(No Model.)

E. R. DULJÉ.

SHOE LACE FASTENER.

No. 526,830. Patented Oct. 2, 1894.

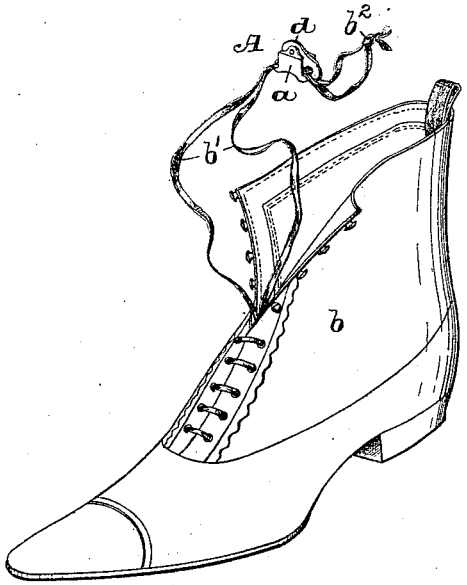

FIG. 1

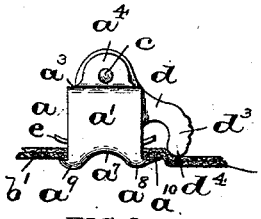

FIG. 2

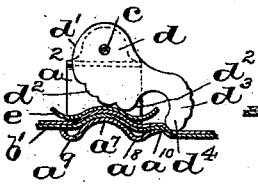

FIG 3

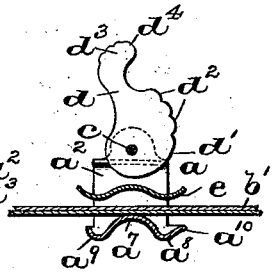

FIG 4

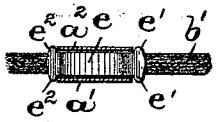

FIG.5

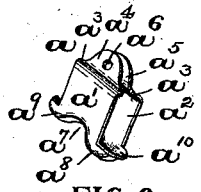

FIG 6

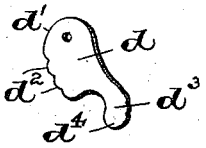

FIG.7

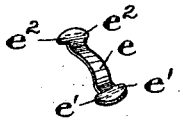

FIG. 8

WITNESSES:

Wm. H. Canfield, Jr.

H. N. Marsh.

INVENTOR

Eustache R. Dulje

BY Fred C. Fraentzel, ATT'Y.

UNITED STATES PATENT OFFICE.

EUSTACHE R. DULJÉ, OF NEWARK, NEW JERSEY.

SHOE-LACE FASTENER.

SPECIFICATION forming part of Letters Patent No. 526,830, dated October 2, 1894.

Application filed June 21, 1894. Serial No. 515,216. (No model.)

To all whom it may concern:

Be it known that I, EUSTACHE R. DULJÉ, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Shoe-Lace Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My present invention relates to improvements in a shoe lace fastener and has for its object to provide a device for the purpose of preventing the laces of the shoe from becoming untied.

The invention has for its further object to provide a holding clasp of this class which will not become accidentally disengaged from its holding contact with the laces, but which can be readily disengaged from its holding contact with the laces, when desired, by the manipulation of a cam-lever pivoted in the frame of the device to permit the partial withdrawal of the shoe laces from the device and their unlacing from the studs on the shoe.

The invention therefore consists of the novel form of shoe lace fastener herein shown and claimed, as a new article of manufacture, and further, the invention consists in certain novel arrangements and combination of parts, such as will be hereinafter more fully described and finally embodied in the clauses of the claim.

The invention is clearly illustrated in the accompanying sheet of drawings, in which similar letters of reference are employed to indicate corresponding parts in each of the several views.

In said drawings, Figure 1 is a perspective view of a shoe and its laces, illustrating in connection therewith the use of my novel form of shoe-lace fastener. Fig. 2 is a side view, and Fig. 3 a longitudinal vertical section of the device, clearly illustrating the operative parts of the device in their clamped or holding positions on the shoe lace. Fig. 4 is a view similar to Fig. 3, with the clamping lever in its raised and disengaged position. Fig. 5 is a horizontal section of the device, just below the pivoted cam-lever, illustrating the arrangement of a movable clamp-plate used in connection with the device. Fig. 6 is a perspective view of the frame of the device. Fig. 7 is a like view of the cam-lever, and Fig. 8 is a similar view of said clamp-plate.

In said views, b indicates the shoe and b' the shoe lace, which is doubled and arranged in the eyelets of the shoe in the usual manner.

My novel form of shoe-lace fastener A, consists essentially of a frame a provided with two upwardly bent arm-portions a' and a^2, substantially as illustrated in Fig. 6. These arms are bent inwardly, as at a^3, and then upwardly to form the bearing-lugs or ears a^4 and a^5. These ears are each of them provided with a perforation a^6, for a pin c on which is pivoted, between the said ears a^4 and a^5, a suitable cam-lever d, having the enlarged part d', and being preferably provided with a serrated or scalloped edge d^2 and a handle portion d^3 for manipulating said lever. The base of the frame a is preferably corrugated, as shown, being formed with the inwardly curved central portion a^7 and the outwardly curved end portions a^8 and a^9. Between said arm portions a' and a^2 of the frame a, I have arranged a movable clamp-plate e which is also corrugated to correspond with the curvature of said base of the frame a, as will be clearly seen from Figs. 3 and 4. In order that said clamp-plate e may be retained between said arms a' and a^2, and still be loosely and adjustably arranged therein, to permit its adjustment for either a heavy or a light shoe lace, said plate is formed on its opposite ends with suitable stops e' and e^2, which ride against the edges of said arm-portions a' and a^2, as clearly shown in Fig. 5.

The device is used in the following manner: The free ends of the shoe-lace b' are inserted between the corrugated base of the frame and the clamp-plate e, and provided with a knob b^2, as illustrated in Fig. 1. This retains the device on the lace, no matter, whether the cam-lever is in its operative or in its inoperative position. After the shoe has been laced, the device, with the lever d in the position illustrated in Fig. 4, is slipped along the lace to near the top edge of the

shoe, and said cam-lever d is then firmly pressed down, bringing the cam-portion of the lever into operative engagement with the upper surface of said clamp-plate e, substantially as illustrated in Fig. 5. As will be noticed from said figure, this action of the lever d upon said plate e will cause the tight binding of the shoe-lace between the corrugated surfaces of said plate e and the base of the frame a of the fastener. Said scallops d^2 on the cam lever d have this purpose, that they act as stops for holding the lever d in different positions when clamped against the plate e. Thus, when a thin lace is inserted between the plate e and the corrugated base of the frame, said lever, when in its clamping position, will be in the position illustrated in Fig. 3, but when used on a thick lace the plate e is higher up and the lever d will be in clamping contact with said plate, in an entirely different position. Said finger piece d^3 of the cam-lever d may also be provided with a sharp nose-portion d^4, which, when the lever has been forced down into its operative holding engagement with the plate e will force the shoe-lace tightly against a projecting lip a^{10} on one of the end-portions a^8 of the frame a, as will be clearly understood from an inspection of Figs. 2 and 3.

The parts of the clasp are preferably struck up from sheet metal and may be made of any suitable shape and configuration in outline.

The device is simple in construction, being cheaply made, and can be readily manipulated to secure the laces in their holding relation to the studs on the shoe.

From the construction and arrangement of the several parts of the clasp herein described and illustrated, it will be seen that it is applicable to the use of a suspender buckle or other like article of manufacture.

Having thus described my invention, what I claim is—

1. A shoe lace fastener, or the like, comprising therein a frame a having arm-portions a' and a^2 and bearings on said arms, a cam-lever pivotally arranged between said arms, and provided with scallops forming stops and an adjustable clamp-plate between said arms, with which said cam-lever can be brought into operative holding engagement said cam plate being provided with stops e' and e^2, substantially as and for the purposes set forth.

2. A shoe lace fastener, or the like, comprising therein a frame a having a corrugated base, arm-portions a' and a^2 and bearings on said arms, a cam-lever pivotally arranged between said arms, and a corrugated clamp-plate e adjustably arranged between said arms, with which said cam-lever can be brought into operative holding engagement, said clamp-plate being provided with stops e' and e^2, substantially as and for the purposes set forth.

3. A shoe lace fastener, or the like, comprising therein a frame a having a corrugated base, arm-portions a' and a^2 and bearings on said arm-portions, a cam-lever pivotally arranged between said arms, provided with a cam surface d' and serrations or scallops d^2, and a corrugated clamp-plate e adjustably arranged between said arms, with which said cam-lever can be brought into operative holding engagement, substantially as and for the purposes set forth.

4. A shoe lace fastener, or the like, comprising therein a frame a having a corrugated base, arm-portions a' and a^2 and bearings on said arm-portions, a lip a^{10} on said corrugated base, a cam-lever pivotally arranged between said arm-portions, provided with a cam surface d' and serrations or scallops d^2, a handle portion d^3 and a nosing d^4 thereon, and a corrugated clamp-plate e adjustably arranged between said arms, with which said cam-lever can be brought into operative holding engagement, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 20th day of June, 1894.

EUSTACHE R. DULJÉ.

Witnesses:
ADOLF FRANZ,
FREDK. C. FRAENTZEL.