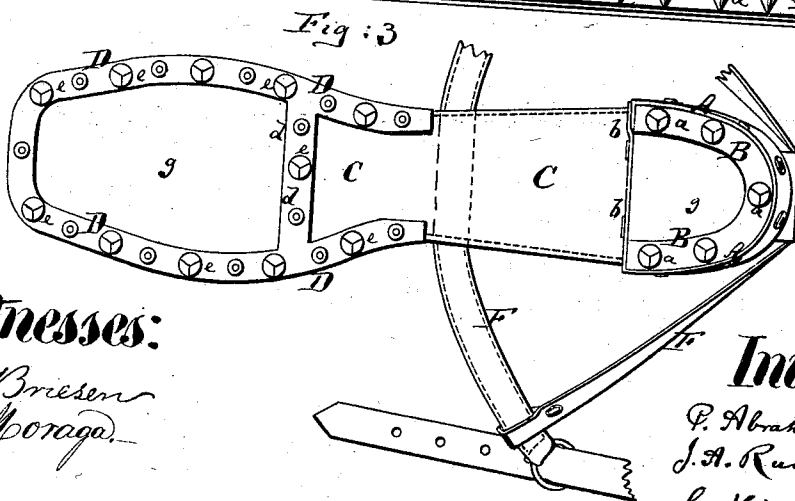
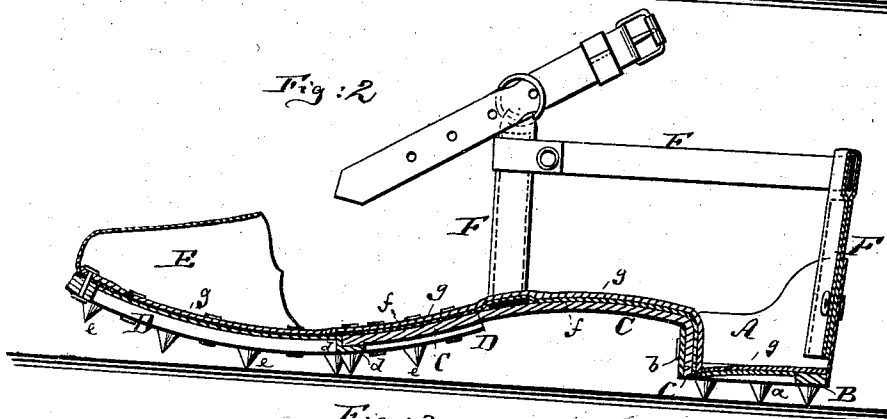
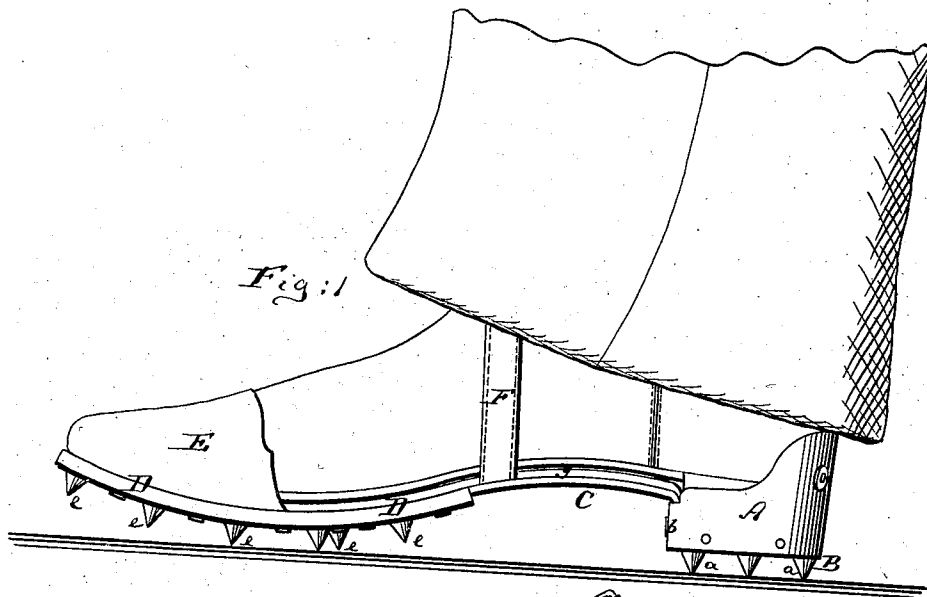


P. ABRAHAMS & J. A. RUMMIG.
ICE-CREEPER.

No. 177,055.

Patented May 9, 1876.



Witnesses:

*P. Briesen
A. Moraga.*

Inventors:

*P. Abrahams
J. A. Rummig
by their attorney
A. Briesen*

UNITED STATES PATENT OFFICE.

PHILLIP ABRAHAMS AND JOHANN A. RUMMIG, OF NEW YORK, N. Y.

IMPROVEMENT IN ICE-CREEPERS.

Specification forming part of Letters Patent No. 177,055, dated May 9, 1876; application filed March 2, 1876.

To all whom it may concern:

Be it known that we, PHILLIP ABRAHAMS and JOHANN ALBERT RUMMIG, of New York city, in the county and State of New York, have invented a new and Improved Ice-Creeper, of which the following is a specification:

Figure 1 is a side view of our improved ice-creeper. Fig. 2 is a vertical longitudinal section of the same, and Fig. 3 a bottom view of the same.

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

This invention has for its object to produce a convenient and practical ice-creeper sandal, for ready attachment to and removal from the boot or shoe of the wearer; and consists of the combination of a pair of metallic toothed frames with a short sole connecting the same, and with a system of straps for attaching the same to the boot or shoe.

In the accompanying drawing, the letter A represents the counter, B the heel, C the instep, D the sole portion, and E the toe-cap, of our improved ice-creeper. The counter A is made of sheet metal, stiff leather, or equivalent material, and is, by rivets or other means, secured to the back and sides of the horseshoe-shaped heel portion B, to project therefrom in the requisite manner. The heel portion B is a horseshoe-shaped metal plate, having downwardly-projecting teeth or prongs *a a*, and is, in front, either provided with a cross-bar or lined by laps *b b* of the counter, that embrace it, as in Fig. 3. The sole portion D is a metallic plate, following the contour of the sole, but open in the middle, excepting where it has a metallic cross-bar, *d*, a short distance in front of the instep, as clearly indicated in Fig. 3. The plate D has also downwardly-projecting teeth or prongs *e e*. A short sole, C, constitutes the flexible instep of the sandal, and serves also to join the heel and

sole portions B and D together. This sole C has its back end placed against the cross-piece *b* of the heel, and is riveted or otherwise fastened thereto. From this cross-piece it extends forward over the back part of the frame D as far as the cross-bar *d*, on which its front end rests, and to which it is also secured by rivets or equivalent fastenings. The cross-bar *d* may be partly recessed for the reception of the sole C, as shown. The sole C may be strengthened by a metal plate, *f*, extending over it along its entire length, as indicated in Fig. 2. An insole, *g*, of thin material, extends over the sole D, instep C, and heel B, to make a good surface-finish. The toe-cap E is secured to the front part of the plate D, as shown. F F are a series of straps, attached to the insole and counter in convenient manner, for readily strapping the sandal to a boot or shoe.

This creeper will be easy to apply and remove, will not injure the boot or shoe in the least, will allow a free movement of the foot, owing to the flexible insole-connection C, and will be an effective guard against slipping on the ice. It will, moreover, be durable, and also easy to repair.

We claim as our invention—

As an improved article of manufacture, an ice-creeper composed of the toothed heel-frame B, cross-bar *b*, toothed sole-frame D, cross-bar *d*, and flexible instep-connection C, which is attached to the cross-bar *d*, and placed over and against the back of the cross-bar *b*, and closely fitted to the shank portion of the boot or shoe, substantially as and for the purpose herein shown and described.

PHILLIP ABRAHAMS.
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Witnesses:

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