

April 24, 1962

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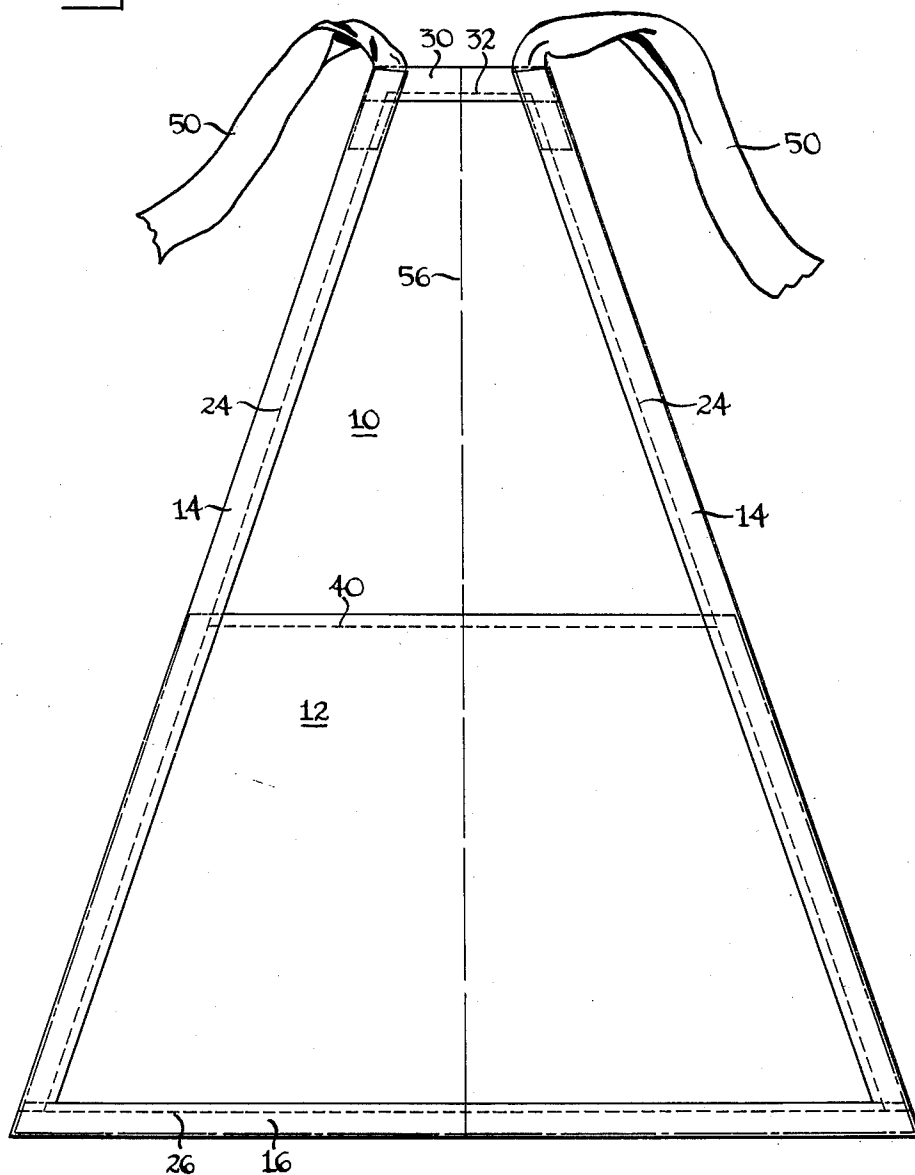
3,030,958

DISPOSABLE ABSORBENT UNIT

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3 Sheets-Sheet 1

Fig. 1



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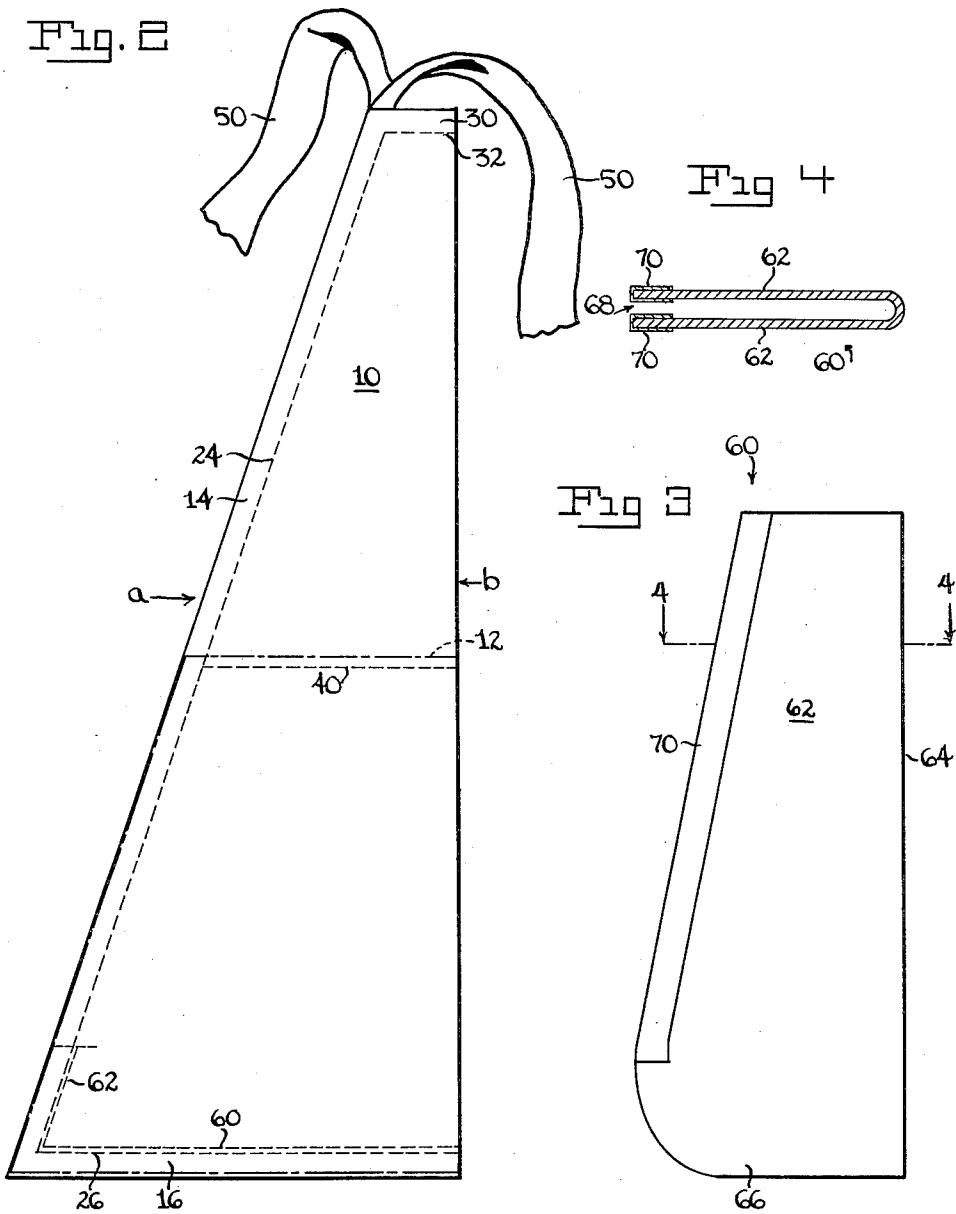
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3 Sheets-Sheet 3

Fig. 5

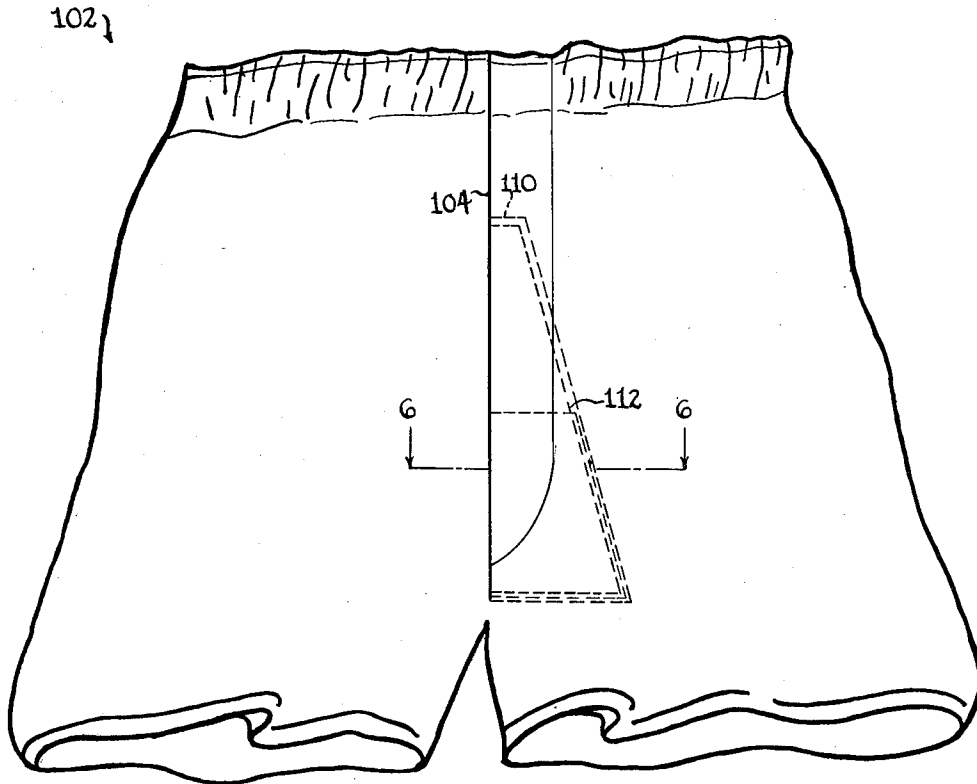


Fig. 6



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1

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DISPOSABLE ABSORBENT UNIT
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 1 Claim. (Cl. 128—294)

The present invention relates to new and useful improvements in structural refinements in a male sanitary garment and is directed more particularly to the provision of a sanitary device for enclosing the private parts of a male person possessing general utility in the arts and having in mind the health and comfort and well being of the wearer.

The invention resides in the particular arrangement, construction and relationship of the various elements, components and instrumentalities of the male sanitary pouch, as exemplified in the detailed disclosure herein-after set forth wherein the objects of the invention, as defined in the paragraphs below, will be apparent.

It is known that the male, particularly as he reaches middle or old age, exhibits tendencies to cause discharges from his private parts, which discharges are frequently uncontrollable by, and without notice to, the man concerned. Such discharges have a capacity for staining the body and/or the clothing and/or the bed clothing of the man concerned so as to cause embarrassment and annoyance, not to mention the unsightliness and the uncleanness which prevail under such circumstances.

It is a principal object of the present invention to provide an inventively novel and improved two-part embodiment of the type in which a safety or sanitary device comprising a shield having a male-organ-receiving pocket or pouch is adapted to receive and enclose the private parts of a man as he moves about in his daily work so as to prevent the contact thereof with other parts of his body and his wearing apparel, which pouch can be readily and comfortably supported relative to the wearer and can be easily removed and cleaned for further use.

A salient object hereof is to provide a covering member for the male organs in which means are employed for enclosing same under all conditions of daily life in such manner as to prevent the discharged material from leaking therethrough and thus soiling the clothes and the like.

It is a purpose hereof to more or less compensate for certain undesirable conditions frequently found in older or mature males by providing a means whereby drip-page or leakage from their private parts is collected within the garment hereof so as to prevent the escape of the fluid to other parts of the body and the consequent soiling of the outer clothing or bedding.

The garment is so constructed as to provide, when worn, for the free entrance of air to the enclosed parts of the body, so as to combat perspiration and to minimize serious irritation caused when, owing to natural functions, the body becomes wet and soiled.

The preferred construction confines the use of a moisture proof material to a small section of the crotch.

To this end, I have designed a form of moisture-proof-pocket in the crotch section provided with a rim there-around to prevent the urine from spreading to the outside of the pocket.

More importantly, the pocket hereof is so constructed as to have an enlarged area which may be positioned relative to the crotch so as to receive the genitals in such manner that when an absorbent pad is disposed in said pocket it is permitted to drop away from the body and thereinto leaving sufficient room to prevent the discharge from pressing against the body. This pad aids

2

in keeping the pocket and surrounding portions of the crotch from soil and also absorbs and holds all moisture until it is displaced for another pad.

The present invention envisions a garment, component parts of which may be made of cloth or paper or other equivalent material which is so inexpensive that it may be practicable to throw same away immediately after use. Also, the composition of such components is preferably such that it is practicable to dispose of same by flushing down a toilet, without the likelihood of clogging the toilet bowl.

Another of the chief objects hereof is to provide an improved garment of the above general description which can be easily and quickly secured to the body or undergarment of the wearer without the use of pins, buttons, metal fasteners or the like.

Still another object hereof is to provide a sanitary garment of simple construction and formed of inexpensive materials, enabling it to be produced and sold at a price commensurate with a single-use disposable character, the material employed being a high moisture-absorbent material, such for instance as cellulose, having a high degree of air permeability, a capability of rapid evaporation of moisture therefrom, and a high degree of resistance to disintegration and tearing.

A further object is to provide a retaining envelope or enclosure which will provide a high degree of tensile strength at the outer side of the garment and a non-irritating skin-engaging surface at the inner side thereof.

Among other essential objects of the invention are the following:

(a) to provide comfort for the wearer by assuring freedom from chafing.

(b) to eliminate unnecessary bulk of conventional garments of this type.

(c) to provide maximum moisture absorptive capacity.

(d) to be readily washable and/or to be readily disposable following use.

Prior garments of this general type have been relatively bulky and uncomfortable in the crotch region of the wearer, often requiring the use of metallic or other fasteners having protruding parts sometimes bearing directly against the wearer's skin. Moreover, many previous sanitary garments required the use of conventional safety pins, which in reality are not safe at all but readily subject to inadvertent opening in use, thus exposing the sharp point to the user's person.

Accordingly, it is a general object of the present invention to provide an improved male sanitary garment construction of the type described which overcomes the above mentioned difficulties which affords maximum comfort when in use, wherein the crotch piece is of minimum size and bulk so as to be inconspicuous in use and readily foldably to occupy but negligible space for ease of portability in a pocket or suitcase or the like, and which can be quickly and easily put on and properly adjusted, and enables the wearer to neatly change napkins in a relatively short time.

With these and other objects and advantages in view, some of which will be in part obvious and apparent and some of which will be in part hereinafter more fully pointed out, and to the end of attaining these and any other object and advantage reasonably appearing, it will be explained that the invention consists substantially in the combinations, constructions, and relative arrangements of parts, as described in detail hereinafter, as shown in the annexed drawings, and as defined with particularity in the appended claim forming a part hereof.

It should be understood however that these physical embodiments are only indicative of but several of the various ways, albeit the preferred exemplifications, in

which the principles of the invention may be employed and in which the component parts may be combined and arranged. The invention is not restricted to said embodiments and same are not intended to be exhaustive of, nor limiting of, the spirit hereof. That is, the precise construction of the figures of the drawing need not be slavishly followed as, of course, the sanitary device may have to be adapted or modified in accordance with the use to which it is to be put. All of this will be obvious to those skilled in the art to which the invention pertains.

The novel features which I consider to be characteristic of my invention, as to its construction and organization will be best understood from a consideration of the following detailed description forming a part of this specification; nevertheless it is to be understood that the invention is not confined to such disclosure, being susceptible of such changes and modifications as shall define no material departure from the salient features of the invention as herein expressed.

In the drawings, like characteristics of reference or numerals are employed to designate like or corresponding parts throughout the several views.

In said drawings:

FIG. 1 is a top plan view of the outer and inner components of the pocket of the invention in the open position prior to folding into the pocket-forming position;

FIG. 2 is a top plan view of the pocket of the invention in the folded pocket-forming position;

FIG. 3 is a top plan view of the insert member of the invention in the folded-pocket-forming position;

FIG. 4 is an enlarged sectional view on the line 4—4 of FIG. 3;

FIG. 5 is a front elevational view of a modified form of the invention shown in cooperative relationship with an undergarment worn by a man; and

FIG. 6 is a sectional view on the line 6—6 of FIG. 5.

Before the structure here illustrated is specifically described, it is to be again emphasized that this invention is not limited to the structural details or arrangement of parts here shown since a sanitary garment embodying the present invention may take various forms, it being susceptible of various modifications and alternative constructions. I do not thereby intend to limit the invention to the specific forms disclosed, but rather intend to embrace herein all modifications, variations, alternative constructions, and equivalents falling within the spirit and scope of the invention and within the meaning and purview and range of equivalency of this disclosure hereof.

With continued reference now to the drawings, which illustrate typical and preferred embodiments of the invention for purposes of disclosure and form a part of this specification, I have shown an appliance in which my invention may be advantageously incorporated as illustrated in FIGS. 1 and 2.

The appliance comprises an outermost covering component 10 which may be made of knitted or woven fabric or other suitable and compatible material such as cellulose wadding or other absorbent material and when spread out flat, as in FIG. 1, has a configuration which conforms generally to a triangle and an innermost lining component 12 which may be made of impervious, moisture-proof, or moisture-resistant material, such as oil skin, rubber or equivalent material and which is superposed upon the lower portion of the said outermost component in a face-to-face manner so as substantially to overlie said lower portion.

The innermost component 12 is of such dimension as to permit the hemming of the outermost component, as will now be observed.

The terms outer and inner, with reference to the components 10 and 12, are to be understood as referring to the outward and inward disposition of these parts when the garment is being worn.

The components 10 and 12 are connected to each other,

the side and bottom edges of component 12 being secured within reinforcing hems 14 and 16 respectively formed by the folding inwardly of the respective side and bottom edges of the component 10 and the stitching thereof to the main body portion as by stitching 24 and 26 respectively.

A reinforcing hem 30 is formed by the folding inwardly at the top edge of the component 10, being secured to the main body portion as by stitching 32.

Said hems 14, 16 and 30 are preferentially machine stitched to provide finished and tear-resistant edges.

The lining component 12, in addition to having its side and bottom edges secured within the hems 14, 14 and 16 of the covering component 10, has a top edge portion stitched to the member 10 as by stitching 40.

Draw strings 50 may have lower ends thereof secured to the member 10 by being receivable within the upper portions of the respective hems 14 and 14 and held therein as by the stitching 24 and 24 so as to have free outer ends extendable upwardly and outwardly from the upper side of the member 10.

The draw strings 50 may be of such length as to be encircled about the waist or girth of the wearer as an encircling belt and tied to each other or to permit the suspension of the pocket from the waist band of the wearer's underwear. The said draw strings preferentially have a high degree of resistance to stretching thus making for reliable securing of the garment with greater comfort to the wearer and permits suspension in such manner that the transmission of moisture to other garments of the wearer or to his bedding is minimized.

The draw string has the advantages of effectually maintaining the position of the garment relative to the wearer and of preventing displacement thereof.

The stitched together members 10 and 12 are then doubled over upon themselves by folding along a fold line indicated by dash lines 56 along the longitudinal major axis at the midsection of said component 10. The two identical half-sections, being symmetrical, are foldable with respect to each other along said fold line in overlying double-thickness relation, as shown in FIG. 2.

Said two half sections are then stitched to each other along their adjacent bottom edges as by stitching 60 and upwardly along a portion of the two overlapping free side edges as by stitching 62 wherefore a pocket or pouch is formed having a front edge indicated by *a* and a posterior edge indicated by *b*.

To permit air to enter within the garment, the half-sections are purposely allowed to remain unstitched to each other at the top portion thereof adjacent the hem 30 as well as to remain unstitched to each other along the balance of the side edges delineated by the adjacent hems 14 wherefore an envelope is provided of such design as not to interfere with air circulation so that rapid external evaporation of moisture may take place thus protecting the wearer's skin from the irritating and mascerating effects of too-long contact with entrapped moisture.

The front edge *a* has an opening upwardly of the stitching 62 through which the male organs are receivable, the formed pocket being of such dimension as to receive and completely enclose the private parts and having a lining within its lower portion consisting of the said impervious, moisture-proof component 12 for preventing the escape of fluid and the consequent soiling of clothing and/or bedding.

In such form, the apparatus is adapted to depend downwardly in the crotch region of the wearer, it being so shaped as to comfortably engage the crotch and, by means of the draw strings, it being detachably securable to the body or garment of the wearer to be held in proper position.

If desired, an absorbent pad or napkin, generally indicated by 60 in FIGS. 3 and 4, may be folded into two half sections 62 and 62 foldable with respect to each

other along a medial fold line 64 in overlying double-thickness relation so as to present a pair of half sections of proper overall size and configuration as to be receivable within the pocket shown in FIG. 2.

Said sections 62 and 62 may be sealed to each other along their adjacent lower portions 66 by any suitable means such as adhesive or the like and the opening 68, provided by the adjacent side edges, may be reinforced by an edging 70 of suitable material such as stiff paper which may enclose said each side edge.

Said absorbent pad or napkin may be made of cellulosic paper-like material, for instance, cellulose sulphite or other medium having a relatively soft, loose, crinkly texture, and a high moisture absorbing characteristic.

A layer of such material, as commercially produced, may comprise a number of thin sheets or films of cellulosic paper-like material which, due to their soft crinkly texture, tend to cling to each other to form a substantially homogeneous layer of soft, loose texture having a thickness, being highly absorbent, having a high degree of wet strength, and providing for air circulation, and rapid evaporation of moisture.

For the purpose of the present disclosure, the reference herein to a layer of absorbent material contemplates such a superimposed number of sheets.

The member 60 may be initially served to enclose the private organs of the wearer, whereupon same may be inserted into the pocket device of FIG. 2.

To permit air to enter within the garment an opening is preformed at the top sides of the body.

More importantly, the material is so shaped as to be conveniently disposed between the legs of the wearer.

As a modified form of the invention, and as shown in FIG. 5, the pocket may be built into a man's underwear, generally indicated by 102, the front portion of said garment adjacent one side of the fly 104 thereof serving as one side of the covering component of the appliance and to which portion a separate cloth member 110 of generally triangular configuration, being stitched along three of the four sides thereof to the front portion of said garment as by the stitching 112.

Within the pocket thus formed an innermost lining component folded into two half-sections, is inserted. One half-section is secured to the adjacent wall of the member 110 and the other half section is secured to the adjacent front portion of said garment as by stitching 114.

The aforescribed absorbent pad or napkin 60 may be employed with this modification of the invention, if desired.

It is to be further understood that the phraseology or terminology herein employed is for the purpose of description and not of limitation. Although specific terms and expressions are employed for purposes of identifying various components, they are used in a generic and descriptive sense only and not for purposes of limitation and are intended to be as generic in their application as

the art will permit. I have no intention, in the use of such specific terms and expressions, of excluding any equivalents of the features shown and described or portions thereof, various modifications being recognized as entirely possible within the scope and spirit of the invention.

Without further analysis, the foregoing is intended to so fully reveal the gist of my invention and its construction and operation that others can, by applying current knowledge, readily adapt it for various applications without omitting features which, from the standpoint of prior art, fairly constitute essential characteristics of its generic and/or specific aspects. The substitution of equivalents and other changes, modifications and alterations as circumstances may suggest or render expedient, are contemplated since the invention is susceptible of such without departing from its real spirit or underlying principles. Stated otherwise, it is not desired to limit this invention to the exact construction shown and described as the objects hereof may be attained by the use of constructions different in certain respects from that disclosed.

The invention is claimed, broadly as well as specifically, as indicated in the appended claim, and same are desired to include within the scope thereof all of said suitable variations, modifications and equivalents by which substantially the results of the invention may be obtained through the use of substantially the same or equivalent devices or means. Accordingly, limitation hereof should only be made as determined by a proper interpretation of the subjoined claim.

What is claimed as new and useful is:

A multi-part male protective device comprising, an outermost pliable pouch component of a general configuration of a triangle, an innermost lining component proportioned to overlie only the lower portion of said outermost pouch component and having its outer edges secured to said outermost pouch component, said superposed pouch and lining components being doubled upon themselves along a medial fold line along the longitudinal major axis at the midsection of said superposed pouch and lining components and being secured to each other along the adjacent bottom edges thereof and along the lower portion of the adjacent side edges thereof in pocket-forming relation to form a genital-receiving opening at one side of and a vented opening in the top of the bag-like device, and a pair of tapes secured to said superposed pouch and lining components along the peripheral lines of securement to each other for supporting the bag-like device to the body of the wearer.

References Cited in the file of this patent

UNITED STATES PATENTS

173,857	Heaney	Feb. 22, 1876
1,014,837	Merrill	Jan. 16, 1912
2,654,367	Turnham	Oct. 6, 1953