(No Model.)

J. L. JOYCE. SHOE FASTENER.

No. 267,218.

Patented Nov. 7, 1882.



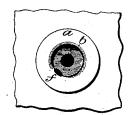






fig. 3

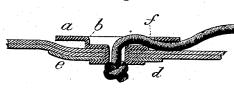
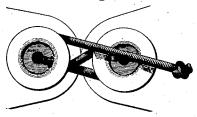


fig 4



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Joseph L. Joyce, By arty. Inventor John E Earle

## United States Patent Office.

JOSEPH L. JOYCE, OF NEW HAVEN, CONNECTICUT.

## SHOE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 267,218, dated November 7, 1882.

Application filed August 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, Joseph L. Joyce, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Shoe-Fasteners; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, an outside view of the fastener; Fig. 2, an inside view of the fastener; Fig. 3, a transverse section.

This invention relates to an improvement in devices for fastening the lacing of shoes, and is an improvement upon my invention for which application for Letters Patent was allowed August 21, 1882; and the invention consists in a stud composed of a flange and a body beneath it, upon the outside of the shoe, and so as to leave a space between the flange and the upper of the shoe, and so that the lacing may be wound around the body beneath the flange, combined with one or more fingers upon the inside of the shoe, in connection with the stud, the said finger or fingers turned outward to bear the upper toward the disk to form a clamp to hold the lacing, as more fully hereinafter

30 described.

The shoe-stud is composed of the flange a, with a concentric body, b, secured to the shoe by an eyelet or otherwise, and so as to leave a space between the upper and the flange a, as 35 seen in Fig. 3, and so that the lacing, after having engaged the fastening-studs on the shoe, may be wound around the body of the fastener. In my before-mentioned invention I constructed the flange with a notch cut from its edge in-40 ward, into which the lacing was drawn, after having been wound around the body, as a means for fastening the lacing. To avoid this cutting of the flange I place upon the inside of the upper a disk, d, which may be secured to the 45 upper by the same device which secures the outside fastening-stud, as seen in Fig. 3. This

disk is constructed with a radially-projecting finger, e, which is slightly bent outward, as seen in Fig. 3, and so as to bend the upper toward the flange a of the stud, thereby lessening the 50 distance between the edge of the flange and the upper at that point, and so that at that point the distance between the flange and upper is less than the diameter of the lacing. Hence as the lacing is wound around the body 55 it is drawn into that narrow space and gripped, the upper yielding sufficiently for the lacing to pass between it and the flange and be held by the friction of the two combined. I prefer to make the finger e elastic, so as to make a firm 60 and better grasp than can be made by the upper itself; yet I find a very good result in the rigid finger and flexible upper.

In some classes of shoes the only fastening required is at one point, as in Oxford ties and in other shoes. In this case I make two studs, alike in appearance, one for each strap, as seen in Fig. 4, and through the body I make an opening, as at f, about the size of the lacing. Then to attach the lacing I make a knot at one end, 70 run the lacing through the fastening-stud, leaving the knot upon the inside, then through the opening, as seen in Fig. 3, then pass the lacing around the other stud, as seen in Fig. 4, and return around the fastening-stud, as before described.

1 claim-

The herein-described shoe-fastener, consisting of the stud constructed with the body b, and with a projecting annular flange, a, the said 80 body to rest upon the outside of the upper and leave a space between the upper and the flange, combined with a disk, d, constructed to be applied upon the inside of the upper, and with a radially-projecting finger, e, bent outwardly, so 85 as to bear upon the inside of the upper and force the upper toward the flange of the stud upon the outside, substantially as described.

JOS. L. JOYCE.

Witnesses:

J. H. SHUMWAY, Jos. C. EARLE.