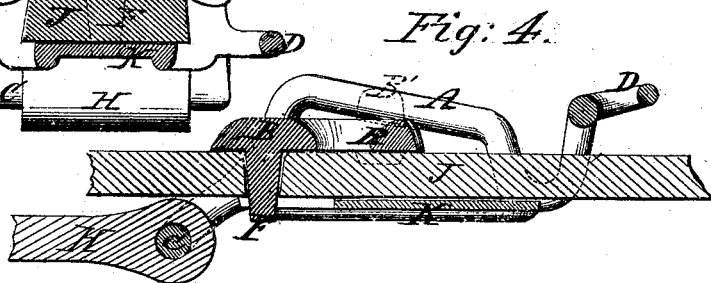
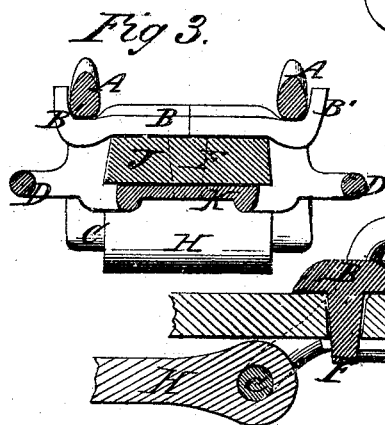
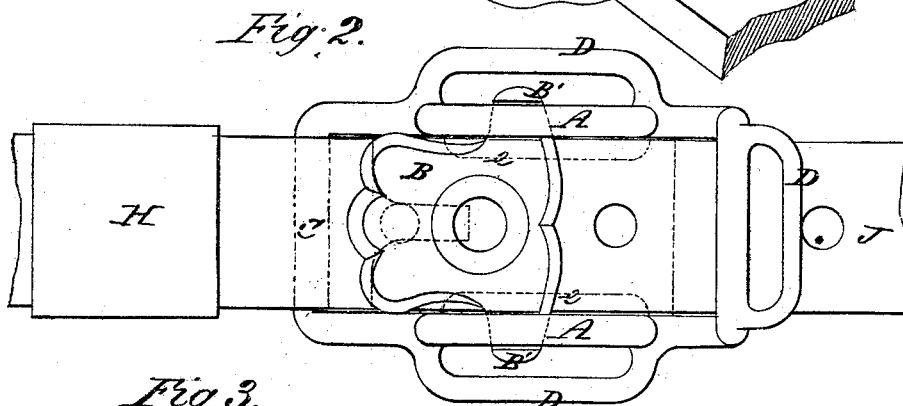
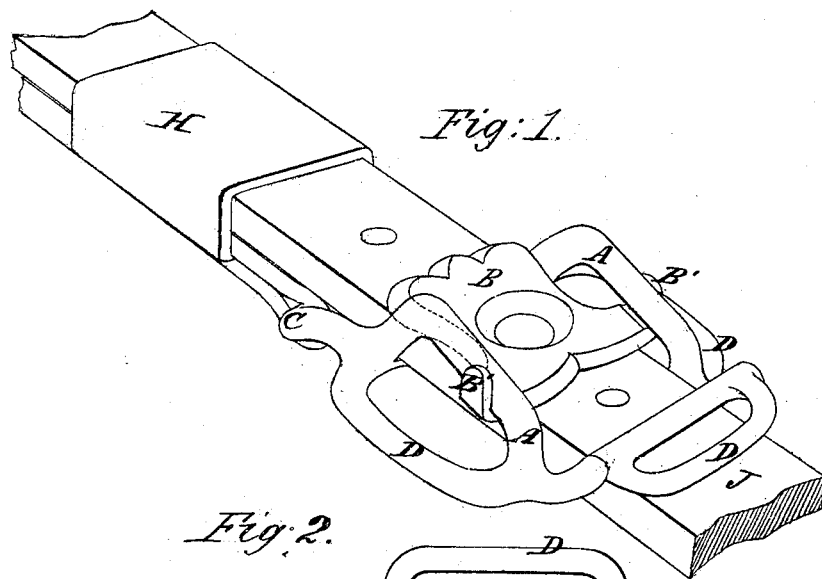


J. H. Martin,

Buckle.

No. 113,902.

Patented Apr. 18, 1871.



Witnesses.
R. J. Campbell
J. A. Campbell

Inventor.
John H. Martin
by his atty
Mason Edmund Lawrence

United States Patent Office.

JOHN H. MARTIN, OF COLUMBUS, OHIO.

Letters Patent No. 113,902, dated April 18, 1871.

IMPROVEMENT IN BUCKLES.

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

To all whom it may concern :

Be it known, that I, JOHN H. MARTIN, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Trace-Buckles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a perspective view of my improved buckle with trace and hame-tug applied to it;

Figure 2 is a front view of the same;

Figure 3 is a vertical transverse section; and

Figure 4, a vertical longitudinal section of the same.

Similar letters of reference indicate corresponding parts in the several figures.

The improvement which I have made in trace-buckles which have a sliding or movable tongue-plate and inclined ways for pressing this plate against the trace at the time when strain comes upon the tongue of the buckle, is—

First, casting the buckle with openings directly beneath the inclined ways and between the edges of the inner plate of the buckle-frame, whereby the use of a core is rendered unnecessary, the weight of the buckle is decreased, and beauty of appearance is secured.

Second, casting the tongue-plate with outwardly-projecting ears or guides in such a manner that the bearing contact between the tongue-plate and the inclined ways is maintained at a point out beyond the inner face of the plate of the buckle-frame, and all liability of the tongue-plate falling out of the buckle-frame when the trace is withdrawn is obviated, particularly when the side straps are in the side loops of the frame.

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

The plate K of the buckle-frame is oblong and irregular in shape, and has side and end loops D D D for the well-known harness-straps, and also has a front cross-bar, C, to which the hame-tug H is fastened.

On the sides of this frame-plate, and extending out laterally, or about at a right angle with the side loops D D, are inclined bars A A, as represented.

These bars have no support from the frame-plate, except at the points where they and the side loops unite with one another and said plate, and therefore a free space is left behind said bars and between the edges of the plate and the side loops D D. This is evident from the dotted lines in the drawings at e e, which are intended to indicate that the plate K is reduced in width between the bars A A. This is

done in order that the inclined ways or side bars A A may be cast without a core, and thus save a part of the labor and expense of manufacturing buckles which work on this general principle, but are made with the guide-slots cut through solid masses of metal, or cast in the same by means of a core.

The ornamental tongue-plate B has ears or lateral guides B' B' cast on it, as shown.

These operate behind and against the sides of the inclined bars A A of the buckle-frame, as illustrated plainly in fig. 3 of the drawings.

On the inner side of this tongue-plate is a tongue or stud, E, designed to enter holes made in the trace J to prevent the trace from slipping. This stud also extends through the frame-plate, there being an oblong open slot formed in this plate to permit the passage of the tongue and allow it to move with the tongue-plate when the strain comes upon the tongue.

The whole buckle is made of cast metal, and can be produced without a core on account of its skeleton-like construction.

The operation of the buckle is the same as others which have sliding tongue-plates and inclined guide-ways or slots, viz., the strain on the tongue and trace hole being relieved by the clamping of the trace between the tongue-plate and plate of the buckle-frame, which result is produced by the ears or guides of the tongue-plate bearing against the inclined bars as the tongue-plate slides, and by thus bearing they, with the tongue-plate, are caused to press with great force against the trace.

Broadly considered, I do not claim a movable or adjustable buckle-tongue, as this is not new.

Nor do I claim inclined guide-ways and a tongue broadly; but

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

1. The buckle-frame K, with the inclined side bars A A arranged opposite free spaces which are between the edges of the plate K and the side loops D D, substantially as described.

2. The ears or guides B' B', cast directly on the edges of the tongue-plate B in the manner described and shown.

3. The skeleton-like trace-buckle herein described, as a new article of manufacture, such buckle being of cast metal and having an end and side loops, D D D, cross-bar C, side bars A A, and a sliding tongue-plate, B E, with ears or guides B' B', all as herein set forth.

JOHN H. MARTIN.

Witnesses:

E. T. DELANY,
W. S. HUFFMAN.