(No Model.)

S. T. HISLEY.

BUCKLE.

No. 479,003. Patented July 19, 1892.

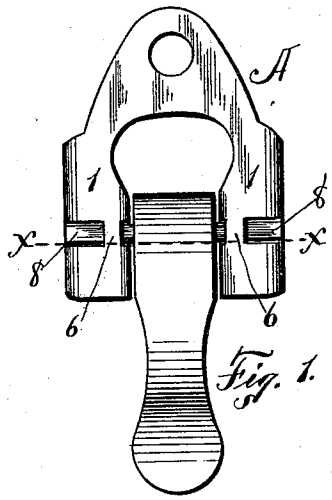

Fig. 1.

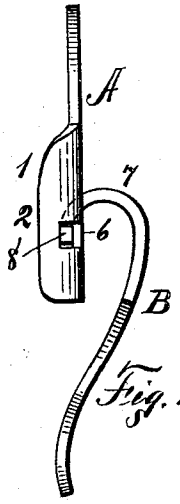

Fig. 2.

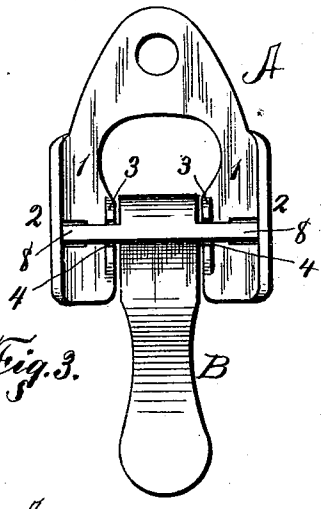

Fig. 3.

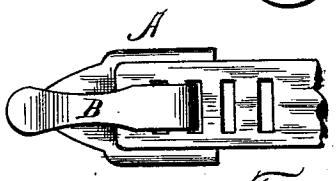

Fig. 9.

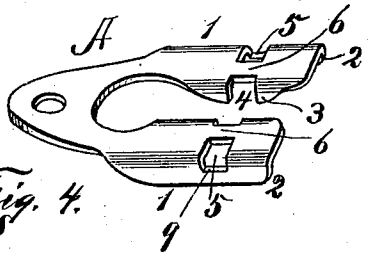

Fig. 4.

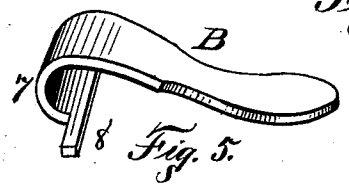

Fig. 5.

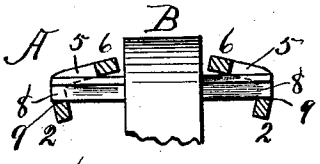

Fig. 6.

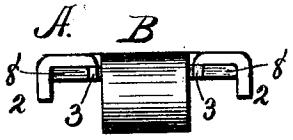

Fig. 7.

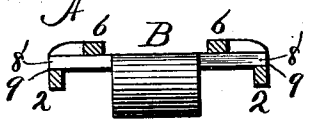

Fig. 8.

WITNESSES:

Joel B. Justin

INVENTOR

Stephen T. Hisley,

BY

Smith & Dennison

his ATTORNEYS

UNITED STATES PATENT OFFICE.

STEPHEN T. HISLEY, OF SYRACUSE, NEW YORK.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 479,003, dated July 19, 1892.

Application filed July 2, 1891. Serial No. 398,305. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN T. HISLEY, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Buckles, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to shoe clasps or buckles which are constructed from two pieces of metal—a body and a finger or lever.

My object is to construct a clasp from two pieces of metal—a body and a finger or lever journaled therein—the parts being so arranged that the pintles of the lever produce a torsion-spring action of the arms of the body when the lever is operated to open or close the clasp.

My invention consists in the several novel features of construction and operation hereinafter described, and which are specifically set forth in the claim hereunto annexed.

It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a bottom plan of the buckle open. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a top plan of the same. Fig. 4 is an isometrical elevation of the body detached. Fig. 5 is a like view of the finger or lever detached. Fig. 6 is a transverse sectional front elevation of the buckle, partly opened, line X X, Fig. 1, showing the torsional effects of the lever-pintles upon the arm of the body when the lever is operated. Fig. 7 is a front elevation of the clasp when the same is partly opened or partly closed. Fig. 8 is a sectional elevation of the clasp closed on line X X in Fig. 1. Fig. 9 is a top plan of the clasp closed, with the draw-plate connected.

A is the body of the buckle, consisting of a single plate of substantially the outline shown, having its central portion cut out to create the arms 1 1, having the outward flanges 2 2 upon their outer edges and the flanges 3 3 upon their inner edges and the transverse grooves 4 4 in said flanges and having the mortises 5 5 partly in the arms and partly in the flanges 2 and having the bars 6 adjacent to the inner flanges.

B is the finger or lever, curved substantially as shown at 7 and having the side pintles 8 projecting from the heel of said lever-body. These pintles are shown as rectangular; but any other form may be used which will produce the same effects. The pintles have their bearings in the side arms 1, lying in the mortises 5 and grooves 4, and against the bars 6, and also against the outer edge of the mortises 5 in the flanges 3, as upon the surface 9 in Fig. 4. When the lever is raised to open the clasp, the rotation of the pintles causes each pintle to bear more strongly against the flanges 3 at 9, forcing the outer edges of the arms in one direction, and also more strongly against the bars 6, thus forcing the inner edges of the arms in the opposite direction and thus jointly producing a twist or torsion upon each arm, as shown in Fig. 6. This torsion is thus created, also, when the lever is thrown over to close the clasp, and the bearing of the arms upon the pintles holds the lever down either in the open or closed position. As the lever passes the center the torsion is correspondingly reduced, and it will snap the lever over either to open or close the clasp, throwing the lever clear over back when the clasp is opened. It will be seen that I thus produce a buckle or clasp, a body-plate, and a lever so connected as to possess full spring action when the lever is operated, and also permitting the lever, when opened, to be thrown clear over, so that its outer end can be readily passed through a slot in the slotted draw-plate and then closed from the open position shown in Fig. 3 by swinging said lever around to the left.

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

In a buckle, a body consisting of a plate of metal, arms projecting from one end thereof adjacent to the edges, flanges turned longitudinally along and standing at substantially right angles to the plane of said arms and forming the outer edges thereof, and mortises cut in the angles between and partly in and transverse to said flanges and partly in and transverse to the portions of said arms which lie in the same plane as the body, in combi-

nation with a lever having pintles projecting laterally into said mortises and lying, normally, in those portions thereof which are in the flanges and across the flat portions of said arms and when operated bearing against said flanges as to one edge of the pintles and against part of the flat portions of said arms as to the other edge of said pintles.

In witness whereof I have hereunto set my hand this 26th day of June, 1891.

STEPHEN T. HISLEY.

In presence of—
HOWARD P. DENISON,
C. W. SMITH.