(No Model.)

# W. SAGE.

## ICE CREEPER.

No. 377,440. Patented Feb. 7, 1888.

Fig. 1.

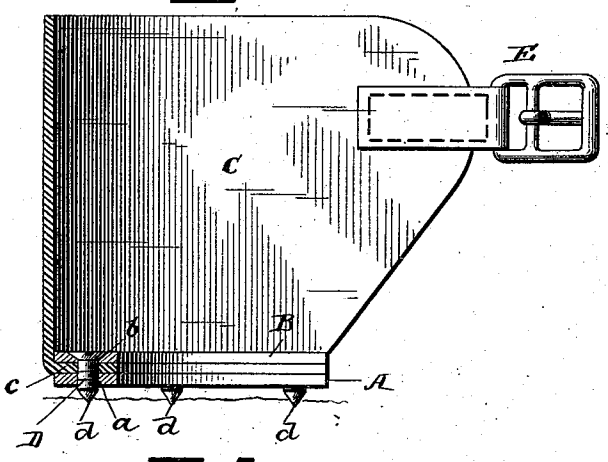



Fig. 2.

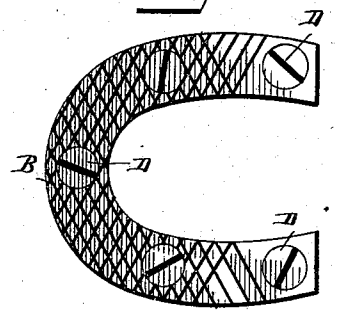
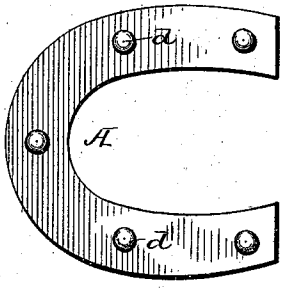



Fig. 3.




Witnesses
Jno. G. Hinkel Jr.
J. S. Barker.

Inventor
William Sage
by Foster & Freeman
Attorneys.

# UNITED STATES PATENT OFFICE.

WILLIAM SAGE, OF BOSTON, MASSACHUSETTS.

## ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 377,440, dated February 7, 1888.

Application filed September 24, 1887. Serial No. 250,606. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM SAGE, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Ice-Creepers, of which the following is a specification.

My invention relates to an ice-creeper adapted to be easily attached to and removed from the foot; and it consists in the novel construction thereof, whereby, among other advantages, the spurs are easily removable, so that they may be replaced when dulled, and, besides acting as spurs, also serve to hold together the separate parts of the creeper.

Figure 1 is a sectional view of an ice-creeper embodying my invention. Fig. 2 is a top view of the same, and Fig. 3 a bottom view.

The form of creeper in which I have chosen to illustrate my invention consists of two U-shaped plates, A B, between which is clamped the turned-in edge *c* of the piece of leather C, forming a cap for the heel of a boot or shoe. The two plates are pierced with apertures *a b*, the former being screw-threaded and the latter countersunk, as seen in Fig. 1, and through these apertures pass screws D, which secure the two plates together and confine the leather of the cap between them. The screws D, which engage with the screw-threaded apertures *a* and have their heads seated in countersunk portions of apertures *b*, are somewhat longer than the combined thickness of plates A B and leather C, and have their projecting ends *d* pointed to act as spurs to prevent slipping. The upper face of plate B is roughened in any desired manner to lessen danger of the shoe slipping relatively thereto.

Straps E may be attached to the cap-piece C to secure it to the foot.

The pointed spurs used in ice-creepers to prevent slipping quickly become dulled, especially when frequently brought into contact with hard pavements; and as ice-creepers are ordinarily made with the spurs riveted or otherwise permanently secured to the other parts of the creeper, the whole becomes useless as soon as the points are dulled. In my invention, however, as soon as the point becomes dulled it may be removed and another substituted, thus permitting the plates and straps—the most expensive portions of the creeper—to be used with a great number of sets of points.

While I have described my invention as applied to a removable heel-cap, it will be seen that it is equally applicable to an ice-creeper adapted to be attached to any other portion of the shoe, so long as two plates are employed between which are clamped the straps or other means of attachment to the shoe, all being united by screws, the projecting ends of which are pointed and act as spurs.

I claim—

An ice-creeper consisting of two U-shaped metal plates, A B, the upper one being provided with countersunk apertures and the lower one with screw-threaded apertures, heel-cap C, having its edge clamped between said plates, and screw-bolts D, passing through said apertures and uniting said plates, and having their ends pointed and projecting beyond the face of the lower plate, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM SAGE.

Witnesses:

WILLIAM F. SAGE,

SAML. W. CREECH, Jr.