July 7, 1959 H. M. PLEHN 2,893,397

GIRDLE

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FIG. 1

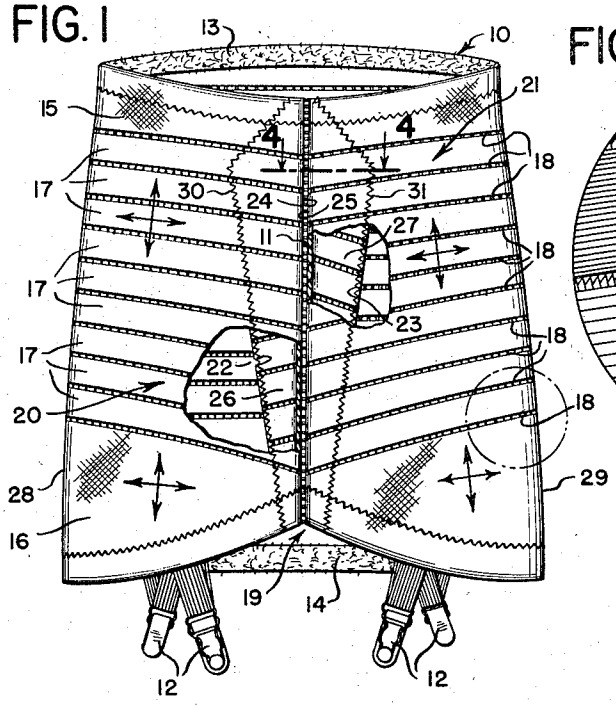


FIG. 3

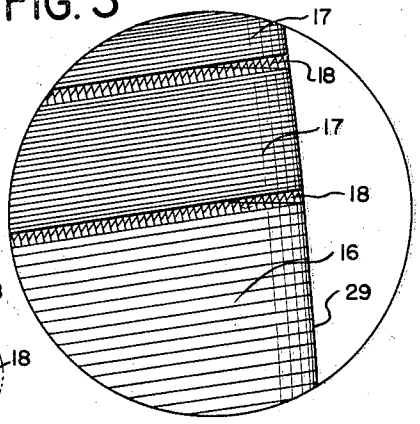


FIG. 2

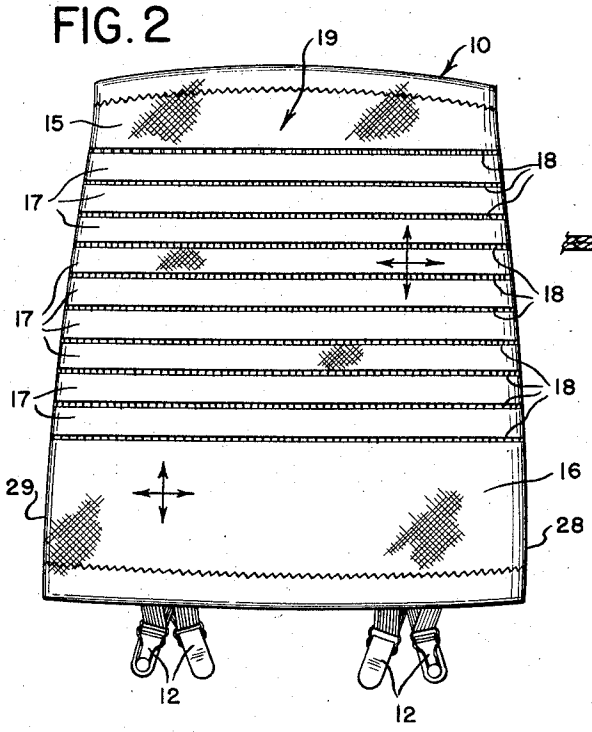
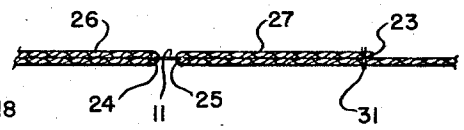


FIG. 4



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GIRDLE

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This invention relates to ladies foundation garments and more particularly to ladies girdles.

Girdles have come to be an accepted part of a woman's wardrobe. Not merely is this so because of changing fashion and a national preference for the trim figure, but as well because modern girdles have been made infinitely more comfortable and easier to get into and to remove than their precursors, the lace-up corset.

Those who have devised girdles have concieved a variety of structures to implement their particular beliefs as to how the body can best be supported and molded consistent with comfort. In general such structures require an assembly of a number of fabric components having varying characteristics of elasticity and appearance into a finished girdle. The varying elasticity in the finished girdle occurs because different parts of the torso require different treatment. Necessarily, prior to the fabrication of such a girdle the purchase of a stock of a variety of types of fabrics must be made, and in the process of fabrication a number of cutting operations are called for. Finally, a series of more or less complex sewing operations are required to assemble the finished girdle.

In the present invention, however, the necessity of an inventory of a number of kinds of fabric is obviated, and it is the primary object of this invention, to provide a girdle made from a single piece of fabric. The resulting girdle contemplated will offer varying characteristics of support at different locations on the body. In carrying out this object, a single piece of stretchable fabric is used, which within itself contains portions having different degrees of elasticity. Maximum advantage of such inherent characteristic is taken in the building of the present novel girdle.

Another object herein is to provide a novel girdle having portions of different elastic properties, in the fabrication of which only very few cutting operations are necessary and the assembly operations are extremely simple. Considerable labor savings to the manufacturer will result.

Still another object of the present invention is to provide a girdle which will last longer than known girdles and be extremely easy to launder and otherwise maintain. In known girdle constructions which have present a number of seams, it is known as a matter of common experience that such seams serve as foci of deterioration of the garment. Since the present girdle has a minimum of seams, it will not be as susceptible to such deterioration as known girdles.

It is another object herein to provide a girdle which will serve to restrain and mold the body in highly effective manner, while at the same time being extremely comfortable to the wearer. These characteristics go hand in hand in the present girdle because forces will be applied to the body in uniform and consistent manner.

How these and many other objects are to be implemented will become clear through a consideration of the accompanying drawings wherein:

Fig. 1 is a front view of a girdle made in accordance with my invention with portions at the front thereof broken away to show interior construction;

Fig. 2 is a rear view of the same girdle shown in Fig. 1;

Fig. 3 is a much enlarged view of the portion of the girdle shown in Fig. 1 within the circle drawn in section lines in Fig. 1, in which the characteristics of the fabric comprising the girdle are illustrated; and

Fig. 4 is a section at 4—4 of Fig. 1.

The girdle **10** is seen to be tubular, and consists of a single length of stretchable fabric with the ends meeting at a vertical seam **11** at the front center of the garment. The girdle has garters **12** depending from the bottom thereof. At **13** and **14**, the interior surface of the top and bottom bands of the girdle are faced with a resilient fabric surface. The purpose of such resilient bands, of course, is to avoid discomfort to the wearer at these extremities of the girdle.

In fabricating the single length of fabric, elastic thread is used. The use of such elastic thread will, of course, yield a girdle having two way stretch characteristics throughout.

While it has been stated that the girdle is formed from a single length of stretchable fabric, such length of fabric does not have uniform characteristics of stretchability from top to bottom of the girdle. This is in spite of the fact that elastic thread of uniform elasticity may be used in fabricating the single length of stretchable fabric. Top body encircling area **15** and bottom body encircling area **16** are both more stretchable than the plurality of bands **17**, which provide a medial body encircling area in the girdle between such top area **15** and bottom area **16**. The bands **17** are separated from each other and from top area **15** and bottom area **16** by wales **18** having greater stretchability than either the bands **17** or the top or bottom areas **15** and **16** respectively, by reason of the fact that the wales **18** are wider than the wales comprising bands **17** or areas **15** and **16**. This effect may be achieved in the single length of fabric by utilizing therein warp knit fabric, wales **18** resulting by warp knitting at these locations at less than the full gauge of the machine while the wales comprising bands **17** and top and bottom areas **15** and **16** respectively are knitted at full gauge. In such warp knitting the threads in the bands **16** are under greater tension than the threads comprising top and bottom areas **15** and **16** respectively, and therefore bands **17** are more confining, i.e. less stretchable, than areas **15** and **16**.

This condition is best illustrated in enlarged Fig. 3. Here the wides wales **18** are shown between bands **17** and between bottom body encircling area **16** and a band **17**. The wales comprising bands **17** and body encircling area **16** are merely repreesnted schematically by spaced lines. The spacing of lines in area **16** in Fig. 3 are shown wider than those in bands **17**. This wider spacing is merely indicative of the fact that the fabric in area **16** has greater stretchability than in band **17**, though in both areas the wales may in fact be of equal width, since both area **16** and bands **17** can be knitted at the full gauge of a warp knitting machine.

It will be noted that the spaced bands **17** are substantailly horizontal at the rear portion **19** of the girdle while they incline downwardly from the sides of the girdle at the front portions **20** and **21** thereof. Thus is a bias effect achieved. Such bias effect results when the free edges of the single length of fabric are folded back and superposed in front portions **20** and **21** of the girdle, adjacent seam **11** to create terminal edges **24** and

25 which are joined at seam 11. Such folding provides folds 26 and 27 on either side of seam 11 situated interiorly of the girdle, which folds extend between free edges 22 and 23, and terminal edges 24 and 25 respectively. In the embodiment shown, such folds 26 and 27 increase in width from the bottom of the girdle upwardly, as may best be seen in Fig. 1. The resultant structural effect is a downward bias in front portions 20 and 21 extending from the sides 28 and 29 of the girdle to seam 11, against which bias is opposed an opposite bias by reason of the provisions of folds 26 and 27 which are superposed and sewn to the front portions of the girdle along stitching lines 30 and 31.

It will thus be apparent that I have described a novel girdle which, while being comprised of a single length of fabric, has distinct areas which will yield different qualities of support to the body in accordance with what will be required at a particular location. Thus, the medial area is calculated to give the firmest support, though this effect is ameliorated by reason of the looser wales 18. A gentler molding and supporting action occurs at top body encircling area 15 and bottom body encircling area 16 in the girdle, while at the front center of the girdle a complex bias effect and hence greater restraint results because of the opposed bias dispositions of the superposed components.

While I have described a specific embodiment of my invention, it is apparent that numerous modifications may be made therein without departing from the essential basis of my invention, and as so modified, a structure would still fall within the present invention.

I claim:

1. A girdle comprising rear and front portions formed from a unitary length of knitted strechable fabric having terminal edges, a substantially vertical seam in said girdle in which said terminal edges are joined, said girdle having top and bottom body encircling areas therein, and a medial body encircling area between said top and bottom body encircling areas, comprising a plurality of bands, said bands being defined on either side thereof by a wale wider than the wales in said band, the stretchability of said girdle being greater in said top and bottom body encircling areas than in said medial body encircling area, said substantially vertical seam being disposed substantially at the front center of said girdle between said front portions, said front portions being biased downwardly from the sides of said girdle to said seam, and including folds superposed upon said front portions of said girdle adjacent said terminal edges, said folds being biased downwardly from said seam toward the sides of said girdle.

2. A girdle comprising rear and front portions formed from a unitary length of knitted stretchable fabric having terminal edges, a substantially vertical seam in said girdle in which said terminal edges are joined, said girdle having top and bottom body encircling areas therein, and a medial body encircling area between said top and bottom body encircling areas, comprising a plurality of bands, said bands being defined on either side thereof by a wale wider than the wales in said band, the stretchability of said girdle being greater in said top and bottom body encircling areas than in said medial body encircling area,

said substantially vertical seam being disposed substantially at the front center of said girdle between said front portions, said front portions being biased downwardly from the sides of said girdle to said seam, and including folds superposed upon said front portions of said girdle adjacent said seam, said folds being biased downwardly from said seam toward the sides of said girdle, said folds increasing in width upwardly from the bottom of said girdle.

3. A girdle comprising a rear portion and front side portions formed from a unitary length of knitted stretchable fabric having free edges, folds, and terminal fold edges, a substantially vertical seam in said girdle between said front side portions in which said terminal fold edges are joined, said girdle having top and bottom body encircling areas, and a medial body encircling area between said top and bottom body encircling areas, said medial body encircling area comprising a plurality of bands, said bands being defined on either side thereof by a wale wider than the wales in said bands, the stretchability of said girdle being greater in said top and bottom body encircling areas than in said bands comprising said medial body encircling area, said bands being substantially horizontally disposed in said rear portion of said girdle, said front side portions being biased downwardly from the sides of said girdle to said seam, said folds being superposed upon said front side portions of said girdle and biased downwardly from said seam toward the sides of said girdle, said folds increasing in width upwardly from the bottom of said girdles, said free edges being joined to said front side portions by lines of stitching.

4. A girdle comprising a rear portion and front side portions formed of knitted stretchable fabric having free edges, folds, and terminal fold edges, a substantially vertical seam in said girdle between said front side portions in which said terminal fold edges are joined, said girdle having top and bottom body encircling areas, and a medial body portion between said top and bottom body encircling areas, said medial body portion comprising a plurality of bands, said bands being defined on either side thereof by a wale wider than the wales in said bands, the stretchability of said girdle being greater in said top and bottom body encircling areas than in said bands comprising said medial body portion, said front side portions being biased downwardly from the sides of said girdle to said seam, said folds being superposed upon said front side portions of said girdle and biased downwardly from said seam toward the sides of said girdle, said folds increasing in width upwardly from the bottom of said girdles, said free edges being joined to said front side portions by lines of stitching.

References Cited in the file of this patent

UNITED STATES PATENTS

808,433	Cartledge	Dec. 26, 1905
1,308,870	Schloss	July 8, 1919
2,610,324	Dowd	Sept. 16, 1952
2,632,165	Murdock	Mar. 24, 1953
2,879,771	Bell	Mar. 31, 1959

FOREIGN PATENTS

161,395	Australia	Feb. 22, 1955