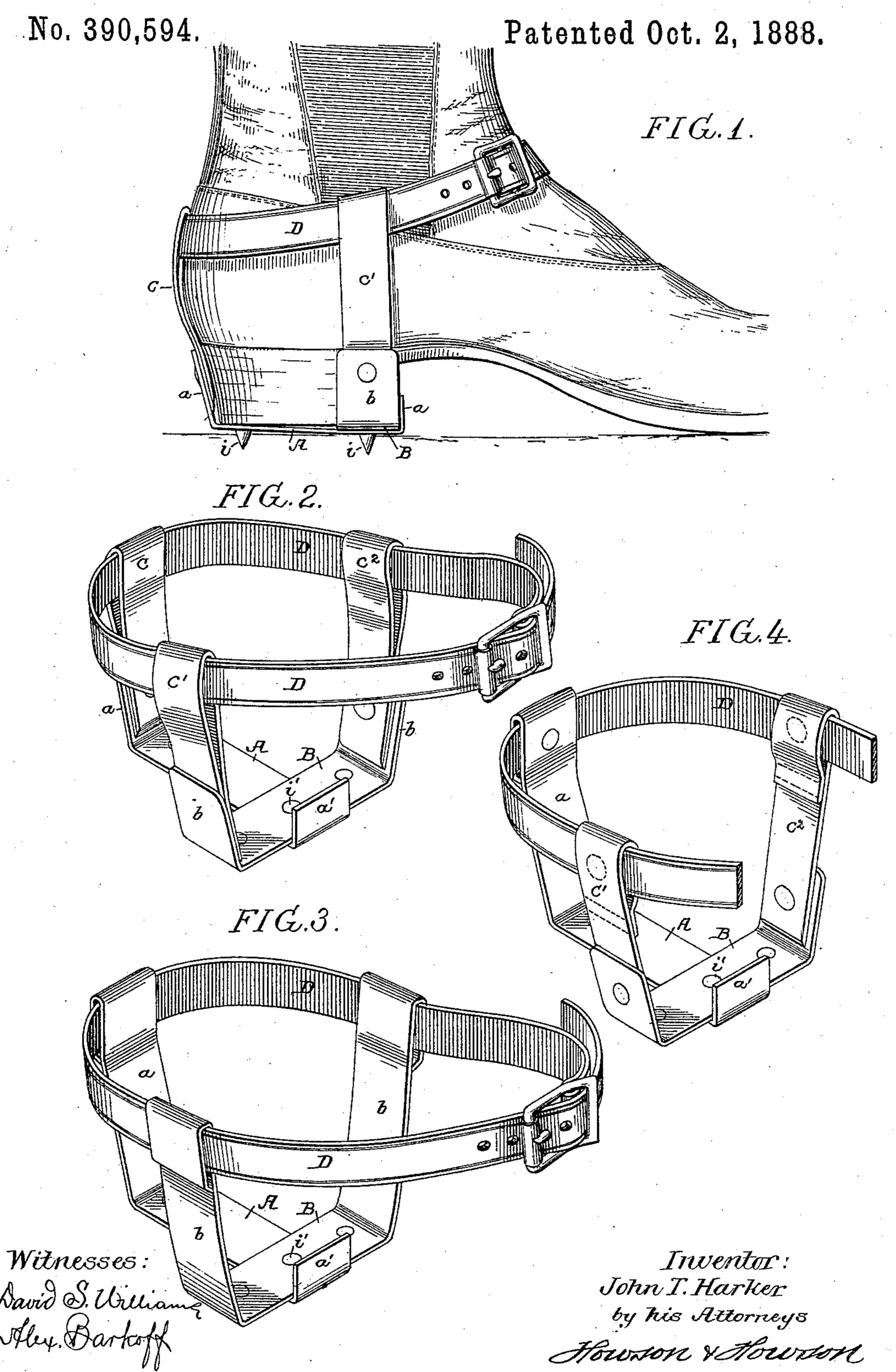
## J. T. HARKER.

ICE CREEPER.



## UNITED STATES PATENT OFFICE.

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## ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 390,594, dated October 2, 1888,

Application filed May 25, 1888. Serial No. 275,072. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. HARKER, a citizen of the United States, residing in Camden, Camden county, New Jersey, have invented 5 certain Improvements in Ice-Creepers, of which

the following is a specification.

The object of my invention is to construct a simple and cheap ice-creeper that can be readily and securely attached to the heel of the shoe to of the wearer by a single strap, as fully described hereinafter, reference being had to the accompanying drawings, in which-

Figure 1 is a view showing the creeper applied to the heel of a boot. Fig. 2 is a per-15 spective view, and Figs. 3 and 4 are views of different forms of the creeper constructed in

accordance with my invention.

The base of the creeper is formed of two plates, A B, crossing each other at right an-20 gles. The transverse plate B has its ends b b turned up, and the longitudinal plate has its rear end turned up, and to these ends are secured the straps  $c c' c^2$  by rivets or other suitable fastenings. These straps are looped at 25 their upper ends, as shown, and through the loops is passed a strap, D, having at one end a buckle, through which the other end of the strap D is passed.

The front end, a', of the longitudinal plate 30 A is preferably turned up so as to engage with the front portion of the heel. Thus it will be seen that these turned-up portions of the plate A fit the heel snugly and preventsidewise movement, while the strap which passes around the 35 ankle, as shown in Fig. 1, securely holds the creeper to the shoe. On the bottom of the plates A and B are a series of spikes, i, the shank of the central spike, i', acting as a rivet to secure the two plates A B together.

In Fig. 3, in place of the leather loops, I extend the ends a b b up to the side of the boot and form loops e e by bending the side plates, thus dispensing with the leather loops. The strap D will then pass directly through these 45 metallic loops.

In Fig. 4 I have shown the two side loops of leather, and the rear bent end, a, extending up to the strap D, which is secured thereto by |

a rivet, so that the strap forms a permanent part of the creeper. Either one or both of the 50 side straps may be secured to the strap D by rivets, as shown by the dotted lines in Fig. 4, where circumstances require.

Thus it will be seen that I make a cheap and substantial creeper with one securing-strap and 55 buckle, which can be readily placed upon the heel of the shoe or removed when required; and, furthermore, the strap placed around the instep in the manner shown will not bind upon and injure the foot as will a strap extending 60 from the lower rear edge of the heel to the in-

step, as the strap in my device need not be drawn as tightly as a strap used at the angle just described.

The spikes in the plates may be of different 65 forms than that shown without departing from my invention.

I claim as my invention—

1. An ice-creeper adapted to cover the treadsurface of a boot or shoe heel, consisting of the 70 base-plates having spikes thereon, with upturned side extensions and a rear extension, each provided with loops at its upper end, and a securing strip passing through the loops, substantially as described.

2. The combination of the longitudinal plate A, having spikes thereon and turned-up portions a a, with a transverse plate having turnedup portions b b, loops on the rear and turnedup side portions, and a securing-strap passing 80 through said loops, substantially as described.

3. The combination, in an ice creeper, of the longitudinal and transverse plates having turned-up portions, loops thereon, and a securing-strap, with spikes riveted to the said 85 cross-plates, and a central spike, i, securing the said cross-plates together, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two sub- 90 scribing witnesses.

JOHN T. HARKER.

Wiinesses:

EDWARD M. RILEY, HARRY SMITH.