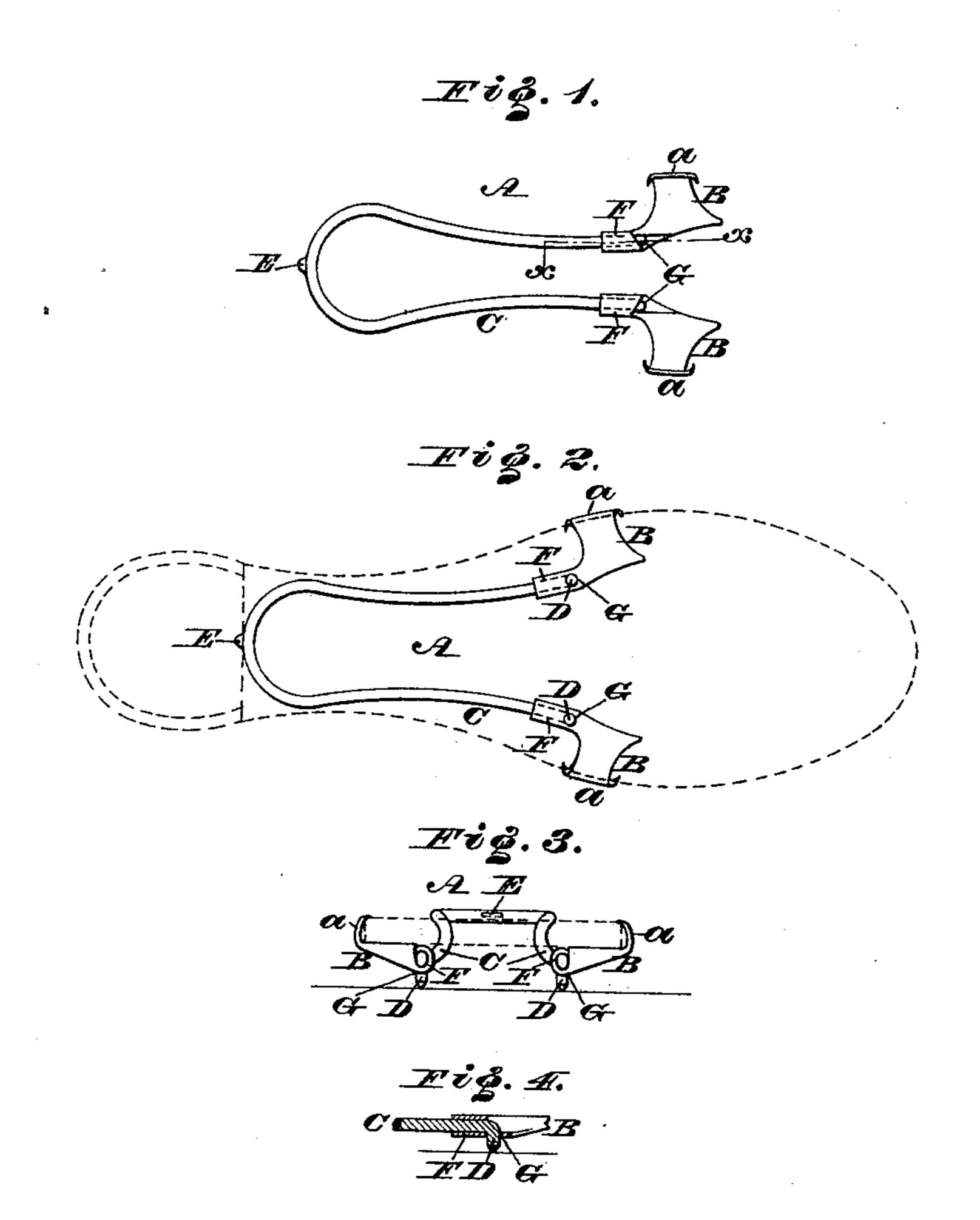
(No Model.)

C. F. WEST.

ICE CREEPER.

No. 346,338.

Patented July 27, 1886.



WITNESSES: L. Douville L. D. Grant Charles J. (INVENTOR: BY Mudicidersheim) ATTORNEY.

## United States Patent Office.

CHARLES F. WEST, OF PHILADELPHIA, PENNSYLVANIA.

## ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 346,338, dated July 27, 1886.

Application filed May 4, 1886. Serial No. 201,048. (No model.)

To all whom it may concern:

Be it known that I, Charles F. West, a citizen of the United States, 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, in which—

Figures 1 and 2 represent top and bottom views of an ice-creeper embodying my invention. Fig. 3 represents a front view thereof. Fig. 4 represents a section of a portion in line  $x \ x$ , Fig. 1.

Similar letters of reference indicate corre-

15 sponding parts in the several figures.

My invention consists of an ice-creeper formed of clips and a shank connected therewith, said clips being adapted to engage with the sides of the sole of a boot or shoe, and said shank with the heel thereof, whereby displacement of the creeper is prevented.

Referring to the drawings, A represents an ice-creeper consisting of clips B, a shank, C,

and spurs D.

The clips B are formed of cast-metal plates, with flanges a on their outer sides, the plates being designed to rest on the sole of a boot or shoe, and the flanges to bear inwardly against the sides of said sole.

The shank C is formed of wire bent to constitute a spring, the legs of which are connected with the clips B, and serve to force the clips B toward each other. The spurs D project from the clips in such manner that when the creeper is in use the spurs come in contact with the ice.

In order to attach the creeper in position, one of the clips is fitted to the side of the sole of the boot or shoe, and the other clip drawn laterally, the shank yielding until the lastnamed clip is fitted to its side of the boot or shoe, when the spring holds both clips firmly

in contact with the sole. The shank C extends longitudinally along the shank of the boot or shoe and bears against the heel thereof, 45 whereby rearward displacement of the creeper is prevented.

In order to lock the shank to the heel, the crown of the former is formed with a spur, E, which is adapted to pierce the heel, thus pre-50

venting lateral shifting of the creeper.

The spurs D are continuous of the legs of the shank, the latter passing through bosses F, formed on the clips B and clamped by the same, the ends of the legs being bent and inserted in openings G in the clips, said ends being pointed and constituting the spurs D, it being seen that the clips, shank, and spurs are firmly connected, and a simple, inexpensive, and strong creeper is produced.

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

Patent, is—

1. An ice-creeper consisting of the metal pieces or clips formed with flanges and a shank, 65 substantially as described, forming a spring and having its ends bent to form spurs, the said shank being secured to said clips, all substantially as described.

2. An ice-creeper having cast metallic clips 70 to engage the edge of the shoe-sole and a wire shank, said clips being formed with bosses and openings, substantially as described, and said shank having its legs inserted in said bosses and bent and passed through said open-75 ings, forming the spurs of the creeper, as stated.

3. An ice-creeper having the metal clips B, with flanges a, the spring-shank C, with spur E, adapted to engage with the heel of the shoe, and the spurs D, all substantially as described. 80

CHAS. F. WEST.

Witnesses:

JOHN A. WIEDERSHEIM, A. P. GRANT.