

H. S. Woodruff,

Harness Buckle,

N^o 61,979.

Patented Feb. 12 1867.

Fig. 1.

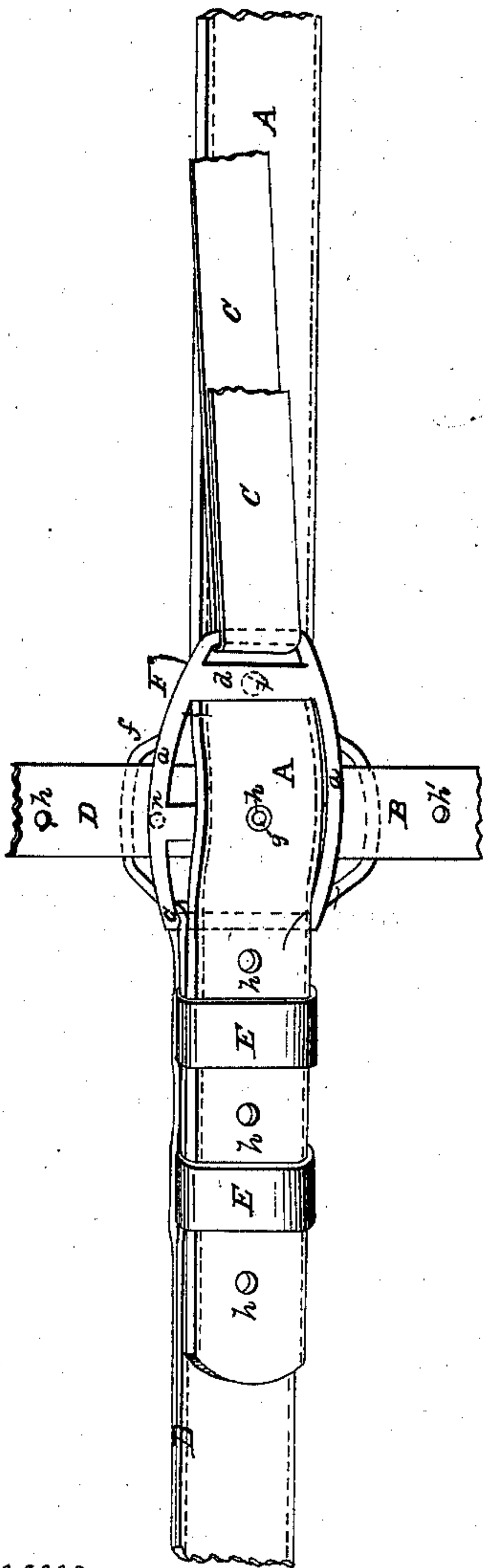


Fig. 2.

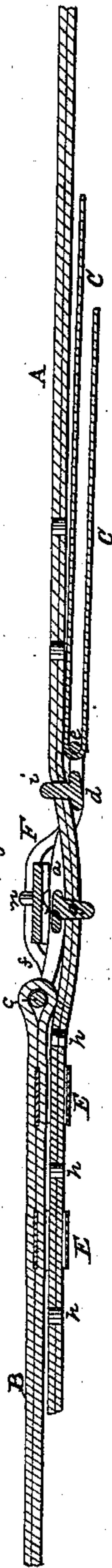


Fig. 3.



Witnesses.
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HENRY S. WOODRUFF, OF JANESVILLE, WISCONSIN.

IMPROVED BUCKLE.

Specification forming part of Letters Patent No. 61,979, dated February 12, 1867.

To all whom it may concern:

Be it known that I, HENRY S. WOODRUFF, of the city of Janesville, in the county of Rock and State of Wisconsin, have invented a new and Improved Buckle; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a view, in perspective, of my buckle with harness attached. Fig. 2 is a horizontal section of same, and Fig. 3 is a transverse vertical section of same.

The nature of my invention relates to that class of buckles called "trace-buckles;" and consists, first, in the application to the same, on the outer surface, and to a cross-bar, of a fixed or rigid tongue for holding the trace; second, in the application to a trace-buckle, on the outer face of a cross-bar, at or near the middle of the buckle, of a fixed or rigid tongue, and also on the inner face of a cross-bar, at or near the rear end of the buckle, of another fixed or rigid tongue, which two tongues are used in connection to hold the trace, thereby distributing the draft-strain upon the trace and buckle between the two points of attachment of the same, instead of centering it upon one point, as in the single-tongue buckle; third, in the application to a trace-buckle, on the inner face of a side bar or of a cross-bar, of a fixed or rigid tongue, to be used in holding the side or back band, and in dispensing with the ordinary separately-attached billet for the belly-band.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I make my buckle in any of the ordinary forms of the trace-buckle, providing it with the side bars *a a*, end or cross bar *c*, for attaching the hame-tug B, and the end or cross-bar *e*, for attaching the side strap C. I also construct my buckle with a cross-bar, *b*, generally near the middle of the buckle, and attach thereto, on the outer face thereof, a fixed or rigid tongue, *g*, to hold the trace A.

I sometimes construct my buckle with an additional cross-bar, *d*, and attach thereto, on the inner face thereof, a second fixed or rigid tongue, *i*, to be used in connection with the

tongue *g* to hold the trace, for the purpose of relieving the strain upon both the trace and buckle by distributing it between two points. I also generally construct my buckle with the metallic loops *ff*, (the upper one looping upward and backward, and the lower looping downward and backward,) and attach to the inner face of a cross-bar, *b*, or of one of the side bars *a*, a third fixed or rigid tongue, *n*, to hold the side or back band D, enabling the lower portion D' of the side or back band, after passing through the loops *ff* and over the tongue *n*, as shown in drawings, to be used as a billet for the belly-band, so dispensing with the ordinary billet and the necessity of sewing the billet and the band (as in the ordinary harness) to the buckle. I attach the hame-tug B to the end bar *c*, in the ordinary manner, and insert the trace A and side or back band D in the buckle, as shown in the drawings.

When in use I adjust or remove the trace by seizing the buckle with one hand and the trace near the rear end of the buckle with the other; then, by throwing the trace off of the rear tongue *i*, and looping it off of the forward tongue *g*, it is in a position to be readily "shortened up," "lengthened out," or removed entirely.

What I claim as new, and for which I desire Letters Patent of the United States, is—

1. The application to the cross-bar *b*, and on the outer surface of a buckle, of a fixed or rigid tongue, *g*, when arranged and used substantially as and for the purpose set forth.

2. The combination and arrangement of the cross-bar *b* and tongue *g* with the cross-bar *d* and tongue *i*, substantially as and for the purpose set forth.

3. The fixed and rigid tongue *n*, when arranged and used substantially as and for the purpose set forth.

4. The combination and arrangement of the tongue *g* and cross-bar *b*, tongue *i* and cross-bar *d*, and tongue *n*, with the side bars *a* and end bars *c* and *e*, substantially as and for the purpose set forth.

HENRY S. WOODRUFF.

Witnesses:

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