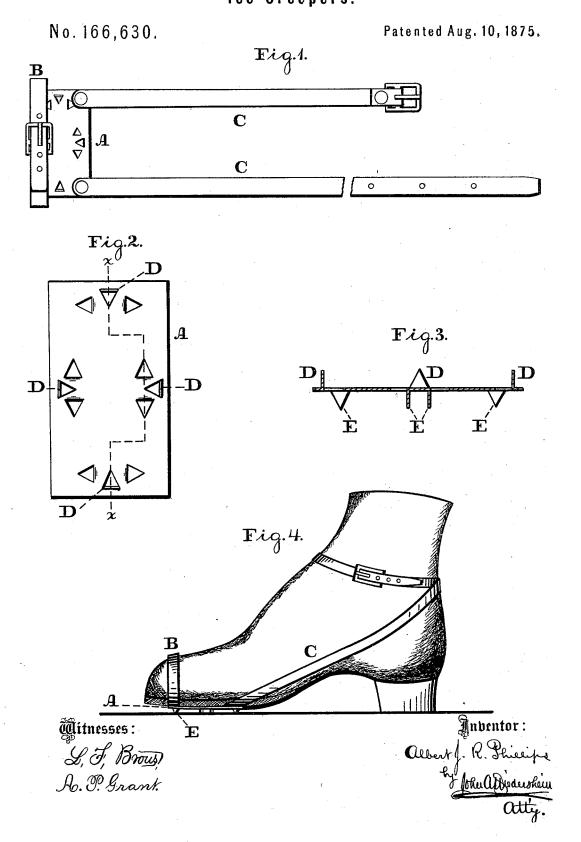
A. J. R. PHILLIPS. Ice-Creepers.



UNITED STATES PATENT OFFICE.

ALBERT J. R. PHILLIPS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO SAMUEL R. PHILLIPS, C. L. PHILLIPS, AND A. J. R. PHILLIPS, OF SAME PLACE.

IMPROVEMENT IN ICE-CREEPERS.

Specification forming part of Letters Patent No. 166,630, dated August 10, 1875; application filed June 9, 1875.

To all whom it may concern:

Be it known that I, ALBERT J. R. PHIL-LIPS, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Ice-Creepers; and I do bereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in

Figure 1 is a top or plan view of the device embodying my invention. Fig. 2 is a top view of the plate of the creeper. Fig. 3 is a transverse section in line x \bar{x} , Fig. 2. Fig. 4 is a side view, showing the application of the

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

My invention consists in forming integral with a metallic plate the spurs which are to take hold on the sole of the boot or shoe, and those which engage with the ice, the spurs occupying positions within the confines of the plate, so that the creeper is strong and will fit various-sized feet, and there is a saving of material of which the plate is formed.

Referring to the drawings, A represents a metallic plate, preferably of steel, with which are connected the front strap B and rear or heel strap C, whereby the plate may be conveniently and firmly attached to the boot or shoe beneath the sole thereof, as seen in Fig. 4. D represents a series of spurs, which are punched out of the said plate, so as to project from the lower face thereof; and E represents a similar series, which are punched out of the said plate, so as to project from the lower face thereof, said spurs D E being thus integral

with the plate A.

It will be seen that the upper spurs afford means for locking or engaging the plate with the sole of the boot or shoe, and thus prevent slipping or displacement of said plate. The lower spurs engage with the ice and prevent slipping of the person wearing the creeper. It will also be noticed that there are no rivets or fastenings for connecting the spurs to the plate, and consequently no openings made in the plate therefor, whereby the spurs have no weak joints, are exceeding strong and durable, and may be produced with small expense, thus decreasing the cost of the creeper, and the plate possesses lightness with sufficient strength. It will also be seen that the spurs occupy positions within the confines of the plate, so that the plate need not be enlarged to provide proper surface for formation of the spurs, and thus there is a saving of metal of which the plate is formed.

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

Patent, is—

The ice-creeper plate A, having upper and lower spurs D E, which are integral therewith, and formed within the confines of the plate, substantially as and for the purpose set forth.
A. J. R. PHILLIPS.

Witnesses:

John A. Wiedersheim, JAMES GUY MORTON.