

*J. Ives.
Buckle*

No. 92,973

Patented July 27, 1869.

Fig. 1.

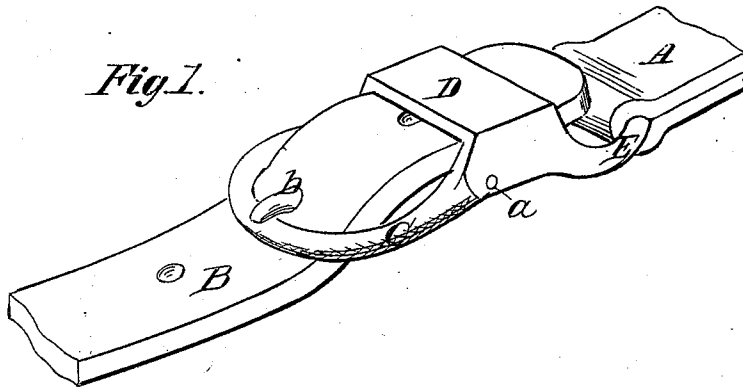


Fig. 2.

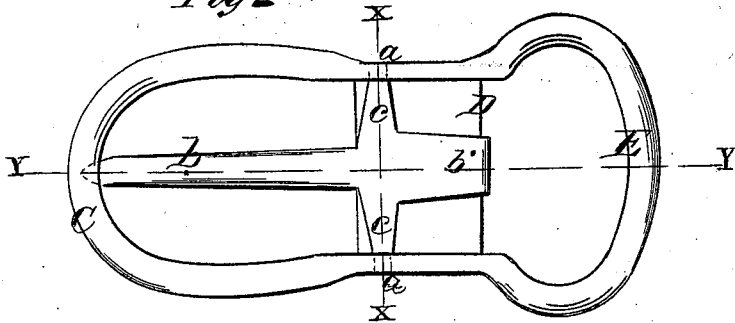


Fig. 3.

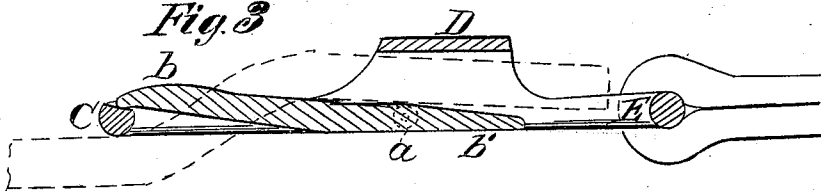
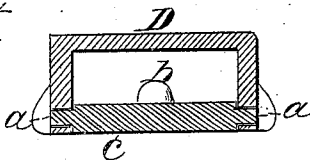


Fig. 4.



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JAMES IVES, OF MOUNT CARMEL, CONNECTICUT.

Letters Patent No. 92,973, dated July 27, 1869.

IMPROVEMENT IN HARNESS-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 I, JAMES IVES, of Mount Carmel, in the county of New Haven, and State of Connecticut, have invented a new and improved Harness-Buckle; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of my improved buckle, with straps applied to it.

Figure 2 is a view of the back of the buckle.

Figure 3 is a section, taken longitudinally through the centre of the buckle, in the plane indicated by line *y y*, fig. 2.

Figure 4 is a section, taken transversely through the buckle, in the plane indicated by line *x x* in fig. 2.

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

The object of this invention is to improve the harness-buckles which are technically termed hip-strap buckles, by constructing the ring and loop, and the buckle-frame, of one piece of metal, or other suitable material, thus greatly facilitating the manufacture of this class of buckles, and making them stronger, cheaper, more durable, and handsomer, than heretofore.

The kind of buckle to which my invention particularly relates, consists of a common bow and tongue, and a ring, connected together by a short leather strap, and provided with a box-loop, for receiving the end of the strap, which is fastened to the tongue of the buckle.

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

In fig. 1 of the accompanying drawings, I have my improved buckle complete, with a single strap, A, fastened permanently to the ring E, and a strap, B, attached by the tongue of the buckle, and its end inserted through the box-loop D.

In some instances, the ring E will have two straps attached permanently to it, as, for instance, when it is used to connect the breeching-strap to the back-strap of harness.

The improved buckle consists of a semi-elliptical bow, C, a semicircular or elongated ring, E, an intermediate connecting-plate or box-loop, D, on a tongue, *b*, which latter may be constructed with a tail-piece, *b'*, as shown in figs. 2 and 3.

The parts C, D, and E, are produced in one piece, and may be made of iron or other metal, or of hard rubber, or any other suitable substance.

It will be seen, by reference to figs. 2 and 3, that the inner side of the buckle, from C to E, is flat, or nearly so, and that the loop D is formed upon the outer or opposite side of the buckle, so that the free end of the strap B is passed between this loop and the pivoted end of the tongue, as indicated in fig. 2, in red. This loop not only serves the same purpose as the leather box-loop in the old form of buckle, but it also serves to strengthen the parts C E, and prevent them from spreading apart or contracting laterally.

Near the inner edge of the flattened sides of loop D, the tongue *b* is pivoted, *a a* being the pivot-connections of the cross-piece *c* of the tongue. To effect the attachment of the tongue to the sides of the buckle, these sides are spread apart far enough to allow the rounded ends of the cross-piece *c* to be inserted into the holes made through said sides, after which the sides are compressed, to complete the attachment.

Instead of constructing the cross-piece *c* and the tongue *b* in one piece, the tongue may be connected to a fixed cross-bar, so as to move upon the same; and, if desirable, the relative proportions of the device may be varied, so as to admit of the formation of two or more loops, instead of one.

The tail-piece *b'*, which forms an extension of the tongue, is designed to hold the free end of the strap B close up to the loop D, as indicated in fig. 3.

While I design the improved buckles for attaching the breeching-straps of harness to the back-straps, I do not confine myself to its use for this purpose, as it may be adopted wherever it is found to be useful.

Having described my invention,

I claim as a new and improved article of manufacture—

1. The buckle, consisting of the frame C E D, tongue *b*, and pivot *a*, all arranged, combined, and operating, substantially as described.

2. The reduced arched portion D of the buckle, in combination with the tongue *b b'* and pivot *a a*, substantially in the manner and for the purpose described.

JAMES IVES.

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