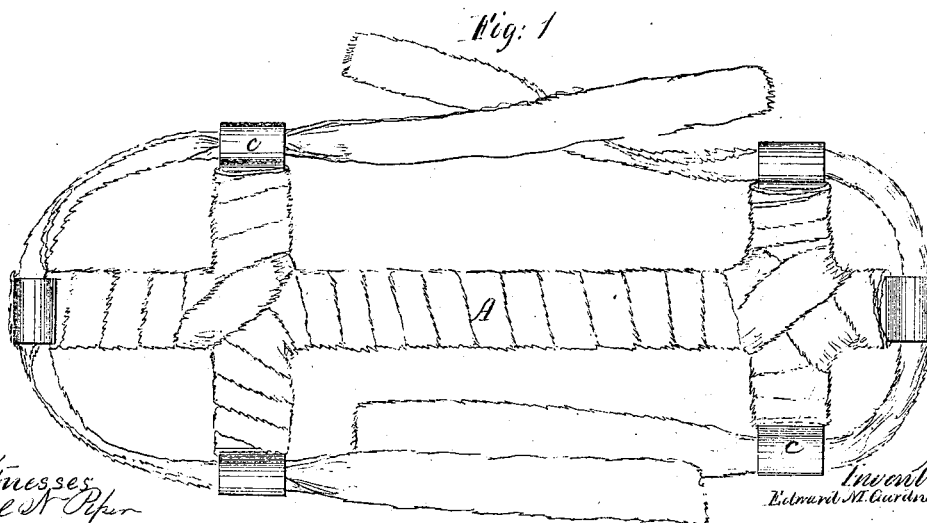
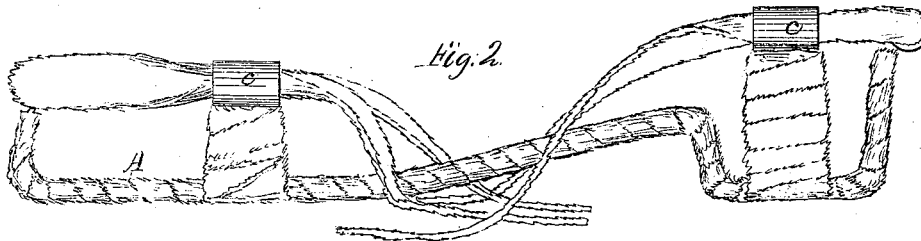
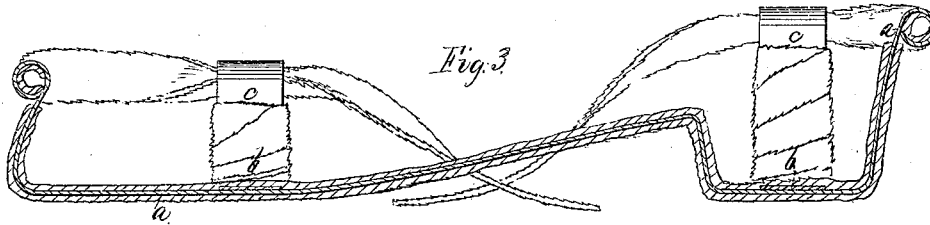


E. M. Gardner, Ice Creeper.

N^o 52,157.

Patented Jan. 23, 1866.



*Witnesses
Samuel N. Piper
J. Carter*

*Inventor
Edmund M. Gardner
by his attorney
R. M. Ladd*

UNITED STATES PATENT OFFICE.

EDWARD M. GARDNER, OF NANTUCKET, MASSACHUSETTS.

IMPROVED ICE-CREEPER.

Specification forming part of Letters Patent No. 52,157, dated January 23, 1866.

To all whom it may concern:

Be it known that I, EDWARD M. GARDNER, of Nantucket, in the county of Nantucket and State of Massachusetts, have invented an Improved Ice-Creeper, to be worn on the foot of a person while walking on ice or snow; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of it.

The said invention consists, not only of a thin strip of metal or frame bent to fit to the under side or surfaces of the sole and heel of a boot or shoe, but of a covering of list or woolen cloth, or its equivalent, wound around the bar or frame or applied to it so as to incase it.

In the drawings, A denotes the bar or frame, which as exhibited consists of one long strip, *a*, and certain shorter strips *b b*, the latter strips being laid across and fastened to the former, *a*, and provided with eyes *c c* at their ends for receiving straps for tying or fastening the frame on the foot of a person. The strip *a* may also have such eyes at its two ends, and it is to be bent to conform to the under

surface of the sole and heel of the shoe, and with the other or cross-strips is also to be bent upward, so as to rise against the edge of the sole or the shoe. The frame, so made of thin metal, such as iron, steel, or brass, as to be very flexible and elastic, will readily yield to the shoe or the bending of it while in use. The frame so made is to be covered with woolen cloth or list around its bars, so as to be on both sides of it, in order that the metal may be separated from the tread of the sole of the shoe by such cloth, which, besides constituting a cushion for supporting the foot on the frame, will serve as a means of preventing the wearer from slipping on ice or snow while in the act of walking thereon.

I claim—

The improved ice-creeper, constructed substantially as described—viz., of the flexible or elastic frame and the cloth covering, arranged together as specified.

EDWARD M. GARDNER.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.