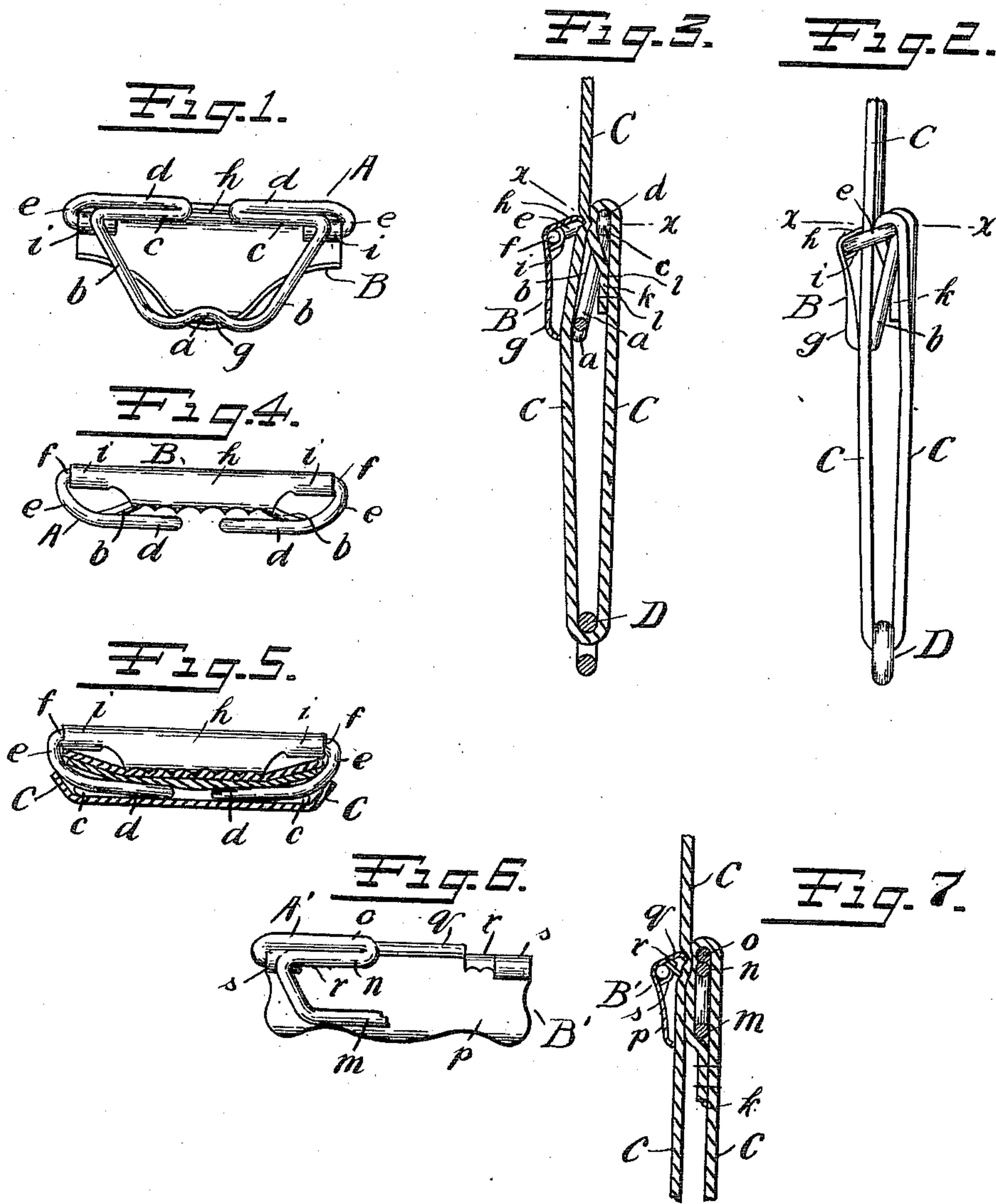


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BUCKLE FOR WEBBING.  
APPLICATION FILED MAR. 26, 1910.

994,843.

Patented June 13, 1911.



Witnesses:  
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# UNITED STATES PATENT OFFICE

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## BUCKLE FOR WEBBING.

994,843.

Specification of Letters Patent. Patented June 13, 1911.

Application filed March 26, 1910. Serial No. 551,652.

*To all whom it may concern:*

Be it known that I, WALTER A. HOLDEN, a citizen of the United States, residing at Ansonia, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Buckles for Webbing, of which the following is a specification.

My invention relates to buckles of the lock lever class designed to carry the extremity of a webbing and to operate along the running portion thereof to form an adjustable loop.

The object of my invention is to provide a buckle of this character having a back or frame made out of a single piece of wire bent up in such a manner that the same can be strung so that a layer of webbing will be interposed between the same and the garment thereby producing what is known in the trade as the rustless effect. I attain these objects in the details of construction and manner of operation set forth in the following description and accompanying drawings in which like reference characters refer to corresponding parts.

In the drawings: Figure 1 is a rear view of the buckle; Figs. 2 and 3, a side view and vertical section of the same in position on the webbing; Fig. 4, a top view; Fig. 5, a transverse section taken on line  $x-x$  in Fig. 3, the webbing only being shown in section, and Figs. 6 and 7, rear and sectional view of a modification.

The buckle comprises a frame A and a lever B. The frame A is made out of a single piece of wire bent to form a skeleton back having the bottom bar  $a$ , the side bars  $b, b$  and the top bars  $c, c$ . The wire is then doubled back on the bars  $c, c$  at  $d, d$ , then bent forwardly forming the side members  $e, e$  and the extremities are then bent inwardly toward each other forming the pintles  $f, f$  which latter may be continued if desired until they meet. The lever B is made out of a single piece of sheet metal bent to form a front portion or shield  $g$  and a clamping member  $h$  on each side of which latter the metal is slit to form the pintle straps  $i, i$  which are curled around the pintles  $f, f$  forming a pivotal connection between the frame A and the lever B. To web the buckle the extremity  $k$  of the webbing C is threaded or crowded rearwardly through the opening in under the double bars  $d, c$ ,

which latter may be regarded together as the webbing attaching member. The webbing is then folded rearwardly over the top of the double bars  $d, c$ , and may if desired be sewed upon itself by stitches  $l, l$ , forming an attaching loop or fold in the webbing which embraces only the double bars  $d, c$ . Thus secured the webbing is carried downwardly and returned upon itself passing upwardly through the buckle in front of the members  $a, b, b$ , and between the lever B and the attaching loop folded around the double bars  $d, c$ , against the front side of which latter the webbing is locked, when the buckle is closed, by the clamping member  $h$ . The webbing strung as described forms an adjustable loop carrying the cast off member D.

In buckles of this type, wherein the webbing is clamped against the front of the back instead of being deflected over the top of the back, it is necessary to set the lever so that its clamping edge will swing close to the front of the back in order to secure a sufficiently tight grip to prevent the webbing from slipping when under stress. When the buckle is strung with webbing of appreciable thickness this close setting of the lever causes a distortion or springing of the frame as shown in Fig. 5, that is, the edge  $h$  of the lever comes to rest directly opposite the members  $c, c$  or between these members and the members  $d, d$ , so that the members  $c, c$  being free to yield at both their extremities will yield bodily in response to the clamping action of the lever, and the members  $d, d$  being free only at their inner extremities will yield most in the middle, thereby causing the inwardly projecting bends or fingers formed by these two sets of members to spread forwardly and rearwardly. The cramping or crowding of the extremity  $k$  of the webbing through the restricted opening in under the attaching member prevents the wedging action of the lever from drawing or pulling the webbing upwardly around the attaching member which latter action would create a slight fold or bunch in the sewed loop. This is a defect called creeping which is common in lock lever rustless buckles. It will be observed that when lock lever buckles of this character are strung rustless that the stress of the webbing causes the lower side of the back to tilt forwardly. For that reason it has been found impractic-



cable to have the sewed loop embrace the entire back as in the case of buckles wherein the webbing is held by deflection and the forward tilting is not present. By constructing the back so that the webbing may be folded around a single bar, which in the present case consists of the inwardly projecting fingers formed by the double members, *d, c*,—*d, c* the tilting portion of the back is located entirely outside of the sewed loop and does not interfere or distort the latter, and further makes it possible to utilize a sewed loop of minimum length and thereby save webbing. This manner of webbing the buckle also permits the tilting portion to be extended downwardly to cooperate with the lower edge of the lever and thereby assist in maintaining the balance of the buckle. By making the members *c, c* a little shorter than the width of the webbing makes it possible to conceal the tilting portion entirely within the folds of the webbing. If desired the inward projecting fingers may be spaced apart sufficiently so that the extremity *k* of the webbing may be first sewed to form the attaching loop and afterward slipped over the extremities of the fingers.

Referring to the modification shown in Figs. 6 and 7 the frame *A'*, of which a fragmentary portion is shown, may be webbed by folding the extremity *k* of the webbing entirely around the back members *m* and *o, n*. The lever *B'* comprises the front portion or shield *p*, the web engaging member *q*, the downwardly projecting teeth *r, r* and the pintle straps *s, s*. The web engaging member *q* has its edge curled downwardly so

that during the operation of closing the buckle it may press the webbing into the opening between the top bar *o, n* and the bottom bar *m* without obtaining a grip thereon as in the case of a serrated edge. When the member *q* snaps over the spring bars *n, n* it locks the lever in its closed position and holds the teeth *r, r* in gripping engagement with the running portion of the webbing.

Of course it is obvious that either of the levers or the methods of webbing the buckle above described may be employed in whatever form the invention is embodied and the buckle is susceptible of such further modification as may fairly come within the scope of the appended claim.

What I claim and desire to protect by Letters Patent is:

A buckle comprising a back bent up out of a single piece of wire to form top and bottom bars spaced apart, and a lever hinged to said back in front of said top bar, the said lever being provided with a web engaging member arranged to coact with the front side of said top bar, and the said top bar being formed by doubling the wire upon itself to present a pair of inwardly projecting and vertical disposed bends the lower sides of which are adapted to yield in response to the wedging action of the lever.

Signed at Ansonia, Connecticut, U. S. A., this 18th day of March, 1910.

WALTER A. HOLDEN.

In the presence of—

MARGARET E. BAXTER,  
ADA M. GESNER.