April 26, 1966 J. B. FANSLER 3,247,846

SHIELDING APPLIANCE

Filed July 10, 1963

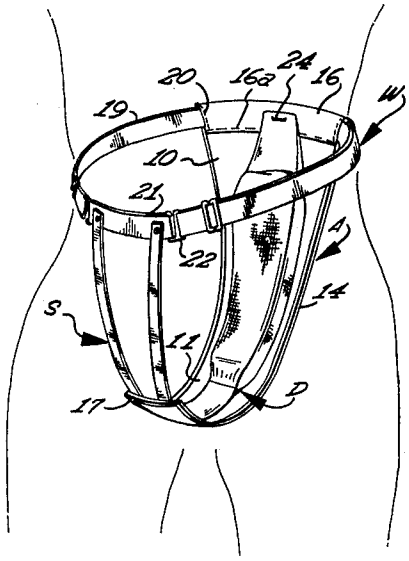


FIG 1

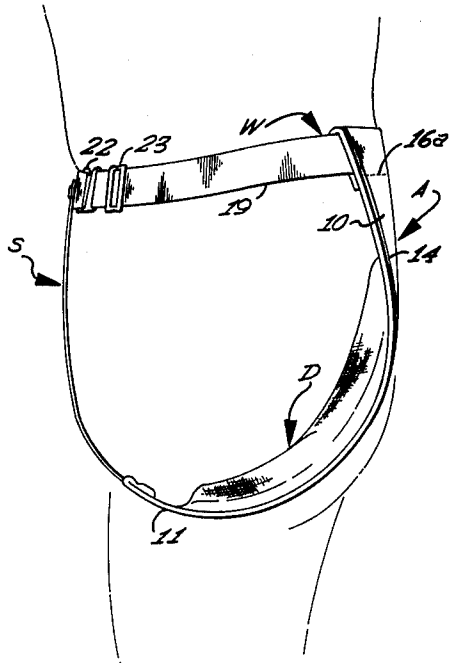


FIG 2

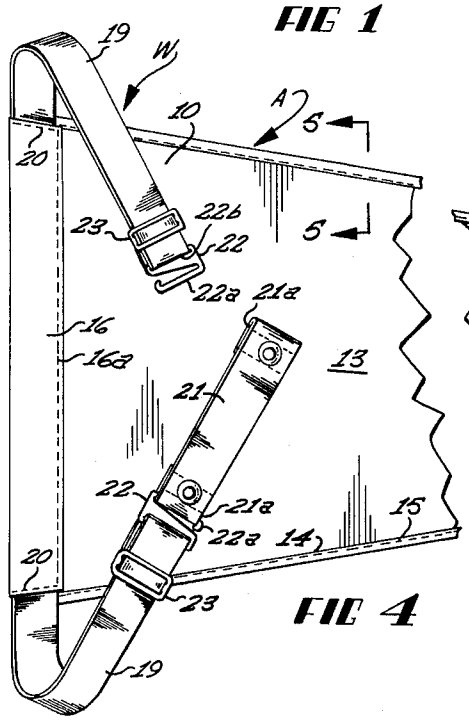


FIG 4

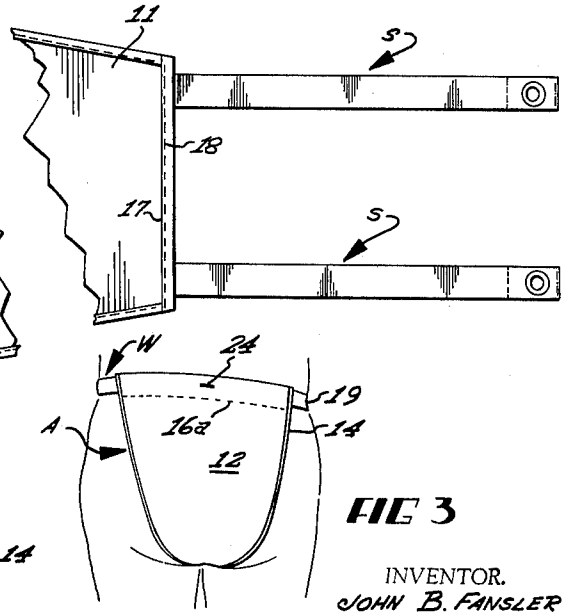


FIG 3

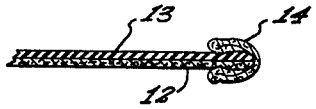


FIG 5

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United States Patent Office 3,247,846 Patented Apr. 26, 1966

3,247,846

SHIELDING APPLIANCE

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Filed July 10, 1963, Ser. No. 294,098
5 Claims. (Cl. 128—171)

This invention relates to an appliance for protectively covering and holding surgical dressings in place in the anal, perineal, gluteal and sacral regions, and for protecting clothing and bed linens from medication applied to and drainage from incisions, wounds or sores in these regions.

One object of this invention is to provide an appliance which is capable of comfortable holding anal, perineal, gluteal or sacral dressings comfortably in place without binding and without the use of tape, and which is capable of preventing soiling or staining of clothing or bed linens, and which can be worn by both male and female patients.

Another object is to provide an appliance of the type above described which is readily adjustable as to size and which can be worn by both hospitalized or bed confined and ambulatory patients and which fits comfortably regardless of the position assumed by the wearer.

Still another object is to provide an appliance of the type above described which can be easily installed on and removed from unconscious or paralyzed patients and those having little or no control over their own movements with a minimum amount of movement and manipulation of the patient.

Still another object is to provide an appliance of the type above described which enables the doctor to examine the patient, enables the dressings held by the appliance to be changed, and enables the patient to urinate or have a bowel movement without necessitating complete disengagement or removal of the appliance from the patient.

Still another object is to provide an appliance of the type above described which completely covers the usual post-operative areas in the aforementioned regions and which covers the major portion of the gluteal and sacral regions so as to be able to cover and protect those sores, wounds, incisions, etc., which are likely to occur in those regions.

Still another object is to provide an appliance of the type above described which provides soft smooth skin engaging surfaces which will not abrade and irritate the skin of the wearer, which can be easily and thoroughly laundered and reused and which is so designed as to prevent the entrapment and collection of blood and other material draining from the wounds or sores covered thereby, which material is an excellent medium and breeding ground for the growth of material and would constitute a potential source of infection for the patient.

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

FIGS. 1, 2 and 3 are respectively perspective and side and rear elevational views of one preferred embodiment of this invention in position of use;

FIG. 4 is a plan view; and

FIG. 5 is a partial cross-sectional view taken approximately on the line 5—5 of FIG. 4.

Referring to the drawings, the illustrated appliance or device comprises a flexible apron A which is trapezoidal in shape when viewed in plan, a waistband W connected to the back of the apron, and a pair of straps or tapes S for detachably connecting the front end of the apron to the waistband.

The apron is adapted to extend from the sacral region to the genitalia, terminating short of the male genitalia and preferably terminating short of the female urethral opening, whereby the appliance can be comfortably worn by both male and female patients without interfering with urination by either. The apron covers the major portion of the sacral region, covers the intergluteal cleft and the major portion of the gluteus on both sides thereof, and also covers the anal and perineal regions, whereby it is capable of protectively holding any surgical dressing applied to these areas, such as after perineal or anorectal surgery, or after pilonidal excision.

The apron A includes an enlarged back portion 10 which is adapted to cover the major portion of the sacral and gluteal regions as illustrated. The apron is progressively forwardly tapered and narrowed to form the smaller front end portion 11 which is adapted to be inserted in the crotch portion of the wearer and is sized and shaped so as to be worn with comfort and completely cover the perineal and anal regions.

The apron is formed of two layers of material, one layer 12 (which is the outer layer in the illustrated embodiment) being a continuous sheet of smooth, flexible, soft, absorbent, durable fabric such as cotton. The other layer 13 (which is the inner layer which faces the body in the illustration) is formed of a continuous sheet of flexible, smooth, moisture-proof fabric which may be of rubberized or other suitable moisture-proof material.

The longitudinal side edges of the sheets 12 and 13 of the apron are disposed in substantially contiguous edge to edge alignment and are joined together by means of soft, smooth binding tape 14 which overlaps the marginal edges of both sheets and is secured thereto by any suitable means such as conventional machine stitching 15.

The back marginal edge portion of the apron is folded inwardly back upon itself to form the hem 16 which is secured to the main body of the apron by stitching 16*a*. The front marginal edge portion of the apron is also folded back inwardly upon itself and hemmed, said hem being overlain by soft smooth binding tape 17, the inner ends of the straps S being installed between said hem and said tape, the hem, tape and straps being fastened together by means of machine stitching 18.

The waistband W comprises a pair of elongate elastic portions 19, the rear ends of which are attached to the upper edge portion of the back 10 of the apron by installing said ends in the hem 16 and fastening them thereto by machine stitching 20, said side portions extending laterally from both sides of the apron for encircling the waist of the wearer.

The waistband also includes an elongate front portion 21 which is detachably connectable to each of the side portions 19 by means of suitable hook fasteners 22. The hook fasteners illustrated have hook portions 22*a* which are insertable in the looped or folded over end portions 21*a* of the front waistband portion 22. The fasteners 22 also include slots 22*b* which receive the free end of the side waistband portions 19, which free ends are folded back upon the main body of the sides 19 after passing through said slots, suitable buckles or clamps 23 being provided for adjustably securing the free end portions of the side portions 16 to the main body thereof, whereby the size of the waistband can be adjusted as desired.

The straps S are flexible and preferably non-elastic, the inner ends thereof being secured to the leading or front edge of the apron in the manner hereinbefore described. Suitable fastening means are provided for detachably connecting the straps S to the waistband W. In the illustrated embodiment, snap fastening means are provided for detachably fastening each of the straps S to the front portion 21 of the waistband, said snap fastening means including

the cooperating socket elements 23*a* carried by the upper end portions of each of the straps and the stud elements 23*b* carried by the front waistband portion 21.

The strap S are laterally spaced apart a sufficient distance to flank and comfortably accommodate therebetween the male genitalia and the female urethral opening.

The provision of the front snaps for detachably connecting the straps S to the waistband is a particularly desirable and important feature of the appliance of this invention since it facilitates installation of the appliance on and removal from unconscious patients or those otherwise difficult to handle with a minimum of movement and manipulation, said installation and removal being further facilitated by the hook fasteners which enable the waistband to be easily and quickly fastened and unfastened. The snap fasteners also enable the front of the apron to be easily and quickly disconnected from the waistband for movement of the apron to an out of the way position for examination of the patient by the doctor and for changing dressings without requiring unfastening and removal of the waistband and the entire appliance from the patient.

This ability to disconnect the apron from the front of the waistband and move the apron to an out of the way position also permits bowel movements without unfastening of the waistband and completely removing the appliance, and also facilitates feminine urination if the apron should interfere therewith although in most instances the latter can be overcome by a slight rearward shifting of the apron where necessary.

The appliance is ordinarily worn with the protective rubberized lining 13 towards the body, but may be reversely worn if so desired.

Any suitable dressing D may be used with the appliance and may be secured thereto by any suitable means, such as pin 24. In such circumstances, it may not be necessary to secure the dressing to the appliance.

From the foregoing, the advantages of this invention are readily apparent. The smooth one-piece construction of the apron layers, and the provision of a smooth binding tape for securing the edges thereof together provides an apron which minimizes the collection and entrapment of any tissue, debris, blood and discharge material which might serve as a breeding ground for infectious bacteria while being worn, and also enables all such foreign matter to be easily and thoroughly removed during laundering of the appliance so that it can be made completely clean and sanitary prior to the next use thereof. The soft, smooth, flexible nature of the apron layers and the binding tape minimizes any irritation of any body surfaces engaged thereby and enables the device to be worn with complete comfort. The device firmly holds the dressing covering the incision or sore firmly in place and the moisture proof rubberized lining prevents soiling of clothing and bed linens. The wide enlarged back portion of the apron enables a dressing to be held firmly in place in the sacral region and the major portion of the gluteal region and also completely covers the post operative area in the anal and perineal regions.

The advantages of the front snap which permits disconnection of the apron from the waistband and movement of the apron to an out of the way position without disengaging the waistband have already been elaborated upon hereinbefore.

It will be understood that the term male genitalia as used herein includes the scrotum.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the various parts without departing from the scope of my invention.

What I claim is:

1. A device for holding surgical dressings comprising a waistband which includes a pair of side encircling portions, a front portion, and cooperating hook and loop means carried by said portions for detachably fastening them together about the waist of the wearer, an elongate flexible apron generally trapezoidal in shape in the direction of length and adapted to extend from the sacral region to and over the perineum and terminate on the posterior side of the male genitalia, the larger end portion of said apron being attached to the back portion of said waistband, a pair of elongate laterally spaced apart straps having one end thereof attached to the smaller end portion of said apron, the other ends of said straps and the front portion of said waistband having cooperating snap fastener elements for detachably fastening said straps to said front portion, one face of said apron comprising a flexible moisture-proof sheet, the other face of said apron comprising a sheet of flexible, absorbent material, and flexible binding tape overlapping adjacent longitudinal marginal edge portions of said sheets and enclosing same therebetween and secured thereto.

2. A device for holding surgical dressings comprising a waistband which includes a pair of side encircling portions, a front portion, and cooperating hook and loop means carried by said portions for detachably fastening them together about the waist of a wearer, an elongate flexible apron generally trapezoidal in shape in the direction of length and adapted to extend from the sacral region to and over the perineum and terminating on the posterior side of the male genitalia, the larger end portion of said apron being attached to the back portion of said waistband, a pair of elongate laterally spaced apart straps having one end thereof attached to the smaller end portion of said apron, the other ends of said straps and the front portion of said waistband having cooperating snap fastener elements for detachably fastening said strap to said front portion, one face of said apron comprising a flexible, moisture-proof sheet and the other face of said apron comprising a sheet of flexible, absorbent material.

3. A device for holding surgical dressings comprising a waistband which includes a pair of side encircling portions, a front portion, and cooperating quickly operable means carried by said portions for detachably fastening them together about the waist of the wearer, an elongate flexible apron generally trapezoidal in shape in the direction of length and adapted to extend from the sacral region to and over the perineum and terminate short of the posterior side of the male genitalia, the larger end portion of said apron being attached to the back portion of said waistband, a pair of elongate laterally spaced apart straps extending between and fastened to the smaller end portion of said apron and the front portion of said waistband, one face of said apron comprising a flexible moisture proof sheet, the other face of said apron comprising a flexible absorbent sheet, and elongate flexible binding tape overlapping adjacent marginal edge portions of said sheets and enclosing same therebetween and secured thereto.

4. A device of the class described for holding surgical dressings comprising

a waist band which includes a pair of side encircling portions, a front portion and cooperating, quickly operable means for detachably fastening said portions together about the waist of the wearer,

an elongate, flexible apron having an enlarged rear portion and progressively converging longitudinal sides terminating in a relatively narrow front portion,

said apron being adapted to extend from the sacral region of the wearer to and over the perineum and terminate at its forward end, short of the posterior side of the male genitalia,

the larger rear portion of said apron being attached to the back portion of said waist band,

a pair of elongate, laterally spaced apart straps having inner ends thereof attached to the smaller forward end portion of said apron adjacent the forward corners thereof,

cooperating, quickly operable fastener elements at the outer ends of said straps and at the forward central

portion of said waist band for detachably fastening said straps in spaced relation to said front portion,

one face of said apron comprising a flexible moisture-proof sheet,

the other face of said apron comprising a sheet of flexible absorbent material,

and flexible binding tape overlapping adjacent the marginal edge portions of said sheets and enclosing the same therebetween and secured thereto.

5. The structure set forth in preceding claim 4 further characterized by

the forward end of said apron terminating in continuous transverse edge and said spaced straps diverging in the use of said device from inner ends attached to the front of said apron to their outer ends detachably connected to the central portion of said waist band.

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