

J. M. RUSSELL.
 RELEASING BUCKLE.
 APPLICATION FILED JULY 18, 1913.

1,088,373.

Patented Feb. 24, 1914.

Fig. 1

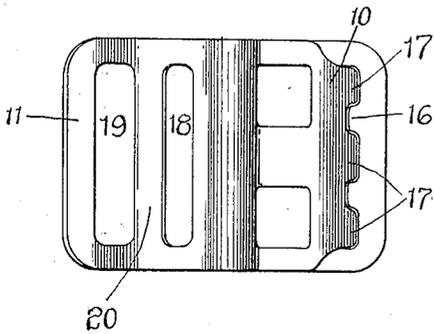


Fig. 4

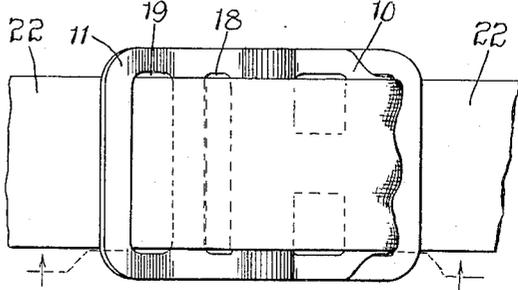


Fig. 2

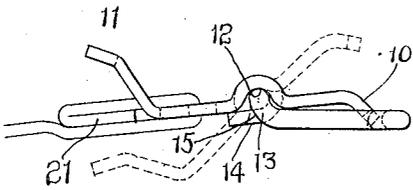


Fig. 5

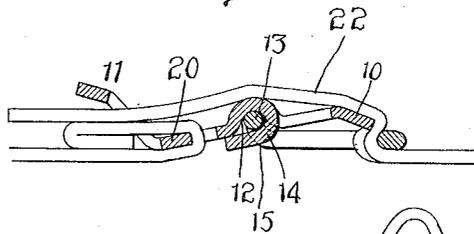


Fig. 3

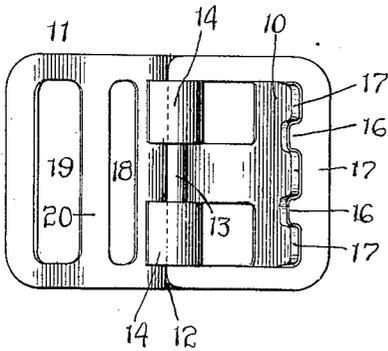
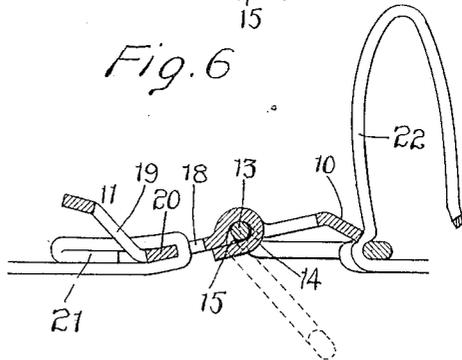


Fig. 6



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UNITED STATES PATENT OFFICE.

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RELEASING-BUCKLE.

1,088,373.

Specification of Letters Patent.

Patented Feb. 24, 1914.

Application filed July 18, 1913. Serial No. 779,763.

To all whom it may concern:

Be it known that I, JOHN M. RUSSELL, a citizen of the United States, residing at Naugatuck, county of New Haven, State of Connecticut, have invented an Improvement in Releasing-Buckles, of which the following is a specification.

This invention has for its object to provide a strong and serviceable buckle adapted for general use and especially adapted for use as a strap buckle, as, upon trunk straps, skate straps, book straps, etc., the special object being to provide a buckle that will give a positive hold upon either a leather or a woven strap, without tearing the strap, and will be instantly and effectively self-releasing when required.

With these and other objects in view I have devised the novel buckle which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts:

Figure 1 is a plan view of my novel buckle detached; Fig. 2 an edge view showing a strap attached but not buckled; Fig. 3 an inverted plan view of the buckle; Fig. 4 a plan view of the buckle with a strap attached and buckled; Fig. 5 a section on the line 5—5 in Fig. 4, looking in the direction of the arrows, and Fig. 6 is a similar view showing the strap passed between the locking plate and the loop but not under the guard, as in the act of either buckling or unbuckling.

My novel buckle consists of two parts only: a body and a rectangular loop hinged thereto. The body comprises essentially a locking plate 10 and a guard 11. At approximately the mid-length of the body on its underside is a transverse groove 12 formed by curving the metal of the body. 13 denotes the loop, one end of which lies in the groove, where it is retained by means of hinge eyes 14 formed by striking out tongues of metal from the body and curving them about the end of the loop. The attaching end of the loop is bent upward from the horizontal plane, the bends 15 in the loop engaging the wall of groove 12 and serving as stops to limit the downward swing of the loop as indicated by dotted lines in Fig. 6. The free end of the loop is provided on its inner side with engaging

teeth 16 and the end of the locking plate is provided with corresponding teeth 17 which are curved downward from the horizontal plane so that when there is no strap between them the teeth upon the loop and the locking plate will pass between and interlock with each other, as shown in Figs. 1, 2 and 3. The other end of the body is provided with transverse slots 18 and 19 between which is a cross piece 20, about which the end of the strap is passed and secured by stitching or in any suitable manner. For convenience in illustration, the attached end of the strap is indicated by 21 and the free end by 22. Outside of slot 19 is an end cross piece which serves as the guard. It will be noted that slot 19 is made amply wide to permit the free end of the strap to be passed easily under the guard and that the guard end of the body is bent upward out of the horizontal plane, which renders it easy to pass the free end of the strap through slot 19, leaving the guard uptilted for convenience in unbuckling.

The operation of my novel buckle will be readily understood from Figs. 5 and 6. In buckling, the free end of the strap is passed upward between the loop and the locking plate as in Fig. 6 and drawn tightly and then passed under the guard as in Fig. 5. In this position of the parts, it is practically impossible for the strap to become unfastened or to slip, as the greater the expansive strain placed upon the strap the more tightly it will be gripped between the teeth of the loop and the locking plate. The interlocking feature of these teeth causes the strap to be crimped between them, thus giving a perfectly firm hold upon the strap without cutting or tearing it. To unbuckle, it is simply necessary to withdraw the free end of the strap from the guard and then to press downward upon the guard, the effect of which is to tilt the locking plate and swing it upward away from the loop and the strap as indicated by dotted lines in Fig. 2, which permits the free end of the strap to be readily drawn outward from between the loop and the locking plate.

In addition to the ease and simplicity with which my novel buckle may be operated in buckling or unbuckling a strap and the firm grip upon the strap, the buckle is made additionally strong owing to the fact

that the entire strain in use is not taken up by the hinge eyes but a portion of the strain is exerted upon the wall of the transverse groove in the body in which the loop is hinged.

Having thus described my invention I claim:

1. A buckle comprising a body having at one end a guard under which the free end of a strap is passed in buckling, at the other end a locking plate and intermediate the locking plate and the guard a transverse groove, and a loop bent from the horizontal plane and hinged in said groove, the bends in the loop engaging the wall of the groove to limit the swing of the loop.

2. A buckle comprising a body having at one end a guard under which the end of a strap is passed, at the other end a locking plate having downwardly turned teeth and intermediate the locking plate and the guard a transverse groove, and a swinging loop

bent from the horizontal plane and hinged in said groove, for the purpose set forth, and having teeth adapted to pass between and interlock with the teeth on the locking plate to lock the strap by crimping it.

3. A buckle comprising a body having at one end a guard, at the other end a locking plate and intermediate the guard and the locking plate a transverse groove, and a loop having its attaching end bent upward from the horizontal plane, the bends in the loop engaging the wall of the groove and serving as stops to limit its downward swing and said loop being hinged in the groove by means of eyes formed from the metal of the body.

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

JOHN M. RUSSELL.

Witnesses:

A. H. DAYTON,
G. M. RUMNEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."