(No Model.)

M. N. BRAY.

SHOE CLASP.

No. 399,237. Patented Mar. 12, 1889.

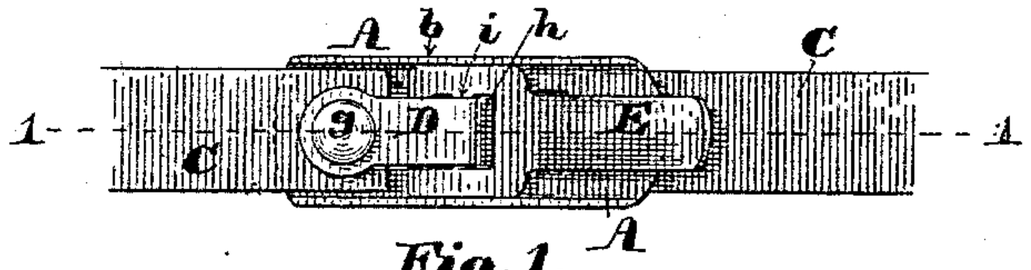


Fig. 1.

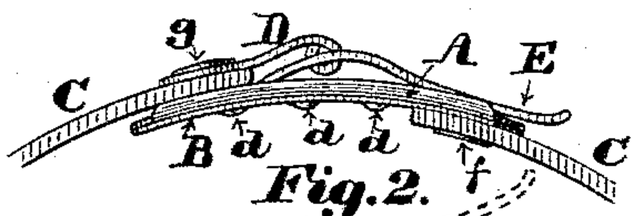


Fig. 2.

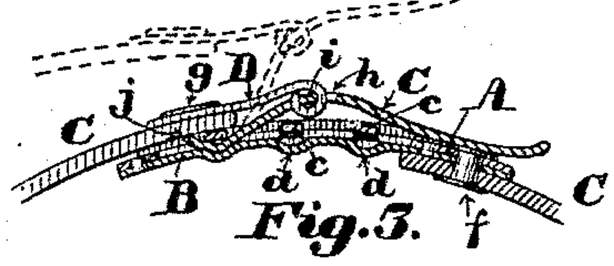


Fig. 3.

Fig. 11.

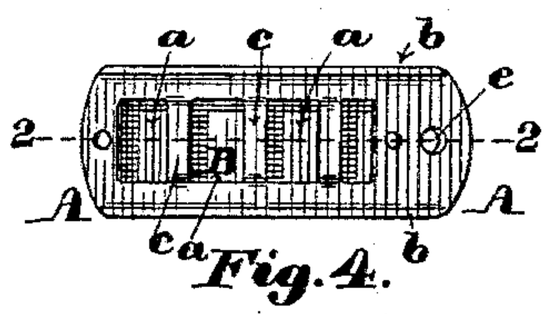


Fig. 4.

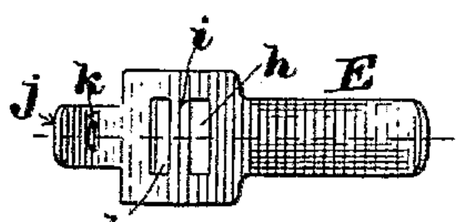


Fig. 8.

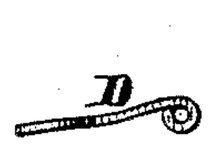


Fig. 12.

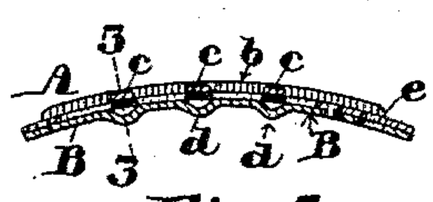


Fig. 5.

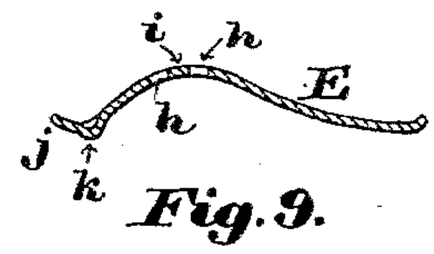
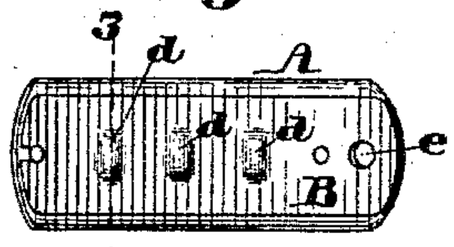


Fig. 9.

Fig. 13.



3 Fig. 6.

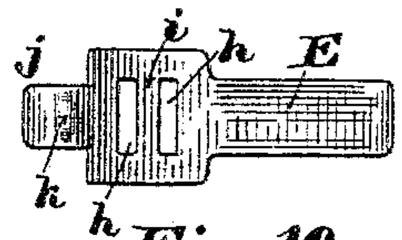


Fig. 10.

Fig. 7.

Witnesses:
Walter E. Lombard,
Frank K. E. Buell

Inventor:
Mellen N. Bray,
by N. E. Lombard
Attorney.

UNITED STATES PATENT OFFICE.

MELLEN N. BRAY, OF BOSTON, MASSACHUSETTS.

SHOE-CLASP.

SPECIFICATION forming part of Letters Patent No. 399,237, dated March 12, 1889.

Application filed November 23, 1888. Serial No. 291,628. (No model.)

To all whom it may concern:

Be it known that I, MELLEN N. BRAY, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Shoe-Buckles, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to buckles for shoes and other purposes, and is an improvement upon the invention described in another application of mine filed November 8, 1888, and serially numbered 290,307; 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 claim, to be hereinafter given, and in which my invention is clearly pointed out.

Figure 1 of the drawings is a plan of my improved buckle, the same being applied to the securing together of the two ends of a strap. Fig. 2 is an elevation of the same. Fig. 3 is a longitudinal section on line 1 1, Fig. 1. Fig. 4 is a plan of the main body or female portion of the buckle. Fig. 5 is a longitudinal section on line 2 2, Fig. 4. Fig. 6 is an inverted plan of same. Fig. 7 is a transverse section on line 3 3, Figs. 5 and 6. Figs. 8, 9, and 10 are respectively a plan, a longitudinal section, and an inverted plan of the tongue or male portion of the buckle. Figs. 11, 12, and 13 are respectively a plan, an elevation, and an inverted plan of the hinge-plate by which the tongue or male portion is secured to the strap, shoe, or other article.

In the drawings, A is the main body or female portion of the buckle, consisting of a plate of sheet metal having transverse slots *a a* cut through it and provided with the ribs *b b*, formed by bending its opposite edges upward, as shown in Figs. 5 and 7. The bars *c c* between the slots *a a* are forced upward above the main body of said plate a distance about equal to the thickness of said plate, as shown in Figs. 5 and 7.

To the under side of the plate A is secured a spring-plate, B, having a longitudinal curve corresponding substantially to the curve of the plate A, and provided in its upper side with recesses or indentations *d d*, one beneath each of the bars *c c* of the plate A, as shown in Fig. 5, the object of which will presently appear.

Both the plates A and B have formed in one end thereof a hole, *e*, to receive a rivet, *f*, by which they are secured to the strap C or to one side or portion of a shoe or other article. To the other end of the strap C, or the opposite side of the shoe or other article, is secured by the rivet *g* one end of the plate D, to the opposite end of which is pivoted the tongue or male portion E of the buckle, which consists of a plate of sheet metal curved transversely, as indicated by the shading in Figs. 8 and 10, to stiffen it, and longitudinally, as shown in Fig. 9, and having two slots, *h h*, cut through it to form a bar, *i*, around which the end of the plate D is bent to form a hinge-connection therewith, as shown in Figs. 1, 2, and 3.

The toe *j* of the tongue E is made narrower than the middle portion containing the bar *i*, so that it can pass through a slot, *a*, and is bent upward, so that it can be readily passed under the bar *c* and between it and the spring-plate B when the tongue or lever E is in the position indicated by dotted lines in Fig. 3.

The toe *j* has formed upon its under side a projection, *k*, which, when the tongue-lever E is moved from the position indicated by dotted lines to the position indicated by full lines in Figs. 2 and 3, will snap into the indentation *d* in the plate B, and thus lock said tongue against accidental displacement.

The spring-plate B is rigidly secured to the plate A at one end, and at its opposite end the hole through which the rivet which secures it to plate B is preferably slotted, so as to permit a slight movement of said plate in the direction of its length when said plate is depressed by the projection *k* pressing thereon before passing into the recess or indentation *d*.

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

In a buckle for securing together two sides or portions of a shoe or other article, the combination of a tongue-engaging plate having a plurality of transverse bars separating rectangular slots formed in said plate, said plate being constructed and adapted to be secured to one side or portion of the shoe or other ar-

ticle, a spring-plate secured by each end to the inner side of said tongue-plate and extending across the slots in said tongue-plate, and having formed in its surface next the tongue-plate a plurality of depressions or indentations corresponding in number and position to the bars in the tongue-plate, a hinge-plate constructed and adapted to be secured to the other side or portion of the shoe or other article, and a tongue in the form of a lever of the first order pivoted to said hinge-plate, the short arm of which lever is constructed to enter a slot in and engage with a bar of said tongue-plate, and provided upon its under side between its end and fulcrum with a projecting lug or detent constructed and arranged to snap into an indentation in said spring-plate when the long arm of the tongue is pressed down upon the slotted plate, and thus lock said tongue in closed position.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 20th day of November, A. D. 1888.

MELLEN N. BRAY.

Witnesses:
N. C. LOMBARD,
WALTER E. LOMBARD.