

No. 822,396.

PATENTED JUNE 5, 1906.

F. S. SMITH.
CROSS LINE BUCKLE.
APPLICATION FILED OCT. 10, 1905.

FIG. 1.

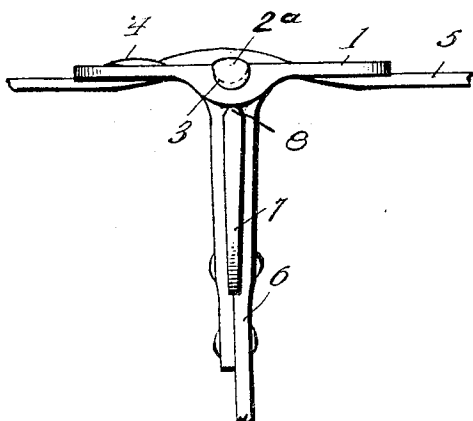


FIG. 2.

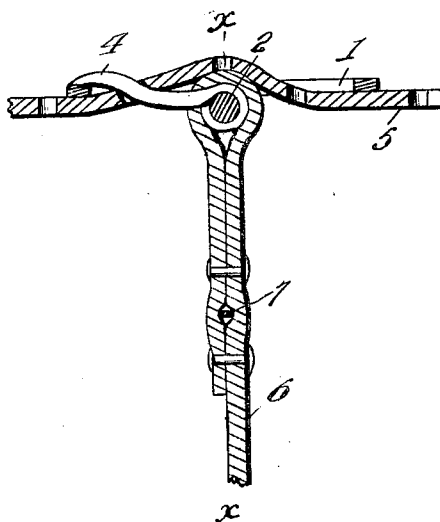


FIG. 3.

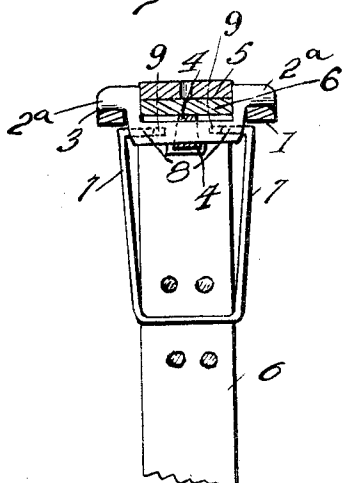
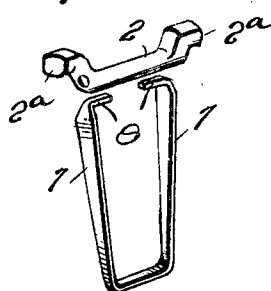


FIG. 4.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

FURMON S. SMITH, OF RAMONA, MICHIGAN.

CROSS-LINE BUCKLE.

No. 822,396.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed October 10, 1905. Serial No. 282,162.

To all whom it may concern:

Be it known that I, FURMON S. SMITH, a citizen of the United States, residing at Ramona, in the county of Newaygo and State of Michigan, have invented certain new and useful Improvements in Cross-Line Buckles, of which the following is a specification.

This invention consists of a special form of cross-line buckle, and embodies a construction in which a detachable cross-bar is connected with the buckle-frame, said cross-bar carrying a tongue to engage a strap part and having a second strap part directly attached thereto.

The invention resides particularly in special means employed for mounting the cross-bar upon the frame of the buckle and preventing accidental displacement thereof.

For a full description 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 side elevation of a buckle embodying the invention with the straps applied thereto. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a transverse sectional view on the line X X of Fig. 2, certain parts being shown in elevation. Fig. 4 is a detail perspective view of the strap part and the detachable cross-bar attached thereto.

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 buckle-frame, and the numeral 2 the detachable cross-bar carried thereby. The sides of the frame 1 are provided with recesses or seats 3 intermediate the ends thereof, in which the ends of the cross-bar are adapted to rest when the said cross-bar is mounted on the buckle. The cross-bar 2 carries the tongue 4, pivotally connected therewith. The long line 5 is provided with suitable openings through which the tongue 4 may pass in adjusting said long line, and the short line 6 is directly connected with the cross-bar 2. The short line 6 is provided with a loop at one end, which receives the cross-bar, and at opposite sides of the looped end portion of the short line are arranged spring members 7, having the upper ends

thereof bent inwardly or toward each other, as shown at 8. A bar may connect the lower ends of the spring members 7, and in this instance they would be integrally formed. The normal tendency of the spring members 7 is to move outwardly beneath the sides of the frame 1 of the buckle, and the bent upper ends 8 of the members 7 are located proximate the ends of the cross-bar 2. When the members 7 are in their normal positions, sprung outward from opposite portions of the loop in the short line 6, said members 7 have their upper ends nearly in contact with the upper side of the frame 1, and when in such position the cross-bar 2 cannot be displaced accidentally or otherwise. In order to detach the short line, however, it is only necessary for the operator to grasp the two spring members 7 and press the same toward each other, so that the ends 8 move into recesses 9 adjacent opposite ends of the cross-bar 2, whereupon the outer sides of the members 7 will be disposed about flush with the inner sides of the sides of the frame 1, this permitting the cross-bar 2 to be moved upwardly and readily detached. When the cross-bar 2 is replaced on the frame, the pressure of the sides of said frame against the outer sides of the spring members 7 will cause the same to move inwardly or toward each other until the ends of the cross-bar 2 move into the seats 3, whereupon the members 7 will spring outwardly beneath the sides of the frame 1 and prevent the bar 2 from accidental displacement. The extremities of the cross-bar 2 are preferably of somewhat hook shape, in order to engage over and reinforce the sides of the buckle-frame 1 against lateral stress.

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

1. In a cross-line buckle, the combination of a frame, a detachable cross-bar mounted thereon, a tongue carried by said cross-bar, and spring members separate from the frame for preventing displacement of the cross-bar therefrom.

2. In a cross-line buckle, the combination of a frame, a detachable cross-bar mounted thereon, a tongue carried by said cross-bar, and spring members arranged adjacent to but separate from the frame of the buckle and adapted to engage said frame to prevent displacement of the cross-bar.

3. In a cross-line buckle, the combination of a frame, a detachable cross-bar, a tongue on said cross-bar, and members coacting with the frame but separate therefrom for
5 locking the cross-bar from displacement.

4. In a cross-line buckle, the combination of a frame, a detachable cross-bar adapted to be displaced from the frame by movement from the upper side thereof, and members ar-
10 ranged beneath the frame and operably connected with the cross-bar to prevent displacement of the latter, said members being separate from the frame.

5. In a cross-line buckle, the combination
15 of a frame, a detachable cross-bar, a tongue carried by said bar, a long line passing through the frame, a short line looped about the cross-bar, and spring members arranged adjacent the ends of the cross-bar and con-
20 nected therewith, said spring members being

adapted to engage the frame and prevent displacement of the cross-bar therefrom.

6. In a cross-line buckle, the combination of a frame, a detachable cross-bar, a tongue carried by said bar, a long line passing 25 through the frame, a short line looped about the cross-bar, and spring members secured to the short line at the looped portion thereof and having the upper ends bent inwardly to enter recesses in said bar, said spring mem- 30 bers normally projecting outward from the short line beneath the frame of the buckle to prevent displacement of the cross-bar therefrom.

In testimony whereof I affix my signature 35 in presence of two witnesses.

FURMON S. SMITH. [L. s.]

Witnesses:

LOUIS W. FULLER,
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