Jan. 4, 1966 B. D. GORDON 3,226,957

ELASTIC KNITTED FORM-FITTING UNDERGARMENTS

Filed Jan. 2, 1962

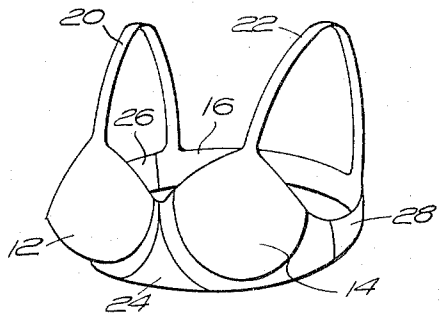


FIG. 1

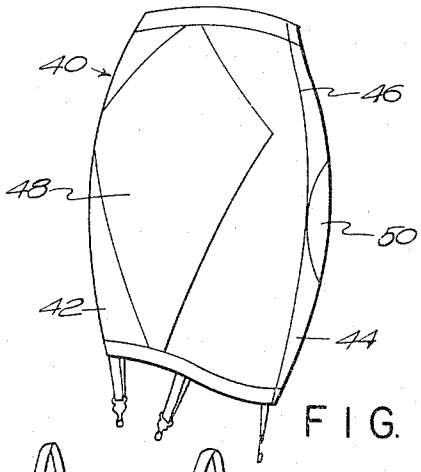


FIG. 2

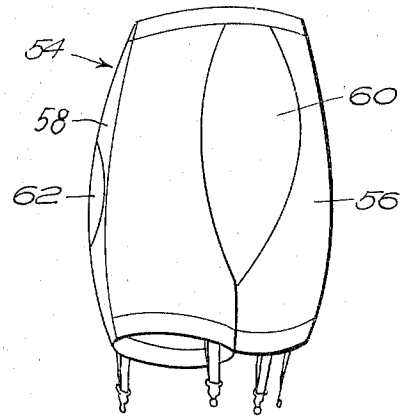


FIG. 3

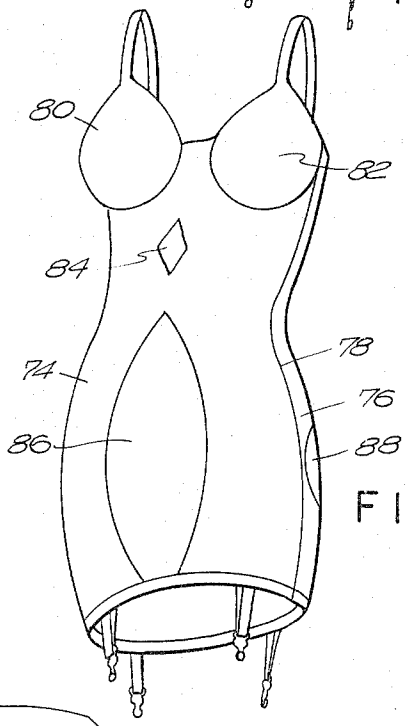


FIG. 4

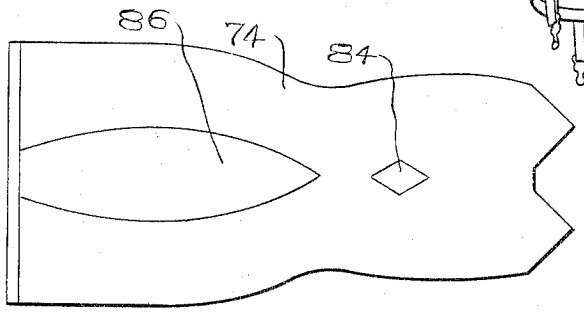


FIG. 5

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3,226,957
Patented Jan. 4, 1966

3,226,957

ELASTIC KNITTED FORM-FITTING UNDERGARMENTS

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Filed Jan. 2, 1962, Ser. No. 163,541
3 Claims. (Cl. 66—176)

This invention relates to form-fitting knitted undergarments for women, such as brassieres, panties and girdles, which can be made in two parts, namely, a front panel and a rear panel, each of which is formed entirely by knitting operations, the panels being joined by stitching to form a garment having side seams, the object garment having 3-dimensional contours which accommodate the breasts, hips and buttocks, the 3-dimensional areas being knitted without seams. It is a further object of the invention to provide these form-fitting garments for women with areas of knitted inelastic yarn, these areas being made as part of the knitting operation, such garments consisting of two panels joined together by side seams, each panel being made entirely by knitting operations using elastic yarn for the most part.

Representative garments embodying the invention are illustrated on the drawing, of which

FIGURE 1 is a perspective view in outline of a brassiere which has three-dimensional knitted breast cup bulges and an area of inelastic yarn;

FIGURE 2 is a similar view of a girdle;

FIGURE 3 is a perspective view of a pair of panties;

FIGURE 4 is a perspective view of a full-length girdle; and

FIGURE 5 is a diagrammatic plan view of the front panel of the girdle shown in FIGURE 4.

All of the garments illustrated on the drawing are characterized by being composed for the most part of panels having seamless three-dimensional contoured portions formed by knitting operations on a flat knitting machine to accommodate and fit upon the breasts, hips and thighs of the wearer, said panels also being made of elastic yarn except for certain areas wherein elastic yarn was substituted for the elastic yarn in the knitting operation, the panel thus being intarsia knitted, this mode of knitting being well known in the art as illustrated and described, for example, in U.S. Patent No. 2,216,051, granted to T. Smith et al., September 24, 1940. The purpose of the areas of inelastic yarn is to hold in certain areas of the body surface of the wearer where the body is apt to bulge excessively if not constricted.

A knitted brassiere is shown in FIGURE 1, consisting of a front portion with seamless three-dimensional bulges **12** and **14** for breast cups shaped entirely by knitting operations such as are described for example in U.S. Patent No. 2,977,783, these operations resulting in a weft knitted fabric all the courses of which extend from selvage to selvage. A rear portion **16** may be knitted as lateral extensions of the front portion. Over-shoulder bands **20**, **22** may be ribbons extending from the breast cups **12**, **14** to the rear portion **16**. The brassiere is made of elastic yarn except for areas of inelastic yarn, as at **24**, **26**, **28**, these areas of elastic yarn and areas of inelastic yarn being formed in a continuous knitting operation, the changes of yarn being brought about by suitable operation of the yarn carriers of the knitting machine, the making of stitched seams thus being avoided in forming the breast cup bulges and the relatively inelastic areas.

A girdle **40** is shown in FIGURE 2, this girdle consisting of a front panel **42** and a rear panel **44** connected together by side seams **46**. The front panel has a central area **48** of non-elastic yarn. The front and/or rear panels may also have other areas such as **50** of non-elastic yarn introduced by intarsia knitting, the entire girdle being knitted in two panels which are for the most part of elastic yarn with the exception of the areas knitted of non-elastic yarn. The rear panel of this garment and of the garments shown in FIGURES 3 and 4, is three-dimensionally shaped to fit smoothly on the hips and buttocks, this shaping being done by a knitting process described in U.S. Patent No. 3,176,480, granted to B. D. Gordon et al. on April 6, 1965.

FIGURE 3 shows form-fitting panties **54** which comprise a front panel **56** and a rear panel **58** knitted chiefly of elastic yarn, with areas such as **60**, **62** of knitted non-elastic yarn formed by intarsia knitting on the knitting machine concurrently with the areas of elastic yarn.

A full-length foundation garment is shown in FIGURE 4, this garment comprising a front panel **74** and a rear panel **76** secured to each other by side seams **78**. This garment has seamless three-dimensional breast cups **80** and **82** made entirely by knitting operations similar to those employed in making the breast cups shown in FIGURES 1 and 2. The garment also has a number of areas **84**, **86**, **88** as shown or elsewhere, these areas being of knitted non-elastic yarn, the remainder of the garment being of knitted elastic yarn. A diagrammatic plan view of the front panel **74** of this garment is shown in FIGURE 5.

The undergarments illustrated on the drawing are given by way of example, the invention not being limited to those particular kinds of garments nor to the particular location of the areas of knitted non-elastic yarn.

I claim:

1. A form-fitting undergarment comprising seamless front and back panels joined by seams at the sides, each panel being entirely weft knit, all the courses of which extend from selvage to selvage, the front panel being intarsia knitted with a central area of inelastic yarn, the remainder of the panel being of elastic yarn.

2. A form-fitting undergarment as described in claim **1**, the rear panel thereof having three-dimensionally contoured portions.

3. A form-fitting undergarment comprising seamless front and back panels joined by seams at the sides, each panel being entirely weft knit, all the courses of which extend from selvage to selvage, each panel being intarsia knitted with at least one area of inelastic yarn, the remainder of the panel being of elastic yarn.

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