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PROCESS FOR MAKING FOOTWEAR WITH ELASTIC
MATERIAL PROJECTIONS AND THE FOOTWEAR
OBTAINED BY THE SAID PROCESS
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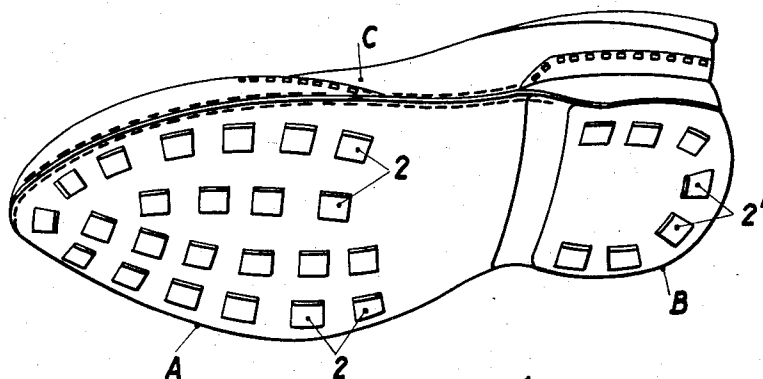


FIG. 1

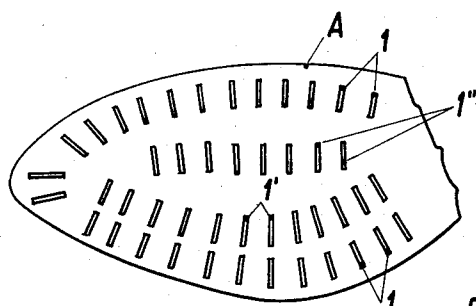


FIG. 2

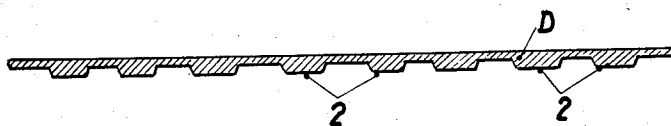


FIG. 3

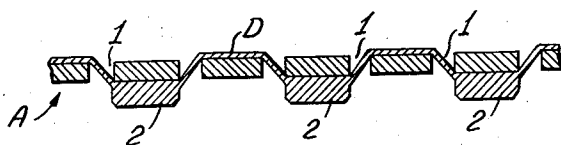


FIG. 4

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PROCESS FOR MAKING FOOTWEAR WITH ELASTIC MATERIAL PROJECTIONS AND THE FOOTWEAR OBTAINED BY THE SAID PROCESS

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1 Claim. (Cl. 36—59)

The present invention relates to a process of making footwear with elastic material projections, and the footwear obtained through the application of said process.

The process, according to the invention, is substantially characterized by the fact that the base member of the supporting footwear is prepared with a series of slots, through which a strip of elastic material or the like is alternately passed in and out so as to create upon the lowermost sole surface elastic material projections which extend from one slot to a contiguous one.

The invention will be described with reference to the appended drawing, and in which:

Fig. 1 is a perspective view of the footwear made in accordance with the method of the invention;

Fig. 2 is a fragmentary bottom plan view of the footwear shown in Fig. 1 before the application of the elastic material strips of the invention;

Fig. 3 is a side elevation of a strip of the elastic material employed in the invention; and

Fig. 4 is a sectional view showing a strip of the elastic material interwoven with a shoe outsole.

Referring to the figures, A indicates a shoe sole, while B indicates a heel. Both sole A and heel B can be made in a suitably shaped single unitary piece, if desired. The sole A is provided with a series of slots extending through the same from the upper surface thereof to the lower surface thereof. These slots are disposed substantially parallel to each other as may be observed by reference to Fig. 2.

As illustrated in Fig. 2, one perimetral series of slots, certain of which slots in the series are identified by numeral 1, are provided adjacent the perimeter of the member A.

A longitudinal series of slots, certain of which slots in the series are identified by numeral 1', are provided in the midsection of member A.

Another longitudinal series of slots, certain of which slots in the series are identified by numeral 1'' are provided in another portion the midsection of member A.

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It will be appreciated that the slots of a series may be in a straight line as in the case of slots 1'' or in a curved line as in the case of slots 1'.

A strip or strips of elastic or like material 2 having a width corresponding to the length of the slots 1, 1' and 1'' is/are passed in and out of the slots as in a weaving manner.

The upper C of the shoe is then secured to the sole A and heel B as in the well known manner.

With special reference to Fig. 3, the strip D of the elastic material is shown to be of a plastic material and carries upon its lowermost face downwardly depending projections 2, the width of which coincides with the width of the strip itself. The length of a projection 2 is substantially equal to the center to center distance between any two of the contiguous slots.

Upon assembly of the strip D and the sole A, the strip D can be so interlaced with the sole A that the projections depend outwardly and downwardly away from the lowermost face of the sole so as to be brought to bear upon the surface of the ground or other base when the footwear is worn by the wearer.

In the illustrated example, the strip of elastic material are three in number for the slots 1, 1' and 1''.

As shown in Fig. 1, the heel can be fabric with a system analogous to the one above described for the sole A, and wherein a perimetral strip of elastic material having the projections 2' is interwoven in heel slots of similar design and function.

In order to improve the connection between a strip D and the sole A, suitable adhesives may be used on the faces of the contacting parts.

The footwear made in accordance herewith is remarkably flexible and serviceable in that the projections of elastic material are not integral parts of the sole and therefore are not affected by the normal rigidity thereof.

I claim:

A shoe outsole comprising a longitudinal row of transverse slots having spaces therebetween, and a strip of relatively yieldable material extending through the slots of said outsole with alternate portions thereof overlying the spaces between the slots at opposite inner and outer sides of said outsole, the portions of said strip overlying the spaces on the outer side of said outsole being provided with downwardly extending projections.

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