Feb. 22, 1927. C. H. SAMPSON ET AL 1,618,389

BUCKLE

Filed March 15, 1924

Fig. 1

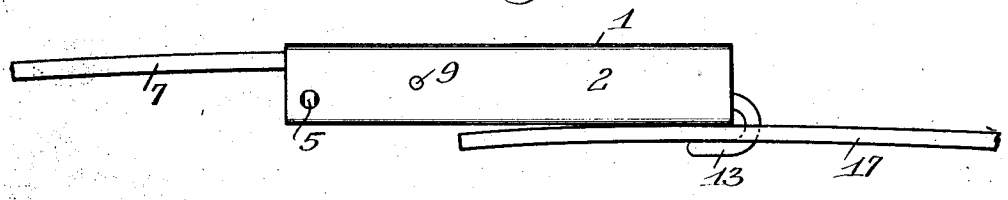


Fig. 2

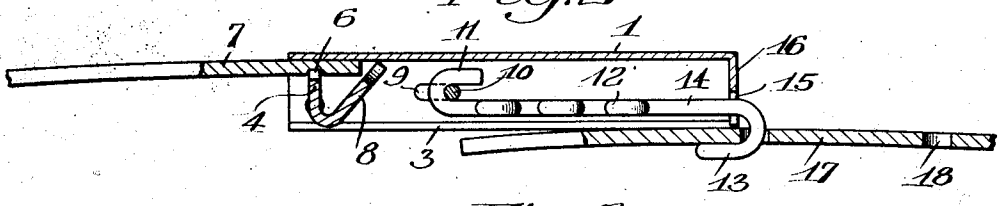


Fig. 3

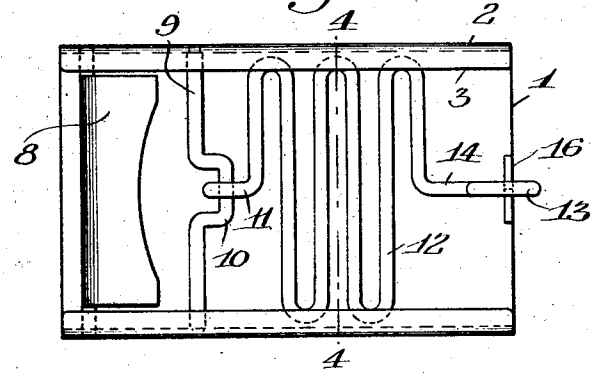


Fig. 4

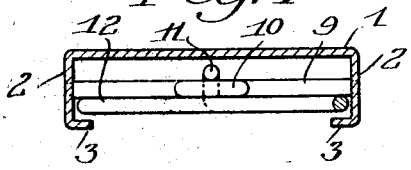
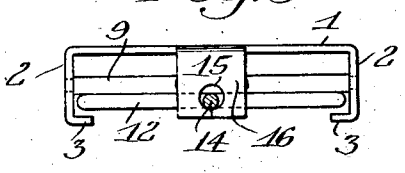


Fig. 5



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UNITED STATES PATENT OFFICE.

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BUCKLE.

Application filed March 15, 1924. Serial No. 699,558.

Our present invention relates to buckles and clasps and more particularly to buckles of the nature used on personal apparel and particularly in connection with the usual leather belts worn by men and it has for its object to provide a buckle of this nature that will be of simple construction and pleasing appearance but will constitute a yielding element in the belt whereby the latter will be maintained under spring tension. To these and other ends the invention resides in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings:

Figure 1 is a top view of a belt buckle with fragments of the belt ends attached the same being constructed in accordance with and illustrating one embodiment of our invention;

Figure 2 is a longitudinal central sectional view through the same;

Figure 3 is an elevation of the inner side of the buckle;

Figure 4 is a transverse section on the line 4—4 of Figure 3 and

Figure 5 is an end view.

Similar reference numerals throughout the several views indicate the same parts.

In the present embodiment of the invention the buckle is of a flat type embodying a buckle plate 1 having flanges 2 at the top and bottom turned inwardly again at 3 to form a guide way. At the left hand end thereof is a clamping member 4 having trunnions 5 on which it turns in the flanges 2. The edge of the clamping member is serrated as shown at 6 and its length is such that when it is turned to a right angle position as in Figure 2 it will bite into and firmly secure one end 7 of the belt pressing it tightly against the buckle plate 1. An operating portion 8 on the clamping member affords a means for manipulating it and is adapted to abut the buckle plate and limit the movement of the clamping member in a direction which would release the belt.

Spanning the buckle plate and secured at its ends in the flanges 2 is a bridge piece 9 consisting of a rod having a yoke or offset 10 at its center. Linked to this offset by means of an eye 11 at one end is a spring element 12 which is looped back and forth across the buckle plate to form an extensible spring the looped portions of which are confined by and guided beneath the flanges 2 and 3. The spring at its other end, terminates in a hook 13 having a shank portion 14 guided in an aperture 15 in a flange 16 formed on that end of the buckle plate. The opposite or normally free end of the belt indicated at 17 passes in rear of the buckle plate as shown and has perforations 18 adapted to selectively engage with the hook 13 in substantially the same manner that an ordinary buckle tongue does. The hook projects far enough from the buckle plate and its flanges to be readily engaged by the perforated belt end. The spring of which the hook forms a part keeps the belt tight while at the same time yielding with the movements of the body so that its pressure is never harsh or uncomfortable. Furthermore, the shape of the spring while giving it a wide range of flexibility nevertheless permits it to be housed within a buckle plate which, with its flanges, is no thicker than the ordinary buckle plate.

We claim as our invention:

1. In a belt, the combination with a buckle plate having guide-ways thereon and means for attaching one end of a belt thereto, of a substantially flat tension spring having a plurality of loops the ends of which are disposed in said guide-ways, one extremity of the spring being connected with the buckle plate and the other being adapted for engagement with the belt whereby to effect expansion of the spring when a pull is exerted on the opposite ends of the belt.

2. In a buckle, the combination with a buckle plate having flanges on its longitudinal edges forming guide ways and means for attaching one end of a belt thereto, of an extensible spring connected at one end to the buckle plate and comprising a plurality of successive loops lying in the same plane and having their ends guided in the guide ways, said spring terminating at its free end in a hook adapted to engage the other end of the belt.

3. In a buckle, the combination with a buckle plate having flanges on its longitudinal edges forming guide ways and means for attaching one end of a belt thereto, of an extensible spring comprising a plurality of successive loops lying in the same plane with their ends guided in the guide ways, said spring having one end connected with the buckle plate terminating in a hook at its

opposite end adapted to engage the other end of the belt and means at one end of the buckle plate for guiding said hook as the spring is flexed.

4. In a buckle, the combination with a buckle plate having flanges on its longitudinal edges forming guide ways and means for attaching one end of a belt thereto, of an extensible spring consisting of a plurality of successive loops lying in the same plane and having their ends guided in the guide ways, said spring terminating in a hook adapted to engage the other end of the belt, a bar spanning the buckle plate and to which one end of the spring is attached and means at the end of the buckle plate for guiding said hook as the spring is flexed.

5. In combination, a belt comprising a strap, a buckle plate connected to one end of the strap and a tension spring deposited at the back of the buckle plate and having a plurality of elongated loops disposed substantially in the same plane, one end of the spring being connected with the buckle plate and the other adapted for connection with the free end of the strap whereby upon exerting a pull on the opposite ends of the strap the spring will be expanded.

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