

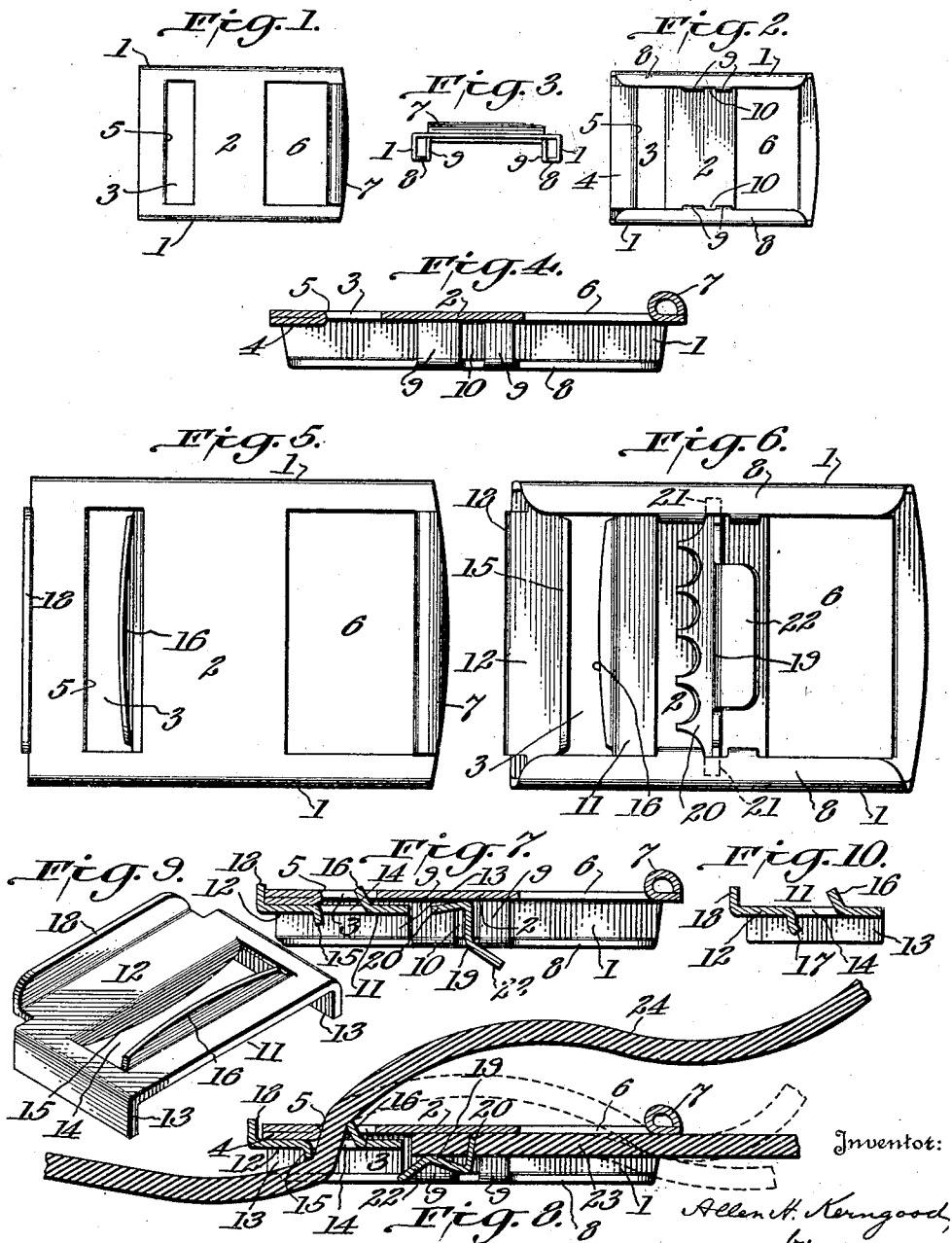
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A. H. KERNGOOD

BUCKLE FOR STRAPS AND BELTS

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UNITED STATES PATENT OFFICE.

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BUCKLE FOR STRAPS AND BELTS.

Application filed September 25, 1923. Serial No. 664,757.

To all whom it may concern:

Be it known that I, ALLEN H. KERNGOOD, a citizen of the United States, residing at Baltimore, in the State of Maryland, have
5 invented a certain new and useful Improvement in Buckles for Straps and Belts, of which the following is a full, clear, and exact description.

The object of this invention is to provide
10 a buckle for use on straps, belts and the like, for securing or carrying bundles, packages, and articles, and also for personal wear, which embodies as characteristic features, facility of engagement with the strap or
15 belt, security in use and ease of release.

The invention is in the nature of a slide buckle, in which the frame and slide are so constructed and arranged that the slide has a right-line movement in the frame
20 to cramp the strap or belt between itself and the frame in order to secure the strap or belt in adjusted position and by a reverse movement to release it; the fixed end of the strap or belt being clamped to the frame
25 by a floating clamping lever, as I will proceed now to explain and finally claim.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated,
30 Figure 1 is a top plan view, Fig. 2 is an inverted view and Fig. 3 is a rear end view of the frame, about one commercial size, the aftermentioned views being enlarged. Fig. 4 is a longitudinal section of the frame.
35 Fig. 5 is a top plan view, and Fig. 6 is an inverted view of the complete buckle, and Fig. 7 is a longitudinal section thereof. Fig. 8 is a longitudinal section of the buckle with a strap or belt in held position therein.
40 Fig. 9 is a perspective view of the slide detached. Fig. 10 is a longitudinal section of a modification of the slide.

The frame may be made of sheet metal, by any usual or approved plans and means, and
45 comprises the channel side bars 1 connected by the face plate 2, the latter having a narrow transverse slot 3 at its forward end, the metal of the slot being folded back upon and underneath the face plate, as indicated
50 at 4, to reinforce the forward end of the face plate and afford a smooth edge 5 for the strap to bear against without marring

it. The rear end of the face plate is provided with a somewhat longer transverse slot, 6, a part of the metal cut out to form
55 said slot being rolled back upwardly or over the rear end of the face plate to form a finger rest 7, as will presently appear.

The metal of the lower flanges 8 of the channel side bars 1 is cut to form the parallel strips 9 which are turned toward the
60 face plate, and have the open spaces 10 between them in which the pintles of the floating clamping lever play and by which said lever is localized.

As shown in Fig. 6 the ends of the lower flanges 8 are rounded off so as to avoid sharp projections and to preserve the symmetry of the buckle frame.

As best seen in Fig. 9, the slide 11 has the
70 top piece 12 with the edge flanges 13, and these edge flanges are of a height to fit accurately in the channel side bars 1 in such way as to permit the slide to move freely within and longitudinally of the side bars,
75 but without any appreciable tilting or sluing motion. This top piece 12 is provided with a transverse slot 14 one portion of the metal cut away in its formation being turned downwardly and its edge preferably curved,
80 to form a strap or belt engaging lip 15, and another portion, after the slide is in place, being bent upwardly and its edge curved or otherwise formed, to form a second lip 16
85 likewise to engage the strap or belt. If desired the downturned lip 15 may have its cramping edge bent rearwardly as shown at 17, Fig. 10, to enhance its cramping effect; or it may be roughened or provided with teeth for the same purpose. The outer
90 or front end of the slide has an upturned lip 18 to afford a finger-hold for use in moving the slide out of engagement with the strap or belt.

The device for attaching the buckle to
95 the strap or belt consists of a lever 19, having the toothed bar 20 provided with laterally extending pintles 21 which enter the spaces 10 between the parallel strips 9 so as to permit the lever to ride up and down
100 in the frame in order to adapt itself to the strap or belt and yet be restrained from movement or escape longitudinally from the frame. A finger piece 22 is formed on the

lever by which the lever may be rocked upon its pintles to engage and release the strap or belt.

As shown in Fig. 8, one end of the strap or belt 23 is extended into the frame beneath its face plate 2 and between the side bars, and then is engaged by the toothed portion 20 of the clamping lever 19, the lower flanges 8 of the side bars being used as fulcrum for the pintles of said clamping lever and the leading end of the strap or belt serving as an abutment against which the angle between the parts 20 and 21 rests. The free end 24 of the strap or belt 23 is passed upwardly from the back of the buckle through the slot 14 in the slide and the slot 5 in the frame and then turned rearwardly through the slot 6 and under the rolled finger rest 7 and on top of the fastened end of the strap or belt, two bights being put in the free end of the strap by the lips 15 and 16 of the slide and the free end of the strap being thereby cramped against the edge 5 of the frame, and thus the free end of the strap held securely.

One characteristic feature of this invention is the ease with which the strap or belt may be adjusted and released, and to this end the buckle may be held by one hand and the thumb and fingers of the other hand used to bear upon the finger rest 7 and the lip 18 and to thereby press the slide rearwardly, that is to say, toward the finger rest 7, which has the effect of instantly releasing the hold of the slide on the free end of the strap or belt to permit its adjustment or removal.

By reason of the fact that the side bars are of channel form and the slide has the flanges 13 working therein with a relatively close fit, the slide is readily and accurately movable, without any tendency to bind or slue out of position.

The buckle is specially adapted for use on straps or bands employed as package, bundle or article carriers, although of course it is useful for other purposes, such as on apparel or trousers' belts.

The lip 15 is particularly useful in connection with fabricated rubber or rubberized straps or belts. The rearwardly turned or curved lip 17 shown in Fig. 10 is specially useful in connection with textile straps or belts.

Variations in the details of construction

are permissible within the principle of the invention and the scope of the claims following.

What I claim is:—

1. A buckle having a frame provided with channel side bars and a slide having side flanges and accurately mounted and slidable in said channel side bars.

2. A buckle having channel side bars, a strap or belt gripping slide mounted for longitudinal movement in said channel side bars and having a lip at its outer end, and a finger rest upon the rear end of the frame.

3. A buckle having channel side bars, and a strap gripping slide provided with downturned side flanges to engage such side bars and capable of longitudinal movement therein, and also having oppositely arranged strap cramping lips on opposite edges of a transverse slot made in said slide.

4. A buckle having a face plate and channel side bars provided with parallel strips extending from the bottom flanges upwardly to the back of the face plate and spaced apart, and a floating clamping lever having pintles arranged in the spaces between said strips.

5. A buckle having side bars of channel form, a face plate connecting said side bars, means to engage the free end of a strap or belt and a clamping lever for anchoring the other end of the strap or belt, said lever pivotally mounted in said side bars and having fulcrum on the lower flanges of the channel side bars and adapted to clamp the strap or belt against the face plate.

6. A buckle having side bars of channel form, a face plate connecting said side bars, and a strap or belt clamping lever pivotally mounted in said side bars and having fulcrum on the lower flanges of the channel side bars and adapted to clamp the strap or belt against the face plate, the lower flanges of the side bars having upturned spaced-apart strips to locate the clamping lever and hold it against movement longitudinally of the side bars.

In testimony whereof I have hereunto set my hand this 24th day of September A. D. 1923.

ALLEN H. KERNGOOD.

Witnesses:

M. F. BOSWELL,
C. M. CROUT.