(No Model.)

G. L. LYON.

ICE CREEPER.

No. 305,012. Patented Sept. 9, 1884.

Fig. 1.

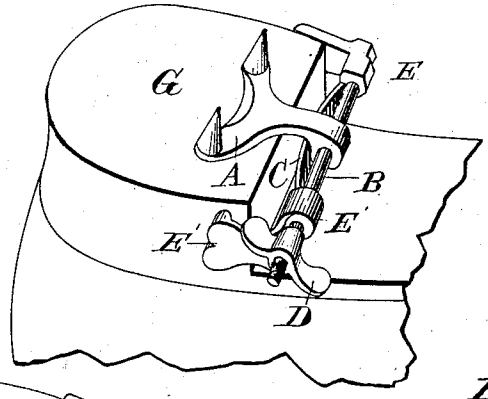


Fig. 2.

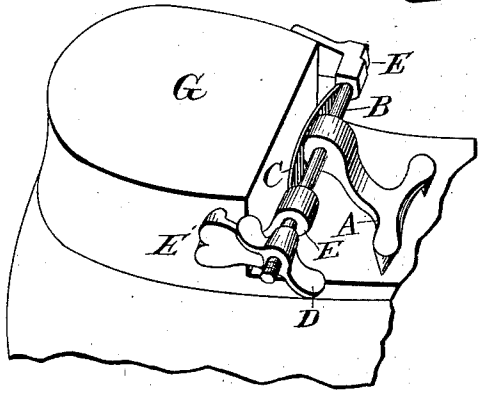


Fig. 3.

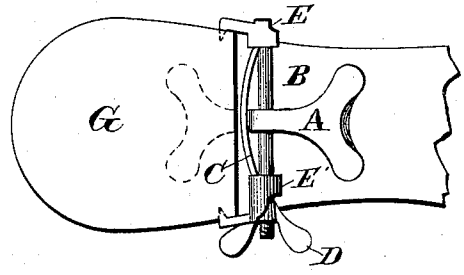


Fig. 4.

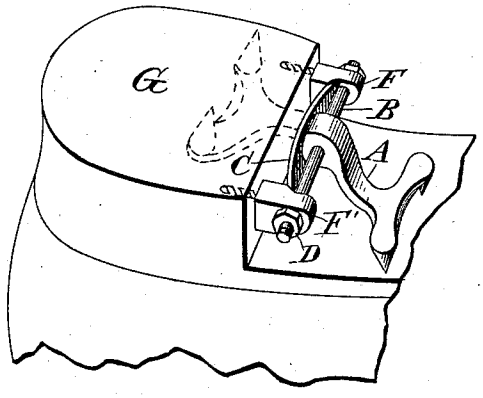
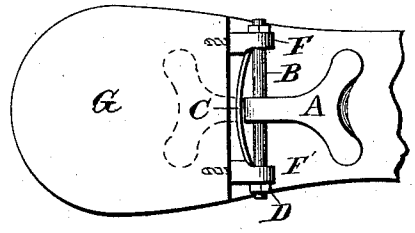


Fig. 5.



Witnesses:
Geo. W. Featherstonhaugh
Edwin G. Day

Inventor:
George L. Lyon
by Wm. H. King
his Attorney

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

GEORGE L. LYON, OF ALBANY, NEW YORK.

ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 305,012, dated September 9, 1884.

Application filed December 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. LYON, of the city and county of Albany, and State of New York, have invented an Improvement in Ice-Creepers, of which the following is a specification.

My improvement relates to an ice-creeper which is attached to the sides or to the inner face of the heel, or to the shank of a boot or shoe, (as one may desire or according to the manner in which the ice-creeper is made, as will be hereinafter described,) and has a plate which turns forward or back, in one position serving as the creeper to prevent slipping, and in the other resting out of the way in the hollow of the shoe under the shank thereof.

In the accompanying drawings, Figure 1 is a perspective view of part of a boot and my improved creeper secured thereto, the plate being in a position for use. Fig. 2 is a perspective view of a part of a boot and my improved creeper secured thereto, the plate being shown in a position when not in use. Fig. 3 is a plan view of the creeper, the dotted lines indicating the position of the plate when in use. Fig. 4 is a perspective view of a part of a boot and my improved creeper secured thereto in another manner, the plate not being in position for use. Fig. 5 is a plan view of the creeper shown in Fig. 4.

Similar letters of reference indicate corresponding parts in the several figures.

In the drawings, A represents the plate; B, the spindle or rod; C, the spring; D, the nut; E E′, clamps, Figs. 1, 2, and 3; F F′, the two shoulders or rests for the spindle B, as shown in Figs. 4 and 5. G is the heel of the boot; H the shank.

I construct and use the creeper as shown in Figs. 1, 2, and 3, respectively, in the following manner: I form from a piece of metal the two clamps E E′, which may or may not have projecting points in the inner sides thereof, as desired, which clamps are placed on and the points thereof inserted in the sides of the heel, or, if desired, on the sides of the shank, the points thereof being inserted in the space between the shank and the upper. Holes may be made in the clamps, through which screws or nails may be inserted to fasten the clamp to the heel or shank. I then place in the large holes of said clamps, at the rear or bottom thereof, a metallic spring, one of the ends of the spring resting in one of said clamps. I then run a bolt, rod, or spindle having a head on one end and a thread on the other through one of the clamps, then through the plate A, which may be constructed of any form and may have projections thereon, or may have a sharp raised edge or edges, then through the other clamp, and upon the threaded end of said bolt I screw a nut, preferably such a one as can be turned by the hand. The plate A, acting upon the spring C, is held in position by means of said spring. When in use the clamps are placed on the sides of the heel or shank, as aforesaid, and by means of nails or screws or by the nut securely fastened thereto. When the wearer desires to use the creeper to prevent slipping, he merely throws the plate A back upon the heel. The projections or the sharp raised edge or edges on the plate then being on the ground is or are inserted in the ice or snow. On the contrary, when its use is not desired, the plate is thrown forward so that the projections or the sharp edge or edges on the plate will fall upon or be near to the shank of the boot. The spring C need not be inserted in the clamps, but may be firmly affixed to the face of the heel or to the shank, and it will then be acted upon by or will act with the plate A.

I construct the creeper, as shown in Figs. 4 and 5, by merely substituting for the clamps E E′ two shoulders, F F′, which are screwed or driven into, or, having holes therein, are screwed or nailed to the face of the heel or in the shank.

Any kind of nut may be used in any of the methods of making my creeper.

I sometimes construct the spindle and the plate together in one piece, so that by means of one of the ends of the spindle I can turn the plate and spindle together by one motion. Again, I sometimes construct that part of the spindle which is between the clamps or shoulders of a polygonal form, and have the hole in the plate A, through which the spindle passes, of the same shape as the spindle, so that the spindle and plate may be turned forward or backward together and by one motion.

I sometimes construct the spindle so that about a half-part thereof shall be of a polygonal form, the balance cylindrical, and the hole in the plate which goes on the spindle also of a polygonal form. When that is done, if I wish to have the plate resting on the heel, I press the plate A on the polygonal part of the spindle, and it is held there without the use of a spring. When I desire to throw the plate forward to rest out of the way under the shank, I press the plate A back on the cylindrical part. In this construction it is not necessary to use a spring either in or with the creeper.

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

1. An ice-creeper consisting of a plate, A, a rod to hold the plate and upon or with which such plate turns, clamps E E′, and the transverse spring C, for the purpose set forth.

2. An ice-creeper consisting of a plate, A, a rod to hold the plate and upon or with which such plate turns, shoulders F F′, which are screwed or driven into or are screwed or nailed to the face of the heel or in the shank of the boot, and the spring C, for the purpose set forth.

GEORGE L. LYON.

Witnesses:
EDWIN G. DAY,
JULIUS F. HARRIS.