F. LEUTHY.

ICE-CREEPERS.

No. 193,452. Patented July 24, 1877.

Fig. 1.

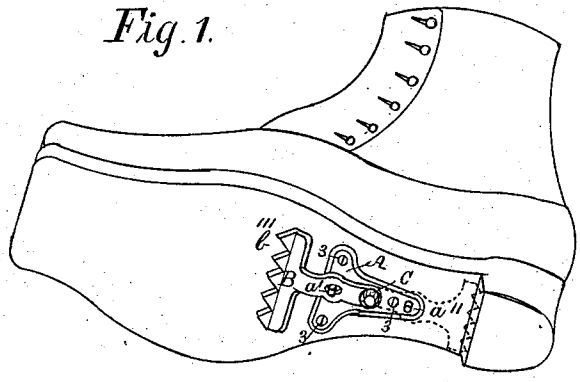



Fig 2.

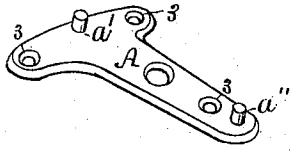



Fig. 3.

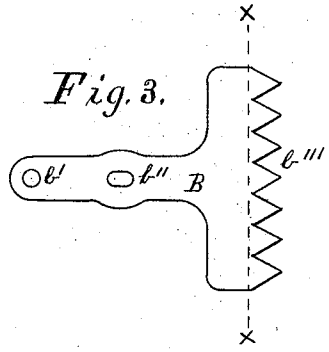
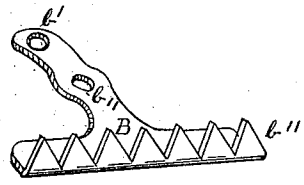



Fig. 4.




Witnesses;
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# UNITED STATES PATENT OFFICE.

FRANK LEUTHY, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN ICE-CREEPERS.

Specification forming part of Letters Patent No. **193,452**, dated July 24, 1877; application filed February 3, 1877.

*To all whom it may concern:*

Be it known that I, FRANK LEUTHY, of the city of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Ice-Creepers, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my creeper attached to a shoe and fixed in the position intended when the wearer is walking on the ice. Fig. 2 is a perspective view of the shank or boot-plate. Fig. 3 is a plan view of the creeper-plate ready for bending, and Fig. 4 is a perspective view of the same bent and ready to be pivoted to the plate A.

The object of my invention is to produce an ice-creeper that will be light, cheap, easily applied, and not liable to break or get out of order, and also one that can be permanently attached to the boot or shoe in such a manner that when not desired as a protection against slipping it can be turned around against the inside face of the boot or shoe heel, as shown in dotted lines, Fig. 1.

My invention consists of the two T-shaped plates, A and B, secured permanently together by a pivot, C, on which the creeper-plate B is rotated.

The shank or boot-plate A is intended to be securely attached to the shank of the boot or shoe by screws inserted in the holes 3 3 3, and is made of any suitable light metal, and about two inches in length, having a hole drilled in the center of its length for the pivot C, and two short pins or studs, $a'$ $a''$, fixed at equal distances from the pivot-hole, for the purpose of holding the creeper-plate B in the desired position when either in or out of use.

The creeper-plate B is made of thin spring-steel, and is about two and a half inches in length, having a hole, $b'$, drilled in the longer arm, for the pivot C, and a small oval hole, $b''$, which fits over the pins $a'$ or $a''$ in the plate A when it is in or out of use as a creeper as the case may be.

The outer edge of the shorter arm is cut into saw-teeth, about one-fourth of an inch in length, and bent at a right angle on the dotted line $x$ $x$ with the face of the plate.

The stem or longer arm is gently curved to form a spring, (when pivoted to the plate A,) after which it is properly tempered, and pivoted to plate A, which completes the device ready to be attached to the boot or shoe.

When it is attached to the boot or shoe the wearer has only to rotate the creeper-plate B forward and spring it over the pin $a'$, when it is securely fixed as a protection against slipping; or, on entering a house, he has only to reverse the motion and spring it over the pin $a''$, where it will be out of the way until required.

I claim as my invention—

In an ice-creeper, the combination of plate A, provided with locking-pins $a'$ and $a''$, and adapted to be secured to the sole of a boot or shoe, of plate B, curved to form a spring, and provided with holes to receive the locking-pins, all arranged and constructed substantially as shown and set forth.

FRANK LEUTHY.

Witnesses:
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