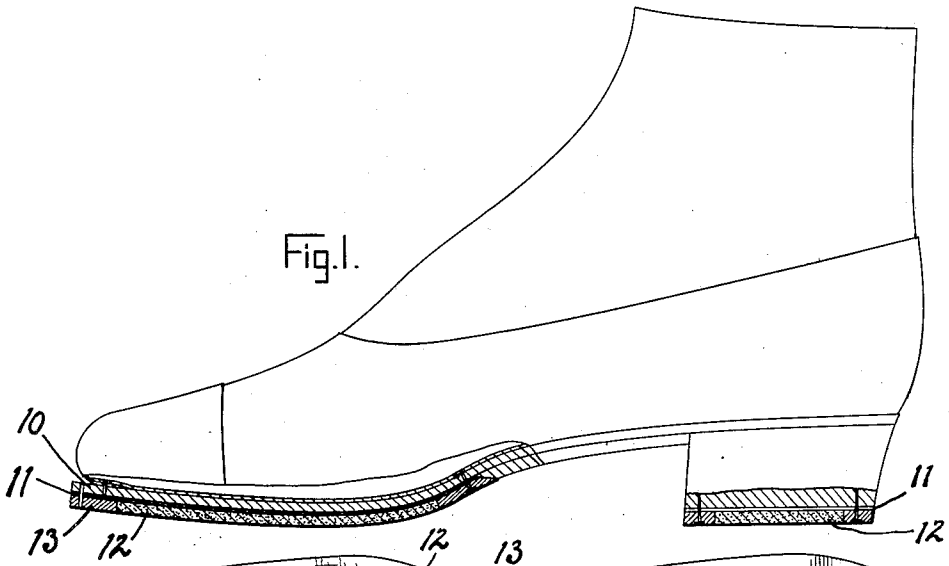
A. E. RENDLE.

NON-SLIPPABLE SOLE.

APPLICATION FILED JUNE 5, 1917. RENEWED JUNE 15, 1920.

1,350,839. **Patented Aug. 24, 1920.**

Fig. 1.



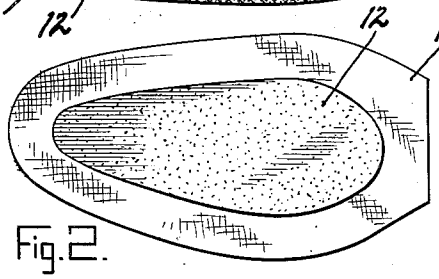


Fig. 2.

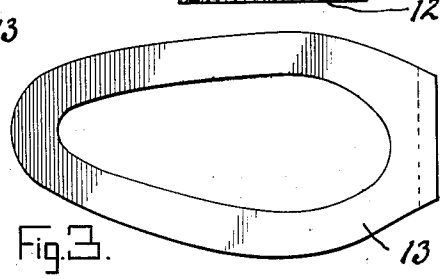


Fig. 3.

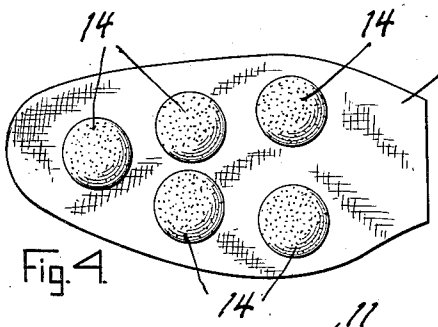


Fig. 4.

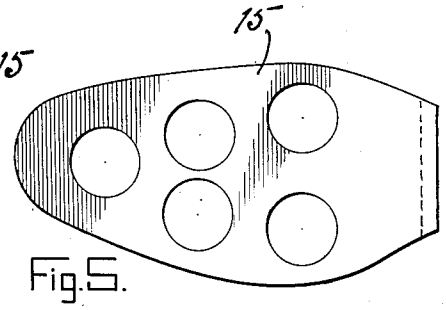


Fig. 5.

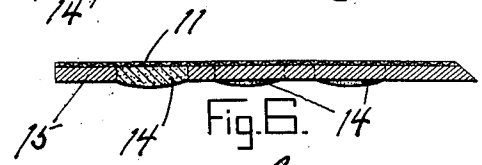


Fig. 6.

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ARTHUR EDGCUMBE RENDLE, OF PHILADELPHIA, PENNSYLVANIA.

NON-SLIPPABLE SOLE.

1,350,839. Specification of Letters Patent. Patented Aug. 24, 1920.

Application filed June 5, 1917, Serial No. 173,059. Renewed June 15, 1920. Serial No. 389,186.

To all whom it may concern:

Be it known that I, ARTHUR E. RENDLE, a citizen of Great Britain, residing at Philadelphia, Philadelphia county, and State of Pennsylvania, have invented and discovered certain new and useful Improvements in Non-Slippable Soles, of which the following is a specification.

The object of my said invention is to provide a non-slippable sole that may be conveniently attached to boots and shoes and one that will be efficient in use and of permanent character, or, in other words, of a life substantially coextensive with the life of an ordinary sole. The term "sole", as used herein, will be understood to include "heels", as well.

In the accompanying drawings:

Figure 1 illustrates a shoe the sole and heel of which are provided with my non-slippable elements, which are shown in section to better illustrate the construction;

Fig. 2 an underside view of a sole formed in accordance with my said invention;

Fig. 3 a plan view of the rim of the sole;

Fig. 4 a view similar to Fig. 2 illustrating a modification in the structure;

Fig. 5 a view similar to Fig. 3, relating to said modification and

Fig. 6 a sectional view through Fig. 4.

The boot or shoe may be of any type and constructed of any approved material. My invention relates only to the construction of the non-slippable sole, whether for permanent or removable attachment with the shoe.

Said non-slippable sole is formed with a base composed of water-proofed material 11, as canvas, cut substantially to the form and size of the shoe sole 10, to which it is to be applied. In the structure shown in Figs. 1, 2 and 3 the central part of said canvas is covered with an oval-shaped non-slippable element 12, consisting of a composition of a suitable adhesive and an abrasive material, like carborundum, emery, or the like, leaving a uniform space around the edge of said portion, which is covered with a border 13 of leather, fiber, rubber, or other appropriate material of uniform thickness with the abrasive substance. This border, as well as the abrasive material which it surrounds, is cemented to the base with a waterproof cement of a character that will permanently secure both the abrasive material and the border to said base. The element thus formed is secured to the sole 10 of the boot or shoe in the same manner as an ordinary "half-sole", either by stitching or in any approved manner. It may likewise be made in the form of a "sandal" to be slipped on over the sole of the shoe, after the manner of rubber sandals in common use. The heels are formed in similar manner and secured in place by nails, or pegs, as usual. The water-proof canvas not only serves as a base but to protect the feet of the wearer from dampness.

The structure shown in Figs. 4 and 5 is similar to that above described except that instead of a solid oval portion of the abrasive material, a number of "buttons", or "tablets" 14 of the abrasive material are firmly cemented to the canvas and a piece of leather 15, formed of appropriate shape and having apertures, is fitted over the buttons or tablets and then cemented to the base.

By this arrangement a sole is provided with a plane surface having abrasive non-slipping portions, entirely protected at their edges by ordinary sole leather, or other material used for the sole (all comprehended in the term "leather", as used herein), and a most efficient and durable construction is thus provided. The sole being thus formed with a surface which is plain but having inserts of material which while "non-slippable" yet are not of a rough or "scratchy" character, can be used without danger of injury to floors, the wearer protected from injury by slipping, and one that wears so that the non-slipping portion is in service until the sole is worn to the canvas. By its use the wearer is enabled to "stand-fast" under all kinds of slippery conditions and I have adopted this as my trade name for the invention.

It will be understood of course that other modifications in the structure may be made without departing from the spirit of my invention; and also that I do not desire to be limited to any specific material either in the structure of the base, or the non-slipping surface. While I have found the canvas base desirable and the nonslipping composition composed of carborundum and the border of leather to make a very desirable structure for the purpose yet, it is obvious that other materials might be substituted and substantially like results obtained.

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

1. A non-slippable sole for a boot or shoe comprising an inner base strip overlying the shoe sole portion, an outer or wearing sole portion entirely overlying and secured to said inner base strip along the edges thereof, and a section of abrasive material set flush within said outer sole portion and of the same thickness thereof, substantially as set forth.

2. A non-slippable sole for a boot or shoe comprising an inner base strip of waterproofed material overlying the shoe sole portion, an outer or wearing leather sole portion entirely overlying and secured to said inner base strip along the edges thereof, and an independent section of abrasive material set flush within said outer sole portion and of the same thickness thereof, substantially as set forth.

3. A non-slippable sole for a boot or shoe comprising an inner base strip overlying the shoe sole portion, and an outer or wearing sole portion of appropriate material entirely overlying and secured to said inner base strip, a part of said outer sole portion being composed of abrasive material surrounded by the appropriate wearing material of which said outer sole portion is in the main composed, the wearing surface of the abrasive material being approximately flush with the wearing surface of the remainder of said outer sole portion, substantially as set forth.

In witness whereof, I have hereunto set my hand and seal at Philadelphia, Pennsylvania, June, A. D. nineteen hundred and seventeen.

ARTHUR EDGCUMBE RENDLE. [L. S.]

Witnesses:

B. H. DARNELL,

JOHN M. COLLINS.