LEOTARD TYPE GARMENT
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ATTORNEYS
LEOTARD TYPE GARMENT


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This invention relates generally to improvements in garments, more particularly, to improvements in the type of garment commonly referred to as a leotard, and similar garments and a method of making the same.

One object of the present invention is the provision of an improved method of making leotards and similar types of garments from flat blanks knit on a conventional full-fashioned hosiery machine. Pursuant to this object of the present invention flat blanks are knit on a full-fashioned hosiery machine and are subsequently secured together in a manner to be described hereinafter to form garments of the aforesaid character.

Another object of the present invention is the provision of an improved method of making leotards and similar types of garments of the aforesaid character which is inherently simple, and which readily lends itself to efficient and low cost mass production.

Another object of the present invention is the provision of an improved sleeve construction in a garment of the aforesaid character.

Yet another object of the present invention is the provision of an improved sleeve construction in a garment of the aforesaid character which are full-fashioned and thus of superior fitting construction, present an aesthetically attractive appearance, and which are eminently suitable for their intended purpose.

The above and other objects, features and advantages of the present invention will be more fully understood from the following description considered in connection with the accompanying illustrative drawings.

In the drawing which illustrates the best modes now contemplated by me for carrying out my invention:

Fig. 1 is a front perspective view of the full-fashioned knit blanks prior to their seaming;

Fig. 2 is a front view of the garment according to the present invention;

Fig. 3 is a sectional view, on an enlarged scale, taken on the line 3—3 of Fig. 2;

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 3;

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 2;

Fig. 6 is a sectional view taken on the line 6—6 of Fig. 2; and

Fig. 7 is a rear view of a modified form of garment.

Referring to the drawing in detail, the leotard 10 is formed by integrating the body blank 12 and the sleeve blanks 14 and 14' in the manner to be described in detail hereinafter, said blanks being knit to shape in the flat on a conventional full-fashioned hosiery machine. The flat knit blanks 12 and 14 may be formed of any suitable material and in the preferred embodiment said blanks are formed of "elastic nylon" which is also commonly known as Helanca processed nylon, said material being preferred because of its elastic properties.

The flat body blank 12 comprises integrally knit front and rear panels 16 and 16, respectively, said panels being shown folded along a transverse fold line in Fig. 1 and disposed in confronting disposition. The panels 16 and 18 are of the same general configuration and comprise a chest portion A, a waist portion B and a hip portion C. The blank 12 is knit to shape in the flat to provide free salvages 20 and 22 at the opposite sides thereof and free salvages 24 and 26 at the opposite ends thereof, there being provided recessed areas 28 intermediate the opposite ends of the blank at the opposite sides thereof and recessed areas 30 intermediate the opposite sides of said blank at the opposite ends thereof, as clearly shown in Fig. 1. It will be apparent from the above that all of the edges of the blank 12 are constituted by salvages, said salvages being adapted to be secured in the manner to be described in detail hereinafter to form the body part of the leotard 10 shown in Fig. 2. The integral portions A, B and C are knit in the flat so as to approximate the wearer's corresponding body portions and the recessed areas 28 are adapted to form the leg openings 32 of the garment 10 with the recessed areas 30 being adapted to form the neck opening 34 of said garment. The salvages 20 and 22 disposed at the opposite sides of the blank 12 comprise salvage lengths 36 and 38, the salvage lengths 36 extending from the points 40 to the points 42 of the panel with the salvage lengths 38 extending from the points 44 to the points 41 of the rear panel, said salvage lengths 36 and 38 at the same side of the blank 12 being adapted to be secured to each other to define the seams 46 disposed at the opposite sides of the garment 10. The companion pairs of salvages 36 and 38 of the front and rear panels 16 and 18, respectively, are secured to each other in any suitable manner, for example by means of the lines of stitching 45 to define the longitudinal seams 46 and form a tubular body part. The seams 46 terminate at their lower ends at the points 40, 44 and the recessed areas 28, which are closed by the above stitching operation, define the leg openings 32. The salvage lengths 48 of the salvage 24 of the front panel 16 are secured to their companion salvage lengths 50 of the salvage 26 of the rear panel 18 in any conventional manner, for example by means of a suitable stitching operation to form the seam lengths 52 at the upper end of the garment and to define the neck opening 34 thereof. Thus the body part of the garment 10 is of an integral one-piece knit construction and is formed of the single piece of knit material which constitutes the blank 12, the latter being seamed as indicated at 46 and 52 to define the sleeveless body part of the finished garment.

Disposed at an upper region of the opposite side seams 46 and defined by unattached portions of the salvages 20 and 22 are a pair of arm openings 54 which extend peripherally from the points 42, 41 to the outer ends of the salvage lengths 48 and 50 at the ends of the blank 12. Thus the securing together of the salvage lengths 36 and 38 and 48 and 50 in the manner aforesaid will define a tubular garment in an intermediate stage of finishing arm openings 54, the latter being adapted to be integrated with the sleeve blanks 14 in the manner now to be described.

The sleeve blanks 14 are of identical construction and configuration and are integrated with the blank 12 in an identical manner and accordingly only one of the blanks 14 will now be referred to in detail. The sleeve blank 14 is knit to shape in the flat in the manner of the body blank 12 to form the free salvages 56 and 58 at the opposite sides thereof and the free salvage 60 at the inner end thereof. The outer end portion 62 of the blank 14 is constituted by an integrally knit cuff of a pair of layers 64 and 64' of the material which forms said blank, said layers 64 and 64' being integral and defining a space 66 therebetween. It will be apparent that the layers 64 and 64' are integrally knit with the remainder of the blank 14 in the manner best shown in
Fig. 6, and accordingly the cuff 62 is of seamless construction, said cuff being initially formed in the knitting of the blanket 14 on a conventional full-fashioned hosiery machine. The selvages 56 and 58 of the blanket 14 are secured together by means of the line of stitching 68 to define the seam 70 and to form a tubular sleeve blank. After the seaming of the tubular sleeve blank, the selvage 60, which is now a closed peripheral selvage, is secured to the arm opening 54 in any suitable manner, for example by means of the line of stitching 71 and this securing operation will define the peripheral sleeve seam 73. The peripherally extending sleeve seams 73, which are defined by the securer of the blanks 14 and 14’ to the blank 12 extend from the upper terminal ends of the seams 46 to the outer terminal ends of the seams 52. It will be understood that various searing operations as described may be carried out in any desired sequence.

As best shown in Fig. 3, the neck opening 34 has an edge portion 72 which is double over on the inside of the garment and which is retained in place by the line of stitching 74. As shown in Fig. 4, the seams 46 are of the overlapping type, it being understood that any desired type of seam construction may be utilized. With reference to S, the leg openings 32 are of resiliently expansible construction and are formed by doubling over the edge portion 76 on the edge portion 77 and superposing on said edge portion 76 a length of elastic strip material 78, said edge portions and said strip material being retained in position by means of the laterally spaced lines of stitching 89. As shown, the front and back portions or panels 16 and 18 are of the same width at the under-arm region and taper in width toward the waist region and have convexly curved side edges extending from the waist region to the leg openings and the lower portions of the vertical seams extend toward the front of the garment in its flat condition when off the wearer.

With reference to Fig. 7, there is shown a slightly modified form 10 of the present invention which is similar to the form 10 described above except that such modified form 10 is provided with a slide fastener 82 on the rear panel 84 of the garment, said slide fastener terminating at its upper end at the neck opening 34’. Thus the slide fastener 82 extends from the neck opening 34’ vertically down the rear panel 84 of the garment 10 whereby to provide for the facile donning and removal of the garment. Accordingly said slide fastener 82 is adapted to be manipulated in the well known manner to increase the neck opening 34’ of the garment sufficiently to permit the donning and removal of the garment where the elasticity of said neck opening is insufficient to provide for such donning and removal. The body blank of the garment 10 is initially knit to provide free selvages 86 and 86’ which have the stringers 85 and 88’, respectively, of the slide fastener 82 secured thereto, the latter constituting releasable closure means for the opening defined by said free selvages. It will be apparent that the provision of such selvages 86 and 86’ assures absolute uniformity of location of the opening defined thereby and the slide fastener 82.

From the above it will be apparent that the garment 10 comprises blanks 12 and 14 which are each of integrally knit construction and which are integrated with each other to form a tubular garment having integrally knit front and rear panels and comprising chest, waist and hip portions A’, B’ and C’, respectively. Although the aforesaid method has its primary application in the manufacture in the type of theatrical garment commonly referred to as a leotard, it is to be understood that said method is equally applicable to the fabrication of other garments of similar characters. Since the blanks 12 and 14 are knit to shape on a full-fashioned hosiery machine it will be understood that said blanks may be knit proportional to the wearer’s corresponding body portions whereby the garment 10 will conform substantially to the wearer’s body and will result in an excellent fit and appearance. If desired, the crotch region of the garments 10 and 10’ may be suitably reinforced in any desired manner, for example by suitably securing a crotch piece in superposed relation with the crotch area of blank 12 of the garments, or by splicing or plaiting operations.

It will be apparent that, if desired, the garments 10 and 10’ may be of sleeveless construction or may be provided with sleeves other than the sleeves specifically illustrated and described and that said garments may be provided with a turtle neck or any other type of neck construction.

While I have shown and described the preferred embodiments of my invention, it will be understood that various changes may be made in the idea or principles of the invention within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A leotard type garment, comprising front, back and crotch portions integral with each other and of full-fashioned knit fabric having selvage edges, said garment having shoulder portions, a neck opening, arm openings and leg openings, said front and back portions being stitched together at said selvage edges of said full-fashioned fabric by vertical seams extending from said leg openings to said arm openings, said front and back portions being of the same width at the under-arm region and tapering in width toward the waist region and having convexly curved side edges extending from the waist region to the leg openings and the lower portions of said vertical seams extending toward the front of the garment in its flat condition when off the wearer.

2. A leotard type garment, comprising front, back and crotch portions integral with each other and of full-fashioned knit fabric having selvage edges, said garment having shoulder portions, a neck opening, arm openings and leg openings, said front and back portions being stitched together at said selvage edges of said full-fashioned fabric by vertical seams extending from said leg openings to said arm openings, said front and back portions being of the same width at the under-arm region and tapering in width toward the waist region and having convexly curved side edges extending from the waist region to the leg openings and the lower portions of said vertical seams extending toward the front of the garment in its flat condition when off the wearer, and full-fashioned sleeves having selvage edges stitched to said front and back portions at the edges thereof which define said arm openings, respectively.

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