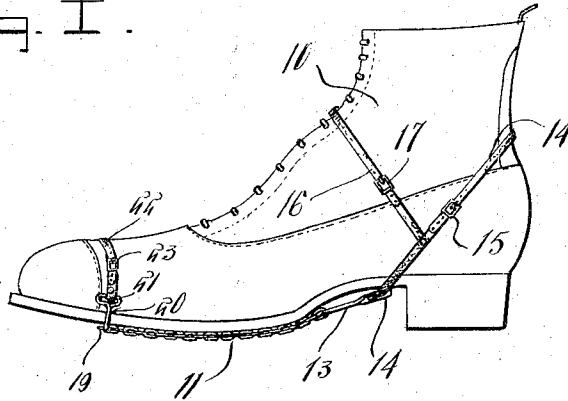


1,042,516.

Fig. I.



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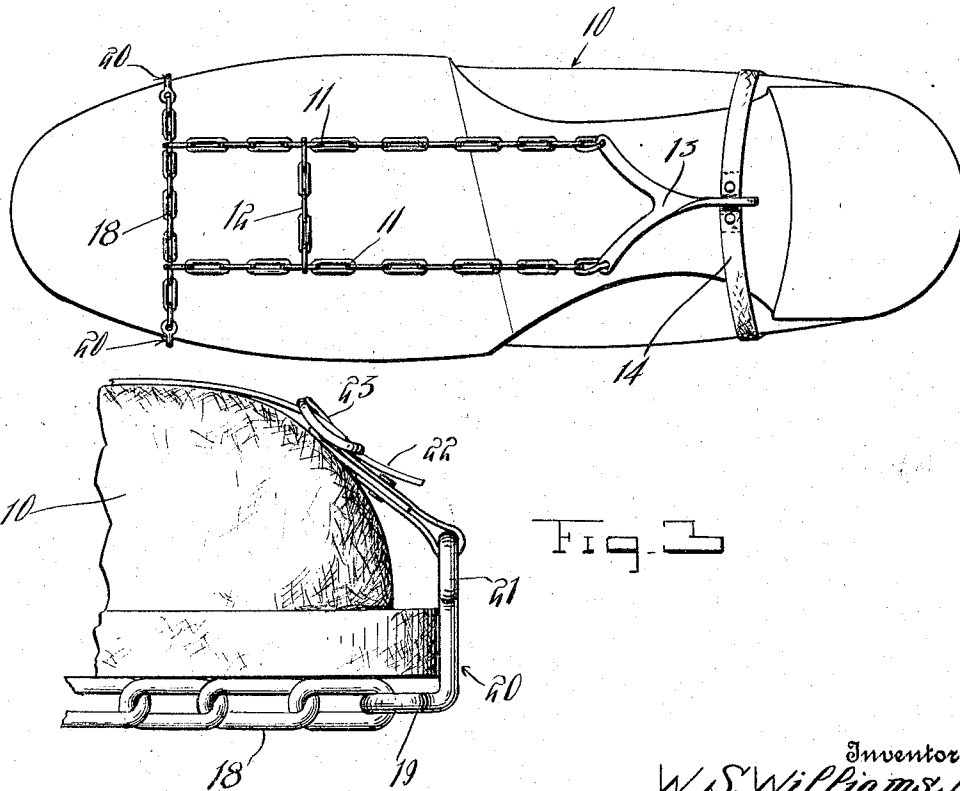


Fig. 2

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UNITED STATES PATENT OFFICE.

WILLIAM S. WILLIAMS, JR., OF JERSEY CITY, NEW JERSEY.

DEVICE TO PREVENT SLIPPING.

1,042,516.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed January 30, 1912. Serial No. 674,322.

To all whom it may concern:

Be it known that I, WILLIAM S. WILLIAMS, Jr., a citizen of the United States, residing at Jersey City, in the county of Hudson, State of New Jersey, have invented certain new and useful Improvements in Devices to Prevent Slipping; and I do hereby 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.

This invention relates to ice creepers and has for an object to provide a light, strong, adjustable and flexible creeper that may be easily and quickly applied to the shoe and that will permit of perfect freedom of movement of the wearer while at the same time preventing slipping without undue strain upon the foot.

With the above object in view the invention consists of certain novel details of construction and combination of parts herein-after fully described and claimed, it being understood that various modifications may be made in the minor details of construction within the scope of the appended claim.

In the accompanying drawing forming part of this specification:—Figure 1 is a side elevation of a shoe equipped with my improved anti-slip device. Fig. 2 is a bottom plan view of the shoe and device applied. Fig. 3 is a fragmentary detail view showing the manner of securing the toe ends of the chains.

Referring now to the drawing in which like characters of reference designate similar parts, 10 designates an ordinary shoe.

The creeper consists of a pair of parallel link chains 11 adapted to extend longitudinally and lie flat upon the bottom of the shoe sole. The chains are connected upon the ball of the sole by a short cross chain 12. The rear ends of the chains 11 terminate at about the center of the arch of the sole, and are connected to the branches of a Y-shaped attaching member 13 which lies entirely within the edges or borders of the arch. The shank of the attaching member is provided with a slot through which the bight

of a strap 14 is engaged, the strap being directed upwardly and rearwardly so as to engage the back strap of the upper as clearly shown in Fig. 1, the strap being equipped with the usual buckle 15 for tightening the strap to snugly fit the shoe. A strap 16 is terminally secured to the strap 14 near the heel of the shoe, and arches over and snugly engages the instep of the upper, the strap 16 being provided with the usual buckle 17 for adjusting this strap to position. The forward ends of the chains 11 are connected by a cross chain 18 which extends to the edges of the sole near the toe, and the terminal links of the chain 18 are engaged with eyes 19 of substantially L-shaped attaching members 20 having eyes 21 adapted to receive the terminals of a toe strap 22, the latter being equipped with the usual buckle 23 for adjusting the strap about the toe of the shoe.

A creeper constructed as above described will be light and strong and may be quickly applied to and detached from the shoe, and when detached may be folded compactly for carrying in the pocket. Furthermore, the creeper will be flexible and will conform to the movements of the foot so that the latter will not be cramped or sprained.

What is claimed, is:—

A creeper adapted to be applied to a shoe and comprising substantially parallel chains adapted to extend longitudinally upon the bottom of the shoe sole, a substantially Y-shaped attaching member having its branches connected to the rear ends of said chains, an ankle strap carried by the shank of said Y-shaped attaching member, a cross chain connecting the forward ends of said chains, substantially L-shaped attaching members carried upon the ends of said cross chain and adapted to hook over the edges of the shoe sole, and a toe strap connecting said L-shaped attaching members.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM S. WILLIAMS, JR.

Witnesses:

FLORENCE M. WILLIAMS,
SABINA WILLIAMS.