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F. A. SCHULTZ

HEEL

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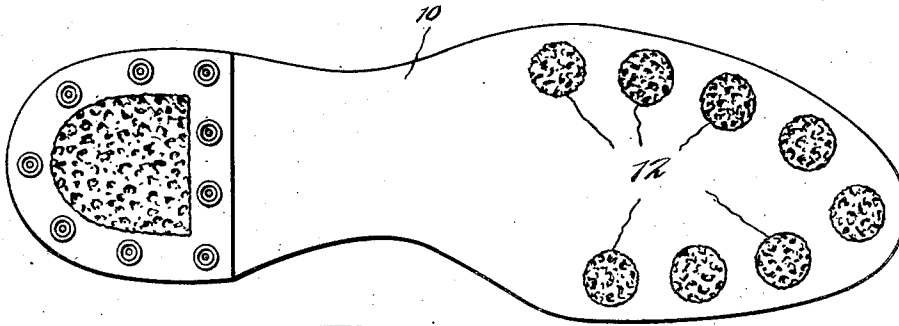


Fig. 1.

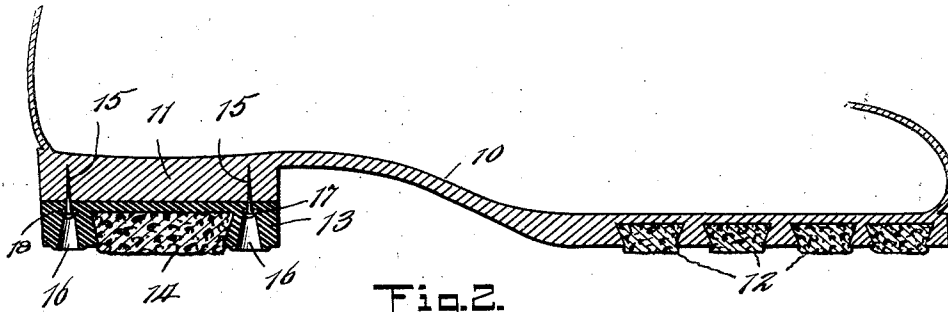


Fig. 2.

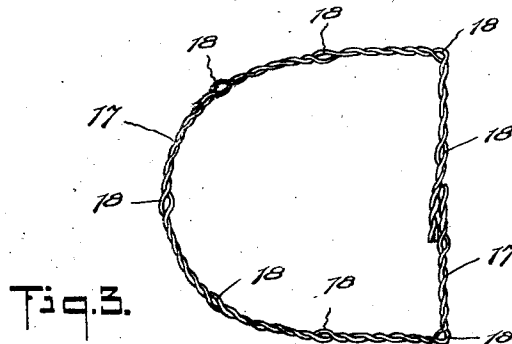


Fig. 3.

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Among the principal objects which the present invention has in view are:—

To provide an improved rubber heel construction for shoes having a self contained tread grip member; to provide in a heel of this character a novel heel reinforcing means; and to provide in a heel construction a tread composed of a relatively soft center surrounded by a relatively hard edge.

Drawings.

Figure 1 is a bottom plan view of a shoe sole having a heel applied thereto in accordance with the invention;

Figure 2 is a central longitudinal section therethrough;

Figure 3 is a plan view of the reinforcing member employed.

Description.

The invention is shown as applied to the sole 10 of a shoe having the usual heel lift 11 thereon and having arranged at spaced intervals around the toe portion, a plurality of soft rubber inserts 12 embedded in the material of the sole and projecting therebeyond to provide an efficient tread grip at the toe of the shoe.

To the bottom of the heel lift 11 is attached a hard rubber tread section 13 conforming to the outline of the heel and having formed therein at its center a recess in which is disposed in permanently attached relation a pad 14 of relatively soft and sponge like rubber. The pad 14 extends over the major portion of the area of the tread 13 and is retained between the downwardly contracted walls of the recess, being disposed so that the outer face of the pad projects normally a slight distance below the face of the lift 13 as clearly illustrated in Figure 2.

At suitable intervals around its edges the body of the hard rubber material comprising the lift 13 is provided with a series of

perforations forming nail hole receiving sockets for insertion of the fastening nails 15 which are driven into the heel lift 11. These sockets 16 are contracted toward their upper ends and the material comprising the hard rubber of the tread has embedded therein a reinforcing element comprising a length of twisted wires 17 shaped to conform to the configuration of the tread section and disposed so that the twisted wires register successively with the contracted ends of the sockets 16 whereby nails driven through the sockets will penetrate between the wires 17 at the points 18 as indicated in Figure 3, the wires thus forming a bearing for the heads of the fastening nails in addition to reinforcing the tread.

In service the porous rubber pad 14 forms a resilient tread member for the heel of a shoe and yields with a cushioning action to permit the weight of the shoe being supported on the relatively hard rubber tread section 13, providing the tread section having a relatively soft central portion surrounded by an edge of a harder material. The pad 14 will provide for a clinging grip at the bottom of the tread and cooperates with the inserts 12 effectively to prevent slipping of the shoe when worn.

I claim:

A heel tread section comprising a heel shaped body formed of yieldable material, and having an open pocket located therein, a pad of relatively softer yieldable material carried in said pocket, said body portion having a series of fastener receiving sockets formed therein and surrounding the pocket, and a non-yielding element embedded in said body portion, completely surrounding the pocket, and having openings coinciding with the sockets in the body portion for the reception of said fasteners, whereby the body portion will be reinforced and said pad will be retained in said pocket.

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