

R. A. BROWN.
BUCKLE.

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1,021,088.

Patented Mar. 26, 1912.

Fig. 1.

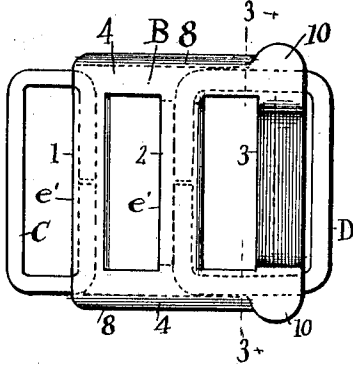


Fig. 2.

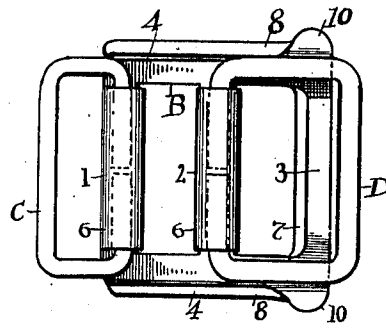


Fig. 3.

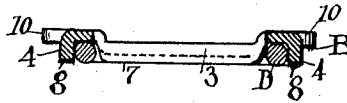
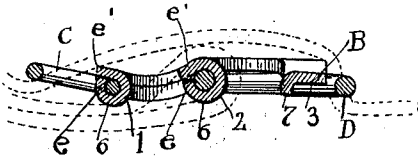


Fig. 4.



ATTEST
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BUCKLE.

1,021,088.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROYL A. BROWN, citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented certain new and useful Improvements in Buckles, of which the following is a specification.

My invention appertains to buckles, substantially as shown and described and particularly pointed out in the claim.

Referring to the single sheet of drawings herewith, Figure 1 is a plan view of the buckle showing what may be termed the top or outer side, and Fig. 2 is a bottom view thereof. Fig. 3 is a cross section of the buckle on line 3—3 looking in the direction of the arrow or to the right. Fig. 4 is a lengthwise sectional elevation thereof.

In this application the body or frame of the buckle indicated by B is preferably struck up by means of suitable dies from sheet metal, and is in a single piece. C and D represents a keeper and a clamping loop respectively, or one keeper and one clamping member engaged on the inner side of said body and adapted to operate therewith as hereinafter fully described. The said body B has distinguishing and original features of construction adapting the same to serve and be employed in the manner shown, and said features reside especially in the three several and different cross portions 1, 2 and 3, and in some measure in the sides 4. Taking up the said cross-portions or bars in their order it will be seen that at least a portion of the stock cut from the front bar is left standing on the bar itself and bent or turned under and around the corresponding side of keeper C and constitutes a hinge connection or engagement therefor and in fact constitutes an essential portion of said cross-bar in this instance. The same is true of cross-bar 2 in its connection with clamp member D, the stock from the front of said cross-bar being thrown down and turned under or beneath the top of said bar 2 in hinge fashion for the inner side of the said clamp member and constituting a bottom strengthening portion of said cross-bar and of the middle portion of the buckle. The cross-bar 3 is peculiar to itself in that it is struck down relatively to the sides of the body B and as to the plane of the top of the two other cross-bars as plainly seen in Fig. 3, and is provided with a flange 7 along

its inner edge at right angles to its top surface. This flange, however, only extends along the immediate inner edge of said cross-bar, like the underturned portion 6 of the other cross-bars and shown in Fig. 3 as ending at or within the ends of the member D. In Fig. 3 I also show a cross section of the sides of the buckle which, it will be seen, have inwardly bent flanges 8 along their outer edges substantially as deep as said keepers or members C and D, so that clamp member D particularly lies in something of a trough within at least a portion of said sides and otherwise rests against the substantially flat bottom of side-bars 4 when folded as shown. Of course the strap to be clamped comes between said parts or under clamp D when in use. Furthermore the sides of the said body are recessed to engage member D therewith and bring the same within the side flanges 8 as well as to lay the said member in position to be lapped and hinged within the bottom or inner stock 6, and the ends of the wire which constitute said member are brought within this hinge arrangement. The same is true relatively of keeper C. Finally as to said frame or body B it will be seen that the same has something of a compound curve between its ends, Fig. 4, which contributes to the leverage when in use and as shown in dotted lines therein, and the action of clamp D is made more effective in this way than it could be if said body were perfectly straight. The said frame also has distinct lips 10 provided at its inner corners and which extend laterally substantially as shown to afford means for gripping and handling the buckle at this point when the strap is fastened or released. The dotted lines, Fig. 4, show that the buckle is hung from its middle bar and that the tightening strap engages within clamp D against the edge of cross-bar 3 and has its extremity threaded beneath keeper C, which is so hung in its support that it cannot open outward further than shown in Fig. 4.

The keeper C is a detaining keeper for the end of the strap and the keeper D is essentially a clamping keeper or member.

Now, referring again to the leverage obtained in my improved buckle, this is a material advantage gained by the depressed relation of the cross-bar 1 in Fig. 4, whereby a marked tilting action of the buckle or

extra leverage is obtained to effectively clamp the strap by clamping member D at bar 3 when the strap is tightened. Obviously the front part of the buckle may be depressed instead of the rear part as shown, the object being to obtain extra leverage for effective clamping action on the strap by member D.

Referring to Fig. 4, both the keeper C and clamping member D are hinged in place in the same manner and the flange or lip 6 by which this is done is turned on a continuous circle until its end edge *e* abuts against the inner or bottom face of the bar and within the vertical plane of its other edge *e'*. This arrangement provides a round smooth surface for the strap which minimizes the wear thereon, and also makes the buckle strong without using heavy stock,

or in other words permits the use of light stock.

What I claim is:

In buckles, a sheet metal body having three cross-bars, a keeper and a clamping member, respectively, mounted on two adjacent bars and the third cross-bar constructed to come into clamping relation with said clamping member and depressed below the adjacent portions of the sides of the buckle, and the sides of the buckle having flanges terminating at said third cross bar.

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

ROYL A. BROWN.

Witnesses:

GEO. B. SMITH,
H. A. MOWREY.

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