

G. M. HARNISCH.
Buckles.

No. 217,097.

Patented July 1, 1879.

Fig. 1.

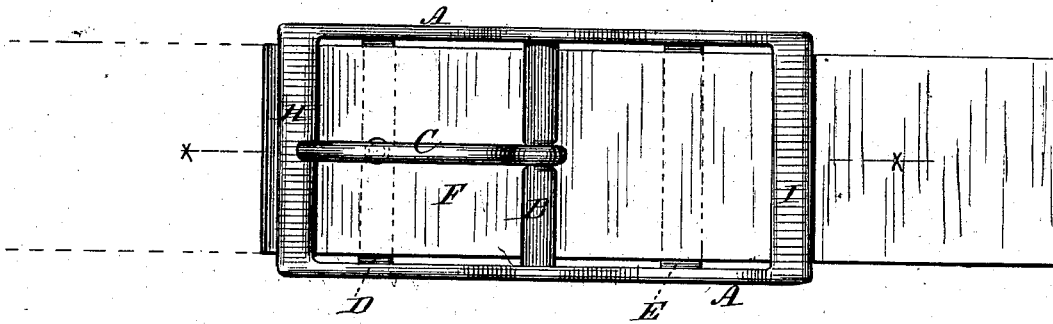


Fig. 2.

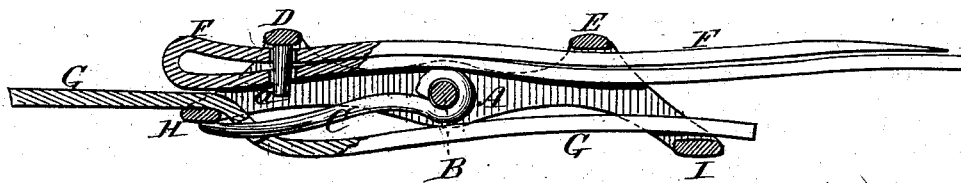


Fig. 3.

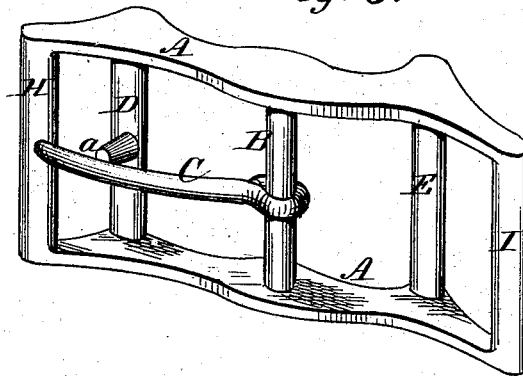
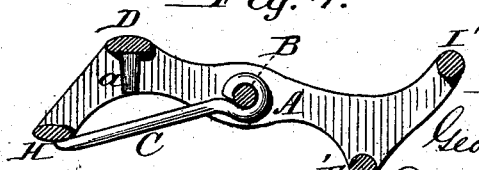


Fig. 4.



Attest:
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UNITED STATES PATENT OFFICE.

GEORGE M. HARNISCH, OF BEECHER, ILLINOIS.

IMPROVEMENT IN BUCKLES.

Specification forming part of Letters Patent No. **217,097**, dated July 1, 1879; application filed May 23, 1879.

To all whom it may concern:

Be it known that I, GEORGE M. HARNISCH, of Beecher, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Buckles, of which the following is a specification.

The object of my invention is to produce a buckle for use in halters, hitching-straps, check-reins, bit-straps, curb-straps, hip-straps, martingales, hame-straps, breast-straps, and for all kinds of strap-work, whether used in harness or otherwise, said buckle to be fastened to its holding-strap without sewing or rivets.

To this end I make the buckle of rectangular form, with a middle cross-bar for carrying a loose buckle-tongue, and with two under cross-bars to form the frame-loops, while upon that bar of these two just mentioned which forms, with the frame, the loop for the holding-strap I also cast a stud. This stud passes through the coincident holes of a looped or doubled strap, (which I call the "holding-strap," in contradistinction to the strap which is to be buckled,) and keeps it. The strap to be buckled bears against the holding-strap, and aids to keep it engaged with the stud.

But the invention is more properly understood from the drawings, wherein—

Figure 1 represents a plan view, with the strap to be buckled omitted; Fig. 2, a longitudinal section, showing the strap as buckled; Fig. 3, a perspective of the buckle-frame; and Fig. 4, a longitudinal section of a buckle-frame made according to my invention, but having a modified construction of end loop.

The rectangular buckle-frame A has a middle round cross-bar, B, upon which the tongue C swings. Upon its under side, or that next the horse, there are also two flat cross-bars, D E, which, with the flat end bars, H I, of the frame, form the end loops for the straps. Projecting from the bar D, which is near the holding-loop, is a stud, *a*, which enters the coincident holes of a doubled strap, F, which strap I denominate the "holding-strap," because it is the strap which carries the buckle-

frame. This strap, as doubled for a short distance, being thus held by the stud *a*, passes also through the other end loop, formed by the bar E and the frame end bar, I.

Now, to buckle the connecting-strap G; pass it through the loop formed by bars D and H, over the doubled stud-held strap F. Let the tongue C be locked with any one of its holes, and pass the strap end through the other frame-loop, as Fig. 2 shows.

It will be seen that the strap G thus binds upon the stud-held strap F, and keeps it from disengaging with the stud. This is, in connection with the stud *a* upon the cross-bar D, one of the important particulars of my invention, since by such a combination and construction the buckle is held to both its connecting and holding strap in the most secure manner.

In Fig. 4 I have shown a modified form of buckle, which has all the parts of my buckle above described. The only difference between the modification and the construction first described is, that instead of both loops turning in the same direction, I turn the loop formed by the round bars E' I' inward, and am thereby enabled to shorten the buckle-frame. Hence I may prefer to use this modification in practice.

I claim—

1. The rectangular buckle-frame A, with its middle cross-bar, B, for the swinging tongue C, and the under cross-bars, D E, the former having an upwardly-projecting stud, *a*, and the end bars, H I, as and for the purpose set forth.

2. A buckle provided with the cross-bar D, having a rigid stud, *a*, and the central cross-bar, B, having a swinging tongue, C, all arranged as shown, whereby the holding-strap F and connecting-strap G are securely held in place, for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

GEORGE M. HARNISCH.

Witnesses:

EMIL WALTER,
HERMAN ROHE.