No. 828,906. PATENTED AUG. 21, 1906.

J. TRUSLER.

LACE FASTENING DEVICE.

APPLICATION FILED DEC. 28, 1905.

Fig 4

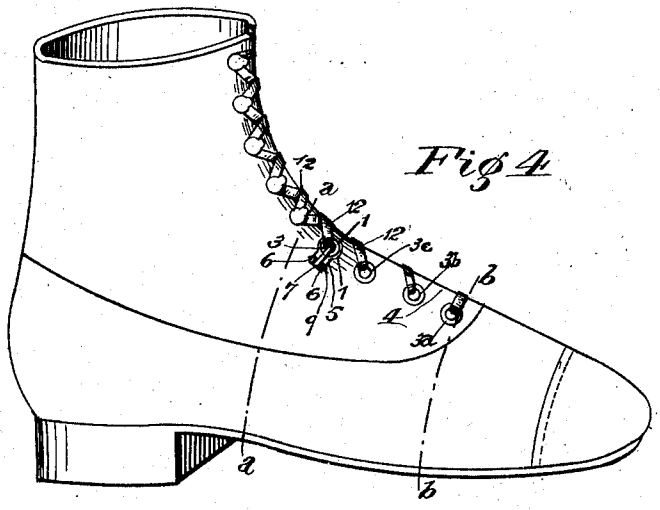
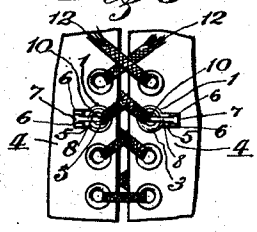


Fig 5



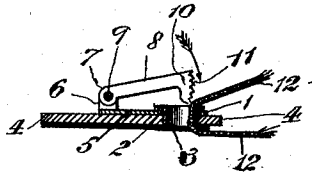
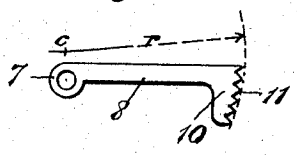


Fig 1

Fig 3



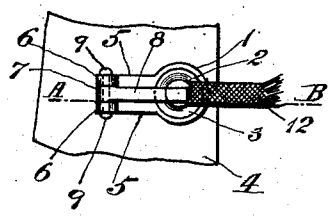


Fig 2

WITNESSES:

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JESSIE TRUSLER, OF INDIANAPOLIS, INDIANA.

LACE-FASTENING DEVICE.

No. 828,906. Specification of Letters Patent. Patented Aug. 21, 1906.

Application filed December 26, 1905. Serial No. 293,286.

To all whom it may concern:

Be it known that I, JESSIE TRUSLER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Lace-Fastening Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an auxiliary fastening or securing means for securing and retaining the lacing of laced shoes, corsets, or such like garments taut at certain parts or lengths of the laced portion of the shoe or garment to which the device is applied, while the remaining laced portion of the garment or shoe is or may be laced loosely, as will be hereinafter more fully described in the specification, and particularly pointed out in the claim.

The object of this my invention is to provide an auxiliary or intermediate lace or shoestring-fastening device whereby some intermediate or other part of the laced portion of a garment or shoe may be maintained tighter than the remaining portion, and is particularly adapted for use in connection with the laces of shoes for maintaining a fixed tension of the lacing of the instep portion of a laced shoe independently of and tighter than the remaining or ankle portion thereof, thereby securing comfort and perfect freedom to the ankle of the wearer. I attain this object by means of the lace securing or fastening device illustrated in the accompanying drawings, in which similar characters of reference designate like parts throughout the several views.

Figure 1 is an enlarged detail sectional side view of my invention of a lace or shoestring fastening, taken through the line A B. (See Fig. 2.) Fig. 2 is a top view of the same. Fig. 3 is an enlarged detail side view of the clamping-lever of the fastening device. Fig. 4 is a perspective view of a laced shoe, showing my invention of a lace or shoestring fastening applied thereto; and Fig. 5 is a broken enlarged detail view of a portion of the flaps of a laced garment or laced shoe, showing my invention of a lace-fastening device applied thereto.

This invention of a lace-fastening device is applicable to not only laced shoes, but also corsets or such like laced garments, and comprises a plate 1, provided with an eye or bore 2 for receiving an eyelet 3, whereby the plate 1 is secured to the flap 4 of a laced shoe or other laced garment. An integral arm 5 extends from the edge of the plate 1, and on the top side, and situated at the end thereof, are formed the lugs 6, between which the end 7 of the clamping-bar 8 is hinged by a hinge-pin 9. The clamping-bar 8 is provided with a clamping-cam 10, which is formed integral on the free end of said bar. Said cam is of such a size as to extend beyond the edge of said bar sufficiently far to project into the bore of the eyelet, and the engaging face or edge of said cam is serrated, milled, or provided with engaging teeth 11, which are adapted to engage the loose end of a lace, as the lace 12, to securely hold and clamp the same against the edge of the bore of the securing-eyelet 3, by which latter the plate 1 of the clamping device is secured to the flap 4.

The serrated face or edge of the cam 10 or the outer edges or points of the teeth 11 conform to a circle, the center *c* of the radius *r* of which is situated slightly above the center of the hinged end 7 of the clamping-bar 8, and by means of this form of construction those teeth situated at the bottom portion of the cam 10 first contact with the lace 12, and as the cams 10, applied to the shoe, (see Fig. 4,) are pressed downwardly into the bores of the eyelets 3, the clamping-pressure on the ends of the lace 12 is gradually applied to securely clamp the ends of the lace 12 in the bores or eyes of said eyelets, thereby permitting the ankle portion of the shoe to be laced loosely to secure comfort and perfect freedom to the ankle of the wearer of the shoe thus equipped.

These lace-fastening devices are applied in pairs, (see Fig. 5,) one to each opposing flap of the shoe or garment and situated directly opposite each other, so that the loose ends of the lace when drawn up tightly may be held securely to maintain that portion of the lacing situated at one side of or beneath the said opposing fastening devices at any degree of tension to which the lace is drawn.

Referring to Fig. 4, it will be observed that that portion of the instep of the shoe situated between the lines *a a* and *b b* is usually in a laced shoe loose in proportion to the remaining or ankle portion of the shoe and for the sake of comfort to the wearer should be loose

in proportion to the instep portion of the shoe, which latter should be close-fitting to secure neatness as well as comfort.

By applying a pair of my lace-fastening devices as above described that portion of the lacing situated beneath the fastening devices or that portion of the instep of the shoe bounded by the lines *a a* and *b b* may be laced tightly and maintained at a constant tension in proportion to the remaining or ankle portion of the shoe.

In practicing my invention the lace 12 is passed through the eyelets 3^a, 3^b, and 3^c in the usual manner, then passed through the eyelets 3 of the fastening devices and drawn to the proper degree of tension to neatly and comfortably bind the instep of the foot of the wearer. The ends of the lace 12 are held tightly while the tension-bars 8 are swung into position (see Fig. 1) to bring the serrated or toothed edges or faces of the cams 10 into contact with the ends of the lace 12 to securely bind said ends in the eyelets 3.

In order to release the lace or shoestring, the loose ends thereof are drawn with a quick jerk, which movement causes the cams 10 to withdraw or recede from and out of the eyelets 3 to disengage the ends of the lace, which being thus released may be drawn backwardly through the eyelets 3 to release that portion of the lacing situated below said fastenings.

I claim—

In a shoe-fastening device, the combination with the flap of a shoe, of a plate provided with a bore or eye, a securing-eyelet passed through the flap of the shoe and said bore of said plate to secure the latter to the former, hinge-lugs extending from the face of said plate, a rigid bar hinged at one end between said hinge-lugs to swing outwardly from and at right angles to the face of said plate, a cam integral on the free end of said hinged bar to project beyond the edge thereof contiguous to said plate, said cam having its face eccentric with the hinged center of said bar and teeth on the cam or eccentric face of said cam, said cam adapted to project into the bore of said eyelet to clamp the lace situated between the teeth of said cam and the edge of the bore of the eyelet.

In testimony whereof I affix my signature in presence of two witnesses.

JESSIE TRUSLER.

Witnesses:
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