

(No Model.)

J. J. UNBEHEND.

SPRING CLASP.

No. 326,352.

Patented Sept. 15, 1885.

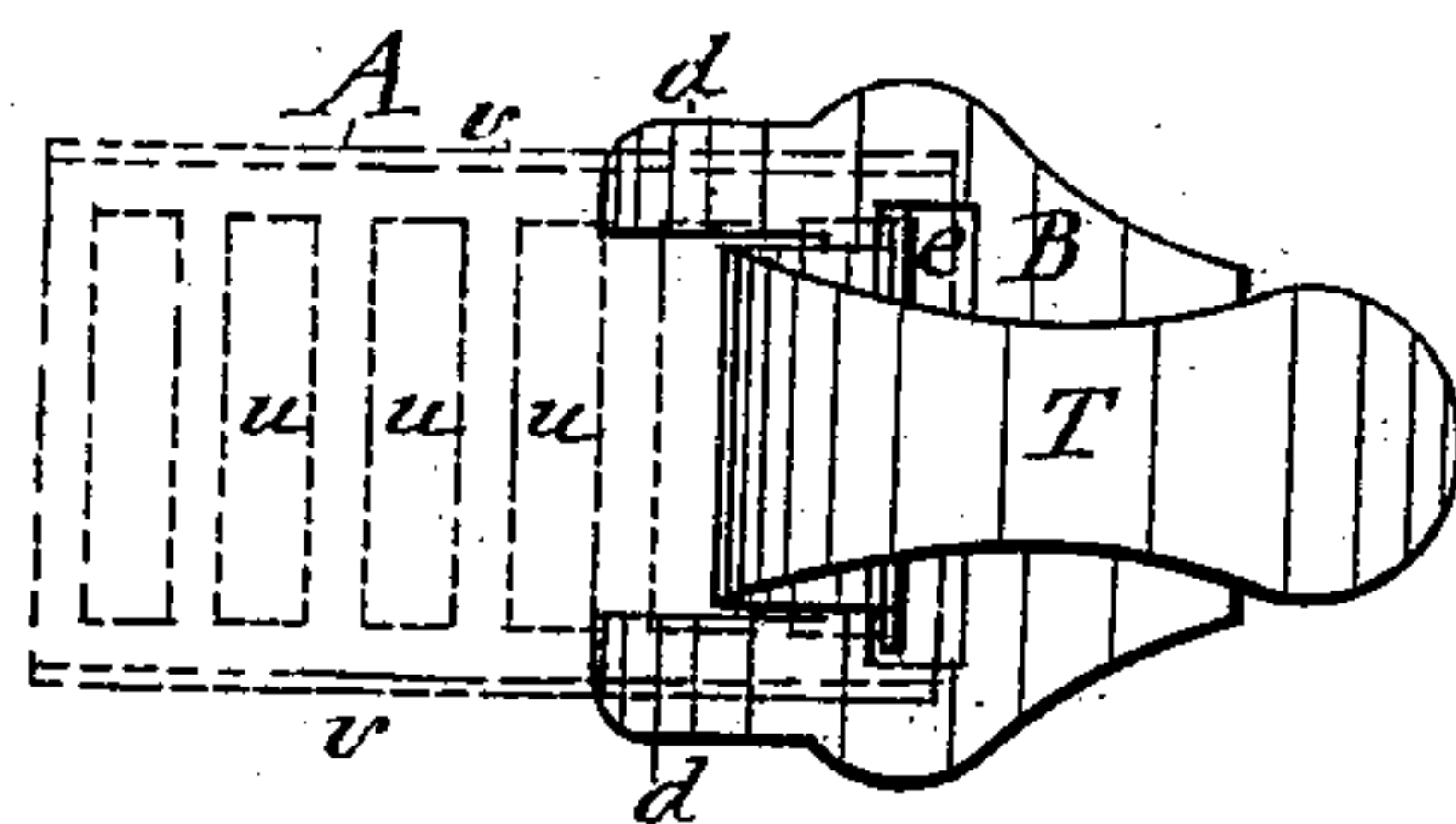


FIG-I-

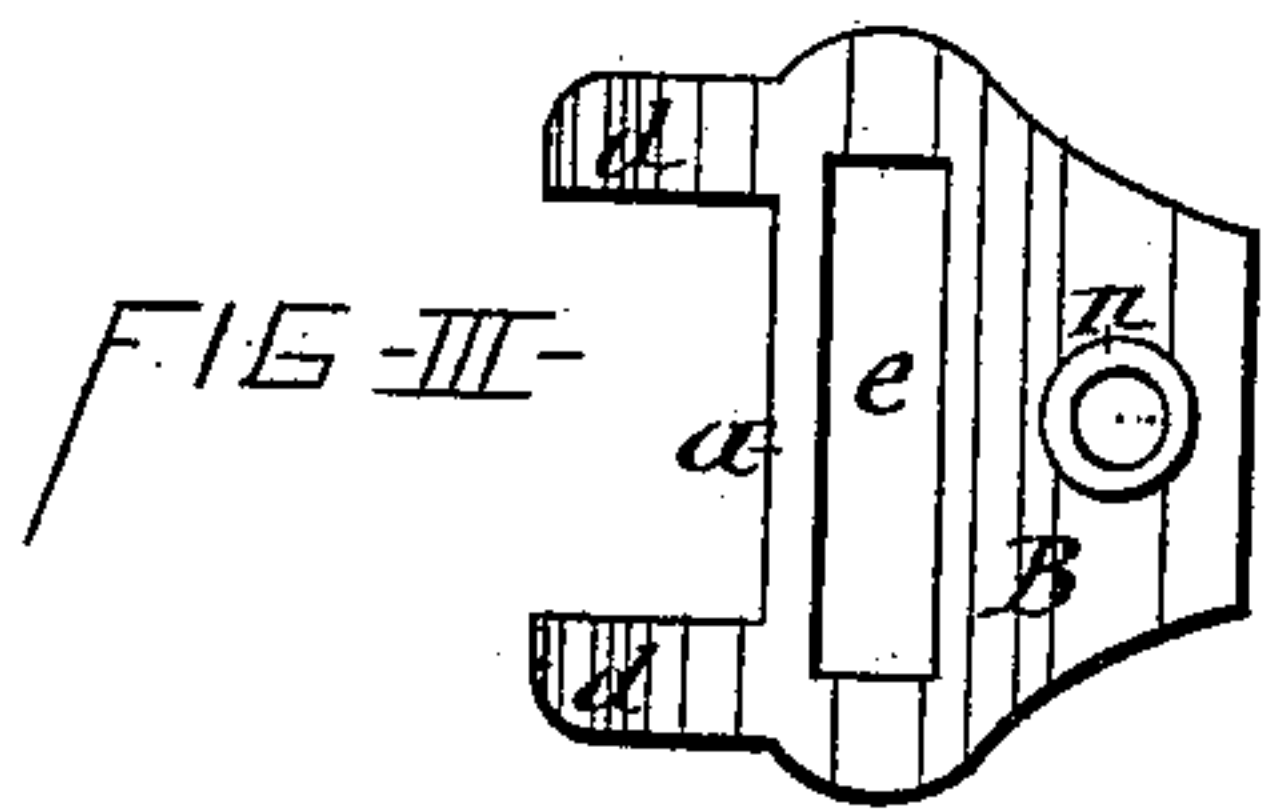


FIG-III-

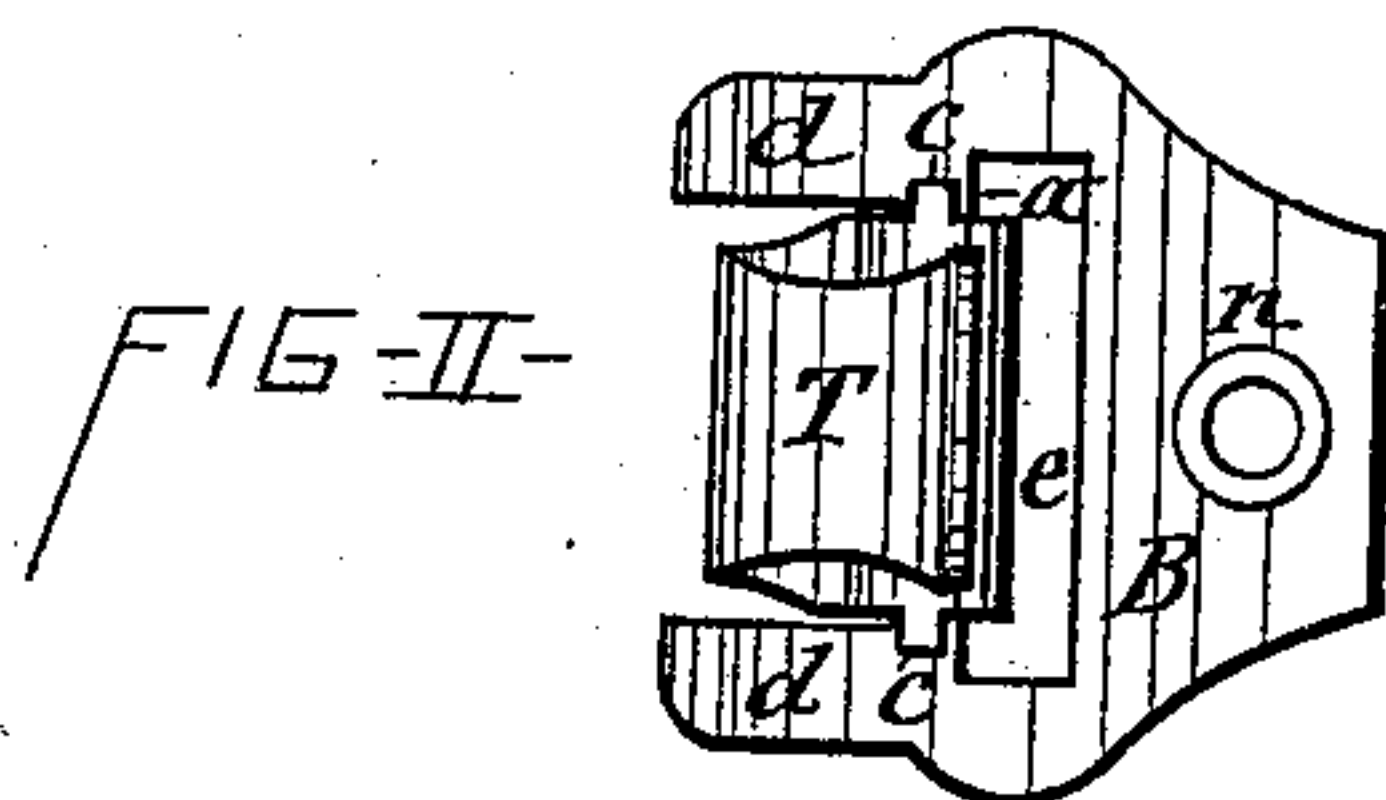


FIG-II-

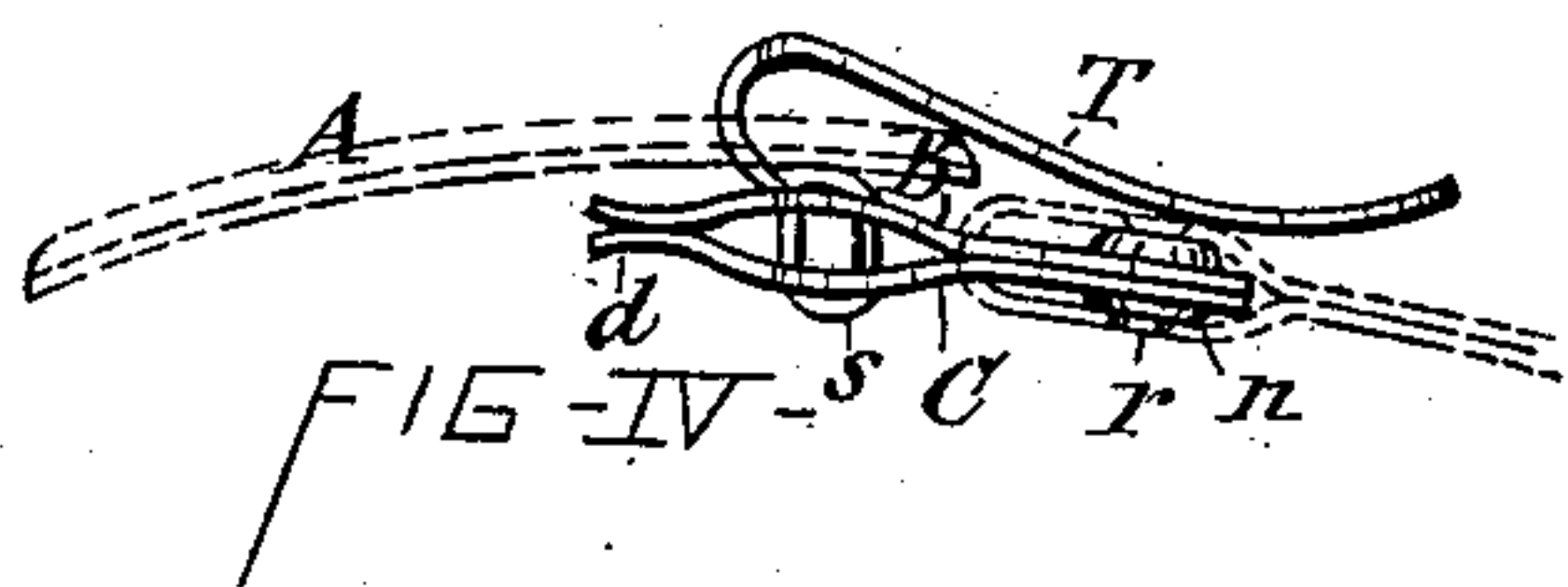


FIG-IV-

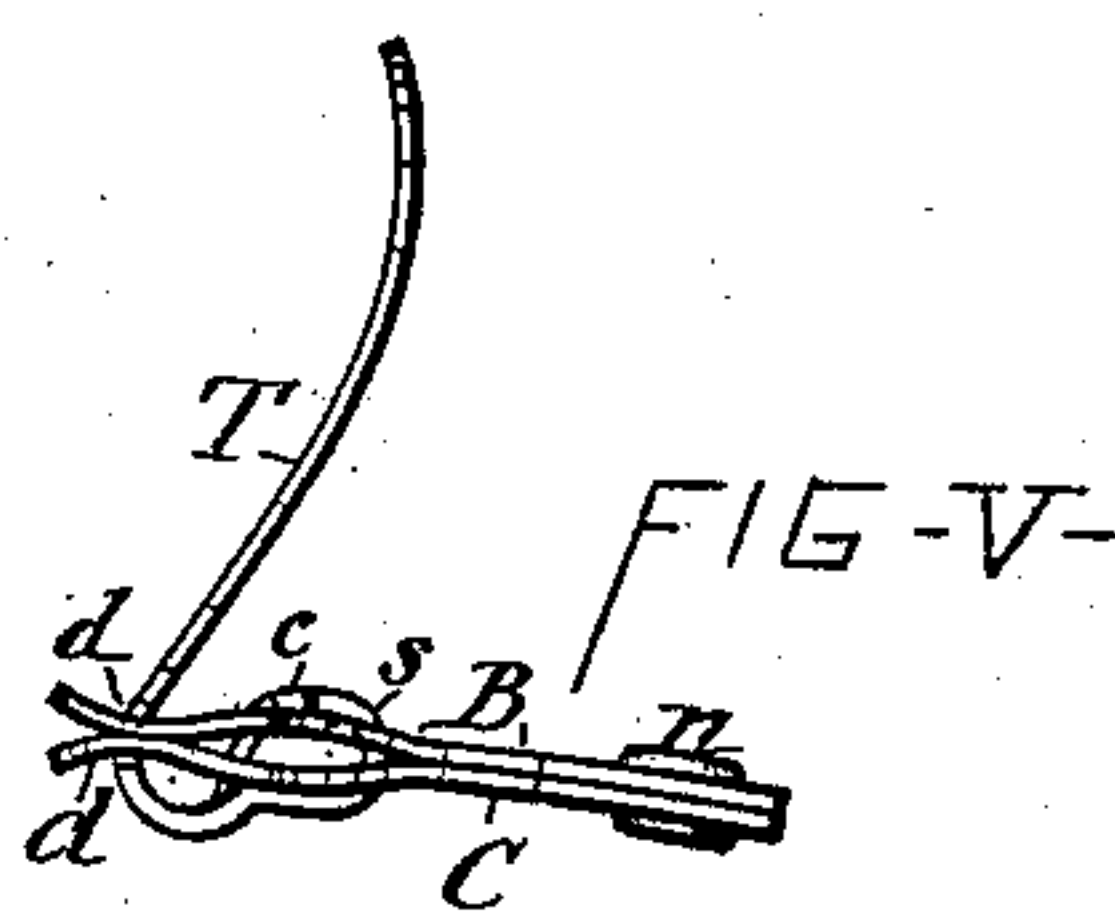


FIG-V-

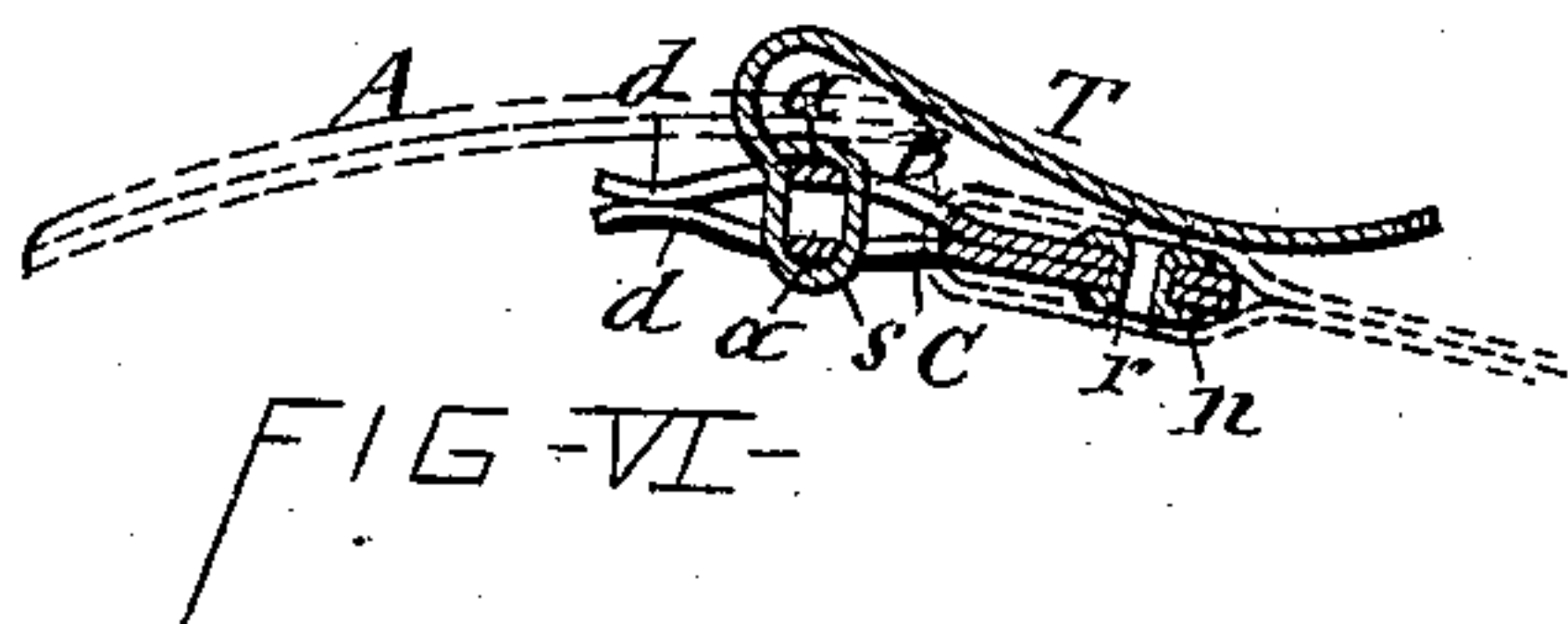


FIG-VI-

WITNESSES

C. Bendison
Wm. C. Raymond

INVENTOR:

Jacob J. Unbehend
per David Laessle & Co
his Atty

UNITED STATES PATENT OFFICE.

JACOB J. UNBEHEND, OF SYRACUSE, NEW YORK.

SPRING-CLASP.

SPECIFICATION forming part of Letters Patent No. 326,352, dated September 15, 1885.

Application filed March 21, 1885. (No model.)

To all whom it may concern:

Be it known that I, JACOB J. UNBEHEND, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and
5 useful Improvements in Spring-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
10 in which a tongue hinged to a plate interlocks with a plate provided with slots through one of which the tongue passes; and the invention has more particular reference to the clasp shown and described in the Patent No.
15 313,385, dated March 3, 1885, upon which it is an improvement.

The object of this invention is to render the clasp more effective in its operation, more secure in its attachment to the shoe or other article, and to control the movement of the tongue
20 to its open position, and, furthermore, to strengthen the slotted plate in a simple, inexpensive, and effective manner; and to that end my invention consists in the novel construction and combination of parts, as hereinafter fully described, and specifically pointed
25 out in the claims.

The invention is fully illustrated in the annexed drawings, wherein Figure I is a plan
30 view of my improved clasp with the slotted plate shown in dotted lines. Fig. II is a plan view of the clasp with the tongue raised to its open position. Fig. III is a plan view of the tongue-carrying plate without the tongue.
35 Figs. IV and V are edge views of the clasp, showing the tongue in its closed and open positions respectively. Fig. VI is a longitudinal section of the clasp in its closed position.

Similar letters of reference indicate corresponding parts.

A represents the transversely-slotted plate, which is to be attached at one end to one of the straps or flaps of the shoe or other article, and T denotes the tongue which is to inter-
45 lock with said slotted plate, and is hinged on a plate or plates attached to the other strap or flap of the aforesaid article. The tongue T in this case is hinged on two plates, B and C, which lie one over the other, and are attached
50 to each other and to the aforesaid strap by an

eyelet, *n*, passing through the rear portions of the two plates and beaded or clinched on opposite sides of the combined plates. In attaching said plates to the strap the latter is passed through a slot, *e*, in the plates forward
55 of the eyelet *n*, and then folded back upon the plates and upon itself, and a rivet, *r*, is inserted through the two-fold portion of the strap and through the eyelet and upset at its ends, as represented by dotted lines in
60 Figs. 4 and 6 of the drawings.

The two plates are composed of spring metal curved or deflected endwise and placed with their concave sides facing each other, so that the plates are made to bear against each other
65 at both ends, while the portions intermediately between the ends are held normally deflected from each other. The latter thus assumes the form of an elliptic spring supported at each end. On suitable bearings on the central por-
70 tion of this spring the tongue T is hinged. The connection of said parts I prefer to make by means of two cross-bars, *a a*, one on each of the plates B C, which cross-bars serve as pin-
75 tles, which extend through an angular or transversely-elongated eye or sleeve, *s*, formed on the tongue T, the elongation of the sleeve being at such an angle in relation to the plane of the tongue as to cause the pintles *a a* to bear
80 against the opposite sides of the widest portion of the sleeve when the tongue lies upon the plates and is in its closed position, as illustrated in Figs. 4 and 6 of the drawings.

In opening the clasp the narrow portion of the sleeve impinges the pintles and compresses
85 the spring, as represented in Fig. V of the drawings, the resistance of said spring serving to enable the tongue to retain its interlocked position with the slotted plate A. Heretofore I terminated the spring at the forward edge
90 of the cross-bars *a a*, and thus gave the spring a resisting support only at one end. This in some clasps I found to be insufficient to produce the requisite spring action. By providing the spring with bearings at each end said
95 spring is materially stiffened, and thus rendered more efficient.

Heretofore some difficulty has been experienced in quickly connecting the slotted plate A with the tongue T, owing to the end of the 100

slotted plate passing accidentally under the end of the tongue-carrying plate. To obviate this defect I provide the hinged portion of the tongue with stops *c c*, in the form of projections on the edges of the tongue, which projections collide with the top of the forward extensions, *d d*, of the spring or tongue-carrying plates when swinging the tongue into its open position, as shown in Figs. 2 and 5 of the drawings.

In order to allow the tongue to be thrown down upon the tongue-carrying plates and into its closed position, I prolong the slot *e* sufficiently to allow the projections *c c* of the tongue to pass through it.

What I claim as new, and desire to secure by Letters Patent, is—

1. A spring-clasp consisting of two plates connected together, one over the other, and formed with bearings between them at both ends, and normally deflected from each other intermediately between the two ends, and the tongue pivoted on the combined plates and provided with an elongated sleeve arranged to compress the deflected portions of said plates as it is turned on its bearings, as set forth.

2. In combination with the tongue provided with an angular or transversely-elongated sleeve, the two plates connected together, one over the other, and bearing upon each other at the ends, and normally deflected from each other intermediately between the two ends, and pintles on the deflected portions of the two plates held within the sleeve of the tongue, substantially as and for the purpose set forth and shown.

3. In combination with the tongue provided with an angular or elongated sleeve, *s*, the plates B and C, connected together at one end, held in contact with each other at the opposite end, and deflected from each other intermediately the ends, and each provided at the deflected portion of the plate with a cross-bar,

a, held within the sleeve of the tongue, substantially as described and shown. 45

4. The combination, with the tongue-carrying plate and tongue hinged thereon, of positive stops on the edges of the hinged portion of the tongue arranged to collide with the plate, and thereby arrest the movement of the tongue when swinging it to its open position, substantially as set forth. 50

5. The combination of the tongue provided with the projections *c c*, and the tongue-carrying plates B C, each provided with the pintle *a* for the attachment of the tongue, and with the extensions *d d* in front of the pintles, and prolonged slot *e* back of the pintles, substantially as described and shown, for the purpose set forth. 60

6. A clasp having two plates with a tongue hinged to both, and said plates attached to each other by an eyelet passing through the two plates and beaded or clinched on opposite sides of the combined plates, substantially as described and shown. 65

7. A clasp having two plates with a tongue hinged to both, and said plates attached to each other and to the strap of the shoe by an eyelet passing through the two plates, and beaded or clinched on opposite sides of the combined plates, the strap passing through a slot in the forward portion of the said plates and doubled back, and a rivet passing through the two-fold portion of the strap and through the eyelet, substantially as described and shown. 75

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 18th day of March, 1885. 80

JACOB J. UNBEHEND. [L. s.]

Witnesses:

FREDERICK H. GIBBS,
E. C. CANNON.