(No Model.)

R. J. DEARBORN.

BUCKLE.

No. 422,741. Patented Mar. 4, 1890.

FIG. 1.

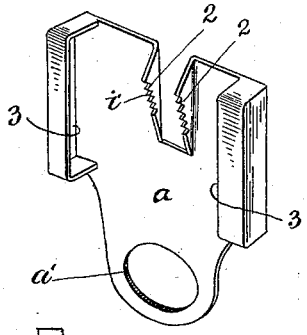


FIG. 2.

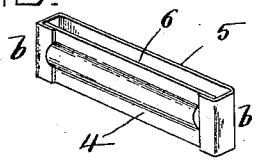


FIG. 3.

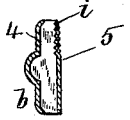


FIG. 4.

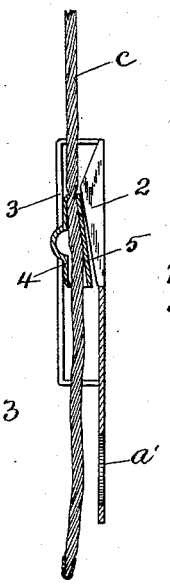


FIG. 6.

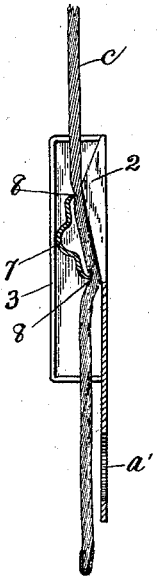


FIG. 5

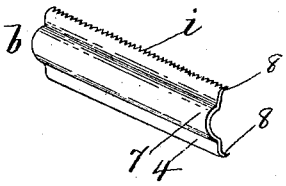
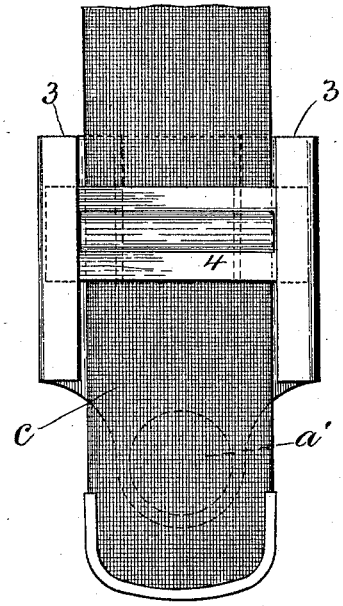


FIG. 7



WITNESSES:

Louis L. Carrie.

W. C. Ramsay.

INVENTOR

Richard J. Dearborn.

by Wright, Brown & Crossley.

Attys.

UNITED STATES PATENT OFFICE.

RICHARD J. DEARBORN, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO EDWARD O. ELY, OF SAME PLACE.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 422,741, dated March 4, 1890.

Application filed August 24, 1889. Serial No. 321,901. (No model.)

To all whom it may concern:

Be it known that I, RICHARD J. DEARBORN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Clasps or Buckles, of which the following is a specification.

This invention has for its object to provide a simple and efficient buckle or clasp adapted to secure the webbing or strap portion of a suspender to the end portion or terminal thereof by compressive pressure; and it consists in the improved construction which I will now proceed to describe.

In the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of the body portion of my improved clasp or buckle. Fig. 2 represents a perspective view of the sliding clamp which accompanies said body portion. Fig. 3 represents a transverse section of the said clamp. Fig. 4 represents a longitudinal section of the complete clasp, showing the suspender held thereby. Fig. 5 represents a perspective view of a clamp of different form from that shown in Figs. 2, 3, and 4; and Fig. 6 represents a longitudinal section of the clasp having a clamp of the form shown in Fig. 5. Fig. 7 represents a front view of my improved clasp or buckle with the suspender applied thereto.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents the sheet-metal body of my improved clasp or buckle, the same being provided with an orifice *a'* in its lower portion adapted to engage a hook on the suspender-end, or otherwise adapted to be detachably connected to a suspender-end. On the upper portion of said body two flanges 2 2 are formed by cutting an opening in the body *a* and bending the edges of said opening inwardly, said edges constituting the flanges, which are inclined relatively to the surface of the body *a*, as shown. At opposite sides of the body *a* are vertical guides 3 3, formed to permit the vertical sliding motion of the clamp *b*, the ends of which are inserted in said guides, as shown in Fig. 7. Said clamp is shown in Figs. 2, 3, and 4 as composed of two parts—namely, a front plate 4 and a back plate 5—said plates being secured together by any suitable means, as by soldering the bent ends of the back plate 5 to the plate 4, the connection being such as to form a suspender-receiving slot or space 6 between the plates 4 5. The back plate 5 is elastic or flexible, for a purpose which will be presently described. The ends of the clamp *b* are placed in the guides 3 3, and the suspender *c* is passed through the slot which is between the plates 4 5 of the clamp.

When it is desired to affix the clasp or buckle to the suspender, the clamp *b* is moved upwardly until its back 5 is displaced and crowded outwardly by the inclined flanges 2 2, as shown in Fig. 4. The suspender is thus compressed between the back plate 5 and the front plate 4, and the latter is pressed firmly against the front portions of the guides 3 3, the result being that the clamp is securely held by friction at the point to which it has been moved, while the suspender is firmly grasped between the back and front plates of the clamp.

In Figs. 5 and 6 I have shown a different construction of the clamp 5, the same being composed of one piece corresponding to the front plate 4 of the form before described, said piece having a longitudinal boss 7 extending along its center and inwardly-projecting flanges or jaws 8 8 at its edges. Said boss bears at its ends against the front portions of the guides 3 and constitutes a fulcrum on which the clamp may rotate or be inclined when the clamp is pushed upwardly, as shown in Fig. 6. The flanges or edges 8 8 of the clamp are permitted by the tipping or rocking of the clamp to conform to the inclined flanges 2 2. In this case the suspender *c* is grasped directly between the jaws 8 8 and the inclined flanges 2 2, as shown in Fig. 6, no back plate being employed. However, a back plate can be employed in this, as in the previously-described construction.

I do not limit myself to the use of two inclined flanges 2 2, as one incline or inclined surface may be employed, which may or may not have a wider surface than the inclines here shown, and said incline may be made by soldering or otherwise securing a piece of metal to the body portion *a*, instead of by bending portions of said body outwardly, as shown.

The clamp *b* may have teeth or indentations *i* to increase its hold on the webbing. Said teeth may be formed by corrugating or otherwise roughening the back plate 5 in the construction shown in Figs. 2, 3, and 4, or by serrating the jaws 8 8 in the construction shown in Figs. 5 and 6, or in any other suitable way. The inclined flanges 2 2 may have serrations *i'*, as shown in Fig. 1, for the same purpose.

When the clamp is constructed as shown in Figs. 5 and 6, no solder need be employed in its construction.

I claim—

1. In a clasp or buckle, the body or back plate *a*, having clamp-guides at its opposite edges and one or more inclined flanges on its inner side between said guides, combined with the clamp having its ends inserted in said guides, and its central portion arranged to co-operate with the said flanges in grasping a strap, as set forth.

2. The sliding clamp having teeth or serrations, combined with the body or plate *a*, having guides 3 3 for the clamp and one or more inclined flanges between said guides to co-operate with the clamp, as set forth.

3. The back plate having one or more flanges having inclined and serrated edges and the clamp-guides 3 3, located at opposite sides of said flanges, combined with the sliding clamp, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 9th day of March, A. D. 1889.

RICHARD J. DEARBORN.

Witnesses:

C. F. BROWN,

A. D. HARRISON.