

A. T. MOORE.  
ICE-CREEPER.

No. 189,949.

Patented April 24, 1877.

Fig 1.

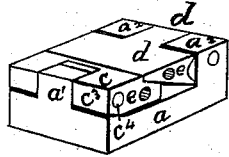


Fig 2.

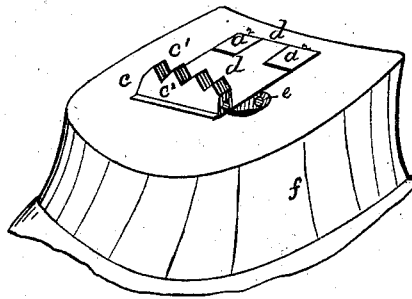


Fig 3.

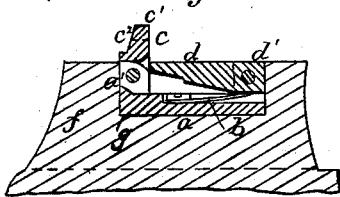
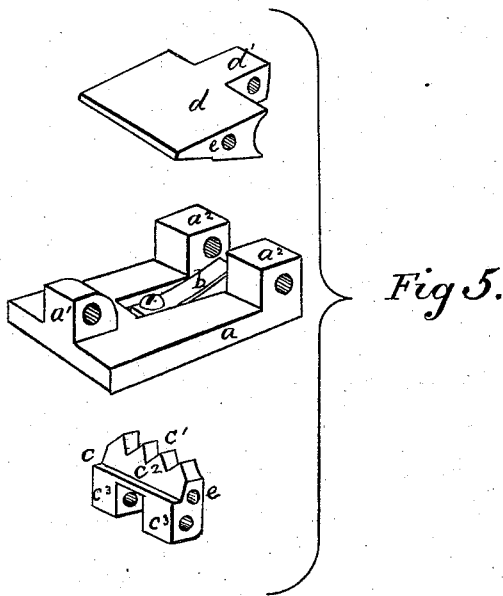
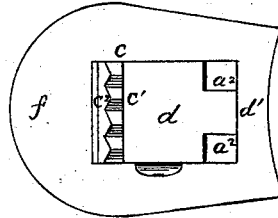


Fig 4.



Witnesses.  
B. C. Pole  
R. H. Lacey,

Inventor.  
Aron T. Moore  
by R. S. & A. P. Lacey  
his attorneys.

# UNITED STATES PATENT OFFICE.

ARON T. MOORE, OF CADIZ, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO  
JESSE L. CONWELL, OF SAME PLACE.

## IMPROVEMENT IN ICE-CREEPERS.

Specification forming part of Letters Patent No. 189,949, dated April 24, 1877; application filed  
February 14, 1877.

*To all whom it may concern:*

Be it known that I, ARON T. MOORE, of Cadiz, in the county of Harrison and State of Ohio, have invented certain new and useful Improvements in Ice Creepers or Calks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in ice-creepers; and has for its object to provide a device which, when placed in a suitable recess in the heel of the boot, may be opened for use, or closed, and be entirely out of the way without the necessity of removing it from the boot. It consists in a substantial base-plate, provided with a spring, and with lugs, to which are hinged a folding calk and plate, all constructed and adapted to be placed within a suitable recess in the heel of the boot, as hereinafter fully explained.

In the drawings, Figure 1 is a perspective of the device folded. Fig. 2, 3, and 4 show the device in the heel of the boot, and Fig. 5 shows the several parts in detail.

*a* is the base-plate, made by preference rectangular in form, and is provided with the vertical lugs *a*<sup>1</sup> *a*<sup>2</sup>, to which are hinged the folding calk and plate, and has secured to it the spring *b*, adapted to bear on the shank of and hold the folding plate closed or open, as hereinafter explained.

*c* is the folding or hinged calk, which is provided with the roughened edge *c*<sup>1</sup>, and is beveled or cut away on its upper side, as shown at *c*<sup>2</sup>, to provide a seat for the end of the folding plate when the latter is closed down upon it; and it is further provided with the lugs or extensions *c*<sup>3</sup>, through which is put a pin, *c*<sup>4</sup>, by which it is hinged to the lug *a*<sup>1</sup>.

*d* is a folding plate, provided with a shank, *d*<sup>1</sup>, which, by a suitable pin, is hinged to the lugs *a*<sup>2</sup>. It folds down over the end of the calk *c*, as shown in Fig. 1, or, when the calk is turned out for use, its end snugly fits against the face of the calk, as shown in Fig. 3. It is held firmly shut or closed, or open,

if desired, by the spring *b*, bearing on the end of the shank *d*<sup>1</sup>.

*e e* are small recesses formed in the sides of the plate *d* and calk *c*, in which the end of a small nail or hook may be placed for the purpose of raising said plate and calk.

The boot-heel *f* is provided with a recess, *g*, adapted to receive the device, which, when placed therein, and folded as shown in Fig. 1, will be entirely within the heel, and out of the way, so that it will not interfere with the movements of the person on carpeted or other floors.

To adjust the device for use, the plate *d* is first raised to a vertical position, then the calk *c*, after which the plate *d* is thrown down again, and locks the calk, as shown in Fig. 3.

The calk when raised for use is supported by the plate *d* on one side, by the rear vertical side of the recess *g* on the opposite side, and by the end of its lugs *c*<sup>3</sup> bearing on the upper side of the base-plate *a*.

A small portion of the heel may be cut away to give facilities for reaching the recesses *e e* with a hook or nail, as shown in Figs. 2 and 4.

It will be readily seen that my device may be quickly adjusted for use, or folded out of the way, without the trouble of removing it from the boot.

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

1. The combination, with the boot-heel *f*, constructed with a recess, *g*, of a plate, *a*, constructed with the vertical lug *a*<sup>1</sup>, and calk *c*, hinged to the lug *a*<sup>1</sup>, adapted to be raised to a vertical position, or turned down against the plate *a*, and within the recess *g*, substantially as and for the purpose set forth.

2. The ice-creeper, constructed of the base-plate *a*, having lugs *a*<sup>1</sup> *a*<sup>2</sup>, calk *c*, and folding plate *d*, arranged and operating substantially as set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

ARON THOS. MOORE.

Witnesses:

JOHN BAYLESS,  
JAMES HOWARD.