(No Model.)

M. N. BRAY & E. M. POPE.

SHOE BUCKLE.

No. 421,660. Patented Feb. 18, 1890.

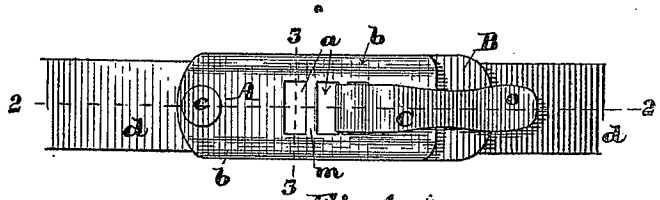


Fig. 1.

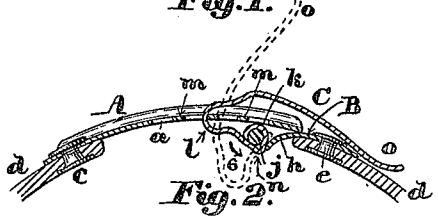


Fig. 2.

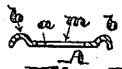


Fig. 3.

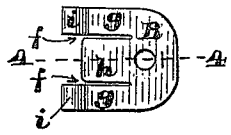


Fig. 4.



Fig. 5.



Fig. 7.

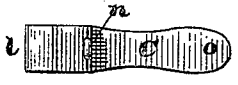


Fig. 6.

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UNITED STATES PATENT OFFICE.

MELLEN N. BRAY, OF BROOKLINE, AND EVERETT M. POPE, OF QUINCY, MASSACHUSETTS; SAID POPE ASSIGNOR TO SAID BRAY.

SHOE-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 421,660, dated February 18, 1890.

Application filed November 30, 1889. Serial No. 332,120. (No model.)

To all whom it may concern:

Be it known that we, MELLEN N. BRAY, of Brookline, in the county of Norfolk and State of Massachusetts, and EVERETT M. POPE, of Quincy, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Clasps or Buckles for Shoes and other Articles, of which the following, taken in connection with the accompanying drawings, is a specification.

Our invention relates to clasps or buckles for shoes and other articles; and it consists in certain novel features of construction, arrangement, and combination of parts, which will be readily understood by reference to the description of the drawings and to the claims hereinafter given, and in which our invention is clearly pointed out.

Figure 1 of the drawings is a plan of our improved buckle arranged for securing together the two ends of a strap of leather or other flexible material. Fig. 2 is a sectional elevation of the same, the cutting plane being on line 2 2 on Fig. 1. Fig. 3 is a transverse section on line 3 3 on Fig. 1. Fig. 4 is a plan of the hook or tongue carrying plate. Fig. 5 is a section of same on line 4 4 on Fig. 4. Fig. 6 is an inverted plan of the hook or tongue, and Fig. 7 is an elevation of the same.

In the drawings, A is a plate curved in the direction of its length to the arc of a circle, having formed in its central portion a series of rectangular slots *a a* and strengthened or stiffened by means of longitudinal corrugations *b b*, formed along each edge thereof, as shown in Figs. 1, 2, and 3. This plate is secured by the rivet *c* to one end of the strap *d*, or other article to be secured together.

B is a plate secured by the rivet *e* to the other end of the strap *d*, or the side of a shoe or other article opposite to that to which the plate A is attached. The plate B is divided by the slits *f f* into three arms *g g* and *h*, the arms *g g* being of considerably greater length than the arm *h* and have their ends bent around to form eyes *i* to receive the pivot-pin *j*, as shown in Figs. 4 and 5.

C is the hook or tongue bent to the form shown in Fig. 7 to form the eye *k* to embrace the pivot-pin *j*, and the loop *l* to engage with one of the bars *m* of the plate A, as shown in Fig. 2. The hook or tongue C has formed upon the under side of its hub which forms the eye *k*, the rounded lug or projection *n*, which co-operates with the free end of the spring-arm *h* to hold said hook or tongue C in the closed position shown in full lines in Fig. 2 or in the open position shown in dotted lines in the same figure. The free end of the arm *h* of the plate B is bent and shaped so as to bear upon the hub or eye of the hook or tongue C just in front of the lug *n* when the said hook is in its closed position, as shown in full lines in Fig. 2.

If it is desired to unclasp the shoe or other article, the free end *o* of the hook C is raised to move it about the pivot-pin *j* in the direction indicated by the arrow 6, when the lug *n* presses the free end of the spring-arm *h* downward until said lug has passed to the upper side of said spring-arm, when the pressure of said spring upon said lug will prevent the hook or tongue assuming its closed position until pressure is applied thereto to overcome the tension of the spring *h*. The curve of the loop *l* should be so formed and located relative to the hub or eye *k* of the hook or tongue C that when said hook is engaged with one of the bars *m* and in its closed position and power is applied to the two plates A and B to try to separate them by a direct pull or strain the under side of the plate A will bear hard upon the eyes *i* of the arms *g g* of the plate B and the free end *o* of the hook or tongue C will be pressed down hard upon the heel of the plate B or upon the strap or other article to which said plate is secured. This makes a very simple and effective shoe-fastening that can be cheaply manufactured, and that when closed is not liable to become accidentally unfastened.

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

The combination, in a fastening for shoes and other articles, of the plate A, provided with a slot or slots *a*, the plate B, provided with the pivot-pin *j* and the spring *h*, and

the hook or tongue C, pivoted on the pin *j* and provided with the loop *l* upon the side of said pivot opposite the free or operating end of said hook or tongue, and having formed upon its hub the lug *n* to engage with the free end of the spring-arm *h*, substantially as described.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, on this 25th day of November, A. D. 1889.

MELLEN N. BRAY.
EVERETT M. POPE.

Witnesses:
WALTER E. LOMBARD,
JOSEPH E. BERTRAND.