

H. H. HARTZELL.  
 Harness Trace Buckles.

No. 143,284.

Patented September 30, 1873.

Fig. 1.

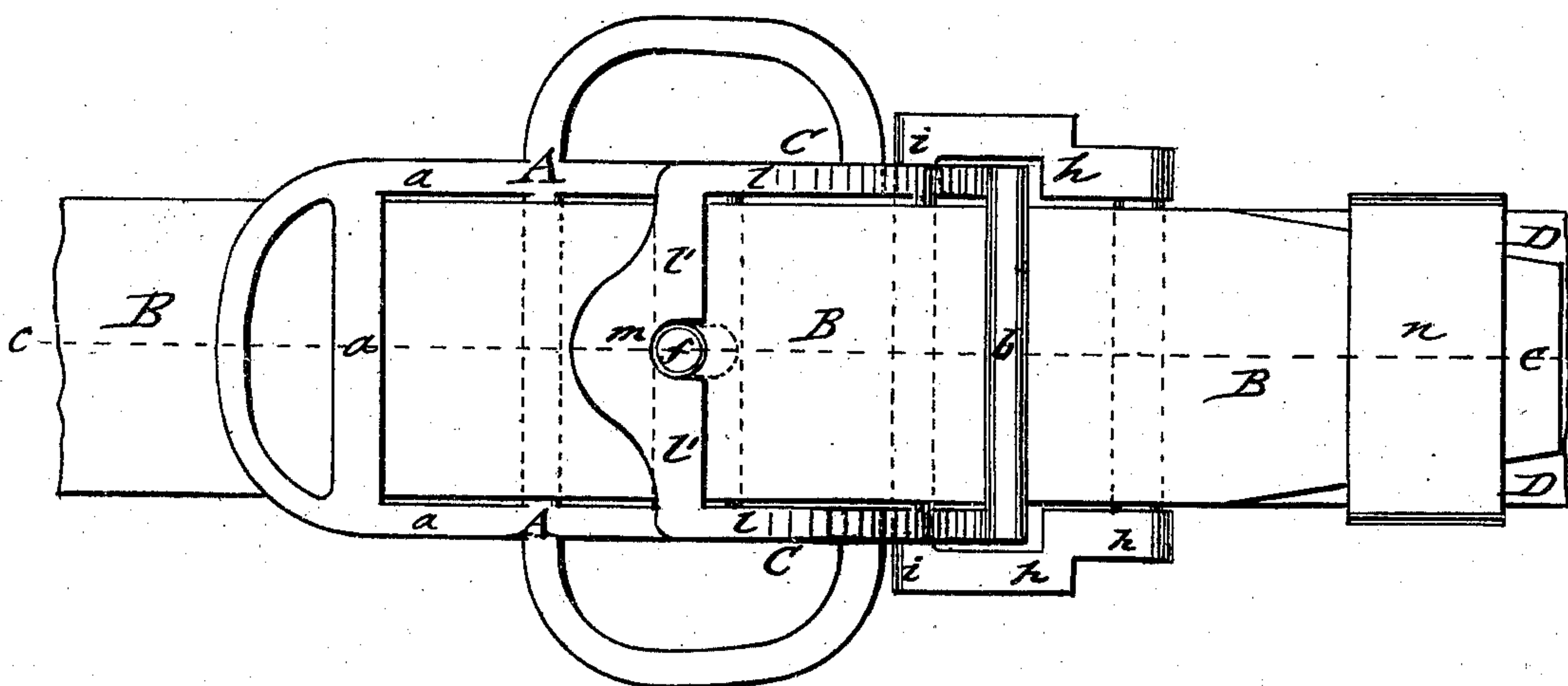
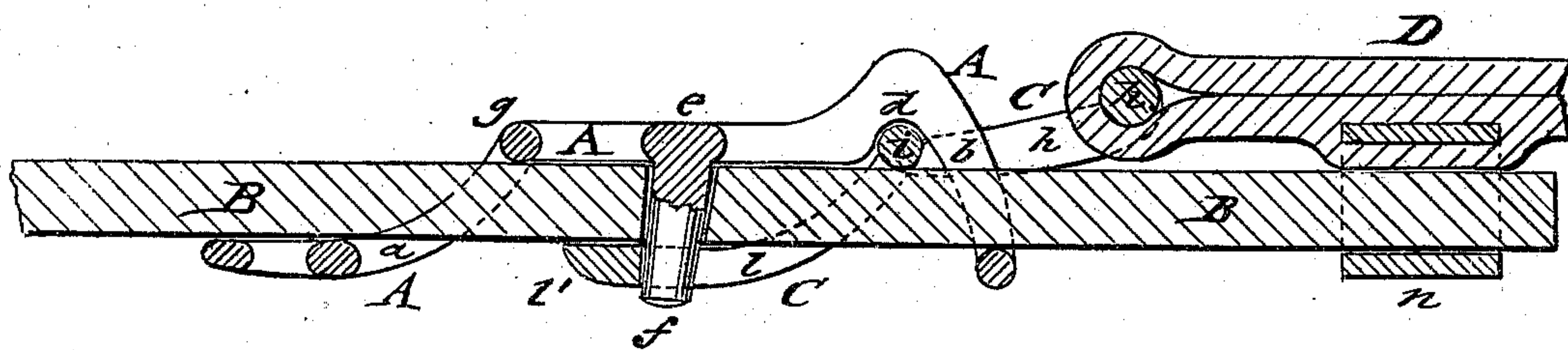


Fig. 2.



Witnesses.

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HILLERY H. HARTZELL, OF HOLDEN, MISSOURI.

## IMPROVEMENT IN HARNESS TRACE-BUCKLES.

Specification forming part of Letters Patent No. 143,284, dated September 30, 1873; application filed June 7, 1873.

*To all whom it may concern :*

Be it known that I, HILLERY H. HARTZELL, of Holden, in the county of Johnson and State of Missouri, have invented a new and Improved Harness Trace-Buckle, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of my improved buckle; and Fig. 2, a vertical longitudinal section of the same on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to produce a strong and durable trace-buckle, which forms a strong and more effective connection of the straps the greater the strain applied to them, being perfectly free from friction or cutting or breaking a trace off. The invention consists in the improvement of trace-buckles, as hereinafter described and pointed out in the claim.

In the drawing, A represents the frame of the buckle, which is provided with an inclined loop, *a*, at one end, and a loop, *b*, at the other end, toward the hames. The loop *b* is curved up toward the same side as loop *a*, but with greater inclination to frame A, so that an indentation, *d*, is produced at the turning-point. A central lateral connecting-piece, *e*, of frame A carries the upright tongue *f* of about the height of the end loops *a b*, which admit the heaviest and thickest traces in use. The lateral connection *g* forms with loop *a* the part through which the trace passes, and serves also to strengthen frame A. The trace B is suitably perforated to fit over tongue *f*. The loop C consists of two parts, of which one part, *h*, connects with hame-strap D, and

has a side expansion to embrace loop *b* of frame A. The lateral bar *i* divides the loop C centrally, and from it extends the part *l*, which has the same width as loop *b*, and a forward inclination like loop *a*. Its connecting-bar *l'* has a circular recess, *m*, which locks over tongue *f*. The lateral bar *i* of loop C bears against indentation *d* and loop *b* of frame A, and produces thereby a twofold connection of frame A with loop C. A strain exerted on the trace and hame-strap causes an upward gliding of bar *i* along the side of loop *b*, and thereby a tightening of the hold on trace B, and also a firmer pressure of loop-bar *l'* over tongue *f*. At every pull on the straps the loop C will lock over tongue *f*, even if it has been detached by a release of the strain. In order to lengthen or shorten the traces, the end of trace B is drawn out of the leather loop *n* of strap D, so that by dropping hame-strap D the center bar *l'* is thrown off the tongue *f*, and loop C inclined in a perpendicular direction toward frame A. By pressing, then, on the trace B from both sides, the same is thrown off tongue *f*, and may then be easily adjusted and the parts placed in their former position.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with frame A and tongue *f*, of the loop C, consisting of parts *h* and *l* with lateral bar *i*, and tongue-bar *l'* with recess *m*, for the purpose described.

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Witnesses:

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