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D. M. CLARK ET AL
GARMENT INCORPORATING ELASTIC FABRIC
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2,196,492

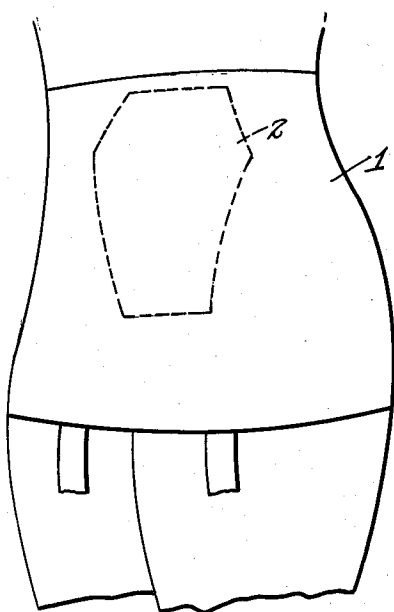


Fig. 1.

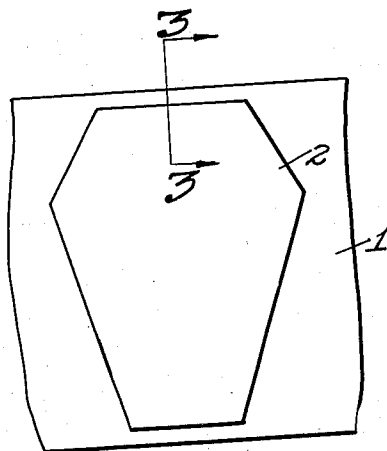


Fig. 2.

Fig. 3.

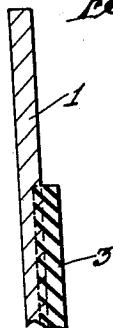


Fig. 5.

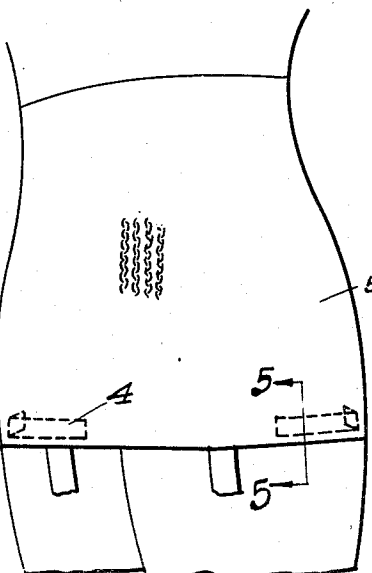


Fig. 6.

Fig. 7.



Fig. 4.



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GARMENT INCORPORATING ELASTIC FABRIC

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3 Claims. (Cl. 2—37)

The present invention relates to a garment to which a panel of latex is applied for controlling the porosity or stretchability of a part of the fabric of the garment.

In the manufacture of a girdle, corselet or the like, made at least in part of elastic fabric, it is frequently customary, as shown for example in the Field Patent No. 1,919,293, to control the stretchability in certain sections by fastening therein a panel which may act to limit the stretch of the garment in predetermined areas. Although this applied panel is in general satisfactory, such a panel is of necessity sewed into the garment and the panel therefore has a tendency to pull away at the seams. Moreover, if the garment itself is made of elastic threads, the act of stitching the panel on may cause damage to certain of the threads, with the resultant breakage. One of the principal objects of the present invention is to provide for controlling the stretch in a predetermined portion of a girdle by applying thereto a covering of latex which forms an integral part of the garment itself and is secured over its entire area to the garment fabric.

This same type of garment has in many instances been found objectionable in that it fails to stay in the proper position on the wearer, either creeping up or creeping down, with resultant discomfort. A further feature of the invention resides in providing portions of the underside of the garment with a tacky latex covering which prevents creeping almost entirely.

In accordance with the present invention the latex is applied as a panel to a fabric to a greater or less degree so that the threads of the fabric are only partly covered in some instances, or so that the threads of the fabric are entirely covered and the latex forms a continuous sheet of material on one side of the fabric. It will be understood that the latex when applied, can be in a more or less vulcanized condition in order to control the resultant hardness and stretchability of the latex when the fabric is completed. In certain instances the latex panel may have applied thereto a flocking or other covering to prevent direct contact between the wearer and the latex.

A further feature of the invention resides in the attachment of stays or reinforcing elements to the garment. Rather than to provide pockets on the garment to receive the stay the latter is embedded in the latex which provides the only attachment for the stay.

Other and further objects and advantages of the invention will more fully appear from the

following detailed description taken in connection with the accompanying drawing, in which:

Fig. 1 is a perspective view of a garment embodying the invention, as applied to a wearer.

Fig. 2 is an elevation of a fragmentary section of the garment as seen from the inside.

Fig. 3 is a diagrammatic sectional view approximately along the line 3—3 of Fig. 2.

Fig. 4 is a view similar to Fig. 1, showing a modification.

Fig. 5 is a fragmentary diagrammatic sectional view substantially along the line 5—5 of Fig. 4.

Fig. 6 is a fragmentary sectional view, corresponding to Fig. 3, showing a further modification.

Fig. 7 is a view similar to Fig. 3, showing an additional modification.

Like reference characters refer to like parts in the different figures.

With reference to the drawing, the fabric embodying the invention is shown as incorporated in a girdle 1, which is, in the particular instance, of knitted material, at least some of the threads of which are elastic so that the entire fabric and garment are stretchable. This fabric may be of the type disclosed in the Clark Patent No. 2,016,168, in which the knitting is so controlled as to produce a stretch in both directions of the fabric. The elastic threads are preferably of the type in which a core is wound with inelastic threads, as for example, the material commercially available under the trade name "Laxtex."

In accordance with the present invention, at least a portion 2 of the inner surface of the fabric forming the girdle is coated with a vulcanized latex 3, of a well known type, one example of which is disclosed in the Townsend Patent No. 1,939,635. The latex which is preferably carried in a liquid as a colloidal suspension or as a dispersion, is vulcanized to a greater or less degree, prior to application to the fabric. The degree of vulcanization is dependent upon the surface desired when the material has been applied to the fabric.

The vulcanized latex is applied, as by spraying or painting, to one surface of the fabric to such an extent that when the carrying solution has evaporated the latex will have partially impregnated the fabric and will form a continuous surface of vulcanized latex, as shown in Fig. 3, which diagrammatically shows the fabric to have been partially penetrated by the latex, with the latter being applied thickly enough to protrude to a very slight degree beyond the surface of

the fabric. The disclosure of the drawing is necessarily greatly exaggerated in order to show the invention.

Instead of applying the latex to such a degree as in Figs. 1 to 3, inclusive, it may be desirable to apply a much smaller amount of latex so that certain of the threads of the fabric on one side thereof are coated, but the surface of the latex is not continuous and the fabric still remains practically as porous as before the application of the latex. This arrangement is shown in Figs. 4 and 5, where the portion 4 of the garment 5 to which the latex is applied is located on the wearer's thighs and the purpose is to prevent a creeping movement of the girdle on the wearer. When the latex 6 is applied in this arrangement it is preferably vulcanized to such an extent that it will be somewhat tacky when the carrying liquid has evaporated so as to adhere slightly to the wearer's body.

Although in the structure of Figs. 4 and 5 the applied latex does in some respects vary the stretchability of the fabric, the particular purpose is not so much to control the stretchability as to provide a slightly tacky surface. On the other hand, in the arrangement of Figs. 1 to 3, the primary purpose is to restrict the stretchability of the fabric of the girdle in either direction so that the portion of the girdle to which the latex is applied will have a more emphatic restraining action than the remainder of the girdle. Thus, with the latex-treated section located at the front of the girdle, the limited elasticity or stretch at this portion tends to reduce any protrusion or bulging which so frequently occurs.

With reference to Fig. 6, the latex-treated portion 7 of the garment 8 may have applied thereto, before the latex is entirely dry, a covering material 9, of fibrous material, preferably in the form of a fabric such as lace, which will prevent the latex itself from coming in direct contact with the wearer. Instead of the fabric shown, the latex may be covered by a suitable thin flocking, which is applied, as by spraying onto the latex, prior to the complete drying thereof. In either event the covering is fibrous material to prevent contact directly between the latex and the wearer's body.

As shown in Fig. 7, the girdle 10 may furthermore be reinforced by embedding stays 11 of resilient material, such as steel, within the latex-

treated section 12. In accomplishing this, the fabric has a small amount of latex applied thereto, the stay is then placed in position, and sufficient additional latex is then applied to cover the stay, and to provide a smooth surface. By this arrangement, the stay is held in the desired position in the fabric, and does not require the use of pockets or other fastening means, since the latex itself provides the sole holding means for the stays.

From the foregoing, it will be apparent that the present invention involves the treatment of one surface of a fabric, the latter being preferably elastic, with a latex which is more or less vulcanized, to provide, when the carrying liquid for the latex is dried, a partially vulcanized latex coating integral with and permanently united to the fabric to such an extent as to form a unitary article.

We claim:

1. A new article of manufacture, comprising a girdle or like garment of knitted elastic fabric incorporating elastic threads, having a vulcanized latex coating applied as a panel only to certain areas on one surface thereof, said coating being integrally combined with and covering the surface threads of the fabric over the entire area of the latex coating.

2. A new article of manufacture, comprising a girdle or like garment of knitted elastic fabric incorporating elastic threads, having a vulcanized latex coating applied as a panel only to certain areas on the inner surface of the garment, said latex coating being integrally combined with and covering the surface threads of the fabric over the entire area of the latex coating and flocking applied to the body contacting surface of the panel.

3. A new article of manufacture, comprising a girdle or like garment of knitted elastic fabric incorporating elastic threads, having a vulcanized latex coating applied as a panel only to certain areas on one surface thereof, said coating being integrally combined with and covering the surface threads of the fabric over the entire area of the latex, and stiffening means embedded in the coating and held to the fabric by the coating.

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