

(No Model.)

O. MALLORY.
TRACE BUCKLE.

No. 318,572.

Patented May 26, 1885.

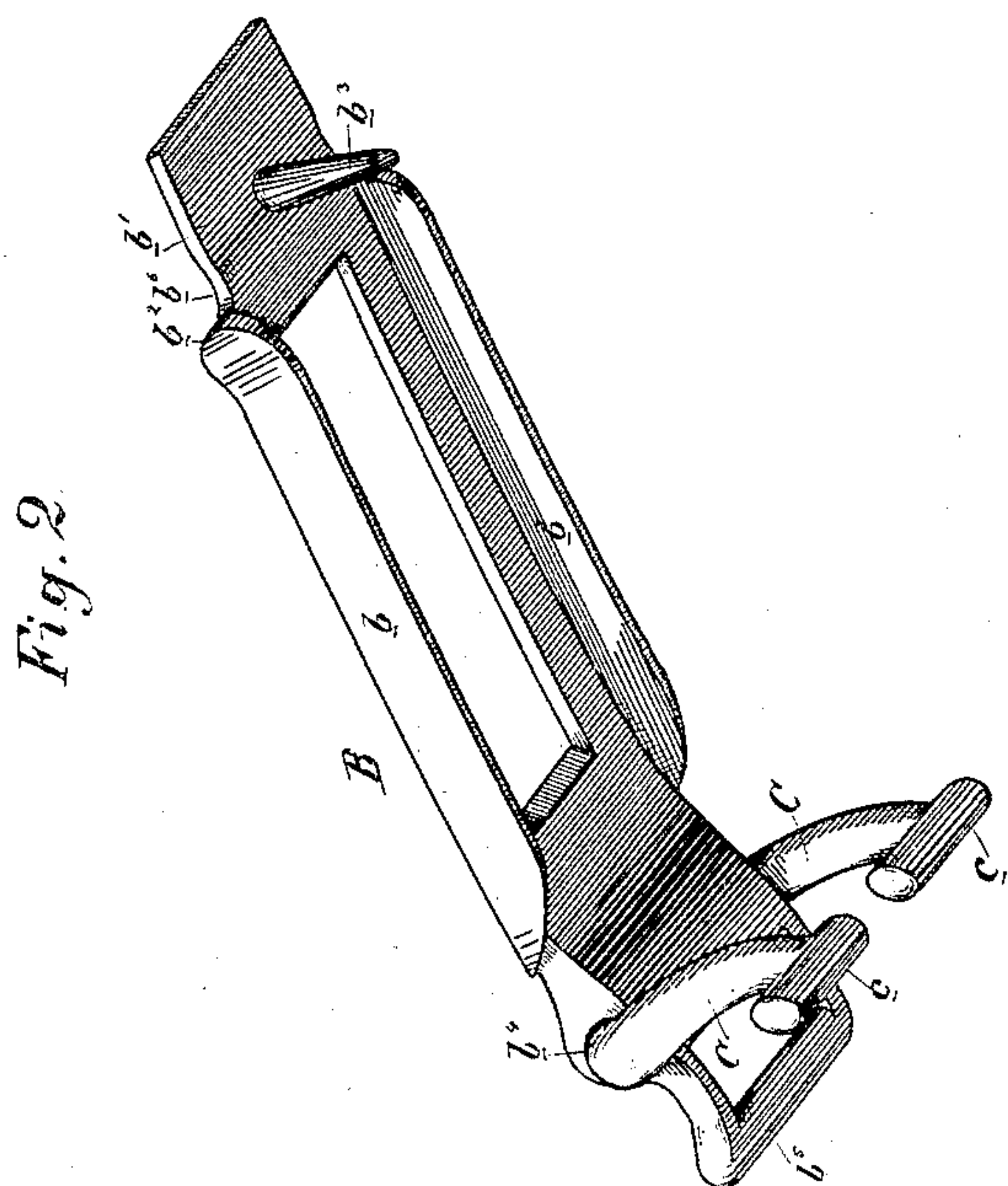


Fig. 2

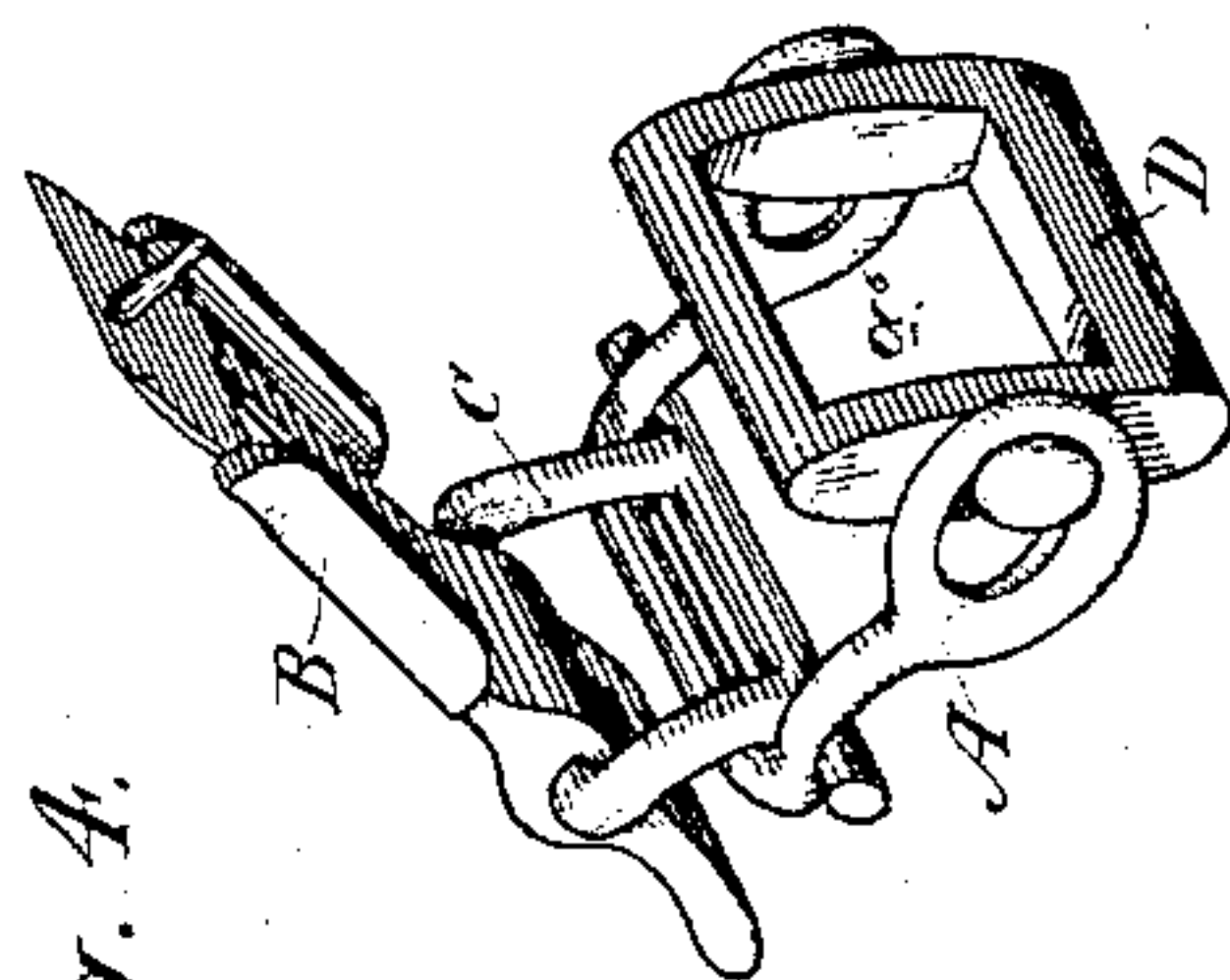


Fig. 4.

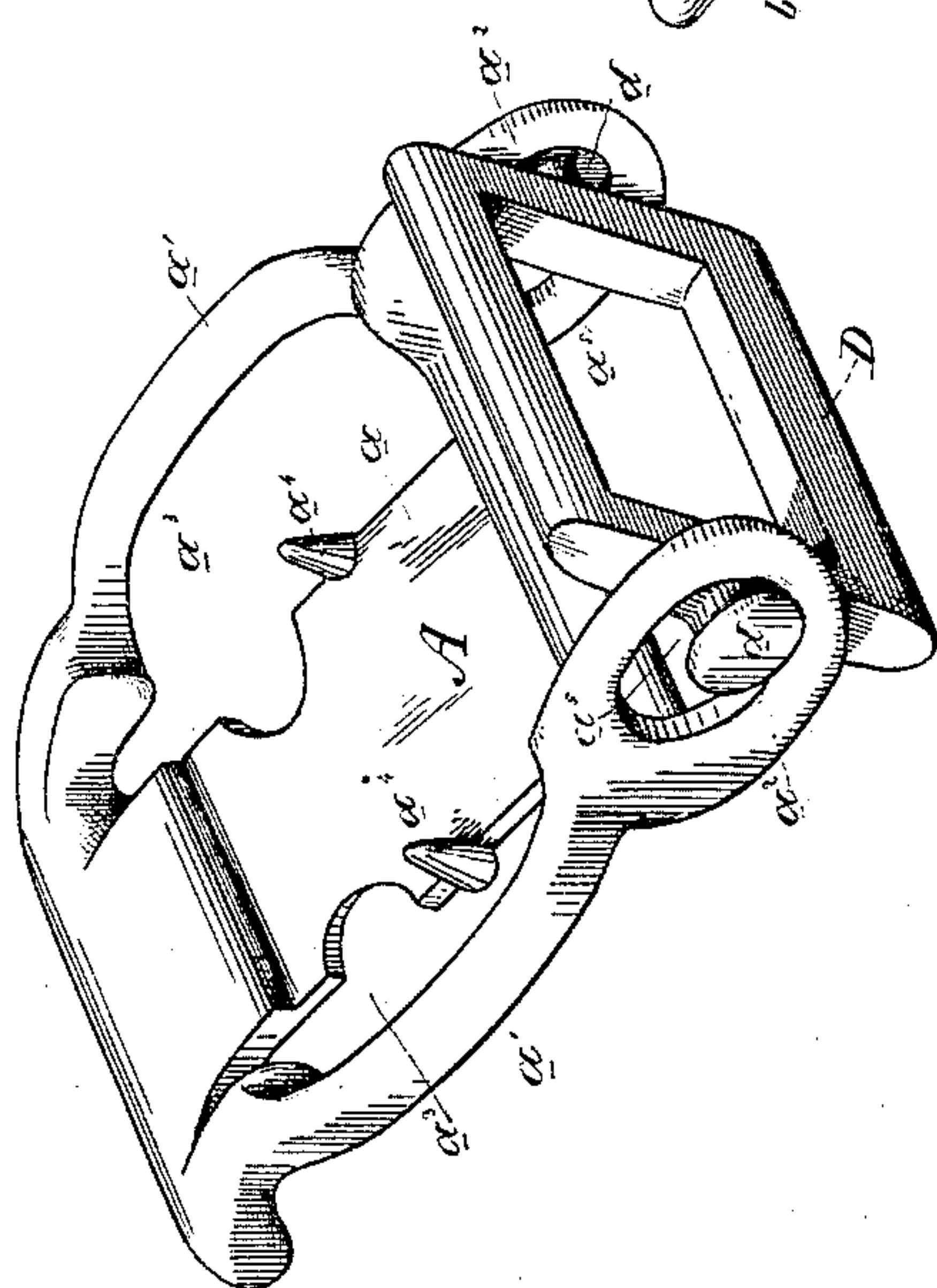


Fig. 7.

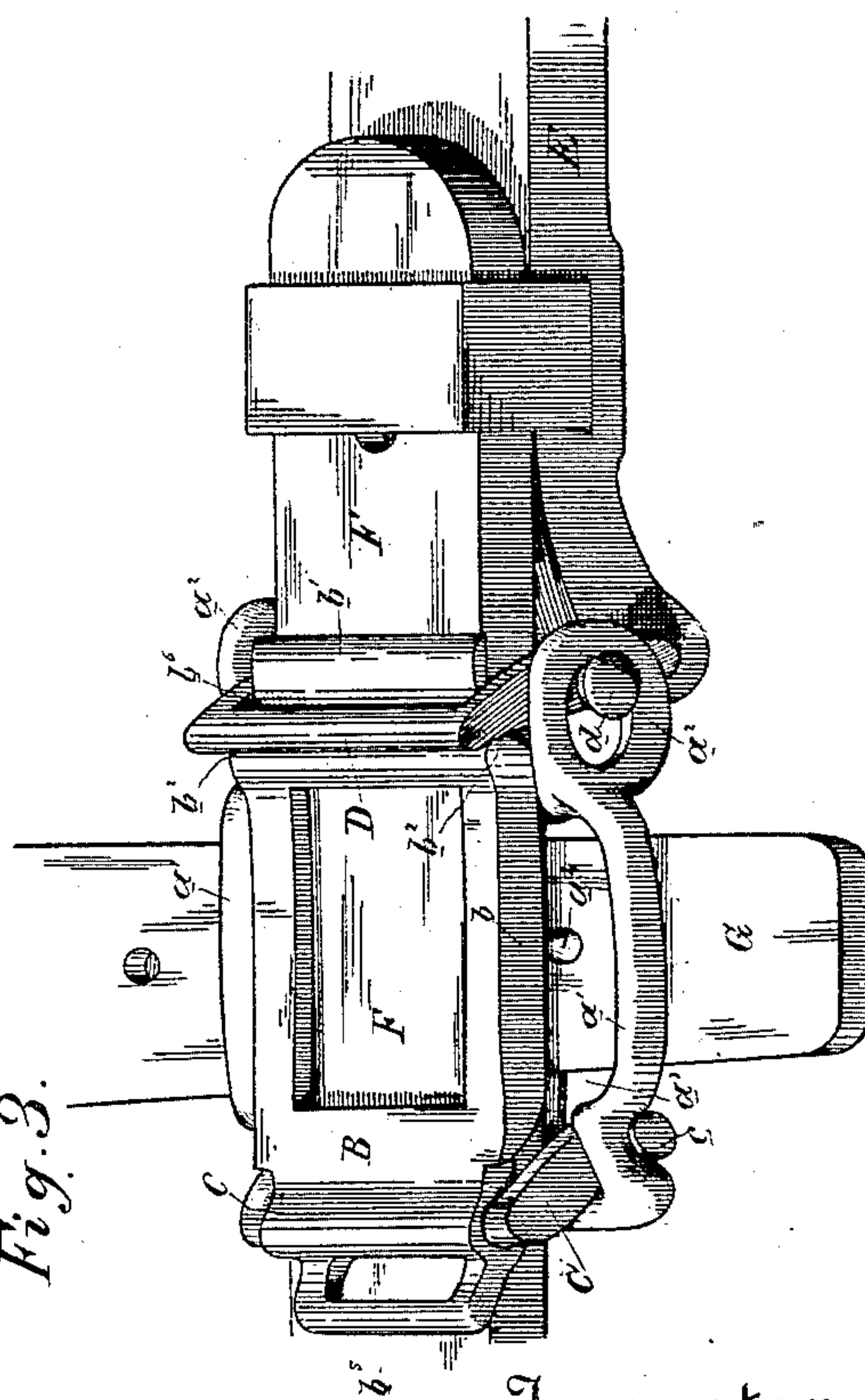


Fig. 3.

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OGDEN MALLORY, OF AUBURN, CALIFORNIA.

TRACE-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 318,572, dated May 26, 1885.

Application filed March 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, OGDEN MALLORY, of Auburn, county of Placer, and State of California, have invented an Improvement in Trace-Buckles; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to that class of buckles used to connect the trace with the hame-tug; and my invention consists, broadly, in the combination, in a single buckle, of devices for engaging and holding the trace, and for engaging directly and holding a strap at right angles to the trace, and which forms a continuous saddle and belly strap for one side of the harness, or the billet of either the saddle or belly strap for the other side of the harness.

My invention further consists in the arrangement and construction of the plates and links hereinafter described, by which these results are effected, and also by which the buckle may be made to answer, when desirable, the single purpose of connecting the trace to the hame-tug, all of which I shall hereinafter fully explain.

The object of my invention is to provide a buckle which is adapted not only to engage the trace and secure it to the hame-tug, but also to directly engage a strap at right angles to the trace, and extending above and below it, said strap, as I have before mentioned, being either a continuous or combined saddle or pad strap and belly-strap, or the billet of either strap, according to which side of the harness it may be on. The advantage of this provision I shall hereinafter explain.

Referring to the accompanying drawings, Figure 1 is a perspective view of the plate A and link B. Fig. 2 is a perspective view of the plate B and link C. Fig. 3 is a perspective view of the buckle, showing its application. Fig. 4 is a perspective view of a modified buckle.

A is the inner plate. It consists of a central body-piece, a , side pieces, a' , and ears a^2 at the front, having elongated slots a^5 . Between the side pieces and the body-piece are formed slots a^3 , for the reception of the appropriate strap. The side pieces do not lie in the same plane with the body-piece, and therefore the slots have a depth which permits the strap

to pass through in a straight position, lying in front of the body-piece and behind the side pieces. On the body-piece are one or more tongues, a^4 , for engaging the strap. These tongues are preferably to be placed on the edges of the body-piece, so as to be above or below the trace, or both above and below, as here shown, whereby they do not interfere with the free working of the trace. They are to engage their own strap and not the trace.

B is the outer plate, consisting of a straight flat piece provided on its sides with angle-flanges b , extending inwardly, a lip, b' , on its forward end, with shoulders b^2 , a tongue, b^3 , on the inner side of the lip, a transverse socket, b^4 , and a loop, b^5 , at its rear end. In the socket b^4 is pivoted the link C, the legs of which are provided with cross feet or lugs c .

D is a link having on its sides the bearing-lugs d . E is the hame-tug; F, is the trace, and G is a strap which may be considered as a continuous or combined saddle and belly strap, or the billet of either. The link D is pivoted in a loop in the rear end of the hame-tug, and its bearing-lugs d are loosely mounted or pivoted in the elongated slots a^5 in the ears a^2 of the inner plate, A. The legs of the link C are passed in through the side slots, a^3 , of said plate, and the cross feet or lugs c of said link engage from behind in the rear ends of said slots, whereby the said link is pivoted and forms a double pivot connected between the plates A B. The strap G is passed down through the slots a^3 of plate A, and its holes are engaged by the tongues a^4 . The trace passes through the link C and between the rear ends of the two plates, its sides being embraced by the flanges b of the outer plate. It lies just outside and upon the strap G, is engaged by the tongue b^3 of plate B, and thence passes through the keeper of the hame-tug. The link D is then turned over upon the lip b' of plate B, being limited by the shoulders b^2 , and the various engagements are complete. Both the trace and the strap G lie perfectly straight, and there is no tendency to kink. A force tending to separate the trace and hame-tug has the following effect: Because of the engagement of tongue b^3 with the trace and the attachment of link D to the hame-tug, the plates A B strive to move in opposite direc-

tions; but such a movement is limited by the links C D, which, engaging both plates by a pivot-connection, simply clamp them firmly together, and the greater the strain the greater the clamping effect. Such is the general operation of the buckle.

The object of the elongated slots a^5 in the ears a^2 of the inner plate, and in which the bearing-lugs d of the link D loosely play, is to enable said link to have movement enough to be readily and easily fitted over and removed from the lip b' of the outer plate.

In the lip b' is made a shallow groove or concave portion, b^6 , in which the link D rests, and by which it is kept in place.

In some cases I can, by slightly modifying my buckle, make of it a simple trace-buckle. This I show in Fig. 4. The plate B remains the same in general construction, though shortened. The plate A is modified by shortening and by dispensing with the central body portion, a , and the slots a^3 , and leaving a single transverse slot or opening, a^6 , the sides lying even with the trace and curving upwardly slightly at their centers. The link C, instead of two separated cross feet or lugs, has one continuous bar, and is made to engage the inner plate by passing the whole of plate B through the transverse slot a^6 , and the link, also, until limited by its cross-bar.

The action of the buckle is the same as in the first case, as far as the clamping of the trace is concerned, the only difference being in the omission of such devices as are necessary for the engagement of the strap G.

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

1. A trace-buckle comprising the inner plate, A, the outer plate, B, the link C, pivoted in the rear end of the outer plate, embracing the trace and engaging the rear of the inner plate, and the link D, pivoted in the hame-tug and forward end of the outer plate and embracing said outer plate, substantially as herein described.

2. In a trace-buckle, the slotted inner plate, A, having slotted ears a^2 at its forward end, and

the outer plate, B, having a lip, b' , and a tongue, b^3 , at its forward end, in combination with the link C, pivoted in the rear end of plate B and in the rear of the slotted plate A, and the link D, having side bearing-lugs, d , loosely pivoted in the slotted ears of plate A, said link being pivoted in the hame-tug and adapted to fit over the lip b' of the plate B, substantially as herein described.

3. A trace-buckle comprising the inner plate, A, formed with a depressed center or body portion, a , having tongues a^4 above and below, side portions, a' , forming guiding-slots a^3 , and forward ears, a^2 , having elongated slots a^5 , the outer plate, B, formed with a lip, b' , and a tongue, b^3 , at its forward end, and a socket, b^4 , at its rear end, the link C, pivoted in socket b^4 , and having cross feet or lugs c , adapted to pivot in the rear of the slots a^3 of plate A, and the link D, pivoted in the rear of the hame-tug, and having side bearing-lugs, d , pivoted loosely in the slotted ears of plate A, said link being adapted to fit over the lip b' of plate B, substantially as herein described.

4. A trace-buckle comprising the inner plate, A, formed with a depressed center or body portion, a , having tongues a^4 above and below, side portion, a' , forming slots a^3 , and forward ears, a^2 , having elongated slots a^5 , the outer plate, B, formed with side flanges, b , a lip, b' , with a bed-groove, b^6 , and tongue b^3 at its forward end, and a socket, b^4 , and loop b^5 at its rear end, the link C, pivoted in the socket b^4 , and having cross feet or lugs c , adapted to pivot in the rear of the slots of plate A, and the link D, pivoted in the rear of the hame-tug, and side bearing-lugs, d , pivoted loosely in the slotted ears of plate A, said link being adapted to fit over the lip b' of plate B and rest in the bed-groove b^6 , substantially as herein described.

In witness whereof I have hereunto set my hand.

OGDEN MALLORY.

Witnesses:

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