Dec. 23, 1958 F. M. McKINNEY 2,865,115

SPIKED SHOE ATTACHMENT

Filed March 3, 1958

Fig. 1.

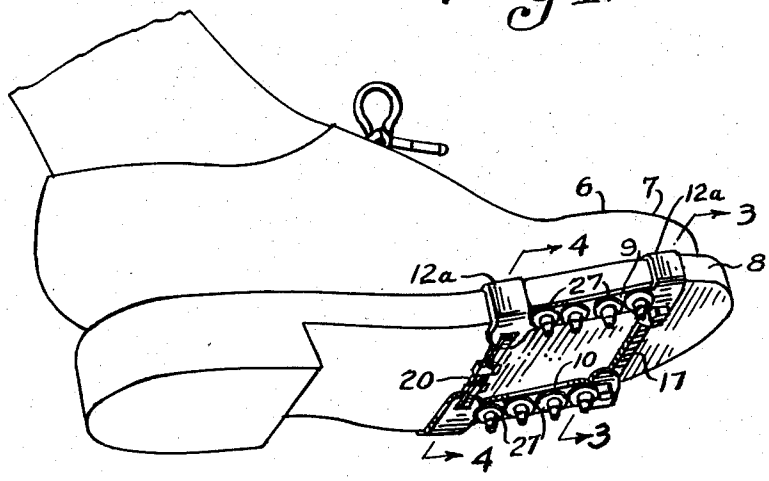


Fig. 2.

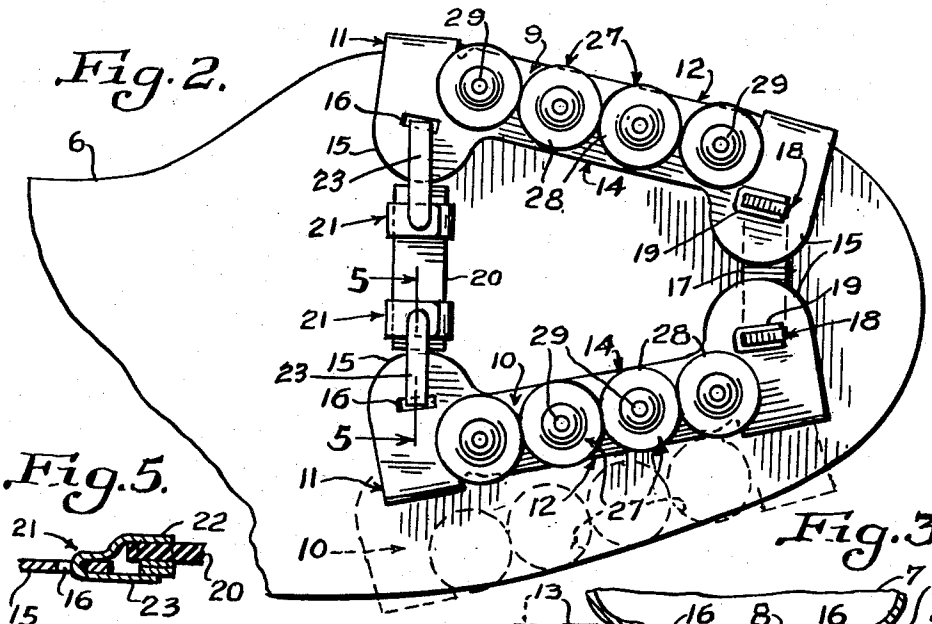


Fig. 5.

Fig. 3.

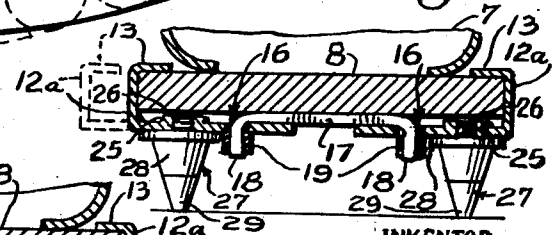
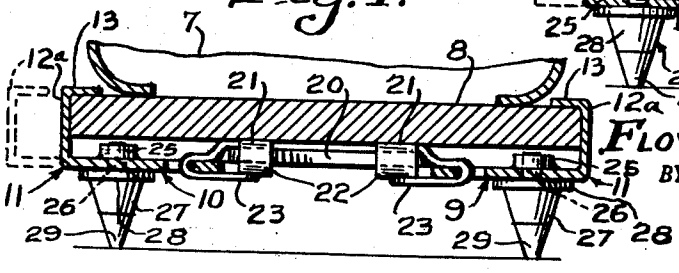


Fig. 4.



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United States Patent Office 2,865,115 Patented Dec. 23, 1958

2,865,115

SPIKED SHOE ATTACHMENT

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Application March 3, 1958, Serial No. 718,526

3 Claims. (Cl. 36—7.7)

This invention relates to attachments for footwear by which spikes may be quickly applied to ordinary shoes, and as easily removed therefrom.

A primary object of this invention is the provision of an attachment that may be used by golfers, spectators at golf tournaments, and many others who do not find it feasible to get ordinary golf shoes. These people have long felt the need of an inexpensive attachment that gives them all the advantages of golf shoes temporarily or for special occasions and which, when removed, makes the shoes again available for normal use.

The present attachment is also useful on boots for hikers, for walking on icy or snowy streets, and for many other uses.

The invention also has for its objects to provide such means that are positive in operation, convenient in use, easily installed in a working position and easily disconnected therefrom, economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawing merely shows and the following description merely describes, one embodiment of the present invention, which is given by way of illustration or example only.

In the drawing, like reference characters designate similar parts in the several views.

Fig. 1 is a perspective view, looking up, showing a shoe provided with an attachment embodying my invention.

Fig. 2 is an enlarged bottom view of the sole shown in Fig. 1, the same being broken away, but with one side of the attachment detached.

Fig. 3 is a transverse section taken on the line 3—3 of Fig. 1, parts being shown in elevation.

Fig. 4 is an enlarged transverse section taken on the line 4—4 of Fig. 1, parts being shown in elevation.

Fig. 5 is a broken section taken on the line 5—5 of Fig. 2.

The invention that is illustrated is adapted to be attached to a shoe 6, the same including an upper 7 and a sole 8 which extends beyond said upper to provide means for engaging my present attachment.

My device comprises a pair of right and left mounting plates 9 and 10, each of which has an extension 11 along its outer edge 12. Extensions 11 are formed with vertical, upturned legs 12*a* and short inturned clamping lugs 13 parallel to plates 9 and 10 and spaced therefrom to accommodate the thickness of and to hook on to the average sole 8, when my device is mounted thereon.

The plates 9 and 10 are preferably made of rigid metal although any other material found suitable for the purpose may be used. The inner edges 14 of the plates extend inwardly and on the opposite sides of the plates 9 and 10 from the extensions 11, to form rounded ears 15, which ears are provided with slots 16.

As shown in Figs. 1 and 2, one plate, for instance 9,

hooks over one side of the sole 8 first, and it is then evident that the transverse distance across the sole is smaller adjacent the toe than it is adjacent the instep.

For this reason I have provided two different forms of transverse connecting members for the opposed ears 15. Adjacent the toe of the shoe, the ears are transversely connected by a substantially heavy strip of rubber 17, or the like, as best shown in Fig. 3. The strip 17 extends laterally between ears 15, along sole 8, and is provided with downwardly extending legs 18.

Legs 18 extend down through slots 16 of ears 15 and are provided with U-shaped gripping means 19 secured to said legs and adapted to prevent withdrawal of the legs 18 from slots 16. When the gripping means 19 is made of rubber, it may be vulcanized to opposite sides of the legs 18, to provide enlargements that will not pass through the slots 16.

The rearmost ears 15 of plates 9 and 10 are provided with a strip of rubber 20 longer than but otherwise generally similar to strip 17, the ends of the same being secured by grippers 21 adjacent said ears. The grippers comprise relatively rigid T-shaped pieces of metal or other suitable material bent upon themselves at 22 to clamp securely there around the ends of strip 20.

The legs 23 of the grippers 21 hook through the slots 16 and make a return bend to hold the clamped ends of the elastic strip 20 in place.

Plates 9 and 10 are provided with a series of equally spaced, internally threaded, bosses 25 adapted to receive the threaded studs 26 of conventional spikes 27. The spikes have tapered base members 28 adapted to contact plates 9 and 10 and bear upon the same, and conical points 29 to penetrate the ground.

Fig. 2 shows the simple method of attaching my invention to the sole of a shoe. As before stated, plate 9 is shown attached to the sole 8 by legs 12*a* and engaging lugs 13. The plate 10 is next firmly gripped, and due to the strips 17 and 20 being expandable lengthwise, the legs 12*a* and lug 13 are readily moved to the dotted line position of Figs. 3 and 4 and then permitted to move inward to grip the sole 8 and complete the attachment.

It will be noted from Fig. 2, in which the strips 17 and 20 are shown in unstretched condition, that the difference in length between the strips causes the plates 9 and 10 to assume a relatively angled position—closer together at one end than at the other. Since the side edges of shoe or boot soles are usually similarly relatively angled, as shown, the strips 17 and 20 stretch approximately the same amounts, when the device is applied. This provides for even tension on the plates 9 and 10 and the grip of legs 12*a* of said plates against the edges of the sole is firm and uniform.

The contraction of the elastic strips 17 and 20 results in a firm but yieldable mounting of my device on the shoe 6, as best shown in Fig. 1.

The expandable strips 17 and 20 make the device readily removable from the shoe, as they can be stretched to disengage clamps 13 from the sole 8. The shoe can then be used in the conventional manner.

While the foregoing specification illustrates and describes what I now contemplate to be the best mode of carrying out my invention, the construction is, of course, subject to modification without departing from the spirit and scope of my invention. Therefore, I do not desire to restrict the invention to the particular form of construction illustrated and described, but desire to cover all modifications that may fall within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. An attachment adapted to be removably applied to

the normally-tapering sole of footwear, said attachment comprising two similar but oppositely formed elongated plates each provided at both ends with sole edge-engaging extensions, each plate between said extensions being provided with spikes that extend in a direction opposite to the direction of said extensions, both ends of both plates being provided with openings, an elastic member extending through the opening at one end of each plate and connecting said ends of the plates, and a longer elastic member extending through the opening at the other end of each plate and connecting said other ends of the plates, said plates, thereby, being angled one relative to the other and the stretch on both elastic members being substantially the same when the sole edge-engaging attachments of the respective plates are engaged with the opposite edges of the sole.

2. An attachment according to claim 1 in which the extensions are provided with inreaching hooks adapted to overstand the sole edge.

3. An attachment according to claim 1 in which the openings are formed as longitudinal slots and at least one of the elastic members has a comparable and flat cross-sectional form to fit said slots and to be in a flatwise position between the plates and the sole to which the attachment is applied.

References Cited in the file of this patent

UNITED STATES PATENTS

298,517	Temple	May 13, 1884
1,044,776	Graff	Nov. 19, 1912
1,051,154	Norlund	Jan. 21, 1913
1,141,353	Markowicz	June 1, 1915
1,326,648	Daniels	Dec. 30, 1919
2,163,512	Castetter	June 20, 1939
2,366,649	Priess	Jan. 2, 1945
2,401,891	Smith	June 11, 1946