

(No Model.)

J. ZIMMERMANN.

SHOE CLASP.

No. 380,305.

Patented Mar. 27, 1888.

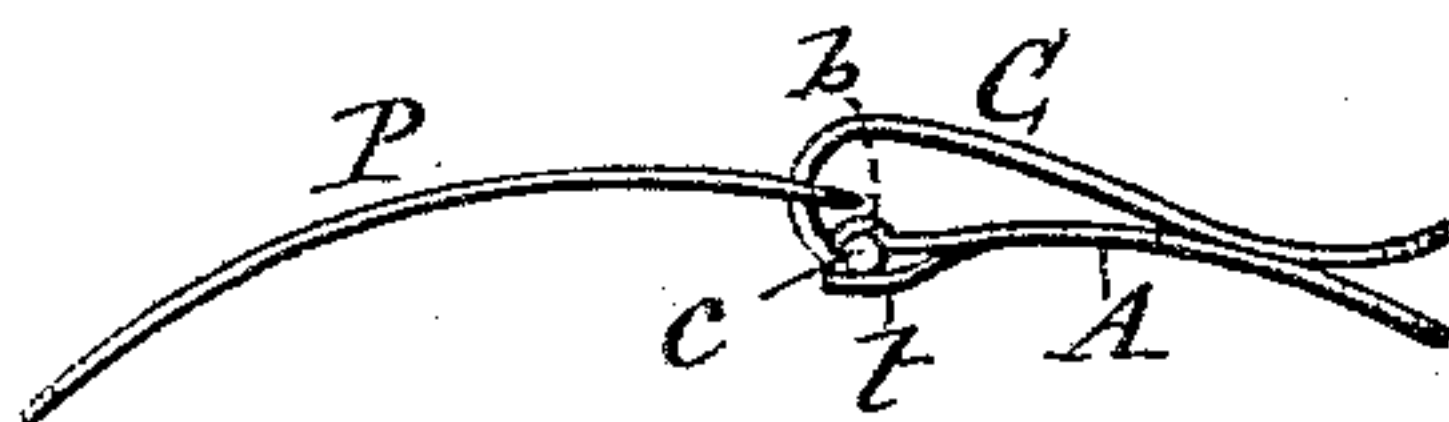


Fig. 1

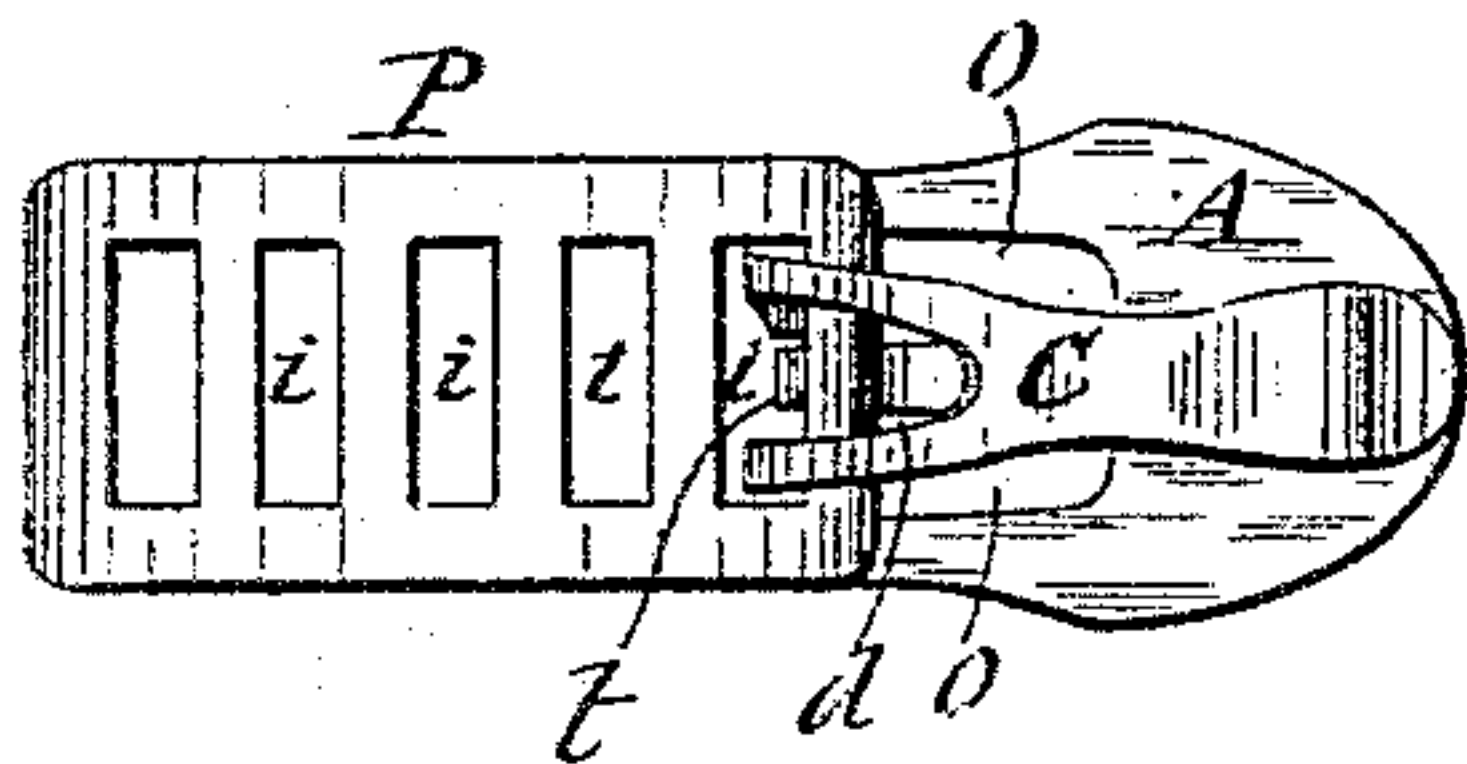


Fig. 2

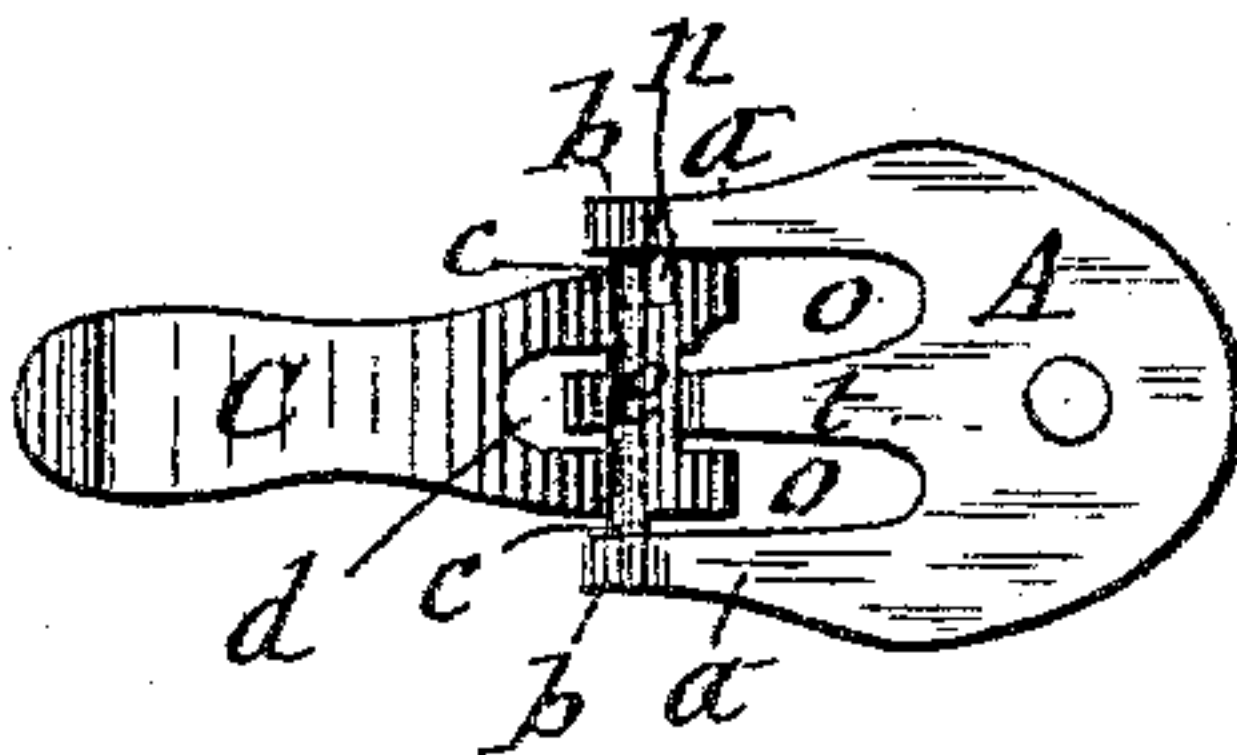


Fig. 5

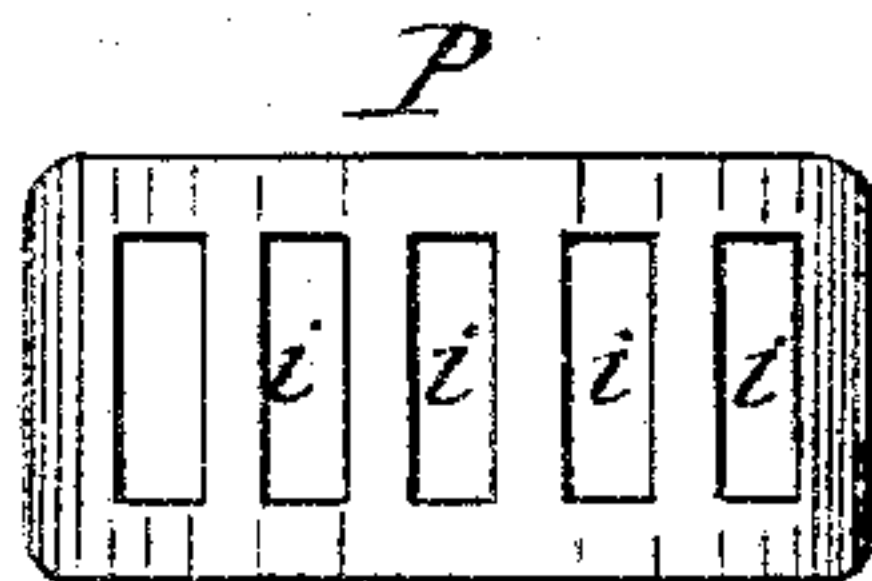


Fig. 3

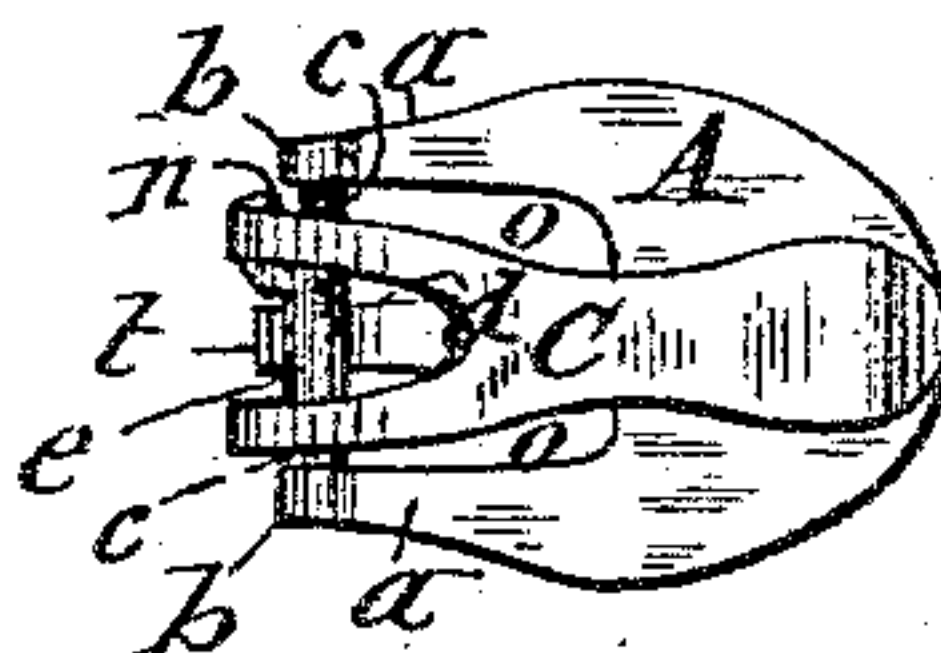


Fig. 4

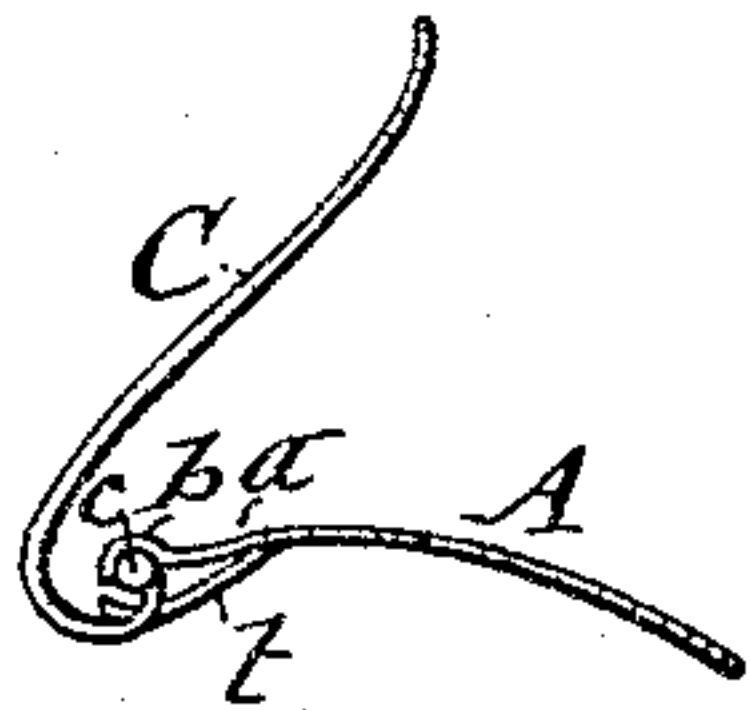


Fig. 6

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UNITED STATES PATENT OFFICE.

JOHN ZIMMERMANN, OF SYRACUSE, NEW YORK.

SHOE-CLASP.

SPECIFICATION forming part of Letters Patent No. 380,305, dated March 27, 1888,

Application filed January 16, 1888. Serial No. 260,943. (No model.)

To all whom it may concern:

Be it known that I, JOHN ZIMMERMANN, 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 relates to the class of clasps which are intended for use on arctic overshoes, and which have the clasp proper hinged to a plate attached to one of the quarters of the shoe and interlocking with a slotted plate attached to the opposite quarter.

The invention consists in an improved construction and combination of parts, as hereinafter fully described, and specifically set forth in the claims.

In the annexed drawings, Figure 1 is an edge view of a clasp embodying my improvements, showing the same in its operative or interlocked position. Fig. 2 is a top plan view of the same. Figs. 3 and 4 are detached top plan views, respectively, of the slotted plate and the clasp. Fig. 5 is an inverted plan view of the clasp in its open position, and Fig. 6 is an edge view of the clasp partly open.

Similar letters of reference indicate corresponding parts.

A denotes the plate to which the tongue or clasp proper, C, is hinged, and P represents the plate which is provided with transverse slots *i i*, with which the clasp C interlocks, as illustrated in Figs. 1 and 2 of the drawings.

The plate A, I form at one end with a central tongue, *t*, side arms, *a a*, and intermediate openings, *o o*, extending through the said end of the plate.

The arms *a a*, I terminate with half-bearings or segmental recesses *b b* in the underside. Said bearings, being easily struck up from the plate by means of suitable dies, greatly facilitates the manufacture of said plate.

The clasp C, I form with trunnions *c c*, which are cylindrical and project from opposite edges thereof. The central portion of the clasp I form with an aperture, *d*, and with a broad bearing-surface, *e*, between the said aperture and hinged end of the clasp. The clasp C is

hinged to the plate A by the trunnions *c c* turning in the recesses *b b*, and held therein by the tongue *t* pressing on the under side of the bearing *e*. The tongue *t*, entering the aperture *d* of the clasp C, prevents lateral displacement of the clasp.

In order to allow the clasp C to be connected to the plate A without unduly straining either the arms *a a* or central tongue, *t*, I provide the edge of said clasp with a notch, *n*, adjacent to the trunnion *c*, said notch being of sufficient depth and width to allow the adjacent end of the arm *a* to enter edgewise into it. The connection of the clasp C to the plate A is effected by placing the former in its closed position, as represented in Fig. 4 of the drawings, then inserting the trunnion *c*, which is adjacent to the notch *n*, into the recess *b* of one of the arms *a* sufficient to bring the end of the other trunnion inside of the inner edge of the adjacent arm *a*; then by a slight downward pressure the latter trunnion is brought in position to allow the clasp C to be pushed laterally, so as to carry the said latter trunnion into the adjacent recess *b* on the arm *a*. The plate A, being composed of spring steel, causes the tongue *t* to act as a spring, which, by its pressure on the broad bearing *e*, imparts to the clasp the required spring action to hold it in its closed position.

In opening the clasp C, as shown in Fig. 6 of the drawings, the end of the tongue *t* passes into the aperture *d* of the clasp, and the edge of the bearing *d*, depressing the spring-tongue *t*, causes the clasp to automatically spring back to its closed position when released by the operator.

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

1. The plate A, formed with the central tongue, *t*, side arms, *a a*, terminating with segmental recesses *b*, and intermediate openings, *o o*, extending through the end of the plate, in combination with the clasp C, formed with the trunnions *c c*, and with the central aperture, *d*, and broad bearing *e* between the said aperture and hinged end of the clasp, substantially as described and shown.

2. In combination with the plate A, provided with pivot-bearings *b b*, the clasp C, formed with trunnions *c c*, and with the notch *n* adjacent to the trunnion, substantially as 5 and for the purpose set forth.

In testimony whereof I have hereunto signed my name, in the presence of two witnesses, at

Syracuse, in the county of Onondaga, in the State of New York, this 9th day of January, 1888.

JOHN ZIMMERMANN. [L. S.]

Witnesses:

C. H. DUELL,

MARK W. DEWEY.