Jan. 30, 1934. A. G. LEGGE 1,945,115

OUTSOLE FOR SHOES

Filed Aug. 25, 1932

Fig. 1.

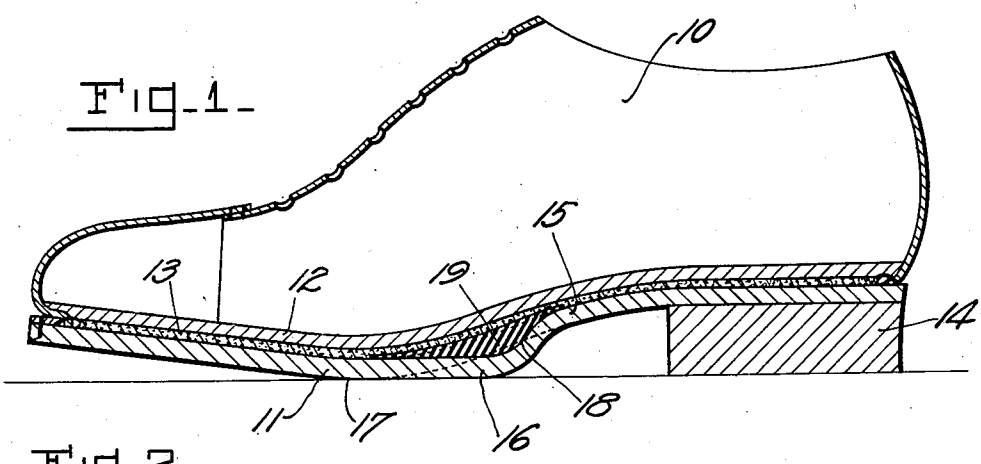


Fig. 2.

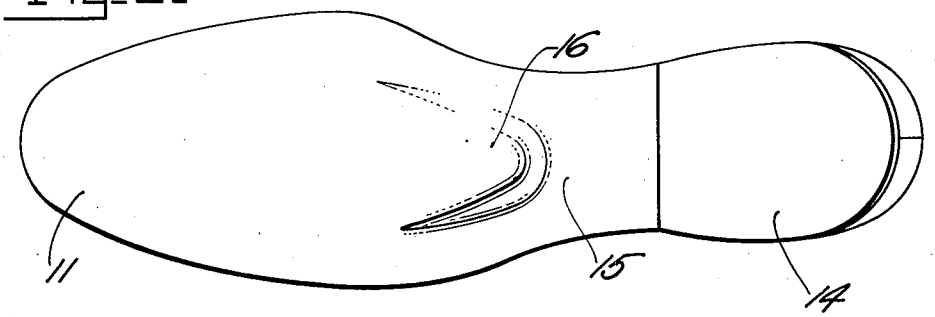


Fig. 3.

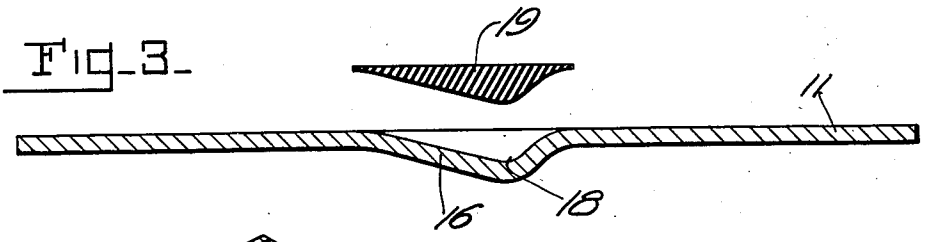


Fig. 4.

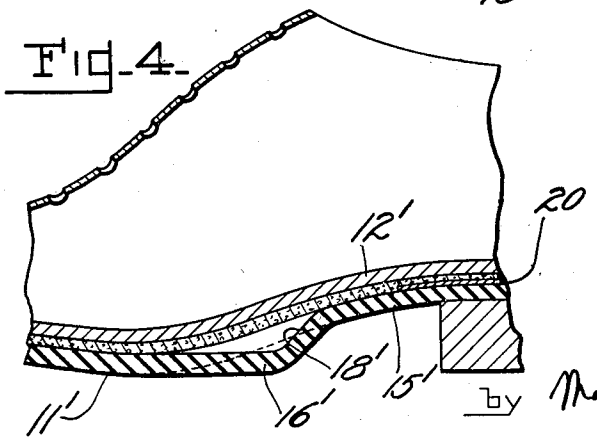




Fig. 5.

INVENTOR:
Alfred G. Legge
by Macleod, Calver, Copeland & Dike
Attys.

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OUTSOLE FOR SHOES

Alfred G. Legge, Brockton, Mass.

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2 Claims. (Cl. 36—76)

This invention relates to shoes and more particularly to an improved outsole construction. The invention has for its object the provision of means embodied in the outsole of a shoe tending to reenforce the shank portion and hold the toe portion down, and thus preserve the shape of the shoe.

In accordance with the invention the shank portion of the outsole is provided with a projection extending from the tread or ball of the outsole. The projection may be formed in any manner desired. In the case of outsoles of leather or composition of a similar nature, the material in a portion of the shank adjacent the tread, preferably, is distorted or molded to provide a cavity on the inner surface of the outsole and a projection on the outer surface extending from the tread. The cavity, preferably, is filled with a flexible material, such as a rubber inlay, cemented or otherwise secured in the cavity. In the case of rubber outsoles or compositions of a similar nature the shank portion is molded to provide either a hollow projection or a solid projection in the shank portion extending from the tread. The hollow projection tends to make the shoe more flexible and the flexibility may be varied by varying the depth of the projection and the thickness of the material forming the projection.

The invention will be more clearly understood from the following description in conjunction with the accompanying drawing in which

Fig. 1 is a vertical longitudinal section of a shoe having applied thereto a leather outsole embodying the invention;

Fig. 2 is a bottom plan view of the same;

Fig. 3 is a vertical longitudinal section of the outsole shown in Figs. 1 and 2 before its application to the shoe;

Fig. 4 is a fragmentary sectional view of a shoe having a rubber outsole; and

Fig. 5 is a fragmentary sectional view of a portion of a rubber outsole of modified construction.

Before explaining in detail the present invention it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawing, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation and it is not intended to limit the invention claimed herein beyond the requirements of the prior art.

One embodiment of the invention is illustrated in Figs. 1 to 3 of the accompanying drawing. In Figs. 1 and 2 a shoe is shown having an upper 10 of suitable material, such as leather, canvas or the like, suitably secured upon an outsole 11 of leather or a composition of a similar nature. An insole 12 is positioned within the upper 10 and secured thereto and provides a space between the outsole 11 and the insole 12 which is filled by suitable material, such as ground cork 13. A heel 14 is suitably secured in any usual manner to the heel portion of the outsole 11.

In accordance with one embodiment of the invention the outsole 11 as shown in Figs. 1 to 3 is formed so as to provide the shank portion 15 with a hollow projection 16 extending from the tread 17, preferably, so that the outer surface of the projection is substantially flush with the tread 17. Preferably, the outer edges of the projection 16 are spaced from the side edges of the shank portion 15 and extend substantially parallel thereto and are merged at their rear ends at a point about midway between the tread 17 and the forward end of the heel 14. The projection may be formed in the outsole 11 in any suitable manner as by embossing or molding which results in the formation of a cavity 18 upon the inner surface of the shank portion of the outsole. The cavity 18, preferably, is filled with a suitable inlay 19, such as rubber, molded to the required shape and secured in the cavity 18 as by cement.

In Fig. 4 a portion of a shoe is shown of a construction similar to that shown in Fig. 1 except that the outsole 11′ is of rubber. In this construction the projection 16′ is hollow and the cavity 18′ is left unfilled. If desired, a metal shank support 20 may be suitably secured between the outsole 11′ and the insole 12′ extending from the middle of the heel over the shank portion 15′ to a point closely adjacent the rear end of the projection 16′ in order to further reenforce the shank portion 15′. In Fig. 5 a portion of a modified form of rubber outsole is shown having a projection 16″ which is solid.

Thus, in accordance with the invention the shank portion of a shoe is reenforced by a projection of substantially U-shape cross section extending from the tread of the outsole and which not only tends to support the shank of the outsole but also tends to hold the toe portion of the outsole down and thus maintain the shape it had when the shoe was manufactured. In this manner the shape of the shoe is preserved and the tendency of the shoe to get out of shape

is greatly reduced. The projection formed on the shank portion of the outsole extending from the tread in accordance with the invention may be employed alone or in combination with a metal shank support. Likewise, the projection can be formed of varied width and depth in order to vary its tendency to reenforce the shank of the shoe. In the case of rubber outsoles the projection may be formed solid or hollow in order to vary the degree of reenforcement of the shank. Preferably, however, in the case of rubber outsoles the projection is formed hollow so that the shoe may be as flexible as possible while reenforced sufficiently to preserve its shape. The projection on the outsole reenforces the shank so that the latter supports part of the weight of the wearer and thus distributes the weight of the wearer more uniformly over his feet, whereas, heretofore, substantially all the weight of the wearer was borne by the ball and heel of the foot. This is accomplished in accordance with the invention without substantially affecting the flexibility of the shoe.

I claim:—

1. An outsole for shoes, a portion of the shank of which is formed with a cavity to provide a projection extending from the tread portion to an intermediate point on the shank, the edges of said projection being spaced from the edges of said outsole.

2. An outsole for shoes, a portion of the shank of which is formed with a cavity to provide a projection extending from the tread portion to an intermediate point on the shank, the edges of said projection being spaced from the edges of said outsole, and a filler for said cavity.

ALFRED G. LEGGE.