United States Patent

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[54] GIRDLE GRIPPING SURFACE

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[52] **U.S. Cl.** **128/535**
[51] **Int. Cl.** **A41c 1/00**
[58] **Field of Search** 128/534–535, 157, 128/519, 521, 541–542; 2/67–68, 159, 164–168

[56] **References Cited**

UNITED STATES PATENTS

3,253,599	5/1966	Bjorn-Larsen	128/528
3,465,757	9/1969	Barg	128/535
3,478,748	11/1969	Bjorn-Larsen	128/535

FOREIGN PATENTS OR APPLICATIONS

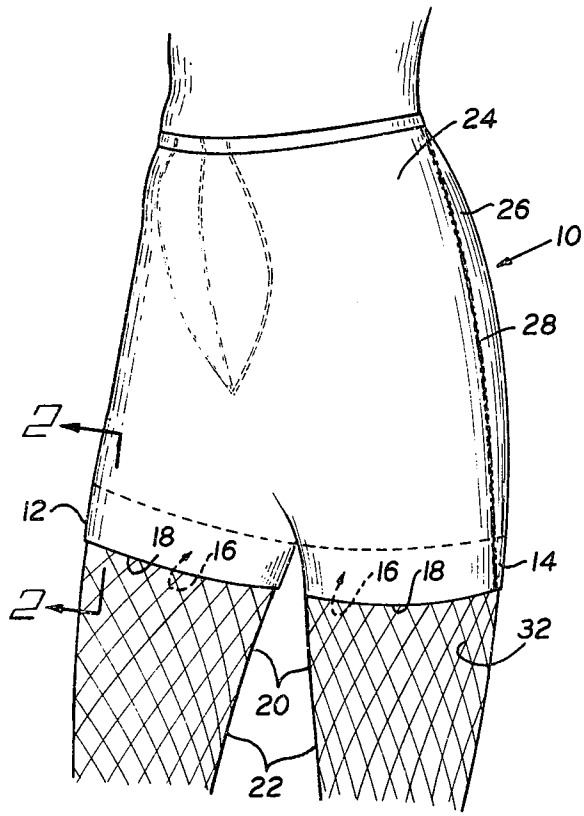
1,506,507	11/1967	France	128/535

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[57] **ABSTRACT**

A girdle friction or gripping surface for stockings, panty hose or the like, the surface being applied directly to the leg portion surfaces bounding the garment leg openings rather than being applied to lace or other fabric which is sewn to the completed garment. The friction surface, in a preferred embodiment, consists of a dispersion of small mass or deposits of latex, elastomeric or plastic material which project through the stocking interstices and, in this manner, prevent the stockings from falling.

1 Claims, 4 Drawing Figures



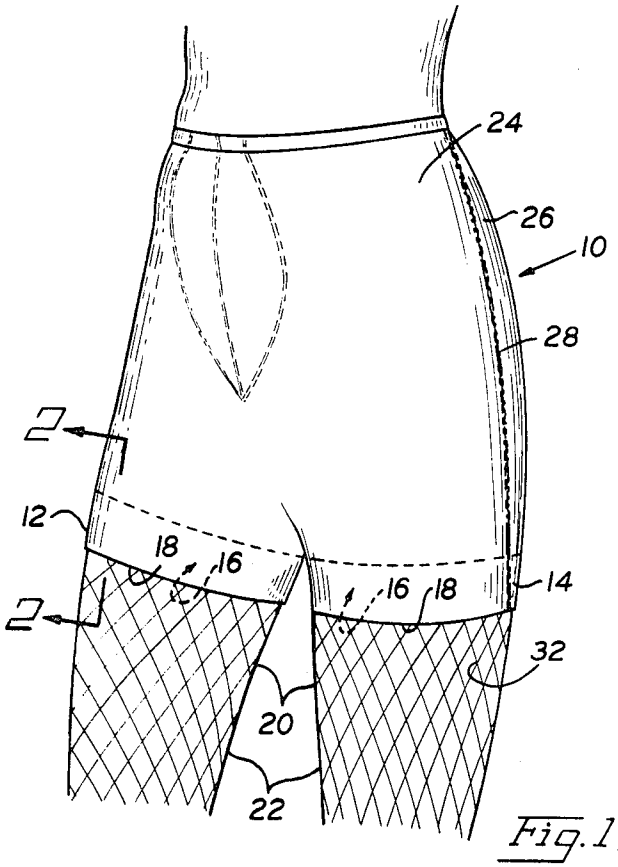


Fig. 1

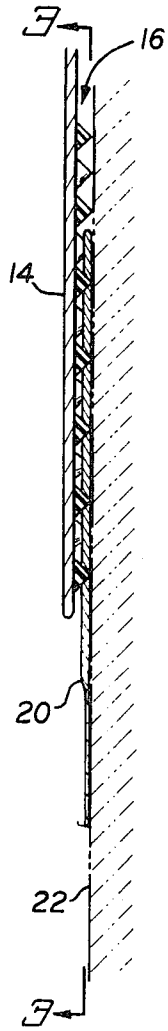


Fig. 2

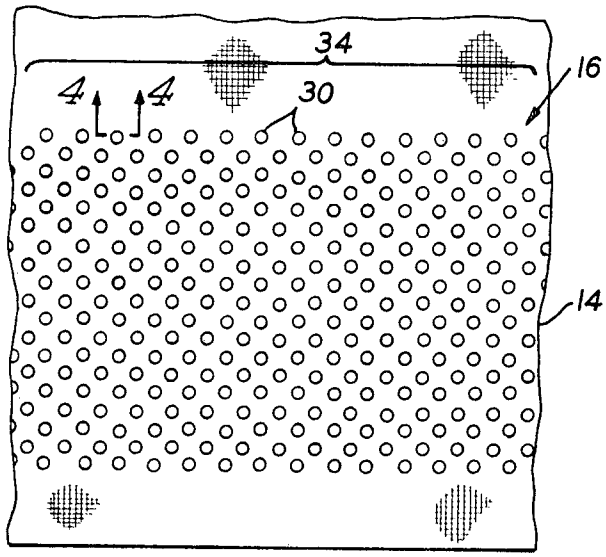


Fig. 3

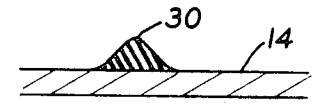


Fig. 4

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GIRDLE GRIPPING SURFACE

The present invention relates generally to a stocking gripping surface for a girdle or like garment, and more particularly to an improved gripping friction surface that readily lends itself to being applied to the girdle panels prior to the sewing attachment of these panels to each other during the construction of the garment.

The present trend is away from stocking garters. Instead, there is provided a girdle-attached friction surface or construction to grippingly engage the stockings to prevent their falling during normal use and activity. A typical known friction surface consists of a continuous latex deposit which forms a ring or band, essentially like a garter, which is contracted or snapped about the upper stocking portion. This latex or elastomeric surface is typically deposited on a pair of lace bands which are then sewn about the respective leg openings of the completed garment. While this known and popular friction surface or construction is generally satisfactory, it is in essence merely a girdle-attached garter and, as such, does not result in any significant savings in costs over a separate or unattached garter.

Broadly, it is an object of the present invention to provide an improved stocking gripping construction for a girdle overcoming the foregoing and other shortcomings of the prior art. Specifically, it is an object to provide a friction surface formed by a spaced arrangement of gripping deposits which is readily applied to the girdle panels in the flat and which applied surface does not interfere with handling and sewing attachment of the panels incident to completion of the garment. The application of the friction surface to the girdle during its manufacture, and particularly the application to the easy-to-handle flat girdle panels significantly reduces handling and manufacturing costs.

A girdle gripping surface demonstrating objects and advantages of the present invention includes an array of small-mass or dots of latex applied directly to the stretch fabric girdle panels, such application being more particularly along the depending marginal edge of the leg portions on the surfaces thereof which bound the leg openings. The spacing between the deposits permits unrestricted stretching of the panels and also contributes to the facilitated subsequent sewing of the panels into the completed garment. The deposits, unlike a garter or continuous friction band, do not physically frictionally engage the stockings as much as they project through the stocking interstices and, in this manner, prevent falling movement of the stocking.

The above brief description, as well as further objects, features and advantages of the present invention, will be more fully appreciated by reference to the following detailed description of a presently preferred, but nonetheless illustrative embodiment in accordance with the present invention, when taken in conjunction with the accompanying drawings, wherein;

FIG. 1 is a perspective view illustrating the contemplated manner of wearing the girdle garment hereof and of the functioning of its gripping surface to hold the wearer's stockings in place;

FIG. 2 is an elevational view, on an enlarged scale, in section taken along lines 2—2 of FIG. 1 which further shows the stocking-gripping functioning of the gripping surface according to the present invention;

FIG. 3 is a partial plan view, on an enlarged scale, illustrating the gripping surface hereof from another viewpoint; and

FIG. 4 is an enlarged elevational view, in section taken on line 4—4 of FIG. 3, illustrating a typical shape of a typical gripping deposit according to the present invention.

Reference is made to the drawings wherein there is shown a conventional elastomeric girdle, generally designated **10**, which includes, on each of the depending leg portions **12** and **14**, an improved stocking-gripping construction, generally designated **16**. That is, each gripping construction **16** is located on the inner surface of the depending leg portions **12** and **14** which respectively bound the leg openings **18** of the garment. In this advantageous position, each gripping construction **16** is thus in a facing relation to the stockings **20** being worn by the user and which stockings are in an interposed position between each gripping construction **16** and a leg **22** of the user. Although the use of gripping constructions on the depending leg portions of an elastomeric girdle, such as the girdle **10** hereof, is not new, the gripping construction **16** hereof is radically different from any gripping construction heretofore used and as a consequence provides several noteworthy advantages, all as will be now described in detail.

In contrast to known gripping constructions, gripping construction **16** is embodied directly on the panels which make up the girdle **10** rather than being added to the completed garment. That is, assuming that the girdle **10** hereof is made up of front and rear panels **24, 26** which are joined at opposite side seams **28**, the gripping construction **16** is readily added to the panels **24** and **26** while these panels are in the flat and before the application of the seams **28** which form the body of the girdle. As already noted, each gripping construction **16** is applied to that portion of the panels which constitute the leg portions **12** and **14** of the garment, and more particularly are applied to the inner surface thereof which bound the leg openings **18** in the completed garment.

As is perhaps best shown in FIG. **3**, each gripping construction **16** consists of a dispersion or spaced arrangement of a plurality of deposits, individually and collectively designated **30**, of a latex, elastomeric or plastic. In a preferred embodiment, the deposits **30** are spaced a quarter inch apart and each is approximately a thirty-second of an inch wide and high. It has been found that elastomeric material will bond itself in the interstices of the girdle panels **24, 26** and, in this manner, have a good adherance to these panels. Yet, the elastomeric panels can freely stretch because of the spacing between the deposits **30**. Additionally, it also has been found that the contraction of the leg portions **12** and **14** about the wearer's legs **22**, while the upper portions of the stockings **12** are in an interposed position between the gripping constructions **16** and the wearer's legs, results in a firm gripping engagement of the stockings by each leg portion gripping construction **16**. As illustrated in FIG. **3**, this gripping engagement is attributable to a significant number of the deposits **30** being projected through aligning interstices **32** of the stockings **20**. Although in the illustrated embodiment the stockings **20** are not a fine mesh, the gripping construction **16** would function in the manner described even if they were of fine mesh except that a lesser number of deposits **30** would project through each stocking interstice. Thus even with a fine stocking mesh, it is contemplated that each deposit **30** will nevertheless be sufficiently small to project through the stocking interstices against the wearer's legs. In this projected position, the deposits **30** function in an obvious way to prevent downward sagging movement of the stockings. Even where the elastomeric deposit comes in contact with a stocking yarn rather than being projected through an interstice between the yarns, the elastomeric material of the deposit functions effectively as a friction surface to also prevent sagging movement of the stocking. The foregoing is achieved without causing any discomfort to the wearer because the elastomeric deposits **30** are relatively soft and are not uncomfortable when pressed against the wearer's legs.

From the foregoing it should be readily appreciated that there has been described herein a noteworthy stocking-gripping construction, in the form of the dispersion of deposits **30**. Among other advantageous features, the gripping construction **16** comprised of the dispersion of elastomeric deposits **30** is readily applied to the girdle panels, while these panels are in the flat, and prior to the sewing operations which result in a completed garment. This patterned elastomeric deposit can be made in any number of ways, the preferred manner being by direct stenciling of the deposits **30** onto the panels **24, 26**. As shown in FIG. **3**, the resulting dispersion preferably should take the form of a horizontally oriented band **34** located on the inner surface of the leg portions **12, 14** and thus in a position encircling each of the legs of the wearer,

somewhat like a garter except that, of course, the leg portions **12** and **14** are an integral part of the garment **10** and are applied at a convenient early stage in the manufacture of the garment.

A latitude of modification, change and substitution is intended in the foregoing disclosure and in some instances some features of the invention will be employed without a corresponding use of other features.

What is claimed is:

1. A gripping construction for a girdle or like garment having elastomeric depending leg portions bounding the leg openings of said garment, said gripping construction comprising plural conically shaped gripping deposits adhered to said elastomeric leg portions, each said deposit being one thirty-second inch high and one thirty-second inch in diameter at its plane of adherence to said elastomeric leg portion and said deposits further being dispersed one-quarter inch apart in staggered relation in alternate rows over the inner face of each said elastomeric leg portion so as to permit expansion and contraction of said elastomeric leg portion in the areas between each of said gripping deposits, said deposits being sized to result in the projection thereof through an aligning interstice of a stocking portion interposed between said gripping construction and the user's leg, whereby a significant gripping engagement is maintained during normal activity of the user between said gripping construction and said underlying portion of said stocking.

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