

(No Model.)

W. KRATZ.

ICE CREEPER.

No. 462,562.

Patented Nov. 3, 1891.

FIG. 1.

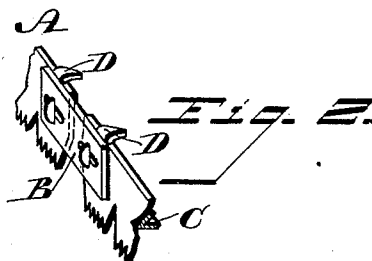
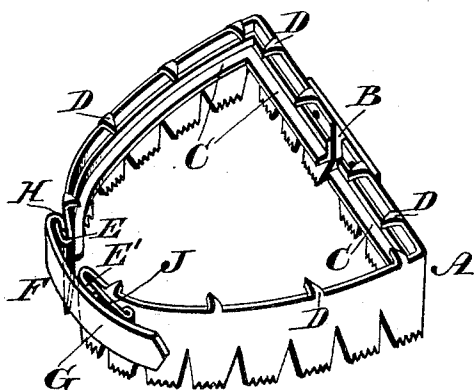
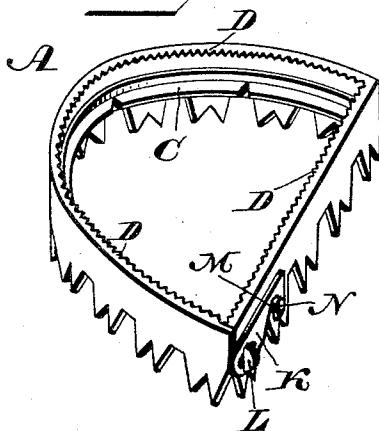


FIG. 3.



WITNESSES:

L. Douville,
P. H. Chagler.

INVENTOR

William Kratz.

BY

ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM KRATZ, OF PHILADELPHIA, PENNSYLVANIA.

ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 462,562, dated November 3, 1891.

Application filed December 23, 1890. Serial No. 375,652. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM KRATZ, a subject of the King of Prussia, (having resided one year last past in the United States and declared my intention of becoming a citizen thereof,) residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Ice-Creepers, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a frame that may be expanded and contracted or opened and closed in order to be applied to and removed from the heel of a boot, shoe, &c., the frame being provided with a locking device and also possessing other features, as will be hereinafter fully set forth.

Figure 1 represents a perspective view of an ice-creeper embodying my invention. Fig. 2 represents a perspective view of a detached portion of the front thereof. Fig. 3 represents a perspective view of a modification.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a frame of the shape of a heel of a boot, shoe, &c., the same being formed of parts, in the present case two in number, each corresponding in shape to the half of a heel, as in Fig. 1, said parts being united in front by a strap B, of flexible or elastic material, whereby the parts may be separated, so as to be applied to and removed from the heel. On the inner face of the frame is a shoulder or ledge C, on which the heel is rested, so as to be prevented from coming in contact with the ground. Projecting inwardly from the frame are spurs D, which are adapted to penetrate the sides of the heel and thus take hold thereon. The rear of the frame is separated, so that said frame may be opened and closed, as has been stated, each end of the separated parts having a hook E E' thereon for engagement of a locking device F, the same consisting of a bar G, one end of which is formed with a tongue H for engagement with the hook E, the inner face of the bar having secured to it a tongue J, which projects toward the tongue H and is adapted to engage with the hook E', it being noticed that the locking device is removable

from said hooks, whereby the frame may be opened. The bottom of the frame is serrated, so as to take firm hold of the ice.

The operation is as follows: When the frame is opened, it is fitted to the heel and closed thereagainst. The hook E and tongue H are now engaged, and the bar G is pressed toward the frame in such manner that the tongue J enters the hook E' and bears against the same in such manner that the two hooks are brought together, and as the bar G passes the center it closes against the frame with a snap, the parts of the frame being thereby tightly compressed against the heel, thus securing the device in position.

It is evident that when the bar G is thrown out it passes the center, whereby the tongue J leaves the hook E' and the tongue H may be disengaged from the hook E. The frame may now be opened and thus disengaged from the heel.

In Fig. 3 I show a form of fastening different from that in Fig. 1, the same consisting of a slotted bar K, which is connected with a headed pin L on the frame and formed with a recess M for engagement with a pin N on the frame, it being seen that when the bar K is raised it is disconnected from the pin N, and the frame may be opened or separated. When the frame is closed and the bar is lowered, it engages with the pin N and holds the same in closed position on the heel.

The tongue J may be a piece of elastic metal secured at one end of the bar G or hinged in position and retaining its place in engagement with the hook E' when said bar passes the center in its locking movement.

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

1. An ice-creeper consisting of an opening and closing upright spurred frame approximating the shape of a heel and a pivoted locking device for the ends of said frame, a part of said locking device being in detachable engagement with a part of said frame, substantially as described.

2. An opening and closing frame provided with spurs and having hooks on the ends thereof, and a locking device consisting of a bar with a hook and tongue for engagement

with said hooks of the frame, said parts being combined substantially as described.

3. An ice-creeper consisting of an opening and closing frame having spurs and provided
5 with hooks on the sides of the openings thereof, and a fastening device composed of a bar with tongues projecting toward each other, adapted to engage said hooks, said
10 parts being combined substantially as described.

4. An ice-creeper consisting of side pieces

with ledges and spurs, an elastic strap connecting an end of each of said sides, a hook on each of the other ends of the sides, and a locking-bar with a hooked end and a tongue
15 pivoted thereto, said parts being combined substantially as described.

WILLIAM KRATZ.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. JENNINGS.