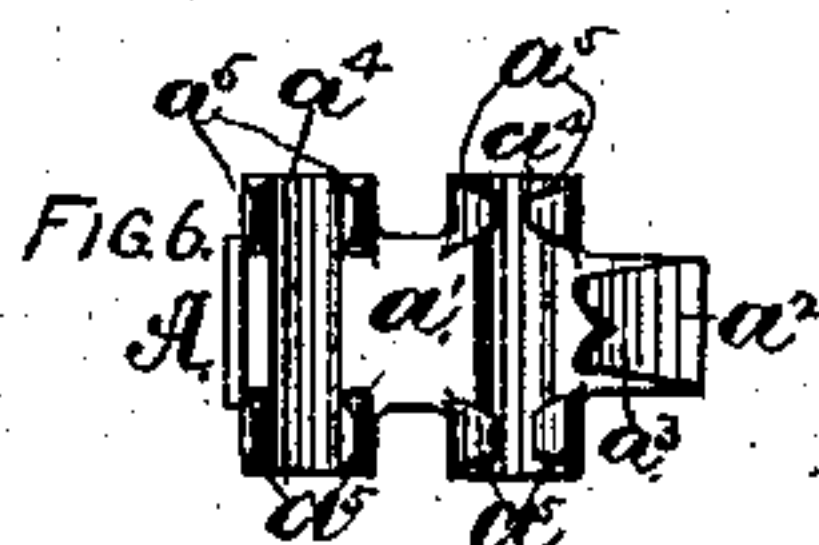
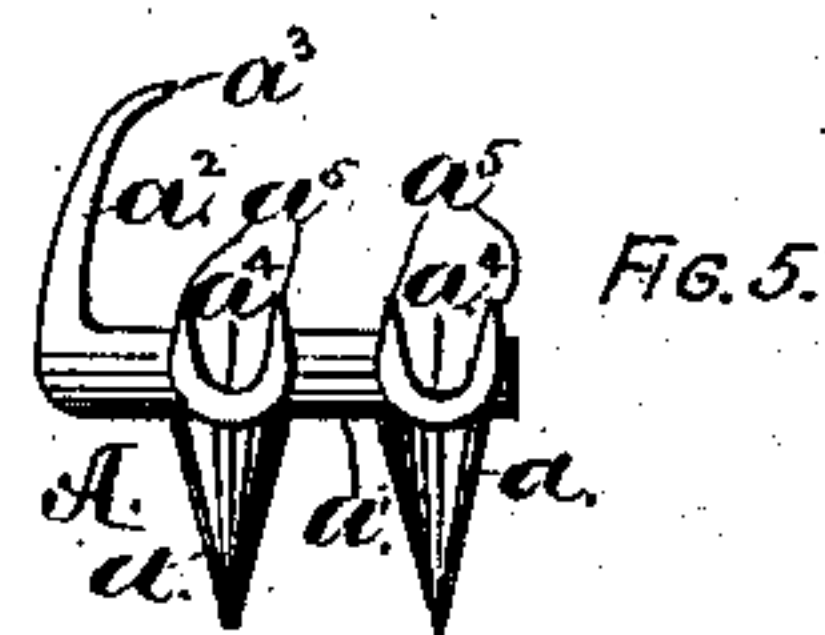
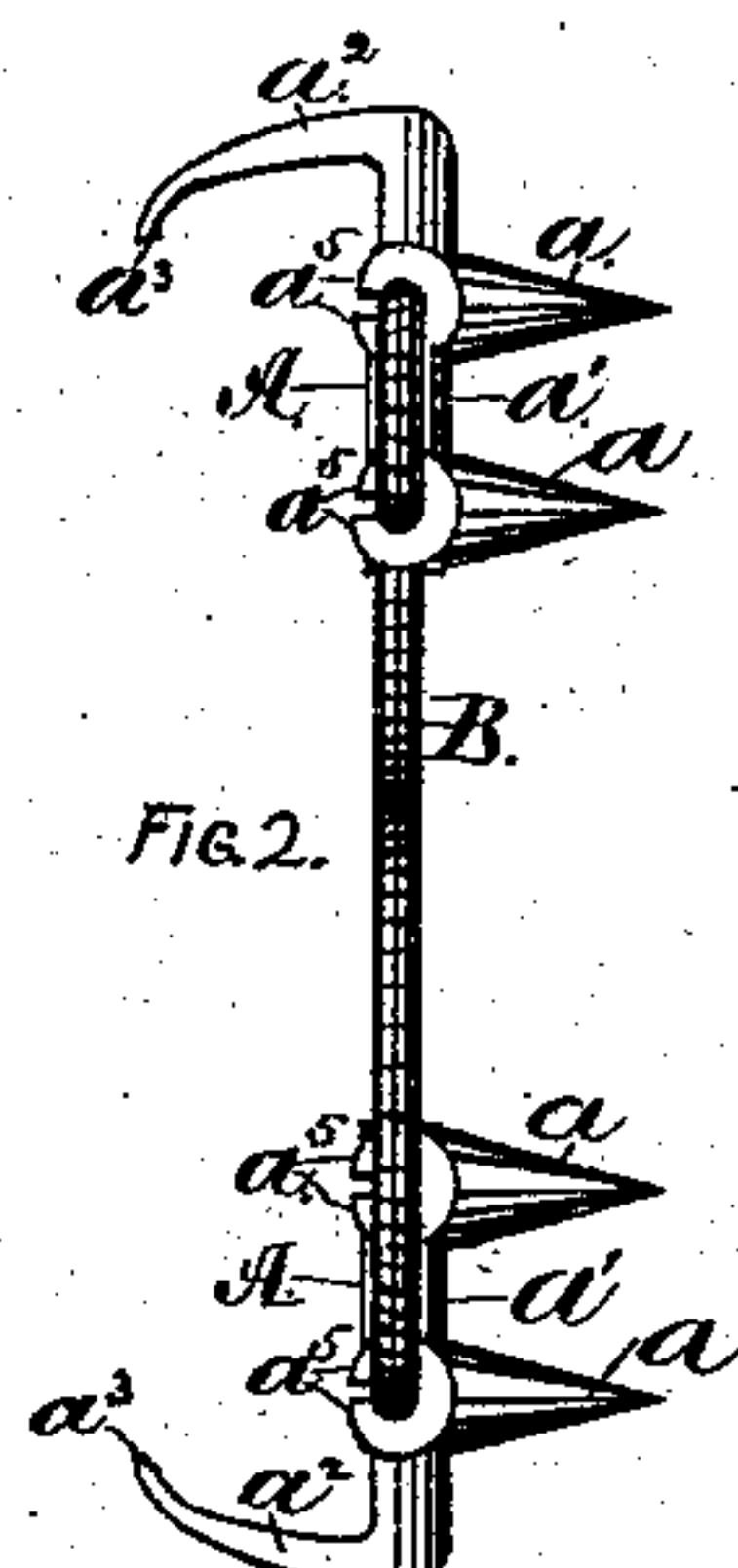
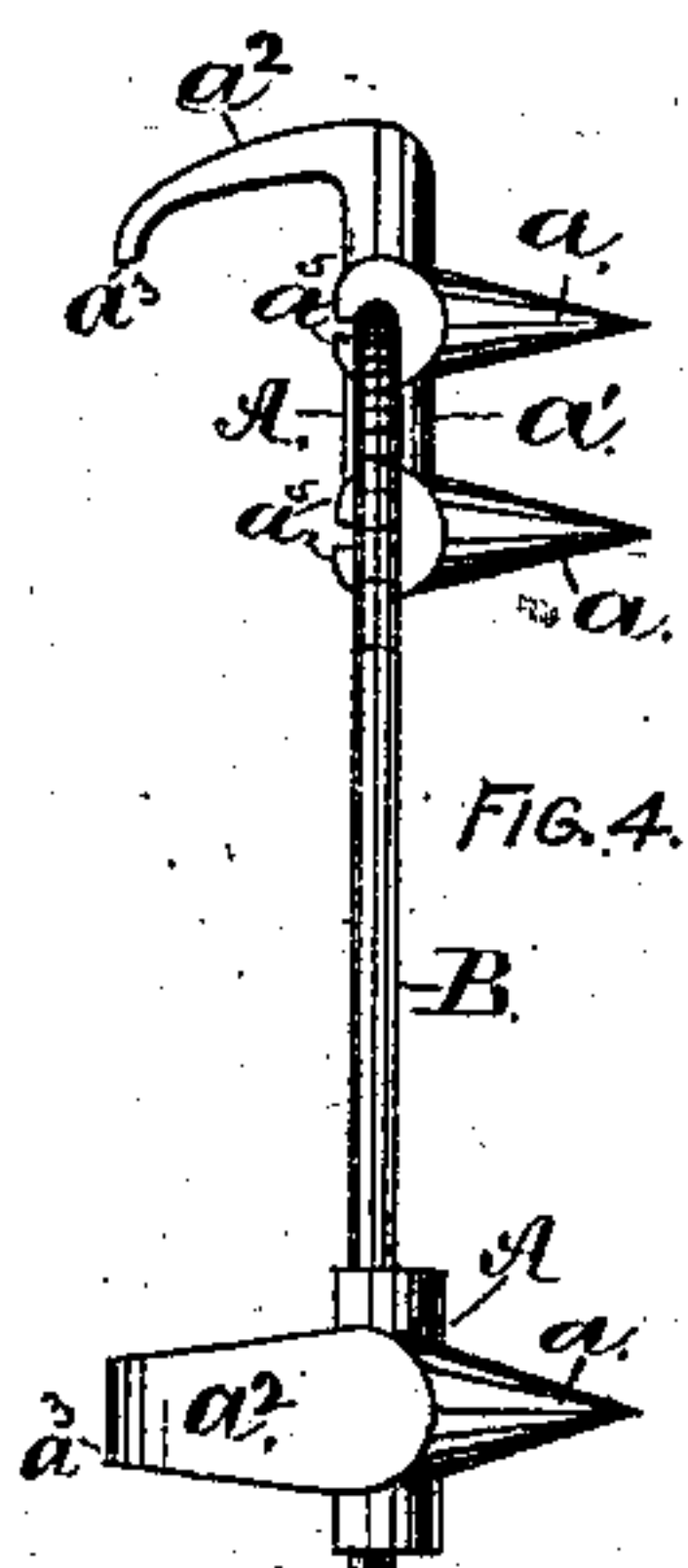
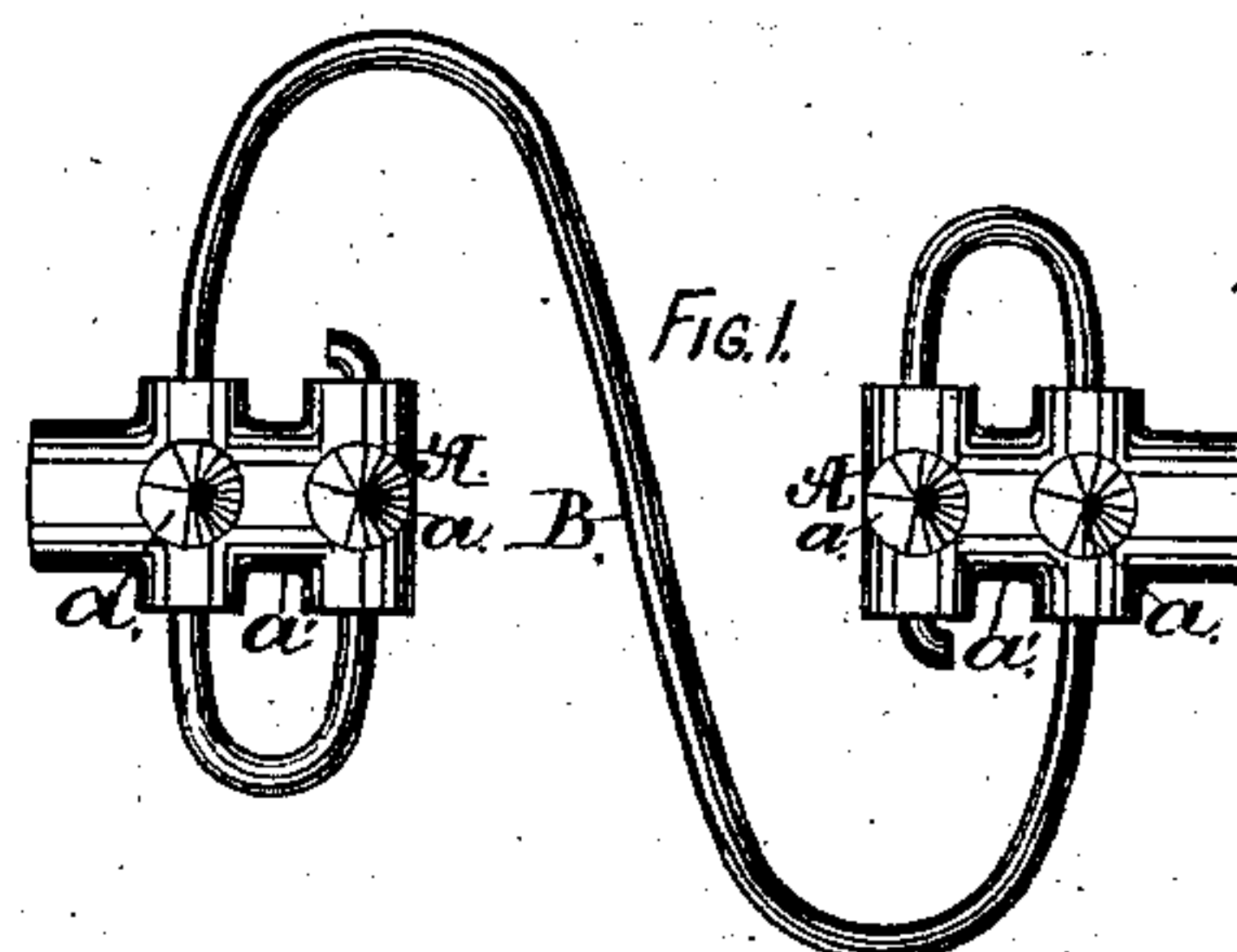
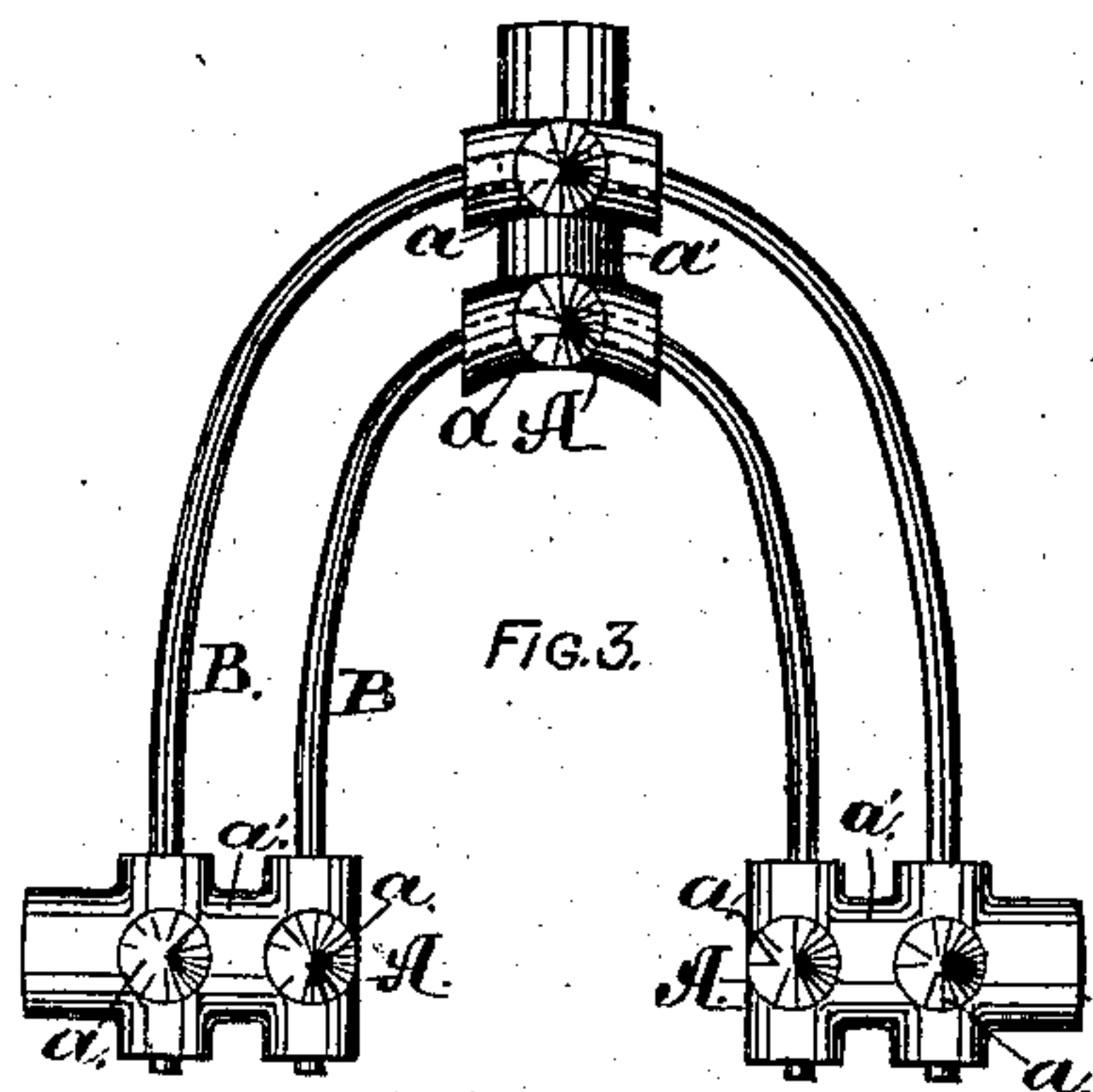


(No Model.)

L. YOUNG.
ICE CREEPER.

No. 290,165.

Patented Dec. 11, 1883.



Witnesses:

S. B. Birney,
H. V. Scattergood.

Inventor:

LEONARD YOUNG,
by
William H. Low,
Attorney.

UNITED STATES PATENT OFFICE.

LEONARD YOUNG, OF SING SING, NEW YORK, ASSIGNOR TO HANNAH G. YOUNG, OF SAME PLACE.

ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 290,165, dated December 11, 1883.

Application filed September 4, 1883. (No model.)

To all whom it may concern:

Be it known that I, LEONARD YOUNG, of Sing Sing, in the county of Westchester and State of New York, have invented a new and
5 useful Improvement in Ice-Creepers, of which the following is a specification.

My invention relates to an improvement in ice-creepers that are attachable to the heels and soles of boots and shoes; and it consists in se-
10 curing two or more spur-pieces to a wire spring or springs in such manner that the device will, by the action of said spring or springs, be held in place with sufficient tenacity to resist any accidental removal.

15 The object of my invention is to provide a simple, cheap, and efficient device that can be quickly attached to and detached from a boot or shoe, and secure to the wearer protection against slipping on ice or other slip-
20 pery places. I attain this object by means of the construction illustrated in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is an inverted plan view of my ice-
25 creeper adapted for use on either the sole or heel of a boot or shoe; Fig. 2, an edge view of the same. Figs. 3 and 4 are respectively an inverted plan view and an edge view of a modified form of my ice-creeper, adapted ex-
30 clusively to use on the heel of a boot or shoe; and Figs. 5 and 6 are respectively a side elevation and a plan view of a detached spur-piece.

As represented in the drawings, A is the
35 spur-piece, made of malleable metal, and provided on its under face with two pointed spurs, a . The said spurs are connected together by a bar, a' , that projects outwardly on one side and forms the hook a^2 . Said hook extends
40 upward, and at its upper end is curved in-

wardly to form a double-pointed end, a^3 , that will grip into the side of the sole or heel for the purpose of securing the creeper in place. On its upper side the spur-piece A is provided with two grooves, a^4 , for receiving 45 the parts of the wire spring, and, as shown in Fig. 5, said spur-pieces are cast with thin standing flanges a^5 at both sides of the grooves a^4 . Said flanges, when the spur-pieces are fixed in place, are bent over to close around 50 the wire spring, as shown in Figs. 2 and 4, to secure the spur-pieces in their required positions on the ice-creeper.

The wire spring B, of which there may be either one or several in each ice-creeper, may 55 be bent in the S form shown in Fig. 1, the horseshoe form shown in Fig. 2, or in any form suitable for the purpose, the only requirement necessary to be observed being that two parts of the spring or springs should be 60 so arranged that they will lie in the grooves a^4 of the spur-pieces, so as to maintain the latter in horizontal positions, as shown in the drawings.

My creeper is applied to use on the heel or 65 sole of a boot or shoe by inserting the points on the ends of the hooks a^2 into the sides of the heel or sole, wherein they will be retained by the tenacity of the springs B.

I claim as my invention—

70 The combination, with the spur-pieces A, provided with spurs a , hook a^2 , and grooves a^4 , of the springs B, secured to the said spur-pieces, in the manner and for the purpose herein specified.

LEONARD YOUNG.

Witnesses:

WM. H. LOW,
S. B. BREWER.