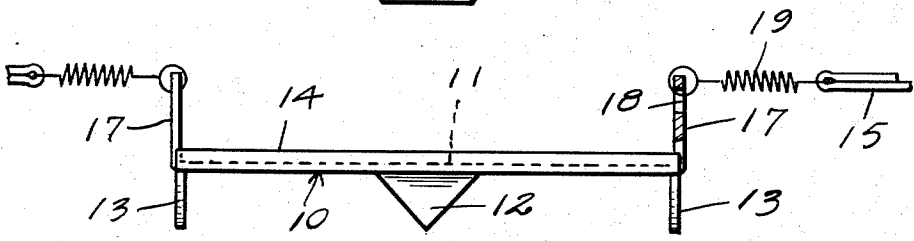
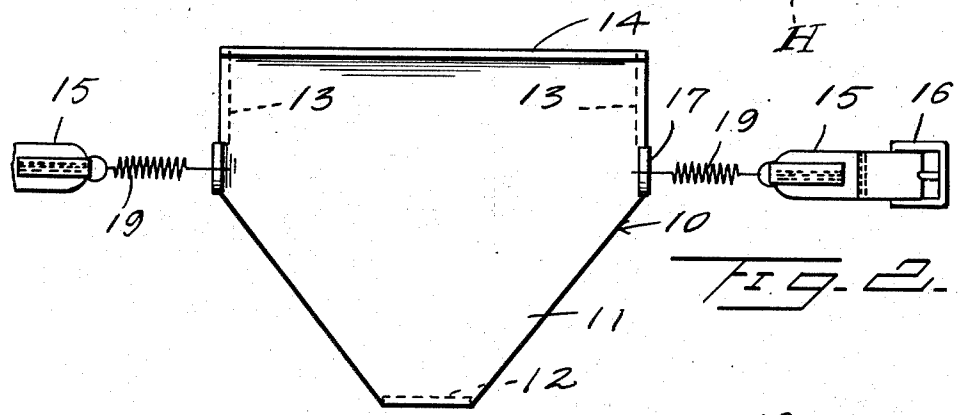
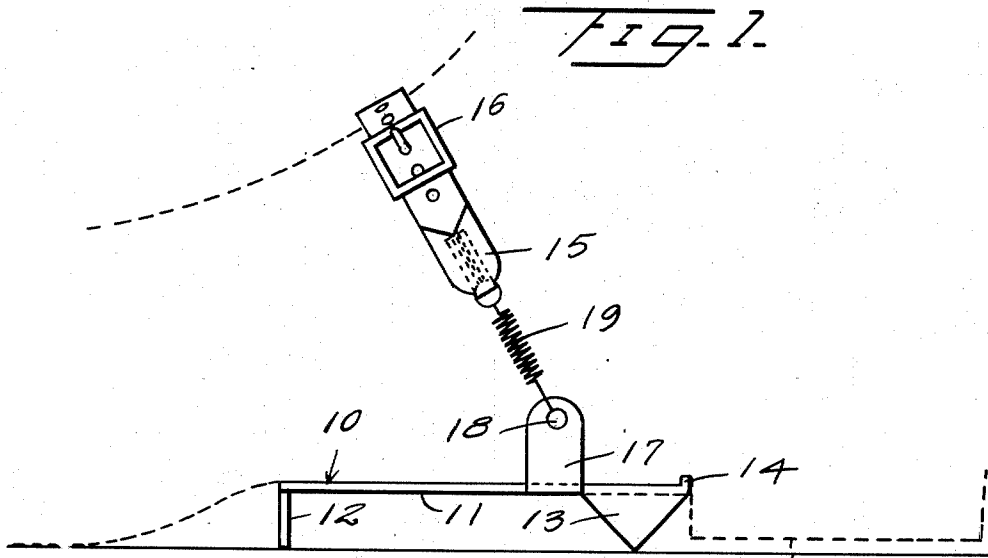


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F. D. STALFORD
ICE CREEPER

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ICE CREEPER

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1 Claim. (Cl. 36-62)

1

This invention relates to anti-slipping devices for boots and shoes.

An object of this invention is to provide a removable anti-slipping device for mounting beneath the shank of a boot or shoe to prevent the wearer from slipping on ice or the like.

Another object of this invention is to provide a device of this kind which includes a securing strap engageable over the instep with a pair of springs between the strap and the calk plate so as to hold the device in applied position under an even tension or pressure.

A further object of this invention is to provide a device of this kind wherein the calk plate may be stamped from sheet metal so that the device may be produced at small cost.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claim.

In the drawing,

Figure 1 is a detail side elevation of an anti-slipping device or ice creeper constructed according to an embodiment of this invention,

Figure 2 is a plan view of the device with the holding strap broken away,

Figure 3 is a detail rear elevation of the device with the holding strap broken away.

Referring to the drawing, the numeral 10 designates generally a calk carrying plate which is of substantially triangular configuration in plan, being formed of relatively rigid sheet metal which may be stamped. The calk carrying plate or member 10 includes a triangular body 11 which has disposed at the forward end thereof a triangular calk 12. The calk 12 is adapted to be disposed when in applied position adjacent the forward portion of the shank with the plate 11 engaging beneath the instep and abutting against the forward end of the heel.

The plate 11 is formed on the opposite sides thereof with a pair of triangular calks 13 which are designed to prevent lateral slipping in addition to forward and rearward slipping when the device is in applied position. The plate 11 is formed along the rear edge thereof with an upwardly projecting rib 14 which is adapted to bite into the shank portion of the shoe at the rear of the instep where the shoe is formed with a rubber sole, such as a rubber boot or the like, which in some instances is not formed with a heel or the heel may be substantially worn down.

The device is removably secured to the shoe or boot by means of a leather strap 15 having a buckle 16, and the plate 11 on the opposite edges thereof is formed with a pair of upwardly projecting lugs 17 having an opening 18 through which the lower end of a spring 19 is adapted to engage. The spring 19 is adapted to be secured at its upper end to the strap 15. In this manner

2

the device is yieldably secured to the shoe so that an even pressure or tension may be applied to the device for securely maintaining it in applied position.

In the use of this device, the calk carrying member 10 is inserted beneath the shank with the rear edge thereof abutting against the forward edge of the heel H. The strap 15 is slipped over the toe of the shoe and pulled upwardly over the instep so that the springs 19 will be under the desired tension. The calks 12 and 13 are adapted to project below the sole and heel of the shoe so that the wearer will engage the calk with the ice or other slippery surface. This device can be formed from a metal stamping so that it can be produced at relatively small cost.

I do not mean to confine myself to the exact details of construction herein disclosed, but claim all variations falling within the purview of the appended claim.

What I claim is:

A removable anti-slipping device for mounting beneath the shank of a shoe or boot comprising a flat plate of substantially triangular configuration, the base line of said plate being rearmost and adapted to abut against the forward end of the heel, an upstanding flange formed along said base line for gripping engagement with the shank portion of the sole of the shoe or boot to prevent longitudinal displacement of the device, a triangular front calk integral with said plate at the apex thereof, a pair of oppositely disposed side calks integral with said plate adjacent the base thereof, a pair of upwardly extending apertured lugs integral with the plate disposed adjacent said side calks, a pair of coil springs each having one end engaged in an aperture in one lug and a strap having an intermediate buckle connecting the opposite ends of said spring.

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