

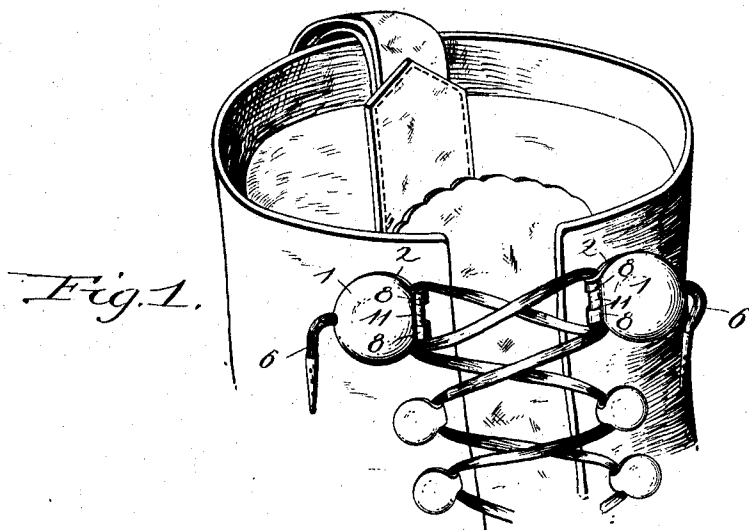
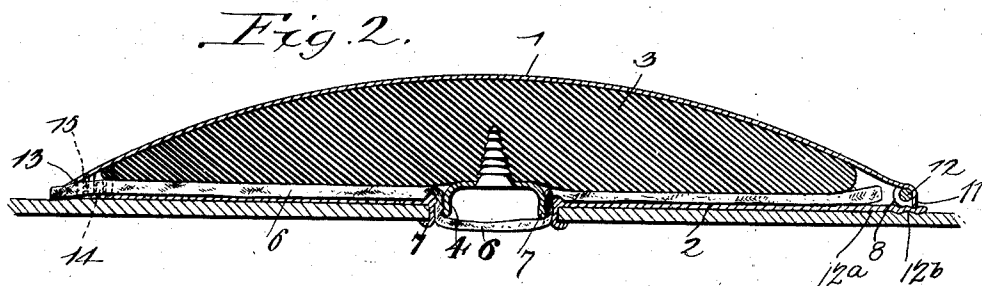
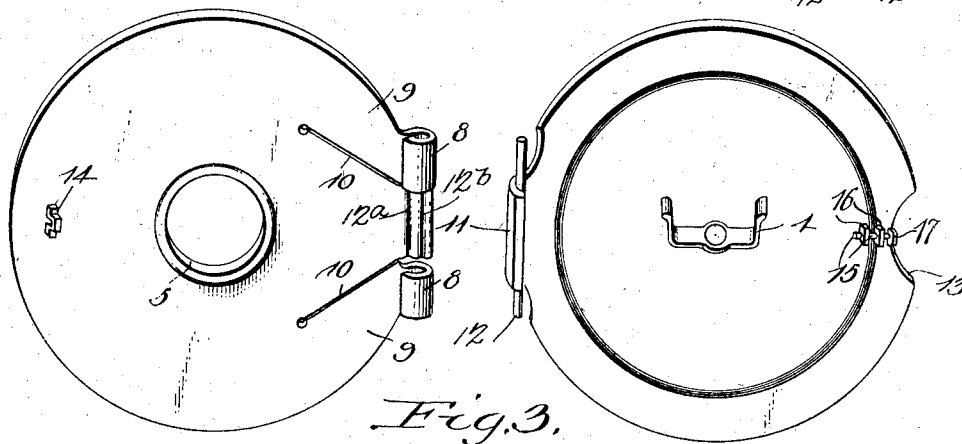
No. 736,742.

PATENTED AUG. 18, 1903.

E. L. KNAPP.
SHOE FASTENING.

APPLICATION FILED SEPT. 22, 1902.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

EUGENE L. KNAPP, OF CHITTENDEN, VERMONT.

SHOE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 736,742, dated August 18, 1903.

Application filed September 22, 1902. Serial No. 124,397. (No model.)

To all whom it may concern:

Be it known that I, EUGENE L. KNAPP, a citizen of the United States, residing at Chittenden, in the county of Rutland and State of Vermont, have invented a new and useful Shoe-Fastening, of which the following is a specification.

This invention relates to shoe-fastenings.

The object of the invention is in a ready, simple, thoroughly-feasible, and practical manner to secure the ends of a shoe-lacing against loosening when the shoe is laced up and without the necessity of uniting the terminals by tying, as usual.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a shoe-fastening, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit thereof.

In the drawings, Figure 1 is a view in perspective of the upper portion of a shoe equipped with the fastening of the present invention. Fig. 2 is a longitudinal vertical sectional view, on an enlarged scale, through one of the fastenings. Fig. 3 is a collective detail view in perspective exhibiting the parts of the fastening separated and viewed from the inner side thereof.

In the accompanying drawings, and more particularly Fig. 2 thereof, 1 designates the cap of the fastening, and 2 the base thereof, these parts being by preference made of resilient metal and associated by a peculiar form of hinge, presently to be described. The cap has assembled with it in any preferred manner a filling 3, of soft rubber, to the central portion of which is connected in any preferred manner a clamp or locking device 4 to engage the walls of an orifice 5 in the base 2, the arms of the locking-device

being of less transverse extent than the diameter of the orifice in order to permit the lacing 6 to be clamped therebetween, as clearly shown in Fig. 2. The walls of the orifice 5 constitute an eyelet which extends through the shoe-leather and is upset or swaged, as at 7, to hold it assembled therewith. The base on one side carries two hinge members 8, constituting the terminals of two spring-tongues 9, formed by two incisions 10, which diverge from the periphery of the base inward toward the orifice, the function of the tongues being to permit the locking device 4 to be forced through the orifice and bind the lacing against the walls thereof, it being seen that without the provision of these tongues objectionable resistance would be presented to the seating of the locking device, which might result in the straining of the hinge members or their breakage. As herein shown, the hinge members 8 constitute an integral continuation of the tongues; but it is to be understood that the invention is not to be limited to this precise construction, as the hinge members may be made as separate elements and associated with the tongues in any preferred manner.

The cap 1 is provided on one side with a curved extension 11, which may be integral therewith or secured thereto and with which is associated in any preferred manner a hinge member in the nature of an ordinary pin 12 to engage the hinge members 8 of the base, as clearly shown in Fig. 2. When the hinge members are assembled and the device is positioned upon the shoe, the hinges constitute studs around which the lacing is passed, as clearly shown in Fig. 1. The tongue 12^a, formed by the incisions 10, has its terminal provided with transverse crimps 12^b, to be engaged by the curved extension 11, thus to hold the cap open or closed, as the case may be, it being understood that the tongue 12^a is flexed upward, thereby always to engage the extension. The cap, in diametrical alignment with the hinge member 11, is provided with a notch 13, through which the free end of the lacing projects, the provision of the notch permitting the cap to be closed down closely upon the base, and thus present a neat and finished appearance. Ordinarily the frictional contact between the arms of

the locking device, the lacing, and the walls of the orifice 5 will be sufficient to hold the cap in its closed or locked position; but if desired to render the structure absolutely held against unlocking a latch or locking device may be employed for the purpose, comprising a keeper 14, secured to the base, to be engaged by a latch 15, working in two guides 16, carried by the under side of the cap and having a head 17, disposed adjacent to the notch 13 and by which the latch is operated. It will be seen that when the latch is in locked engagement with the keeper no matter what strain may be applied to the lacing or the upper the cap will be positively held against accidental unlocking.

In the use of the device the caps are released and the lacing turned around the hinges, after which the cap is sprung to position, binding the lacing firmly between the walls of the orifices in the bases of the fastening, the ends of the lacing projecting outward through the notches 13. When the shoe is to be removed, it will be only necessary to grasp the ends of the lacing and draw outward upon them, when the caps will be released from engagement with the bases.

The parts of the device can be cheaply made, as they can be struck up from any suitable metal, and their application to a shoe-upper does not require any change in its structural arrangement, as the ordinary openings provided for the common form of lacing-stud may be employed for accommodating the eyelets of the bases.

The device will be found thoroughly efficient and practical in use, ornamental in character, and will in a simple and practical manner obviate separation of the ends of the lacing in the use of the shoe.

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

1. A shoe-fastening comprising a base provided with an eyelet, and a cap hinged to the base and provided with a locking device having resilient arms to engage the walls of the eyelet.

2. A shoe-fastening comprising a base provided with a centrally-disposed eyelet and with resilient hinge members, and a cap provided with resilient locking means to engage the eyelet and with a hinge member to be associated with the corresponding members of the base.

3. A shoe-fastening comprising a base provided with a centrally-disposed eyelet and on one edge with resilient hinges, and a cap provided with a hinge member to be assembled with the corresponding members of the base, with resilient locking means to engage the said eyelet, and with a peripheral lacing-receiving notch.

4. A shoe-fastening comprising a base provided with a centrally-disposed eyelet and with resilient hinge members, and a cap provided with a hinge member to engage the corresponding members of the base, and with a filling carrying a resilient locking device to engage the walls of the eyelet.

5. A shoe-fastening comprising a base provided with an eyelet, on one edge with resilient hinge members and on its upper side with a keeper, and a cap provided with a hinge member to be assembled with the corresponding members of the base, with a resilient locking device to engage the eyelet, and with a latch to engage the keeper.

6. A shoe-fastening comprising a base provided with a centrally-disposed eyelet, with resilient hinge members, and with a tongue disposed between the hinge members and provided with transverse crimps, and a cap provided with a hinge member to engage the corresponding members of the base, with a locking device to engage the walls of the eyelet, and with an extension to engage the crimps on the base to hold the cap either open or closed.

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

EUGENE L. KNAPP.

Witnesses:

GEORGE A. BRIGHAM,
GRACE MURPHY.