S. M. MATHEWS.

HEEL PROTECTOR.

APPLICATION FILED APR. 1, 1911.

1,036,666. Patented Aug. 27, 1912.

Fig. 1

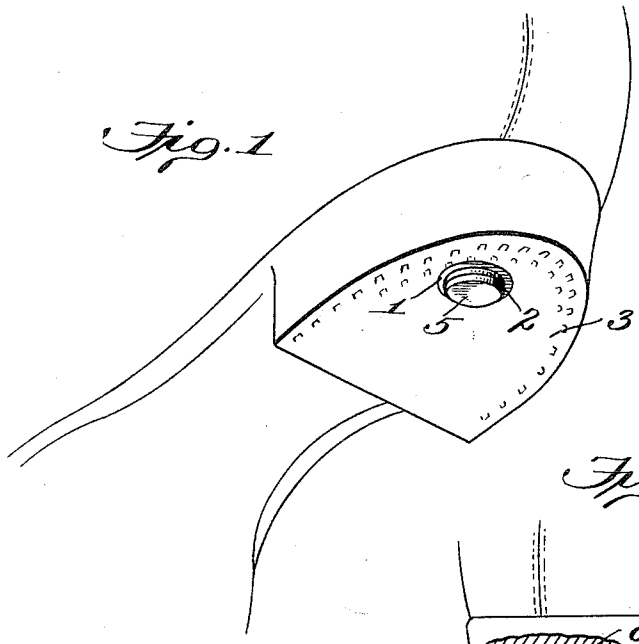


Fig. 2.

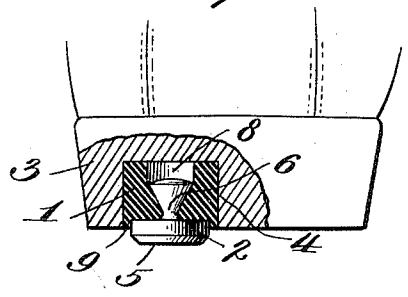


Fig. 3.

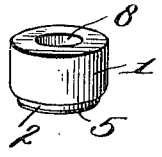


Fig. 4.

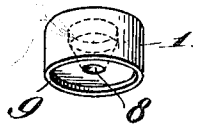
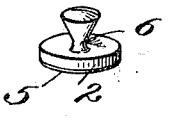


Fig. 5.



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HEEL-PROTECTOR.

1,036,666. Specification of Letters Patent. Patented Aug. 27, 1912.

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To all whom it may concern:

Be it known that I, STEPHEN M. MATHEWS, of the city of Toronto, in the county of York and Province of Ontario, Canada, have invented certain new and useful Improvements in Heel-Protectors; and I hereby declare that the following is a full, clear, and exact description of the same.

My present invention relates to improvements in heel protectors for boots and shoes, and it is the primary object of the invention to provide a simple and improved device of this character which may be applied with facility to the heel or other appropriate part of the boot or shoe and which in practice serves to protect the heel and also to absorb, cushion, or minimize shock or vibration incident to the movements of the wearer, the device in its preferred form being so constructed that a resilient or yieldable body performs the dual function of absorbing or cushioning such vibration and of firmly but detachably retaining the tread member in operative position.

To these and other ends, the invention consists in certain improvements, and combinations and arrangements of parts, all as will be hereinafter more fully described, the novel features being pointed out particularly in the claims at the end of the specification.

In the accompanying drawings:—Figure 1, is a perspective view of the under side of a portion of a shoe showing a protector applied thereto which is constructed in accordance with one embodiment of my invention; Fig. 2, represents a transverse vertical section through the heel and the protector, as shown in Fig. 1; Fig. 3, is a perspective view of the protector removed from the shoe; and Figs. 4 and 5, are detail perspective views of the parts of the protector removed from the shoe and detached one from the other.

Similar parts are designated by the same reference characters in the several views.

In the accompanying drawings, I have shown the preferred embodiment of my invention, wherein the device comprises a resilient or yieldable body 1 and a tread member 2. The body 1 may be composed of different materials, rubber, for example, being suitable. This body may be of different shapes but its exterior form is preferably cylindrical in order that it may be inserted into the heel 3 of the boot or shoe by simply forming the latter with a cylindrical bore 4, in which the yieldable body is firmly cemented. The tread member 2 is preferably composed of metal or other relatively hard material and, in the present instance, it provides a relatively large tread surface 5 and a securing stem 6, the latter being of a conical shape converging toward the tread surface 5. The resilient or yieldable body 1 has a conical shaped bore 8 to accommodate the stem of the tread member and to secure the tread member and resilient body together. The outer face of the body 1 in the present instance is also formed with a peripheral flange 9 which surrounds and partly overlaps the periphery of the exposed portion of the tread member 2, and this construction is generally preferable as it prevents foreign matter from collecting between the body 1 and the upper face of the tread member, and it also maintains a proper separation between the exposed portion of the tread member and that part of the heel surrounding the bore 4, so that the tread member may operate freely.

When the protector is in position, it will be retained in such position by the resilient and compressible body which fits snugly within, and is cemented to, the bore provided for it in the heel. This compressible or resilient body also retains the tread member in coöperative relation with it and also permits the tread member to yield upwardly relatively to the heel, the tread member thus producing a cushioning effect although possessing the desired wearing qualities.

I claim as my invention:—

1. In the hereinbefore described device, an apertured heel and a heel protector contained therein and separate from the heel, said heel protector comprising a tread member consisting of a relatively large head part and a conical securing stem connected to the inner surface thereof and tapered toward it, and a resilient body member having a conical distensible bore tapering from its inner toward its outer end to contract against the securing stem and retain it in the body member.

2. In the hereinbefore described device, an apertured heel and a heel protector contained therein and separate from the heel, said heel protector comprising a tread mem-

ber consisting of a relatively large head part and a conical securing stem connected to the inner surface thereof and tapered toward it, and a resilient body member having a conical distensible bore tapering from its inner toward its outer end to contract against the securing stem and retain it in the body member, and a flange projecting from the tread surface of the body member to engage the edge of the tread member.

Toronto, March 25, 1911.

STEPHEN M. MATHEWS.

Signed in the presence of—
OLIVE BATEMAN,
D. S. LOVELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."