D. L. SMITH.

BUCKLE.

No. 183,473. Patented Oct. 17, 1876.

*fig. 1*

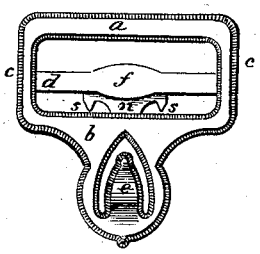


*fig 2*

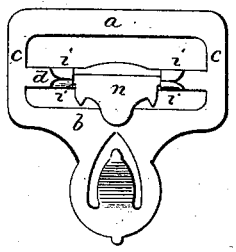


*fig. 3*

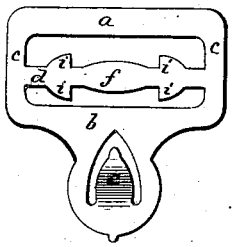


*fig. 4*

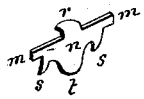


*fig. 5*


Witnesses.

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# UNITED STATES PATENT OFFICE.

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

## IMPROVEMENT IN BUCKLES.

Specification forming part of Letters Patent No. **183,473**, dated October 17, 1876; application filed September 15, 1876.

*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 Improvement in Buckles; 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, a front view; Fig. 2, a rear view; Fig. 3, the frame of the buckle as cut from sheet metal; Fig. 4, the tongue; and in Fig. 5, a vertical central section.

This invention relates to an improvement in that class of buckles designed specially for suspenders, the object being to form a tongue considerably shorter than the frame, whereby the tongue can be made small and light, and yet equally as strong as the usual full-length tongue.

The invention consists in constructing the frame with a central longitudinal bar, with a bearing for the tongue-cam in the center, and an ear each side the said bearing, combined with a tongue hinged or closed upon the bar by the said ears, and constructed with a cam to work upon said bearings, and tongues for securing the suspenders, all as more fully hereinafter described.

The frame is cut from sheet metal, as seen in Fig. 3, forming an upper bar, *a*, a lower bar, *b*, ends *c*, and a central longitudinal bar, *d*, with the usual hook *e* below. At the center of this bar *d* there is formed a cam-bearing, *f*, and at the right and left of this bearing an ear, *i*, is formed upon each side of the bar, the extent of these ears being sufficient to turn over onto the bar, as seen in Fig. 1, and form a pocket or bearing for the pintle of the tongue; but, if preferred, these ears may be made entirely upon one side.

The tongue *n* is in length a little more than the distance between the ears on the bar *d*, so as to form a trunnion, *m*, at each end, as seen in Fig. 4. On the back or upper edge of the tongue a piece is turned forward to form the cam *r*, and on the lower edge spurs *s*, (more or less in number,) and at a convenient point a thumb-piece, *t*, on the same edge.

The tongue thus constructed is laid between the ears on the bar *d*, and the ears turned over to inclose the trunnions *m*, as seen in Fig. 2. The cam *r* is above the line of the hinge, and bears upon the center *f* of the bar, as seen in Fig. 5, and therefore tends to hold the tongue down against the frame; but when raised, as indicated in broken lines, the cam will retain the tongue in that position until the suspender be properly adjusted, then turned down. The bearing *f* of the bar serves as a spring upon the cam *r*, to force and hold the spurs into the suspender.

By this construction it will be observed that the tongue is proportionately very much smaller than for the same-sized buckle of its class of the usual construction.

I claim—

The herein-described buckle, consisting of the frame *a b c*, with a longitudinal bar, *d*, forming a central bearing, *f*, and constructed with ears between the bearing and the ends of the frame, combined with a tongue constructed with a cam upon its upper edge and spurs upon the lower, the trunnions of the said tongue closed by ears upon the bar, substantially as specified.

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Witnesses:

ANSON F. ABBOTT,

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