(No Model.)

C. A. CONGER.

BUCKLE.

No. 557,253. Patented Mar. 31, 1896.

Fig. 1.

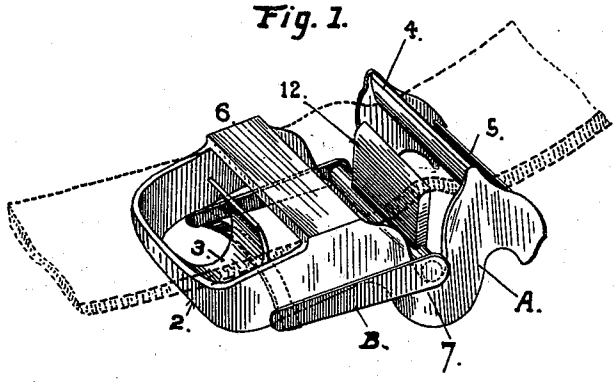


Fig. 3.

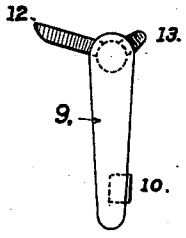


Fig. 2.

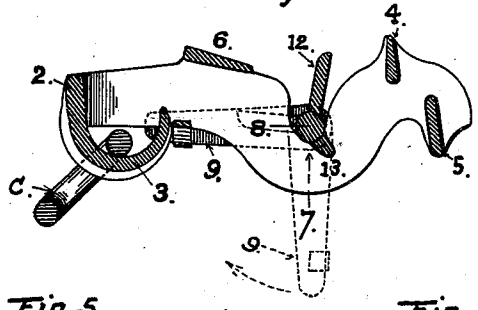
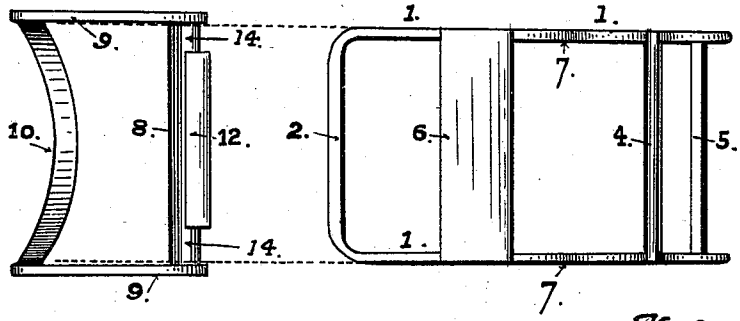


Fig. 5.

Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES A. CONGER, OF SAN FRANCISCO, CALIFORNIA.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 557,253, dated March 31, 1896.

Application filed April 25, 1895. Serial No. 547,184. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. CONGER, a citizen of the United States, residing in the city and county of San Francisco, in the State of California, have invented certain new and useful Improvements in Buckles, of which the following is a specification.

This invention relates to an improvement made in buckles of the class described and claimed in the Letters Patent of the United States which were issued to me on the 29th of May, 1894; and the present invention has for its object, mainly, to simplify the number of parts and reduce the cost of manufacture, and also to produce a buckle of the kind or description mentioned that is particularly adapted for use on thick and heavy straps.

The following description explains the nature of my present improvement and the manner in which I proceed to construct, apply, and produce the same, reference being had to the accompanying drawings.

Figure 1 is a view in perspective of a buckle embodying my present improvements, the parts being shown in position to hold the strap, which is indicated by dotted lines. Fig. 2 is a longitudinal section with the gripping-piece set to hold the strap. Fig. 3 represents in side view the part which I have termed the "gripping-piece." Fig. 4 is a plan or top view of the buckle-frame, and Fig. 5 is a plan of the gripping-piece.

Referring to the several figures of the drawings, A indicates the frame of the buckle, cast in one piece, and B the gripping-piece, or the part that grips and holds the strap by bending it out of line in the buckle-frame. These two parts A B constitute the complete buckle, and the present invention differs from my former patent before mentioned in dispensing with the part which I term the "pressure-plate" in that patent, and thus reducing the number of parts of the buckle.

The frame A is formed of the parallel side bars 1 1, united at one end by an end bar or cross-piece 2 having a hook 3 formed on it, the end of which is bent over with a short curve and is turned downwardly into the opening between the side bars. The office of this hook is to receive and hold a ring C for the snap-hook on the end of a hitching-strap, to which class or character of heavy straps the buckle is particularly adapted; but in some cases I omit this hook from the cross-bar, as I have represented in Fig. 4.

At the opposite side of the buckle-frame the side bars 1 1 are united by the cross-bars 4 5, one of which extends across the top and joins the side bars together only at the top, while the other extends across the bottom and to one side of the first-mentioned cross-bar, as will be understood from Fig. 2.

At a point in the length of the buckle-frame about midway between the cross-bar 4 and the front or hook-bearing end a second cross-bar 6 joins the two side bars together across the top of the frame, and in that portion of the frame lying between the two last-mentioned cross-bars 4 6 the two side bars are bent downwardly in a sharp curve and in the same plane, producing the open sockets or bearings 7 7. The other member B of this buckle is a rock-shaft 8, having two levers 9 9 fixed to the outer ends or cast in one piece with the shaft, and a cross-bar 10 joining together the outer ends of the said levers. On the shaft is an eccentric or cam-shaped piece 12, which is a part of the shaft 8. It projects at right angles from the shaft for nearly the entire length; but journal portions 14 14 are left between the ends of the cam and the levers 9 9. These last-mentioned portions of the shaft are finished round to fit the bearings on the side bars. On the back of the shaft, or that portion which lies under the eccentric, is formed a short rib or projection 13, the function of which is to keep the gripping-piece in position when it hangs loosely down, as shown by the dotted lines, Fig. 2, and prevent the piece from turning back. These parts constitute the locking-piece or grip of the buckle, and are readily cast in one piece.

The two parts A B thus formed are put together before the strap is inserted in the frame by passing the piece B over the frame A, with the cam-bearing portion held uppermost and the cam turned toward the front or hook-bearing end of the frame A, and then dropping the shaft into place in the bearings. The parts then have the position illustrated in Fig. 2 by the dotted lines, ready to receive the strap, and into this position the piece B is turned when the buckle is to be loosened on the strap.

By turning up the lower end of the piece B until the cross-bar strikes the buckle-frame the eccentric locking-piece is brought into position against the part of the strap that lies between the two cross-bars of the buckle-frame, and the strap is gripped with a pressure sufficiently strong to hold it under any strain or pulling force which it may be required to bear.

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

The herein-described buckle consisting of the frame A having the cross-bar 2 at one end, the cross-bars 4 5 at the opposite end, the top cross-bar 6 and the open sockets 7 7 in the side bars between the said bars 4 and 6, in combination with a gripping-piece provided with a rock-shaft 8 and eccentric 12 on said shaft, arms 9 9 on the ends of the said rock-shaft and a cross-bar 10 uniting the outer ends of said arms together; the said gripping-piece being fitted to slip over the frame A, and its eccentric portion to work in the space between the cross-bars 4 and 6, substantially as hereinbefore set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

CHARLES A. CONGER. [L. S.]

Witnesses:

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