June 17, 1947. M. BOZEK 2,422,335

ICE CREEPER

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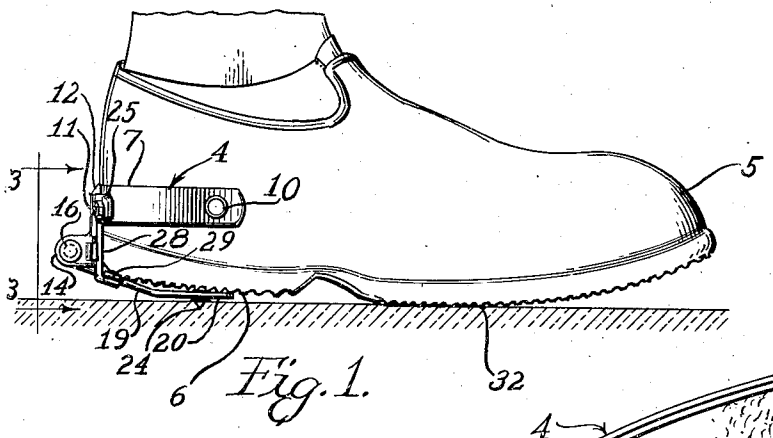


Fig. 1.

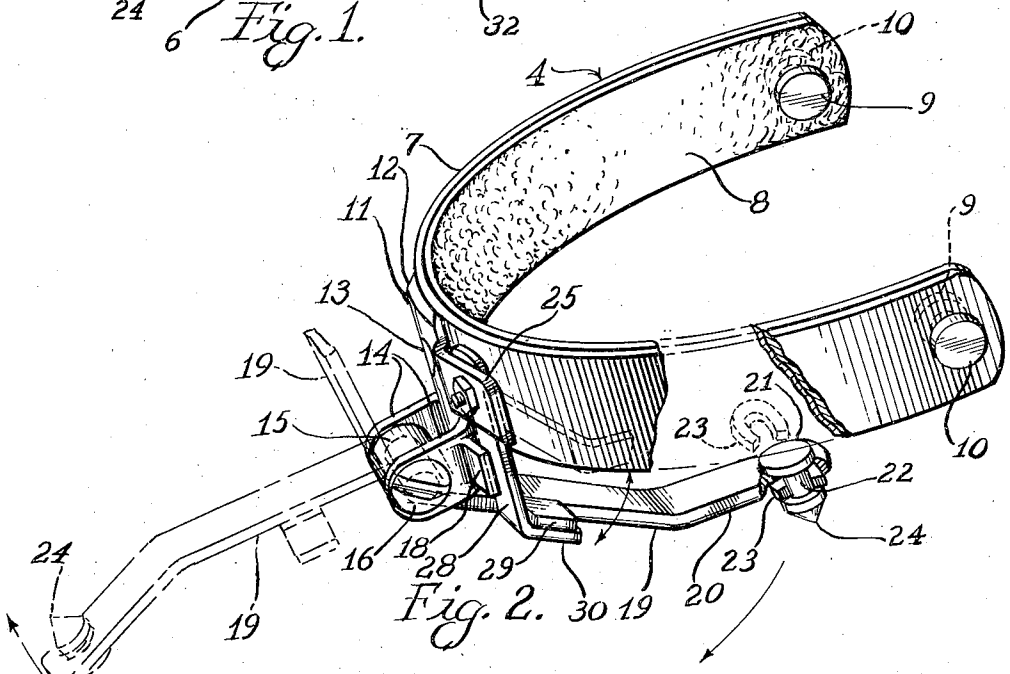


Fig. 2.

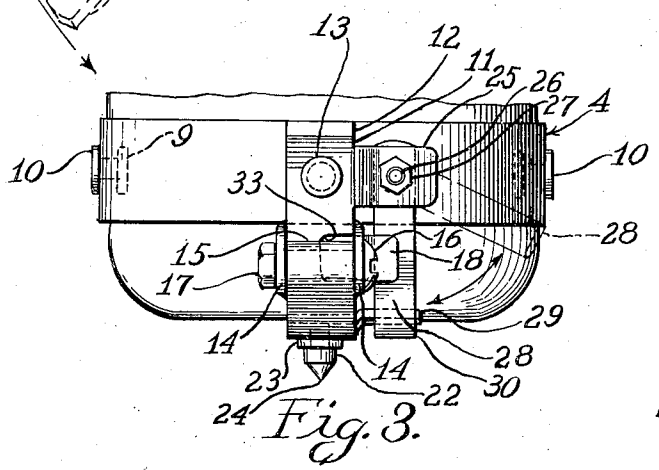


Fig. 3.

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ICE CREEPER

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4 Claims. (Cl. 36—61)

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My invention relates to articles known as ice creepers, for use on slippery pavements.

An important object of my invention is to provide a device of the afore-mentioned character, which is attached to rubbers, or overshoes, and has a pavement engaging portion, which is pivotally connected, so that it may be placed in either operative or inoperative position.

Another object of my invention is to provide a device of the afore-mentioned character, which is provided with locking means for engaging and locking the pavement engaging means in operative position.

A further object of my invention is to provide in an article of the afore-mentioned character interchangeably removable pavement engaging means, which may be sharpened or replaced when worn.

A further object of my invention is to provide an article of the afore-mentioned character which is simple in construction, practical, and efficient for the purposes for which it is to be used, and of such elemental construction as to warrant economical manufacture thereof in quantity production.

Other features, objects and advantages inherent in my invention will became apparent from an examination of the accompanying drawings bearing further elucidation in the ensuing description, wherein like symbols are used to designate like parts, and in which;

Fig. 1 is a front view of my invention as attached to a rubber worn over a shoe of a wearer.

Fig. 2 is a perspective view of my invention removed from the rubber, or overshoe, showing in enlargement, and depicting, with certain portions thereof shown in cross-section, the elemental structure of my invention.

Fig. 3 is an end view looking in the direction 3—3 of Fig. 1.

Referring to the various views, my invention is generally designated 4, and it is permanently attached to a rubber 5, by means of the double headed studs, having heads 9 imbedded and molded into the rubber 5, the heads 10 maintaining the horse-shoe shaped retaining element 7 of my invention. The said element 7 has secured thereto by riveting means 13, or other suitable means, an upright bearing support 11, having a beveled off portion 12, so as to make it as inconspicuous as possible, the said bearing portion 11 being provided with an outwardly extended lug 25 on which is pivotally positioned the locking means 28, which has an engaging ledge 30 to frictionally

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engage the extended tab 29 from the pivoted support 19.

The pivoted support 19 has a cylindrical bearing portion 15 articulately secured by means of the stud 16, and the nut 17 to ears 14 formed at the terminus of the bearing element 11. From the ear or bifurcated structure 14, the lug 18 is formed, leaving the recessed opening 33. It is the province of this lug 18 to act as a steadying guide for the pivoted locking element 28 which is swung to dotted position when the device is in inoperative position, and shown in the full lines when the device is in operative position.

The terminal portion 20 is provided with a suitably reamed opening to receive the body portion 22 of the pavement gripper element 21, which is headed to prevent its falling through the opening, it being provided with a shoulder portion, and a sharpened or pointed portion 24, the horse-shoe shaped washer 23 being fitted about the body 22, and directly confined underneath and below the lower surface of the terminal portion 20, and the shoulder portion of the pointed portion 24.

Thus the gripper element 21 may be removed for sharpening when worn, and when completely worn may be replaced with a new gripper element for uninterrupted use. The pivoted ground gripper retainer 19 is swung in the direction shown by the arrows and the dotted lines in Fig. 2, and may be swung upwardly when the device is in inoperative position, at times when entering the home, or a place that is being visited, without it being necessary to remove the rubber, or overshoe 5.

The bottom of the rubber heel 6 acts as a stop for the pivoted element 19, when the same is being worn so that it will engage a slippery pavement 32 when walking, thus steadying the walker and giving him the confidence and assurance of non-slippage; in other words, providing anti-skidding functions. The hore-shoe shaped retainer element 7 may be lined with a resilient, or flexible, liner element 8, so as to prevent undue wear of the retainer 7 fitted about the heel portion of the rubber 5. The element 28 is pivoted by virtue of a stud 26, and a lock nut 27 retaining the same in rotatable, and articulately operative arrangement, as indicated by the dotted lines in Fig. 3.

In order to more clearly illustrate the construction, the gripper element 21 has been shown exaggerated, inasmuch as it can be made to more compact height dimensions, so as to occupy the minimum of space between the ground surface 32 and the bottom of the rubber heel 6. When walking on a slippery pavement, the invention

is placed in operative position, as shown in Fig. 1 and Fig. 2. In placing the article in inoperative position, the pivoted element 19 is swung as shown by the dotted lines almost upright, and parallel to the leg of the wearer, without necessarily touching the same, by first releasing and swinging out of engagement the lock element 28, and disengaging its terminal extension 39 from the ledge 29, permitting the movement of the element 19. In locked or operative position, as shown in Figs. 1 and 2, the element 28 is steadied by the lug 18 on the one side, and the ledge 29 on the other side, the head of the stud 21 being confined between the pavement and the rubber heel of the overshoe.

The utility of the device appears to be self-evident, and obvious; hence no further elucidation is believed necessary.

I believe, I have herein described, rather succinctly, the construction and operation, as well as the utility of my invention, and inasmuch as the same is susceptible to modifications, alterations, and improvements, I hereby reserve the right to all such alterations, modifications, and improvements coming within the scope and spirit of my invention, as well as any that may fall within the purview of the foregoing description; my invention to be limited only by the appended claims.

Having thus described and revealed my invention, what I claim as novel and desire to secure by Letters Patent, is:

1. An ice creeper of the character described comprising, a horse-shoe shaped element securable to a shoe or the like, a depending bearing element secured to the said horse-shoe shaped element, a gripper retainer element pivotally secured to the said bearing element, a keen gripper element interchangeably and removably secured to the said gripper retainer element, the said bearing means being provided with a tab portion at its top, the said gripper retainer element being provided with an extension at its side, and locking means pivotally secured to the said tab portion and having a bent portion adapted to engage the said extension to secure the said gripper retainer element in operative position.

2. An ice creeper of the character described comprising, a horse-shoe shaped element securable to a shoe or the like, a depending bearing element secured to the said horse-shoe shaped element, a gripper retainer element pivotally secured to the said bearing element, a keen gripper element interchangeably and removably secured to the said gripper retainer element, the said gripper retainer element being constructed and arranged to assume a horizontal operative position, and a vertical inoperative position when swung through an ambit of 270°, the said bearing means being provided with a tab portion at its top, the said gripper retainer element being provided with an extension at its side, and locking means pivotally secured to the said tab portion and having a bent portion adapted to engage the said extension to secure the said gripper retainer element in operative position.

3. An ice creeper of the character described comprising, a horse-shoe shaped element securable to a shoe or the like, a depending bearing element secured to the said horse-shoe shaped element, a gripper retainer element pivotally secured to the said bearing element, a keen gripper element interchangeably and removably secured to the said gripper retainer element, the said bearing means being provided with a tab portion at its top, the said gripper retainer element being provided with an extension at its side, and locking means pivotally secured to the said tab portion and having a bent portion adapted to engage the said extension to secure the said gripper retainer element in operative position, the said bearing element being also provided with a steadying lug in juxtaposition to the said tab portion to reenforce the said locking means in operative position preventing accidental unlocking of the said gripper retainer element.

4. An ice creeper of the character described comprising, a horse-shoe shaped element securable to a shoe or the like, a depending bearing element secured to the said horse-shoe shaped element, a gripper retainer element pivotally secured to the said bearing element, a keen gripper element interchangeably and removably secured to the said gripper retainer element, the said gripper retainer element being constructed and arranged to assume a horizontal operative position, and a vertical inoperative position when swung through an ambit of 270°, the said bearing element being provided with a tab portion at its top, the said gripper retainer element being provided with an extension at its side, and locking means pivotally secured to the said tab portion and having a bent portion adapted to engage the said extension to secure the said gripper retainer element in operative position, the said bearing element being also provided with a steadying lug in juxtaposition to the said tab portion to reenforce the said locking means in operative position preventing accidental unlocking of the said gripper retainer element.

MAURICE BOZEK.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
37,788	Krauser	Feb. 24, 1863
107,132	Walter et al.	Sept. 6, 1870
1,026,407	Ruthstein	May 14, 1912
1,935,944	Dunn	Nov. 21, 1933
2,065,386	Mattsson	Dec. 22, 1936
272,027	Buermann	Feb. 13, 1883

FOREIGN PATENTS

Number	Country	Date
40,446	Switzerland	July 4, 1907
156,103	Germany	Nov. 8, 1904