July 11, 1939. I. M. KRISCHER 2,165,928

BUCKLE FOR BELTS

Filed Sept. 24, 1938

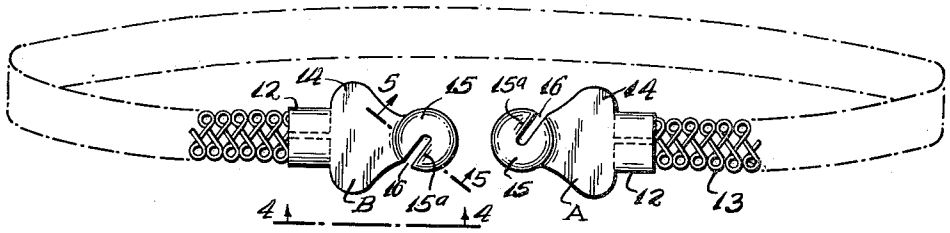


Fig. 1.

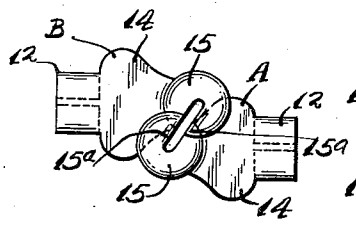


Fig. 2.

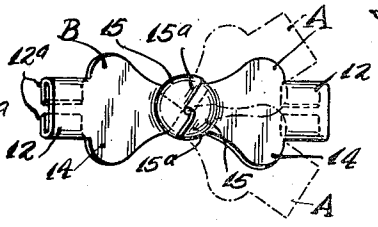


Fig. 3.



Fig. 4.



Fig. 5.

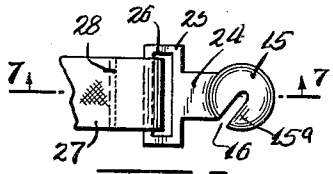


Fig. 6.

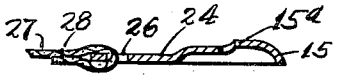


Fig. 7.

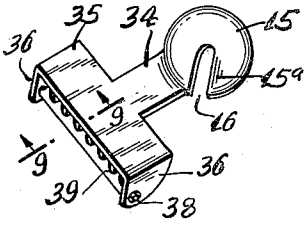


Fig. 8.

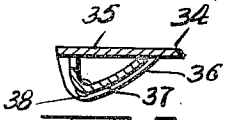


Fig. 9.

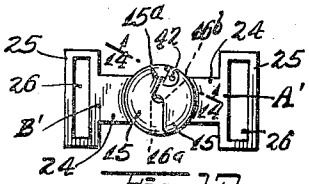


Fig. 13.

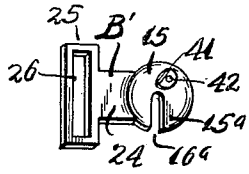


Fig. 10.

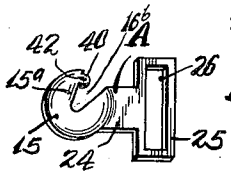


Fig. 11.

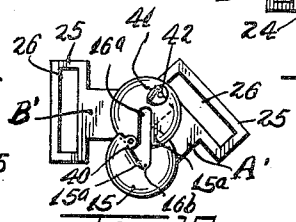


Fig. 12.



Fig. 14.

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BUCKLE FOR BELTS

Irving M. Krischer, Brooklyn, N. Y.

Application September 24, 1938, Serial No. 231,518

8 Claims. (Cl. 24—201)

This invention relates to new and useful improvements in a buckle for belts.

The invention has for an object the construction of a buckle for belts which is characterized by a "right" buckle section and a "left" buckle section, each having an outer end portion with elements thereon by which same may be attached to the end of a strap, and an inner portion of a particular design and construction.

More specifically, the invention contemplates characterizing each inner end portion of the buckle sections by the fact that it is of circular form in elevation and slightly cupped so that one circular form of one buckle section may fit into the other. It is further proposed that the cup ends have radial slots extending from the centers to the outer peripheries at different relative points to each other, and the material along the edges of these slots to be formed in a particular manner so that the cup ends may "threadedly" engage each other.

More specifically, the invention contemplates forming the material of the cupped ends along opposite sides of each slot so as to extend slightly outwards to cause the cupped ends to "threadedly" axially engage each other when placed together with one slot engaging the other slot.

Still further the invention proposes a snap arrangement for holding the buckle sections in a pre-determined relative position.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:—

Fig. 1 is a perspective view of a buckle constructed according to this invention shown applied upon the belt.

Fig. 2 is an elevational view of the buckle sections illustrated per se and shown adjacent each other as they would appear during the engagement of one with the other.

Fig. 3 is a perspective view of the buckle sections engaging each other, and the dot and dash lines show various turned positions of one of the buckle sections.

Fig. 4 is a fragmentary edge elevational view looking in the direction of the line 4—4 of Fig. 1.

Fig. 5 is a fragmentary sectional view taken on the line 5—5 of Fig. 1.

Fig. 6 is a plan view of a buckle section constructed according to another embodiment of this invention.

Fig. 7 is a sectional view taken on the line 7—7 of Fig. 6.

Fig. 8 is a perspective view of a buckle section embodying another form of this invention.

Fig. 9 is a fragmentary sectional view on the line 9—9 of Fig. 8.

Fig. 10 is a perspective view of a buckle section constructed according to a modification of this invention.

Fig. 11 is a perspective view of the complementary buckle section for use in conjunction with the buckle section shown in Fig. 10.

Fig. 12 is an elevational view of the buckle sections in a position while they are being engaged one with the other.

Fig. 13 is an elevational view showing the buckle sections fully engaged.

Fig. 14 is a sectional view taken on the line 14—14 of Fig. 13.

The buckle for belts, according to this invention, includes a right buckle section A and a left buckle section B. Each of these sections has an outer end portion 12 with elements thereon by which the same may be attached to the ends of a strap 13. Each section also has an intermediate body portion 14 and an inner end portion 15 of circular form in elevation and slightly cupped so that one circular form of one buckle section may fit into the other circular form of the other buckle section. The said cupped ends have radial slots 16 extending from their centers to their peripheries. These slots are at different relative points to each other when the buckle sections are in the positions shown in Fig. 1. It should be noted that they are arranged diametrically opposite each other.

The material of the cupped ends 15 along the opposite sides of each of the slots 16 is extended slightly upwards at the areas 15a (see Figs. 4 and 5) to cause the cupped ends to "threadedly" axially engage each other when placed together with one slot engaging the other slot. In Fig. 2 the buckle sections are illustrated as they are being slipped one upon the other. In Fig. 3 they are completely engaged one with the other. Because of the cup shaped formation and because of the interengagement of the slots 16 it is possible to pivot the buckle sections relative to each other. In Fig. 3 the dot and dash lines indicated by the letters A illustrate different pivoted positions of the right buckle section relative to the left buckle section B.

The elements on the end portions 12 by which

the buckle sections may be attached to the ends of the strap comprise lug portions 12a bent from the material of the buckle and adapted to be clamped over the end of the strap. The intermediate body sections 14 of the buckles are illustrated of substantially triangular form, but this is merely a matter of design. Each of the buckle sections is of identical construction even to the particular relation of the slot 16 and the offset sides 15a of the slots. It is only when one of these buckle sections is turned around relative to each other, into positions as illustrated in Fig. 1, that the slots 16 are located at different relative positions to each other and that the offset portions 15a are adapted to "threadedly" engage each other.

In Figs. 6 and 7 another embodiment of the invention has been disclosed which distinguishes from the prior form merely in the construction of the intermediate and outer end portions of the buckle. In this embodiment the buckle has an intermediate body section 24 in the form of a strip. The outer end portion 25 of the body section is in the form of a head piece across the end of the strip. This outer end portion 25 is formed with a slot 26 through which the end of the strap 27 may engage. Stitches 28 are used to hold down the loop end of the strap. The inner end portion of the buckle section is identical in construction with the inner end portion of the previous form, and the identical parts may be identified by the same reference numerals. While Figs. 6 and 7 illustrate only one buckle section it should be borne in mind that an identical buckle section is required, which when turned around to oppose the buckle section will be capable of being connected therewith as previously described.

In Figs. 8 and 9 a still further embodiment of the invention has been disclosed which distinguishes from the prior forms in the construction of the outer end portion of the buckle section. According to this form of the invention the buckle section has a central body portion 34 the inner end of which is formed with a cup shaped portion as previously described relative to the other buckle sections, the parts of which may be identified by the same reference numerals. The outer portion of the body is formed with a head 35 having its ends 36 bent downwards forming spaced lugs. Between these spaced lugs there is a catch 37 pivotally mounted by a trunnion 38 engaging openings in the lugs 36. This catch 37 has one of its ends formed with teeth 39. In the closed position the teeth 39 bear against the inner face of the body portion 35, past the dead center of pivoting, so that the catch maintains its closed position.

In Figs. 10–14 inclusive a still further modified form of the invention has been disclosed which distinguishes from the prior form essentially in the construction of the inner end portion of the buckle sections. In Fig. 11 a right hand buckle A' is illustrated, while in Fig. 10 a left hand buckle B' is shown. The left hand buckle has a central body portion 24, an outer end portion 25 formed with an opening 26, and an inner end portion 15 formed with the radial slot 16a. The material along one side of this slot at the area 15a is bent upwards as previously described in the other forms of the inventions. The slot 16a is arranged at right angles to the length of the central portion 24.

The buckle section A' includes an intermediate body portion 24 connected with an outer end portion 25 having a slot 26. This buckle section has an inner end portion 15 constructed as previously described and having a slot 16b formed in at an angle from a side opposed to the side of the buckle section B' having the slot 16a. The material on one side of the slot 16b, particularly in the area 15a, is offset as previously described. This offset side is provided with a lug portion 40 projecting in one direction opposed to a cup shaped projection 41 formed in the inner end portion 15 on the buckle section B'. The lug 40 and cup shaped portion 41 are adapted to engage one in the other when the buckle is closed. The lug 40 and the projecting portion 41 are each formed with a niche 42 adapted to engage each other in snap relationship so as to hold the buckle in the closed position.

The operation of the buckle shown in Figs. 10 to 14 is as follows: The buckle section A' must be placed at a slight angular position to the buckle section B', as shown in Fig. 12, so that the slots 16a and 16b are aligned with each other and the buckle sections may be hooked together by engaging these slots. Then the buckle sections are turned relative to each other to be in alignment, as shown in Fig. 13. During this turning operation the lug 40 will enter the open end of the projection 41 and the niches 42 will snap one into the other to firmly engage each other. The buckle sections are now held in this position.

It is to be understood that by this arrangement it is possible to make buckle member, right and left, by the same set of dies.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. A buckle for belts, comprising a right buckle section and a left buckle section, each section having an outer end portion and an inner end portion of circular form in elevation and cupped so that one circular form may fit into the other, elements formed on said outer end portion by which the same may be attached to the end of a strap, and said cupped ends having radial slots extending from their center to their peripheries at different relative points to each other, the material of said cupped ends along opposed sides of each slot being extended slightly outwards to cause the cupped ends to threadedly axially engage each other when placed together with one slot engaging the other slot.

2. A buckle for belts, comprising a right buckle section and a left buckle section, each section having an outer end portion and an inner end portion of circular form in elevation and cupped so that one circular form may fit into the other, elements formed on said outer end portion by which the same may be attached to the end of a strap, and said cupped ends having radial slots extending from their center to their peripheries at different relative points to each other, the material of said cupped ends along opposed sides of each slot being extended slightly outwards to cause the cupped ends to threadedly axially engage each other when placed together with one slot engaging the other slot, and an intermediate body portion for each of said buckle

sections and being of ornamental design and extended between said outer end portion and said inner end portion.

3. A buckle for belts, comprising a right buckle section and a left buckle section, each section having an outer end portion and an inner end portion of circular form in elevation and cupped so that one circular form may fit into the other, elements formed on said outer end portion by which the same may be attached to the end of a strap, and said cupped ends having radial slots extending from their center to their peripheries at different relative points to each other, the material of said cupped ends along opposed sides of each slot being extended slightly outwards to cause the cupped ends to threadedly axially engage each other when placed together with one slot engaging the other slot, said elements comprising portions of the body of the buckle adapted to be bent over the end of the strap.

4. A buckle for belts, comprising a right buckle section and a left buckle section, each section having an outer end portion and an inner end portion of circular form in elevation and cupped so that one circular form may fit into the other, elements formed on said outer end portion by which the same may be attached to the end of a strap, and said cupped ends having radial slots extending from their center to their peripheries at different relative points to each other, the material of said cupped ends along opposed sides of each slot being extended slightly outwards to cause the cupped ends to threadedly axially engage each other when placed together with one slot engaging the other slot, said elements comprising a flat portion formed with a slot through which the end of the belt or strap may engage.

5. A buckle for belts, comprising a right buckle section and a left buckle section, each section having an outer end portion and an inner end portion of circular form in elevation and cupped so that one circular form may fit into the other, elements formed on said outer end portion by which the same may be attached to the end of a strap, and said cupped ends having radial slots extending from their center to their peripheries at different relative points to each other, the material of said cupped ends along opposed sides of each slot being extended slightly outwards to cause the cupped ends to threadedly axially engage each other when placed together with one slot engaging the other slot, said elements comprising a body section of the buckle, and a clamp mounted on said body section.

6. A buckle for belts, comprising a right buckle section and a left buckle section, each section having an outer end portion and an inner end portion of circular form in elevation and cupped so that one circular form may fit into the other, elements formed on said outer end portion by which the same may be attached to the end of a strap, and said cupped ends having radial slots extending from their center to their peripheries at different relative points to each other, the material of said cupped ends along opposed sides of each slot being extended slightly outwards to cause the cupped ends to threadedly axially engage each other when placed together with one slot engaging the other slot, a lug portion projecting from one side of the slot of one of said buckle sections, a projection formed on the other of said buckle sections and having an open end into which said lug portion is adapted to extend when said buckle sections are engaged one with the other.

7. A buckle for belts, comprising a right buckle section and a left buckle section, each section having an outer end portion and an inner end portion of circular form in elevation and cupped so that one circular form may fit into the other, elements formed on said outer end portion by which the same may be attached to the end of a strap, and said cupped ends having radial slots extending from their center to their peripheries at different relative points to each other, the material of said cupped ends along opposed sides of each slot being extended slightly outwards to cause the cupped ends to threadedly axially engage each other when placed together with one slot engaging the other slot, a lug portion projecting from one side of the slot of one of said buckle sections, a projection formed on the other of said buckle sections and having an open end into which said lug portion is adapted to extend when said buckle sections are engaged one with the other, and niches on said lug portion and projection to snap one into the other for holding the buckle sections closed.

8. A buckle for belts, comprising a right buckle section and a left buckle section, each section having an outer end portion and an inner end portion of circular form in elevation and cupped so that one circular form may fit into the other, elements formed on said outer end portion by which the same may be attached to the end of a strap, and said cupped ends having radial slots extending from their center to their peripheries at different relative points to each other, the material of said cupped ends along opposed sides of each slot being extended slightly outwards to cause the cupped ends to threadedly axially engage each other when placed together with one slot engaging the other slot, a lug portion projecting from one side of the slot of one of said buckle sections, a projection formed on the other of said buckle sections and having an open end into which said lug portion is adapted to extend when said buckle sections are engaged one with the other, and niches on said lug portion and projection to snap one into the other for holding the buckle sections closed, the slots of said buckle sections being at angular positions relative to each other.

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