No. 896,158. PATENTED AUG. 18, 1908.

W. J. ROCHE.

ICE CREEPER.

APPLICATION FILED MAY 11, 1908.

Fig. 1.

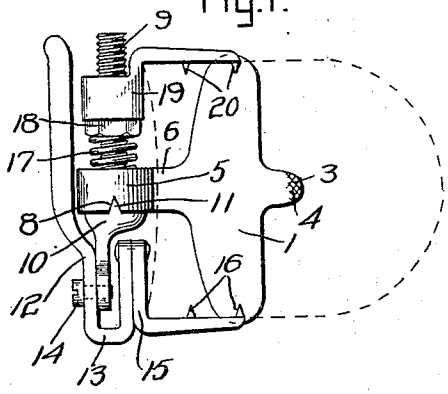
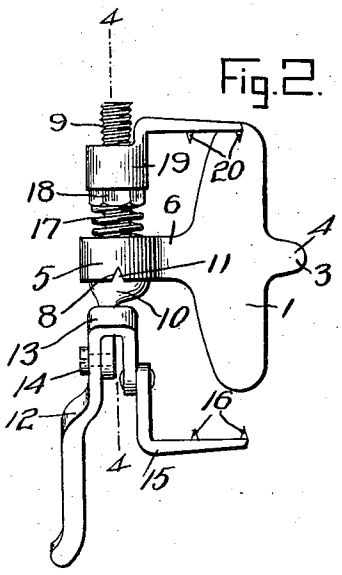


Fig. 2.



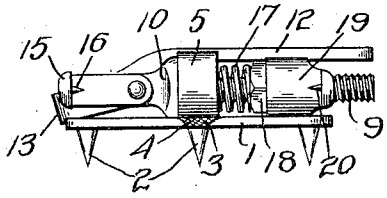


Fig. 3.

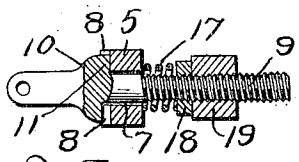


Fig. 4.

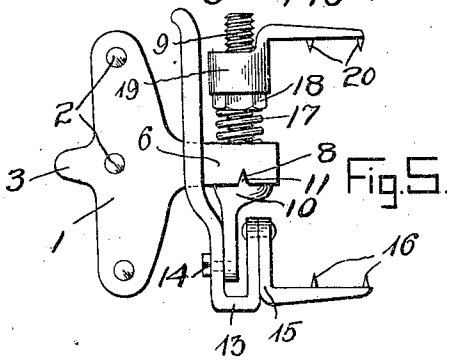


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

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ICE-CREEPER.

No. 896,158. Specification of Letters Patent. Patented Aug. 18, 1908.

Application filed May 11, 1908. Serial No. 432,109.

To all whom it may concern:

Be it known that I, WILLIAM JANSON ROCHE, a citizen of the United States, residing at New Bethlehem, in the county of Clarion and State of Pennsylvania, have invented certain new and useful Improvements in Ice-Creepers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to ice creepers, and particularly to that type which are to be attached to the heel and be removed therefrom when not in use.

The object of the invention is the provision of a device of this character which may be cheaply constructed, which will be thorough and efficient in operation and which will be expeditious and out of the way.

A further object of the invention is the provision of novel means for clamping the device upon the heel, and for adjusting the clamping member to different sized heels.

A still further object of the invention is the provision of means whereby the device may be thrown to inoperative position with its engaging points turned into the instep, and with means for holding the same in operative and inoperative positions.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a horizontal section taken through a shoe heel just above the creeper, Fig. 2 is a top plan view of the device disengaged from the heel, Fig. 3 is a rear elevation, Fig. 4 is a sectional view on the line 4—4 of Fig. 2, and Fig. 5 is a top plan view of the device disengaged from the heel in inoperative position.

Referring more especially to the drawings, 1 represents the heel plate, which is provided on its under side with the usual engaging prongs 2, and its rear with a projecting lip 3, having a serrated and beveled surface 4, to permit of the proper engagement of the device by the hand or with a tool, so as to throw the heel plate into an inoperative position, as will be hereinafter described. The forward portion of the heel plate is provided with an upstanding lug 5, connected to the plate by a reduced neck 6, and having a central horizontal aperture 7, and a side face provided with limiting notches 8. A clamp shaft 9 is passed through the aperture 7, and has a headed extension 10, which carries wedge-shaped lugs 11, to engage the notches 8 formed in the side face of the lug 5. Pivoted to this end of the shaft is an operating lever 12, having a U-shaped bend 13, formed at its inner end, through which passes the pivotal bolt 14, so as to permit rotation of these parts. The inner end of the U-shaped bend is provided with a pivoted clamp 15 approximately L-shaped in formation and having upon its heel engaging face a plurality of entering pins 16. The opposite end of the shaft is surrounded by a spiral spring 17, which is held in position against the lug 5 by a locking nut 18, threaded upon the shaft between the lug 5 and the heel clamp 19. This latter heel clamp is threaded upon the shaft, as is shown in Fig. 4 so as to be adjustable for different sized heels, and is provided, as is its opposite or co-acting member with entering pins 20.

In applying the device to the shoe the lever is swung downwardly and around to the position shown in Fig. 2 where it will be seen that the clamp 15 is fully extended in position to engage the heel of the shoe. By throwing the lever back to its original position shown in Fig. 1, the entering pins 16 and 20 of the respective clamps are made to engage and enter the heel so as to hold the device in proper position. Normally the heel plate is underneath the heel with its upper flat surface engaged thereby, but when it is desired to dispense with the use of the creeper the heel plate may be engaged by the thumb or by a suitable tool and turned upon the shaft 9 so as to throw the heel plate into the space beneath the instep. In this action the notched side of the lug 5 rides over the lugs 11 against the tension of the spring until they reënter at the half turn so as to hold the plate in inoperative position.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of

this invention as defined in the appended claims.

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

In an ice creeper, a shaft, a heel plate pivoted thereto, a heel clamp adjustably mounted upon the shaft, a lever pivoted to the shaft and having a U-shaped crank integrally formed thereon, and a heel clamp pivotally carried at the extremity of said crank.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM JANSON ROCHE.

Witnesses:

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