D. L. SMITH.

Buckle.

No. 167,947. Patented Sept. 21, 1875.

Fig. 1.

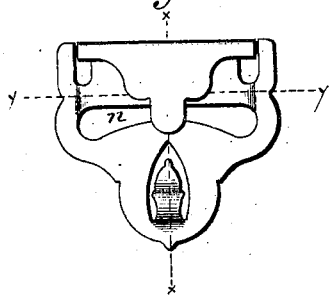

Fig. 2.

Fig. 3.

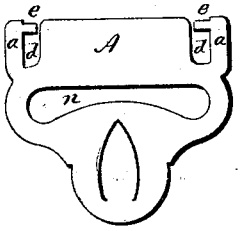

Fig. 4.

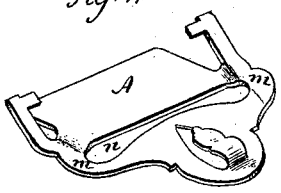

Fig. 7.

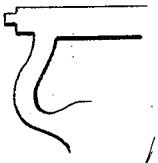

Fig. 8.

Fig. 5.

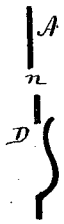

Fig. 6.

Witnesses.
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UNITED STATES PATENT OFFICE.

DWIGHT L. SMITH, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE WATERBURY BUCKLE COMPANY, OF SAME PLACE.

IMPROVEMENT IN BUCKLES.

Specification forming part of Letters Patent No. **167,947**, dated September 21, 1875; application filed February 5, 1875.

To all whom it may concern:

Be it known that I, DWIGHT L. SMITH, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Buckle; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, front view; Fig. 2, side view; Fig. 3, diagram of the blank as cut for the body; Fig. 4, perspective view of the body ready to receive the lever; Fig. 5, vertical section on *x x;* Fig. 6, transverse section on line *y y;* Figs. 7 and 8, the old construction.

This invention relates to an improvement in that class of buckles designed for suspender-buckle, and in which a lever-clamp is used to hold the strap.

Heretofore it has been the usual practice to construct the body-blank with an ear projecting from each side, to be turned up, and the ends bent inward to form the trunnions for the lever. This necessitates very short or right-angular bends in the ears. In doing this, unless the metal be too soft for a durable buckle, many blanks will be destroyed by the breaking of the ears in bending. Again, in clamp-buckles there is no allowance for variable thickness of suspenders.

The object of this invention is to obviate these difficulties, and at the same time produce a stronger buckle.

The invention consists in the peculiar method of forming the trunnions upon the body, as more fully hereinafter described.

The blank for the body is cut in the usual manner, from suitable sheet metal, and of the form seen in Fig. 3. This is substantially the usual form, with this important difference: The arms *a* at each side of the body are formed by cuts *d*, and upon the inside of these arms the trunnions *e*, all in the same plane. Then the arms *a* are turned upward, as denoted in Fig. 4, to bring the trunnions to the required elevation above the base A, and without bending the trunnions or forming sharp angular bends in any part; whereas, in the usual construction, the blank is cut as in Fig. 7, with laterally-projecting arms *f*, and trunnions on the end. These must be bent up and over, as seen in Fig. 8. The lever B is applied to the trunnions in the usual manner.

By this improvement the trunnions are connected to the body below, leaving the base A free above that point of connection, and as the material of which the buckle is made is elastic, it follows that the base A will yield as the lever is brought to bear upon the suspender over the plate, and thus accommodate different thicknesses of material.

This construction requires less metal than the old, as the width of the blank, as seen in Fig. 3, is less than that of the old, as seen in Fig. 7.

In order to afford greater facility for tucking the end of the suspender through the slit *n* in the plate, than can be when the part A above the slit *n* is in the same plane as the part below, as in the usual construction, I depress the base A by "striking" it below the ends *m*, as seen in Figs. 5 and 6, the depression being about equal to the thickness of the suspender; hence the part or base A will lie flat upon the back of the suspender, and the part D below will lie flat upon the front without making a bend in the suspender at the slit.

I claim—

1. A buckle-frame, having the arms *a* formed thereon by transverse cuts *d*, with the inwardly-projecting trunnions *e*, substantially as described.

2. In a buckle-frame, substantially such as described, the base A, struck below the plane of the part D, substantially as and for the purpose specified.

DWIGHT L. SMITH.

Witnesses:

A. F. ABBOTT,

B. G. BRYAN.