

(No Model.)

C. R. HARRIS.
BUCKLE.

No. 513,780.

Patented Jan. 30, 1894.

FIG. 1.

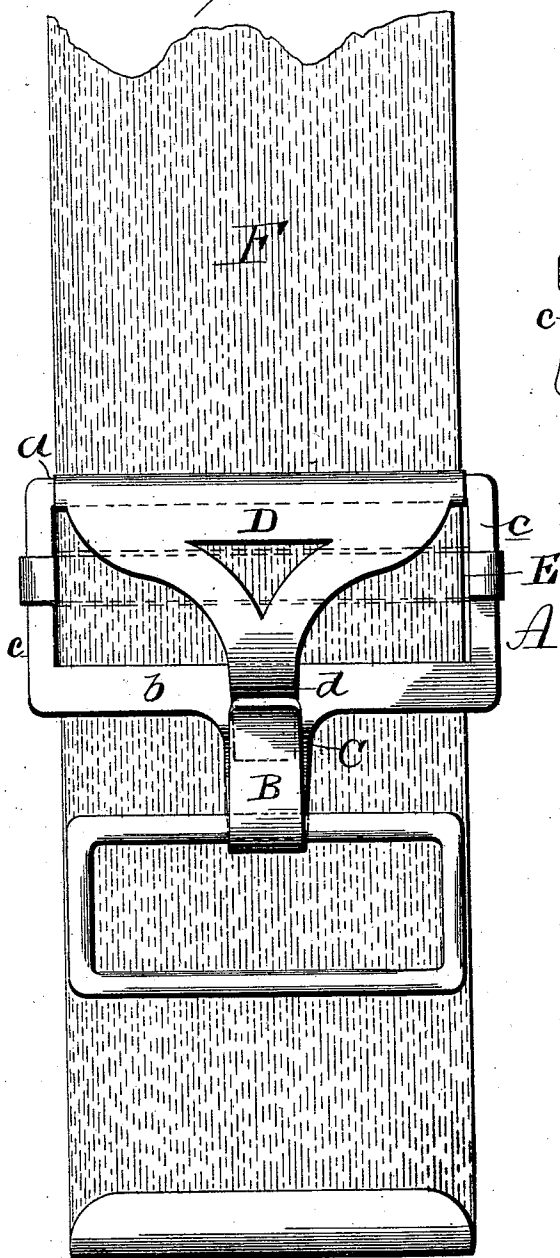


FIG. 2.

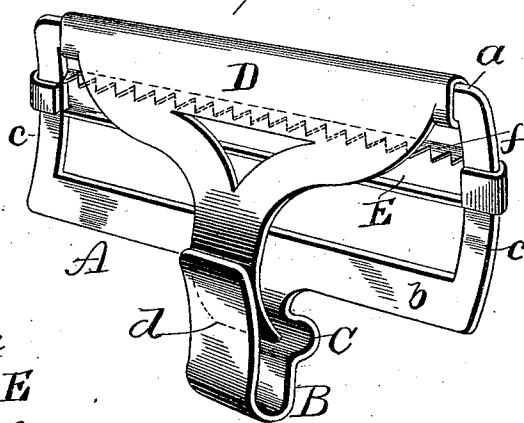
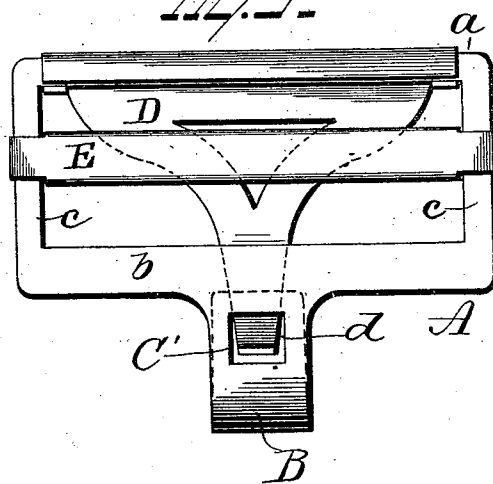


FIG. 3.



Witnesses

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CHARLES R. HARRIS, OF WILLIAMSPORT, PENNSYLVANIA.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 513,780, dated January 30, 1894.

Application filed April 18, 1893. Serial No. 470,844. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. HARRIS, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain
5 new and useful Improvements in Buckles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in buckles and more particularly to an improvement in the buckles disclosed in Letters Patent No. 485,628, granted to me November 8, 1892, the present invention being modified to make it applicable to the back straps for draft animals and it consists in a metal frame having a hook at the lower end in which hook a recess is formed, and a clamping bar constructed to slide up and down on the slide bars of the frame, in connection with a front plate connected at its upper end to the top of the buckle frame and terminating at its lower or free end in the hook at a point opposite
25 the recess formed in the hook so that it may be forced into the latter when occasion may require it.

The present invention further consists in certain novel features of construction and combination of parts which will be hereinafter described and pointed out in the claims.

In the accompanying drawings Figure 1 is a view in front elevation. Fig. 2 is a detached perspective view. Fig. 3 is a modification.

A represents the frame of the buckle. This frame is preferably cut in a single piece, from sheet metal and it comprises the top and bottom cross bars *a* and *b* respectively and the
40 side bars *c, c*. The side bars connect the ends of the top and bottom cross bars and instead of extending in a straight line from one to the other they are curved slightly throughout their length as shown in Fig. 1.

A hook B depends centrally from the lower edge of the bottom cross-bar *b* and its free end extending forwardly and terminating preferably opposite the lower edge of the bar *b*.

About midway of its length the hook is bent
50 backward to form a recess C as shown in Fig.

1 or if desired in lieu of this bent a slot C' may be made in the back of the hook.

B is a front plate consisting of sheet-metal. This front plate is bent around and clamped securely at its upper edge to the top bar *a* so that a rigid connection is formed at this point. Thence the plate curves slightly outward and tapers gradually to about the width of the hook, its free end *d* entering the hook, where it remains permanently and being bent backward toward the recess C or slot C' as the case may be. The spring of the front plate holds its free end yieldingly forward against the inner face of the curved portion of the hook where it remains normally until forced back
65 by dropping the ring into the hook, when of course the pressure is sufficient to force the lower end of the front plate inward to allow the ring to pass into the hook, the lower end of the front plate springing back immediately upon the passage of the ring to close the hook. From the side rims it will be seen that a V-shaped opening is formed above and below the free end of the front plate so that the ring is guided between the free end of
75 the hook and front plate when raised or lowered, sufficient force only being required to overcome the outward pressure of the front plate.

In addition to the parts described, a cross bar E is constructed to slide up and down on the side bars *c, c*, for the purpose of clamping the web F between its teeth *f* and the front plate. The web is passed rearward of the top and bottom bars *a* and *b* and between the
85 cross bar E and front plate D and the web is held fast by the cross-bar E sliding upward until the web is clamped between it and the front plate.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention and hence I do not wish to limit myself to the exact construction herein set forth, but,
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Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a frame having a hook at the lower end in the back of which a
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recess is formed, the free end of the hook curved upwardly and forwardly, of a front plate terminating at its lower end in a tongue which normally bears outwardly against the inner face of the free end of the hook and terminates at its free end in the recess in the rear of the hook whereby V-shaped recesses are formed at both sides of the point of contact of the tongue with the hook, substantially as set forth.

2. The combination with a frame terminating at its lower end in a hook, said hook having a recess formed in its rear, of a front plate terminating at the lower end in a tongue

which projects downward into the hook and rearward into the recess in the rear of the hook whereby the extreme end of the tongue normally projects rearward of the plane of the front face of the rear portion of the hook, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES R. HARRIS.

Witnesses:

C. L. DRURY,

S. G. NOTTINGHAM.