June 12, 1956 R. J. TEITLER 2,749,912

SANITARY GARMENTS

Filed Feb. 21, 1955 3 Sheets-Sheet 1

FIG. 1

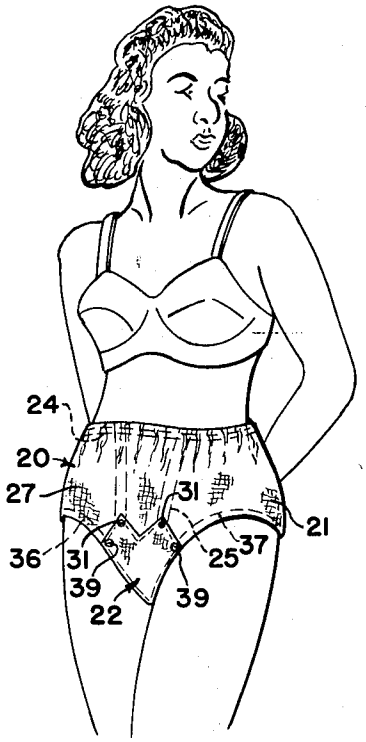


FIG. 2

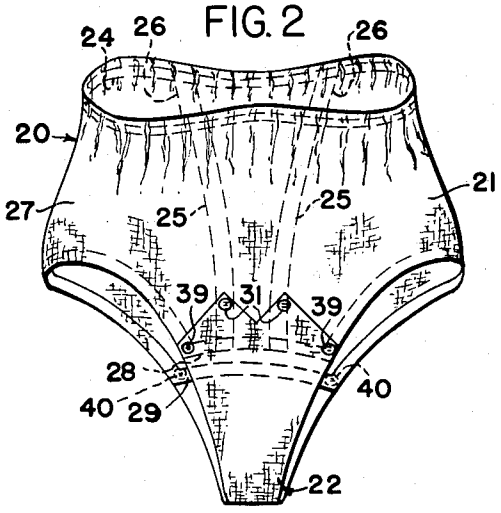
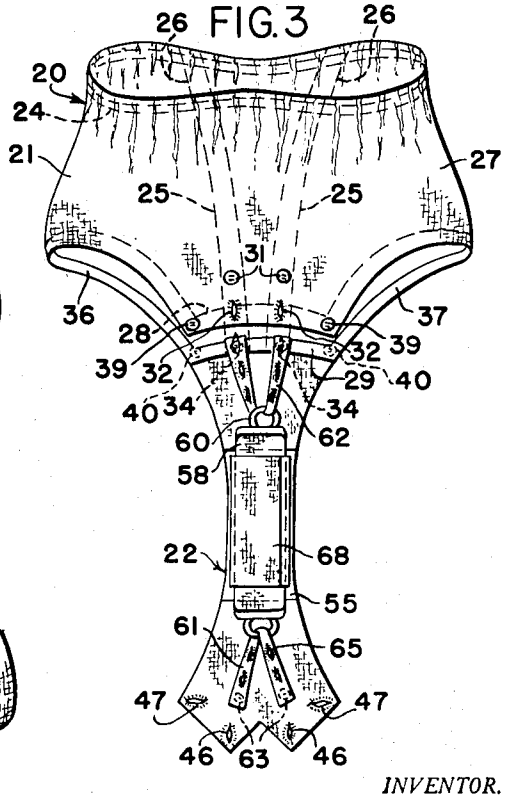


FIG. 3



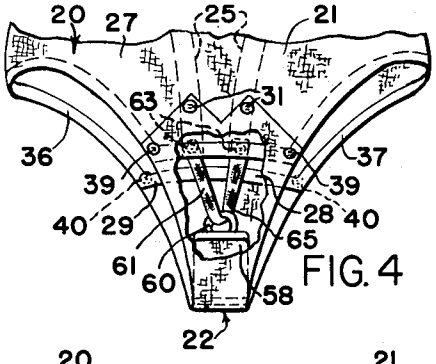


FIG. 4

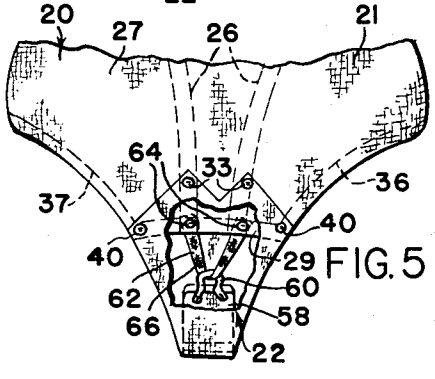


FIG. 5

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SANITARY GARMENTS

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FIG. 6

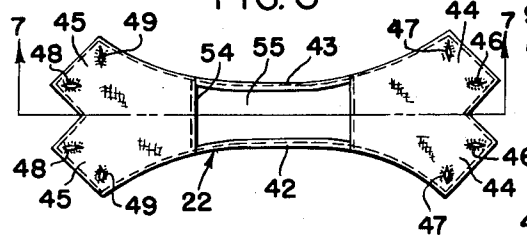


FIG. 8

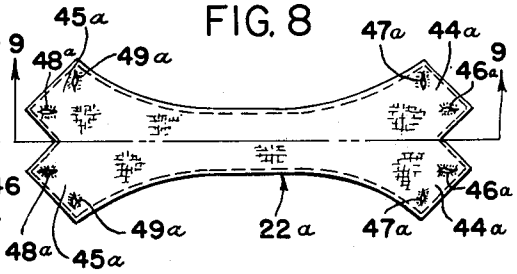


FIG. 7

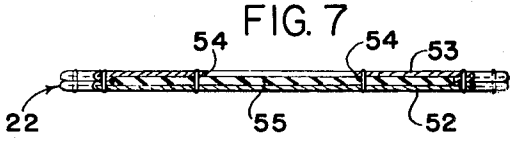


FIG. 9

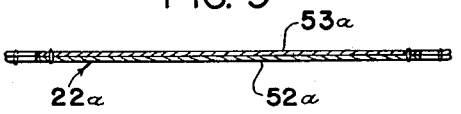


FIG. 13

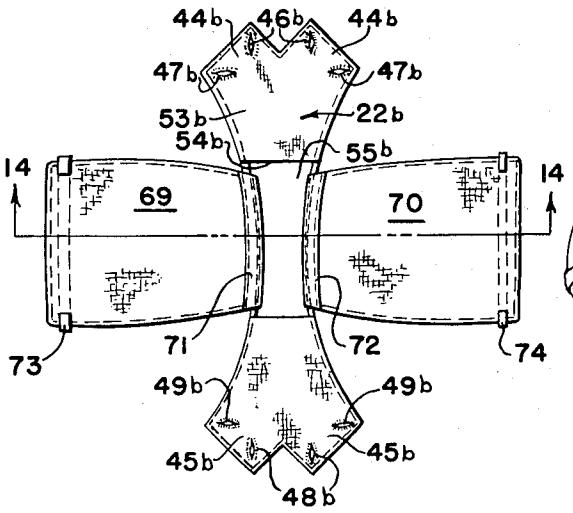
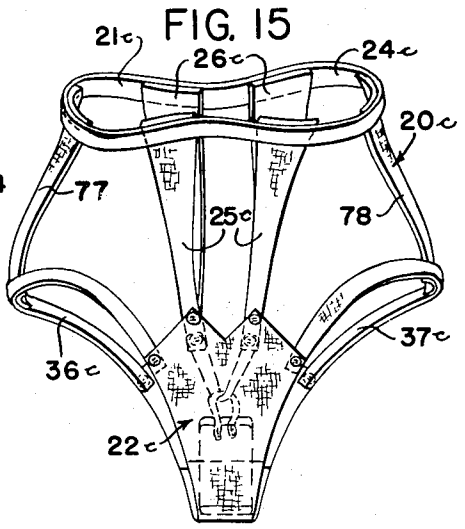


FIG. 15



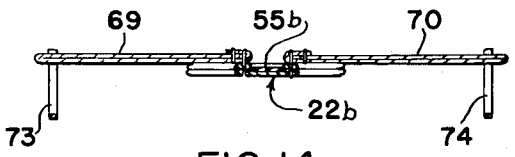


FIG. 14

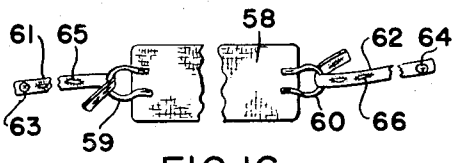


FIG. 16

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FIG. 10

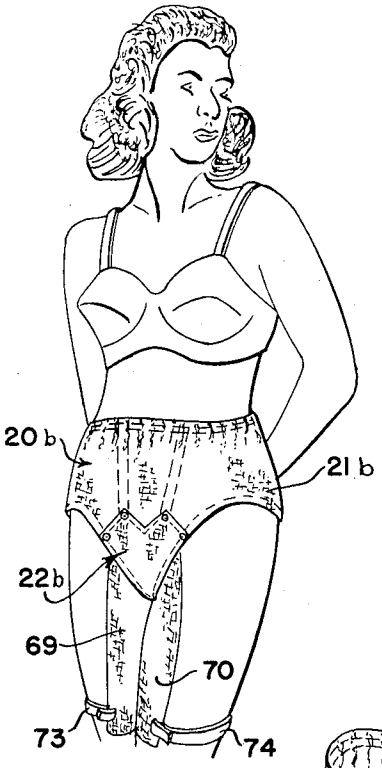
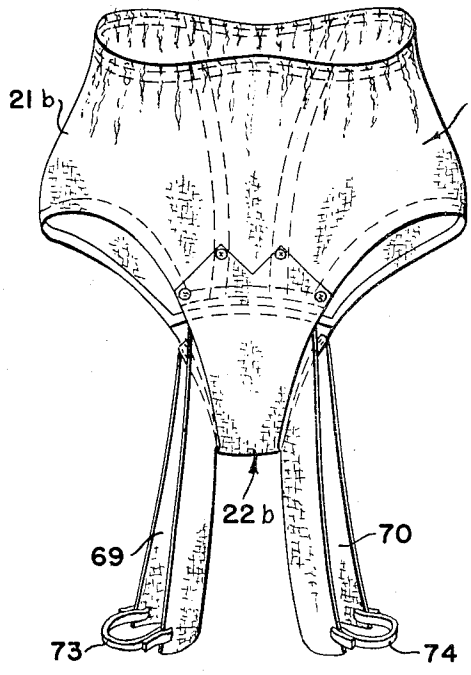


FIG. 11



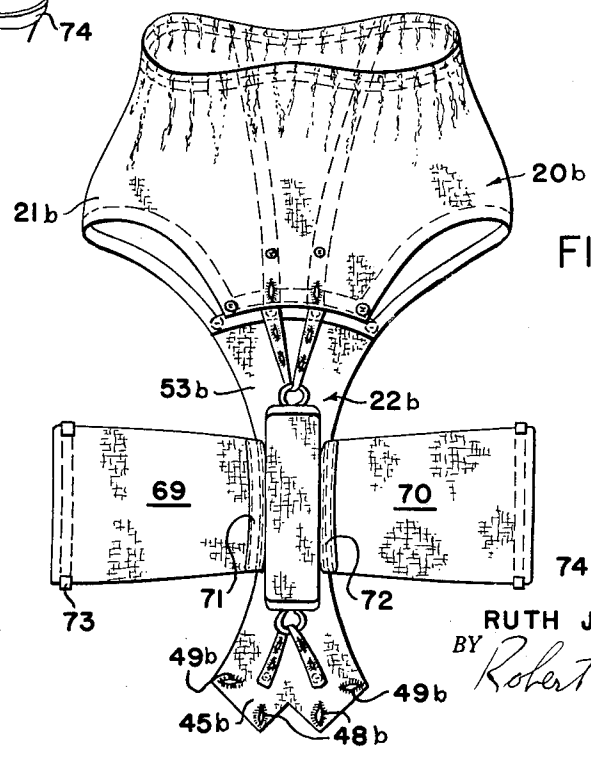


FIG. 12

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United States Patent Office 2,749,912 Patented June 12, 1956

2,749,912

SANITARY GARMENTS

Ruth J. Teitler, Philadelphia, Pa.

Application February 21, 1955, Serial No. 489,400

6 Claims. (Cl. 128—284)

This invention relates generally to garment constructions, and is particularly directed to ladies' garments of the type adapted for use both as a pantie and as a sanitary belt.

The particular embodiment of the present invention, which is illustrated in the drawings, and which will be described hereinafter in greater detail, comprises generally an upper pantie part or section adapted to encircle the waist of the wearer and depend toward the crotch region, an elongated crotch piece or lower section shaped to conformably engage the crotch of the wearer, and means detachably securing the crotch piece to the upper pantie portion to hold the crotch piece in proper position.

Heretofore, as is generally well known, sanitary garments, such as belts and panties for use during menstruation, were subject to numerous difficulties and disadvantages. For example, prior garments of this general type were 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 when in use, thus exposing the sharp point to the user's person.

Prior sanitary garments generally served only the single purpose of use during menstruation, were bulky and inconvenient to carry in a handbag, as when its use is expected; and, it was a difficult and time consuming procedure to don prior garments and to properly adjust the same, both when a napkin is initially employed and when it is changed or replaced.

Accordingly, it is a general object of the present invention to provide an improved sanitary garment construction of the type described which overcomes the above mentioned difficulties, which affords maximum comfort when in use, both during menstruation and otherwise, wherein the crotch piece is of minimum size and bulk so as to be inconspicuous in use and readily foldable to occupy but negligible space for ease of portability in a handbag or pocket, 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.

It is a further object of the present invention to provide a sanitary pantie having the advantageous characteristics mentioned in the foregoing paragraph, which is completely safe to use, requiring no pins or other sharp securing devices, which permits of changing a napkin without removing the garment, and which insures retention of the napkin in its proper position of use under all conditions of body movement, without binding the wearer's person or imposing undue strains on the garment.

It is another object of the present invention to provide a sanitary garment of the type described, having the novel features mentioned hereinbefore, and which includes a highly improved sanitary napkin adapted for use

with the garment. The instant invention further contemplates the provision of leg shields adapted for protective engagement with the inner sides of the wearer's legs.

It is still a further object of the present invention to provide a sanitary pantie or the type described which is simple and durable in construction and use, which effectively accomplishes its intended objects, and which can be manufactured and sold at a reasonable cost.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings, which form a material part of this disclosure.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts, which will be exemplified in the construction hereinafter described, and of which the scope will be indicated by the appended claims.

In the drawings:

Figure 1 shows a woman wearing a sanitary garment constructed in accordance with the present invention;

Fig. 2 is a front elevational view showing the garment of the present invention, with its crotch piece in attached or closed condition;

Fig. 3 is a front view similar to Fig. 2, but showing the crotch piece in an open condition depending from the rear of the garment;

Fig. 4 is a partial front view, similar to Fig. 2, but broken away to illustrate the front napkin securing means of the instant invention;

Fig. 5 is a partial, rear view, broken away to show the rear napkin securing means;

Fig. 6 is a top plan view showing a crotch piece of the present invention adapted for use during the menstrual period, the crotch piece being removed from the upper pantie section;

Fig. 7 is a longitudinal sectional view taken substantially along the line **7—7** of Fig. 6;

Fig. 8 is a top plan view showing a crotch piece of the present invention, removed from the upper pantie section, the crotch piece being adapted for ordinary use during non-menstrual periods;

Fig. 9 is a longitudinal sectional view taken substantially along the line **9—9** of Fig. 8;

Fig. 10 is a partial view showing a woman wearing a slightly modified form of sanitary garment constructed in accordance with the present invention, and including protective shields for the wearer's legs;

Fig. 11 is a front elevational view, somewhat enlarged, showing the embodiment of Fig. 10 in greater detail;

Fig. 12 is a front elevational view showing the embodiment of Figs. 10 and 11, with the crotch piece open and depending from the back of the upper pantie section;

Fig. 13 is a top plan view showing the crotch piece of Figs. 10–12 apart from the upper pantie section, and with the sanitary napkin removed therefrom, to better illustrate its construction;

Fig. 14 is a sectional view taken substantially along the line **14—14** of Fig. 13;

Fig. 15 is a front elevational view showing a slightly modified form of sanitary pantie constructed in accordance with the present invention; and

Fig. 16 is a plan view, partially broken away, illustrating the improved sanitary napkin of the present invention.

Referring now more particularly to the drawings, and specifically to Figs. 1–7 thereof, the embodiment of the invention illustrated therein comprises a sanitary pantie, generally designated **20**, including an upper pantie part or section **21** adapted to girdle the hips of a wearer, see Fig. 1, and a lower pantie section or crotch piece **22** ex-

tending through the crotch of the wearer and releasably secured to forward and rearward portions of the upper section.

The upper pantie section is comprised of a waistband **24** adapted to encircle the wearer's waist, and preferably fabricated of elastic or other suitable strip material. A pair of front suspender straps **25, 25** have their upper ends secured, as by stitching or other suitable means, to spaced, symmetrically disposed points of the front, central waistband portion. Similarly, a pair of rear suspender straps **26, 26** have their upper ends secured by any suitable means to spaced, symmetrically disposed points in the rear central portion of the waistband. The front and rear suspender straps may be fabricated of any suitable flexible tape, as desired.

Secured circumferentially along the waistband **24** is a body covering **27**, which depends from the waistband to encircle the wearer's hips, and is preferably fabricated of conventional underwear material or other suitable thin, flexible sheet material. Stated otherwise, the upper edge portion of the body covering **27** is secured circumferentially along the waistband **24**, as by stitching or other suitable means, and advantageously wrapped around the waistband to provide the upper pantie section with a smooth interior.

The lower edge portion of the body covering **27** is cut to provide leg openings, and is also shaped to leave the crotch region open. As best seen in Fig. 3, the front suspender straps **25, 25** converge downwards, being preferably secured by stitching or other suitable means to the adjacent portions of the body covering **27**, and have their lower ends terminating at the lower edge of the body covering forwardly of the crotch region. The rear suspender straps **26, 26** also converge downwards, see Fig. 5, terminating at the lower edge of the rear central portion of the body covering **27**, and are preferably stitched or otherwise secured to the adjacent portions of the latter.

Extending between the lower ends of the front suspender straps **25, 25**, and laterally therebeyond, is a laterally disposed front connector member **28**. More specifically, the front connector member extends laterally between the lower ends of the front suspender straps, being fixedly secured to the latter, has its opposite ends disposed laterally outwards of the front suspender straps, and is secured, by any suitable means, along the lower edge of the front central region of the covering **27**.

A rear connector strap **29** is similarly disposed laterally extending between and beyond the lower ends of the rear suspender straps **26, 26**, being secured to the latter and along the lower edge of the rear central covering portion. The connector members **28** and **29** may be formed of any suitable flexible tape, as desired.

Secured to the front suspended straps **25, 25** adjacent to and spaced above the lower ends thereof, are a pair of buttons **31, 31**, or other suitable fastening elements disposed exteriorly of the covering **27**. The lower end portions of the front suspender straps **25, 25**, and the spaced portions of the front connector member **28** secured to the front suspender straps, are formed to define a pair of buttonholes **32, 32**, or other fastener elements suitable for purposes appearing presently.

As seen in Fig. 5, the rear suspender straps **26, 26** are provided, respectively, with exterior fastener elements **33, 33**, such as buttons or the like, disposed adjacent to and spaced above the lower strap ends. While the lower ends of the rear suspender straps and the portions of the rear connector member **29** secured to the latter straps are provided with buttonholes **34** or other equivalent fastener means.

Extending along the right leg opening of the body covering **27** and having its opposite ends secured to the rightward ends of the connector members **28** and **29** is a partial right leg band **36**. That is, the partial right leg band is secured along the lower edge portion of the covering **27** corresponding to the right leg opening thereof, and has its opposite ends stitched or otherwise secured to the rightward ends of the front and rear connectors **28** and **29**. A partial left leg band **37** is similarly secured along the lower edge portion of the covering **27** corresponding to the left leg opening, and has its opposite ends stitched or otherwise secured to the leftward ends of the front and rear connector members **28** and **29**. For purposes of durability and comfort, it is preferred that the lower edge portions of the body covering **27** be rolled or wrapped about the connector members **28** and **29**, and the partial leg bands **36** and **37**, and subsequently stitched to the connector members and partial leg bands. At the junctures of the partial leg bands and the front connector member **28**, exteriorly of the body covering **27**, are provided a pair of fastener elements **39, 39**, shown for purposes of illustration as buttons. A pair of buttons **40, 40**, or other suitable fastener elements are also secured to the junctures of the rear connector member **29** and the partial leg bands, exteriorly of the body covering **27**, all for purposes appearing presently.

The crotch piece, generally designated **22**, is best seen in Figs. 6 and 7 as being of generally elongated configuration, having arcuately concave longitudinal side edges **42** and **43**. Further, the crotch piece is formed at one end with a pair of laterally spaced, longitudinally outwardly extending tabs or extensions **44, 44**, and similarly formed at the other end with a pair of laterally spaced, longitudinally outwardly extending tabs or extensions **45, 45**. It will be observed that the end tabs **44** and **45** taper toward their distal ends, and thus define a serrated or generally M-shaped configuration at each end of the crotch piece. The distal ends of the tabs **44, 44** are formed with a pair of fastener elements or buttonholes **46, 46**, while the adjacent portion of the crotch piece is formed with an additional pair of fastener elements or buttonholes **47, 47** spaced laterally outwards from the tab end buttonholes. The distal ends of the tabs **45, 45** are similarly provided with buttonholes **48, 48** or other fastener elements; and, additional buttonholes or fastener elements **49, 49** are formed in the adjacent crotch piece portion spaced laterally outwards from the buttonholes **48, 48**.

The preferred construction of the crotch piece **22** is best seen in Fig. 7, and includes a lower or outer layer **52** and an upper or inner layer **53**, both of the above described configuration, disposed in superposed relation with respect to each other and secured together about their peripheral edges by any suitable means. The lower and upper layers **52** and **53** are preferably fabricated of relatively soft, flexible sheet material, and the upper layer has its central portion cut away, as at **54**. Interposed between the lower and upper layers **52** and **53** is an intermediate layer or sheet **55**, preferably fabricated of fine woven fabric or plastic so as to be liquid repellent, and exposed through the cut away central portion of the upper layer **53**, see Fig. 6.

The napkin of the present invention, best seen in Fig. 16, comprises a generally rectangular pad or body **52** fabricated of gauze or other suitable material, and is provided with flexible loops or eyes **59** and **60** secured on opposite ends of and projecting outwards beyond the pad. The loops may be formed of separate threads, having their opposite ends secured to the pad by stitching, stapling or otherwise, or may be formed of the napkin material itself twisted to form a filament and then secured to the pad proper. A pair of flexible securing strips **61** and **62**, respectively provided with end buttons **63** and **64** and with a plurality of longitudinally spaced buttonholes **65** and **66** or other appropriate fastener elements, are extended through the loops **59** and **60**, for purposes appearing presently in greater detail.

In use, the upper pantie section **21** is placed about the hips of the wearer, with the waistband **24** uppermost and encircling the wearer's waist. The crotch piece **22** has one end attached to the rearward lower portion of the upper pantie section **21**, as by passing the buttons **33, 33**

through the buttonholes **46**, **46**, and the buttons **40**, **40** through the buttonholes **47**, **47**.

The napkin is preferably prepared by wrapping the pad **58** in a fragrantly scented deodorizing tissue, **68**, see Fig. 3, which is preferably fabricated of soft, absorbent paper or the like. With the securing strip **62** extending through the loop **60**, the buttons **64**, **64** are engaged in the buttonholes **34**, **34**, respectively, to complete the condition of Fig. 3. If the pad **58** does not overlie the exposed portion of the liquid repellent layer or lining **55**, as illustrated, the securing strap **62** may be adjusted by engaging one of the buttons **64** through one of the buttonholes **65**. This will of course adjust the pad longitudinally of the crotch piece. The securing strip buttons **63** are similarly engaged through the front buttonholes **32**, **32**, and adjusted as required; and, the depending end of the crotch piece is drawn forwardly to pass the buttons **31**, **31** through the buttonholes **48**, **48**, and the buttons **39**, **39** through the buttonholes **49**, **49**. This will complete the condition illustrated in Figs. 4 and 5. It will be observed that the M-shaped crotch piece end extensions, and the spaced fastener elements, insure closure of the garment crotch region while permitting ventilation thereof through the spaces between the fasteners.

When it is desired to employ the pantie garment of the instant invention as a conventional pantie, as during periods free of menstruation, the crotch piece **22***a* may be used. This crotch piece is similar to the first described crotch piece **22**, being of elongated, specifically configured contour, but is not provided with the liquid resistant intermediate layer or lining. That is, the crotch piece **22'** has end tabs **44***a*, **44***a* and **45***a*, **45***a*, corresponding to the end tabs **44**, **44** and **45**, **45**; and, is provided with buttonholes or other appropriate fastener elements **46***a*, **46***a*, **47***a*, **47***a*, **48***a*, **48***a* and **49***a*, **49***a*, arranged in the same manner and corresponding to the buttonholes **46**, **46**, **47**, **47**, **48**, **48** and **49**, **49**. The lower or outer layer **52***a* of the crotch piece **22***a* is substantially identical to the lower or outer layer **52** of crotch piece **22**, however the upper or inner layer **53***a* of the crotch piece **22***a* differs from the upper layer **53** in that its central portion is not cut out. That is, the lower and upper layers of the crotch piece **22***a* are substantially identical, and secured in facing, superposed engagement with each other, as by peripheral stitching or other suitable securing means. The crotch piece **22***a* may of course be employed, in the absence of the sanitary napkin, in substantially the same manner as the crotch piece **22**.

A further modification of the crotch piece **22** is illustrated at **22***b* in Figs. 10–14. That is, the sanitary garment, generally designated **20***b* in Figs. 10–12, includes an upper pantie section **21***b* substantially identical to the upper pantie section **21**, and a crotch piece **22***b* substantially identical to the crotch piece **22**, but with the addition of leg shields or guards **69** and **70**.

Thus, as best seen in Figs. 13 and 14, the crotch piece **22***b* has end tabs **44***b*, **44***b*, and **45***b*, **45***b*, and is formed with buttonholes or other fastener elements **46***b*, **46***b*, **47***b*, **47***b*, **48***b*, **48***b*, **49***b* and **49***b*. The intermediate crotch piece layer or lining **55***b* is exposed through a central cutout **54***b* of the upper crotch piece layer **53***b*.

In the plan view of Fig. 13, the leg shields **69** and **70** are illustrated as extending laterally outwards from opposite side edges of the crotch piece **22***b*, centrally thereof. More particularly, the leg shields **69** and **70** are each fabricated of relatively soft, flexible sheet material, preferably of double thickness as seen in Fig. 14, and have their upper or inner ends stitched or otherwise secured to opposite side edges of the crotch piece. Further, relatively soft, preferably sponge-like binding strips or tapes **71** and **72** are stitched or otherwise held fast along the secured ends of the shields **69** and **70**, respectively, and the crotch piece edges on opposite sides of the exposed liner **55***b*.

The distal, unsecured ends of the leg shields **69** and **70** are provided with elastic strips or garters **73** and **74**, for a purpose appearing presently. With the pantie top section **21***b* and crotch piece **22***b* in position, see Fig. 10, the leg shields **69** and **70** will depend from the crotch piece between the wearer's legs. The garters **73** and **74** may be placed about the wearer's legs to distend and maintain the shields each in facing engagement with its respective leg. This of course will prevent rubbing, chaffing and other irritation of the legs during normal body movements.

The sanitary napkin may also be employed in conjunction with the crotch piece **22***b*, see Fig. 12, in substantially the same manner as described hereinbefore in connection with Fig. 3. In addition, the crotch piece **22***a* may also be employed with leg shields, for use during periods free from menstruation.

A further embodiment of the present invention is illustrated in Fig. 15, wherein a sanitary garment, generally designated **20***c* includes a modified upper pantie section **21***c* and a crotch piece **22***c*, substantially identical to the crotch piece **22**.

The garment **20***c* is particularly well suited to be worn over a foundation garment or the like, and for use under relatively hot climatic conditions. That is, the upper pantie section **21***c* eliminates the need for a body covering, and comprises a waistband **24***c*, front suspender straps **25***c*, **25***c*, rear suspender straps **26***c*, **26***c*, and right and left partial leg bands **36***c* and **37***c*.

As in the first described form of the present invention, the waistband **24***c* and the leg bands **36***c* and **37***c* are preferably fabricated of elastic, strip material. The suspender straps **25***c* and **26***c* depend, respectively, from spaced points of the central front and rear portions of the waistband, terminating forwardly and rearwardly of the crotch region. The suspender straps are provided adjacent to but spaced from their lower ends with fastener elements, such as buttons **31***c*, **31***c* and **33***c*, **33***c*, corresponding to the buttons **31**, **31** and **33**, **33**, and are further provided in their end portions with fastener elements or buttonholes for receiving the buttons **63** and **64**.

A pair of right and left side straps **77** and **78**, respectively, have their upper ends secured by any suitable means to opposite side portions of the waistband **24***c*, and have their lower ends secured to intermediate portions of the right and left partial leg bands **36***c* and **37***c*, respectively. On the ends of the partial leg bands **36***c* and **37***c* are provided fastener elements **39***c* and **40***c* corresponding to the fastener elements **39** and **40**, for engagement in the crotch piece buttonholes **47** and **49**. It will be observed that the laterally disposed connector members **28** and **29** of the first described pantie section **21** are eliminated in the open, light weight construction of Fig. 15.

It will now be understood that the sanitary garment construction of the present invention insures a correct and comfortable fit, the suspender straps of the upper pantie section affording vertical support to the crotch piece, and the securing strips being readily adjustable to maintain the sanitary napkin in proper position. Further, the garment may be quickly and easily converted from everyday use to menstruation use by merely interchanging crotch pieces, without removing the upper, main pantie section; and, napkins may also be changed simply, neatly and efficiently, without removing the upper pantie section. Of course, an extra or spare crotch piece may be folded to occupy but negligible space and conveniently carried in a handbag or pocket.

It will also be apparent that the instant invention completely eliminates the use of pins, and moreover, does not require the use of fastener elements in engagement with or facing toward the person of the wearer, thereby affording a maximum of comfort and safety.

From the foregoing, it is seen that the present invention provides an all-purpose sanitary garment of the pantie type, and napkin for use therewith which fully accomplish

their intended objects, and are well adapted to meet practical conditions of manufacture and use.

Although the present invention has been described in some detail by way of illustration and example for purposes of clarity of understanding, it is understood that certain changes and modifications, such as the substitution of materials and equivalent fastener elements may be made within the spirit of the invention and scope of the appended claims.

What is claimed is:

1. A sanitary pantie comprising a waistband, a pair of spaced front suspender straps depending from the central front portion of said waistband and terminating forwardly of the crotch region, a pair of spaced rear suspender straps depending from the central back portion of said waistband and terminating rearwardly of the crotch region, a pair of partial leg bands each adapted to extend about the outer portion of one leg of the wearer and terminating short of the adjacent front and rear suspender straps, an elongated crotch piece shaped to conformably engage the crotch of the wearer, and releasable securing means on said suspender straps and leg bands and on opposite ends of said crotch piece for detachably securing the latter in position, a sanitary napkin seated longitudinally on said crotch piece, a pair of loops on opposite ends of said napkin, and a securing strip extending through each of said loops, each of said securing strips being provided with means releasably interengageable with said securing means to detachably connect said strips to the adjacent pair of said suspender straps.

2. A sanitary pantie comprising a waistband, a pair of spaced front suspender straps depending from the central front portion of said waistband and terminating forwardly of the crotch region, a pair of spaced rear suspender straps depending from the central back portion of said waistband and terminating rearwardly of the crotch region, a laterally disposed front connector member extending between and secured to the lower ends of said front suspender straps, a laterally disposed rear connector member extending between and secured to the lower ends of said rear suspender straps, a partial right leg band having its opposite ends secured to the rightward ends of said front and rear connector members, a partial left leg band having its opposite ends secured to the leftward ends of said front and rear connector members, an elongate crotch piece shaped to conformably engage the crotch of the wearer, and releasable securing means on said front and rear connector members and suspender straps and on opposite ends of said crotch piece for detachably securing the latter in position extending between said connector members, a sanitary napkin seated longitudinally on said crotch piece, a pair of loops on opposite ends of said napkin, and a securing strip extending through each of said loops, each of said securing strips being provided with means releasably interengageable with said securing means to detachably connect said strips to the adjacent pair of said suspender straps.

3. A sanitary pantie comprising a waistband, a pair of spaced front suspender straps depending from the central front portion of said waistband and terminating forwardly of the crotch region, a pair of spaced rear suspender straps depending from the central back portion of said waistband and terminating rearwardly of the crotch region, a laterally disposed front connecting member extending between and secured to the lower ends of said front suspender straps, a laterally disposed rear connector member extending between and secured to the lower ends of said rear suspender straps, a partial right leg band having its opposite ends secured to the rightward ends of said front and rear connector members, a partial left leg band having its opposite ends secured to the leftward ends of said front and rear connector members, a flexible sheet covering having its upper edge portion secured along said waistband and having its lower edge portion secured along said leg bands and connector members to cover the lower torso portion of the wearer, and elongate crotch piece shaped to conformably engage the crotch of the wearer, releasable securing means on the opposite ends of said front and rear connector members and on the opposite ends of said crotch piece for detachably securing the latter in position extending between said connector members, a pair of laterally spaced longitudinally extending tabs on each end of said crotch piece overlying the portions of said covering adjacent to the crotch region, and additional releasable securing means on said suspender straps and the distal ends of said tabs for detachably securing the latter in said overlying relation.

4. A sanitary pantie according to claim 3, wherein said connector members extend laterally beyond the lower ends of said suspender straps, said first named securing means thus being spaced from second named securing means to afford ventilation to the crotch region of the wearer.

5. A sanitary pantie according to claim 3, in combination with a sanitary napkin seated longitudinally on said crotch piece, a pair of loops on opposite ends of said napkin, and securing strips extending through each of said loops, each of said securing strips being detachably secured to an intermediate portion of the adjacent connector member to detachably secure said napkin in position.

6. A sanitary napkin according to claim 5, said crotch piece having its central portion underlying said napkin fabricated of flexible, liquid resistant material, the remainder of said crotch piece being fabricated of relatively soft, woven material.

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