

(No Model.)

R. CROCKER.

TIE LOOP.

No. 307,441.

Patented Nov. 4, 1884.

Fig 1.

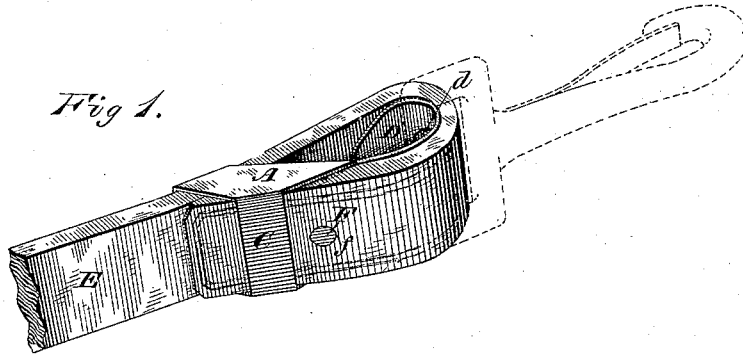


Fig 2.

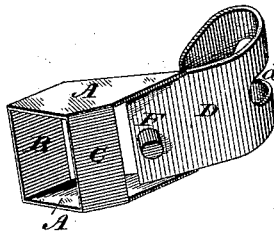


Fig 3.

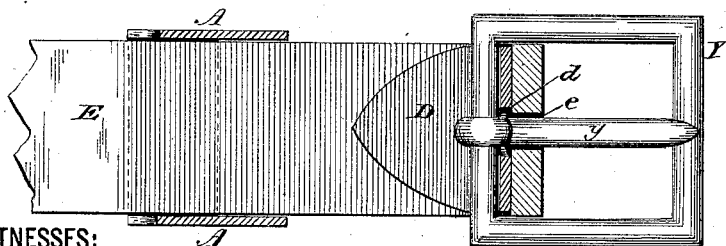
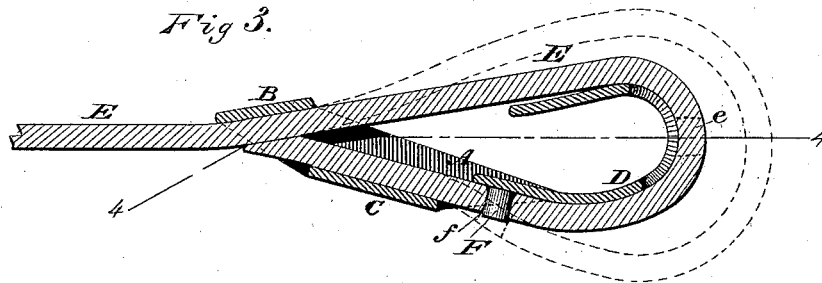


Fig 4.

WITNESSES:

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RICHARD CROCKER, OF MAZO MANIE, WISCONSIN, ASSIGNOR TO THOMAS M. CORBETT.

TIE-LOOP.

SPECIFICATION forming part of Letters Patent No. 307,441, dated November 4, 1884.

Application filed July 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, RICHARD CROCKER, a citizen of the United States, residing at Mazo Manie, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Tie-Loops, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of tie-loops or buckles in which the strap is passed through a frame between cross-plates and is secured to the loop-frame by means of a lug constructed thereupon.

The objects of my invention are, first, to provide for a minimum amount of wear at those places on the strap against which the loop-frame impinges; secondly, to provide facilities for easily attaching or detaching the strap to or from the loop-frame; and, thirdly, to provide a loop-frame to which can be readily attached a spring-beak or snap-hook, ring, or buckle, as the case may be, as will be hereinafter more fully set forth.

In the drawings, Figure 1 is a perspective view of a strap-loop when formed around my improved loop-frame. Fig. 2 is a perspective view of the loop-frame. Fig. 3 is an enlarged horizontal longitudinal section cut through loop-frame and strap. Fig. 4 is a vertical longitudinal section, also enlarged, cut through line 4 4 of Fig. 3, showing manner of attaching any well-known form of buckle to the tie-loop.

The loop-frame, substantially as shown in the drawings, consists of side plates, A A, connected to each other at their rear ends by a cross-plate, B. A cross-plate, C, also connects the side plates to each other, and is located at a point between the two ends of the side plates, being attached to the edges of the side plates opposite to those connected together by the cross-plate B. The forward ends of the side plates are attached to each other by means of the inner end of an elongated plate, D, the outer end of this plate being bent in the form of a hook or loop. In the immediate bend of this hook-plate is cut an aperture, *d*, through which can project a tongue, *y*, of any well-

known form, of buckle, Y, a buckle-tongue aperture, *e*, having been also cut through strap E, so as to register with the aperture in the loop-frame.

From the outer face of the inner end of hook-plate D projects a lug, F. This lug rests in aperture *f* cut through strap E, by means of which the strap is securely attached to the loop-frame after the former has been tautly drawn over the latter, and is located in relation to the front edge of plate *c* in such a manner as to freely admit of the attachment or detachment of the strap to or from the loop-frame, as shown in Fig. 3. The plates B and C are so located in relation to each other as to cause their inner surfaces to occupy the same planes as those naturally adopted by the inclined outer surfaces of the looped strap. They also rest throughout the entire breadth of their inner surfaces against the outer surface of the inclined sides of the looped strap, while the outer face of the hook-plate D molds the loop of the strap.

It will be observed from the above description that, first, as the inner faces of the cross-plates B and C of the loop-frame occupy the same planes naturally adopted by the outer surfaces of the inclined sides of the looped strap, a minimum amount of wear takes place at those portions of the loop-frame which impinge against the strap; secondly, as the locking-lug F projects outwardly from the loop-frame, and is located at a convenient distance from the front edge of the cross-plate C, in order to admit of an easy attachment to or detachment from the loop-frame of the strap, and as loop-frames have heretofore been provided with an inwardly-projecting locking-lug, thereby making it inconvenient to fasten the looped strap, greater facilities are provided in my improved loop-frame for readily attaching or detaching the strap to or from the loop-frame than have heretofore existed; and, thirdly, as the hook-plate D is provided at its end with an aperture, *d*, which is made to register with a buckle-tongue aperture, *e*, cut in the strap, it is obvious that my improved tie-loop can accommodate any well-known

form of buckle, as above described, as well as a snap-hook, ring, or other equivalent device.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a loop-frame for forming a loop in a strap, the hooked plate, as described, provided with a buckle-aperture, as and for the purposes set forth.

2. In a loop-frame constructed, as described, with side and cross plates and fastening-lug,

the combination of the hooked plate provided with a buckle-tongue aperture, the strap provided with lug and buckle-tongue apertures, and the buckle, as set forth.

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

RICHARD CROCKER.

Witnesses:

GEORGE L. KURTZ,
WILLIAM H. EBBETS.