

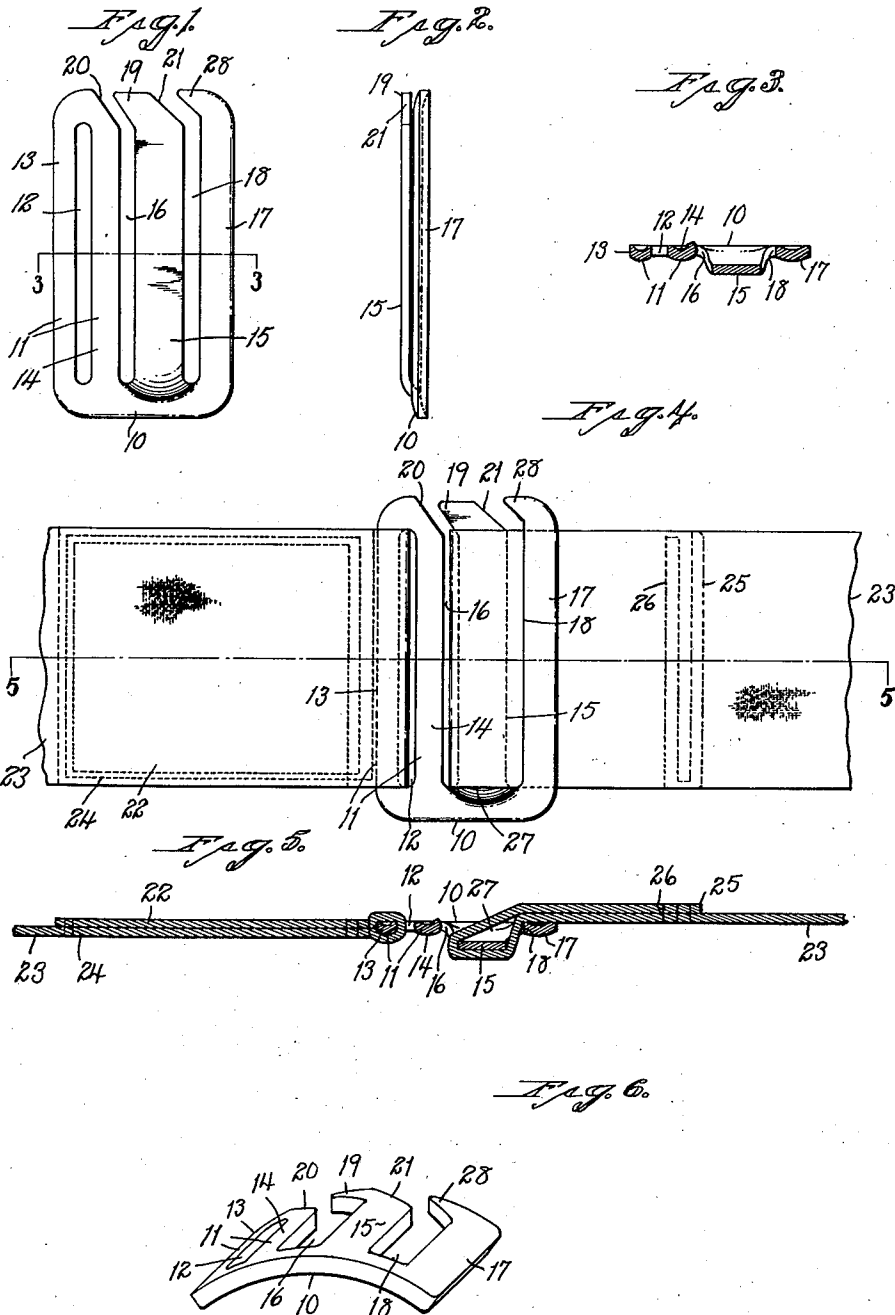
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BUCKLE

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BUCKLE

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This invention relates to an improvement in buckles and particularly to buckles adapted to coact with a loop at the free end of a strap or the like.

5 The main object of this invention is to produce at a low cost for manufacture, a simple, reliable and effective buckle of the type referred to, and constructed with particular reference to providing for the ready
10 attachment and detachment of the free end of a strap, etc., by a lateral movement thereof, and the secure retention thereof in place.

With the above and other objects in view as will appear from the following, my invention
15 consists in a buckle having certain details of construction and combinations and arrangements of parts as will be hereinafter described and particularly recited in the claims.

20 In the accompanying drawings:

Fig. 1 is a face view of one form which a buckle embodying my invention may assume;

Fig. 2 is an edge view thereof;

25 Fig. 3 is a transverse sectional view thereof taken on the line 3—3 of Fig. 1;

Fig. 4 is a face view thereof showing the webbing attached thereto;

Fig. 5 is a longitudinal sectional view taken on the line 5—5 of Fig. 4; and

30 Fig. 6 is a perspective view of another form which a buckle embodying my invention may assume.

The particular buckle herein chosen for the illustration of my invention in Figs. 1 to 5
35 inclusive, is of substantial rectangular form and consists of a side-bar 10 from which offsets an integral tie-loop 11 provided with a strap-receiving closed slot 12 extending transversely of the buckle between a tie-bar 13 and
40 a guard-bar 14, respectively forming the complementary reaches of the said tie-loop 11.

Also laterally offsetting from the side-bar 10 is an integral coupling-bar or prong 15
45 extending parallel with the tie-loop 11, though offset upwardly with respect thereto, as shown in Figs. 3 and 5, and separated from the guard-bar 14 of the said tie-loop by an open slot 16. The edge of the buckle structure opposite the tie-loop 11 is provided with
50 a deflecting-bar 17 formed integral with the

side-bar 10 and projecting therefrom in parallelism with the bars before referred to and separated from the bar 15 by an open slot 18.

The bars 13, 14 and 17 are preferably and as shown, struck up into concavo-convex
55 form while the coupling-bar 15 is flat and bodily offset upwardly from the plane of the bars 10, 13, 14 and 17, as clearly shown in Figs. 3 and 5 of the drawings whereby to aid
60 in disposing the end of strap 23 thereon. Coupling bar 15 is offset to aid in mounting strap loop hereinafter mentioned.

The outer or free end of the coupling-bar 15 is offset toward the tie-loop 11 to form a
65 stop-finger 19 having an angularly disposed sloping inner face complementing a cutaway portion 20 at the free end of the said tie-loop 11, all for the purpose as will hereinafter appear.

The deflecting-bar 17 is in turn formed at its outer or free end with a stop-finger 28
70 offsetting toward the tie-bar 15, which latter is cut away as at 21 to complement the angularly disposed sloping inner face of the said stop-finger.

The form of buckle shown in Fig. 6 corresponds to the buckle shown in the preceding
75 figures with the exception that the entire buckle structure is of concavo-convex form and the coupling-bar 15, as well as the remaining bars, is flush with the side-bar 10. The entire buckle structure is concavo-convex
80 to aid in holding the strap 23 from sliding with respect to coupling bar 15.

In the use of my improved buckle, the end
85 22 of a strap 23 which end I shall, for convenience of description, refer to as the "anchored" or "permanently-attached" end, is inserted through the slot 12 of the tie-loop and reversed upon itself around the tie-bar
90 13, and sewn in place by means of stitches 24. The buckle thus becomes a permanent fixture at the end of the strap 23.

The free end 25 of the strap 23 (or of a separate and distinct strap, if desired) is
95 also folded back upon itself and anchored in place by means of stitches 26 to form a loop 27. The loop 27 is slipped laterally over the free end of the coupling-bar 15 so that its
100 respective reaches enter the slots 16 and 18

flanking the same. Both of the reaches of the looped end 25 of the strap underlie the deflecting-bar 17, as shown in Figs. 4 and 5.

By providing the bars 15 and 17 respectively with the stop-fingers 19 and 28 and cutting away the portions 20 and 21 of the tie-loop 11 and coupling-bar 15, the outer or open ends of the slots 16 and 18 are deflected, so to speak, toward the tie-loop 11, and thus prevent the accidental lateral displacement of the loop 27.

From the foregoing, it will be seen that when the strap is under tension, the stop-fingers 19 and 28 serve to prevent the loop from sliding laterally off the free end of the coupling-bar 15. When it is desired to uncouple the loop 27 of the strap from the buckle, this may be accomplished by slackening the draft upon the strap, which will enable the same to be slipped laterally off the end of the said coupling-bar 15.

It may be explained in this connection that the guard-bar 14 forming one reach of the tie-loop 11 not only stiffens the tie-bar 13, but also serves to prevent the end 22 of the strap from moving lengthwise to any appreciable extent toward the coupling-bar 15.

It will be understood by those skilled in the art that my invention may assume varied physical forms without departing from my inventive concept and I, therefore, do not limit myself to the specific embodiment herein chosen for illustration, but only as indicated in the appended claims.

I claim:

1. In a buckle, a tie-loop, a coupling bar disposed in parallel relation to said tie-loop and adjacent thereto, a deflecting bar disposed in parallel relation to said coupling bar and adjacent thereto, the said coupling bar and deflecting bar being each free at one end, and stop fingers formed at the end of each of said coupling and deflecting bars, whereby to guard against the lateral displacement of a strap.

2. In a buckle made of one piece, a tie-loop disposed at one end of said buckle and consisting of a tie-bar and a guard bar, a coupling bar disposed adjacent to said tie-loop and in parallel relation thereto, a deflecting bar disposed adjacent to said coupling bar and in parallel relation thereto, the said coupling bar and deflecting bar being each free at one end, and stop fingers formed at the respective ends of said coupling bar and deflecting bar, whereby to prevent the lateral displacement of a strap.

3. In a buckle, a tie-loop disposed at one side thereof and consisting of a tie-bar, a guard bar and side bars, a coupling bar disposed in parallel relation to said tie-loop, a deflecting bar disposed in parallel relation to said coupling bar and adjacent thereto, said coupling bar and deflecting bar being each free at one end and stop fingers formed at

their ends, whereby to guard against the lateral displacement of the strap.

4. In a buckle made of a single piece, a tie-loop formed on one side thereof, said tie-loop comprising a parallel tie and guard bars with a slot there-between, a coupling bar disposed adjacent to said tie-loop and in parallel relation thereto, a deflecting bar disposed in parallel relation to said coupling bar and adjacent thereto, a side bar formed integral with said tie-loops, coupling bar and deflecting bar, said coupling bar and deflecting bar being each free at one end, stop fingers formed integral with said coupling and deflecting bars whereby to guard against the lateral displacement of the strap and said buckle being made concavo-convex, whereby to aid in mounting said strap.

5. In a buckle made of a single concavo-convex piece, a tie-loop formed at one side of said buckle and comprising tie and guard bars having a slot there-between, a side bar formed integral with said tie-loop, a flat coupling bar formed integral with said side bar and in parallel relation to said tie-loop, a deflecting bar formed integral with said side bar and disposed in parallel relation to said tie-loop, all of said bars projecting substantially perpendicular from said side bar, the said coupling bar and deflecting bar being each free at one end, and the free ends of said coupling bar and deflecting bar being each formed with an angularly disposed offsetting stop finger, whereby to prevent the lateral displacement of the strap.

6. In a buckle, a tie-loop, a coupling bar disposed in parallel relation to said tie-loop, a deflecting bar disposed in parallel relation to said coupling bar and adjacent thereto, the said coupling bar and deflecting bar being each free at one end and means formed on said bars to guard against lateral displacement of the strap.

7. In a buckle, a tie-loop, a coupling bar disposed in parallel relation to said tie-loop, a deflecting bar disposed in parallel relation to said coupling bar and adjacent thereto, said coupling bar and deflecting bar being each free at one end.

8. In a buckle, a tie-loop, a coupling bar disposed in parallel relation to said tie-loop, a deflecting bar disposed in parallel relation to said coupling bar and adjacent thereto, said coupling bar being offset bodily from said tie-loop and said deflecting bar, whereby to aid in disposing the end of the strap thereon.

In testimony whereof, I have signed this specification.

WALTER T. BRONSON.