

S. R. PHILLIPS.
Ice-Creepers.

No. 159,447.

Patented Feb. 2, 1875.

Fig. 2.

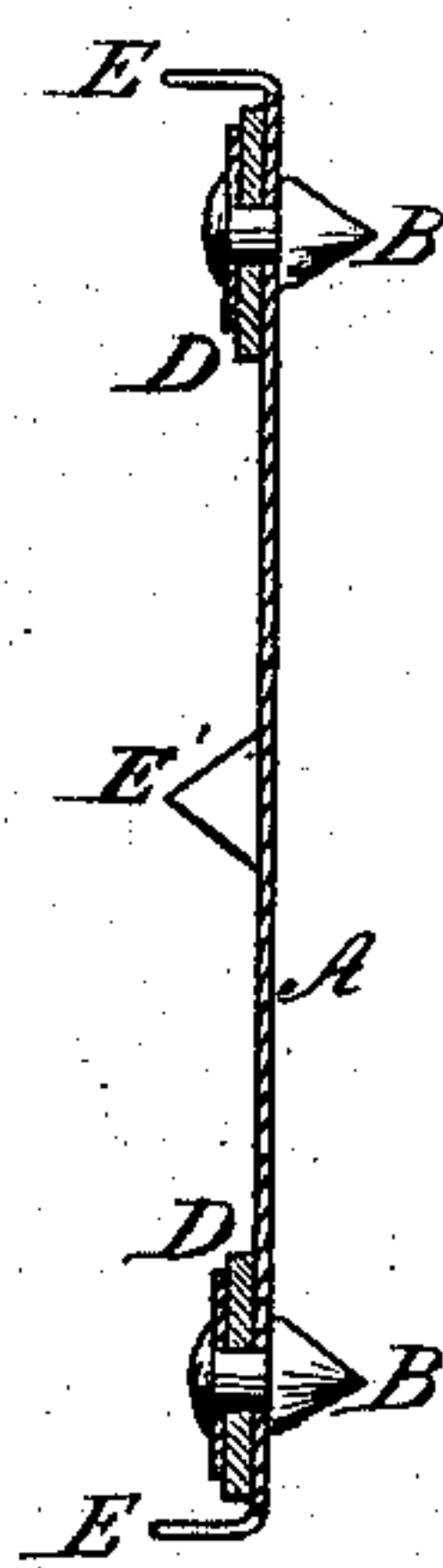


Fig. 1.

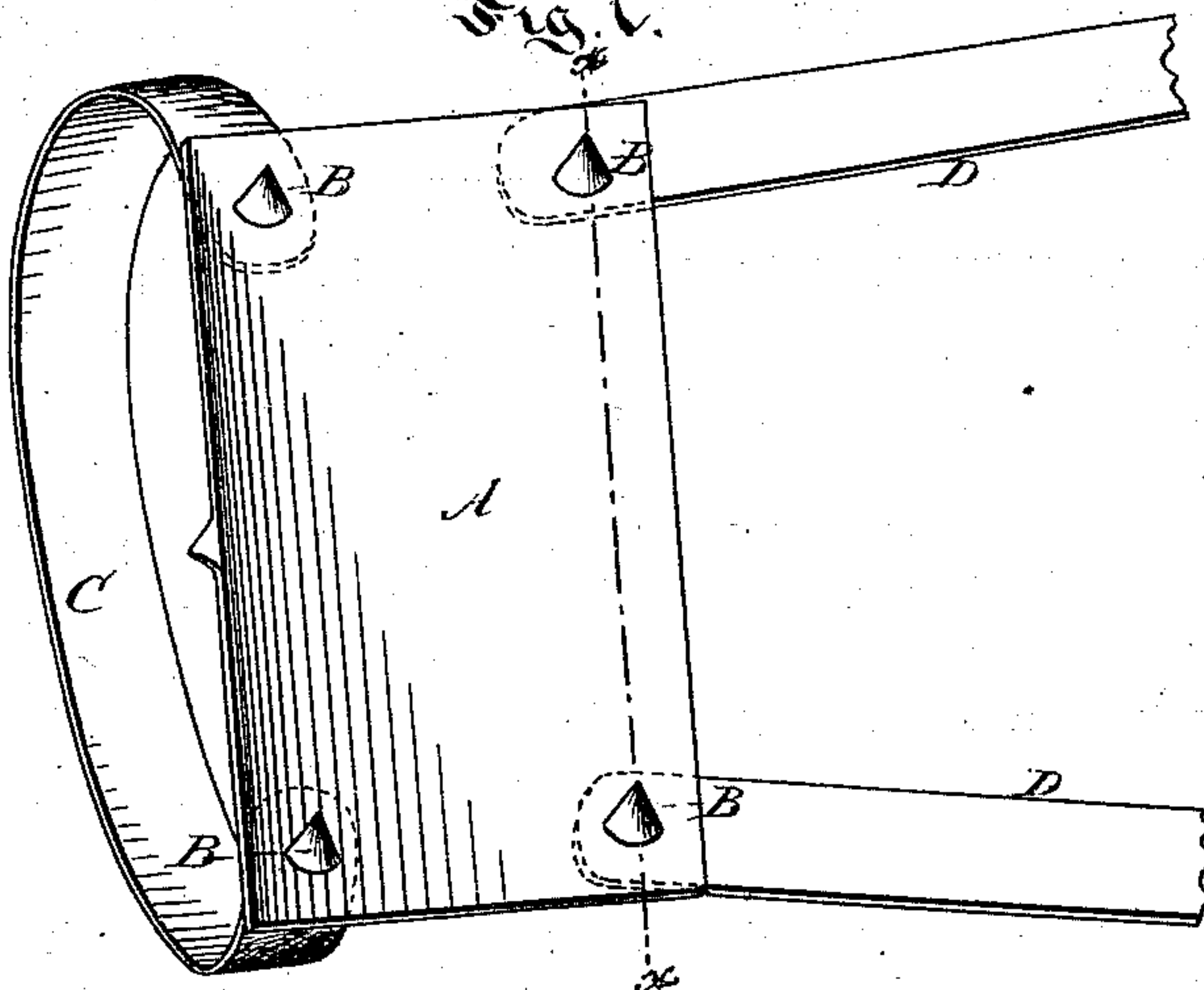


Fig. 3.

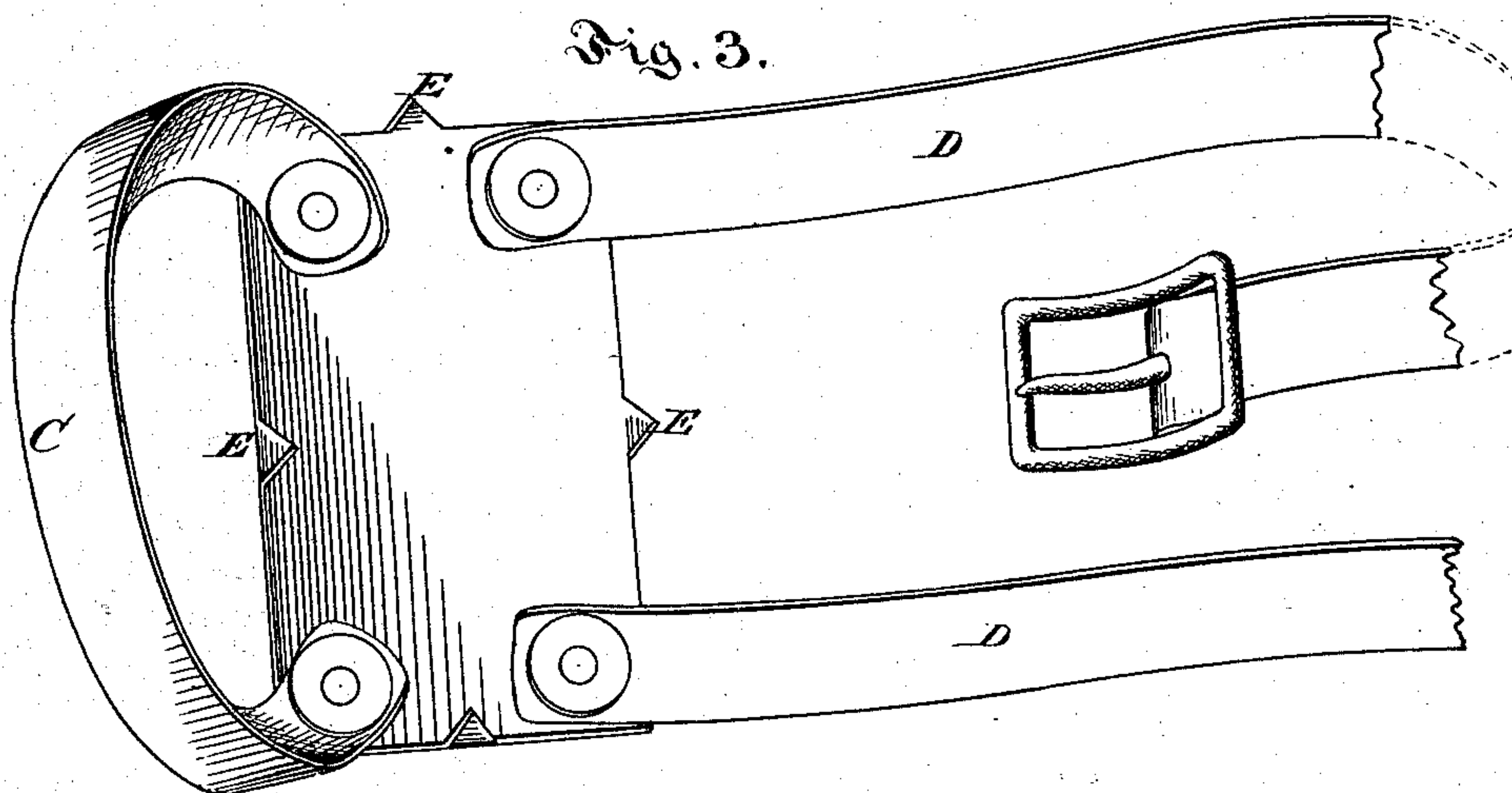
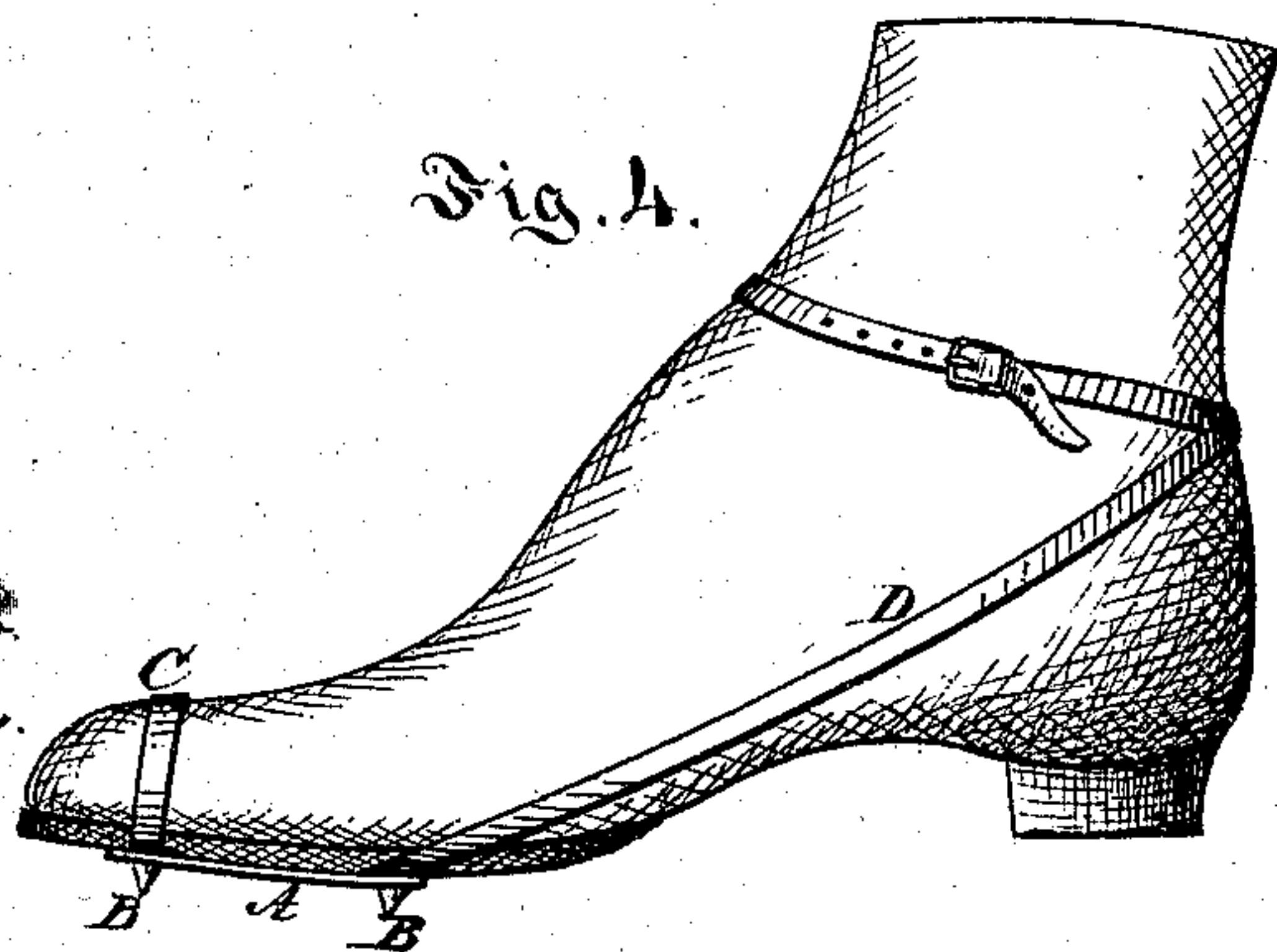


Fig. 4.



Witnesses:
H. S. Miller
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att'y

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN ICE-CREEPERS.

Specification forming part of Letters Patent No. **159,447**, dated February 2, 1875; application filed January 30, 1875.

To all whom it may concern:

Be it known that I, SAMUEL R. PHILLIPS, of the city and county of Philadelphia, and the State of Pennsylvania, have invented a new and useful Improvement in Ice-Creepers; and I do hereby 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 which—

Figure 1 is a perspective view from the bottom of the device embodying my invention. Fig. 2 is a transverse section in line *x x*, Fig. 1. Fig. 3 is a perspective view from the top. Fig. 4 is a side view thereof.

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

My invention consists in a plate having a series of spurs attached thereto, and located on the lower side thereof, and retaining-straps secured to the plate by means of the spurs, whereby the straps are firmly held in place, and the plate possesses the greatest possible strength. It also consists in the plate having spurs turned up therefrom on its upper face for engagement with the sole of the boot or shoe, so as to prevent shifting of the creeper.

Referring to the drawings, A represents a metal plate, and B a series of spurs, which are arranged on the under side of the plate, and their shanks pass through openings in the plate and are "headed," so as to secure the spurs to the plate. To the plate there are connected the front strap or straps, C, and the rear straps, D, which are secured thereto by the spurs B prior to the heading thereof, so that the spurs serve the twofold purpose of engaging with the ice to prevent slipping, and

of attaching the straps C D to the plate. It will also be seen that the plate is not weakened by openings for the spurs and additional openings for rivets to secure the straps. The sides of the plate are cut away, and the pieces thus produced are turned up to form spurs E, which, when the plate is applied to the sole of the boot or shoe, enter said sole, and prevent lateral and longitudinal displacements of the creeper. The straps D extend rearward or longitudinally, or at about a right angle to the direction of the front strap, C, and are lengthened or extended, so that they may be passed along the sides of the foot to the ankle, and then around the same, in which position the said straps are to be buckled or otherwise secured, whereby the plate will be most effectually secured to the foot. Moreover, I avoid pressure on the instep, and the consequent discomfort and injurious effect to the foot, the circulation of the blood not being affected.

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

1. The plate A, having a series of spurs, B, connected thereto, in combination with the retaining-straps C D, secured thereto by means of said spurs B, substantially as and for the purpose set forth.

2. The extended straps D, projecting from the plate A in the longitudinal direction thereof, and of sufficient length to pass along the sides of the feet to the rear of the ankle and around the same, substantially as and for the purpose set forth.

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