Oct. 8, 1957 H. R. SCHWARZ 2,808,592

PANTY

Filed Aug. 3, 1955

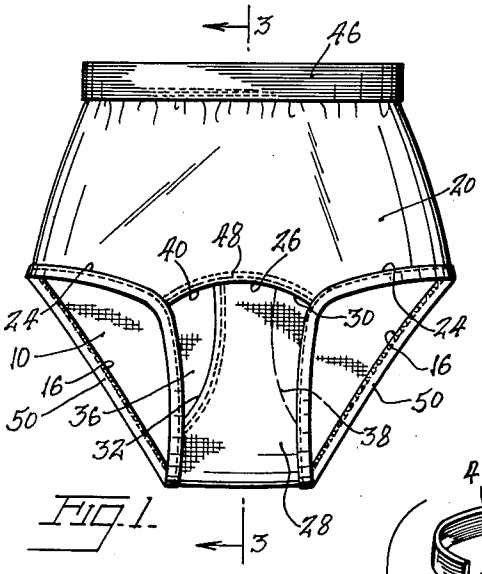

FIG. 1.

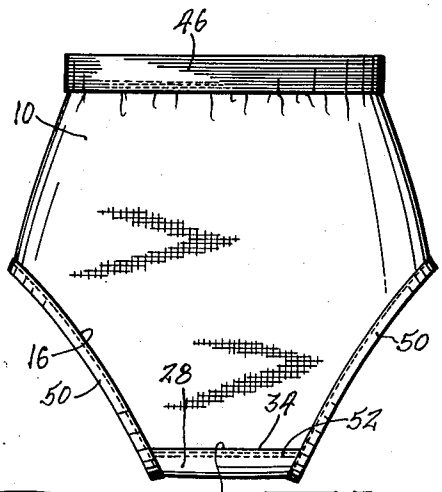

FIG. 2.

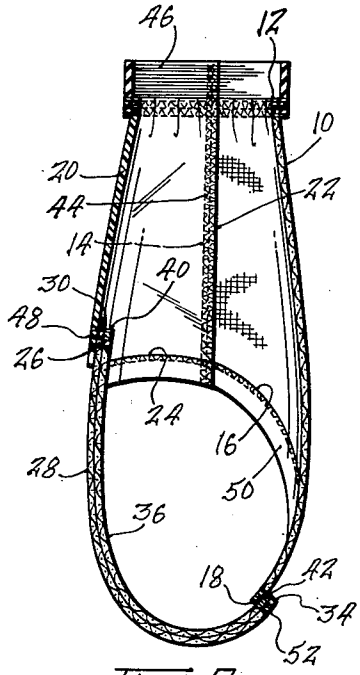

FIG. 3.

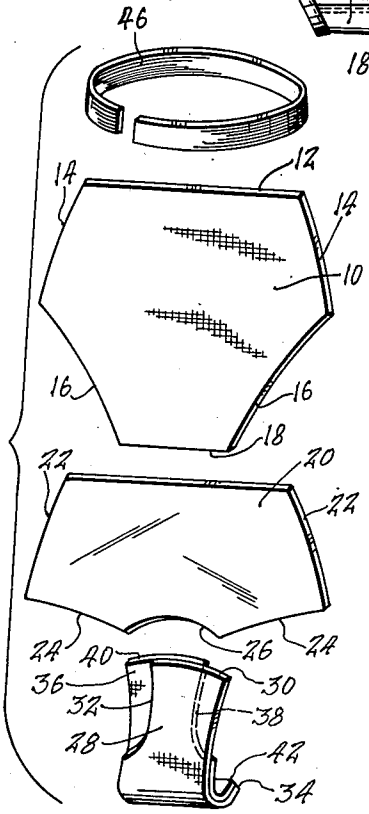

FIG. 4.

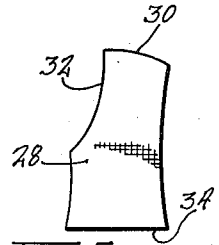

FIG. 5.

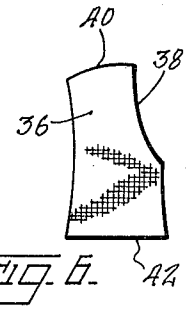

FIG. 6.

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PANTY

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1 Claim. (Cl. 2—224)

This invention relates to undergarments, and more particularly has reference to a child's panty.

Summarized briefly, the invention is a child's panty the rear panel and crotch portion of which are of knit goods, and hence stretchable in a transverse direction, and the front panel of which is of woven material relatively non-stretchable both in transverse and longitudinal directions. The panty, further, is so designed that the upper end of the crotch panel is arcuately bowed upwardly, while the lower edge of the front panel, between the leg openings of the undergarment, is bowed inwardly complementarily to the bowed edge of the crotch panel.

Most usually, an undergarment for small children designed primarily for utilitarian characteristics, rather than for combined dress and utilitarian characteristics, is wholly of knit goods and further, has a straight transverse seam between the leg openings at the meeting point of the front panel and crotch panel.

One important object of the present invention, in this regard, is to embody in what may be generally called a primarily utilitarian undergarment of the knit goods type, a front panel which, being of woven rather than knit material, will have an appearance more attractive to the ordinary purchaser, by reason of its adaptability for forming a substantial part of the front area of an undergarment of the type commonly known as "athletic shorts," from woven rather than the usual knit material.

Another object is to provide a combined action in the knit rear panel and woven front panel, and in the crotch panel, deriving from the particular characteristics of these panels as regards stretchability or the lack of it, that will make the garment more comfortable when worn, and will prevent distortion or deformation of a front panel usually occurring due to pull thereon by the rear and crotch panels.

A further object of importance is to provide a garment in which a relatively non-stretchable front panel, joined to a laterally stretchable crotch panel by a curved seam, will permit lateral expansion of the crotch panel by the confined male organs without more than a minimum amount of pull upon or distortion of the front panel.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a front elevational view of an undergarment formed according to the present invention.

Fig. 2 is a rear elevational view.

Fig. 3 is an enlarged vertical sectional view on line 3—3 of Fig. 1.

Fig. 4 is an exploded perspective view of the undergarment.

Figs. 5 and 6 are plan views of the crotch panel members which when superimposed provide the completed crotch panel.

The reference numeral **10** designates a rear panel of the undergarment, formed wholly from a single piece of knit goods, and having a straight top edge **12** and side edges **14** diverging downwardly from the ends of the top edge. At their lower ends, the side edges **14** terminate at the outer ends of downwardly convergent, inwardly curved edges forming the back edge portions of the leg openings of the undergarment, and at their convergent ends, the edges **16** terminate at the opposite ends of a straight, relatively short bottom edge **18** paralleling the top edge **12**.

The front panel **20** is formed wholly from woven material as distinguished from the back panel, and is relatively non-stretchable both horizontally and vertically. The back panel, as shown in Fig. 2, has its wales running vertically, and is freely and resiliently expansible in a lateral direction, though not in a vertical direction.

The front panel **20** has a straight top edge, and downwardly diverging side edges **22** meeting at their lower ends the outer edges of edges **24** which are inclined slightly from the horizontal, in a direction downwardly from the side edges, terminating at their inner ends at opposite ends of a relatively short, arcuately and upwardly curving bottom edge **26** of the front panel.

The vertical dimension of the front panel is substantially less than the greatest vertical dimension of the back panel, and connected between the edges **18, 26** is a crotch panel of double thickness, knit goods, composed of superposed crotch panel members respectively shown in Figs. 5 and 6 per se.

The outer crotch panel member has been designated at **28**, and has an arcuately, outwardly bowed top edge **30** which, by reason of the provision of a vertically elongated, curving recess **32** in one side of the crotch panel member **28**, does not extend the full width of said panel member. The bottom edge **34** of the crotch panel member **28** is straight, extending normally to the straight side edges of the crotch panel member. In a commercial embodiment, the side edges of the crotch panel member can be inwardly curved slightly, so as to prevent bunching of the material between the legs of the wearer.

The inner crotch panel member **36** is identical to panel member **28**, except for having its recess **38** opening upon the opposite side from that on which the recess **32** opens. The upper edge **40** of panel member **36** is arcuately curved in an upward direction, and being curved about the same center as edge **30**, forms a continuation of the edge **30**, so that the completed crotch panel, after superposing of the panel members one upon the other, has an arcuate, upwardly bowed top edge extending full width of the crotch panel and meeting with the inwardly curved bottom edge **26** of the front panel **20** of the undergarment.

The bottom edge **42** of the panel member **36** is straight, and substantially registers with edge **34**, for connection of both of these edges to the straight bottom edge **18** of the back panel.

In connecting the panels to complete the garment, stitching **44** is employed (Fig. 3), to connect the side edges **14, 22** of the back and front panels respectively, and an elastic waistband **46** is stitched to the top edges of the back and front panels extending through the full circumstances of the garment at the top thereof. Stitching **48** is applied, following the curved edges **26, 30, 40**, to join the superposed panel members to the bottom of the front panel, and a knit binding **50** is applied about the full circumstances of the leg openings defined by edges **24, 16** of the front and back panels respectively and by the side edges of the crotch panel. Stitching **52** is used to connect the bottom edges of the crotch panel to the bottom edge **18** of the back panel, and it may be noted that when the garment is completed, the recesses **32, 38**

will cooperate to define a fly construction at the front of the crotch panel.

The garment illustrated is a boy's undergarment, but by eliminating recesses **32**, **38** so as to leave out a fly formation, a girl's panty can be made, still having the characteristics as regards relative stretchability of the front, back, and crotch panels.

The wales of the crotch panel members are aligned with the wales of the back panel **10**, so that the crotch panel members are freely stretchable in a lateral direction, as is the back panel. As a result, when the garment is worn, all expansion in a lateral direction takes place in the back panel, and the front panel remains comfortably fitted across the abdomen of the wearer, without binding thereagainst. Still further, the provision of the curved seam between the front panel and crotch panel is adapted to protectively resist deformation of the front panel, resulting from a bulge caused at the front of the garment, in the area of the crotch panel, by a confined male organ. The curved formation of the upper end of the crotch panel permits the crotch panel to be bulged outwardly, without imparting a corresponding bulge to the front panel which is held firmly yet comfortably against the wearer's abdomen by the general but nevertheless clearly exerted pull exerted thereon in opposite directions laterally, outwardly in Fig. 1, by the resiliently expanded back panel.

The back panel, as will be noted from Fig. 1 and also from Fig. 4, is of a width substantially greater than that of the front panel, so as to permit the back panel to be curved at its sides about the sides of the wearer, terminating at the front of the garment close to the sides thereof.

While I have illustrated and described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as

new, and desire to secure by United States Letters Patent is:

An undergarment comprising a back panel formed of a laterally stretchable material, a separate front panel relatively non-stretchable in a lateral direction and covering the entire front area, said front panel diverging downwardly, a waistband connected to the upper ends of the front and back panels and extending through the full circumference of the undergarment, and a crotch panel connected between the lower ends of the front and back panels medially between the sides of the garment and cooperating with the front and back panels to form leg openings at opposite sides of the crotch panel, said back panel being formed wholly of a knit material, and the front panel being formed wholly from a single piece of woven material, the crotch panel also being formed of a knit material, with the wales of the crotch and back panels running in a substantially vertical direction, the crotch panel at the end thereof connected to the front panel being accurately bowed in an upward direction and the front panel having medially between its sides an inwardly curving edge complementing the bowed part of the crotch panel to provide a curved seam at the point of connection of the crotch and front panels, the crotch panel having a double thickness, and including registered crotch panel members substantially equal to one another in length and width, the crotch panel members being formed one with a lateral recess opening on one side of the crotch panel and the other with a lateral recess opening upon the opposite side of the crotch panel and aligned transversely with the first-named recess to cooperate therewith in forming a fly formation.

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