H. J. STUART.

BUCKLE.

APPLICATION FILED MAR. 29, 1916.

1,236,121. Patented Aug. 7, 1917.

Fig. 1.

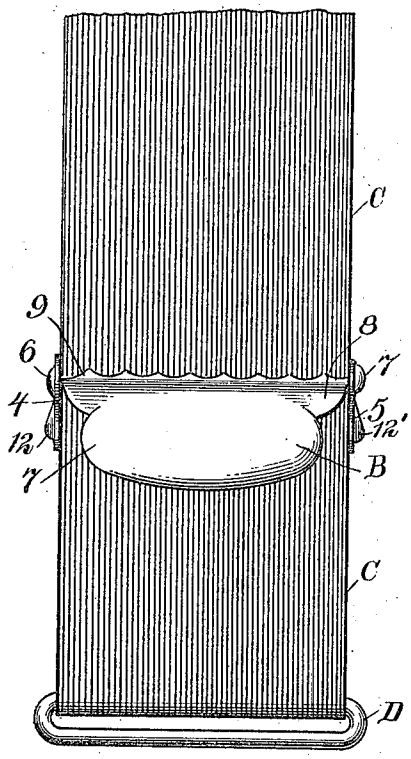


Fig. 2.

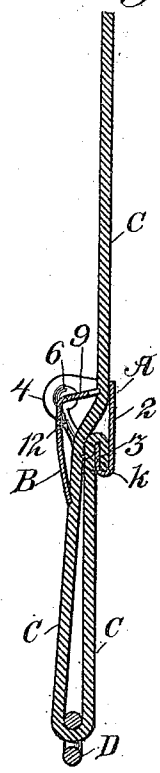


Fig. 5.

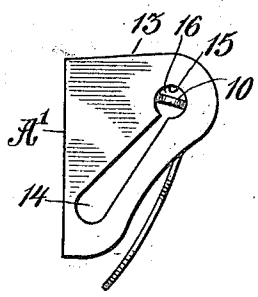


Fig. 3.

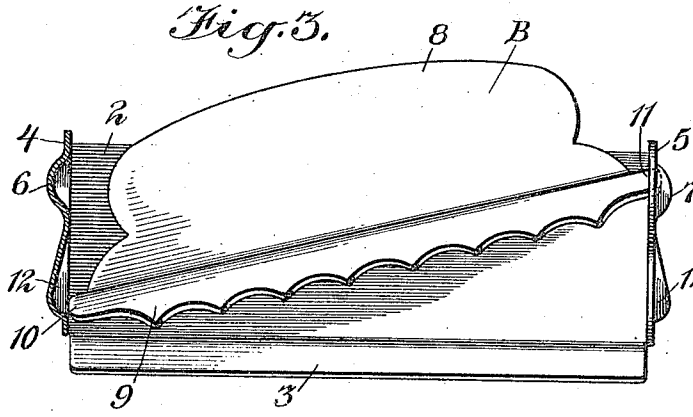
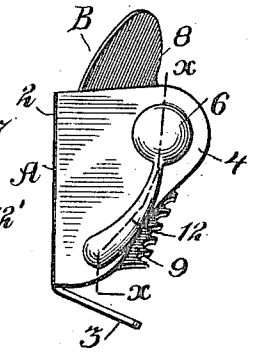


Fig. 4.



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BUCKLE.

1,236,121. Specification of Letters Patent. Patented Aug. 7, 1917.

Application filed March 29, 1916. Serial No. 87,646.

To all whom it may concern:

Be it known that I, HENRY J. STUART, a citizen of the United States, residing at Derby, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Buckles, of which the following is a specification.

My invention relates to lever buckles and like articles in which the lever is journaled in bearings carried by a pair of side ears, and its object is to produce a device of this character in which the lever may be slipped into its bearings during the operation of assembling the buckle without the aid of the usual press or machine. I attain this and other objects of my invention in the details of construction and manner of operation more fully set forth in the following description and accompanying drawings in which like reference characters refer to corresponding parts.

In the drawings:

Figures 1 and 2 are front and sectional views of the buckle when closed upon running webbing;

Fig. 3, a front view showing one position of the lever during the assembling operation, one of the ears being shown in a section taken on line *x*—*x* in Fig. 4;

Fig. 4, an end view, and

Fig. 5, an end view of a modification.

The buckle consists of a back or frame A and a lever B. The frame A is bent up out of sheet metal to form the back plate 2 having its lower extremity turned upwardly to form a projecting lip 3 which is swaged down to confine the end *k* of the webbing C between the lip and the face of the back as shown in Fig. 2. The back plate 2 is provided with forwardly turned side ears or lugs 4, 5 which have their body portions drawn or depressed outwardly forming the cups 6, 7. The lever B is also bent up out of sheet metal to form the front portion or shield 8, the web-engaging edge 9 and the laterally projecting trunnions 10, 11 which latter are journaled in the bearings or cups 6, 7 respectively. In webbing the buckle the moving portion is looped downwardly from the secured extremity *k* and is then passed upwardly through the buckle between the back A and the lever B, which latter when shut down as shown in Figs. 1 and 2 locks the webbing against the back plate 2. The depending loop in the webbing may carry a cast-off or any other suitable member D. The buckle thus far described is one well known in the art and is disclosed in preference to other buckles merely for the purpose of showing how my invention is to be applied. During the process of forming the back the ear 4 is provided with an elongated depression or channel 12 which, in the present instance, extends upwardly from a position at or adjacent to the lower side of the ear 4 to the under side of the cup or bearing 6. To assemble the buckle the lever is reversed and one of its trunnions 11 is seated in the bearing 7 in one of the ears 5. The opposite pintle 10 is then forced past the lower edge of the ear 4 and springs into the channel 12 and is then forced upwardly until it snaps out of the upper extremity of the channel 12 and becomes seated in its bearing 6. The width and depth of the channel 12 at its lower extremity is preferably great enough so that the trunnion 10 may be readily sprung into the same and have some play therein. As the channel approaches the bearing, however, its depth and width are preferably decreased so that at the under side of the bearing it has very little depth or no depth at all. This tapering of the channel as it approaches the bearing causes the trunnion 10 to bear against its inside wall and bend the ear 4 outwardly just before or at the time of springing the trunnion into its bearing. When the trunnion leaves the channel, however, the ear springs back again into its normal position. In this manner the lever and back are assembled without the employment of the usual machine or press for bending the ears during the process of seating the trunnions in their bearings. It is not necessary that I should employ the specific form of channel above described nor any channel at all since any suitable guide way may be employed provided it is adapted to receive the swinging trunnion and guide the same into its bearing, a particular instance being shown in Fig. 5 in which the ear 13 is provided with a tapering slot 14 the upper extremity of which latter is just wide enough to admit the trunnion edgewise into the bearing seat 15 forming the wall of the aperture 16. If desired the ear 5 may also be provided with a channel 12′ so that the parts may be assembled by utilizing either channel.

While I have shown guide ways or channels of decreasing width for the purpose of guiding the trunnion edgewise into the bearing yet this is only the preferred form of my channel since it is obvious that the invention comprehends structures which guide the trunnion into its bearing in any other manner provided the same may fairly come within the scope of the appended claims.

Having now described my invention what I claim and desire to protect by Letters Patent is:

1. A buckle having a pair of sheet metal side ears each of which is provided with a bearing, and a lever having laterally projecting pintles seated in said bearings, one of said ears having a laterally projecting channel extending toward its bearing for the reception of one of the pintles during the operation of assembling the buckle.

2. A buckle having a pair of side ears each of which is provided with a bearing, and a lever having laterally projecting pintles seated in said bearings, one of said ears being recessed to form a channel extending toward its bearing and decreasing in depth as it approaches said bearing, whereby one of said pintles may be sprung into its bearing after the other pintle has been seated in its bearing.

3. A buckle having a pair of side ears each of which is provided with a bearing and a lever having laterally projecting pintles seated in said bearings, one of said ears having a guide way extending toward its bearing and becoming narrower than the width of the pintles as it approaches its bearing, whereby the said guide way may receive one of said pintles during the operation of assembling the buckle and guide said pintle edgewise into its bearing after the opposite pintle has been seated.

In testimony whereof I have hereunto set my hand this 1st day of February, 1916.

HENRY J. STUART.

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