

J. M. ALEXANDER.  
 ANTISLIPPING ATTACHMENT FOR FOOTWEAR.  
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1,023,350.

Patented Apr. 16, 1912.

Fig. 1.

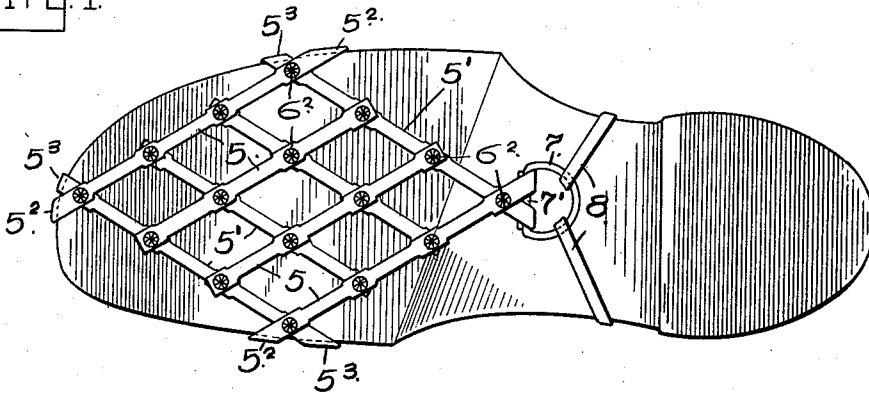


Fig. 3.

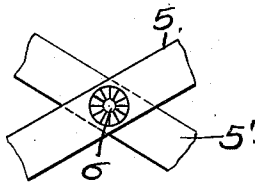


Fig. 4.

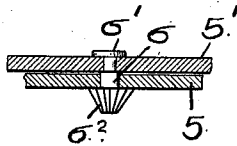
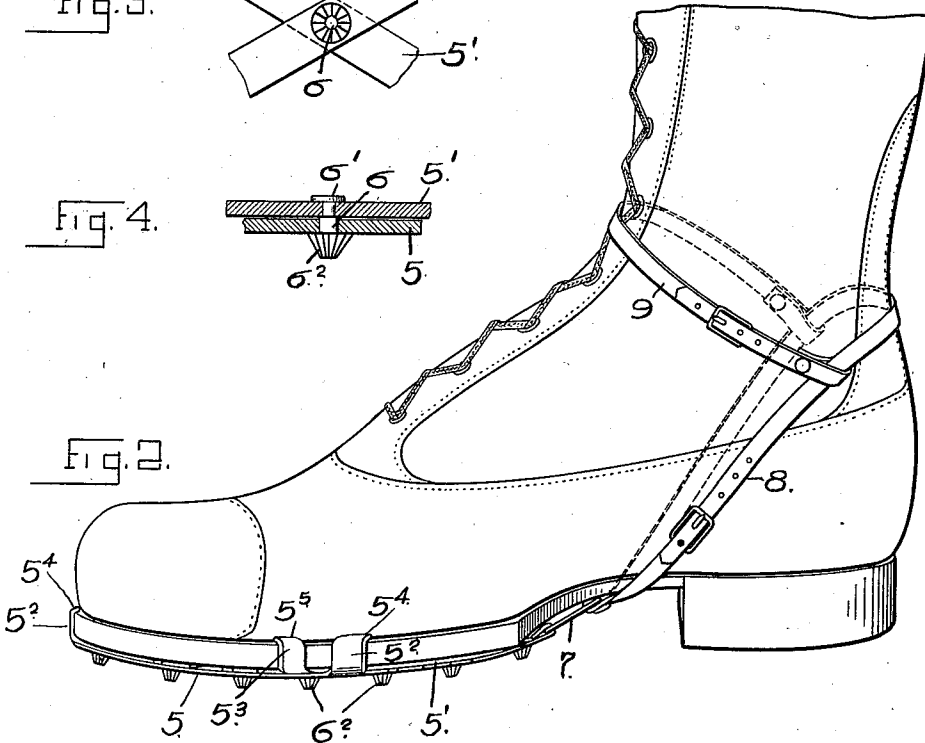


Fig. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## ANTISLIPPING ATTACHMENT FOR FOOTWEAR.

1,023,350.

Specification of Letters Patent.

Patented Apr. 16, 1912.

Application filed November 9, 1911. Serial No. 659,334.

*To all whom it may concern:*

Be it known that I, JULIUS M. ALEXANDER, a citizen of the United States, residing at Healdsburg, in the county of Sonoma and State of California, have invented certain new and useful Improvements in Antislipping Attachments for Footwear, of which the following is a specification.

The hereinafter described invention relates to an improved adjustable and collapsible attachment, adapted to be applied to and removed from the sole of a boot or shoe and provided with projections affording better traction to assist the wearer thereof in walking on ice, ice covered or slippery pavements, and in climbing roofs, or other steep inclines, and the same comprises an adjustable frame formed of strips of material arranged in angular spaced cross relation to each other, pivoted at their crossing points, the pivots carrying lugs or projections, and providing a means for precluding the shoe from slipping, shoe sole engaging means carried by the ends of certain of the strips, and flexible connections engaging certain strips of the frame and extending around the rear of the shoe, for forcing the sole engaging members against the sole of the shoe.

The object of the invention is to provide a device of the above character, adapted to be adjusted to fit boots of any size, one that may be quickly applied to or removed from the boot and that is provided with projections such as steel or rubber so that the device may be adapted for use in walking on surfaces of different kinds.

A further object is to provide a device so constructed that when removed from the sole of a boot or shoe, it may be collapsed into a small compass and readily carried by the user.

With these and other objects in view, the invention consists in the novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

To comprehend the invention reference should be had to the accompanying sheet of drawings illustrating a completely con-

structed device for carrying out the invention, wherein—

Figure 1 is a plan view of the sole of a shoe, with the invention applied thereto. Fig. 2 is a side elevation of a shoe with the device applied thereto. Fig. 3 is an enlarged plan view of one of the crossing points of the lattice, showing the projecting point. Fig. 4 is an enlarged sectional view of a crossing point of the lattice.

In the drawings the numeral 5 designates parallel spaced bars or strips intersected by and pivotally mounted, as at 6, to other parallel spaced bars or strips 5', the bars or strips 5 and 5' extending in angular relation to each other, forming a substantially diamond-shaped collapsible frame within which are substantially diamond shaped openings. The pivots 6 extend through suitable openings in the bars 5 and 5' uniting the same, and are provided at their upper ends, or the part adapted to rest next to the sole of the shoe, with flat heads or surfaces 6' and at their opposite ends with pointed projections 6<sup>2</sup>, which, when the frame is applied to the shoe in a hereinafter described manner, provide a traction surface for the foot of the wearer, as shown in Figs. 2 and 4 of the drawings. The ends of the bars 5 and 5' forming the outer edges of the frame are bent upwardly as at 5<sup>2</sup> and 5<sup>3</sup> and inwardly as at 5<sup>4</sup> and 5<sup>5</sup>, as in Fig. 2 of the drawings, providing hooked portions for engaging over the top edges of the sole and for clamping against the same in a hereinafter described manner.

Pivotally mounted in the bars forming the rear, or that portion of the diamond shaped frame adapted to extend under the instep of the shoe, is a ring 7, having a portion 7' of its edge straight along which straight portion the bars are adapted to slide, and in rear of the straight edge portion it carries a strap or other flexible connection 8 adapted to extend upwardly from each side of the instep and be buckled around the shoe above the heel, as in Fig. 2 of the drawings. The strap 8 is in turn supported on the shoe by another strap 9 slidably mounted thereon and adapted to extend therefrom and buckle around the ankle of the wearer, as shown in Fig. 2 of the drawings.

From the above construction it will be apparent that the frame, when positioned as in Fig. 1 of the drawings, on the sole of a shoe, with the sole engaging portions 5<sup>4</sup>

and 5<sup>5</sup> engaging the top of the sole, and the strap 8 extended around the rear of the shoe above the heel, as in Fig. 2 of the drawings, and pulled tightly, the frame will be partly collapsed, and the sole engaging portions 5<sup>2</sup> and 5<sup>3</sup> will be drawn inwardly and will be tightly clamped to the edge of the sole thereby securely mounting the frame on the sole of the shoe.

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

1. In a device of the class described, the combination with a collapsible frame, comprising parallel spaced bars intersected by and pivotally mounted to other parallel spaced bars, sole engaging portions projecting from the frame and adapted to engage the sole of a shoe, studs projecting from the frame in an opposite direction from the sole engaging portions, and a flexible connection adapted to extend from the rear of the frame and around the rear of the shoe for collapsing the frame and forcing the sole engaging portions against the sole of a shoe.

2. In a device of the class described, the combination of a frame comprising parallel spaced bars intersected by and pivoted to other parallel spaced bars, sole engaging portions formed by the ends of certain of

the bars, studs projecting from the pivotal points of the bars, and a flexible connection secured to the rear of the frame and adapted to extend around the rear of the shoe for collapsing the frame and forcing the sole engaging portions against the sole of a shoe.

3. In a device of the class described, the combination of a frame comprising parallel spaced bars intersected by and pivoted to other parallel spaced bars, the bars being arranged in angular relation to each other, sole engaging portions formed by the ends of certain of the bars, studs projecting from and their upper ends forming the pivots for the bars, a flexible connection secured to the rear of the frame and adapted to extend around the rear of the shoe for collapsing the frame and forcing the sole engaging portions against the shoe, and another flexible connection secured to the first mentioned flexible connection and adapted to extend around the upper front portion of the shoe for supporting the said flexible connection.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JULIUS M. ALEXANDER.

Witnesses:

LIEUALLEN J. HALL, Jr.,  
JOSEPH H. MILLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."