H. G. ROBINSON.

RESILIENT HEEL PLATE FOR SHOES.

APPLICATION FILED NOV. 1, 1919.

1,337,962. Patented Apr. 20, 1920.

Fig. 1.

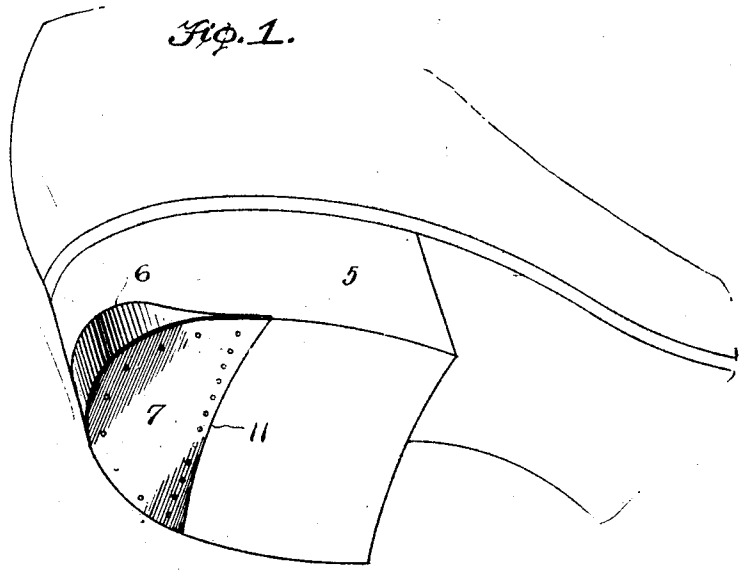



Fig. 2.

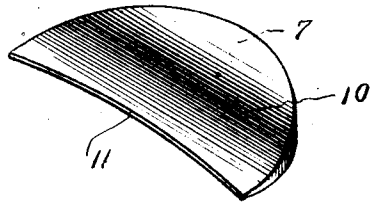



Fig. 3.

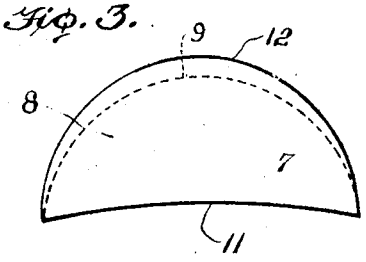
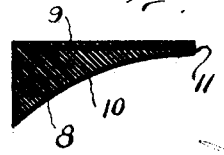



Fig. 4.




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# UNITED STATES PATENT OFFICE.

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## RESILIENT HEEL-PLATE FOR SHOES.

1,337,962. Specification of Letters Patent. Patented Apr. 20, 1920.

Application filed November 1, 1919. Serial No. 334,940.

*To all whom it may concern:*

Be it known that I, HUGH G. ROBINSON, a citizen of the United States, formerly residing at Oakland, Alameda county, California, P. O. Box 368, city of Philadelphia, Philadelphia county, State of Pennsylvania, have invented new and useful Improvements in Resilient Heel-Plates for Shoes, of which the following is a specification.

This invention relates to a detachable resilient wear plate for the heels of boots or shoes.

One object of the present invention is to provide a wear plate composed of such character of material and formed of such a shape or configuration as to permit of quick, ready, and effective attachment of the same to a worn heel without the necessity of tearing off any of the worn layers of the leather heel.

Another object resides in the provision of a detachable wear plate for the purpose stated, embodying among other characteristics great wear-resisting properties and when applied to a heel providing for a cushioning effect.

A still further object of the invention is to provide a wear plate for the heels of leather boots or shoes which is so formed and constructed as to facilitate the building up and the leveling off a worn off portion of the rear under surface of the heel, evening up the entire surface of the heel, without the necessity of tearing off any of the worn layers of the leather, the wear plate being so constructed that it can be quickly and firmly secured in place and readily removed when worn to be replaced by a new one.

With the above and other objects in view, the present invention, consists in the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing, and particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a rear perspective view of a heel of a boot or shoe, illustrating my improved wear and cushion plate attached thereto.

Fig. 2 is a similar view showing the underside of the wear plate.

Fig. 3 is a view similar to Fig. 2 showing in plan view the outer or wearing surface of the wear plate.

Fig. 4 is a sectional view of the wear plate.

In carrying my invention into practice it will be understood that while the wear plate is shown in the accompanying drawing as applied to the rear of the heel, that the shape and form of the wear plate is such that it may as well be readily applied to either side or at a point between the sides and the rear of the heel, depending upon which portion of the heel has become worn. It is well understood that while one wearer may wear off the heel of a shoe directly at the rear of the heel there are other wearers who wear off the heel on either side or at a point between the side and the rear of the heel and with this knowledge in mind, I have constructed my wear plate of a shape that it may be readily applied or detached at a point of any of the inequalities of heels incident to the various peculiarities of wear by various wearers of shoes.

Referring more particularly to the accompanying drawings, there is shown for the purpose of illustration, a heel 5 which has been worn off directly at the rear of the heel along the line indicated at 6 and to which worn off portion 6 there is shown applied my improved wear and cushioning plate 7. This wear plate may be composed of a compound consisting of fiber or ground fabric or other tough material mixed with rubber to provide a body 8. A suitable coloring ingredient may be added, if desired. In this body 8 there is embedded suitable nail holding material 9 which is preferably composed of ground leather and rubber or other tough nail head holding material, and to which a coloring ingredient may be added, if desired, and which, if added, will preferably be the same in color as the coloring ingredient added to the body mixture. The reason for the coloring ingredient is due to various colored shoes, and if the body should be cut or trimmed down to an edge of the embedded nail holding material, it will show the same color as the color of the body of the wear plate. This composition of material which provides for holding the nails is preferably mixed together in any suitable manner and rolled into a relatively thin sheet, as indicated particularly at 9 in Fig. 4. This nail holding sheet of material 9 is located near the flat under or wear surface of the wear plate, and this nail holding compound sheet of material 9 is of such density as to prevent the nail heads from working

through the plate when the wear plate is nailed to the leather heel, holding the plate firmly and securely in place.

In constructing the resilient wear plate of the present invention, the same is formed in a suitable mold which may have such shape as to provide the wear plate of a shape whose wearing surface is flat and whose inner surface is concave as indicated at 10, tapering down to a thin curved inner edge 11 and this wear plate can be trimmed easily with a knife around its outer surface, making it flush with the rear angle or rear surface of the shoe heel 5. The body material hereinbefore referred to is first placed into the mold, the nail holding material 9 in soft sheet form is placed in the mold on the body material at a predetermined time in carrying out the process of formation of the wear plate and more body material is then fed into the mold onto the nail holding sheet or material 9, and all the materials are then vulcanized together to the desired resiliency and shape.

It will be seen from the foregoing that by a simple process I am enabled to form a tough but resilient wear plate for the rear under surface of worn down heels of boots or shoes and that by virtue of the tough nail holding material embedded in the wear plate I am enabled to provide for an effective application of the wear plate to the heel through the instrumentality of the usual nails employed in the building up of heels of boots or shoes.

What is claimed is:

1. A resilient repair plate for boot or shoe heels composed of a body of rubber and fiber mixed together, and a sheet of nail-holding material composed of ground leather and rubber embedded therein adjacent to and approximately coextensive with the tread face therein to retain the heads of the attaching nails.

2. A resilient repair plate for boots or shoes composed of a body of fiber and rubber mixed together, and a sheet of nail-holding material composed of ground leather and rubber embedded therein adjacent to the tread face of the entire periphery of the plate, and all vulcanized together, the nail-holding material being of such density as to prevent the nail heads from working through the same.

3. A resilient repair plate for boot or shoe heels composed of a body of rubber and fiber mixed together, and a piece of tougher nail-holding material composed of fibrous material and rubber vulcanized together and embedded in the plate adjacent to and approximately coextensive with the tread face therein to retain the heads of the attaching nails.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HUGH G. ROBINSON.

Witnesses:
JAMES L. CRAWFORD,
RICHARD K. STEVENS.