(No Model.)

C. MOSCHEL & F. KOCH.

LACE FASTENING HOOK.

No. 494,821. Patented Apr. 4, 1893.

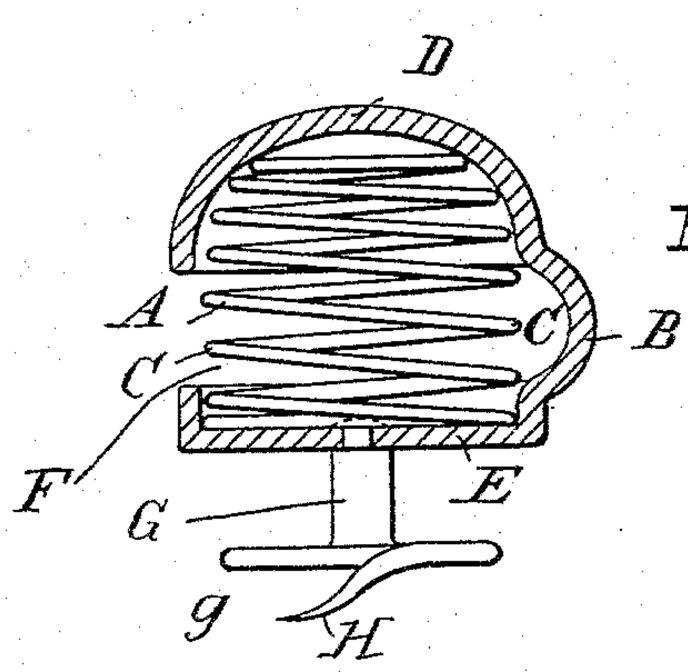

Fig. 1.

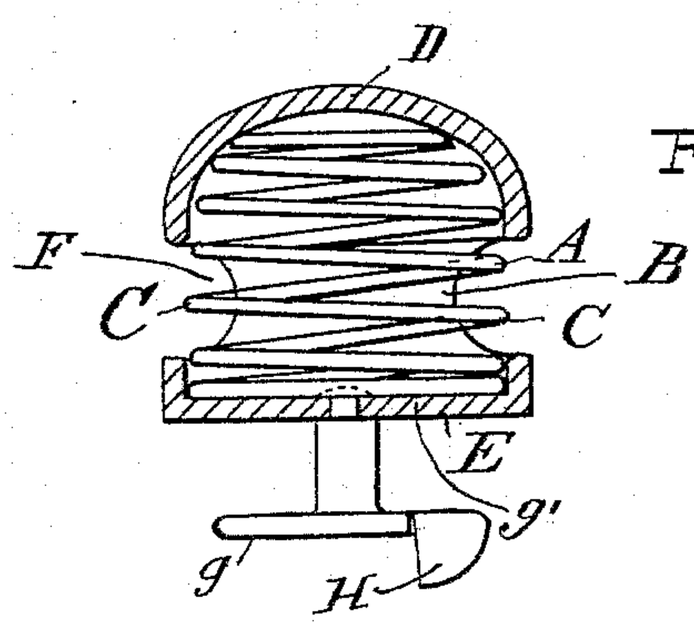

Fig. 2.

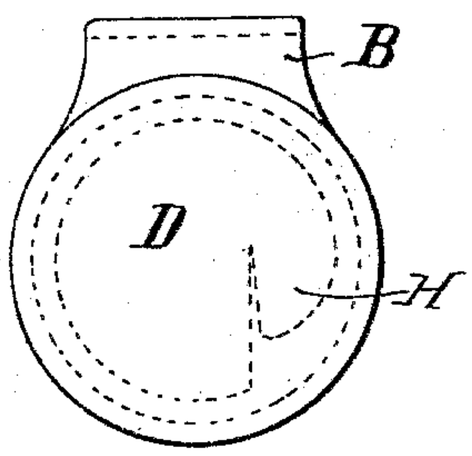

Fig. 3.

WITNESSES:
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UNITED STATES PATENT OFFICE.

CARL MOSCHEL, OF OFFENBACH-ON-THE-MAIN, AND FRIEDRICH KOCH, OF FRANKFORT-ON-THE-MAIN, GERMANY.

LACE-FASTENING HOOK.

SPECIFICATION forming part of Letters Patent No. 494,821, dated April 4, 1893.

Application filed January 18, 1893. Serial No. 458,790. (No model.) Patented in Germany October 27, 1891, No. 64,237, and in France October 28, 1891, No. 217,070.

To all whom it may concern:

Be it known that we, CARL MOSCHEL, a resident of Offenbach-on-the-Main, and FRIEDRICH KOCH, a resident of Frankfort-on-the-Main, Germany, subjects of the Emperor of Germany, have invented new and useful Improvements in Spring-Hooks for Boots, Shoes, Gloves and the Like, (for which Letters Patent have been obtained in Germany, No. 64,237, dated October 27, 1891, and in France, No. 217,070, dated October 28, 1891,) of which the following is a specification.

Reference is had to the accompanying drawings, forming part of this specification, in which—

Figures 1 and 2 are central vertical sections, at right angles to each other, of our improved fastening device or hook, and Fig. 3 is a plan view thereof.

The present invention relates to fastening devices for shoe lacings or similar cords.

The main object is to provide a device of the character indicated in which the fastening can be easily accomplished, and from which the lacing or cord cannot readily become accidentally detached, and the invention consists in a fastening device hereinafter more fully described and set forth in the claim.

The fastening device has a hook shaped body B, the upper and lower parts D, E being of cup form, with the open sides of the cups facing each other. The side of the hook connecting these parts D, E is sufficiently narrow to leave deep notches F, into which the lacing or cord to be secured can be slipped.

According to our invention we put within the hook a spiral spring A, the ends thereof resting in the upper and lower cups, as shown in Figs. 1 and 2. This spring serves as a spring clamp to hold a lacing or cord placed therein. The hook B is provided at the end E with a shank G, secured thereto in any suitable manner. Upon the lower end of the shank G is an enlargement *g* which is adapted to be secured to the under side of the shoe or other suitable article. As shown, this enlargement or button like portion *g* is provided with a bent lip H formed by slitting said enlargement. In securing the fastener in place this lip can be inserted through a hole in the shoe, or other article and the device turned, thereby being carried into place by a screw action, in the well known manner, after which the lip H may be bent into the same plane as the rest of the enlargement *g*.

The fastening devices described are used by placing them on a shoe, glove, or other article, in a position where it is desired to secure the lacing, and pulling the lacing to be secured into the hook, thereby causing such lacing to press apart two adjacent spirals C of the spring A, thus admitting the lacing into the hook. The lacing should be pulled hard enough to carry it well back into the hook, so that the forward ends of said adjacent spirals may approach each other, thereby rendering escape of the lacing more difficult. While this spring action of the spiral on the lacing should be sufficiently strong to prevent accidental slipping of the lacing, it is such as to allow the lacing to be pulled out with moderate exertion. It is evident that, the wire from which the spiral spring is formed being round, no sharp edges will exist to wear the lacing.

The spiral springs above described will be sufficiently held in place by merely inserting the opposite ends in the two cup shaped parts D, E, but they may be otherwise secured, if desired. In practice we prefer to flatten outer surface *g'* of the end spiral so that it will rest flatly against the supporting cup—but this is not essential.

From the description given it will be seen that it requires no especial skill to secure a lacing in this fastening device, and no particular effort to disengage said lacing. At the same time, the lacing is securely held so that it will not accidentally slip or loosen. Evidently the form of the hook or button may be varied without departing from our invention. But the essential feature is that the device should have means for holding the ends of the spiral springs so that they cannot move apart or away from each other, at the same time leaving the spirals open, so that the lacing can be pulled in between two adjacent turns of the spiral, as above set forth.

What we claim is—

A cord or lacing fastening device consist-

ing of a hook shaped body adapted to be secured to the shoe or other article and a spiral spring within the hook, between spirals of which a cord or lacing may be drawn, thereby being grasped and held by spring action, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CARL MOSCHEL.
FRIEDRICH KOCH.

Witnesses:
FRANZ HASSLACHER,
FRIEDRICH CÖRRELL.