Sept. 8, 1936. C. W. FULLER 2,053,906

SPIKE FOR GOLF SHOES

Filed March 1, 1935

Fig. 1.

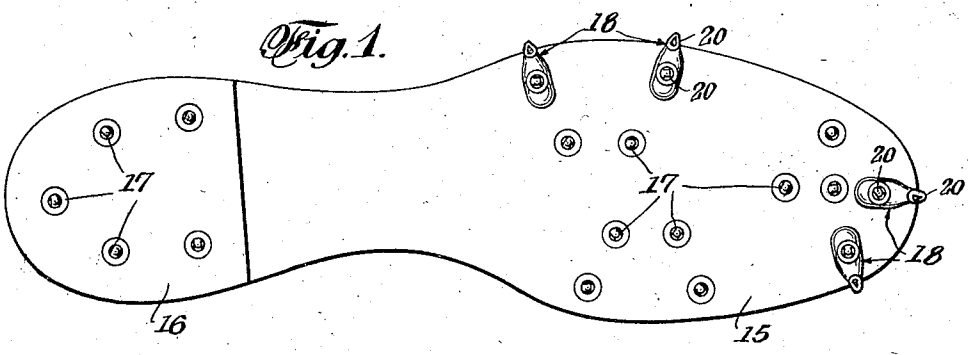


Fig. 2.

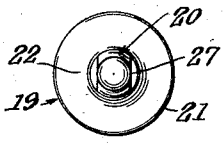


Fig. 3.

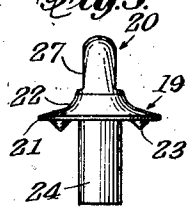


Fig. 4.

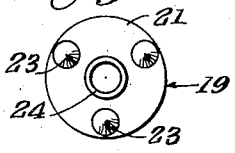


Fig. 5.

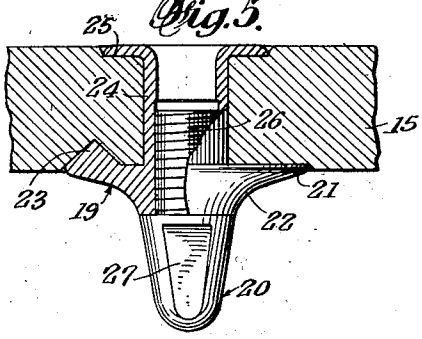


Fig. 6.

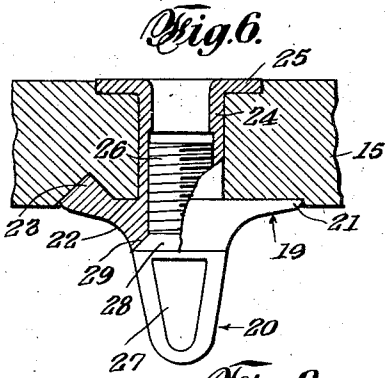


Fig. 7.

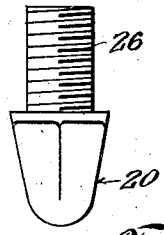


Fig. 8.

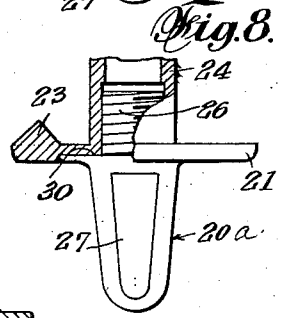
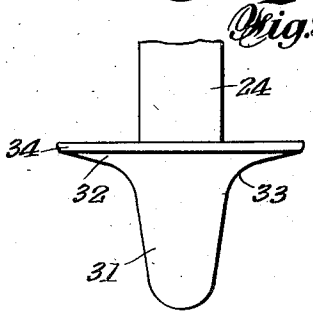


Fig. 9.



INVENTORS
Clarence W. Fuller
BY
Cree Freeman
ATTORNEY

Patented Sept. 8, 1936

2,053,906

REISSUED

UNITED STATES PATENT OFFICE

2,053,906

SPIKE FOR GOLF SHOES

Clarence W. Fuller, Yonkers, N. Y.

Application March 1, 1935, Serial No. 8,828

2 Claims. (Cl. 36—59)

The present invention relates to spikes for golf shoes or the like.

Shoes equipped with spikes do not wear out in the same manner as ordinary shoes, i. e., the soles and heels after considerable use show little or no wear for the reason that the spikes prevent contact with the ground. But, for that reason, the spikes receive hard usage and in many instances have been worn completely away long before the shoes are ready for discard.

As heretofore made, the spikes have been permanently riveted to the sole and heel and therefore were not replaceable unless the shoe were resoled and reheeled also. Since resoling and reheeling is not ordinarily necessary, considerable unnecessary expense was entailed in replacing the spikes on a pair of shoes.

Others have realized the advantages of providing replaceable spikes but have uniformly fallen into the error of attempting to thread the spikes in the soles and heels of the shoe. It is quite apparent that the leather of which these parts are made is not a proper medium into which to thread a member or members which are subjected to considerable strain. This should be clear when it is realized that the forces on the spikes during a golfer's driving swing not only exert wear on the surface of the spikes but tend to shear them at their weakest point.

In such instances where the spike was threaded into a metallic socket member, in previous attempts to provide a replaceable spike, the fault resided in the lack of provision of means to prevent rotation of the socket member in relation to the shoe sole. This construction was obviously faulty in view of the forces to which the spikes are subjected.

This invention, therefore, seeks to provide spikes for golf shoes or the like which are readily replaceable when worn.

Another object of the invention resides in the provision of a spike which, while no higher than those in present use, presents considerably more wearing height.

A further object lies in the provision of a two-part spike, one part being permanently and non-rotatably affixed to the shoe and the other being separably united with it for ready replacement.

A still further object of the invention is to provide an extension spike for use at the edge of the shoe sole of novel and simple construction.

These and many other objects and advantages of the invention and the means for their attainment will be more readily apparent after perusal of the following specification in which is described the accompanying drawing, and in which:—

Fig. 1 is a bottom view of a golf shoe provided with spikes in accordance with the invention.

Figs. 2, 3, and 4 are respectively top plan, side, and bottom plan views of a preferred form of spike.

Fig. 5 is an elevational view, partly in section, of the spike shown in Figures 2, 3, and 4.

Fig. 6 is a similar view of an alternate form of spike.

Fig. 7 is a side view of a modified form of replaceable spike portion.

Fig. 8 is a broken elevational and sectional view of still another form of spike.

Fig. 9 is an elevational view of an integrally formed spike designed to provide maximum wearing surface.

In the drawing, in which several preferred embodiments are illustrated, the sole and heel of a shoe are respectively shown at **15** and **16**. The heel, as is usual in shoes for golfers, etc., is provided with spikes **17** as shown, and the sole is similarly provided with spikes **17**, judiciously placed and with extension spikes **18**.

A preferred form of spike is illustrated in Figures 2 to 5 inclusive and comprises the two portions **19** and **20**. The portion **19** is formed with a flange **21**, thickened towards the center to form a substantially conical head the sides of which are concavely formed as at **22**. The flat side of the head is preferably provided with teats or projections **23**, and projecting from that same side is a hollow shank **24** in the manner of a tubular rivet adapted to be peened over as at **25** after assembly with the shoe.

It will be noted that the teats **23** are impressed into the surface of the leather as is the peened over portion of the shank **24** thus effectively holding the portion **19** rigidly in place against any tendency to rotate.

The portion **19** is made preferably hollow through the center and provided with a screw seat which is engageable by the screw stud **26** of the portion **20**. The spike portion **20** is preferably formed as a cone having a rounded apex, and to facilitate its assembly with, and removal from the portion **19**, is provided with a pair of opposed flats **27** which may be engaged by a suitable tool.

It will be noted that the assembled spike comprising the portions **19** and **20**, or that portion which protrudes from the bottom of the shoe, is shaped like a cone with a flared base portion, the sides of the cone blending into the flared base portion with a curve. This permits making the

flange thinner and, therefore, the spike portion longer and also obviates sharp corners as possible points of fracture.

The alternate form of the invention shown in Figure 6 is the same as above described except the spike portion is provided with a conical portion **28** formed at the base of the spike which is adapted to engage the seat **29** formed in the portion **19**. This arrangement provides a yet stronger spike less susceptible to fracture.

If desired the spike may be formed as a pyramid as shown in Figure 7.

In the form of the invention shown in Figure 8, the flange **21** is made without a taper and provided with a central seat **30** for the base of the spike which in this instance may be provided with a flanged portion to engage the seat for greater stability. It will be understood however, that the seat **30** may be omitted leaving the top surface of the flange **21** flat and unbroken while still obtaining good results with the use of spike **20a**.

An integrally formed spike, Fig. 9, may also be provided having the shape and contour of the form of the invention shown in Figure 5. Heretofore, a spike of this type was usually shaped as a sharp cone having a flange formed as a flatter cone, one abruptly starting from the other. In this case it will be noted that the cones **31** and **32** comprising the spike are blended into each other as a single relatively long cone with a suitable concave curve **33** filleting the corner formed at the juncture of the base of the cone with the flange **34**. This permits making the flange **34** quite thin, yet retaining the desired strength and providing a longer spike which, naturally, would have longer life.

As is apparent from the foregoing, the invention may be practised in many ways. This disclosure should therefore be interpreted only in the light of the prior art.

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

1. A spike for shoes comprising a fixed portion, and a replaceable portion; a flange integral with the fixed portion for engagement against the outer surface of the shoe sole, a depressed seat in the upper face of the flange, integral anti-rotational means on the under surface of the flange for engagement with the shoe sole, said fixed portion having a threaded bore communicating with the depressed seat, said replaceable portion having a screw shank for removable engagement with the threaded bore, and having a flange for interfitting engagement with the depressed seat whereby when both portions are assembled the top surfaces of two flanges will be flush.

2. A spike for shoes comprising a fixed portion and a replaceable portion; a flange integral with the fixed portion for engagement against the outer surface of the shoe sole, integral anti-rotational means on the under surface of the flange for engagement with the sole, said fixed portion having an axial threaded bore, said replaceable portion having a screw shank for removable engagement with the threaded bore, the outer end portion of the fixed member having a recessed seat, and the upper end portion of the replaceable portion having a face coacting with the recessed seat when the shank is screwed home in the threaded bore.

CLARENCE W. FULLER.