

(No Model.)

M. E. REILLY.  
ICE CREEPER.

No. 456,060.

Patented July 14, 1891.

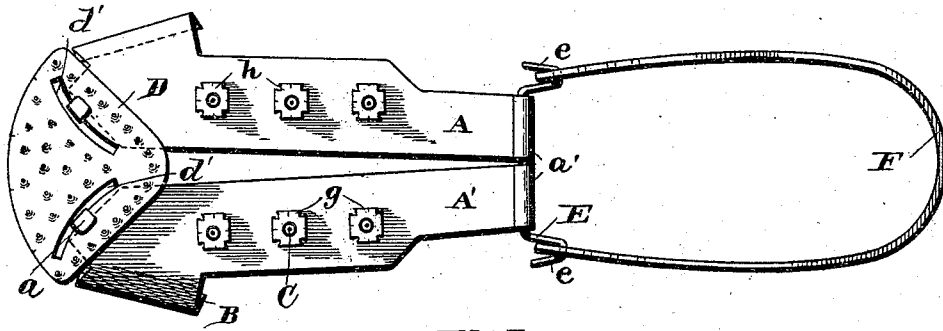


Fig. 1-

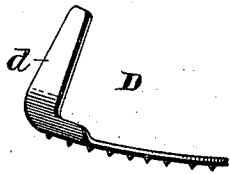


Fig. 2-

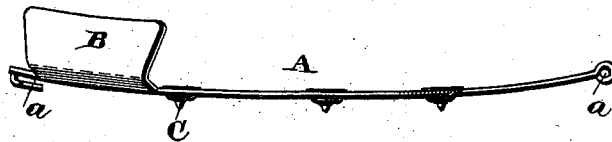


Fig. 3-

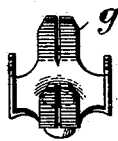


Fig. 4-

Fig. 5-



Fig. 6-

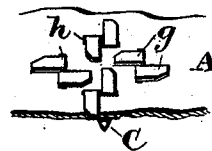


Fig. 7-



Witnesses

Albert Spinden.  
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Inventor

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By his Attorney

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# UNITED STATES PATENT OFFICE.

MICHAEL E. REILLY, OF MONTESANO, WASHINGTON.

## ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 456,060, dated July 14, 1891.

Application filed February 26, 1891. Serial No. 382,899. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL E. REILLY, a citizen of the United States, residing at Montesano, in the county of Chehalis and State of Washington, have invented certain new and useful Improvements in Ice-Creepers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to ice-creepers, and aims to provide a device that can be quickly adjusted to the foot, and which when in position will not be liable to become detached at an inopportune moment.

The improvement consists of the novel features which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a bottom plan view of a device embodying my invention. Fig. 2 is a side view of the toe-piece which connects the sole-plates. Fig. 3 is a side view of a sole-plate. Fig. 4 is a detail view of the calk-fastener. Fig. 5 is a detail view of the calk. Fig. 6 is a detail view showing the relative position of the calk and the manner of securing it to the sole-plate. Fig. 7 is a cross-section of the calk-fastener, showing the calk in place.

The device is composed of two sole-plates A and A', rights and lefts, each covering about a longitudinal half of the sole and provided with a series of calks C and with a retaining-lip B at its outer edge to extend up alongside of the sole and prevent lateral displacement of the device. The toe-piece D has a vertical flange *d* to project up in front of the sole at the toe of the shoe and diverging slots or ways *d'* to receive projections *a* at the front ends of the sole-plates. The rod E is held in the bent ends *a'* of the sole-plates, and is provided at each end with a hook *e*, which have the ends of the heel-strap F fastened thereto.

The calks C are tapering and have flat heads and the fastenings are plates centrally apertured to receive the shanks of the calks and provided with the prongs *g*, which extend vertically from the edges of the plates, four being

provided. These prongs are split to form two members, which after being passed through openings *h* in the sole-plates are bent in opposite directions and clinched. The openings or slots *h* in the sole-plates are provided in sufficient number to receive the prongs *g*. The calk is thrust through the fastening until its head comes in contact therewith, and the prongs of the said fastening are thrust through the openings in the sole-plate from below and clinched on the upper side of the sole plate in the manner aforesaid.

The heel-strap is adjustably connected with the hooks of the rod E and remains fixed in the adjusted position. The device is placed against the sole of the shoe with the flange *d* of the toe-piece projecting up in front of the toe of the shoe. The heel-strap is drawn back and sprung up over the heel of the shoe. Obviously, when drawing on the heel-strap the sole-plates A and A' are drawn back and the projections *a*, riding in the diverging ways *d'*, cause the said plates A and A' to approach and clamp the lips B against the edges of the sole and retain the device in position.

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

1. An ice-creeper provided with a sole-plate and a calk secured thereto by means of a fastening-plate apertured to receive the shank of the calk and having prongs to project through the sole-plate and be clinched thereon, substantially as described.

2. An ice-creeper provided with a sole-plate having four slots, as *h*, and a calk secured thereto by means of a fastening-plate having an opening to receive the shank of the calk and having a series of prongs, one at each edge, to correspond in number and position with and projected through the slots in the said plate, and having the prongs split and clinched in opposite directions, substantially as described, for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

MICHAEL E. REILLY.

Witnesses:

B. O'SULLIVAN,  
M. J. GERAGHTY.