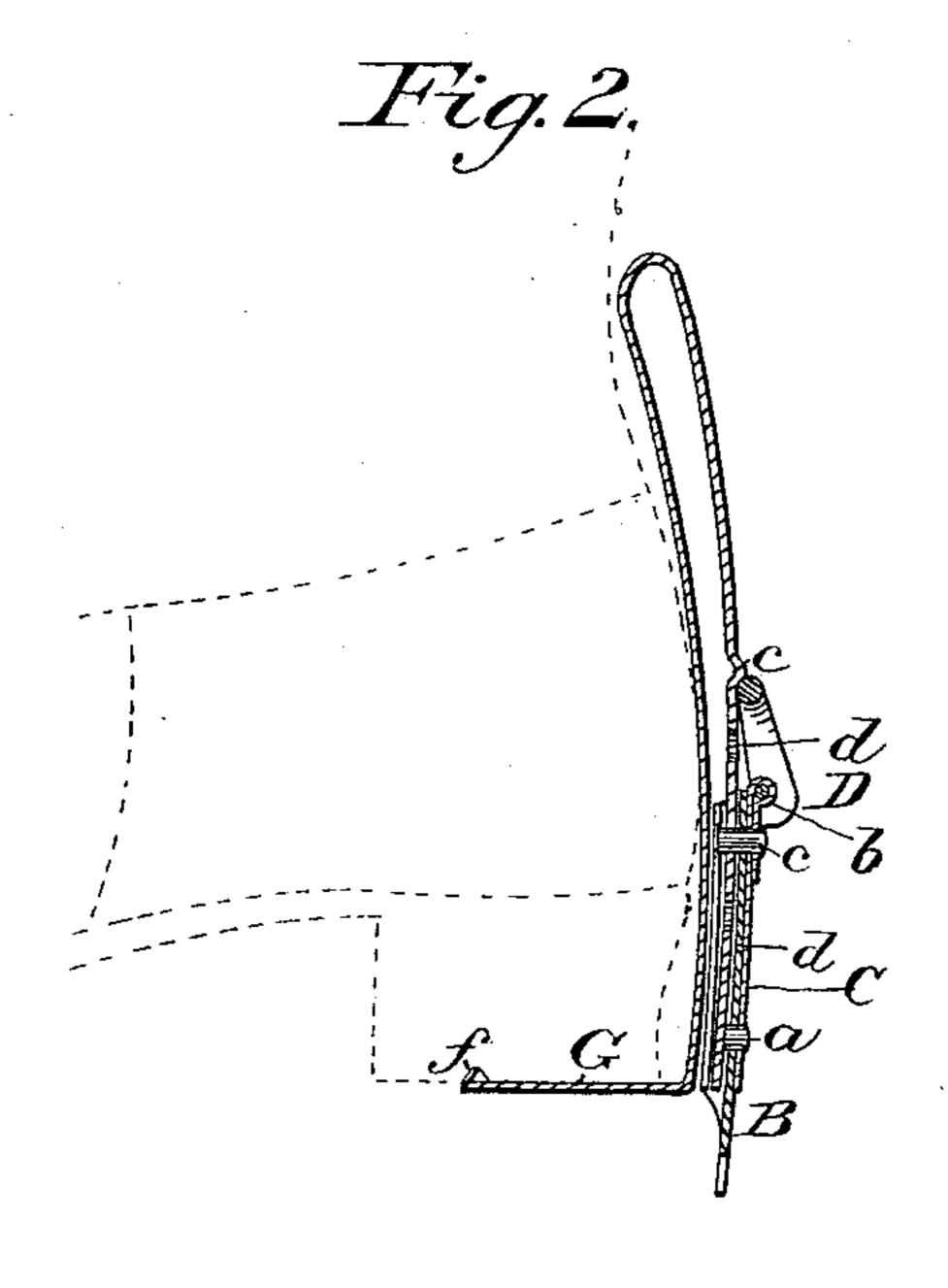
. (No Model.)

## L. R. DEY.

ICE SPUR OR CREEPER.

No. 368,330.

Patented Aug. 16, 1887.



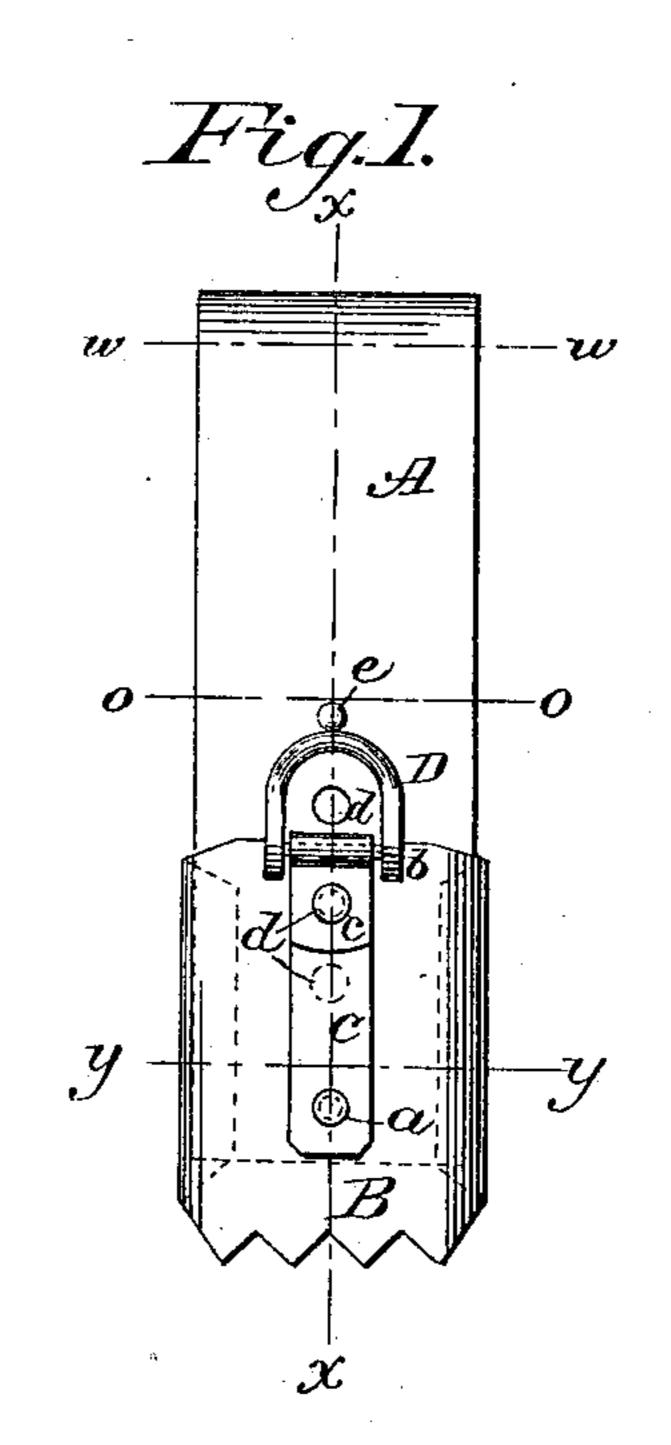
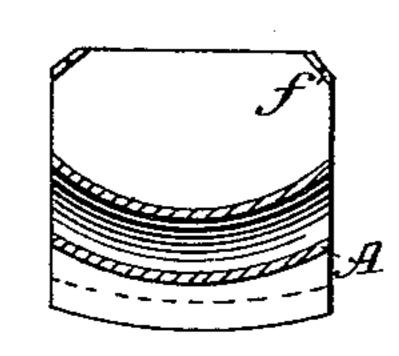
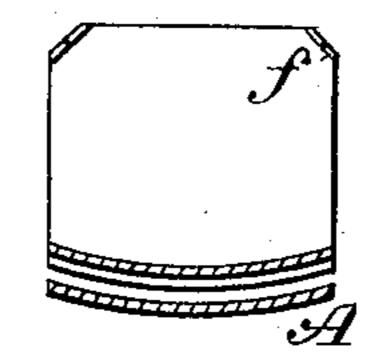


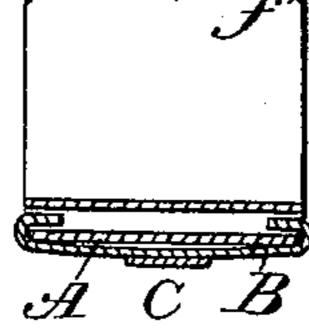
Fig. 3.

Fig.A.

Fig.5.







Witnesses: O'Hennayer & Weggand

Inventor:

Lewi A. Ley

## United States Patent Office.

LEWIS R. DEY, OF CAMDEN, NEW JERSEY.

## ICE SPUR OR CREEPER.

SPECIFICATION forming part of Letters Patent No. 368,330, dated August 16, 1887.

Application filed June 19, 1886. Serial No. 205,736. (No model.)

To all whom it may concern:

Be it known that I, Lewis R. Dey, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented a new and useful Ice-Spur or Creeping-Machine, of which the following is a specification.

My invention relates to improvements in ice spurs or creepers; and the objects of my improvements are, first, their application to gums or rubber shoes to prevent persons from slipping down on ice or snow; second, their facility of adjustment to or detachment from the shoe, and, third, their novelty and simplicity of design. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an external view of the device or machine. Fig. 2 is a longitudinal section. 20 Fig. 3 is a cross-section through line w w, Fig. 1. Fig. 4 is a cross-section through line o o, Fig. 1. Fig. 5 is a cross section through line y y, Fig. 1.

A is a supporting piece and guide for sliding piece B, and is also the external part of the main spring, which fastens the machine to the rubber shoe.

B is a movable slide, on which is a spring, C, secured to the same by means of a small 30 rivet, a.

D is a cam which turns on a pin, b, through a loop in the top end of spring C.

c is a small pin riveted through spring C, and passes through the holes d in the main 35 guide A. The pin c is lifted out of the holes d by means of the cam D, and allows the slide B to move up or down at will.

e is a knob or raised portion on the main guide A to form a stop when the slide B is 40 moved to the top hole.

f is a small point formed by turning up the corner of the heel-piece G, to prevent the same

from moving or slipping when used on rubber shoes, but dispensed with in ordinary shoes.

Thus it will be seen by the above specifica- 45 tion and annexed drawings that the machine consists of a spring-strap of steel, V-shaped, Fig. 2, and curved to fit the back part of the overshoe, over which it is made to slip and held firmly in position by its own elasticity, 50 which causes it to clasp or pinch the shoe. One end of the strap forms a projecting arm or heel-piece, G, which rests on the inside of the sole of the overshoe and receives the weight of the body when walking, and always keeps 55 the contact-points on the outside of the shoe, when in use, hard upon the ice. A movable slide, B, Fig. 2, attached to the outer or friction end of the strap, enables the person to secure any desired degree of friction upon the 60 ice while in use, or to remove all friction when entering the house, thus doing away with the necessity of detaching the device from the foot or shoe when not in actual use.

I do therefore claim as my invention and de- 65 sire to secure by Letters Patent—

1. The main spring or strap, as described, in combination with the slide B and cam D for operating the same, substantially as described.

2. In an ice spur or creeper, the slide B, with spring C, secured to the same by means of a rivet, in combination with the spring-strap, as described.

3. In an ice spur or creeper, the cam D, 75 which turns on a pin, b, through a loop in the top, and of spring C, in combination with the spring-strap and slide B, all substantially as set forth.

LEWIS R. DEY.

Witnesses:

PHILIP S. SCOVEL, LOUIS B. HUMPHREYS.