

D. H. Clock.

Trace-Clamp.

N<sup>o</sup> 72266

Patented Dec. 17, 1867

Fig. 1.

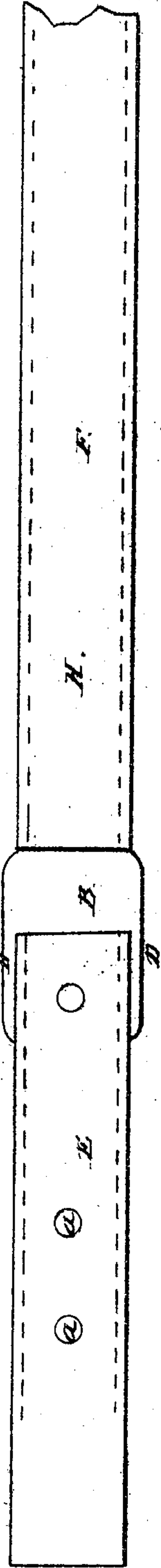


Fig. 2.

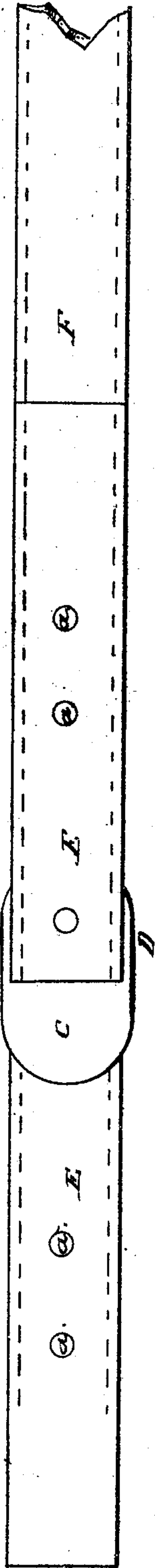


Fig. 3.

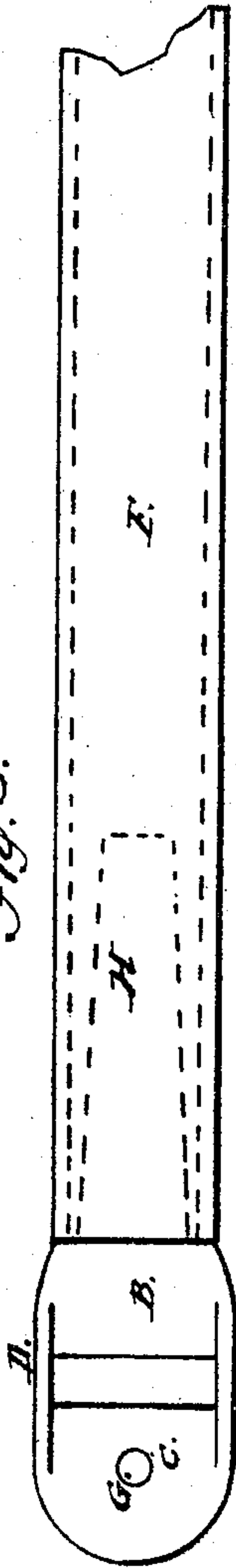
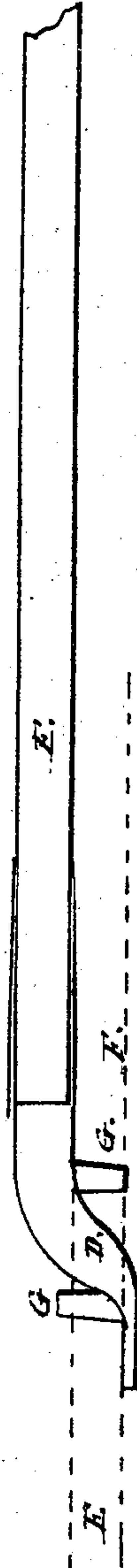


Fig. 4.



Inventor;

D. H. Clock

Witnesses

W. M. Thompson  
Thomas Clark

# UNITED STATES PATENT OFFICE.

D. H. CLOCK, OF MONROEVILLE, OHIO.

## IMPROVED TRACE-CLAMP.

Specification forming part of Letters Patent No. 72,266, dated December 17, 1867.

*To all whom it may concern:*

Be it known that I, D. H. CLOCK, of Monroeville, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Hame Trace and Tug Clamps; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which--

Figure 1 is an outside view of the clamp with hame tug and trace coupled together. Fig. 2 is an inside view of the same. Fig. 3 is a view of the clamp with trace detached; Fig. 4, an edge view of Fig. 3.

Like letters of reference refer to like parts in the different views.

A, Fig. 1, is the clamp, which consists of a broad metallic plate B and a semicircular plate C, the two being connected to each other by curving sides D, Fig. 4, thus making an opening between them equal in length and width to the width and thickness of a hame tug or trace, as shown in Fig. 3. The direction of this opening is indicated by the dotted lines E, Fig. 4, in which it will be seen that when the trace strap or tug E (also indicated by the dotted line in Fig. 4) is passed through the clamp for the purpose of coupling it will be in a straight line with the piece to which it is coupled without any curve or bend at the point in connection with the clamp. G G, Fig. 4, are pins projecting rigidly from the face of each plate and by which the coupling is secured.

This clamp is attached to the end of the trace F by a shank, (indicated by the dotted lines H, Figs. 1 and 3,) which is inserted between the pieces of leather of which the trace is made up, and then riveted or otherwise properly secured.

The manner of using this clamp is simple and easily performed, and consists merely in inserting the end of the hame-tug or other straps through the opening referred to until the holes *a*, which correspond in number, size, and distance, conform to each other. The pins are then forced into the holes by bringing the two straps together, as shown in Fig. 2, in

which E represents a hame-tug, and F a section of trace, to the end of which the clamp is secured, as indicated in Fig. 3. In this instance the holes for the reception of the pins are in the hame-tug, and hence in order to shorten or lengthen out the trace it is done by shifting the pins from one set of holes to another, as the case may be.

It will be evident that this clamp, when applied to the hames and trace, is of great advantage, as it requires no extra length of trace to reach through the clamps for the purpose of lengthening or shortening the same, as is necessary in the use of the old buckle, and for which is usually allowed from ten to fifteen inches, together with a number of loops for the purpose of confining the end thus given in excess. In this clamp the strain or pressure is applied equally to each side of the trace or strap. Therefore there can be no bending nor crimping of the leather on one side and stretching on the other, the trace being at all times straight. Hence it is much easier to fasten and unfasten than the ordinary buckle and will last longer, for the reason of there being no sharp bar to press or cut into the leather. By this clamp the sides of the strap are held by the plates with greater safety and with no abrasion, which is not the case with the common buckle, in that the strain and abrasion being both on one side of the strap it is soon worn through or so injured as to cause it to break, and is always so crooked in the buckle after a short time as to make it difficult to unfasten.

This clamp can be applied to any part of the harness that requires a buckle, and can be used for other purposes where a buckle is needed.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction of a clamp in the manner substantially as described, as a new article of manufacture, when applied to the purpose specified.

D. H. CLOCK.

Witnesses:

J. S. DAVIS,  
A. S. SKELTON.