(No Model.)

A. SHENFIELD & C. VOORHIS.

SUSPENDER BUCKLE.

No. 332,448. Patented Dec. 15, 1885.

Fig. 2.

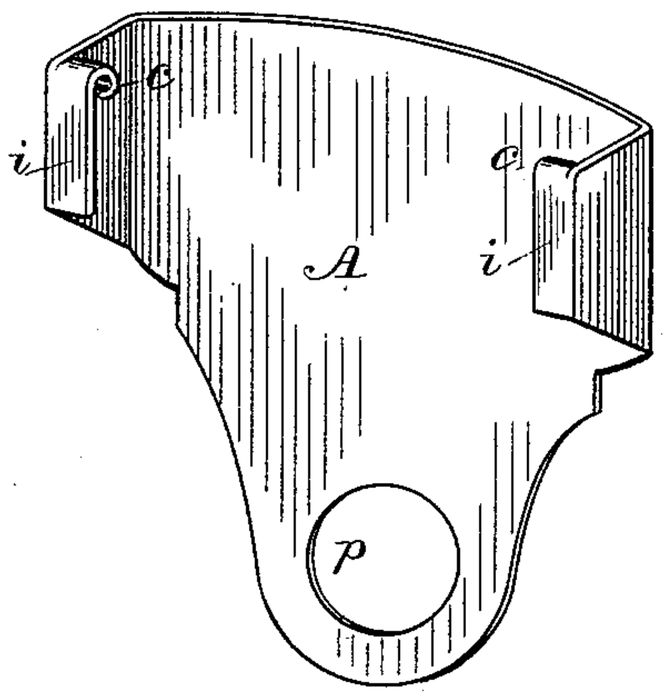


Fig. 3.

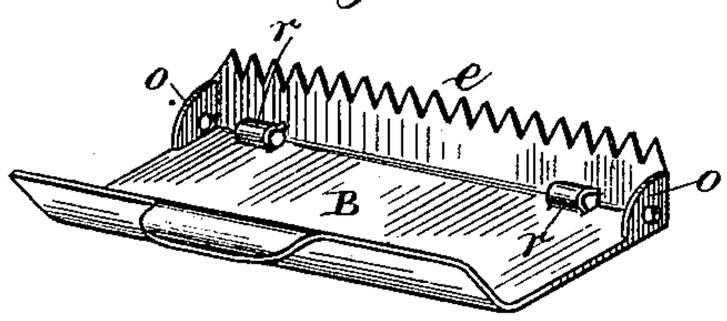


Fig. 6

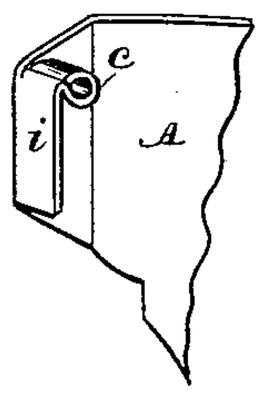


Fig. 1.

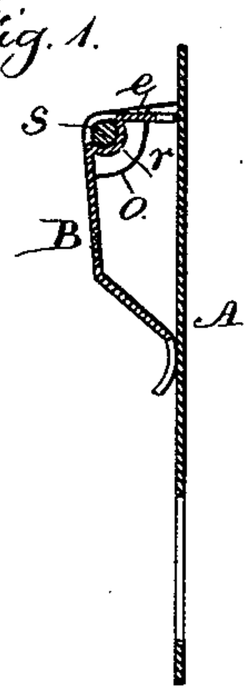


Fig. 4.

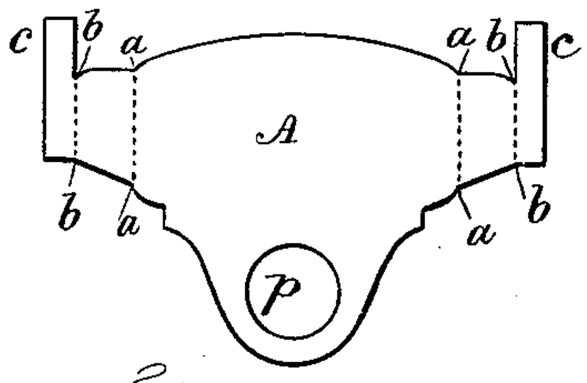


Fig. 5.

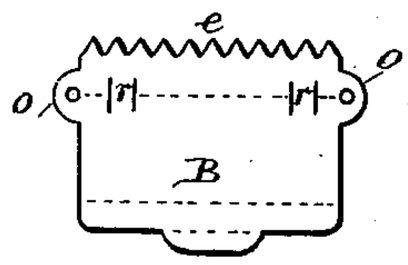


Fig. 8

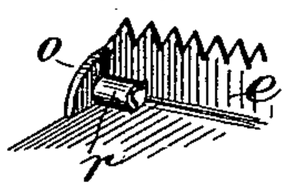
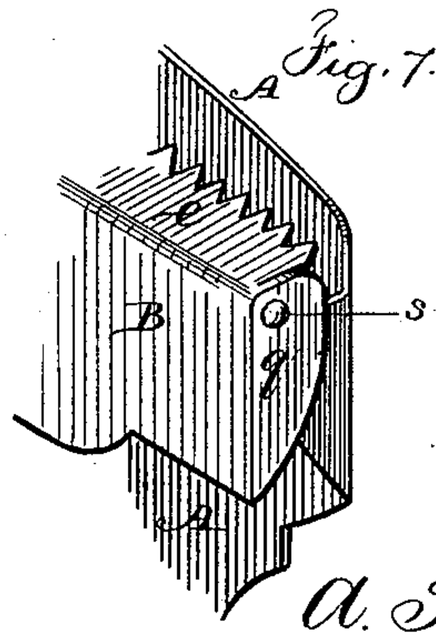


Fig. 7.



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UNITED STATES PATENT OFFICE.

ABRAHAM SHENFIELD AND CALVIN VOORHIS, OF NEW YORK, N. Y.

SUSPENDER-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 332,448, dated December 15, 1885.

Application filed October 6, 1885. Serial No. 179,127. (No model.)

To all whom it may concern:

Be it known that we, ABRAHAM SHENFIELD and CALVIN VOORHIS, of the city and State of New York, have invented an Improvement in Suspender-Buckles, of which the following is a specification.

Buckles for suspenders have been made with a body, at the back of which a lever is pivoted to clamp the suspender-strap, and usually there are teeth at the edge of the lever that come into contact with the suspender. In these buckles there are usually edges and corners upon the sheet metal at the back part of the body, and these are liable to wear the shirt or other parts of the clothing with which they come into contact.

Our invention is made for rendering the back of the suspender-buckle smooth and free from any projecting sheet-metal edges, and for strengthening such buckle.

In the drawings, Figure 1 is a section of the buckle complete. Fig. 2 is a perspective view of the body of the buckle. Fig. 3 is a similar view of the bent clamping-lever, as seen from the inside. Fig. 4 is a representation of the plate as cut out to form the body of the buckle. Fig. 5 represents the plate as cut out to form the bent clamping-lever, and Figs. 6, 7, and 8 are perspective views of modifications of parts of the buckle.

In Figs. 1, 2, 3, 6, 7, and 8 the parts are shown in enlarged size.

The body A is made of sheet metal, cut out similar to the blank shown in Fig. 4. This is folded or bent at the lines *a a b b*, so as to assume a partial box form, and the strap portions *c c* project sufficiently to be bent around to form eyes for the pivots of the clamping-lever B. These eyes, being in one piece with the body A, and the sheet metal being bent or rolled over, form very strong pivot-bearings, that are not liable to give way by the strain to which they are subjected. It is preferable to bend the strap portions *c* inwardly, as seen in Fig. 2; but these strap portions may be bent the other way, as seen in Fig. 6, if preferred. In any case the pivot-eyes are preferably bent so that the metal of the body comes at the ends of the pivot-wire, to hold the same in place and dispense with riveting the ends of the pivot-wire. The clamping-lever B is usually made with teeth at the end of the right-angle lip *e*, but it may have a plain edge and be otherwise formed in any desired manner; but we prefer the form and construction next described. The lever B is of a width to pass in between the eye *c*, and between the returned flanges *i i* of the body A, and in order to strengthen the lever B we employ end braces, *o*, that extend across the angles at the bend or fold in the lever. The sheet metal should be cut out in the form shown in Fig. 5, and then bent or folded at right angle, and the braces *o* turned over upon a form or die by pressure, so as to condense the metal, and holes are made through the braces *o* for the passage of the pivot-wire *s*. The sheet metal at the angle in the clamping-lever is pressed inwardly to form one or more loops, *r*, through which the pivot-wire passes. These firmly secure the pivot-wire and stiffen the lever. These loops are to be at any desired place or places along in the angle. When near the ends of the bent lever and adjacent to the braces *o*, the holes in the braces may be punched before bending such braces up to place.

The hook or eye at *p*, for the suspender-end or any other suitable device, is provided upon the body A for the connection of the suspender-end.

The clamping-lever, instead of passing in between the returned flanges *i*, may have side pieces *q*, as seen in Fig. 7, to swing down outside the side portions of the body. In this case the pivot-pin, instead of being inclosed at its ends within the body A, will pass through the metal at the ends of the eyes *e*, and through the end pieces *q*, and be riveted.

We claim as our invention—

1. The buckle-body A, having returned end flanges and the metal strap-pieces bent up into circular eyes, in combination with the clamping-lever and the pivots thereof, which pivots enter into the eyes, substantially as set forth.

2. The buckle-body having pivot-eyes formed of the bent-up straps, and the returned end flanges, in combination with the clamping-lever and a pivot-wire for connecting the clamping-lever to the eyes in the body, substantially as set forth.

3. The combination, with the buckle-body and the pivot-wire, of a bent clamping-lever

having braces at the ends of the bent portion, with holes through which the pivot-wire passes, substantially as set forth.

4. The combination, with the buckle-body and the pivot-wire, of a bent clamping-lever having loops in the bend through which the pivot-wire passes, substantially as set forth.

5. The combination, in a suspender-buckle, of the body A, having returned end flanges, and pivot-eyes formed of the strap-pieces bent up, and a bent clamping-lever with perforated braces at the ends of the bent portions, and loops bent in the sheet metal for the passage of the pivot-wire, substantially as set forth.

Signed by us this 5th day of October, A. D. 1885.

ABRAHAM SHENFIELD.
CALVIN VOORHIS.

Witnesses:
WALLACE L. SERRELL,
WILLIAM G. MOTT.