

(No Model.)

L. BENSEL.
ICE CREEPER.

No. 266,962.

Patented Nov. 7, 1882.

Fig: 1

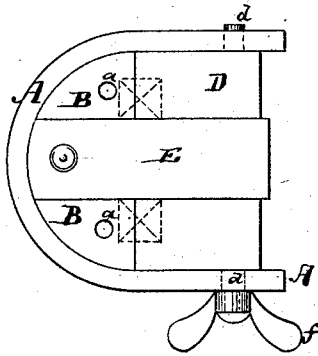


Fig: 2

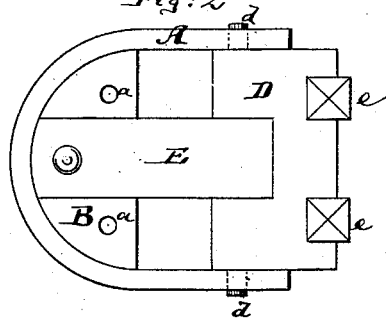


Fig: 3

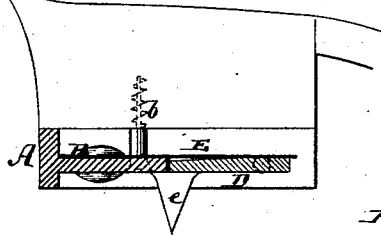


Fig: 4

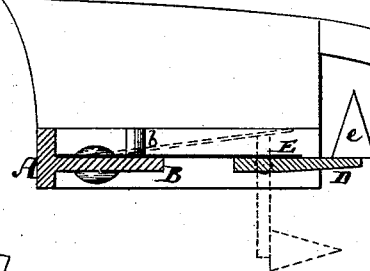


Fig: 5

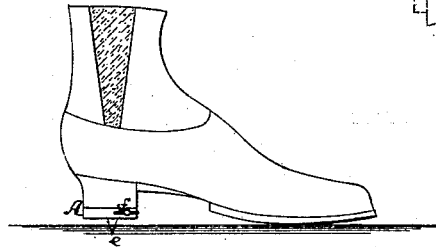


Fig: 6

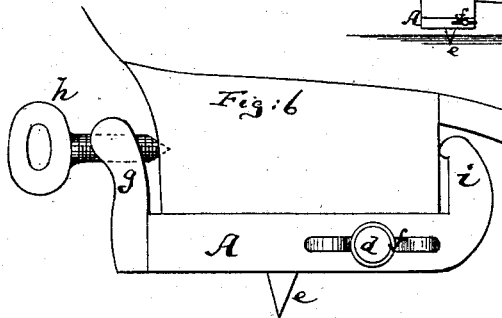
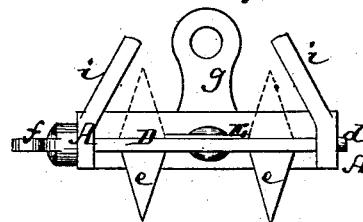


Fig: 7



Witnesses:
John C. Fairbridge.
August Schlarbaum.

Inventor:
Ludwig BenseL
by his attorneys
Brienen & Betts

UNITED STATES PATENT OFFICE.

LUDWIG BENSEL, OF ISERLOHN, PRUSSIA, GERMANY.

ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 266,962, dated November 7, 1882.

Application filed February 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, LUDWIG BENSEL, of Iserlohn, Prussia, in the Empire of Germany, have invented a new and Improved Ice-Creeper, of which the following is a specification.

Figure 1 is a top view of my improved creeper, showing it in position for use as such. Fig. 2 is a top view of the same, showing the creeper-prongs turned upward. Fig. 3 is a longitudinal vertical section of the same in the position shown in Fig. 1; Fig. 4, a similar section in the position shown in Fig. 2. Fig. 5 is a side view of a shoe having my improved creeper. Fig. 6 is a side view of a modified form of the frame of said creeper, and Fig. 7 a front view of the same.

The object of this invention is to produce an ice-creeper attachment to boots and shoes which can be readily adjusted when there is no ice, so as to carry the spurs of the creeper entirely out of the way; and the invention consists in forming the spurs on a plate which is pivoted in the horseshoe-frame of the creeper, and so arranged with reference to a rigid plate held in said plate that it can be revolved on its pivot to carry the spurs partly under said rigid plate when they are required for actual use.

The invention also consists in further details of improvement, hereinafter more fully described.

A in the drawings represents a horseshoe-shaped band of iron, which constitutes the framing of my improved creeper, the same being intended as an attachment to the heel of a boot or shoe. In the back part of this horseshoe-shaped frame A is a rigidly-secured transverse plate, B, having in it holes *a*, through which screws can be passed for securing the frame to the bottom of a heel, as indicated at *b* in Fig. 3. In front of the cross-plate B is pivoted in the horseshoe-shaped frame A, by means of gudgeons or pins *d*, a plate, D, which, when in the position shown in Figs. 1 and 3, abuts against the front edge of the plate B and is contiguous therewith, and in this position carries downwardly-projecting prongs or spurs *e*. Hence in this position the device is an ice-creeper lining the entire bottom of the heel with metal. The spurs *e*, in the position shown in Fig. 3, lap partly under the plate B, and in this position the plate D, with its spurs, is held by a spring, E, which is at one end fastened

to the plate B, and at the other end bears upon the top of the plate D, as shown. Thus the spring has the tendency to throw the projecting or interlocking parts of the spurs *e* against the under side of the plate B, leaving the ice-creeper in perfect condition for use; but when the ice-creeper is not to be used as such, but merely to form a strengthening attachment to a boot or shoe, the plate D is revolved on its gudgeons into the position shown in Figs. 2 and 4, so as to bring the spurs *e* into an upwardly-projecting position, as shown. In this position the spring E will also hold the plate D. The dotted lines in Fig. 4 show the plate D in a vertical position on its way from that shown in Fig. 3 to that shown by full lines in Fig. 4, or vice versa.

For convenience of turning, one of the gudgeons *d* may have a suitable handle attachment, *f*; but this in practice may be altogether unnecessary.

It will be seen from the foregoing specification that the spurs can be thrown into or out of use at will, and that when in use as a creeper the plates B and D abut, making a practically continuous metallic bottom to the heel of the boot or shoe, although in many cases this continuity may be dispensed with.

The modification which is shown in Figs. 6 and 7 consists simply in adding to what is shown in Figs. 1, 2, and 3 an upwardly-projecting lug, *g*, at the back of the frame A, with fastening-screw *h* passing through the same, and upwardly and inwardly projecting lugs *i* at the front end of the frame A for bearing against the front of the heel, so that by this means the apparatus can be fastened to a heel, instead of by the screws *b*.

I claim—

The ice-creeper frame A, having fixed plate B and pivoted plate D, with spurs *e* on the latter, the upper ends of said spurs projecting horizontally back of the plate D and extending partly beneath the contiguous plate B, when they are turned down, in combination with the spring E, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LUDWIG BENSEL.

Witnesses:

C. KURTZ,
CARL SCHULTE.