June 10, 1947. E. H. LEVINE 2,421,792

DETACHABLE BOOT AND SHOE HEEL

Filed Feb. 6, 1945

Fig. 1.

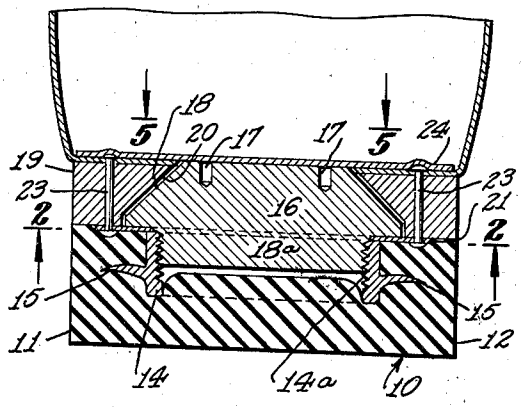


Fig. 2.

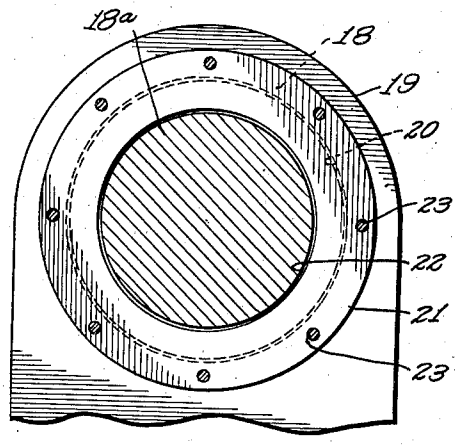


Fig. 3.

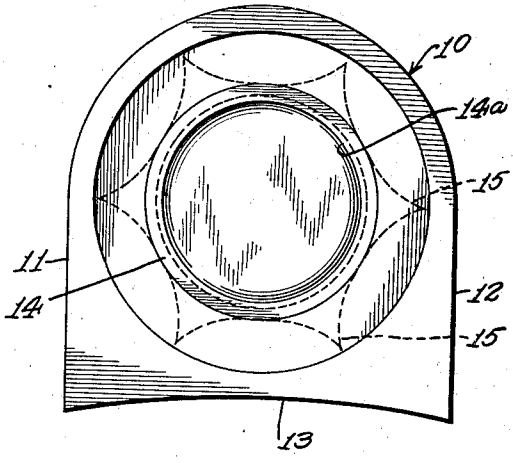
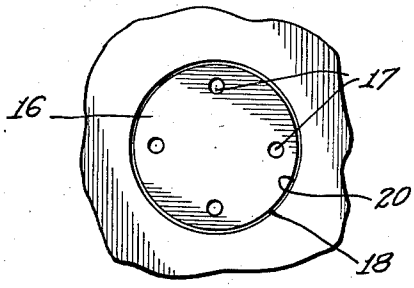


Fig. 4.



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DETACHABLE BOOT AND SHOE HEEL

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2 Claims. (Cl. 36—36)

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This invention relates to footwear, and more particularly to a boot or shoe having an improved form of detachable heel lift which may be secured to the sole without the use of the usual nails or screws which might penetrate through the sole as the heel wears out.

One object of the present invention is to provide a heel of the above nature, which may easily be removed from the shoe or boot whenever desired.

A further object is to provide a detachable rubber heel of the above nature, which will positively be maintained in correct position until worn out.

Another object is to provide a detachable heel of the above nature, which will be simple in construction, inexpensive to manufacture, easy to install and manipulate, compact, ornamental in appearance, very efficient, safe and durable in use.

With these and other objects in view, there have been illustrated on the accompanying drawings, several forms in which the invention may conveniently be embodied in practice.

In the drawings,

Fig. 1 represents a vertical sectional view of the first form of the invention, in which the heel lift may be removed by a tool applied to the inside of the heel portion of the sole.

Fig. 2 is a horizontal sectional view, taken along the line 2—2 of Fig. 1, looking upwardly in the direction of the arrows.

Fig. 3 is a top plan view of Fig. 1 showing the heel lift by itself.

Fig. 4 is a fragmentary plan view of the invention, looking in the direction of the arrows 5—5 of Fig. 1.

Referring now to the drawings in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates a heel or lift, such as rubber, having side edges 11, 12, and a front concave edge 13. The lift 10 is provided in its upper portion with a circular socket member 14 having a plurality of lateral prongs 15 (six in this instance) embedded in the interior of said lift 10 during the molding thereof.

The socket member 14 has an upper tapped section 14*a* for detachably receiving a circular rotary insert 16 resting upon a stationary ring plate 21, which is rigidly secured to the heel portion 19 of the sole by means of a plurality of rivets 23. The insert 16 has a conical upper rim 18 which engages in a conical recess 20 in the heel portion 19 of the sole. The ring plate

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21 is located under the conical rim 18, and has a central aperture 22 surrounding a depending reduced threaded section 18*a*.

The heel portion 19 of the sole and the circular insert 16 are covered by a sock lining 24 which is adapted to be lifted up to expose a plurality of wrench holes 17 in said insert 16 whenever it is desired to twist said insert to unscrew it from the rubber heel 10.

Operation

In operation, when it is desired to attach the heel lift 10 (Figs. 1, 2, 4 and 5) to the rear portion 19 of the sole, the lift 10 will first be raised until the tapped socket member 14 embedded therein engages the depending threaded central reduced section 18*a* at the base of the movable insert 16. The lift 10 will then be twisted to bring the concave section 13 to the front, and by means of a suitable wrench inserted in the holes 17, the movable insert 16 will then be rotated as far as it will go for tightly securing the lift 10 in position. To remove the lift 10, the above operation will be reversed.

While there has been disclosed in this specification a form in which this invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosure, but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new, and for which it is desired to secure Letters Patent, is:

1. In a shoe, a bottom sole having a conical upwardly converging aperture in its rear end, an upwardly converging conical insert loosely fitted in said aperture, extending through said sole, and being provided with a reduced vertical threaded lower section, a heel lift having in its upper surface a tapped socket member shaped to engage said threaded lower section, and means accessible from the top of said sole to rotate said insert to draw said heel lift upwardly and tightly into operating position.

2. In a shoe, a bottom sole having a conical upwardly converging aperture in its rear end, an upwardly converging conical insert loosely fitted in said aperture and being provided with a reduced vertical threaded plug on its lower end, a ring-shaped insert-retaining plate member underlying the outer portion of said insert outside

of said plug, means for rigidly securing said plate to said sole, a heel lift having embededd in its upper surface a tapped socket member shaped to engage said threaded plug, and means accessible from the top of said sole to rotate said insert and draw said heel lift upwardly and tightly into operative position.

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