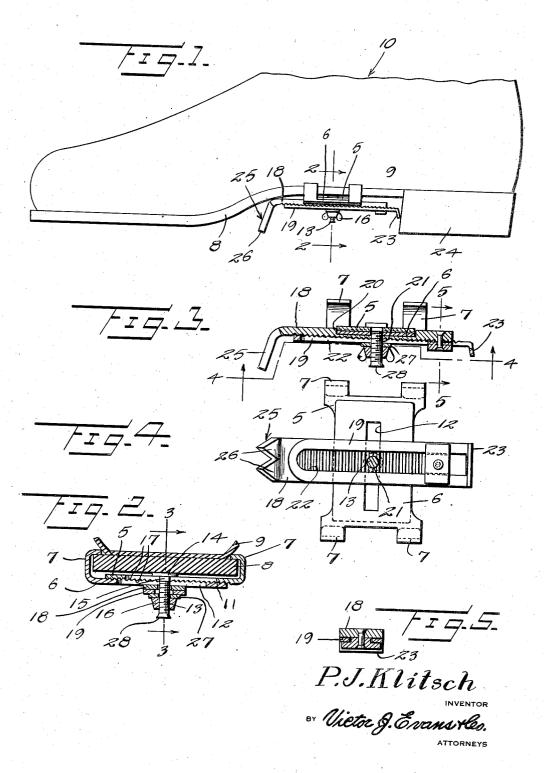
ICE CREEPER

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ICE CREEPER

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2 Claims. (Cl. 36-62)

My invention relates to improvements in ice creepers and has as one of the principal objects thereof the provision of a simple device of this character which may be quickly attached to shoes of different sizes and which may be adjusted to the width of the shoe as well as to the length thereof.

Another object of my invention is to provide a device of the character described which is durable in use, efficient in operation, easy of attachment and economical in manufacture.

Other objects and advantages will be apparent from the following description, appended claims and annexed drawing.

Referring to the drawing wherein like reference characters designate like parts throughout the several views:

Figure 1 is a side elevation of my invention as applied to a shoe.

Figure 2 is a sectional view taken on the line

2—2 of Figure 1.Figure 3 is a sectional view taken on the line3—3 of Figure 2.

Figures 4 and 5 are sectional views taken on 25 the lines 4—4 and 5—5 of Figure 3 respectively.

My novel ice creeper comprises a pair of adjustable transversely disposed upper and lower plates 5 and 6 respectively. The oppositely disposed ends of said plates at the corners thereof 30 are fashioned with upwardly extending arcuate shaped spaced jaws 7, the upper ends of which overlie and grip the upper face of the sole 8 outwardly and adjacent the lower end of the upper 9 of a shoe 10 as clearly illustrated in Figures 1 35 and 2 of the drawing. Each of the plates 5 and 6 are fashioned with slots 11 and 12 respectively adapted for registry with each other and extending through said slots is a bolt i3 having a head 14 overlying the upper plate 5 and said bolt 40 subjacent the head 14 is provided with a squared section 15 engaging the side wall of the slot 11 to preclude rotation of said bolt and the section of said bolt subjacent the section 15 is threaded and has threaded thereon a wing nut 16.

The opposed faces of the plates 5 and 6 are provided with serrations 17 coacting with each other to preclude relative movement of said plates when clamped together in adjusted position by said nuts 16 as hereinafter more fully set forth.

A pair of relatively narrow and elongated upper and lower plates 18 and 19 respectively underlie the plates 5 and 6 and extend at right angles thereto. The upper face of the upper plate 18 55 is recessed between the ends thereof to form a

seat 20 which accommodates therein the plates 5 and 6 and precludes lateral movement thereof relative to the plate 18. The upper plate 18 is also fashioned with an aperture 21 centrally disposed relative to the recess and receives therethrough the bolt 13. The lower plate 19 is fashioned with a centrally disposed longitudinally extending slot 22 for accommodating therethrough said bolt 13. One end of the plate 19 is provided with an angularly disposed downwardly extending end section 23 which engages a front vertical face of the heel 24 of the shoe 10.

The oppositely disposed end of the upper plate 18 is fashioned with a downwardly and outwardly inclined section 25 provided with a pair of spaced 15 ice engaging teeth 26 and said section 25 at the jointure with the plate 18 effects engagement with the outer face of the sole subjacent the instep of the shoe, it being understood that the teeth 26 extend a sufficient distance below the ground en- 20 gaging surface of the sole to effect engagement with the ice. The bolt 13 has mounted thereon between the plate 19 and the wing nut 16 a lock washer 27 and the lower end of said bolt is flared outwardly as at 28 to preclude detachment of said 25 wing nut therefrom. However, it is to be understood that the bolt is of a sufficient length to permit adjustment of the wing nut 16 thereon. The opposed or abutting faces of the plates 18 and 19 are provided with serrations coacting 30 with each other to preclude relative movement of the plates 18 and 19 when the latter are secured in adjusted position.

In use, the wing nut 16 is loosened on the bolt 13 and the plates 5 and 6 are adjusted trans- 35 versely relative to each other to permit the upper ends of the jaws 7 to engage the sole 8 as clearly illustrated in Figure 2 of the drawings. When the plates 5 and 6 are thus adjusted transversely of the shoe, the latter are adjusted longitudinally to effect engagement of the jointure of the section 25 with the plate 18 against the under face of the sole. When the parts are thus adjusted the plate 19 is adjusted lengthwise to effect engagement of the section 23 thereof with the heel 45 24 and the wing nut 16 is tighened on the bolt 13 to effect clamping of the plates together and maintain the device secured in operating position on the shoe.

From the foregoing it will be apparent that I 50 have provided a simple device capable of being adjusted to shoes of various sizes whereby the teeth 26 will effectively penetrate and grip icy surfaces to prevent the feet of the user from slipping.

What I claim is:

1. A device of the character described, comprising, a pair of relatively adjustable transversely extending plates each provided with sole gripping jaws adapted for securing said plates to the sole of a shoe, a pair of relatively adjustable longitudinally extending plates, one of said last mentioned plates fashioned with a recess for accommodating said first mentioned plates in adjusted position, one of said last mentioned plates fashioned with an angularly disposed ice engaging section and the other of said last mentioned plates formed with a heel engaging section, and means securing said plates together in fixed condition and operable to permit adjustment of one pair of said plates relative to the other pair.

2. A device of the character described, comprising, a pair of relatively adjustable transverse-

ly extending plates each provided with sole gripping jaws adapted for securing said plates to the sole of a shoe, a pair of relatively adjustable longitudinally extending plates, one of said last mentioned plates fashioned with a recess for accommodating said first mentioned plates in adjusted position, one of said last mentioned plates fashioned with an angularly disposed ice engaging section and the other of said last mentioned plates formed with a heel engaging section, and 10 means securing said plates together in fixed condition and operable to permit adjustment of one pair of said plates relative to the other pair, each of said pair of plates fashioned with coacting serrations on the opposed faces thereof to preclude $_{15}$ relative movement of the respective pairs when in adjusted position.

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