(No Model.)

J. L. THOMSON.

SHOE CLASP.

No. 302,799. Patented July 29, 1884.

FIG-1-

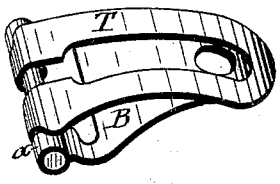


FIG-2-

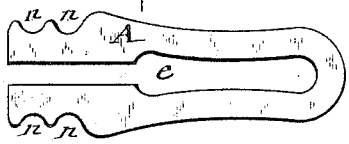


FIG-3-

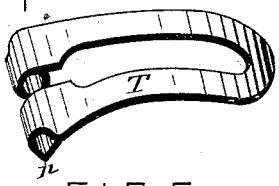


FIG-4-

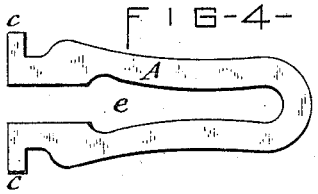


FIG-5-

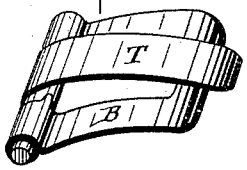


FIG-6-

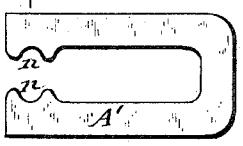


FIG-7-

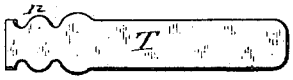


FIG-8-

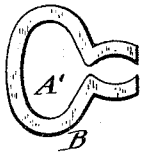
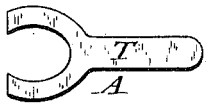


FIG-9-



ATTEST—

Wm. C. Raymond

C. Bendixon

INVENTOR—

Judson L. Thomson

per Duell, Lacey & Thy

his Attys

UNITED STATES PATENT OFFICE.

JUDSON L. THOMSON, OF SYRACUSE, NEW YORK.

SHOE-CLASP.

SPECIFICATION forming part of Letters Patent No. 302,799, dated July 29, 1884.

Application filed April 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, JUDSON L. THOMSON, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Shoe-Clasps, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention is designed more particularly as an improvement on the shoe-clasp for which I have obtained Letters Patent No. 290,816, dated December 25, 1883; and it consists in an improved construction and combination of the component parts of the clasp, as hereinafter described, and specifically set forth in the claims.

The invention is fully illustrated in the annexed drawings, wherein Figure 1 is a perspective view of the clasp as formerly constructed by me. Fig. 2 is a plan view of the blank from which the tongue of the aforesaid clasp is formed. Fig. 3 is a detached perspective view of said tongue. Fig. 4 is a plan view of the blank, embodying one of the features of my present improvements. Fig. 5 is a perspective view of a clasp embodying other features of my present invention. Figs. 6 and 7 are plan views of the blanks from which the aforesaid clasp is formed, and Figs. 8 and 9 are plan views of modifications of said blanks.

Similar letters of reference indicate corresponding parts.

A represents the blank from which the spring-tongue T of the shoe-clasp shown in Fig. 1 is formed, said tongue being hinged to an attaching-plate, B, and having on the ends of its hinge cam-shaped projections *n n*, engaging with notches in the roll or hinged portion *a* of the plate B, whereby the tongue is automatically held in two of its operative positions, and receives a lateral compression as it is swung from one of its aforesaid positions to the other. The blank A, from which the aforesaid spring-tongue is formed, I stamp out of sheet-steel by means of a die, which punches out of the blank an excision or opening, *e*, extending through one edge of the blank, thereby forming a sheet-metal strip, maintained in one plane, and having its extremities disposed side by side with a space between them, to allow said extremities to deflect laterally and exert the elasticity of the plate edgewise thereof.

In stamping out the blank A, as aforesaid, the extremities thereof receive notches *n n*, which form the cams on the tongue T, when the extremities of the blank are rolled up to form the hinge of the tongue, as represented in Fig. 3 of the drawings.

The connection of the tongue T with the plate B was effected by a pin extended through the rolled-up ends of said parts, as shown in Fig. 1 of the drawings.

One of the objects of my present invention is to obviate the expense of forming a roll or sleeve on the tongue, and to dispense with the extra pin for connecting the tongue to its plate; and to that end I construct the tongue of a blank, A, formed with lateral projections *c c*, as shown in Fig. 4 of the drawings, in lieu of the notches *n n*, said projections thus being integral with the tongue and serving as pins by which to hinge the tongue T on the attaching-plate B of the shoe-clasp.

Heretofore I have obtained the tongue-actuating spring by the construction of the said tongue; but inasmuch as said member is limited in its width, it is sometimes difficult to obtain either the requisite elasticity or the proper tension, and I therefore convert the ordinary rigid and larger attaching-plate B into a spring by forming the same of a blank, A′, having a central excision extending through one end thereof, leaving a marginal band, as shown in Figs. 6 and 8 of the drawings, said band constituting a spring, which exerts its elasticity edgewise of the band or plate of which the spring is formed.

The notches *n n* may be either formed on the inner edges of the extremities to operate with the cams of the tongue T, hinged between them, as represented in Fig. 5 of the drawings, or formed on the outer edges of the extremities of the blank, as shown in Fig. 8 of the drawings, to engage with the cams of the tongue T, hinged to the outside of the aforesaid blank.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An improved clasp consisting of the spring-bearing plate having its central portion cut away, and provided with bearings,

and a lever-tongue provided with integral lateral projections or pivots resting in such bearings, all substantially as shown and described.

2. The blanks A A′, the former provided with lateral extensions forming pivots, and the latter provided with bearings for such pivots, and having a central excision, the two adapted, when united, to form a clasp, substantially as described and shown.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 28th day of March, 1884.

JUDSON L. THOMSON. [L. S.]

Witnesses:

C. H. DUELI,

F. H. GIBBS.