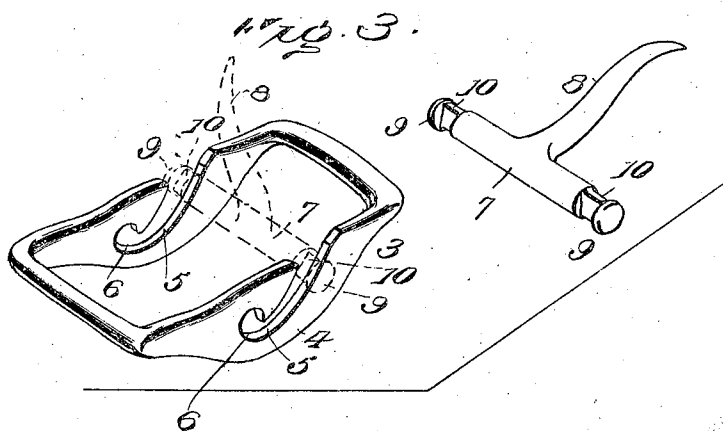
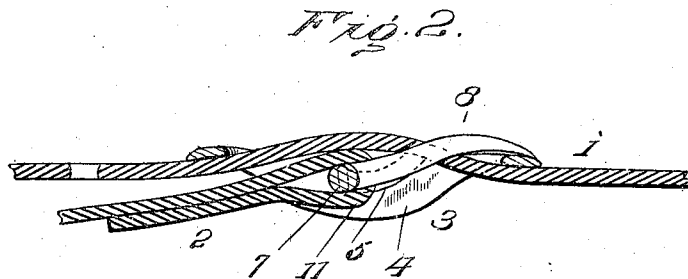
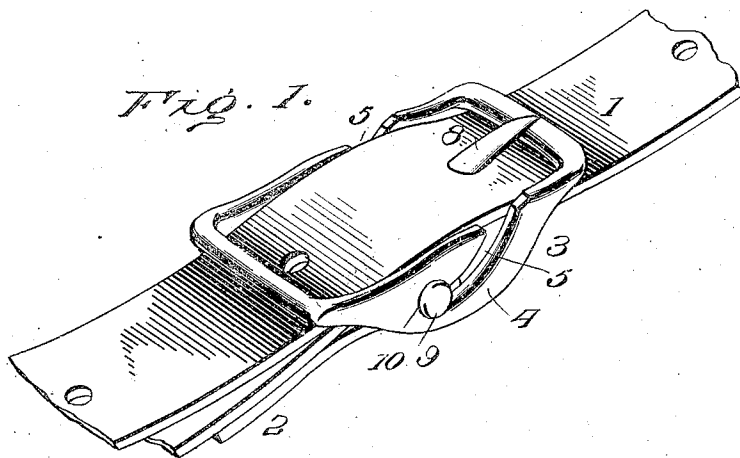


No. 844,184.

PATENTED FEB. 12, 1907.

H. H. PIJAN.
CROSS LINE BUCKLE.
APPLICATION FILED MAY 3, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

HERMAN H. PIJAN, OF WAUSAU, WISCONSIN.

CROSS-LINE BUCKLE.

No. 844,184.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed May 3, 1906. Serial No. 315,039.

To all whom it may concern:

Be it known that I, HERMAN H. PIJAN, a citizen of the United States, residing at Wausau, in the county of Marathon and State of Wisconsin, have invented certain new and useful Improvements in Cross-Line Buckles, of which the following is a specification.

This invention consists of a novel form of buckle, particularly designed for attaching a cross-line to the long line of reins, but susceptible of use in various ways in connecting strap parts.

In carrying out the invention it is contemplated to utilize the usual buckle-frame through which the long line is passed in connection with a tongue-carrying bar peculiarly mounted upon the frame and detachable therefrom to admit of ready disconnection of the cross-line, as will be pointed out more fully hereinafter.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view of a buckle embodying the invention applied. Fig. 2 is a transverse sectional view. Fig. 3 is a perspective view of the frame and the tongue-carrying bar in separated positions.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In the drawings the numeral 1 designates the long line, and the numeral 2 the short or cross line. The frame of the buckle is denoted at 3 and is of the customary rectangular form, the sides thereof, however, being vertically thickened or enlarged, as at 4. The enlarged side portions 4 of the frame 3 are formed with curved slots 5, having the entrance-terminals at the upper edges of the sides of the frame and thence curving downwardly and longitudinally of the frame to the inner terminals thereof. The inner terminals of the slots 5 are vertically enlarged, as shown at 6. The cross-line 2 is looped about a cross-bar 7, adapted to span the frame 3 in the customary way and having the tongue 8 formed therewith, said tongue 8 being adapted to pass through openings in the long line 1 to connect and adjust the same with reference to the frame 3. The mounting of the cross-bar 7 on the frame 3 is such that said

cross-bar may be readily displaced from the frame, but when in operative position thereon is so interlocked with said frame as to prevent accidental displacement. The means for effecting the above is comprised in the peculiar formation of the slots 5 and the opposite end portions of the cross-bar 7. It will be noted that the cross-bar 7 is provided with heads 9 at its opposite extremities and the body of the cross-bar adjacent to the inner sides of said heads 9 is cut away from opposite sides to form recesses 10. The recesses 10 reduce the thickness of the bar 7 diametrically adjacent to each head 9, and the narrower portions of the bar at the heads 9 are equal in thickness to the width of the slots 5, so as to permit free movement of the recessed portions 10 through the slots 5 in placing the cross-bar in position on the frame 3.

In the use of the invention as above mentioned the tongue 8 is held in an approximately vertical position as the cross-bar 7 is manipulated to cause the recessed portions 10 of the same to engage in and pass through the slots 5 to the inner enlarged terminals 6 of the latter. As soon as the ends of the cross-bar 7 are seated in the enlarged terminals 6 of the slots 5 the tongue 8 may be moved downwardly toward an end of the frame 3, having been passed through an opening in the long line 1, and this movement of the tongue will rotate the cross-bar 7 and cause the wider end portions thereof adjacent to the heads 9 to assume a vertical position, thereby preventing movement of the cross-bar in the slots 5 in such a way that said cross-bar might possibly be displaced from the frame 3.

The cross-line 2 is affixed to the cross-bar 7 by being looped thereabout, as shown at 11, and as the tongue 8 passes through the cross-line 2 at the looped portion 11 the cross-line may be readily grasped so as to admit of readily manipulating the cross-bar 7 and the tongue 8 to properly position the part 8 preliminary to either introducing the same into the slots 5 or disengaging the same from the frame of the buckle.

It will be noted that the heads 9 at opposite ends of the cross-bar 7 so engage the outer sides of the frame 3 that the frame is reinforced against lateral stress and is made more rigid for obvious reasons. Formation of the cross-bar, as above noted, is especially advantageous when the buckle-frame is made of light metal.

Having thus described the invention, what is claimed as new is—

1. In a cross-line buckle, the combination of a frame embodying spaced sides, each of said sides being formed with a slot leading from an edge thereof and enlarged at its inner terminal, a cross-bar mounted on the frame and having its opposite end portions recessed to reduce the same diametrically and thereby admit of passage of the end portions of said cross-bar through the slots to the inner terminals of the latter, whereupon rotary movement of said cross-bar will interlock the wider end portions thereof with the side portions of the frame, and a tongue carried by said cross-bar.

2. In a cross-line buckle, the combination of a frame embodying spaced sides, each of said sides being formed with a slot leading from an edge thereof and enlarged at its inner terminals, a cross-bar mounted on the frame and having its opposite end portions recessed to reduce the same diametrically and thereby admit of passage of the end portions of said cross-bar through the slots to the inner terminals of the latter, whereupon rotary movement of said cross-bar will interlock the wider end portions thereof with the side portions of the frame, a tongue car-

ried by said cross-bar, and heads integrally formed at opposite extremities of the cross-bar and engaging the outer sides of the frame to reinforce the latter.

3. The combination with a cross-line buckle composed of a frame embodying spaced sides, each of said sides being formed with a slot leading from an edge thereof and enlarged at its inner terminal, a cross-bar mounted on the frame and having its opposite end portions recessed to reduce the same diametrically and thereby admit of passage of the end portions of said cross-bar through the slots to the inner terminals of the latter, whereupon rotary movement of said cross-bar will interlock the wider end portions thereof with the side portions of the frame, a tongue carried by said cross-bar, of a cross-line having an end looped about the cross-bar and formed with an opening through which the tongue aforesaid passes, and a long line passed beneath the ends of the buckle and engaged by the tongue.

In testimony whereof I affix my signature in presence of two witnesses.

HERMAN H. PIJAN. [L. s.]

Witnesses:

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G. A. OSSWALD.