

(No Model.)

E. A. PUMYEA.  
LACE FASTENER.

No. 523,377.

Patented July 24, 1894.

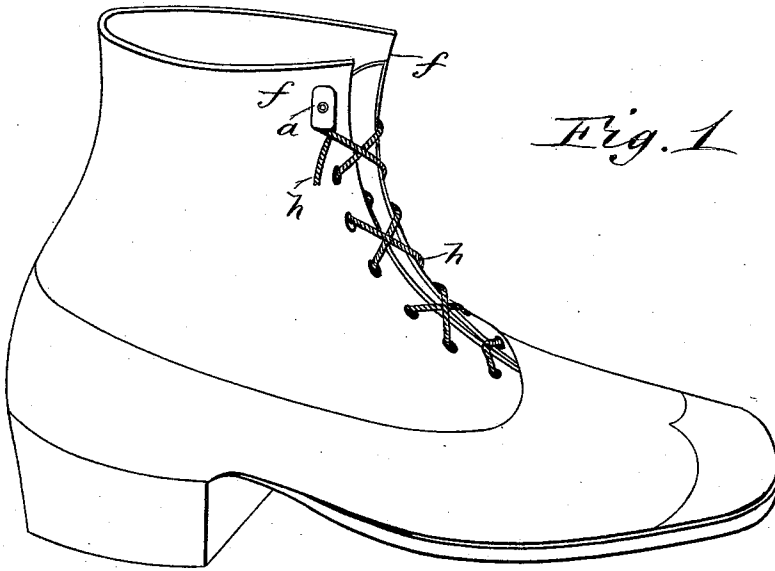


Fig. 1

Fig. 2

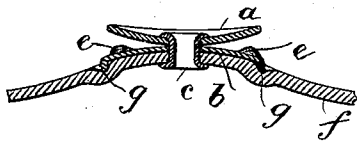


Fig. 3

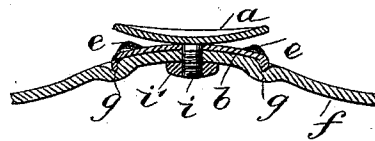


Fig. 4

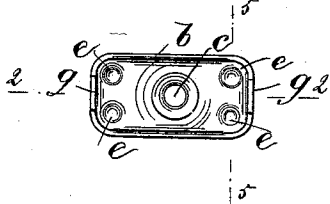


Fig. 5

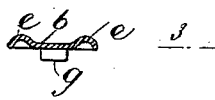
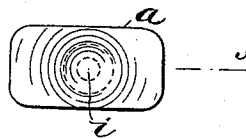


Fig. 6



WITNESSES:

*C. Neveu*  
*Co. Sedgwick*

INVENTOR

*E. A. Pumyea*  
BY *Munn & Co*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

EDWIN A. PUMYEA, OF JERSEY CITY, ASSIGNOR OF ONE-HALF TO WILLARD E. HAVERSTICK, OF RAHWAY, NEW JERSEY.

## LACE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 523,377, dated July 24, 1894.

Application filed October 10, 1893. Serial No. 487,718. (No model.)

To all whom it may concern:

Be it known that I, EDWIN A. PUMYEA, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Securing Device for Lacing-Strings, of which the following is a full, clear, and exact description.

My invention relates to an improved device for securing the ends of shoe strings and other lacing strings; and has for its object, to provide a novel, simple attachment for a shoe or glove, that will be adapted to securely retain the end portions of lacing cords or strings which have been adjusted to hold the shoes or gloves in place, and that will permit the quick and easy release of the lacings when occasion requires.

To this end, my invention consists in the construction and combination of parts, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a shoe, and the improvement in place on it, and showing a lacing string of the shoe engaged with the securing device. Fig. 2 is an enlarged sectional side view, on the line 2—2 in Fig. 4, of the improvement in preferred form attached to the flap portion of a shoe or glove. Fig. 3 is a sectional side view of the device, slightly modified in one of its details, the line of section being indicated at 3—3 in Fig. 6. Fig. 4 is an inverted plan view of the preferred form of the device shown in Fig. 2. Fig. 5 is a transverse sectional view of the lower portion of the securing device, on the line 5—5 in Fig. 4; and Fig. 6 is a plan view of the modification shown in Fig. 3.

The lacing securing device as shown in Figs. 1, 2, 4 and 5, comprises two sheet metal planchets *a*, *b*, of an oblong form and nearly equal dimensions, these main pieces being similarly dished, to produce convex surfaces on the sides that in service are oppositely located. The pieces *a*, *b*, are centrally perforated of a proper diameter to receive a tubular shank *c*, which may be an integral pro-

jection from the top plate *a*, or be formed separately and attached after insertion.

The external diameter of the tubular shank *c* is proportioned to permit it to pass through the lower plate *b*, closely engaging its central perforation, having such a length as will allow it to extend sufficiently below the lower plate for insertion through the flap of a shoe or vent portion of a glove, whereon it is affixed by circumferentially flanging it on the end with a proper tool, similar in manner to the "setting" of an eyelet.

The lower plate *b*, is furnished with four upward projections *e*, one near each rounded corner, which projections are preferably given a conical form. From each end of the lower plate *b*, a short tang *g* is downwardly projected near the transverse center, which will slightly penetrate the material the device is secured upon and prevent it from turning around.

When the device is employed to secure shoe strings, one of the improved lacing holders is affixed upon each flap *f* of a shoe, near the top and side edges at the vent, as shown in Fig. 1.

In use, each end of the lacing string *h*, being first properly drawn upon to close the shoe vent, is then wrapped around one of the improved securing devices between the convex faces of the top and bottom plates *a*, *b*, and drawn upon with sufficient force to wedge the lacing end portions into the centrally converged space that intervenes the plates, which will serve to bind the lacing ends and retain them from release until they are designedly unwrapped, the coniform projections *e*, aiding to hold the string ends from unloosening.

The modification shown in Figs. 3 and 6, represents a device having the convex faced plates *a*, *b*, detachably secured together by a threaded shank *i*, that may be hollow or solid, and that is centrally projected from the convex face of the upper plate *a* to which it is affixed by one end, the shank having a sufficient length to pass through the central perforation of the lower plate *b*, and also through the material *f*, a nut *i'* being screwed upon

the portion of the shank that extends through the portion *f*, which may be the flap of a shoe or part of a glove. The nut *v*, is thin, and rounded on its outer faces so as to avoid angles that would wear the stockings or injure the foot or wrist of the wearer of the shoe or glove, and the end of the shank *i*, should not project beyond the nut when the latter has been properly adjusted to retain the lacing holder in position.

The modified form and manner of attachment of the lacing securing device upon a shoe or glove, is provided to afford means for its detachable connection with such articles of wear, so as to permit the improvement to be readily applied to a pair of shoes or gloves that have been worn, the preferred form being adapted for the permanent attachment of the device upon shoes or gloves previous to their sale.

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

The combination with two rectangular sheet metal pieces centrally perforated, each having one convex face, one piece provided with coniform projections at its corners, and a depending tang at each end of said rectangular piece, of a securing shank passing through the perforations of both rectangular pieces and also through an article of wear engaged by the lower piece, and means to bind the ends of the shank on the top piece of the device and upon the material penetrated by the lower end of the shank, substantially as described.

EDWIN A. PUMYEA.

Witnesses:

WM. P. PATTON,  
E. M. CLARK.