

(No Model.)

E. A. SMITH.  
BUCKLE.

No. 376,921.

Patented Jan. 24, 1888.

Fig 1

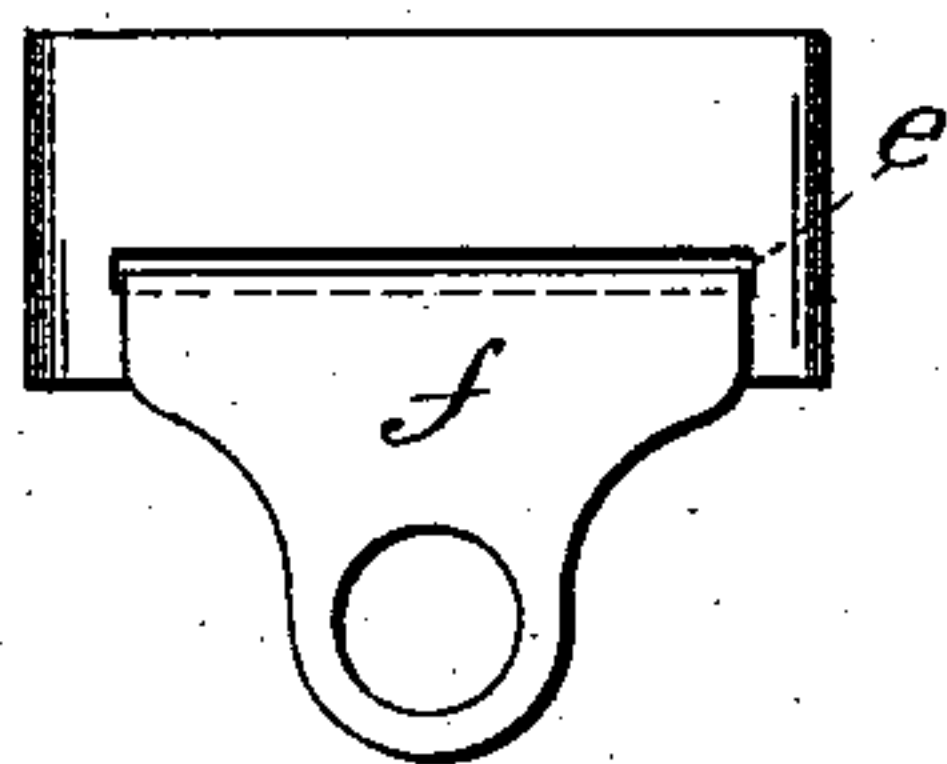


Fig 2

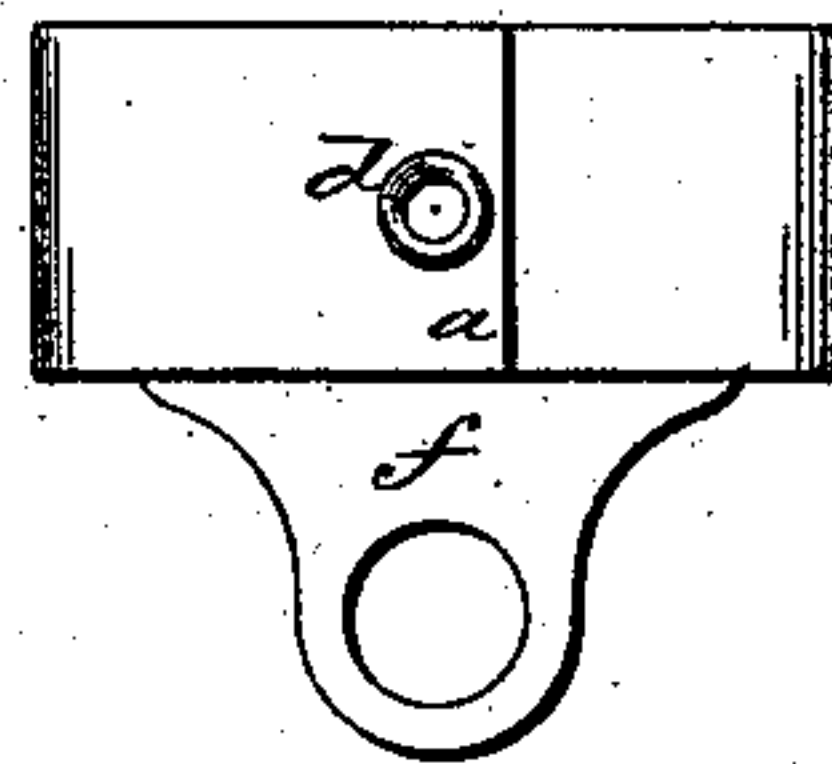


Fig 3

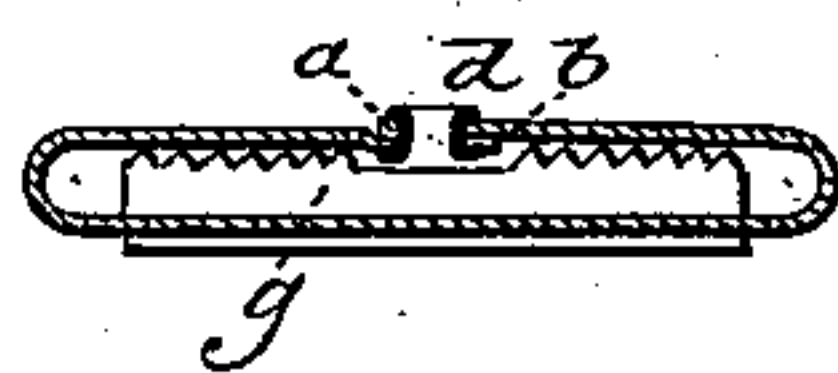


Fig 4

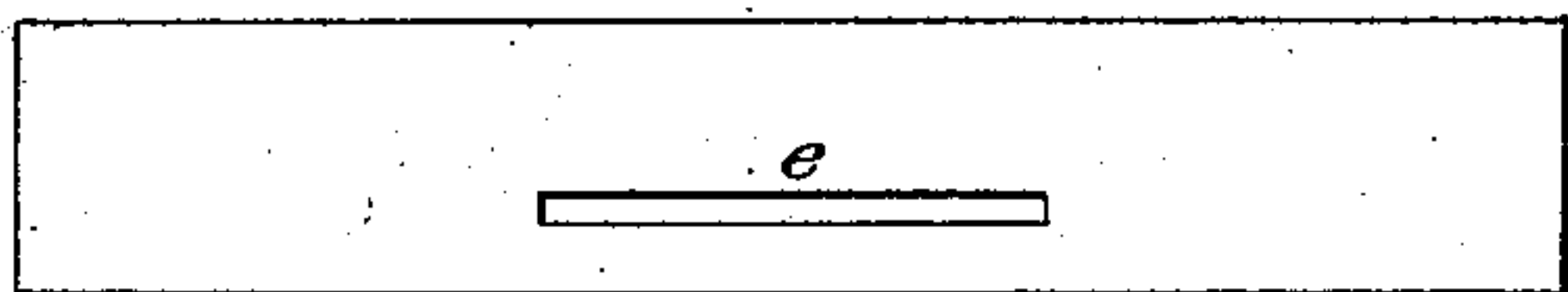


Fig 5

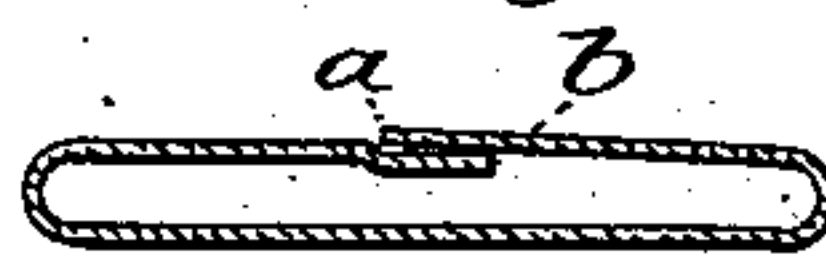


Fig 6



Fig 7

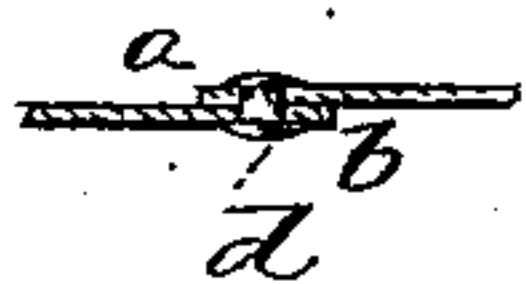
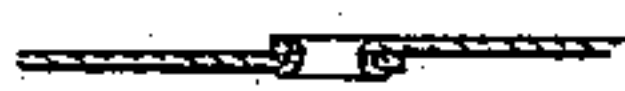


Fig 8



Witnesses  
J. N. Shumway  
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Earl A. Smith  
By atty. Inventor.  
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# UNITED STATES PATENT OFFICE.

EARL A. SMITH, OF WATERBURY, CONNECTICUT.

## BUCKLE.

SPECIFICATION forming part of Letters Patent No. 376,921, dated January 24, 1888.

Application filed December 1, 1887. Serial No. 256,631. (No model.)

*To all whom it may concern:*

Be it known that I, EARL A. 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 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 of the buckle complete; Fig. 2, a rear view of the same; Fig. 3, a horizontal section through the slot; Fig. 4, the blank from which the frame is made; Fig. 5, the strip as bent into the tubular form for the frame, showing the overlapping portions; Fig. 6, the same as Fig. 5, riveted together; Figs. 7 and 8, modifications of the rivet.

This invention relates to an improvement in that class of buckles adapted for wearing-apparel, particularly suspenders, and in which the frame is of tubular shape, with a lever introduced through an opening in one side, and of cam-like shape, so as to impinge upon the strap and force it against the opposite side, the strap passing through the tube-like frame. In this class of buckles the frame has been made with the back or bearing side of the buckle divided in a central position, the two ends left free, so as to give a considerable amount of elasticity to the back; but in practice this elasticity is found to be undesirable, and that a close back is preferable.

In some cases, as in the patent granted to me, No. 307,345, dated October 28, 1884, the back of the buckle extended entirely across from end to end, the meeting edges of the frame lapping one upon the other.

The object of my invention is to construct the frame so as to give a strong rigid back or resistance for the action of the cam upon the strap. To this end the invention consists in a frame made of tubular shape, the frame being made in a single piece of sheet metal bent into tubular shape, the ends or edges of the metal meeting in the back overlapping and secured together by a rivet through the overlapping portion.

The frame is best made from a strip of metal of equal width from end to end, and of a length corresponding to both the front and

rear, plus the turning of the ends and the overlapping portions, and as represented in Fig. 4. This strip of metal is then bent into tubular shape, as indicated in Fig. 5, the ends of the metal preferably meeting at the center of the back, as represented in Fig. 5, *a* representing one end, and *b* the other end, then through the overlapping portions a rivet is introduced, as represented in Fig. 6. This rivet is best made by first correspondingly piercing the two ends, and then introducing an eyelet, *d*, through the hole, which is set down upon the surface of the overlapping portions, so as to firmly secure them together. This eyelet forms a tubular rivet. The rivet, however, may be a solid rivet, as represented in Fig. 7; or the rivet may be made as a tubular protrusion from the inner surface of one part through a corresponding hole in the other part, as represented in Fig. 8.

The front of the frame is constructed with a horizontal slit, *e*, (see Fig. 4,) through which the lever *f* is introduced in the usual manner, the lever terminating upon the inside of the frame in the form of a cam, *g*, (see Fig. 3,) as usual in this class of buckles. By thus positively uniting the two ends of the frame I form substantially a solid tube. The overlapping of the back and the firm union of the overlapping portions adds strength to the back to resist the action of the cam upon the strap which passes through the frame.

I have illustrated the frame as made from a strip of equal width from end to end; but it will be understood that the frame may be made in any of the usual shapes for this class of buckles, not necessary to be illustrated.

I claim—

The herein-described buckle, consisting of a tubular frame made from a single piece of metal bent into tubular shape, the ends of the metal overlapping on the back, and the said overlapping portions riveted together, the front of the frame constructed with a horizontal slot combined with a cam-lever arranged in the said slot, and so as to operate against the united back as a resistance, substantially as described.

EARL A. SMITH.

Witnesses:

H. L. SLAUSON,  
C. E. WILCOX.