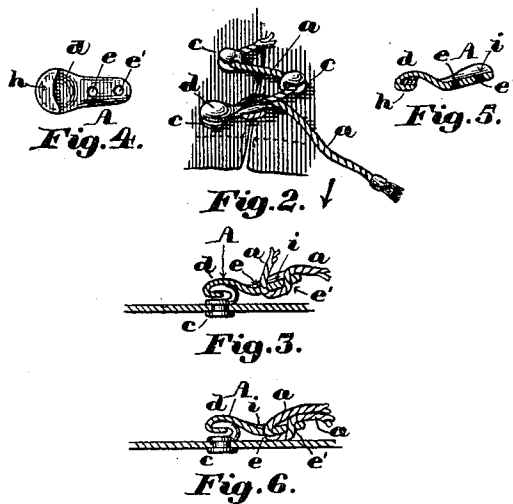
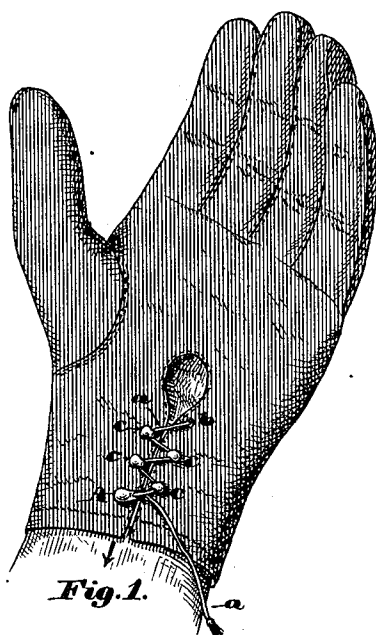


(No Model.)

E. M. POPE.
LACING CORD FASTENER.

No. 368,421.

Patented Aug. 16, 1887.



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

EVERETT M. POPE, OF QUINCY, ASSIGNOR TO MELLEN BRAY, OF NEWTON,
MASSACHUSETTS.

LACING-CORD FASTENER.

SPECIFICATION forming part of Letters Patent No. 368,421, dated August 16, 1887.

Application filed January 6, 1887. Serial No. 223,568. (No model.)

To all whom it may concern:

Be it known that I, EVERETT M. POPE, of Quincy, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Lacing-Cord Fasteners, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to fastenings for securing the ends of lacing-cords after the article has been laced, and is especially adapted to use on boot and glove lacings in which the cord is passed around studs or hooks; and it consists in a metal coupling-hook having a concavo-convex head provided upon its concave side with an inwardly-projecting lip to engage with the under side of the outer head of a lacing stud or hook, and having an arm projecting from one side of said hook and provided with two holes at different distances from the center of the concavo-convex head to receive the lacing-cord, said arm being curved transversely, so as to form a longitudinal groove in its upper side, as will be more fully described.

It further consists in the combination, with a series of lacing studs or hooks set alternately in opposite sides or parts of the thing to be laced, of a lacing-cord secured at one end to the article to be laced and arranged and adapted to engage alternately with the hooks or studs upon the opposing parts of the article to be laced, and a metal coupling-hook mounted and movable upon said lacing-cord by means of two holes formed therein, through which said cord passes, and provided with a concavo-convex head having upon its concave side an inwardly-projecting lip or flange, all so constructed and arranged that the head of said coupling-hook may be applied to the outer surface of one of said studs or hooks, while said lip or flange engages with the inner surface of the outer head of said stud or hook, as will be more fully described.

Figure 1 of the drawings is a perspective view of a hand with a glove thereon, having my invention applied thereto. Fig. 2 is a similar view of a small portion of the glove with my improved fastening applied thereto, drawn to an enlarged scale. Fig. 3 is a longi-

tudinal section through the coupling-hook or fastener and a portion of the glove, and showing the lacing and a portion of the cord in elevation, the parts being shown in the position they occupy when the fastening-hook has been made to engage with the hook attached to the glove and before the cord has been drawn taut. Fig. 4 is an inverted plan of the coupling or fastening hook; Fig. 5, a longitudinal section of the same; and Fig. 6 is a section similar to Fig. 3, except that the parts are shown in the positions they occupy when the lacing-cord has been drawn taut and into position to fasten the same.

In the drawings, *a* is the lacing-cord, secured by one end to the glove at *b*.

c c are the lacing studs or hooks, secured to the glove or other article to be laced in any well-known manner.

A is the coupling or fastening hook, having at one end the concavo-convex cap *d*, of a diameter somewhat greater than the outer head of the lacing-stud *c* and between said cap, and its other end having formed therein two holes, *e* and *e'*, at different distances from the center of said cap, as shown in Figs. 3, 5, and 6. The cap end of said fastener *A* is provided upon its concave side with the inwardly-projecting lip *h*, covering nearly one-half of the area of said cap portion, as shown in Figs. 3 and 4. That portion of the coupling or fastening hook in which the holes *e* and *e'* are formed is curved transversely, or otherwise constructed, so as to form in its outer surface a longitudinal groove, *i*, along which the cord *a* extends when drawn taut after the cap end of the fastening-hook has been applied to the lacing hook or stud *c*, as shown in Figs. 2 and 6.

The coupling-hook *A* is mounted upon the lacing-cord *a* by passing the free end of said cord through the hole *e* inward and then outward through the hole *e'*, when said coupling-hook may be moved along said cord to any desired position thereon.

The operation of my invention is as follows: The coupling or fastening hook *A* being slipped along the lacing-cord *a* to a point near its free end, said cord is passed alternately about the lacing hooks or studs *c c* upon opposing parts of the article to be laced until only

one lacing-hook *c* remains disengaged, when the cap end of the fastening-hook *A* is placed over said disengaged lacing hook or stud in such a manner that its lip *h* passes between the
 5 outer head of said hook or stud *c* and its base-collar, as shown in Figs. 3 and 6, when the cord *a* is drawn taut in the direction of the length of said fastening-hook *A* and toward the last hook *c* about which the cord *a* was
 10 passed, the result of which is to cause the under side of the fastening-hook or the portion of the cord which is beneath it to be pressed hard upon the article being laced, and the portions of the cord which are outside of said
 15 fastening-hook to rest in the groove *i* with that portion of said cord which extends from the last hook *c* about which it was passed to the hole *e* in said fastening-hook, pressing upon that portion of the cord which is just outside
 20 of the hole *e'*, thereby securely fastening the cord so as to effectually prevent it from unlacing accidentally.

When it is desired to unlace the glove, boot, or other article, it is only necessary to
 25 seize the end of the cord *a* and pull it in the direction indicated by the arrow on Figs. 1 and 2 to draw the under portion of the cord from beneath the outer part resting in the groove *i* and turn the fastening-hook *A* about
 30 a quarter of a revolution about the center of the head of the hook *c* with which it is engaged, when the two hooks will be disengaged and the cord can be readily unlaced from the other studs or hooks.

35 It will be seen by reference to Figs. 3, 5, and 6 that that portion of the fastening-hook *A* in which the holes *e* and *e'* are made is somewhat thicker than the hook end. This is desirable in order that the holes *e* and *e'* may be so
 40 formed as not to cut the lacing-cord, which is done by rounding the corners of the metal around said holes, as shown in Fig. 3.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. As a means of securing the end of a lacing-cord, a metal coupling-hook having a concavo-convex head provided with an inwardly-projecting lip upon its concave side and an arm projecting radially from said head, and having formed in the outer surface thereof a longitudinal groove, and two holes through
 50 said arm at different distances from said head to receive the lacing-cord, substantially as described.

2. In combination with a series of lacing studs or hooks set alternately in opposing parts of an article to be laced and a lacing-cord secured by one end to the article to be laced, a metal coupling or fastening hook having perforations by which it may be mounted
 60 and movable upon said cord, and provided with a concavo-convex head having an inwardly-projecting lip upon its concave side, and with a groove in its outer surface radial to said head, substantially as described. 65

3. In combination with a series of lacing studs or hooks set alternately in opposing parts of an article to be laced and a lacing-cord secured by one end to said article, a metal coupling having perforations by which
 70 it may be secured by one end to said lacing-cord at or near its free end, and provided at its other end with a concavo-convex head having upon its concave side an inwardly-projecting lip to engage with the inner surface of the outer head of a lacing stud or hook, substantially as described. 75

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 1st day of January, A. D. 1887.

EVERETT M. POPE.

Witnesses:

R. A. COLLINS,

WALTER E. LOMBARD.