(No Model.)

T. E. KING.

SHOE CLASP.

No. 341,422. Patented May 4, 1886.

Fig. 1

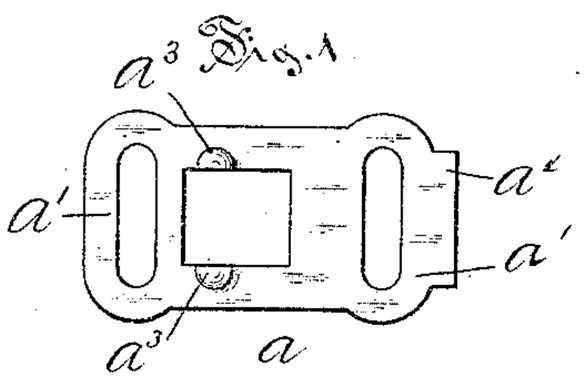


Fig. 2

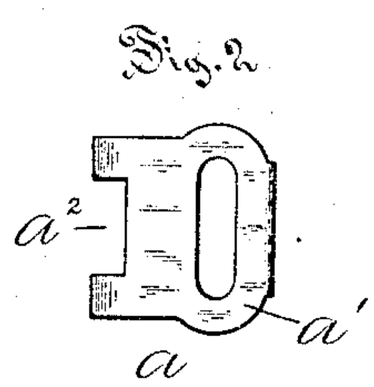


Fig. 3

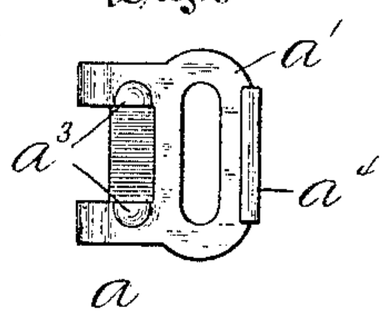


Fig. 4

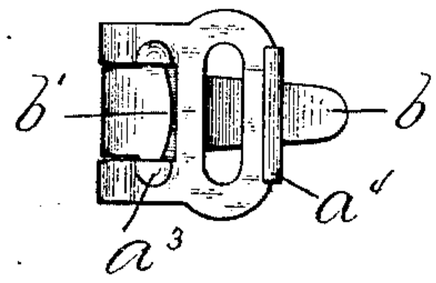


Fig. 5

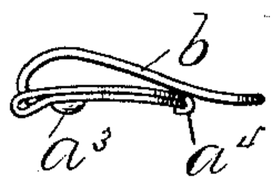


Fig. 6

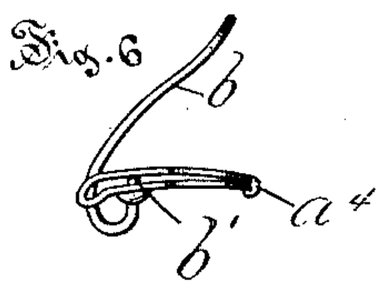
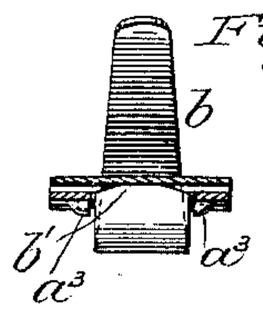


Fig. 7.



Witnesses:

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UNITED STATES PATENT OFFICE.

THEODORE E. KING, OF WESTPORT, ASSIGNOR OF ONE-HALF TO JOSEPH C. HAMMOND, JR., OF ROCKVILLE, CONNECTICUT.

SHOE-CLASP.

SPECIFICATION forming part of Letters Patent No. 341,422, dated May 4, 1886.

Application filed January 6, 1886. Serial No. 187,766. (No model.)

To all whom it may concern:

Be it known that I, THEODORE E. KING, of Westport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Shoe-Clasps, of which the following is a full, clear, and exact description, whereby a person skilled in the art can make and use the same.

My invention relates to the class of clasps or buckles used on articles of wearing-apparel, and particularly on articles of foot-wear, as overshoes and brogans.

The object of my improvement is to provide a shoe-clasp the tongue-plate of which is made by folding a single piece of plate metal upon itself, the parts being closely closed upon each other in their normal position to exclude dust and dirt, in combination with a swinging tongue so pivoted between the parts of the plate that the spring action is taken off the tongue-pintles and made to depend upon the projecting base of the tongue; and my improvement consists in the combination of a tongue-plate and spring-plate formed of a single piece of metal folded upon itself in two layers, with a tongue pivotally supported in sockets between the folded parts of the plate, and having on its base a projecting cam, which in opening and closing the tongue thrusts the two layers of the plate apart to obtain the spring action.

Referring to the drawings, Figure 1 is a plan view of the tongue-plate blank before folding. Fig. 2 is a view of the upper side of the folded blank. Fig. 3 is a view of the under side of the folded blank. Fig. 4 is a view of the under side of the tongue-plate and tongue, the latter closed. Fig. 5 is a view in central lengthwise section of the plate and closed tongue. Fig. 6 is a view in central section of the parts with the tongue lifted and partly open. Fig. 7 is a detail view in cross-section of the tongue-plate with the tongue half opened, and looking toward the tongue, so as to show the relation between the cam on the tongue and the top plate.

In the accompanying drawings, the letter *a* denotes a tongue-plate cut or stamped from a sheet of metal, with an opening transversely of the plate near each end, forming the loops a', and between these another opening, a^2, that is preferably rectangular in outline, and has near one edge, upon opposite sides, cup-shaped indentations, forming the pivot-sockets a^3. This blank is folded upon itself in such manner that the pivot-sockets lie on the under side, below the upper part of the plate, and it is held in this folded position by the rigidity of the metal, and also by the flange a^4 on the outer edge of one of the loops, that is bent so as to hook over the edge of the lower fold of the plate. The relative positions of the several parts, when the tongue-plate is bent to shape, are clearly shown in Figs. 2, 3, and 5. The tongue *b* is cut or stamped from sheet metal in like manner as the plate-blank. It is formed to the hook shape shown in Figs. 5 and 6, has integral pivots and a cam, b', that projects rearward of the pivots on the base of the tongue. The pivots of the tongue are placed in the pivot-sockets in the plate before the latter is closely folded together, and when the folding is completed the parts are in the position shown in Fig. 5, when the tongue is closed. The front edge of the upper part of the tongue-plate overhangs the base of the tongue, and when the latter is opened the cam strikes against the under side of this overhanging part, and the further opening of the tongue is resisted by the resiliency of the folds of the plate. When the tongue is about half open, the plates will be sprung apart, in the manner illustrated in Fig. 6; but as the opening of the tongue is continued the cam swings over the pivot-points, and the folds close together, holding the tongue open. By this method of construction the spring action between the folded parts of the plate is obtained without depending solely upon the oblong section of the tongue-pintles, as in prior devices, and greater efficiency and durability are obtained in my improved device by thus throwing the spring action off the pintles and putting the wear on the base of the tongue.

The tongue-plate made in the above-described manner may be readily plated or coated with japan without any interference with the wearing parts by such coating material getting between the folded parts of the plate, and these folds are so closed that dust and dirt are excluded from the wearing parts of the device when in use on shoes or the like.

I claim as my improvement—

1. In a shoe-clasp, in combination, a tongue-plate composed of a single piece of metal folded

upon itself, with pivot-sockets formed in the lower fold and underlying the upper, and a tongue pivoted to the plate and having a cam on its base rearward of the pivots, all substantially as described.

2. In combination with a tongue-plate composed of a single piece of metal folded upon itself, with pivot-sockets formed between the parts, a hook-shaped tongue pivoted to the plate and bearing on its base a cam that co-operates with an overhanging part of the upper fold of the plate to form a spring as the tongue is opened, all substantially as described.

3. In a shoe-clasp, in combination, a tongue-plate, *a*, composed of a single piece of metal folded upon itself, with pivot-sockets a^3, and the folds secured together at the front and rear edges, a hook-shaped tongue, *b*, with integral pivots held in the pivot sockets in the plate, and bearing on its base a cam, *b'*, that co-operates with and engages an overhanging part of the upper fold of the plate to form a spring depthwise of the plate as the tongue is opened, all substantially as described.

4. The improved clasp or buckle, consisting of an upper plate and under plate, and a swinging hooked-shape tongue pivoted to one of the plates, the other of said plates having an overhanging part that presses upon the cam on the tongue, all substantially as described.

THEODORE E. KING.

Witnesses:

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