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2,184,772

ELASTIC TEXTILE FABRIC

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Fig. 1.

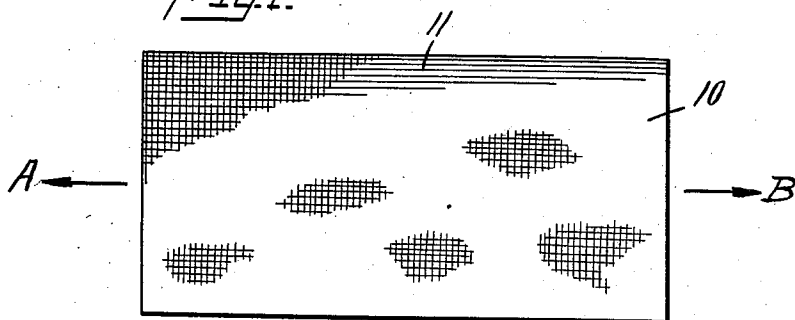


Fig. 2.

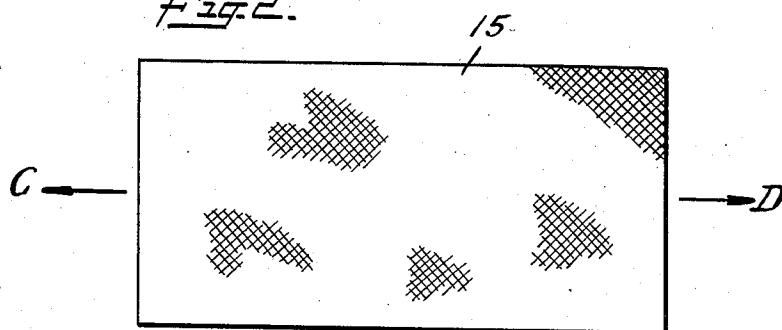
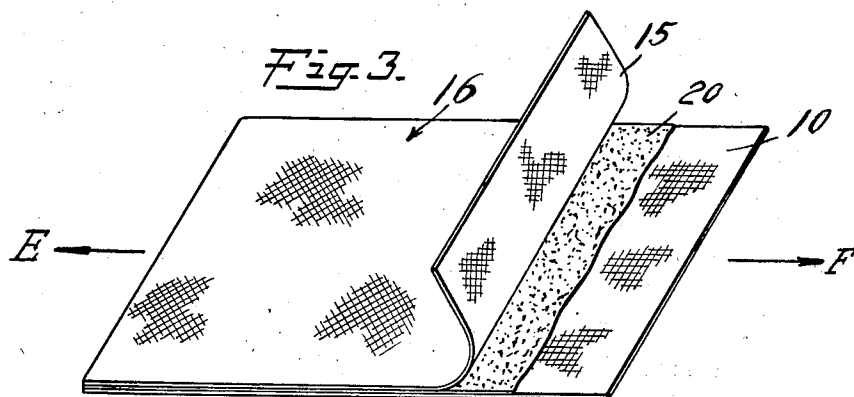


Fig. 3.



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ELASTIC TEXTILE FABRIC

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1 Claim. (Cl. 154—48)

This invention relates to textile material or textile fabric.

As is well known, textile material made from cotton, wool or other yarn has a limited amount of stretch, particularly when the material is pulled on a bias. However, when the material has been stretched it will not return to its original shape and size since the material has no inherent elasticity.

10 It is very desirable to provide for a limited amount of stretch in textile fabrics used for shoes or like articles so that the fabric will fit snugly over the foot, as for instance, over the instep. This, however, has not been possible with the
15 usual or ordinary textile fabrics since such fabric after being stretched and held in stretched condition will not return to its original size and will become warped or loose.

This invention has for its salient object to provide an elastic textile fabric so constructed and constituted that the material may be stretched,
20 but will return to its original form and shape and will retain its elasticity.

Further objects of the invention will appear from the following specification taken in connection with the drawing which forms a part of this application, and in which

Fig. 1 is a plan view of a textile fabric woven with elastic yarn so that it can be stretched;

30 Fig. 2 is a plan view of an ordinary piece of textile woven material or fabric; and

Fig. 3 is a perspective view of laminated textile material or fabric in which the fabric shown in Figs. 1 and 2 have been cemented together with
35 an elastic or rubber cement.

In Fig. 1 there is shown a piece of textile material or fabric 10 in which the weft threads 11 are formed of elastic yarn. This material may be stretched in the direction shown by the arrows A, B. The elastic weft threads 11 return the material to its original dimensions after it has been stretched.

40 Fig. 2 shows a piece of textile fabric 15 of ordinary or usual textile material, such for instance, as gabardine. It will be noted that this material is cut on a bias and it can be stretched

in the direction indicated by the arrows C, D, but since this material has no inherent elasticity it will not return to its original dimensions or to the original size and shape thereof after it has been held in stretched position.

In Fig. 3 there is shown a piece 16 of laminated
5 textile material comprising the layer 10 of elastic fabric, the layer 15 of biased textile fabric and an intermediate layer 20 of elastic or rubber cement by which the two outer layers are laminated, thus forming a laminated fabric. The
10 laminated fabric 16 can be stretched in the direction indicated by the arrows E, F. This stretching is permitted due to the fabric 15 being arranged on a bias and the cementing of the elastic fabric 10 thereto in such a relation to the biased
15 fabric that the direction of stretching permitted in the biased fabric will coincide with the direction of stretch permitted in the elastic fabric 10. Since the elastic fabric is cemented to the biased fabric by an elastic cement, the laminated fabric
20 will return to its original size and shape after its stretching, due to the elasticity of the fabric 10.

Although one specific embodiment of the invention has been particularly shown and described, it will be understood that the invention
25 is capable of modification and that changes in the construction and in the arrangement of the various cooperating parts may be made without departing from the spirit or scope of the invention, as expressed in the following claim.

What I claim is:

A laminated elastic textile fabric comprising a layer of woven textile material having substantially no stretch in a direction parallel to the warp threads or in a direction parallel to the
35 weft threads, and a layer of woven elastic textile fabric having parallel elastic threads extending in one direction and stretchable in said direction, but non-stretchable in a direction at right angles thereto, the layer of woven textile material being
40 disposed on a bias relative to the line of stretch of the woven elastic textile fabric, and an elastic cement binding said layers together.

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