March 10, 1925. 1,528,782

E. S. PERRY

ATHLETIC SHOE SOLE

Filed Nov. 4, 1924

Fig. 1.

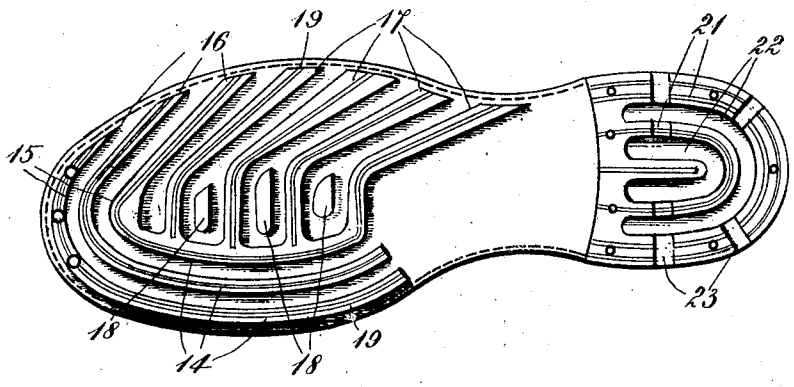
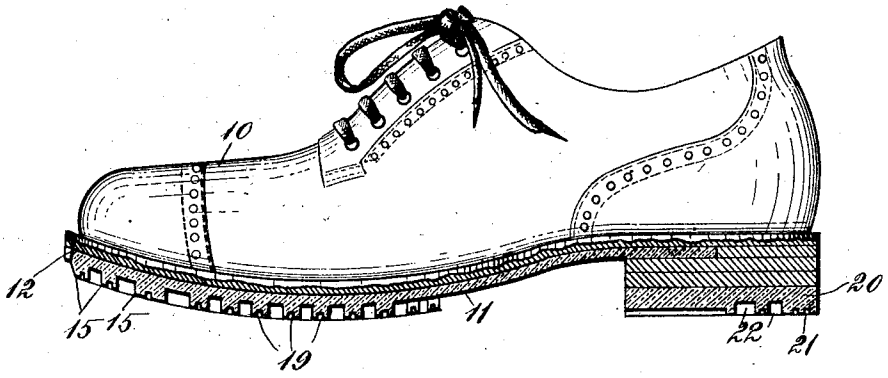


Fig. 2.



INVENTOR=
E. S. Perry
By Clyde L. Rogers
his ATTORNEY=

Patented Mar. 10, 1925. 1,528,782

UNITED STATES PATENT OFFICE.

ERIC S. PERRY, OF NORTHAMPTON, ENGLAND.

ATHLETIC SHOE SOLE.

Application filed November 4, 1924. Serial No. 747,830.

To all whom it may concern:

Be it known that I, ERIC S. PERRY, a subject of the King of Great Britain, whose residence and post-office address is Northampton, England, have invented an Improvement in Athletic Shoe Soles, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts in each of the several views.

This invention relates to athletic shoe soles or tread members produced of rubber composition or like suitable moldable material and equipped with ribs or corrugations specially designed to resist particular thrusts and strains.

In making a stroke at golf, there are two particular ways in which the foot presses upon the ground, which may cause a slip unless opposed by properly designed resistance ribs or corrugations; these are—(1) a sideways pressure by the inside of the foot from the ball of the great toe forward, and (2) a twist—with the outside joint as a pivot—when the weight of the body is on the outside of the foot. In the beginning of the stroke the former of these strains is on the left foot, and the latter strain on the right foot, while at the end of the stroke the strains are reversed.

In accordance with my invention the tread surface of the sole is equipped with longitudinal curving corrugations which extend from the inside ball to the toe, and are thus specially adapted to oppose the former of the above noted strains, while the outer side portion of the sole is equipped with fan-shaped corrugations or ribs extending diagonally rearward from the toe portion of the sole nearly to the heel, and thus best adapted to resist the latter noted strain.

The foregoing and other objects and advantages of the invention will more fully appear from the following detailed description taken in connection with the accompanying drawings, and the distinctive features of novelty will be pointed out in the appended claims.

Referring to the drawings—

Figure 1 is a bottom plan view of an athletic shoe sole embodying the invention; and

Fig. 2 is a side elevation thereof with the sole portion broken away in vertical section.

The shoe 10 to which the invention is applied may be generally of usual type, illustratively shown as a blucher-cut oxford. 11 indicates the athletic sole of my invention which may be secured by usual stitching 12 to the inner sole and body of the shoe. This outer sole is preferably produced of rubber composition with the ribs or corrugations to be described molded integrally therewith. These corrugations comprise ribs 14, illustratively shown as three in number, with spacing valleys therebetween, and extending in a curve corresponding generally to that of the inner edge of the sole, forward from the instep portion to the toe, with the forward portions thereof curving around the toe, as indicated at 15, and continuing as part of the fan-shaped corrugations 16 which extend diagonally backward at the outer side of the sole. These fan-shaped corrugations are continued by other ribs 17 which are shown as branching from the inner one of the ribs 14, and which extend outward and then diagonally rearward to the outer side of the sole with the outer portions thereof gradually enlarging in a wedge shape as shown. These fan-shaped corrugations preferably extend well toward the heel so as to afford a maximum area of resistance to strains tending to cause slipping.

As herein shown the spaces between inner portions of these fan-shaped corrugations are occupied by studs 18 affording further strain resisting members.

The tops of both the longitudinal corrugations and the fan-shaped corrugations may be formed with smaller valleys 19 intermediate the width thereof to further enhance the non-slipping property of the sole. The longitudinal corrugations or ribs 14 are thus best adapted to resist the above noted sideways pressure by the inside of the foot from the ball of the great toe forward, while the fan-shaped corrugations 16, 17 are best adapted to resist the already noted twisting strain when the weight of the body is on the outside of the foot and with the outside joint as a pivot.

The curving longitudinal corrugations also provide for the free pivoting of the right foot during the stroke, at the same

time opposing the required resistance to slipping, even when the player finishes the stroke on the extreme end of the toe of the right foot.

The described corrugations therefore are best adapted and designed to present a solid continuous resistance to slipping throughout the movements required for the stroke, while at the same time facilitating the necessary pivoting movement, and the described sole is thus greatly superior to one equipped merely with studs or squares which at best offer only broken resistance to strains, and entirely prevent free pivoting.

The outer or tread heel-lift 20 is also molded with curving corrugations 21 separated by valleys 22 and extending around the heel and preferably interrupted by radiating valleys 23 so as to obtain a firm-non-slipping grip of the heel also upon the ground.

I am aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and I therefore desire the present embodiment to be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

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

1. An athletic shoe sole molded with longitudinal curving ribs separated by spacing valleys at the inner side portion thereof, and with fan-shaped ribs separated by spacing valleys in its outer portion extending diagonally outward and rearward of the sole.

2. An athletic shoe sole equipped with spaced apart corrugations extending longitudinally at the inner side thereof, and curving around the toe portion of the sole continuing in a fan-shape extending diagonally outward and rearward of the outer side of the sole, and other fan-shaped corrugations extending diagonally rearward of the outer portion of the sole to a point relatively near the heel.

3. An athletic shoe sole equipped with longitudinally-extending curving corrugations at the inner side thereof, and with other corrugations extending diagonally outward and rearward on the outer portion of the sole to a point relatively near the heel thereof.

In testimony whereof, I have signed my name to this specification.

ERIC S. PERRY.