No. 890,958. PATENTED JUNE 16, 1908.

W. J. BOYD.

BUCKLE.

APPLICATION FILED MAR. 2, 1907.

Fig. 1.

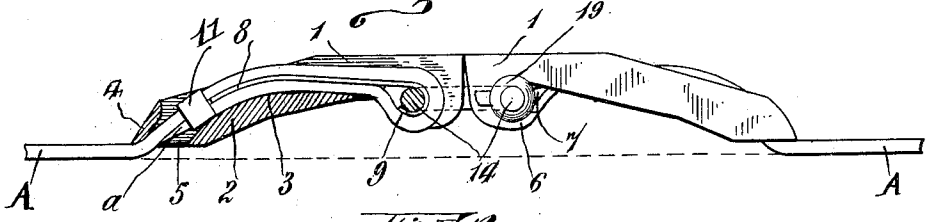


Fig. 2.

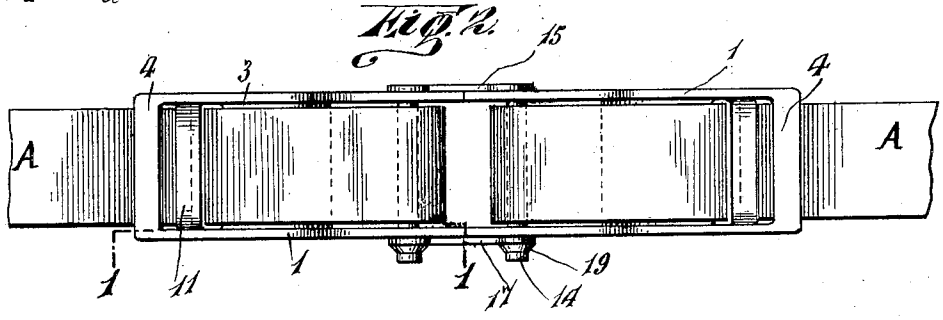


Fig. 5.



Fig. 3.

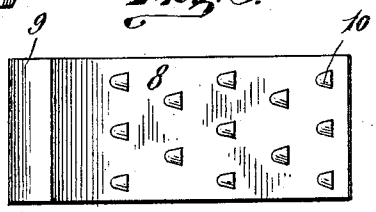
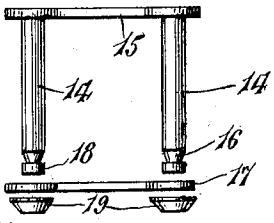


Fig. 4.



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BUCKLE.

No. 890,958. Specification of Letters Patent. Patented June 16, 1908.

Application filed March 2, 1907. Serial No. 360,254.

To all whom it may concern:

Be it known that I, WILLIAM JAMES BOYD, a subject of the King of Great Britain, residing at Regina, in the Province of Saskatchewan, Canada, have invented certain new and useful Improvements in Buckles; and I do hereby declare that the following is 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 harness buckles; the object of my invention is to provide a buckle which will hold a looped end of leather without slipping, without the use of pivoted parts, rivets or stitching; a further object is to provide means for attaching two such ends to permit free play thereof and to maintain the looped end of leather in a flat, smooth condition; and, my invention consists of the construction, combination and arrangement of parts, as herein illustrated, described and claimed.

In the accompanying drawings, forming part of this application, I have illustrated one form of embodiment of my invention, in which drawings similar reference characters designate corresponding parts, and in which:

Figure 1 is a side elevation of one buckle, and a vertical section through an adjacent buckle on line 1—1 of Fig. 2, and illustrating the application of the invention; Fig. 2 is a plan view; Fig. 3 is a plan view of a friction increasing tongue; and Fig. 4 is a plan view of a buckle connecting member. Fig. 5 is an enlarged sectional view of one of the washers 19.

Referring to the drawings, 1 designates side members connected by a web 2 intermediate of their ends, and provided with an arched surface 3. The side members 1 are further connected by a web 4 at their ends, leaving an opening 5 between the web 2 and the web 4. The opposite ends of the side members 1 are provided with hooked lugs 6, leaving slots or recesses 7, adapted to receive a bar or link of a coupling device. Disposed between the side members 1, and extending from their hooked ends to the web 2, is a friction increasing member or friction plate 8, provided with a hooked end 9 adapted to engage over the link or bar 14, of the coupling device, these bars being disposed in the slots or recesses 7, and provided with projections 10 on one surface adapted to increase the friction of the looped end A of the leather. Disposed between the side members 1 in the opening 5, is a box loop 11, having its lower ends bent at an angle and disposed through openings 13 formed in the reduced end *a* of the leather A, so that the folded leather will lie smooth and flat within the side members 1 and between the webs 2 and 4. Disposed in the slots 7 are transverse bars 14, having one of their ends connected by the plate 15, and having their opposite ends reduced as at 16 to form shoulders or heads 18. Removably disposed over the reduced end 16 of the bars 14, is a plate 17, adapted to be maintained on the bars by means of the heads or shoulders 18 and the washers 19 and to form with them and with the plate 15 a coupling device for connecting two sets of side members 1.

In use, the friction increasing tongue 8 is disposed with its hooked end 9 over one of the bars 14, and its opposite end is disposed between the folded leather A. This member 8 may be of spring metal, so as to normally maintain the lower fold of the leather *a* against the arched surface 3 of the web 2. As graphically illustrated in Fig. 1, tension exerted on the leather members A, forces the same firmly against the arched surface 3 of the web 2, and tightly binds the folded ends together, as the side members are made angular in shape.

It should be evident that by pushing on the end of the leather A that the short end may be adjusted through the box loop 11.

In Fig. 7 modified form shows the members 1 formed in one piece, otherwise all of the parts are the same. In constructing the device the arch 2 in any of the forms may be provided with friction producing projections 10, although it is a mere mechanical expedient to add these projections to the arches in view of the disclosure relating to Fig. 5.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is:—

1. A buckle comprising two substantially parallel side members, a web connecting said side members intermediate their ends, a second web connecting the lower ends of said side members and forming between itself and the first named web an opening, hooked portions on the opposite ends of said side members, a bar passing through said hooked portions, and means for removably securing said bar therein.

2. A buckle comprising two substantially parallel side members, a web connecting said

side members intermediate their ends, a second web connecting the outer ends of said side members and forming between itself and the first named web an opening, a hooked portion on the opposite ends of said side members, a bar passing through said hooked portions, a locking shoulder on one end of said bar, and means adapted to engage said shoulder and thereby lock said bar within said hooks.

3. A buckle comprising two substantially parallel side members, a web intermediate the ends thereof, a second web connecting the outer ends of said side members and forming between itself and the first named web an opening, hooked portions on the opposite ends of said side members, a bar passing through said hooked portions, a shoulder on said bar, and means for locking said bar within said hooked portions, said means comprising a washer adapted to fit over and engage the shoulder on the aforesaid bar.

4. A buckle consisting of two parts, each part comprising two substantially parallel members, means connecting said members and forming therebetween openings, hooked portions on each of said parts, a coupling device removably engaging said hooked portions to thereby couple said parts together, said coupling device comprising a plate and a plurality of locking bars attached thereto, and means for locking said coupling device in operative position.

5. A buckle consisting of two parts each comprising two substantially parallel members, webs connecting said members, to form openings therebetween, hooked portions on each of said parts, a coupling device adapted to removably engage said hooked portions and to thereby couple said parts together, said coupling device comprising a plate and a plurality of bars extending from said plate, each bar being adapted to engage hooked portions, locking shoulders on each of said bars, and means adapted to engage said shoulders to thereby lock said bars in operative position.

6. A buckle consisting of two parts, each part comprising two members, a hooked portion on each of said parts, a coupling device adapted to removably engage said hooked portions to thereby hold said parts coupled together, said coupling device comprising a plate, a plurality of bars extending from said plate and adapted to engage the aforesaid hooked portions, locking shoulders on said bars, a plate adapted to fit over the free ends of said bars, and locking washers adapted to fit over the ends of said bars and engage with the shoulders thereon to thereby lock the same in operative position.

7. A buckle comprising two substantially parallel side members, a web connecting said side members intermediate their ends, a second web connecting the lower ends of said side members and forming between itself and the first named web an opening, hooked portions on the opposite ends of said side members, a bar passing through said hooked portions, means for removably securing said bar therein, and a friction plate mounted on said bar.

8. A buckle comprising two substantially parallel side members, a web connecting said side members intermediate their ends, a second web connecting the outer ends of said side members and forming between itself and the first named web an opening, hooked portions on the opposite ends of said side members, a bar passing through said hooked portions, a locking shoulder on one end of said bar, means adapted to engage said shoulder and thereby lock said bar within said hooks, and a friction plate mounted on said bar.

9. A buckle comprising two substantially parallel side members, a web intermediate the ends thereof, a second web connecting the outer ends of said side members and forming between itself and the first named web an opening, hooked portions on the opposite ends of said side members, a bar passing through said hooked portions, a shoulder on said bar, means for locking said bar within said hooked portions, said means comprising a washer adapted to fit over and engage the aforesaid bar, and a friction plate mounted on said bar.

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

WILLIAM JAMES BOYD.

Witnesses:
HAROLD THOMAS TAYLOR,
E. J. BOYD.