

**J. LINES.
Buckles.**

No. 156,580.

Patented Nov. 3, 1874.

Fig. 1.

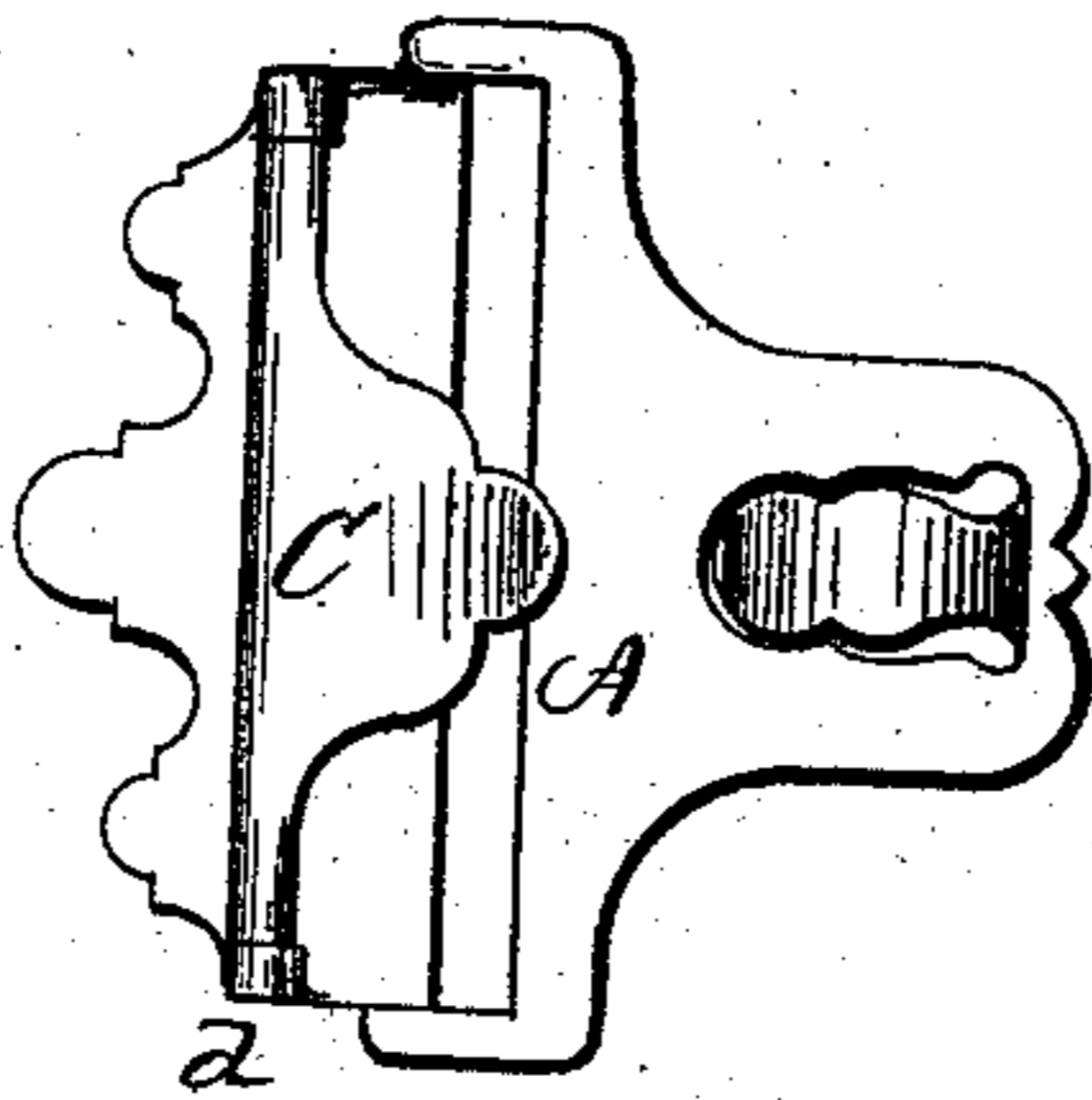


Fig. 2.



Fig. 3.

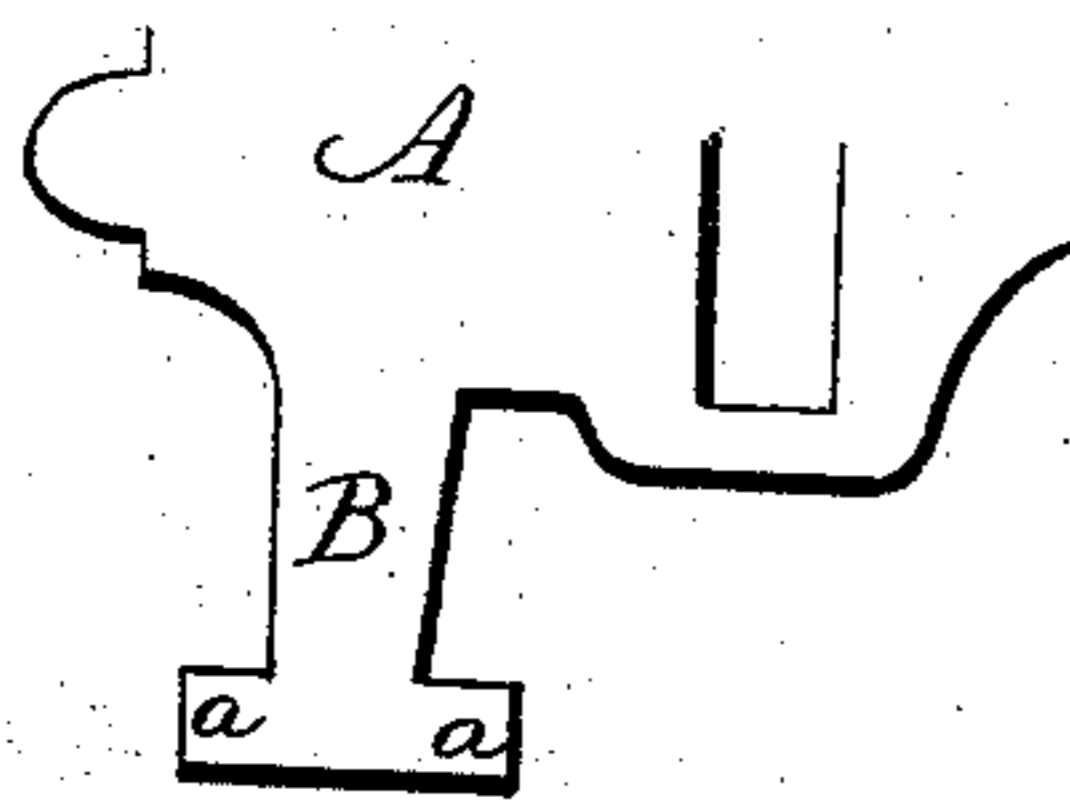


Fig. 4.

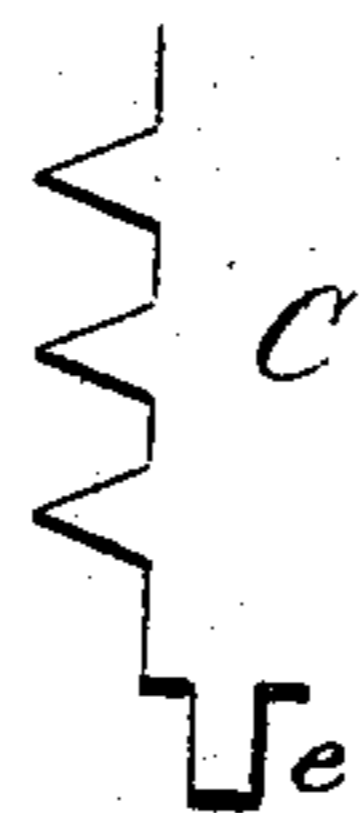


Fig. 5.

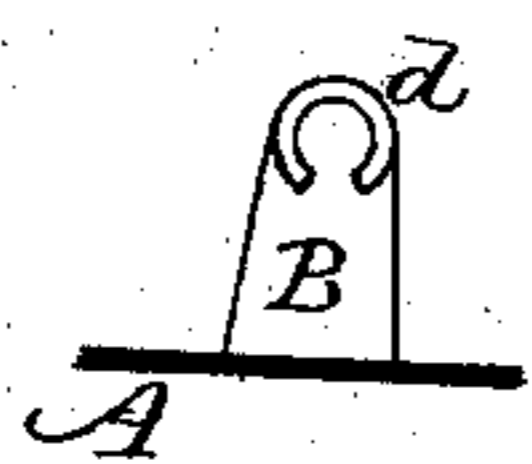
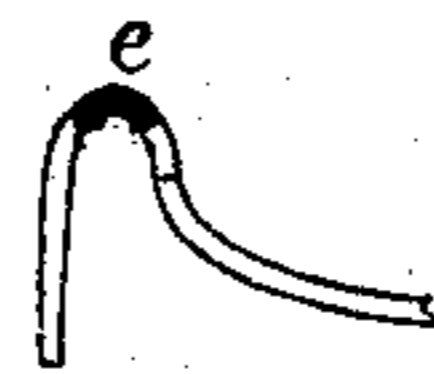


Fig. 6.



Witnesses.

*J. W. Shumway
A. J. Tipton*

*John Lines
Inventor
By Atty.*

John O. Earle

UNITED STATES PATENT OFFICE.

JOHN LINES, OF WATERBURY, CONNECTICUT, ASSIGNOR TO SMITH & GRIGGS MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN BUCKLES.

Specification forming part of Letters Patent No. 156,580, dated November 3, 1874; application filed October 15, 1874.

To all whom it may concern:

Be it known that I, JOHN LINES, 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, front view; Fig. 2, longitudinal central section; and in Figs. 3, 4, 5, and 6, detached parts.

This invention relates to an improvement in the manufacture of that class of buckles known as "lever-buckles," and such as are made from sheet metal.

Heretofore it has been the usual practice to form the trunnion by turning the ear on the frame inward and closing the end of the lever around the trunnion; but as the frame is necessarily of soft metal there is very little strength to the trunnion thus formed, and any great strain tends to separate the lever from the frame.

The object of this invention is to overcome this difficulty; and it consists in forming the trunnion or pivot upon the two ends of the lever and corresponding sockets in the frame to receive the said trunnions, the said sockets formed in one and the same piece with the

ears on the frame, as more fully hereinafter described.

A is the frame, of the usual form, except the ears B. (Shown detached in Fig. 3.) The frame is struck from sheet metal, and upon each side of the ears, at the end, a projection, *a*, is formed. This portion of the ear is turned inward at right angles to the ear, and the projection *a* closed down, so as to form the socket *d*, as seen in Figs. 1 and 5. C is the lever, also of usual form, save the ends. This part of the buckle can be, and is, made of much harder metal than the frame, because there is so much less work to be done upon it. At each end of the lever a projection, *e*, is formed for the pivot, and at the point where the bend of the tongue comes, as seen in Fig. 6, these pivots are set into the sockets *d*, and the buckle is complete, and the sockets are so much stronger than the usual construction that the buckle will endure many times the strain of the usual construction.

I claim—

The frame A, formed with the ears B, and the projections *a* thereon closed to form the sockets *d*, as described, combined with a tongue, C, constructed with the pivots *e*, corresponding to the said sockets *d*, substantially as described.

Witnesses:

GEO. E. FERRY,
BEN. B. HALLAS.

JOHN LINES.