

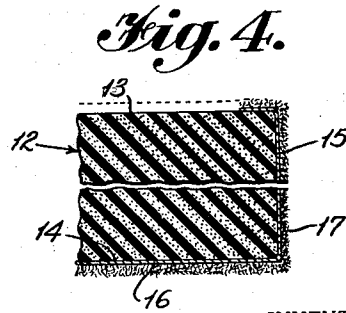
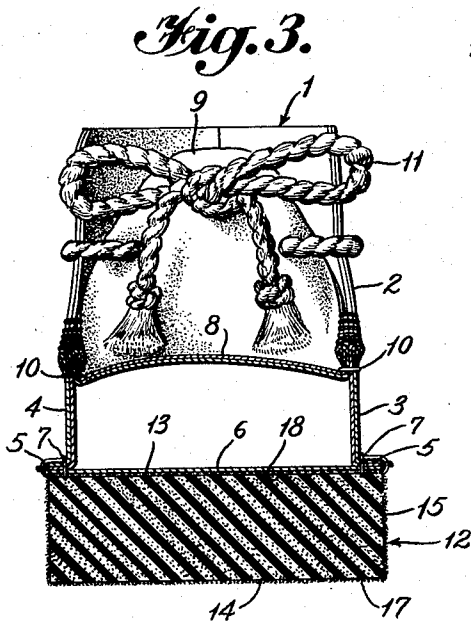
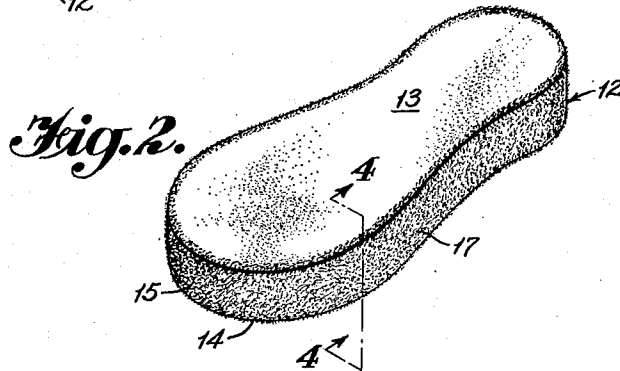
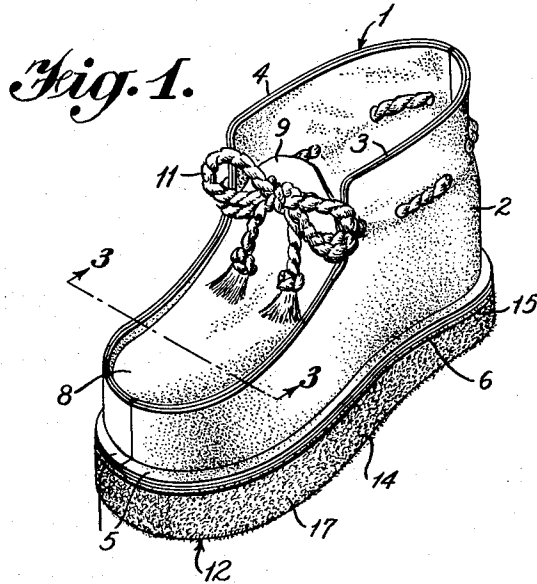
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ARTICLE OF FOOTWEAR EMBODYING FLOCK-COATED OUTSOLE

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ARTICLE OF FOOTWEAR EMBODYING
FLOCK-COATED OUTSOLE

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2 Claims. (Cl. 36—9)

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The present invention relates to footwear, and more particularly to footwear having an outsole coated with dyed fibrous material so that it matches the color of the upper, or artistically contrasts with the color of the upper.

More specifically, the invention relates to leisure footwear having a thick outsole of sponge rubber, foam rubber, crepe rubber or the like, at least the peripheral edges of which have been coated with flocculent material to improve the appearance and wear qualities thereof.

The principal object of the invention is to provide footwear having outsoles whose exposed surfaces are covered with a layer of decorative, colored material to enhance the normal plain appearance thereof.

Another object of the invention is to provide an outsole adapted for use with various types of footwear, and which will improve the appearance and wear qualities of such footwear when attached thereto.

A further and more specific object of the invention is to provide an outsole having its edges and/or one or both sides thereof covered with flocculent material to increase the attractiveness thereof.

A still further object of the invention is to provide a porous sponge rubber or foam rubber outsole which has all or part of the exposed cellular surfaces thereof sealed with an adhesive and which adhesive serves also as a means for bonding minute fibrous particles to the rubber, whereby all or part of the exposed surface of the outsole may be covered with the fibrous material.

Other objects and features of the invention will become apparent from the following description taken in conjunction with the accompanying drawings, in which:

Fig. 1 is a perspective view of an article of footwear embodying an outsole made in accordance with the principles of the present invention;

Fig. 2 is a perspective view of the outsole per se;

Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 1; and

Fig. 4 is a fragmentary, schematic sectional view through one edge of the outsole taken on the line 4—4 of Fig. 2.

Referring now to Fig. 1 of the drawings, the complete article of footwear is generally identified by the numeral 1 and comprises an upper 2 made of cloth or other suitable material in the manner fully disclosed in the copending application of Preston E. Hiestand, Ser. No. 292,707 filed June 10, 1952, and which upper per se forms

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no part of the present invention, although certain portions thereof will, of necessity, be described herein. Thus, the upper 2 comprises double-thickness side wall portions 3 and 4 having the lower edges thereof turned laterally outwardly to form a flange 5. An insole 6 of canvas, or any other suitable material, underlies the flanges 5 of the side walls 3 and 4, as best shown in Fig. 3. The insole 6 is secured to the flange portions 5 by stitches 7 diagrammatically illustrated in Fig. 3. A double-thickness toe portion 8 having an extension forming a tongue 9 is secured to the side walls 3 and 4 by stitches 10, also diagrammatically shown in Fig. 3. A tie cord 11 is threaded through suitable openings formed in the tongue 9 and in the side wall portions 3 and 4 and is adapted to be pulled tight to draw the side walls snugly about the ankle of the wearer and to have its ends tied in a bow-knot over the tongue to retain the article on the foot of the wearer.

The outsole is generally identified by the numeral 12 and may be made of any suitable material but is preferably made of yieldable, cushion-like material, such as, sponge rubber, foam rubber, crepe rubber, etc. When the outsole 12 is made of cellular sponge or foam rubber, it is preferred to make the same of a thickness of about $\frac{1}{2}$ " to 1" in order to provide a yieldable support affording a feeling of springiness and great comfort to the foot of the wearer.

The outsole 12 has a top surface 13, a bottom surface 14, and a side or peripheral edge 15 which conforms to the contour of the insole 6. In the present instance, the contour of the outsole 12 is such that it may be used for footwear to be worn on either the left or the right foot. This greatly simplifies manufacturing procedure. However, it is to be understood that any desired contour may be given to the outsole, without deviating from the principles of the invention.

Sponge and foam rubber soles, while they may be formed of compositions having coloring matter added thereto, nevertheless, present surfaces at which a substantial number of the openings comprising the cells thereof are exposed, thereby detracting from the appearance of the soles as a whole. The present invention contemplates coating at least the edges, and one or both sides of such soles, with a suitable "flock," such as minute particles of rayon, nylon, cotton, wool, hair, etc. to conceal such openings and at the same time enhance the appearance of the soles. The flock material is preferably dyed a desired color before application to the outsole.

In applying the flock material to the outsole 12, those portions of the outsole which are to be covered with the flock are first coated with a neutral, or preferably a colored adhesive, such as, a quick-drying latex, indicated at 16, Fig. 4, and then a layer of flock material 17 is applied to the latex while it is still tacky. The latex may be applied by a spray gun or brush, or the outsole may be dipped in the latex. One or more coatings may be applied, although a single coating has been found to be satisfactory. Such coating or coatings at least seal the outer pores of the outsole to which the same is applied. In any event, the latex or other adhesive used is preferably of a quick-drying character so that substantially immediately after application of the adhesive, the flock can be applied. While the adhesive is still in a tacky condition, dry flock is blown onto the adhesive by an air gun, or sprinkled onto the adhesive by hand, an excess being deposited so that upon pressing the flock against the outsole, by hand or by rollers, a uniform layer of the flock adheres to the outsole. After the adhesive has thoroughly dried, the superfluous flock can be readily removed by vigorously shaking the outsole, or by brushing the outsole. The flock on the finished outsole presents the appearance of a nap and serves the practical purposes of covering up the exposed cells or pores of the sponge or foam rubber outsole, and at the same time, increases the wear qualities of the outsole by reinforcing the cells against tearing or rupturing in the coated areas when in use.

Only the edge 15 of the outsole 12 need be coated with flock. However, as shown in Fig. 4, the edge 15 and the bottom or lower surface 14 of the outsole 12 are completely covered with flock. The entire upper surface 13 of the outsole may also be coated with flock, if desired. Instead of coating the entire upper surface 13, the same may be left uncoated. Alternatively, only the marginal portion of the surface 13 at the edge 15 may be coated. The latter is desirable for the reason that the upper surface 13 of the outsole 12 is normally secured to the outer side of the insole 6 by a layer of latex or other suitable, quick-drying cement 18, as shown in Fig. 3, and it is preferred that any part of the surface 13 that may be inadvertently left exposed at the edge of the insole 6 present the same appearance as the edge 15, rather than the color of the uncoated outsole. Thus, a neat appearance at the juncture of the outer edge of the insole 6 and the upper edge of the outsole 12, is assured.

It is preferable to employ an adhesive 16 that is of the same color as the flock material 17, although a clear, colorless adhesive may be employed, if desired. The flock coating may be of the same color as the material employed in making the upper 2 or may be a harmonizing or contrasting color. For example, the upper 2 may be made of bright yellow cloth and the adhesive 16 and flock 17 on the outsole 12 may be dark brown.

It will be appreciated that the flock on the outsole need not all be of the same color. For example, the side edge 15 of the outsole 12 may be covered with flock of one color and the bottom 14

covered with flock of a different color. Also, mixtures of flock materials or varicolored flock may be applied to all or any part of the outsole to provide an infinite variety of patterns and color tones.

The completed article of footwear is extremely light in weight and the combination of the cloth upper 2 and yieldable outsole 12 impart to the feet of the wearer a feeling of lightness and springiness not achieved by ordinary footwear. The present footwear is adapted for leisure wear at home, at the beach, etc. The flock coating, in addition to being attractive, also improves the wear qualities of the article.

It will be understood that the invention is not limited to the application of flock to outsoles of any given thickness, nor to outsoles made of any particular base material. Thus, various departures may be made from the specific outsole disclosed herein, without departing from the principles of the invention or the scope of the annexed claims.

I claim:

1. An article of footwear, comprising: an upper having an insole; a cellular sponge rubber outsole having a top surface, a bottom surface, and a peripheral edge having open cells, said outsole conforming closely to the contour of said insole; means securing said outsole to said insole with the top face of said outsole confronting said insole; a substantial coating of flexible and resilient adhesive material substantially entirely covering the peripheral edge and the bottom surface of said outsole; and a layer of flock substantially entirely covering said adhesive coating material and bonded thereto, whereby the adhesive material and flock coating close said cells and reinforce the outsole against tearing or rupturing in the coated areas when in use.

2. An article of footwear, comprising: an upper having an insole; a cellular, rubber outsole having a top surface, a bottom surface, and a peripheral edge conforming closely to the contour of said insole; means securing said outsole to said insole with the top face of said outsole confronting said insole; a substantial coating of flexible and resilient adhesive material substantially entirely covering the peripheral edge, the bottom surface and the marginal portion of the top surface of said outsole; and a layer of flock substantially entirely covering said adhesive coating material and bonded thereto.

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