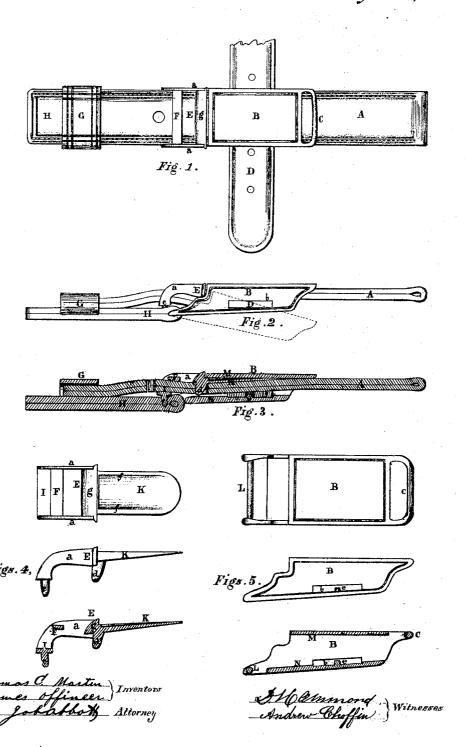
Martin & Offineer,

Buckle.

No. 102843.

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United States Patent Office.

THOMAS C. MARTIN AND JAMES OFFINEER, OF PERRYSVILLE, OHIO, ASSIGNORS TO THOMAS C. MARTIN, JOHN TAYLOR, AND DANIEL GEISELMAN, OF SAME PLACE.

Letters Patent No. 102,843, dated May 10, 1870.

IMPROVED TRACE-BUCKLE.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that we, THOMAS C. MARTIN and JAMES OFFINEER, of Perrysville, Ashland county, Ohio, have invented certain new and useful Improvements in Harness-tug Buckles; and we do hereby declare that the following is a full, clear, and exact description of our invention, reference being had to the accompanying drawings forming a part of this specification, and to the letters of reference marked thereon, of which drawings-

Figure 1 is a plan showing the application of our

improved buckle.

Figure 2 is a side view of the same.

Figure 3 is a longitudinal section of the same.

Figure 4 are plan, side view, and longitudinal section of buckle tongue.

Figure 5 are plan, side view, and longitudinal sec-

tion of buckle-frame.

Our invention consists-

First, in the construction of a wedge-tongue for a harness-tug buckle, with a bar underlying the tug in front of the body of the buckle, and having a tongue secured on it, which tongue fits in a hole in the hametug, and thus prevents the tug and wedge-tongue from sliding forward and unbuckling the tug, which difficulty forms a serious objection to the old forms of wedge-buckles, as they are liable to come unbuckled by the slacking of the tug due to the cessation of the draft on the tug, as in going down hill, or in backing the load.

Our invention consists, secondly, in the construction of a harness-tug buckle-frame, with strap-holes at its sides, and with a tongue on its lower inside face, whereby we obtain a very cheap and simple means of securing the tugs to the saddle-strap, and effect a considerable saving of buckles and work, in making the harness.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construc-

tion and operation.

The buckle-frame B is of a box form, and is made with a slight taper in its lateral dimensions from the front to the rear end, as shown in figs. 2, 3, and 5.

The hame-tug bar L, and back-strap bar C, are cast on the frame B, as shown, and the strap-holes b bare formed in the sides of the frame B, close to the lower side, N, as shown in figs. 2 and 5.

The tongue e is cast on the lower side N of the frame B, between the strap-holes b b, as shown in

figs. 3 and 5.

The wedge-tongue E consists of the plate K, which has the wedge-shaped flanges ff cast on its edges, and at the end of which is the bar g.

The tongue d is cast on the lower side of the bar g, and the arms a a extend from the ends of the bar g down to the bar I, on which is east the tongue c.

The hame-tug H is secured to the frame-bar L in an ordinary manner, and has arranged on it one or

more tug-loops, G, as shown in figs. 1, 2, and 3.

Now, in order to buckle the tug A, it is first passed through the frame B, and through the loop formed by the bar I, and the bar F, which is cast between the tongue-arms a a, as shown in figs. 3 and 4.

The tongue d is then turned into the desired hole in the tug A, and the tug A and wedge-tongue E are then drawn back into the frame B, when the wedge-flanges ff press against the upper side M of the frame B, and thus bind the tongue d into the tug A, while the face of the bar g comes to a bearing against the side M, and thus serves to transfer the draft from the tug A to the frame B, by which it is transmitted to the hame-tug H.

While this operation is being effected, the buckleframe B is to be turned at an angle with the hametug H, as indicated by dotted lines in fig. 2, when, by bringing the frame B into line with the hame-tug H, as shown in drawings, the tongue c is brought into a hole in the hame-tug H, as shown in figs. 2 and 3.

The tug A, being then tucked into the loop G, it

is evident that the tug A and wedge-tongue E will be firmly held against any forward movement, so that there can be no danger of an accidental unbuckling of the tug, and it is also evident that the arms a a and bar I form a loop, which surrounds the tug A, and prevents the wedge-tongue E from dropping off from said tug.

In order to secure the tugs to the saddle-strap D, the wedge-tongue E and tug A are slid forward in the frame B, until the wedge-flanges f f are clear of

the upper side M of the frame.

The saddle-strap D is then slid through the strapholes b b in the frame B, under the tug A, until the tongue e is brought under the proper hole in the saddle-strap, when the tug A and wedge-tongue E are drawn back to the position shown in drawings, which presses the tug A down onto the strap D, and secures it on the tongue e, thus effecting a firm connection between the saddle-strap and tug.

The bar F, between the arms a a of the wedgetongue E, simply serves as an aid in keeping the buckle and hame-tug in line, and to act as a brace to the arms a a, and it could be dispensed with if de-

sired.

Having thus fully described our improved buckle, What we claim therein as new and of our invention, and desire to secure by Letters Patent, is-

1. The hame-tug tongue c on the bar I of the loop a I a, on the wedge-tongue E, substantially as and

for the purpose specified.

2. The buckle-frame B, provided with the strapholes b b, and with the saddle-strap tongue c, when constructed substantially as is herein specified.

3. The combination of the buckle-frame B, provided with the saddle-strap tongue e, tug A, and wedgetongue E, the several parts being arranged substantially as and for the purpose specified.

4. The combination of the buckle-frame B, wedge-

tongue E, provided with the tug-tongue d, draft-bar g, and loop a I a, with hame-tug tongue c, the several parts being arranged and operating substantially as and for the purpose specified.

As evidence of the foregoing, witness our hands this 17th day of February, A. D. 1870.

THOMAS C. MARTIN.

JAMES OFFINEER.

Witnesses: John Taylor, John F. Taylor.