April 7, 1931. I. I. TUBBS 1,799,334

SHOE CLEAT

Filed Nov. 12, 1927

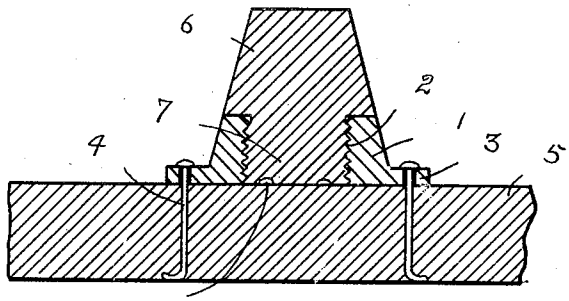


Fig. 1.

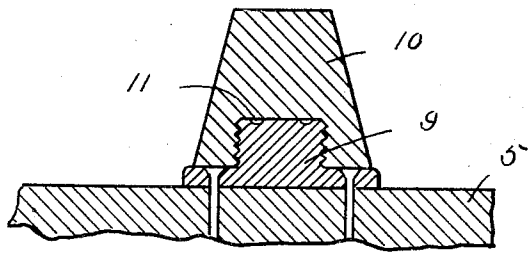


Fig. 2.

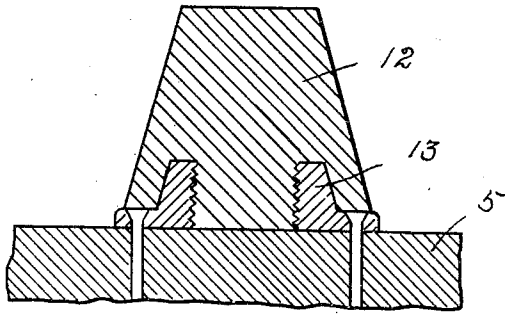


Fig. 3.

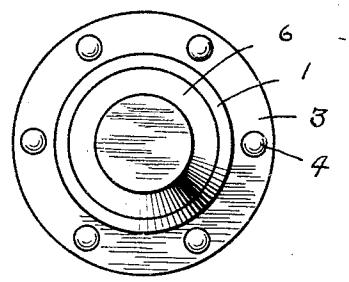


Fig. 4.

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UNITED STATES PATENT OFFICE

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SHOE CLEAT

Application filed November 12, 1927. Serial No. 232,824.

This invention relates to shoe cleats and has particular reference to an anti-slip cleat particularly adapted for use upon football players' shoes or the like.

The principal object of the invention is to produce a more practical, durable, and efficient cleat than heretofore known.

Another object is to provide such a cleat or shoe calk which may be readily removed or interchanged and yet is securely held in position against accidental dislodgment.

A further object is to provide such a shoe cleat wholly externally of the sole of the shoe, and one presenting the least amount of objectionable or dangerous protrusion from the shoe.

Still other objects and advantages of the invention will appear in the further description thereof.

Referring now to the accompanying drawing, forming part of this application, and wherein like reference characters indicate like parts:

Figure 1 is a central vertical section through one of the improved cleats as applied to the sole of a shoe in inverted position:

Figure 2 is a similar view of a modified form of cleat.

Figure 3 is a like view of a still further modified form of cleat; and

Figure 4 is a top plan view of Figure 1.

The cleat or calk is circular in form and preferably of frusto-conical or frustum shape, being composed of the holding member or base portion 1, made of suitable material such as brass, aluminum, or the like, the preferred form having a central bore which is internally screw threaded as at 2, and provided with the annular flange 3, through which suitable holes are formed for attachment to the bottom of the shoe sole, either by screws or nails as preferred, the latter being indicated at 4, and the sole of the shoe at 5.

Within the bore of the base 1 is screw threadedly mounted the tip of the calk or cleat, as illustrated at 6, it preferably being in contour a continuation of the shape of the base, and made of any suitable material such as rubber, fiber, or bakelite.

In the extreme end of the portion 7 of the tip, which extends within the base 1 and abuts the face of the shoe sole, I prefer to form a plurality of shallow holes or recesses, indicated at 8, so that when the tip is screwed into position and the portion 7, being made sufficiently long for such purpose, will tightly impinge the face of the sole 5 when the tip is screwed tightly home with the shoulder thereof engaging the outer extremity of the base 1. This construction acts as locking means for the tip, as the leather of the shoe sole, being somewhat yieldable, will bulge slightly within the depressions 8 and tend to hold the tip snugly in position.

In Figure 2 the base portion is illustrated at 9 and has an upwardly protruding central portion which is externally screw-threaded, and the tip 10 is so constructed as to surround same, the lower portion covering the entire face of the flange of the base 9, in which event the upper face of the externally screw threaded portion of the base is provided with depressions 11 similar to those previously described and numbered 8; they functioning in a like manner to hold the tip firmly in position.

In Figure 3 I have shown a modified form of tip 12 for mounting upon the base 13 which is identical in shape with the base 1, shown in Figure 1, and which form of tip may be preferred for a larger and longer tip for use in excessively muddy and soft conditions.

It will of course be understood that the tip, or entire cleat, as illustrated in Figure 1, may be enlarged, in lieu of the modification shown in Figure 3, for use on muddy or heavy ground; and that the portion 7 of the tip may not extend entirely to the sole of the shoe as illustrated. Further modifications may also be resorted to without departing from the spirit of the invention, as defined in the appended claims.

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

1. A removable shoe calk of the class de-

scribed, comprising a base plate adapted to be attached to the sole of the shoe and having an outwardly extending frustro-conical extension having a screw threaded opening therein, said opening extending through the base plate, and a frustro-conical calk having a reduced screw threaded extension, threaded into the opening in the extension and the base plate having its inner end engaging the sole of the shoe, the extension of the base plate and calk forming a truncated-cone.

2. A removable calk of the class described, comprising a base plate adapted to be secured to the sole of the shoe and having an outwardly extending frustro-conical extension, having a screw threaded opening extending therethrough and through the base plate, and a frustro-conically shaped calk having a reduced screw threaded extension carried by its lower end and adapted to extend through the opening in the extension and base plate, and having its lower end provided with recesses or serrations adapted to engage the sole of the shoe and the outer end of the extension engaging the calk around the threaded extension thereof, said extension and calk forming a truncated-cone.

3. A removable calk of the class described, comprising a base plate adapted to be secured to the sole of the shoe and having a tapering extension provided with a screw threaded opening, and a truncated-cone shaped calk having an annular recess to receive the extension of the base plate, and a screw threaded extension adapted to be threaded into the threaded opening in the extension of the base plate.

In testimony whereof I affix my signature.

IRA IRL TUBBS.