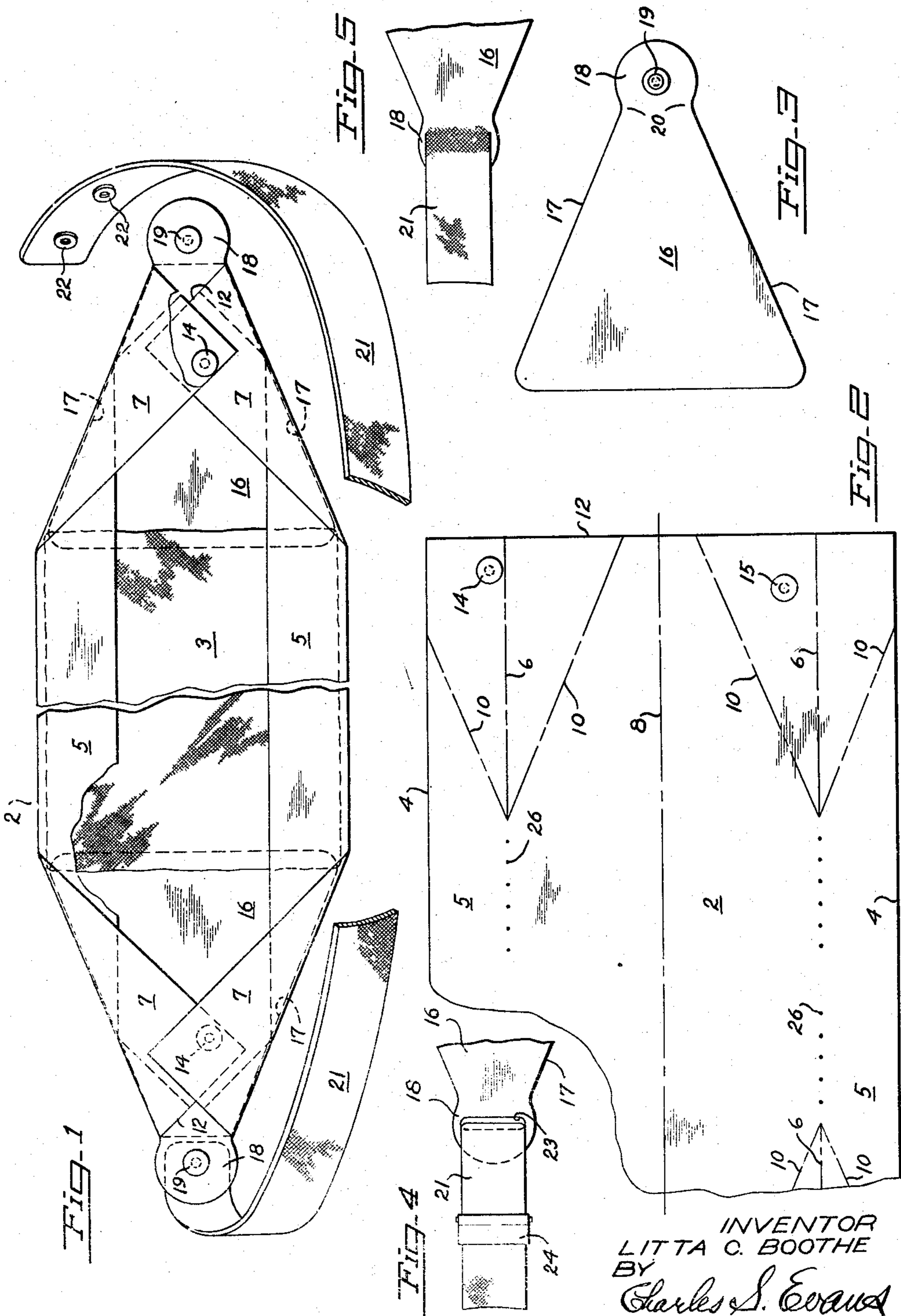


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SURGICAL APPLIANCE  
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## SURGICAL APPLIANCE

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My invention relates to surgical appliances; and particularly to a colostomy belt for use by patients who have undergone colostomy operations.

One of the objects of my invention is the provision of a colostomy belt adapted to hold a pad of absorbent disposable material in place on the body of the wearer over the colostomy area.

Another object is the provision of a belt which may be easily removed and cleaned for further use.

Still another object is the provision of a colostomy belt which is simple in construction, economical to make and unobjectionable when worn.

My invention possesses other objects and features of value, some of which, with the foregoing, will be set forth in the following description of my invention. It is to be understood that I do not limit myself to the showing made by the said description, and the drawings, as I may adopt variant forms of my invention within the scope of the appended claims.

Referring to the drawings: Fig. 1 is an elevational view showing the colostomy belt of my invention with the pad in place and ready for use. A portion of the figure has been broken away to shorten the view. Fig. 2 is a fragmentary plan view showing the flat sheet, and indicating the fold lines along which the sheet is folded for use.

Fig. 3 is a plan view of an anchor plate showing one form of connection to the belt; and Figs. 4 and 5 are plan views of variant forms of the connecting means. All of the views are shown on a reduced scale.

Broadly, the surgical appliance of my invention comprises a receptacle or envelope for holding a pad of absorbent material to be worn by a patient who has undergone a colostomy operation. The receptacle is formed from a flat sheet of moisture resistant material substantially rectangular in shape. Opposite marginal edge portions of the sheet are folded in to provide a marginal portion or edge for engaging or retaining the pad; and at each end, a tapered pocket is formed by the folding in of the folded corners. Means are provided which engage under the folded portions for attachment to a belt.

In terms of greater detail, the surgical appliance of my invention comprises a flat sheet of moisture resistant material folded to form a receptacle for an absorbent pad 3, as shown in Fig. 1 of the drawings. The sheet may be selected from a wide range of materials. Hospital

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sheeting or a rubberized or plastic coated fabric is preferred. The requirements are that the sheet material be moisture resistant and of a character and texture which will be comfortable when worn against the body of the wearer. The pad is conveniently of the type that is composed of layers of absorbent loosely felted sheets preferably treated with a wetting-out agent, and faced on each side with gauze.

The basic unit is a flat long rectangular sheet. In forming the receptacle from the sheet, each of two opposite longitudinal edges 4 of the sheet is first folded over on to the body of the sheet to provide a marginal portion 5 extending the entire length of the sheet. The marginal portion is of a width sufficient to lend stability to the sheet, and to overlie the marginal edge of the pad and retain it in the receptacle. A substantial area of sheeting is thus left exposed between the edges 4, as the effective area of the pad of absorbent material. Dashed lines 6 indicate lines of fold. Fig. 2 illustrates a satisfactory proportion of parts. Other convenient dimensions and proportions may be chosen.

At each end, the longitudinally folded sheet is further folded to provide anchor tabs 7. The tabs are preferably formed by folding or turning in toward the longitudinal center line 8, the ends of the folded margins 5 so that they are in reverse symmetry with respect to the center line. The folds occur along the lines 10, which intersect the fold lines 6 at an angle and at a point spaced from the end edge 12 of the sheet. The points of intersection of the fold lines 10 with the end edge 12 of the sheet are spaced on either side of the longitudinal center line 8, the space between the points of intersection forming the throat of a tapered pocket formed at each end of the receptacle between the overlapping anchor tabs.

In order that the tabs may be secured in their folded position a plurality of fastener elements comprising the socket element 14 and the stud element 15 are fixed to the sheet; and each is located on the sheet in a position such that when the anchor tabs are folded to shape the pocket, the companion elements at each end lie in interengageable alignment. The positional placing of these stud and socket elements are indicated in approximately correct position in Fig. 2, both elements facing downwardly on the underside of the receptacle sheet as shown. When so aligned, the fastener elements may be engaged by applying light pressure. Thus held in folded position, the tabs form the tapered pocket at each end of



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the sheet; and each pocket provides a snug seat for the engagement of the anchor plate 16.

There are preferably two anchor plates provided, one at each end of the receptacle, each being formed from a sheet of moisture resistant material such as one of the sheet plastics, and being somewhat stiffer than the sheet 2. The two opposite edges 17 of the plate converge into a rounded end portion or head 18 at one end of the plate. The angle of inclination of the edges to a longitudinal center line passing through the plate is equal to the angle of inclination of the fold line 10 to the center line 8. This equality insures a uniform distribution of stresses along the entire length of fold 10 when the anchor plate is inserted in the pocket and engaged by the folds. Preferably, the anchor plates are formed with a restriction or neck 20 between the body of each plate and the head 18. This permits the head to be thrust through the throat for placement of the anchor plate in the receptacle, but prevents the head from falling back through the throat.

The head 18 of each plate is provided with a stud element 19 of preferably the stud and socket type of fastener. A belt 21 carries one companion or socket fastener element 22, at one end and one or more of them at the opposite end. For adjustments to accommodate persons of different size, the belt carries a plurality of fastener elements at one end, leaving it to the user's choice to snap on the fastener which will give the greatest comfort.

Other adjustment means may be utilized, such as the one shown in Fig. 4, wherein the head of the anchor plate is provided with a slot 23 through which the belt passes, the doubled over end being caught under a clasp 24 of well known type. This construction allows for any amount of adjustment. Another modification is shown in Fig. 5; one end of the belt being secured directly to the head of the anchor plate by the application of heat and pressure to the head of the plate. With this construction, adjustments are made at the other end of the belt by a plurality of fasteners or other suitable means.

The main unit 2 of my colostomy belt is constructed conveniently from sheet material such as hospital sheeting of the proper weight and of a width having selvage edges 4. The end edges 12 result from cutting lengths from the long piece and need not be finished. The lines 6 of proper folding to provide the right width of margin 5 are preferably indicated on the sheet by an inch or two of dots 26 which can be readily printed in the same operation when the fasteners are applied and the long piece cut to length. The fold lines 10 need not be indicated since they fall in the correct places when the fastener elements 14 and 15 are snapped together.

I claim:

1. A surgical appliance constituting a receptacle for a pad of absorbent material and comprising a sheet of moisture resistant material, opposite longitudinal edges of the sheet being folded over to form opposite sides of the receptacle, an anchor tab folded from each corner of the longitudinally folded sheet to form tapered pockets constituting opposite ends of the receptacle, interengageable fastener elements fixed to

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the sheet and within the areas of the unfolded tabs and arranged to lie in interengaging alignment when the tabs are folded, an anchor plate engaged in each of said tapered pockets when formed, and a belt releasably connecting the anchor plates.

2. A surgical appliance constituting a receptacle for a pad of absorbent material and comprising a sheet of moisture resistant material folded to form the receptacle, fastener elements fixed adjacent edges of the sheet and lying in interengaging alignment in the folded condition of the sheet forming said receptacle, a belt, means securing one end of the belt to one end of the folded sheet forming the receptacle, and means securing the opposite end of the belt to the opposite end of the folded sheet forming the receptacle including a stiff anchor plate of solid and non-absorbent material detachably engaging the receptacle in one of its folded ends.

3. A surgical appliance constituting a receptacle for a pad of absorbent material and comprising a sheet of moisture resistant material folded to form the receptacle, fastener elements fixed adjacent edges of the sheet and lying in interengaging alignment in the folded condition of the sheet forming said receptacle, a wedge-shaped anchor plate detachably engaging the receptacle at each folded end thereof, and a belt connected at its opposite ends to said anchor plates at the opposite ends of said receptacle.

4. A surgical appliance constituting a receptacle for a pad of absorbent material and comprising a sheet of moisture resistant material folded to form the receptacle, fastener elements fixed adjacent edges of the sheet and lying in interengaging alignment in the folded condition of the sheet forming said receptacle, an anchor plate having an enlarged area detachably engaging the receptacle within each folded end thereof and with a more restricted area extending therebeyond, and a belt connected at its opposite ends to said anchor plates at the opposite ends of said receptacle.

5. A surgical appliance constituting a receptacle for a pad of absorbent material and comprising a sheet of moisture resistant material folded along opposite sides and across opposite ends to form the receptacle, fastener elements fixed adjacent edges of the sheet and lying in interengaging alignment in the folded condition of the sheet forming said receptacle, a wedge-shaped anchor plate engaging the receptacle in the end folds at each end, and a belt releasably connecting said anchor plates.

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