

C. H. JOHNSON & W. AXFORD.

Ice-Creepers.

No. 145,656.

Patented Dec. 16, 1873.

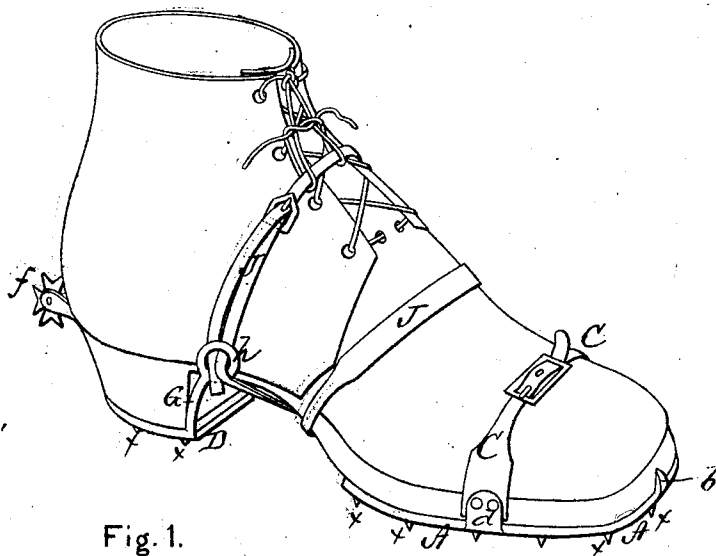


Fig. 1.

Fig. 2.

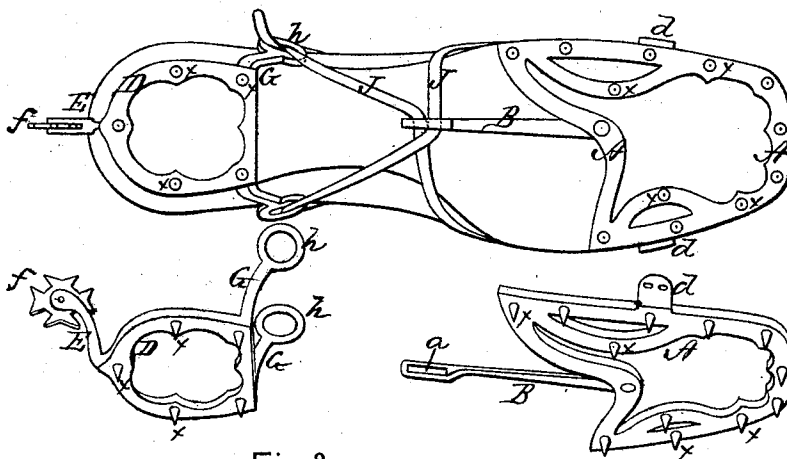


Fig. 3.

Fig. 4.

INVENTORS

C. H. Johnson,  
Wm. Axford,  
Chipman & Son, & Co.  
Attys.

WITNESSES.

Villette Anderson.  
George E. Upham.

# UNITED STATES PATENT OFFICE.

CHARLES H. JOHNSON AND WILLIAM AXFORD, OF WHITE HALL, ILLINOIS.

## IMPROVEMENT IN ICE-CREEPERS.

Specification forming part of Letters Patent No. **145,656**, dated December 16, 1873; application filed July 12, 1873.

*To all whom it may concern:*

Be it known that we, CHARLES H. JOHNSON and WILLIAM AXFORD, of White Hall, in the county of Greene and State of Illinois, have invented a new and valuable Improvement in Metallic Adjustable Ice-Creepers; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a shoe with our invention attached thereto. Fig. 2 is a bottom view of the same. Fig. 3 is a perspective view of the heel part, and Fig. 4 a similar view of the sole part thereof.

The nature of our invention consists in the construction and arrangement of an adjustable metallic sole and heel ice-creeper for walking on ice, as will be hereinafter more fully set forth.

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

A represents a metallic frame, made somewhat of the form or outline of a half-sole for a boot or shoe, and provided with a rearward-extending arm, B, which has a slot or loop, *a*, formed in or on its rear end. At the toe of the frame A is an upward-projecting hook-shaped lug or projection, *b*, to catch on the toe of the shoe-sole, as shown in Fig. 1. On each side of the frame A is a plate or ear, *d*, extending upward, which forms stops or guides for adjusting the frame on the boot or shoe. To these plates are riveted straps C C, which are buckled across the toe of the foot. On the under side are teeth or points *x x* arranged

around and near the edge of the frame, and also under the foot, as shown particularly in Fig. 4.

D represents another metallic frame in the shape or outline of a heel, which is also, on the under side, provided with teeth or points *x x*. This frame D has in the center, on the rear side, a projecting curved arm, E, with spur-wheel *f* in its outer upper end. At the front corners of the frame D are projecting arms G G, with rings *h h* formed in their upper front ends. J represents the strap for connecting the frames A and D, and fastening them to the foot. This strap is first passed over the foot downward, and the ends passed in opposite directions through the slot or loop *a* of the arm B, and then through the ring *h* of the arm G on the opposite side, after which they are buckled on top of the foot.

By this construction the frames A and D may be adjusted to shoes of different sizes; and anybody using them can walk with perfect ease on the ice.

We disclaim the arm E and spur-wheel *f*.

What we claim as new, and desire to secure by Letters Patent, is—

The combination of the adjustable sole and heel ice-creeper D with arms B and G G, respectively, and the straps C C and J, substantially as and for the purposes herein set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses:

CHARLES H. JOHNSON.  
WILLIAM AXFORD.

Witnesses:

ABRAM GEERY,  
J. N. ISRAEL.