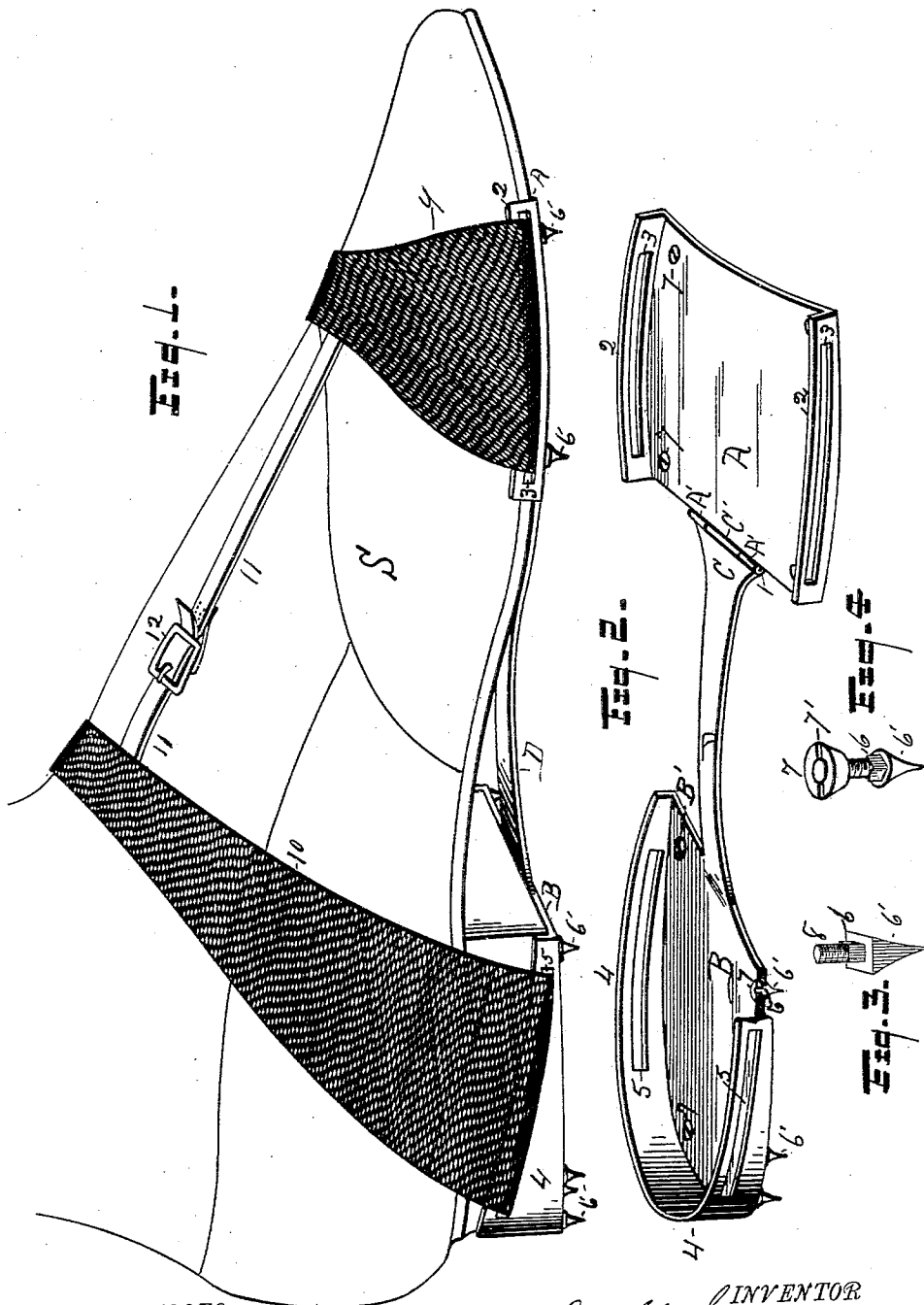


(No Model.)

J. CARR.
ICE CREEPER.

No. 504,708.

Patented Sept. 12, 1893.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH CARR, OF SAGINAW, MICHIGAN.

ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 504,708, dated September 12, 1893.

Application filed June 16, 1893. Serial No. 477,781. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CARR, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Ice-Creepers; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention is an ice creeper, and consists in the special construction shown and claimed.

Figure 1 is a perspective of the creeper fastened on a shoe. Fig. 2 is a perspective of the creeper with parts broken away. Fig. 3 is a view of the calk without the nut, and Fig. 4 is same view showing nut.

In the drawings, S is the shoe, A is the sole of the creeper, B the heel, D the connection between the heel and the sole, being integral with the heel but hinged to the sole by hinge C which consists of the part C', being a hollow tube formed on the end of D, and the parts A', A' being lateral extensions of the sole on each side of the tube C forming hollow tubes adapted to receive a bolt passing through the parts A', A' and the part C', hinging D to A. 2, 2, are upwardly projecting rims on the sides of the sole, fitting around the sole of the shoe. They are provided with the longitudinal slot 3 for receiving the toe strap 9.

4 is a rim projecting upward from the heel B, fitting around the heel of the shoe; it is provided with the longitudinal slots 5, 5, on each side thereof for receiving the ankle strap 10.

6, 6, are calks secured in the bottom of the heel B and the sole A as described, viz: A beveled socket is cut upon the upper side of the sole and heel where it is desirous to secure a calk, and from underneath is cut a square socket to receive the square shoulder of the calk. The calk consists of a sharp point, 6', formed on the end of a square headed bolt, 6, sloping upward forming a shoulder around the square head of the bolt, and resting, when placed in its socket, against the lower surface of the sole or heel, as shown in Fig. 2. The upper end 8, of the calk is screw

threaded and adapted to receive a screw threaded nut 7. This nut is provided with a groove, 7', across its upper face to receive a tool for screwing it down into the socket. The lower surface of the nut 7 is beveled so as to fit into the beveled socket B'. The straps 9 and 10 may be provided with buckles. They are also provided with a connecting strap 11, and buckle 12, to hold them in position on the shoe so that the movement of the sole on its hinge may not loosen the toe strap 9.

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

1. In an ice creeper, the combination with the sole A, provided with upwardly extending rims 2, 2, containing slots 3, 3, and strap 9, of the heel B connected to and hinged to the sole A by the connecting piece D and hinge C, the heel B being provided with a rim 4 to fit around the heel of the shoe, and grooves 5, 5, and strap 10 secured through the grooves, and the calks 6, 6 consisting of a sharp pointed bolt having a square head 6 back of the shoulder of the point, the screw threaded end 8, nut 7 adapted to fit upon the screw threaded end 8, said nut being provided with a groove 7', and adapted to fit into a beveled socket B', the lower half of the socket B' being square and adapted to receive the square head 6 of the bolt, substantially as and for the purpose set forth.

2. In an ice creeper, the combination with the creeper provided with a beveled socket upon the upperside of the creeper for receiving a beveled nut, and a square socket underneath the beveled socket for receiving the square head of the calk, of a calk adapted to fit into the square socket with one end screw threaded, and passing up into the beveled socket, and a beveled nut adapted to be secured upon the upper end of the calk in the beveled socket holding the calk in position, substantially as and for the purpose set forth.

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

JOSEPH CARR.

Witnesses:

A. H. SWARTHOUT,
FANNIE ROBBINS.