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D. A. CUTLER

1,752,787

SHOE

Filed Sept. 5, 1928

Fig. 1

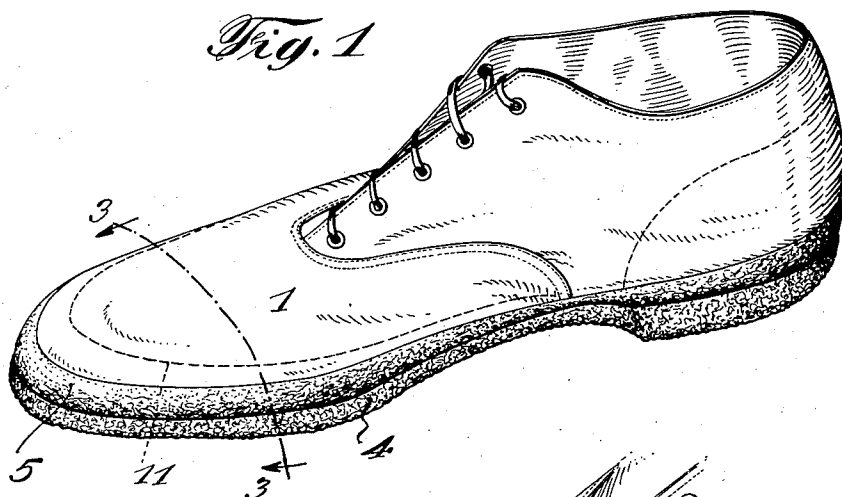


Fig. 2.

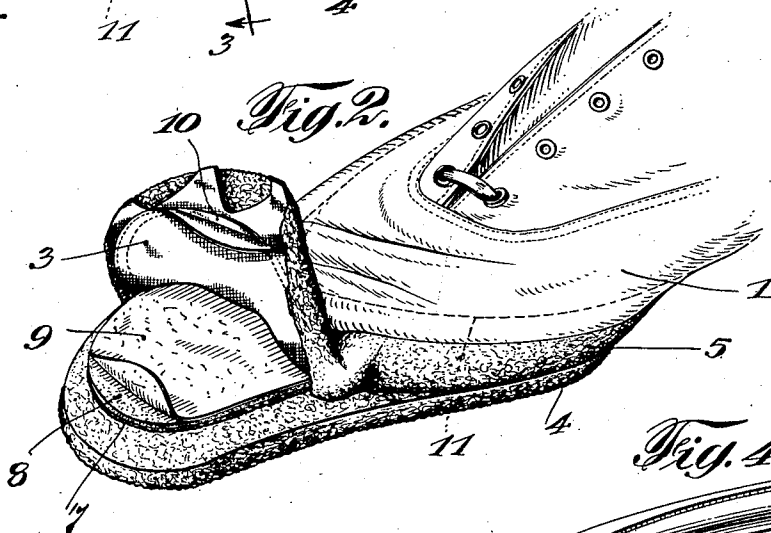


Fig. 4.

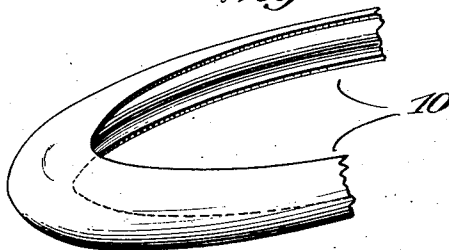
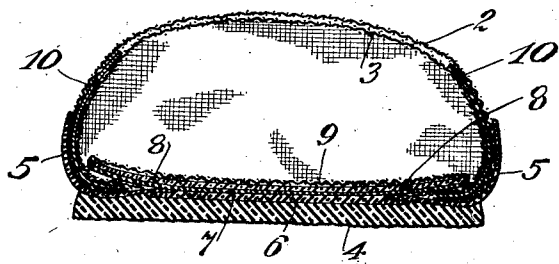


Fig. 3.



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SHOE

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My invention relates to shoes, for sport or other purposes, and usually having a rubber sole and canvas upper.

The principal object is to provide, in such a shoe, an internal reinforcement extending about the vamp portion of the shoe and above the sole, which produces approximately a "box toe", strengthens and properly stiffens the fore-part of the shoe, and prevents "over-running" of the sole.

The characteristics and advantages of the invention are further sufficiently explained in connection with the following detail description of the accompanying drawing, which shows one preferred embodiment. After considering this example, skilled persons will understand that many variations may be made, and I contemplate the employment of any structures that are properly within the scope of the appended claims.

In the drawing:

Fig. 1 is a perspective view of a shoe, embodying the invention in one form.

Fig. 2 is a similar view of the front part of the shoe, with parts separated for explanatory purposes.

Fig. 3 is a section at 3—3, Fig. 1.

Fig. 4 is a perspective view of the reinforcement.

Details of the shoe structure, aside from the special reinforcement, may vary considerably, as will be understood by skilled persons after studying the example given, in which the upper, and especially the vamp portion 1 thereof, is of canvas, and includes an outer sheet 2 and an inner, or lining sheet 3 (Fig. 3). The sole 4 is of crepe rubber, or other suitable material. A welt strip 5, usually of material similar to the sole, is secured thereto and passes about the exterior of the canvas upper, being suitably secured, as by cementing, in the case of crepe or other rubber.

The central portion of the sole may have a filler strip 6, of similar, or other suitable material. The inner margin of the welt strip is brought in and secured over the edges of this filler strip.

The insole may consist of a plurality of sheets or layers, cemented or otherwise suit-

ably connected. In the present example the insole includes a lower sheet 7 of crepe rubber, thereon a sheet 8 of ordinary rubber composition, and on that an insole liner, usually of fabric with a "soft" top surface finish.

The edges of the upper, consisting of sheets 2 and 3, are secured between the margin of the insole and the welt strip 5.

As the principal feature of my invention, I provide a reinforcement 10 (Fig. 4) of suitable sheet material, located between the layers 2 and 3 of the "upper" (or vamp portion thereof). This reinforcement, while flexible, is of substantial thickness and stiffness. It may vary as to material or structure, but in practice I preferably employ a composition of cork and rubber, which has the desired physical qualities, including resistance to moisture, perspiration, etc. The material is shaped substantially as shown in Fig. 4, by molding, pressing or other approved method.

The inner edge of the reinforcement is flush with the inner edge of canvas sheets 2 and 3, and these portions are secured together by stitching, or otherwise. Thus the inner edge of strip 10 is located under the margin of the insole structure, and its upper edge extends considerably above the welt strip 5, throughout the front contour of the shoe, as indicated by dotted line 11, Fig. 1, preferably sloping downward toward the instep, where it preferably terminates.

This reinforcement is therefore concealed and protected between the inner and outer layers of the canvas vamp, and forms practically, a resilient or flexible box front, tending to preserve the shape of the vamp, to support the foot, and prevent overrunning of the edges of the sole by the upper structure.

In some cases the shoe upper, or vamp portion 1 thereof, may consist of a single layer, or of two layers of canvas connected together; and in such cases the reinforcing strip will lie against the inner surface of the upper material.

I claim:

1. A shoe comprising a sole and an insole, a vamp including inner and outer layers with their margins secured between the sole and insole, and a reinforcement of sheet rubber

and cork composition of substantial thickness and stiffness, located between the layers of the vamp and extending about the fore-part of the shoe.

5 2. A shoe comprising a sole and an insole, a vamp including inner and outer layers with their margins secured between the sole and insole, and a reinforcement of sheet rubber and cork composition of substantial thickness and stiffness, located between the layers
10 of the vamp and extending about the fore-part of the shoe, and having its inner margin substantially flush with the inner margins of the vamp.

15 3. A shoe comprising a sole and an insole, an upper including inner and outer layers with their margins secured between the sole and insole, a welt strip of rubber composition surrounding the fore part of the upper and
20 having its inner margin secured between the upper and the sole, and a reinforcement of sheet rubber and cork composition, located between the layers of the upper and extending about the fore-part of the shoe.

25 4. A shoe comprising a sole and an insole, an upper including inner and outer layers with their margins secured between the sole and insole, a welt strip of rubber composition surrounding the fore part of the upper
30 and having its inner margin secured between the upper and the sole, and a reinforcement of sheet rubber and cork composition, located between the layers of the upper and extending about the fore-part of the shoe, said reinforcement having its inner edge located be-
35 tween the welt strip and insole.

5. A shoe comprising a sole and an insole, an upper including inner and outer layers with their margins secured between the sole
40 and insole, a welt strip of rubber composition surrounding the fore part of the upper and having its inner margin secured between the upper and the sole, and a reinforcement of sheet rubber and cork composition, located
45 between the layers of the upper and extending about the fore-part of the shoe, said reinforcement having its inner edge located between the welt strip and insole, and extending upward substantially above the upper
50 edge of the welt strip.

In testimony whereof I affix my signature.

DAVID A. CUTLER.

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