

J. P. BAIR.
BUCKLE.
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988,617.

Patented Apr. 4, 1911.

Fig. 1.

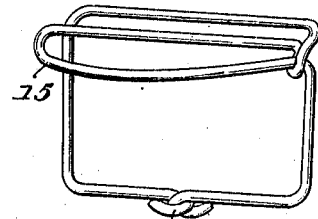
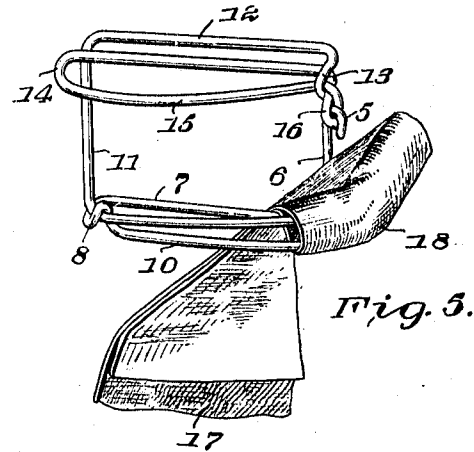
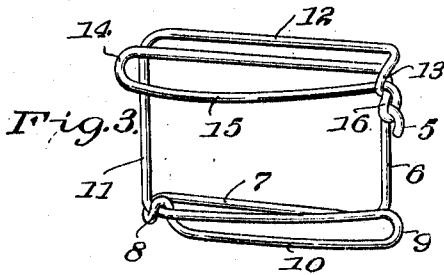
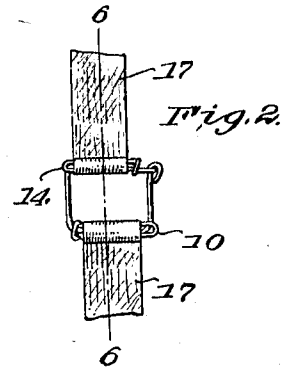
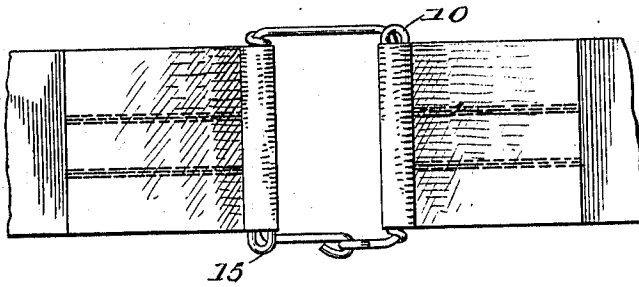


Fig. 7.

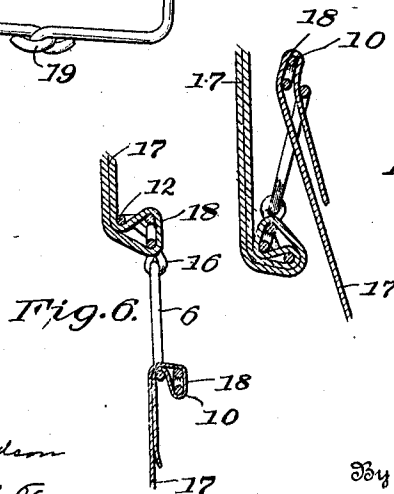


Fig. 4.

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UNITED STATES PATENT OFFICE.

JOHN P. BAIR, OF BELVUE, KANSAS, ASSIGNOR OF ONE-THIRD TO REUBEN W. WEEKS,
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BUCKLE.

988,617.

Specification of Letters Patent.

Patented Apr. 4, 1911.

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To all whom it may concern:

Be it known that I, JOHN P. BAIR, a citizen of the United States, residing at Belvue, in the county of Pottawatomie and State of Kansas, have invented certain new and useful Improvements in Buckles, of which the following is a specification.

This invention relates to buckles and has for its object the provision of a comparatively simple and thoroughly efficient device of this character, by means of which the adjacent ends of a belt, suspension strap or the like may be detachably united without the employment of the usual pivoted tongue, or without cutting, punching or otherwise mutilating the material constituting the body of said belt or strap.

A further object is to provide a buckle, the construction of which is such that when the buckle is tilted to expose its rear face, the belt or strap may be readily positioned thereon and adjusted longitudinally to lengthen or shorten the same, and when the buckle is returned to normal position, that is to say, with its front face exposed, the belt or strap will be securely clamped in adjusted position.

A further object is to provide a buckle formed from a single piece of metal bent to produce oppositely disposed clamping loops for engagement with a strap.

A still further object of the invention is generally to improve this class of devices, so as to increase their utility, durability, and efficiency, as well as to reduce the cost of manufacture.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a front elevation of a buckle constructed in accordance with my invention showing the same applied to a belt; Fig. 2 is a similar view showing the buckle

connecting the adjacent ends of a suspension strap; Fig. 3 is a perspective view of the buckle shown in Fig. 2 detached; Fig. 4 is a vertical sectional view showing the buckle tilted upwardly to permit the attachment of one of the attaching straps; Fig. 5 is a perspective view showing the manner of positioning the looped end of the attaching strap on the adjacent clamping loop of the buckle, the buckle being shown in normal position in order to more clearly illustrate the manner of attaching said suspension strap; Fig. 6 is a vertical sectional view taken on the line 6—6 of Fig. 2; Fig. 7 is a perspective view illustrating a modified form of the invention.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The buckle shown in Figs. 2 and 3 of the drawings is preferably formed from a single length of spring wire or other suitable material, one end of which is bent to produce a hook 5 terminating in a bar 6 constituting one end of the frame of the buckle, the metal after the member 6 is formed being extended laterally at substantially right angles thereto to produce a side wall 7, and thence bent upon itself to form an eye 8, the metal after the eye 8 is formed being extended longitudinally in substantially parallel relation to the side wall 7 and thence bent upon itself at 9 to form a clamping loop 10 and thence extended through the eye 8 and laterally at substantially right angles to the loop 10 to form the opposite end wall 11. The metal or wire after the end wall 11 is formed, is bent laterally in substantially parallel relation to the side wall 7 to produce a similar side wall 12, the wire being thence bent to form an eye 13 and continued longitudinally to a point beyond the end wall 11 and thence bent upon itself at 14 to form a clamping loop 15, similar in construction to the clamping loop 10, the free end of the wire after the clamping loop 15 is formed being extended through the eye 13 and bent to form a hook 16 for engagement with the hook 5. Attention is here called to the fact that the loops 10 and 15 are spaced from the adjacent end

walls of the buckle frame and are also projected longitudinally beyond said end walls so as to permit the ready attachment of the adjacent ends of the suspension strap 17.

5 In attaching the suspension strap 17 to the buckle, one end thereof is folded upon itself to produce a loop 18, after which the buckle is swung upwardly so as to expose its rear face and the loop 18 of the suspension strap introduced between the side walls 10 7 and 12 of the buckle frame and said loop 18 slipped over the free end of the adjacent clamping loop 10, as best shown in Fig. 4 of the drawings, after which the buckle 15 frame is returned to normal position, that is to say, to the position shown in Fig. 2 of the drawings, and in which position the suspension strap 17 will be effectually secured against accidental displacement. It is obvious that to attach the other suspension 20 strap, it is merely necessary to tilt the buckle downwardly to expose its rear face and to introduce the looped end of the suspension strap through the buckle frame and over the adjacent clamping loop 15 and subsequently return said buckle frame to its normal position when said suspension strap will be also 25 secured in position on the buckle frame. It will also be apparent that by tilting the buckle frame upwardly to the position shown in Fig. 4 of the drawings, the adjacent suspension strap 17 may be adjusted longitudinally to lengthen or shorten the same by exerting a longitudinal pull on 30 either strand of the loop 18, the strap being retained in adjusted position on the buckle by swinging the buckle frame downwardly to normal position, as before stated.

When the buckle is in normal position, 40 that is to say, in the position shown in Figs. 2 and 6 of the drawings, the material constituting the loop 18 of the suspension strap extends over the adjacent resilient clamping loop of the buckle and downwardly at the rear of the adjacent side bar of the 45 buckle so that the greater the pull on the suspension strap the more firmly will the clamping loop grip the same.

The buckle shown in Fig. 1 of the drawings 50 is similar in construction to the buckle shown in Figs. 2 to 6 inclusive of the drawings, with the exception that the clamping loops 10 and 15 are disposed in a vertical plane instead of in a horizontal plane, this 55 form of buckle being especially designed for connecting the adjacent ends of belts, girdles and the like.

In Fig. 7 of the drawings, there is illustrated a modified form of the invention in 60 which one of the clamping loops is dispensed with, the wire or metal forming the frame of the buckle being fastened together by interlocking hooks, indicated at 19.

The buckle may be used in connection with

electric belts, vest straps, suspenders, shawl 65 straps, stirrup straps, harness or wherever a device of this character is found desirable or applicable.

Having thus described the invention, what is claimed as new is:

70 1. A buckle including a rigid frame formed of a single piece of wire having an intermediate portion thereof bent to produce a resilient clamping loop, the free end of which is spaced from one side of the 75 frame and projected longitudinally beyond the adjacent end thereof, the wire constituting the frame being coiled around one of the strands at the fixed end of the loop to form an eye.

80 2. A buckle comprising a substantially rectangular rigid frame having oppositely disposed resilient loops arranged on the same side thereof, the free ends of said loops being extended in different directions and 85 spaced from the adjacent portion of the frame.

90 3. A buckle including a frame having substantially parallel side and end walls and provided with oppositely disposed resilient clamping loops arranged on the same side of the frame and having their free ends extending in different directions and projecting 95 beyond the adjacent ends of said frame.

4. A buckle including a frame formed 95 from a single piece of wire having intermediate portions thereof bent to produce resilient clamping loops, the wire constituting the frame being coiled around one of the strands 100 at the fixed end of each clamping loop to form an eye.

5. A buckle formed of a single piece of wire bent to produce a substantially rectangular frame, a portion of the wire at each 105 side wall of the frame being bent to produce a longitudinally disposed clamping loop, said loops extending in opposite directions, the free end of each loop being projected longitudinally beyond and spaced from the 110 adjacent end of said frame, and the wire constituting the frame being coiled around one of the strands at the fixed end of each loop to form an eye.

6. A buckle formed of a single piece of wire, one end of which is bent to form a 115 hook terminating in an end wall, the wire being thence bent laterally to form one side of the buckle frame and thence coiled to produce an eye, the wire after the eye is formed being extended longitudinally and 120 bent upon itself and extended through said eye to produce a clamping loop, the wire being thence extended at substantially right angles to the clamping loop and bent laterally to form another side wall of the buckle 125 frame and thence bent to produce an eye terminating in a clamping loop, similar in construction to the first mentioned loop, the

wire after the last mentioned loop is formed being bent to produce a hook arranged to interlock with the first mentioned hook.

5 7. The combination with spaced suspension straps having loops formed therein, of a buckle connecting said suspension straps and including a frame provided with oppositely disposed resilient clamping loops arranged on the same side of the frame in
10 spaced relation to the latter and adapted to enter the loops of the adjacent suspension straps, said suspension straps being free to

slide over the clamping loops and through the buckle frame when the latter is tilted in one direction and clamped in engagement 15 with said loops and frame when the buckle is tilted in the opposite direction.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN P. BAIR. [L. S.]

Witnesses:

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GEORGE H. SOMMERS.

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