W. A. HOLDEN.

BUCKLE FOR WEBBING.

APPLICATION FILED AUG. 7, 1915.

1,232,546. Patented July 10, 1917.

Fig. 1.

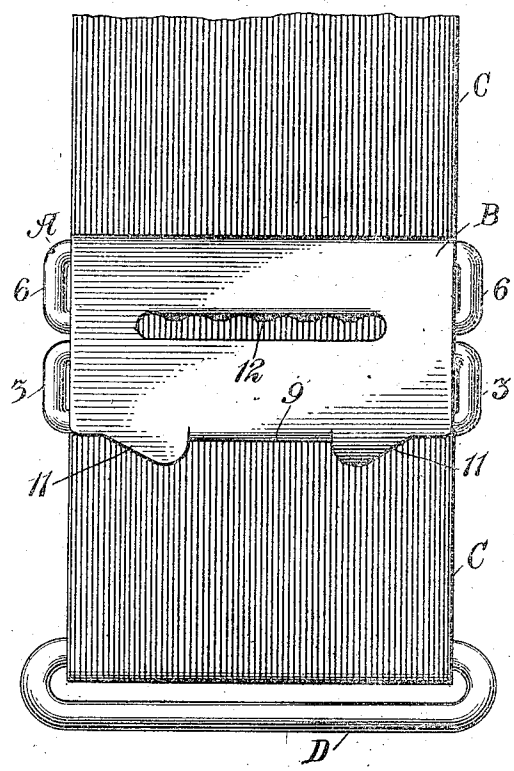


Fig. 2.

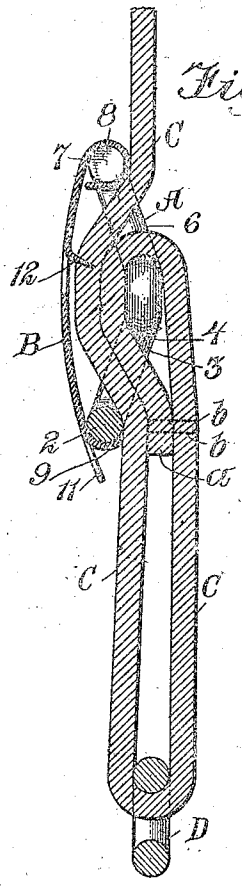


Fig. 4.

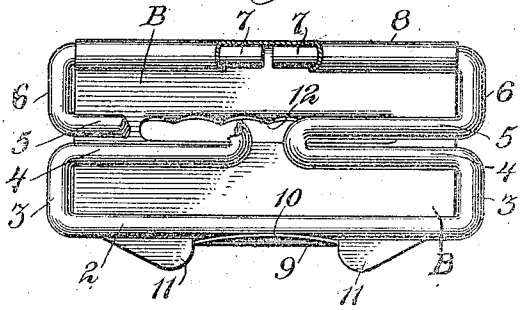
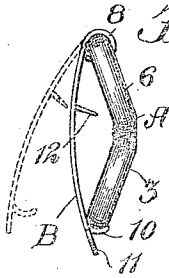


Fig. 3.



WITNESSES

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BUCKLE FOR WEBBING.

1,232,546. Specification of Letters Patent. Patented July 10, 1917.

Application filed August 7, 1915. Serial No. 44,300.

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 lever buckles for running webbing designed to be strung so that a layer of webbing will be interposed between the back of the buckle and the garment of the wearer producing what is known in the trade as the rustless effect, and its object is to provide a buckle of this character in which the lever and back members engage each other in locking relation when the buckle is closed and, when webbed and under stress, the top of the buckle lies close against the front of the webbing thereby eliminating the unsightly shelf or projection usually presented by the web-clamping arm in this type of buckle.

I attain this and other objects of my invention in the buckle set forth in the following description and accompanying drawing in which like reference characters refer to corresponding parts.

In the drawing:

Figure 1 is a front view of the buckle strung with webbing; Fig. 2, an enlarged transverse vertical sectional view taken centrally of Fig. 1, and

Figs. 3 and 4, rear and side views of the buckle before the webbing is attached thereto.

My buckle generally comprises a frame or back member A and a lever or front member B. The back member A is preferably bent up out of a single piece of wire its middle portion being left straight to form the bottom bar 2. The extremities of the wire are then bent upwardly from each end of this bar to form the lower side members 3, 3, then inwardly and back upon themselves to form the inwardly projecting fingers 4, 5 parallel with the bar 2, then upwardly forming the upper side members 6, 6 and inwardly again terminating in the pintles 7, 7 also parallel with the bar 2, which pintles are preferably continued until they substantially meet. The front member B is preferably fashioned out of a single piece of sheet metal having its top edge 8 rolled around the pintles 7, 7 which pintles taken together with the rolled edge 8 may be regarded as the top bar or side of the buckle. In this manner a hinge is formed connecting the front and back members. The middle of the lower edge of the front member is cut, preferably on a circle, and bent to form the upwardly curled flange 9 the edge 10 of which is arranged to snap under the bottom bar 2 so that the latter will become seated in the curled flange 9 to effect a locking engagement between the front and back members when the buckle is closed. The lower edge of the front member is further provided with depending lugs 11, 11 which may be grasped by the fingers to pull out the flange 9 from under the bar 2 to unlock and open the buckle. A plurality of web-holding teeth or spurs 12 project from the front member and are located so that, when the front and back members are locked together, the ends of these teeth will lie in front of a vertical plane passed through the rear face 13 of the top side of the buckle. One way to form these teeth is to punch them out of the body portion of the front member and then bend them rearwardly leaving an opening as shown. The teeth, however, may be formed in any other manner provided they do not project rearwardly of the top side of the buckle when the buckle is closed. One way of webbing the buckle is to fold one extremity *a* of the webbing C around the fingers 4, 5, which fingers taken together may be regarded as the intermediate or web-supporting bar. This folded extremity *a* is fastened on itself by stitches *b*, *b*. The other extremity of the webbing is passed forwardly between the bottom and intermediate bars and then rearwardly between the intermediate and top bars leaving a loop in the webbing depending below the buckle carrying a cast-off or other suitable connecting piece D. To enable the buckle to slide more readily on the webbing the back member is preferably bent to bring the intermediate bar slightly to the rear of the top bar so that it will be out of vertical alinement with the latter, but not to such an extent as to prevent the webbing from being deflected rearwardly by the top bar as shown. In the preferred form of my buckle disclosed herein the teeth will bear against the webbing, when the front and back members are locked together, at points where the webbing passes the web-supporting bar, or to be more exact where the front layer of the webbing passes the underlying

extremity *a* folded around the bar. In such a case the web-supporting bar forms a backing for the webbing and coöperates with the teeth to fasten the buckle in its adjusted position on the webbing. It is essential, however, in whatever form of buckle my invention is embodied that the web-engaging member of the lever should bear against the webbing at points where the direction of the strain is in a plane passed in back of the axis of the hinge. In this manner the strain on the webbing holds the buckle closed without the assistance of the locking means which latter are employed to hold the buckle closed when the webbing is slack. It should be observed that the teeth do not deflect the webbing away from the top side of the buckle, as is the case in that style of buckle wherein the teeth snap over or swing beyond the top edge of the web-supporting bar, and for this reason the top side of the buckle lies close against the webbing. This manner of gripping the webbing without deflecting it away from the top side of the buckle is one of the principal features of my invention. It should be noticed that the web-supporting bar lies in a pocket or depression formed in the deflected portion of the webbing so that the hump caused by the extremity folded over this bar is relieved to such an extent as to be inappreciable. It should be further noticed that the front member lies close against the webbing since no space is required between any of the members to permit the swinging movement of a radially disposed lever arm. In the disclosure herein I have employed a back member having webbing openings both above and below the web-supporting bar since, in such a case, the lower bar or side of the back member offers a ready means for entering into locking relation with the lever. It is to be understood, however, that my invention is not confined to any particular number of openings or other details in the structure of the back member so long as this member is provided with a web-supporting bar and a pivotal connection for the lever above the bar. The buckle constructed and strung as described is very flat and compact and presents a neat and attractive appearance.

The device herein shown and described is the preferred embodiment of my invention but the same is susceptible to such modification as may fairly come within the scope of the appended claims.

Having now described my invention what I claim and desire to protect by Letters Patent is:

1. The combination with webbing, of a buckle comprising a back having a web-supporting bar and a web-holding lever pivoted to the back above said bar, the said buckle being strung so that a running length of webbing is passed between said lever and bar and the back of the buckle is covered with webbing, and the said lever being arranged to engage the webbing without deflecting it away from the top side of the buckle but at points where the pull on the lever will hold the buckle closed when the webbing is under stress, and means mounted on said lever and coöperating with said back which are arranged to enter into locking engagement to hold the buckle closed when the webbing is slack.

2. A buckle comprising a back having an opening and a web-supporting bar underneath said opening, and a web-holding lever pivoted to the back above said bar, in combination with webbing passed over the back of said bar and a running length of webbing passed through said opening whereby the back of the buckle is covered with webbing, the said lever having all of that portion which engages the webbing disposed in front of a plane passed through the rear face of the top side of the buckle, when the buckle is closed, and having its web-holding portion bearing against the webbing in a position where the pull on the lever will hold the buckle closed when the webbing is under stress, and means mounted on said lever and coöperating with said back which are arranged to enter into locking engagement to hold the buckle closed when the webbing is slack.

3. A rustless buckle comprising a back member having a webbing opening and a web-supporting bar underneath said opening, and a web-holding lever hinged to the back member above said bar and arranged to enter into locking engagement with the back member when the buckle is webbed and closed, the said lever having its web-holding portion arranged to bear against the webbing in a position where the direction of the strain on the webbing is in a plane passed under the axis of the hinge, whereby the lever will not deflect the webbing away from the top side of the buckle and the strain on the webbing will hold the buckle closed.

4. A rustless buckle consisting solely of a back member and a pivoted web-holding lever member each of which is made in a single integral piece, the said back member having a web-supporting bar, and the said lever member being provided with means arranged to enter into locking engagement with said back member when the buckle is closed and having its web-holding portion, when the buckle is webbed and under stress, arranged to engage the webbing without deflecting it away from the top side of the buckle but at points where the pull on the lever will hold the buckle closed.

5. A rustless buckle comprising a back member having a web-supporting bar and webbing openings above and below said bar,

and a sheet metal front member hinged to the back member above said bar and provided with means arranged to snap into locking engagement with the back member below said bar, in combination with webbing folded around said bar and a running length of webbing passed through said openings in front of said bar, the said front member being provided with projecting teeth which press said running length against the folded webbing at points where the latter is backed by said bar when the buckle is closed.

In testimony whereof I have hereunto set my hand this 6th day of August, A. D. 1915.

WALTER A. HOLDEN.