

F. RINGHAUSEN.  
CROSS LINE BUCKLE.  
APPLICATION FILED FEB. 25, 1906.

FIG. 1.

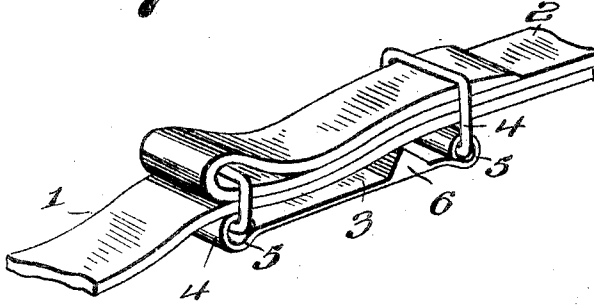


FIG. 2.

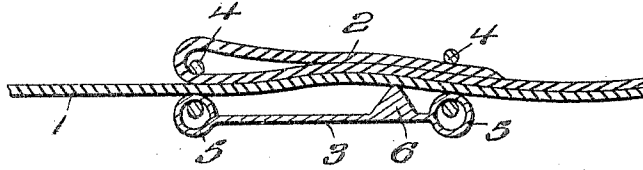
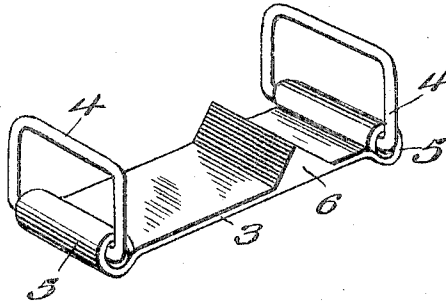


FIG. 3.



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Witnesses

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By

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# UNITED STATES PATENT OFFICE.

FREDERICK RINGHAUSEN, OF HARDIN, ILLINOIS.

## CROSS-LINE BUCKLE.

No. 802,476.

Specification of Letters Patent.

Patented Oct. 24, 1905.

Application filed February 25, 1905. Serial No. 247,348.

*To all whom it may concern:*

Be it known that I, FREDERICK RINGHAUSEN, a citizen of the United States, residing at Hardin, in the county of Calhoun and State of Illinois, have invented certain new and useful Improvements in Cross-Line Buckles, of which the following is a specification.

This invention provides an improved buckle or connecting device particularly designed for use as a cross-line buckle, but applicable in various ways for connecting strap parts.

The invention aims to provide an effective substitute for buckles which embody piercing tongues to engage in openings in strap parts, and the device which comprises the invention is of such a nature as to admit of a maximum amount of adjustment of the straps, permitting ready detachment 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.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still some of the preferred embodiments are shown in the accompanying drawings, in which—

Figure 1 is a perspective view showing the invention as when in actual use as a cross-line buckle. Fig. 2 is a vertical longitudinal sectional view of the buckle with strap parts attached. Fig. 3 is a perspective view of the buckle alone.

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 carrying out the invention the simplicity of construction and consequent cheapness in the cost of the buckle or connecting device are had in view in order to secure an article of the utmost practicability.

Specifically describing the invention, referring to the drawings, the numeral 1 indicates the long line of the harness-reins, and the numeral 2 the short line customarily provided. The invention is designed to connect the lines 1 and 2 in the construction illustrated, and the device consists of a body or base 3, upon which are mounted loops 4. The body or base 3 of the buckle is preferably made of a plate of metal or the like, and the loops 4 are two in number

and pivotally connected with the base 3 at opposite ends of the latter. The loops 4 are preferably of approximately rectangular form in order to conform somewhat with the shape of the strap parts received therein. The said loops extend over the upper side of the base, having free pivotal movement thereon. The plate from which the base or body 3 of the buckle is preferably made may be rolled at its ends, as shown at 5, so as to form journal members in which a portion of each loop 4 is received to secure the necessary pivotal connection between the said parts 4 and 3. The members 4 constitute clamping members when the strap parts 1 and 2 are secured by means of the buckle, and said loops firmly engage the strap parts in order to hold the same in proper relative position in the conditions of service thereof. Between the ends of the base 3 of the buckle and the spaced loops 4 is located a projection 6, which is extended from the base 3 and which is adapted to positively engage the strap part which is in connection therewith when the device is in use. In this instance the long line 1 passes through both of the loops 4 and is engaged by the projection 6. The short line is also passed through both of the loops 4, being looped upon itself at its end, so as to enable the extremity thereof to be passed again through one of the loops 4. In other words, the short line is first passed through both of the loops 4 and looped about the loop at one end of the base 3, the extremity of the short line being then forced through, the other loop being held in contact with the body of the line by the last-mentioned loop. When the parts are in the positions shown in Figs. 1 and 2, any strain upon the strap parts only serves to cause the loops 4 to clamp more firmly thereagainst and to hold the long line 1 hard against the projection 6. The buckle device may be readily adjusted, so as to lengthen the long line 1, by pulling the end portion of the short line from beneath the loop with which it is engaged, thus admitting of sliding the device longitudinally of the long line in a manner readily apparent. The clamping action of the loops 4 and the engaging action of the projection 6 is very effective in accomplishing the purpose of the invention as regards the attachment of the strap parts, and the arrangement of said parts with relation to the buckle of course admits of quick adjustment and attachment thereof, the above being prerequisites of a device of this type.

The loops 4 are of different sizes, since they

are designed to receive different thicknesses of straps. The projection 6 is preferably formed by a transverse rib merging to an edge near its outer portion. It will be understood  
5 that the buckle may be made in different sizes, according to the particular use for which they may be designed.

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

10 In a buckle, the combination of a base, clamp-loops pivoted to the base at the ends thereof, a projection extended from the base between

the clamp-loops, a line passed through the clamp-loops and engaged by the projection aforesaid, and a second line passed through  
15 both of the loops and having its extremity looped about one of the loops and received in the other of said loops.

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

FREDERICK RINGHAUSEN. [L. s.]

Witnesses:

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