

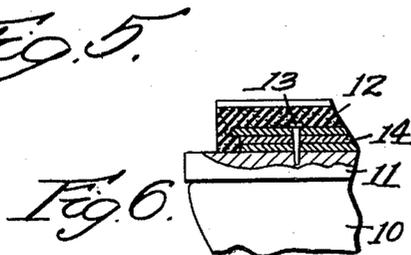
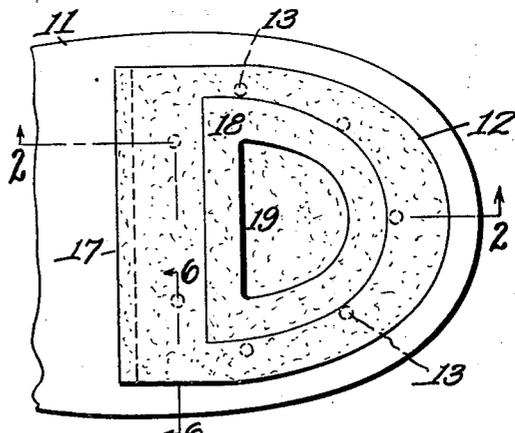
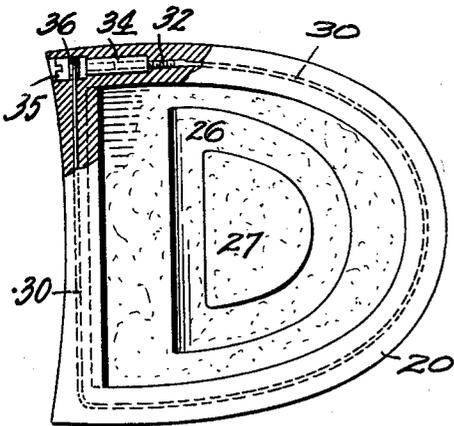
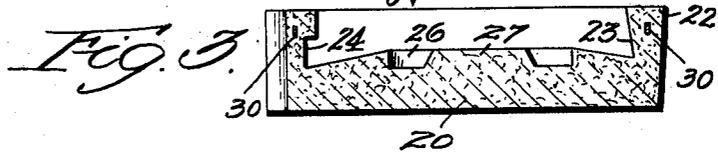
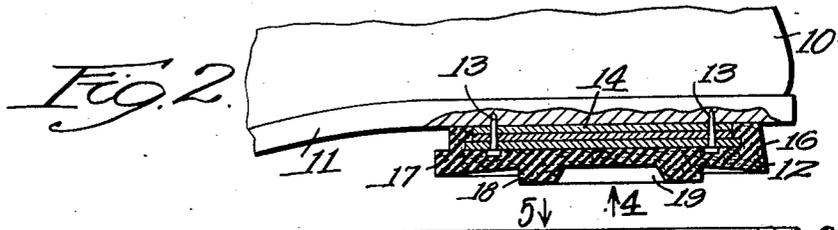
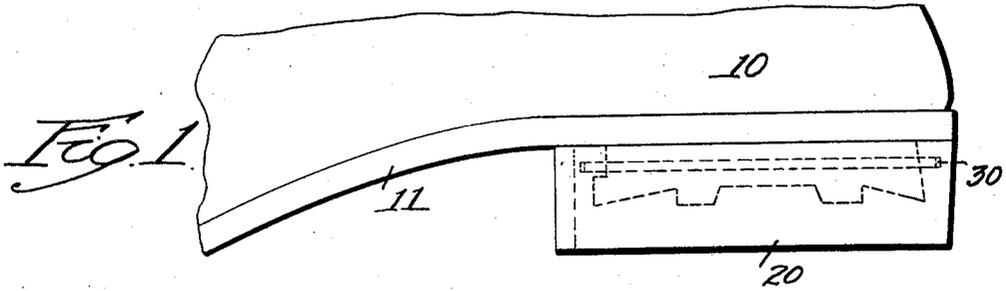
June 17, 1930.

W. L. BERNIER

1,764,000

DETACHABLE RUBBER HEEL

Filed June 19, 1929



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UNITED STATES PATENT OFFICE

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DETACHABLE RUBBER HEEL

Application filed June 19, 1929. Serial No. 372,005.

This invention relates to the provision of a rubber heel which may be quickly and easily attached to a shoe or detached therefrom.

It is the object of my invention to provide improved devices for attaching a rubber heel to a shoe, so designed that the heel will be very securely held in position, while the attaching operation is of the simplest.

A further object of the invention is to provide a heel and a co-operating retaining member permanently secured to the shoe, said co-operating parts being so formed as to substantially eliminate the possibility of the heel becoming detached or moving transversely relative to the shoe attaching member.

My invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly pointed out in the appended claims.

A preferred form of the invention is shown in the drawings in which

Fig. 1 is a side elevation of a portion of a shoe with my improved heel applied thereto;

Fig. 2 is a sectional side elevation of a portion of the shoe and the heel attaching member, taken along the line 2—2 in Fig. 4;

Fig. 3 is a longitudinal sectional elevation of the detachable heel;

Fig. 4 is a bottom view of the heel attaching member, looking in the direction of the arrow 4 in Fig. 2;

Fig. 5 is a plan view, partly in section, of the detachable heel; and

Fig. 6 is a detail sectional elevation, taken along the line 6—6 in Fig. 4.

Referring to the drawings, I have shown a portion of a shoe 10 having a sole 11 to which a heel-attaching member 12 is permanently secured in any convenient manner, as by nails 13 (Fig. 2). The member 12 is preferably provided with a layer of wood veneer or other similar material 14, molded and vulcanized into the member 12 and adapted to receive and firmly hold the nails 13, thus firmly securing the member 12 from accidental displacement.

The member 12 is provided with an undercut edge portion 16 extending along the two sides and around the rear end portion of said member. The front edge portion of the

member 12 is provided with a flange or undercut projection 17 for a purpose to be described.

The member 12 is preferably arched or recessed upward on its lower face and is provided with a projection 18 following the outline of the heel in a general way and having its center portion recessed upwardly, as indicated at 19.

The heel 20 is provided with an upstanding side wall 22 undercut on its inner side and rear end portions, as indicated at 23, to receive the heel attaching member 12, and also having a recess 24 on the inner side of its front edge portion, adapted to receive the flange or projection 17. The heel 20 is also provided with a recess 26 adapted to receive the projection 18, and with a projecting portion 27 adapted to fit the recess 19. By the co-operation of the parts above described, transverse or lateral movement of the heel 22 relative to the heel attaching member 12 and sole 11 is effectively prevented.

I will now describe the means by which the heel 20 is firmly secured on the heel-attaching member 12. For this purpose I provide a wire 30, preferably of rectangular cross section, extending substantially around the heel edge portion 22 and molded within the thickness of said edge portion. One end 32 of the wire 30 is threaded and is received in an elongated nut 34, mounted in a corresponding recess formed in the flange portion 22, and having a slotted head 35 accessible through an inconspicuous opening in the front face of the heel 20.

The other end of the wire 30 preferably encircles the nut 34, which is provided with an annular groove 36 to receive the end of the wire. After the parts have been assembled by stretching the edge portion 22 of the heel over the flange 17 of the member 12, the parts are then secured in position by turning the nut 34 and thus tightening the encircling band or wire 30.

When these parts are thus drawn up and tensioned, the heel is very firmly secured to the member 12 and accidental displacement thereof is practically impossible. Transverse movement or shifting of the heel is

prevented by the cooperation of the recesses and projections on the adjacent faces of the heel 20 and member 12, and the parts will remain permanently assembled until it is desired to replace the heel, when the parts may
5 be readily separated by turning the nut 34 and loosening the tension wire 30.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what
10 I claim is:—

1. In a shoe, a heel, a heel-attaching member permanently secured thereto, a detach-
15 able rubber heel, said member and heel having cooperating flanged and under-cut edge portions, a tension wire substantially encircling said heel at the edge portion thereof, and means to tension said wire.

2. In a shoe, a heel, a heel-attaching member permanently secured thereto, a detach-
20 able rubber heel, said member and heel having cooperating flanged and under-cut edge portions, a tension wire substantially encircling said heel at the edge portion thereof,
25 said wire having a threaded end portion, and a nut threaded to receive said end portion and to which the other end of the wire is secured.

3. In a shoe, a heel, a heel-attaching member permanently secured thereto, a detach-
30 able rubber heel, said member and heel having cooperating flanged and under-cut edge portions, a tension wire substantially encircling said heel at the edge portion thereof,
35 said wire having a threaded end portion, and a nut mounted in said heel and effective to tension said wire.

In testimony whereof I have hereunto af-
40 fixed my signature.

WILFRED L. BERNIER.

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