

(No Model.)

C. F. DEMMON.  
TRACE BUCKLE.

No. 575,217.

Patented Jan. 12, 1897.

Fig. 1.

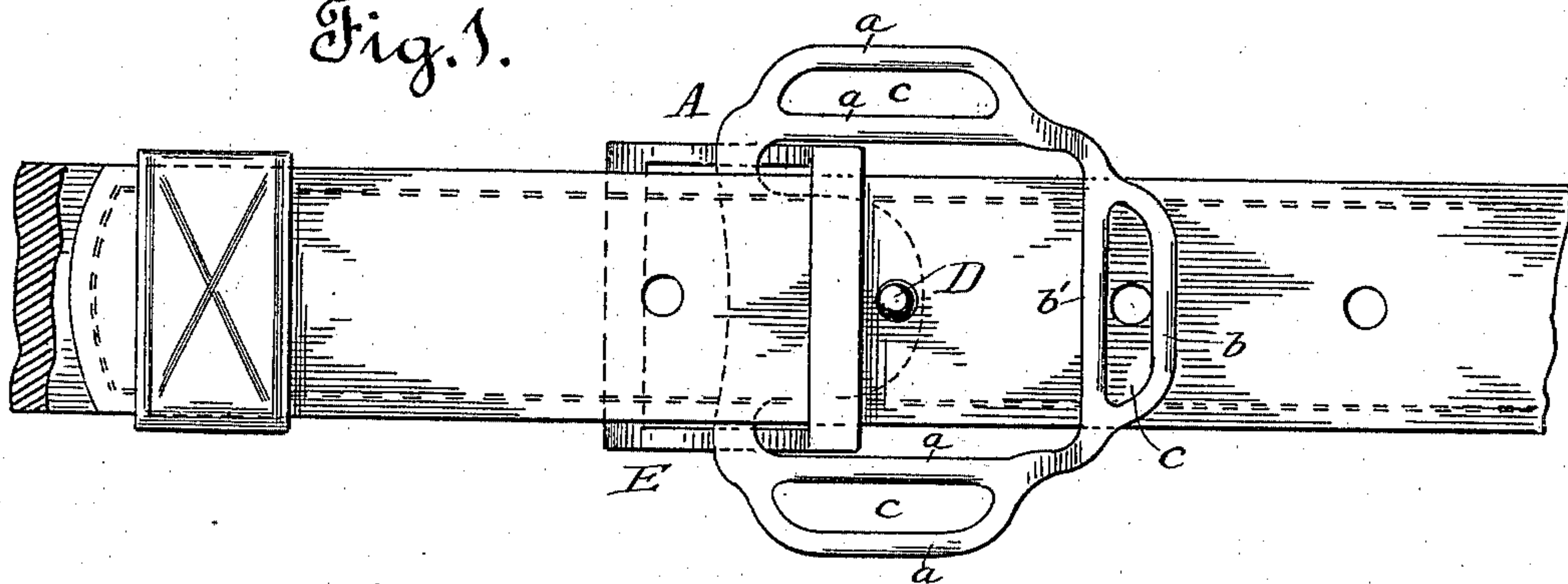


Fig. 2.

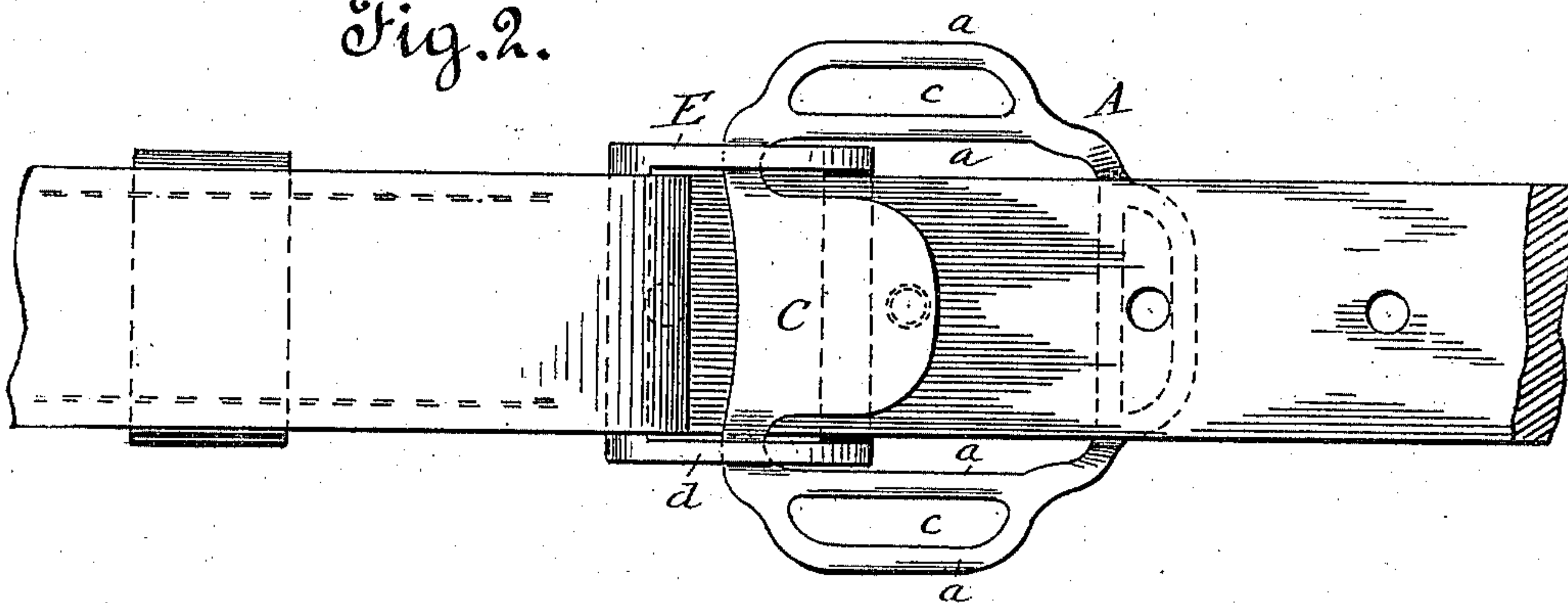


Fig. 3.

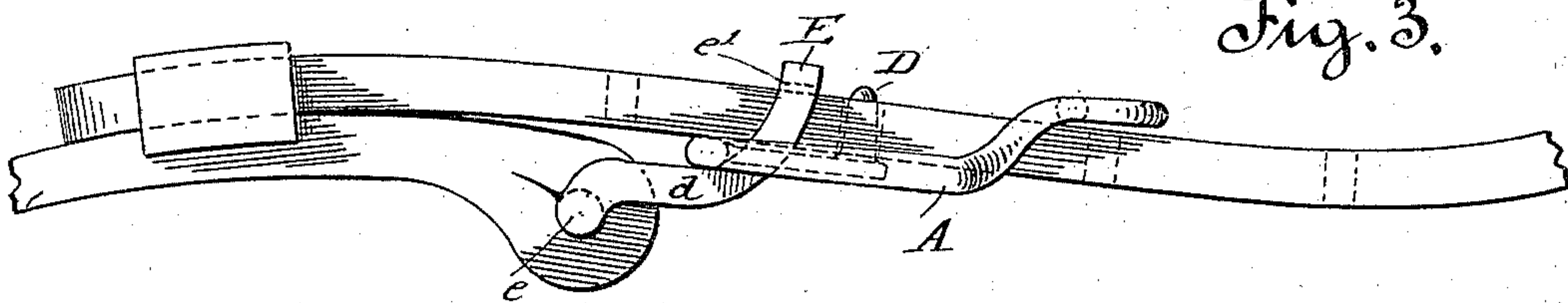


Fig. 5.

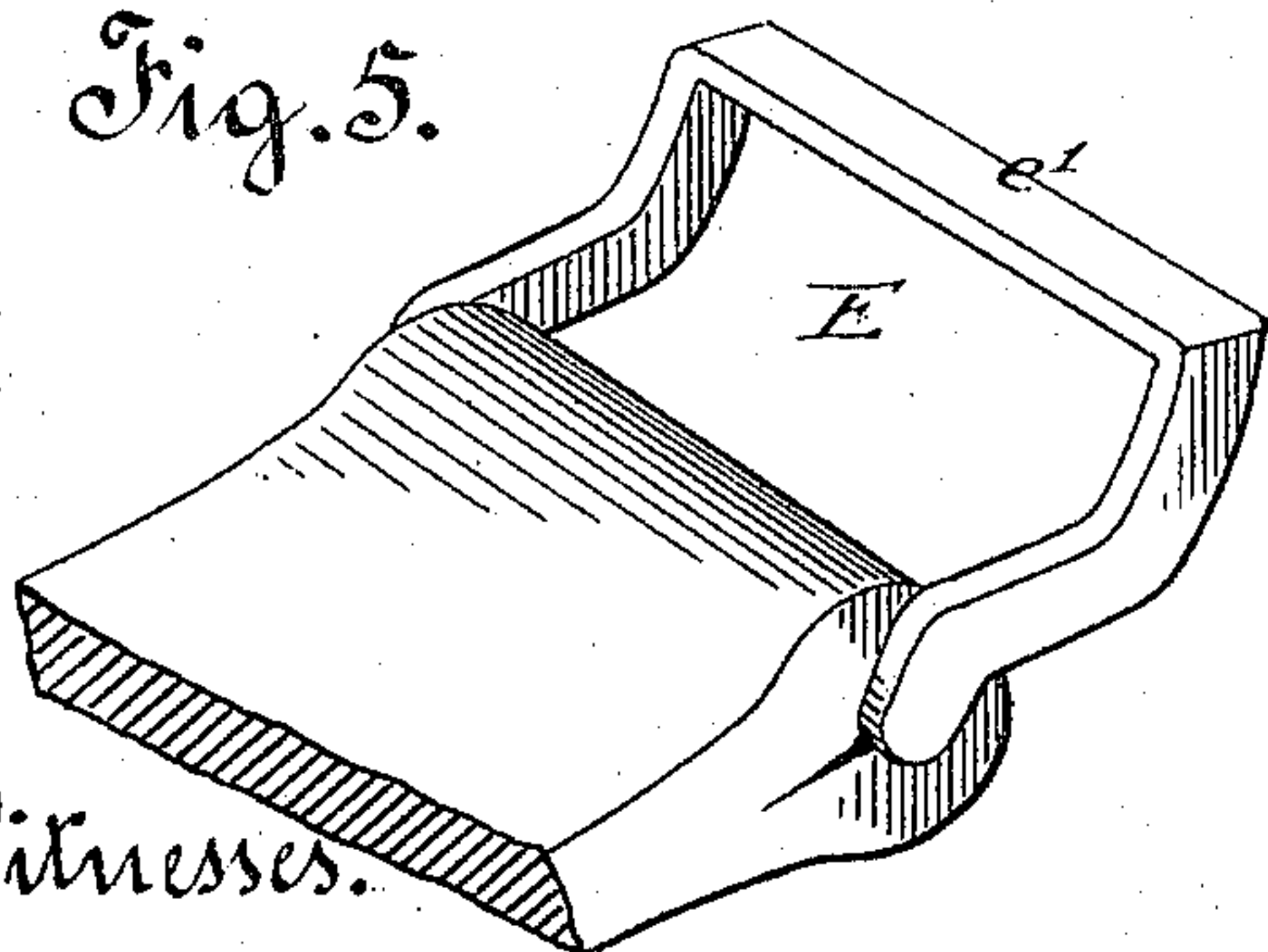
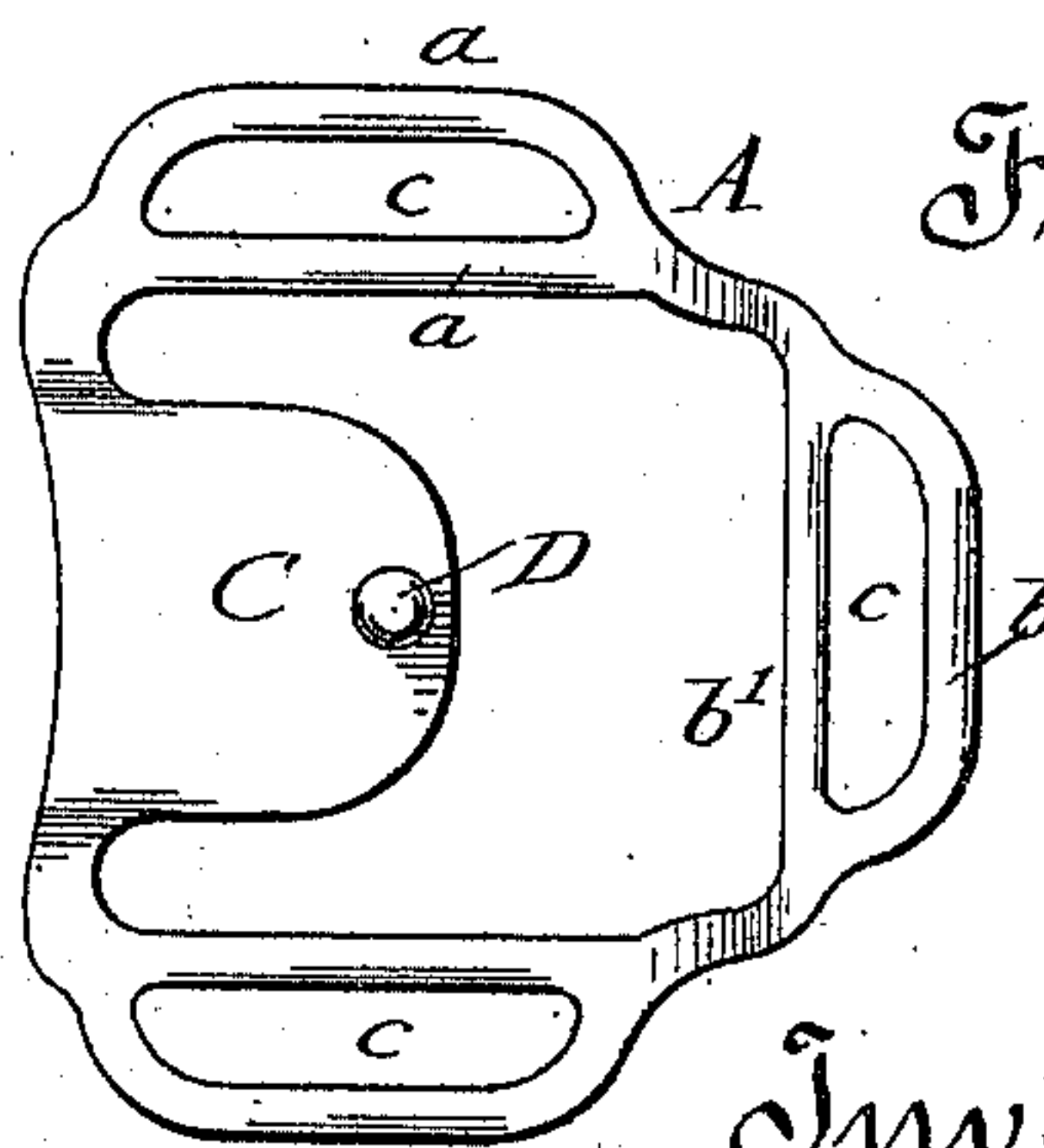


Fig. 4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

CHARLES F. DEMMON, OF SACRAMENTO, CALIFORNIA.

## TRACE-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 575,217, dated January 12, 1897.

Application filed March 17, 1896. Serial No. 583,618. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES F. DEMMON, a citizen of the United States, residing at Sacramento, in the county of Sacramento and State of California, have invented certain new and useful Improvements in Trace-Buckles; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to an improved harness or trace buckle, having for its object a means of securely fastening or buckling a trace or tug to the hame-tug and permitting the trace to be readily removed or changed. In most buckles of this class the trace is held in place by a tug-bail having a bearing upon the trace midway between two cross-bars in the buckle-frame. The lever-clamp thus formed brings a great pressure upon the trace or tug at right angles to the direct draft on the trace, which tends to break the fiber of the leather. This causes the trace to crack or break at that point and in time destroys the trace or tug. While still retaining the full benefit of the lever-clamp, I have substituted a fixed plate with a rigid tongue for the two cross-bars of the buckle-frame. This gives a broad bearing-surface directly opposite the lever-clamp and prevents any strain upon the trace across the line of draft. In most buckles with a lever-clamp the tongue usually enters the tug at a point in front of the clamp or bail, bringing a strain upon the tug where the tongue enters the trace, which tears or stretches the trace before the pressure of the lever-clamp becomes effective. In my improved device I place the rigid tongue on the fixed plate at a point in the rear of the lever-clamp, which permits the full force of the lever-clamp to be applied before any strain can come on the tongue, thus preventing any breaking of the leather.

In the manufacture of my buckles I preferably use malleable iron, but do not confine myself to any particular material.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the trace-buckle, showing the buckle complete with the trace fastened to the hame-tug. Fig. 2 is a similar view of the opposite side. Fig. 3 is a side elevation of the same. Fig. 4 is a plan view of the buckle-frame. Fig. 5 is a perspective

view of the tug-bail with the hame-tug attached.

A is a buckle-frame having side bars *a a* and cross-bars *b b'* with openings or slots on each side and one end. These openings *c c c* are for fastening the back-band, belly-band, and breeching-straps. The cross-bar *b'* on one end of this frame is raised and forms a keeper, permitting the trace or tug B to pass under and upon the plate C and rigid tongue D. The other end of this frame A, Fig. 4, consists of a cross-bar *b*, in the center of which is a fixed plate C. On the plate C is formed a rigid tongue D, located at a point far enough from the cross-bar *b* to allow the pressure of the lever-clamp to come in front of said tongue D.

In Fig. 5 is shown the tug-bail E, having S-shaped side bars *d d*, with end cross-bars *e e'*, one of which, *e*, is round and forms a bearing for the hame-tug, while the other, *e'*, is a flat bar and acts as a keeper and forms a lever-clamp that holds the trace or tug in place on the fixed plate C and rigid tongue D. The plate C extends centrally into the buckle-frame, Fig. 4, far enough to permit the rigid tongue D to enter the trace or tug at a point just beyond the bearing of the cross-bar *e'* on the bail E, Fig. 5, thus forming a firm support and bearing-surface for the trace or tug while in use. The cross-bar *e'* may be made wider than is shown in the drawings in order to give a broader bearing-surface.

What I claim is—

In combination, in a trace-buckle, the tug-bail and the rectangular frame having a central open space comprising the side and cross bars, the solid plate C extending into said space below the plane of said cross-bars and the tongue D projecting from the face of said plate and adapted to engage the trace between said tug-loop and the cross-bar *b*, substantially as described.

In testimony whereof I have affixed my signature, in presence of two witnesses, this 7th day of March, 1896.

CHARLES F. DEMMON.

Witnesses:

P. J. GLAS,

JAS. N. PORTER.