

P. J. FINNERAN.
SHOE.
APPLICATION FILED SEPT. 13, 1915.

Patented Oct. 19, 1920.

1,355,827.

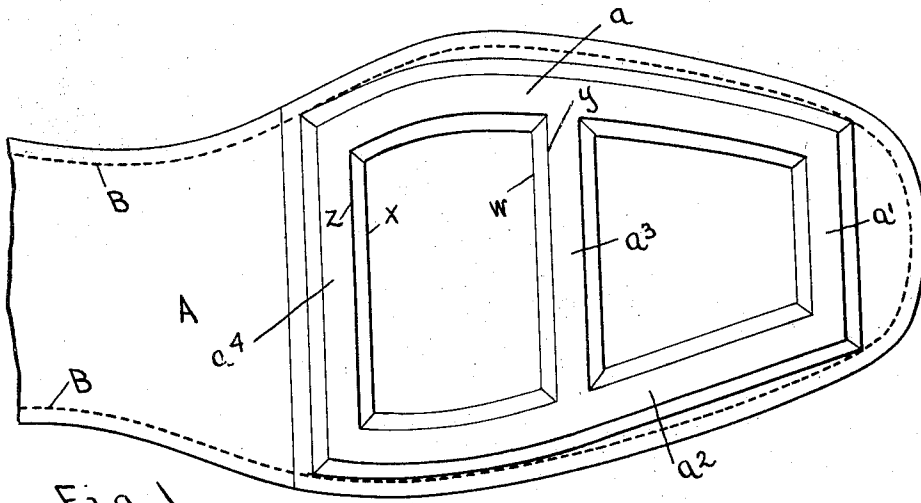


Fig. 1.

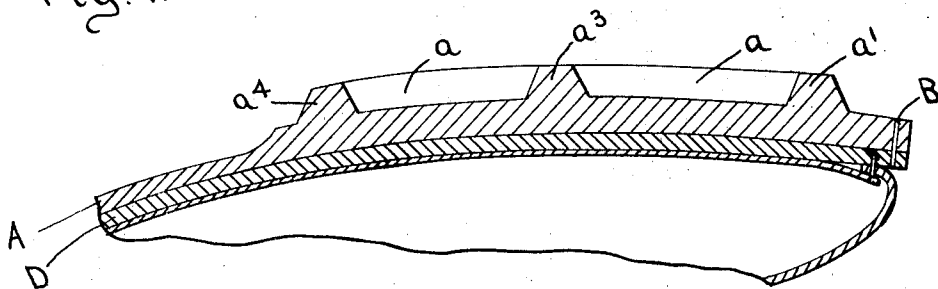


Fig. 2

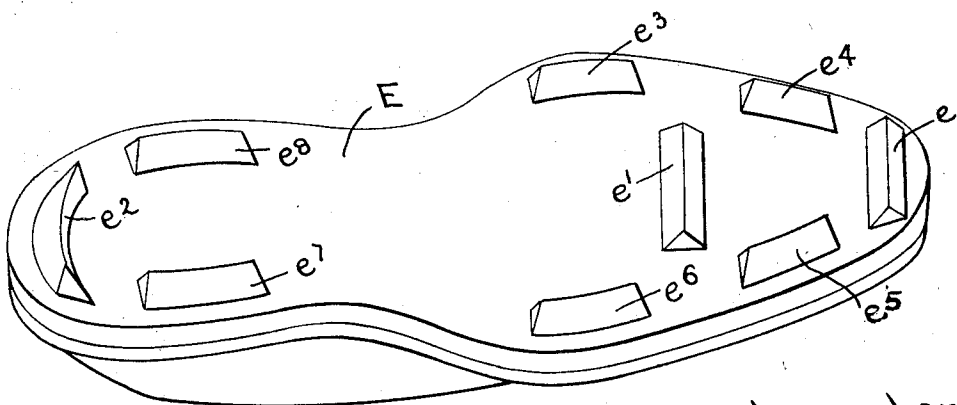


Fig. 3

Inventor
Patrick J. Finneran
by George A. Rockwell,
attorney

UNITED STATES PATENT OFFICE.

PATRICK J. FINNERAN, OF BOSTON, MASSACHUSETTS.

SHOE.

1,355,827.

Specification of Letters Patent.

Patented Oct. 19, 1920.

Application filed September 13, 1915. Serial No. 50,291.

To all whom it may concern:

Be it known that I, PATRICK J. FINNERAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Shoes, of which the following is a specification.

My invention relates to shoes and more particularly to shoes whose soles have projections or cleats to prevent slipping and particularly when the shoes are worn by players of football, golf, basketball and other games.

Before my invention, it has been customary to use leather soles with cleats nailed thereto. Such shoes have many defects which have long been recognized but which have been put up with because no one before my invention saw how to remedy them and the experts unite in saying that my present invention fully meets the demand so long unfilled.

Among these defects I may point out that leather soles and cleats when used in wet weather are knocked out of shape and are left in this condition and when dried out are still out of shape. Moreover, when mud collects on leather soles it will remain caked against the cleats and eventually the cleats become unfit to accomplish their purpose. It has been customary to nail separate cleats to these leather soles but these nails work loose and the cleats fall off. Moreover the heads of the nails are on the outside and although at first they are supposed to be flush with the cleat yet they soon project and cut one's opponent. Moreover the nails, which are clenched to the sole, tear through the sole, and while new cleats might be applied once yet even that weakens the sole so that a new sole becomes practically necessary. Furthermore, the heads of the nails wear off and the nails work into the inside of the shoe, injuring the foot of the user.

Cleats can not be held to rubber soles by nails because the nails tear out almost immediately.

I have overcome all these defects by providing a rubber sole with a cleat or cleats and I prefer to hold it or them to the sole by adhesion and in the preferred form this adhesion is provided by molding the cleat or cleats integral with the sole.

A feature of my invention consists in one or more cleats to prevent longitudinal slipping and one or more to prevent slipping sidewise.

Other features of my invention will be pointed out below.

In the drawings,

Figure 1 represents a partial bottom plan of a shoe embodying my invention;

Fig. 2 is a central longitudinal section thereof; and

Fig. 3 is a perspective of the preferred form.

Rubber sole A has molded integrally with it several cleat portions a , a' , a^2 , a^3 , and a^4 , of which a and a^2 prevent slipping sidewise while portions a' , a^3 and a^4 prevent longitudinal slipping. At the outer portion the cleats are narrower than at the base portions. For example, the distance from w to x is less than from y to z so that on bending of the sole mud or dirt will be effectually forced out. Stitching B holds the rubber sole to the inner leather sole D.

In Fig. 3 I show a form more particularly adapted for football use and here rubber sole E is provided with separate cleats e , e' and e^2 to prevent longitudinal slipping and cleats e^3 , e^4 , e^5 , e^6 , e^7 and e^8 to prevent slipping sidewise. These cleats are molded integrally with sole E and the mud ejecting function above described is here had by sloping the walls of the cleats as above described, the cleats e and e' being opposed for this purpose and, for example, cleats e^4 and e^8 .

With my shoe there are no nails; the sole and cleats will always retain their shape; the sole will bend and throw out mud or the like; the cleats will not injure the players; and the cleats are yielding with consequent springiness and prevention of sprain of the user.

With my shoe there is also a great saving of labor and expense because the sole, heel and cleats can be applied much more quickly than is the case with the cleats of the prior art.

In Fig. 3 the walls of each cleat slope outwardly from the sole toward each other forming, in effect, an edge to engage the ground and this edge provides new func-

tions or gripping and prevention of slipping as nothing of this kind is to be found in the prior art.

What I claim is:

- 5 1. An article of footwear having a rubber sole and a cleat held to the sole by cohesion.
2. An article of footwear having a rubber sole and a cleat molded integrally with the sole.
- 10 3. An article of footwear having a rubber sole and a plurality of cleats integral with the sole and extending longitudinally of the shoe and a plurality of cleats integral with the sole and extending trans-
15 versely of the shoe.
4. An article of footwear having a rubber

sole and cleats integral with said sole, the sole having two opposed cleats transverse to the sole and two sets of opposed cleats extending longitudinally of the sole, and the heel of the sole having two opposed cleats extending longitudinally of the sole and one cleat extending transversely of the sole.

5. An article of footwear having a rubber sole and rubber cleats integral with the sole and projecting therefrom and extending crosswise of the sole to prevent slipping.

6. An article of footwear having a rubber sole and integral therewith a cleat extending partially across the sole.

PATRICK J. FINNERAN.