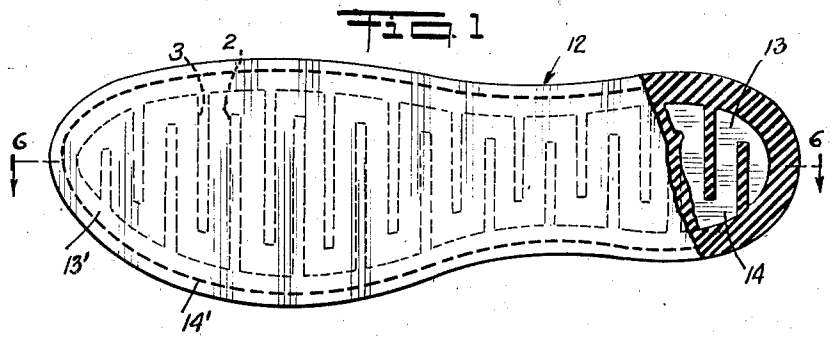
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RUBBER OR PLASTIC ENCASED FLEXIBLE REINFORCEMENT OR FLEXIBLE MEMBER

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INVENTORS:
Henry Ghez
Oscar Ghez
BY
Haseltine, Lake & Co.
ATTORNEYS.

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RUBBER OR PLASTIC ENCASED FLEXIBLE REINFORCEMENT OR FLEXIBLE MEMBER

Henry Ghez and Oscar Ghez, New York, N. Y.

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6 Claims. (Cl. 36—32)

This invention relates to a resilient shoe sole and has for its chief object to provide an improved shoe sole including an elongated reinforcing member of normally stiff material made flexible or resilient by a series of spaced slots and an elastic material encasing the outer periphery of said member and extending into said slots so as to prevent undue distortion or breakage of such member such material further having a sufficient marginal width about the member for stitching to an upper.

The resilient member is preferably made of cardboard, vulcanized fiber, plain wood or plywood, aluminum and any and all other stiff materials, while the elastic material to be associated therewith may be live rubber, either natural or synthetic, or any resilient or elastic plastic material more or less well known in the art, such as Vinylite and cellulose acetate derivatives. It is quite evident that the degree of resiliency which will inhere in the resilient member will depend upon the thickness and rigidity of the material used, the length of the slits or slots therein as well as the width and actual form, and also their number which involves greater or lesser distances between the same. The rubber or plastic material encasing the resilient member and entering the slots will obviously form a compact mass with the resilient member, which will not readily be dissociated therefrom when the resulting compact body is tensed, compressed or distorted within a reasonable degree.

In order to disclose more comprehensively the features of our invention, the same is illustrated in the accompanying drawing by way of example.

Fig. 1 is a plan view partly in section of a shoe sole built up on the principle of our invention, having elastic plastic or rubber encasing an interior resilient member.

Fig. 2 is a longitudinal section of the sole of Figure 1 along line 6—6.

Fig. 3 is a modification of the sole of Figure 2.

Fig. 4 is another modification of the same.

Fig. 5 is a further modification.

A shoe sole embodying the salient features of our invention is indicated at 12 in Figures 1 and 2. In these figures a resilient member 13 formed from fiber wood multiple veneer, or other suitable stiff material is provided with alternate slots 2, 3 which extend from one edge or side of the same toward the other and vice versa, so that only a relatively small neck of the material remains beyond the inner edge of each slot comparable in width with the distance between slots. The resilient member 13 has a contour 14 corresponding in spaced manner to that of the exterior sole 12 and wholly encased in rubber or plastic material 6, which penetrates the slots 2 and 3, the resilient member of course giving both resiliency and body to the sole, while the rubber retains the same intact and within bounds so that its resilience is maintained and at the same time the elasticity of the rubber is present.

In Figure 3 a modification is shown wherein the sole 14 only partly encloses the resilient sole member 13 by exposing the top of the same and covering the sides and the bottom and filling the slots or slits between the individual branches or parts 15 of the resilient member, the materials being of the same nature as in Figures 1 and 2.

An opposite modification is disclosed in Figure 4, wherein the resilient member 13 is exposed upon the bottom of the sole 16 and being otherwise constructed in similar fashion to the sole of Figure 3. Figure 5 is a different modification in which the sole 17 consists of the plastic or rubber material 6, which merely surrounds the resilient member 18 and fills the slots at 19 between the branches 20 of the resilient member, the latter extending through the sole so as to be exposed at both top and bottom surfaces.

Having now fully described our invention, we claim:

1. A resilient shoe sole including an elongated reinforcing member of normally stiff material having spaced slot portions extending alternately a distance from the two side edges in upon said member, and an elastic material encasing the outer edges or periphery of the same member and extending into the slot portions thereof so as to prevent undue distortion or breakage of said member and further having a sufficient marginal width about the member for stitching to an upper, while exposing the upper and lower surfaces of said member to view.

2. A resilient shoe sole including an elongated reinforcing member of normally stiff material having spaced slot portions extending alternately a distance from the two side edges in upon said member, and an elastic material encasing the outer edges and one surface of the same member and extending into the slot portions thereof so as to prevent undue distortion or breakage of said member and further having a sufficient marginal width about the member for stitching to an upper, while exposing one surface of said member to view.

3. A resilient shoe sole including an elongated

reinforcing member of normally stiff material having spaced slot portions extending alternately a distance from the two side edges in upon said member, and an elastic material encasing the outer edges and both sides of the same member and extending into the slot portions thereof so as to prevent undue distortion or breakage of said member and further having a sufficient marginal width about the member for stitching to an upper, while completely concealing said member from view.

4. A resilient shoe sole including an elongated reinforcing member of normally stiff material having a plurality of spaced open slots extending alternately a distance inwardly from the two side edges of said member, said slots extending generally transverse to the length of the element, and an elastic material encasing the outer edges or periphery of the member and extending into the slots thereof so as to prevent undue distortion or breakage of said member, said material being molded to said member, and further having a sufficient marginal width about the member for stitching to an upper.

5. A resilient sole as claimed in claim 4, said elastic material exposing at least one of the upper and lower surfaces of said member to view.

6. A resilient sole as claimed in claim 4, said elastic material exposing at least one of the upper and lower surfaces of said member to view, said slots lying at right angles to the length of the element, being substantially parallel, and having substantially parallel spaced edges.

HENRY GHEZ.
OSCAR GHEZ.