March 9, 1943. E. F. BLOCK 2,313,316

ANTISLIPPING DEVICE

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Fig. 1.

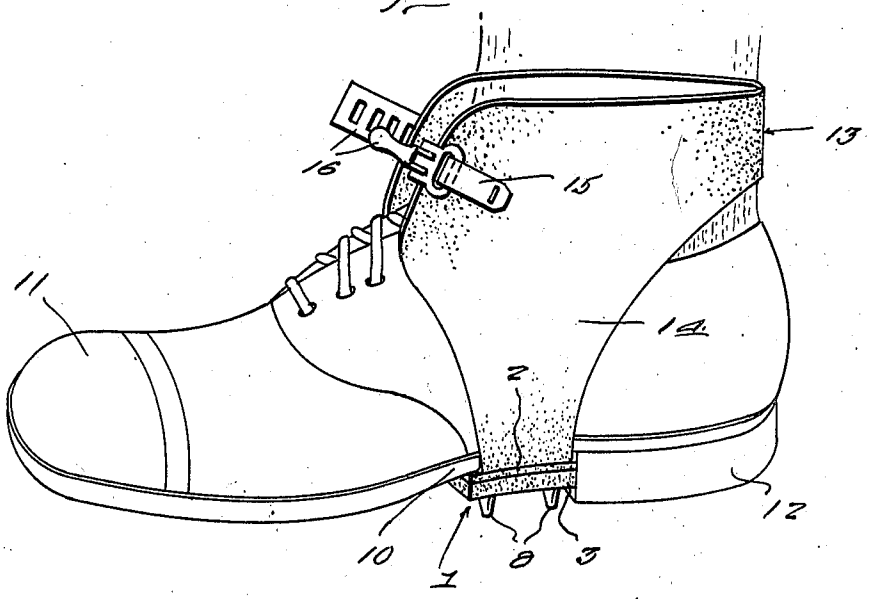


Fig. 3.

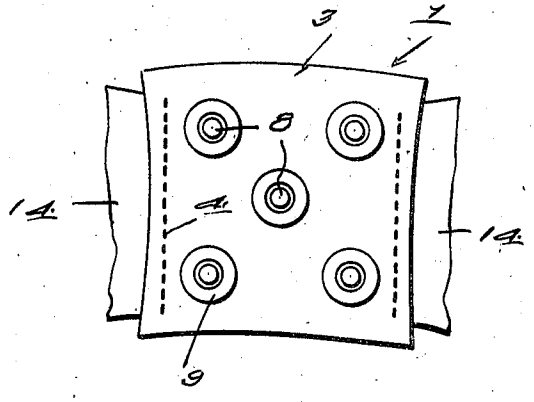


Fig. 6.

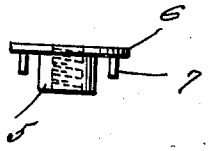
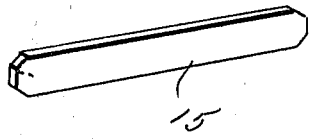


Fig. 7.



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ANTISLIPPING DEVICE

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Fig. 2.

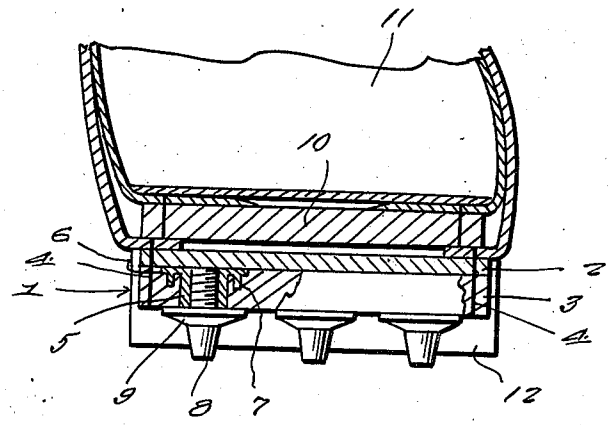


Fig. 4.

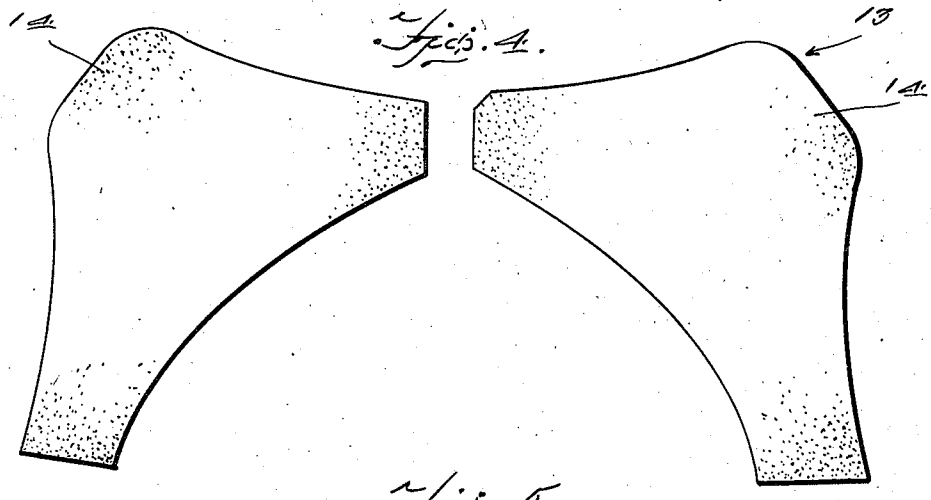
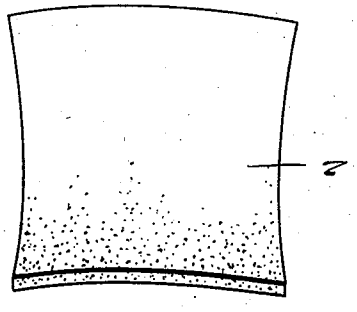


Fig. 5.



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UNITED STATES PATENT OFFICE

2,313,316

ANTISLIPPING DEVICE

Emil F. Block, Milwaukee, Wis.

Application March 4, 1942, Serial No. 433,374

1 Claim. (Cl. 36—62)

The present invention relates to new and useful improvements in anti-slipping devices, and has for one of its important objects to provide, in a manner as hereinafter set forth, an article of this character which is adapted to be expeditiously applied and worn on a shoe, boot or other conventional footwear.

Another very important object of the invention is to provide an anti-slipping device of the aforementioned character comprising a novel construction and arrangement whereby the tread portion, comprising the gripping elements, will be located beneath the instep in abutting engagement with the heel of the shoe, boot, et cetera.

Other objects of the invention are to provide an anti-slipping device of the character described which will be comparatively simple in construction, strong, durable, highly efficient and reliable in use, compact, light in weight, attractive in appearance, comfortable, adaptable for easy carrying by compact folding for emergency purposes, and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a perspective view, showing an anti-slipping device constructed in accordance with the present invention in position on the foot and ready to be fastened.

Figure 2 is a view principally in cross-section through the lower portion of the device and the shoe on which it is mounted.

Figure 3 is a bottom plan view of the tread portion of the device.

Figure 4 is a plan view of the blanks from which the upper is formed.

Figure 5 is a perspective view of the upper lamination of the tread.

Figure 6 is a detail view in side elevation of one of the calk retaining tubes.

Figure 7 is a detail view in perspective of one of the straps from which the buckle securing loops are formed.

Referring now to the drawings in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a tread which is designated generally by reference numeral 1. As illustrated to advantage in Figure 2 of the drawings, the tread 1 includes a top lamination 2 and a bottom lamination 3 of comparatively thick or heavy leather, said laminations being stitched or riveted together at 4.

Extending vertically through the lower lamination 3 of the tread 1 is a plurality of internally threaded tubes 5. The tubes 5 include, on their upper ends, external flanges 6 which are countersunk in the lower lamination 3. Depending from the flanges 6 are prongs or the like 7 which are embedded in the lower lamination 3. Threadedly mounted in the tubes 5 are removable calks 8. The calks 8 are of the shape shown to advantage in Figure 2 of the drawings and include flanges 9 which abut the lower lamination 3 and the lower ends of the tubes 5.

The tread 1 is engageable beneath the instep portion 10 of a conventional shoe 11, for example, and is adapted to abut the front or breast of the heel 12 of said shoe.

Reference numeral 13 designates generally an upper in the form of a strap of suitable flexible material having its end portions secured on the marginal side portions of the tread 1 by the stitching 4. The upper 13 includes a pair of substantially triangular members 14 having one end secured together, their other ends being connected at 4 to the tread 1. Mounted on the front portions of the members 14 are loops 15 which are formed from leather straps. Fastening elements 16 are mounted in the loops 15 for adjustably and detachably connecting the front portions of the upper 13 over the arch of the foot. In lieu of the elements 15 and 16, "Dot" or other suitable fasteners may be used.

It is thought that the manner in which the device functions will be readily apparent from a consideration of the foregoing. The heel or rear portion of the shoe 11 is inserted in the upper 13 in a manner to bring the tread 1 beneath the instep 10 in abutting engagement with the heel 12. The upper 13 is formed to extend comfortably around the back of the foot just above the heel, in which position it is secured by the buckle elements 16. The construction and arrangement is such that any forward or rearward movement of the tread 1 beneath the shoe is positively prevented. Should the calks 8 become worn, they may be expeditiously removed for replacement.

It is believed that the many advantages of an anti-slipping device constructed in accordance with the present invention will be readily understood, and although a preferred embodiment of said device is as illustrated and described, it

is to be understood that changes in the details of construction may be resorted to which fall within the scope of the invention as claimed. For example, calks substantially similar to the elements 8 may be securely and permanently riveted to the tread 1.

What is claimed is:

An anti-slipping device of the character described comprising a tread engageable beneath the instep of a shoe and adapted to abut the heel of said shoe. said tread including top and bottom laminations secured together, tubes mounted in the lower lamination, removable calks threadedly mounted in said tubes, and means for securing the tread in position beneath the shoe, said means comprising a strap adapted to extend around the back of the foot and including a pair of substantially triangular members having one end secured together and their other ends secured to the tread, and coacting fasteners for detachably connecting the front portions of said members.

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