

(No Model.)

D. M. FORSYTH.
ICE CREEPER.

No. 572,975.

Patented Dec. 15, 1896.

FIG. 1.

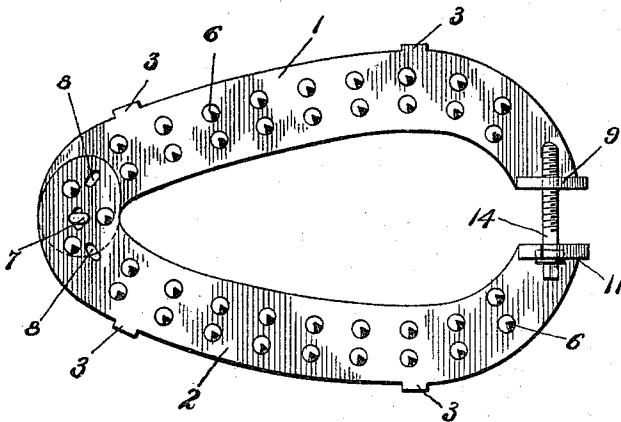
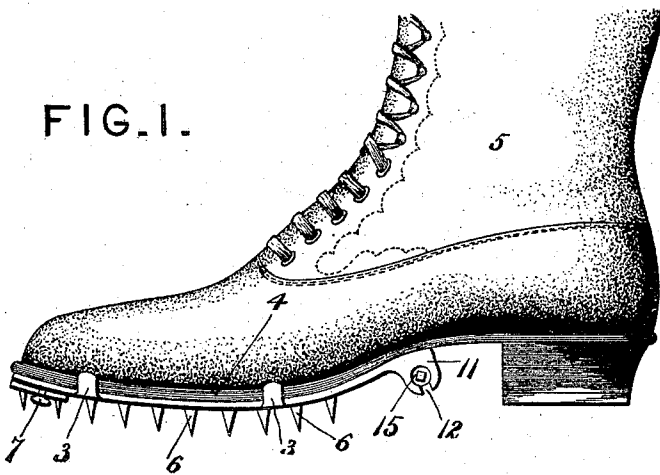


FIG. 2.

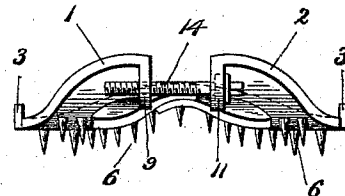


FIG. 3.

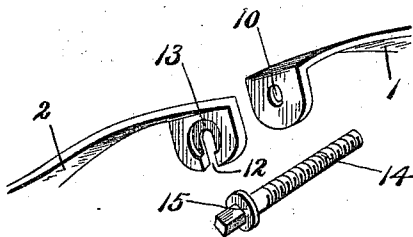


FIG. 4.

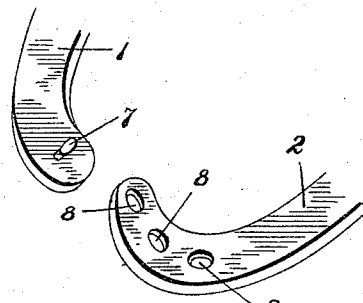


FIG. 5.

Witnesses

A. M. Paynter.
U. B. Willard.

By *his* Attorneys.

Inventor

Daniel M. Forsyth.

Cashow & Co.

UNITED STATES PATENT OFFICE.

DANIEL M. FORSYTH, OF FRANKLIN, INDIANA.

ICE-CREEPER.

SPECIFICATION forming part of Letters Patent No. 572,975, dated December 15, 1896.

Application filed February 8, 1896. Serial No. 578,595. (No model.)

To all whom it may concern:

Be it known that I, DANIEL M. FORSYTH, a citizen of the United States, residing at Franklin, in the county of Johnson and State of Indiana, have invented a new and useful Ice-Creeper, of which the following is a specification.

This invention relates to devices to be applied to the soles of shoes in icy and sleety weather or when the roadway is covered with ice and snow to prevent the wearer from slipping and sliding, thereby enabling the pedestrian to walk upon the slippery surface with the same assurance as upon the street or pavement under ordinary conditions.

The object of the improvement is to facilitate the removal of the device from the shoe and provide for its ready and quick adjustment to different-sized shoes and its application thereto when required for use, and to enable the contrivance to be reduced to a small compass to be conveniently carried in the pocket or laid aside when not required for immediate use, so as not to present a bulky and untidy appearance.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a side elevation showing the invention applied. Fig. 2 is a bottom plan view thereof. Fig. 3 is a rear end view. Fig. 4 is a detail view of the rear end portions of the sole-plates, having the binding-screw detached and illustrated in connection therewith. Fig. 5 is a detail view showing the pivotal and adjustable connection between the front ends of the sole-plates.

Corresponding and like parts are designated hereinafter and referred to in all the figures of the accompanying drawings by the same reference characters.

The sole-plates 1 and 2 oppositely curve to conform to the edge portions of the sole of a boot or shoe and may be formed in any con-

venient way, preferably by being malleably cast, and in order to adapt the device to different-sized shoes the said plates are adjustably connected at their front ends in such a manner as to admit of the rear ends of the plates being separated or brought together to clamp the lugs or clips 3 at the outer edges of the sole-plates against the edges of the sole 4 of the boot or shoe 5.

The lower face or side of the sole-plates is roughened, preferably by having spurs or points 6 formed thereon at the time of casting the plates, and these spurs or points entering the icy surface will prevent the wearer from slipping, as will be readily understood. The lugs or clips 3 are an integral part of the sole-plates and are provided at the outer edges thereof, and are disposed so as to come upon opposite sides of the swell of the sole, so as to prevent any longitudinal movement of the device after it is properly adjusted and applied to the boot or shoe.

The front ends of the sole-plates are pivotally connected in such a manner as to admit of the said ends being separated or brought together to adapt the device to be fitted to shoes of different sizes. While any means may be employed to effect this result, those shown are preferred, and consist of a stud 7, applied to or formed with the sole-plate 1, and a series of openings 8 in the plate 2 to receive the said stud 7, the stud and openings being elongated or oblong in form and the edges of the stud being notched or undercut, so that after passing the stud through one of the openings 8 and giving the plates a relative turn, so as to cause the stud to extend crosswise of the opening, the plates will be secured, as will be readily understood.

A lug 9 is provided at the rear end of the plate 1 and has a threaded opening 10, and a companion lug 11 is formed with the plate 2 and has a slot 12 and a depression 13 at the inner end of the slot and on the outer side or face of the lug. A binding or clamp screw 14, having a head 15, is adapted to screw into the threaded opening 10 and have its head 15 engage with and enter the depression 13 of the lug 11, so as to draw the rear ends of the sole-plates together and cause the lugs or clips 3 to grip the edges of the sole 4, the end of the binding-screw adjacent to the head 15

being angular or otherwise constructed so as to receive a key or suitable instrument for rotating the said binding-screw when it is required to clamp or release the sole-plates.

- 5 The lugs 9 and 11, as also the binding-screw, are disposed to come opposite the hollow or shank of the shoe, so as not to interfere with or impede the movements of the wearer. When it is required to remove the device from
10 the boot or shoe, the binding-screw is loosened sufficiently to enable its head 15 to be disengaged from the depression 13, and by slipping the said binding-screw through the slot 12 the rear ends of the sole-plates can be readily and
15 quickly separated to permit the detachment of the device from the shoe, and for storing the sole-plates can be turned until the stud 7 registers with its opening 8, after which the said plates can be separated and placed the
20 one upon the other, so as to occupy a minimum amount of space.

A device constructed substantially as herein set forth is effective for the purpose designed and can be cheaply and economically
25 manufactured, and, being adjustable, can be applied to different-sized shoes, and provides an ice-creeper that can be quickly reduced to a compact form for laying aside or carrying in the pocket.

- 30 Having thus described the invention, what is claimed as new is—

1. A device to prevent a person from slipping on icy surfaces, comprising sole-plates roughened on their lower sides and having
35 lugs or clips at their outer edges, one of the plates having a series of oblong openings at its front end, and the other plate having a stud at its front end of corresponding shape to the said openings and having its edges
40 notched or undercut to make adjustable and pivotal connection with any one of the said series of openings in the manner set forth, and means for drawing the rear ends of the

plates together to clamp the said lugs or clips upon the edges of the sole, substantially as 45 specified.

2. An antislipping device to be applied to the sole of a boot or shoe, the same comprising sole-plates having pivotal connection at their front ends and formed with pendent 50 lugs at their rear ends, one of the lugs having a threaded opening, and the other lug having a slot extending through its edge and a recess in its outer side, and a clamp-screw removably fitted in the said slot and having 55 a head to enter the recess of the slotted lug and adapted to screw into the threaded opening of the other lug, substantially as and for the purpose set forth.

3. An antislipping device to be applied to 60 the sole of a boot or shoe, comprising sole-plates having lugs or clips at their outer edges and roughened on their lower sides, a series of oblong openings at the front end of one plate, a stud of oblong form applied or formed 65 on the front end of the opposite plate and having its edges notched or undercut, and adapted to make adjustable and pivotal connection with any one of the said series of oblong openings, pendent lugs at the rear ends of the 70 plates, one lug having a threaded opening, and the other lug a slot and a recess in its outer side, and a clamp-screw adapted to operate in the said threaded opening of the apertured lug and removably fitted to the slot- 75 ted lug, and having a head to enter the said recess, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 80 the presence of two witnesses.

DANIEL M. FORSYTH.

Witnesses:

THOMAS J. SPEARS,
SAM H. HARDIN.