

No. 885,701.

PATENTED APR. 21, 1908.

C. A. PATTERSON.
BUCKLE.

APPLICATION FILED MAR. 20, 1907.

Fig. 1.

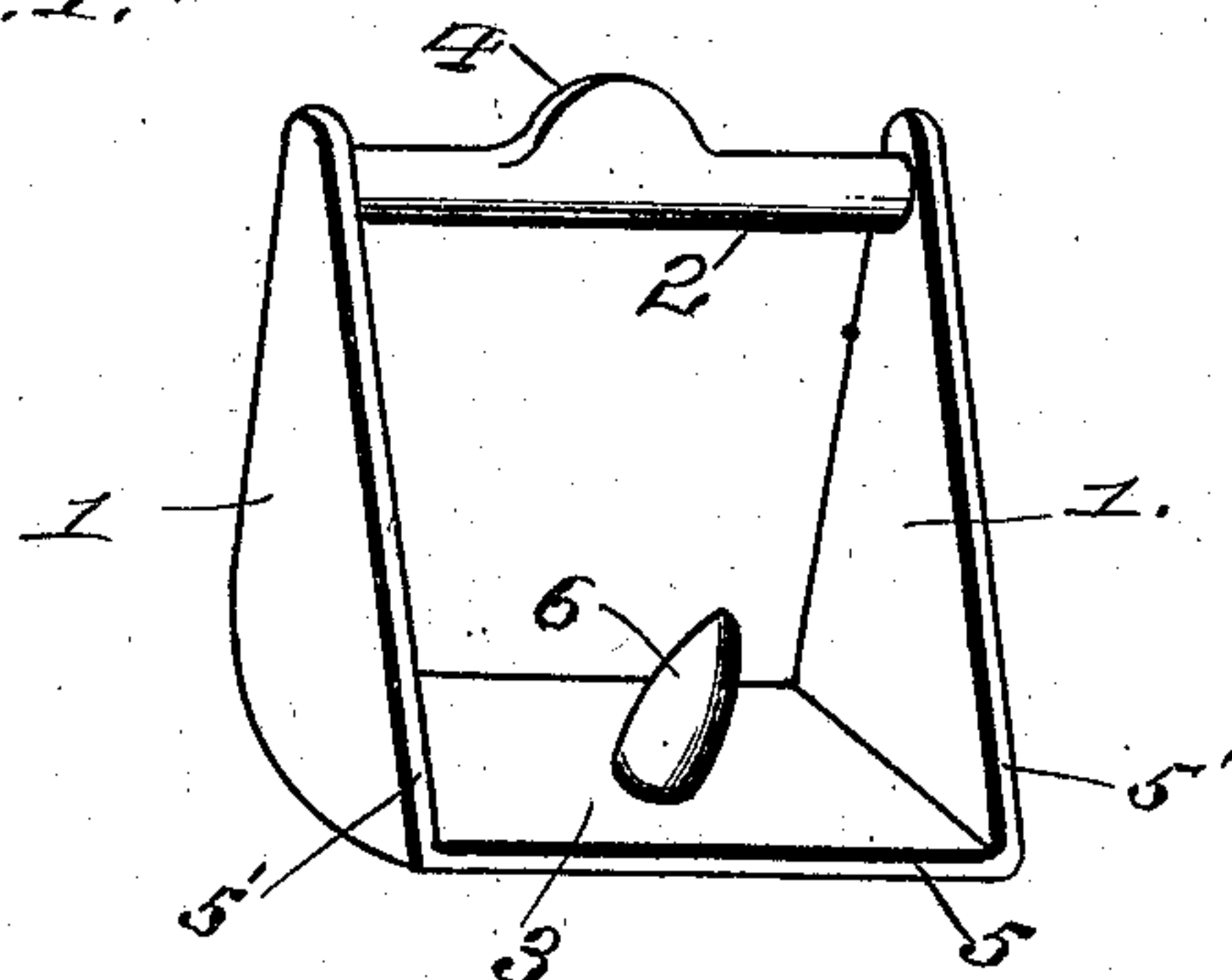


Fig. 2.

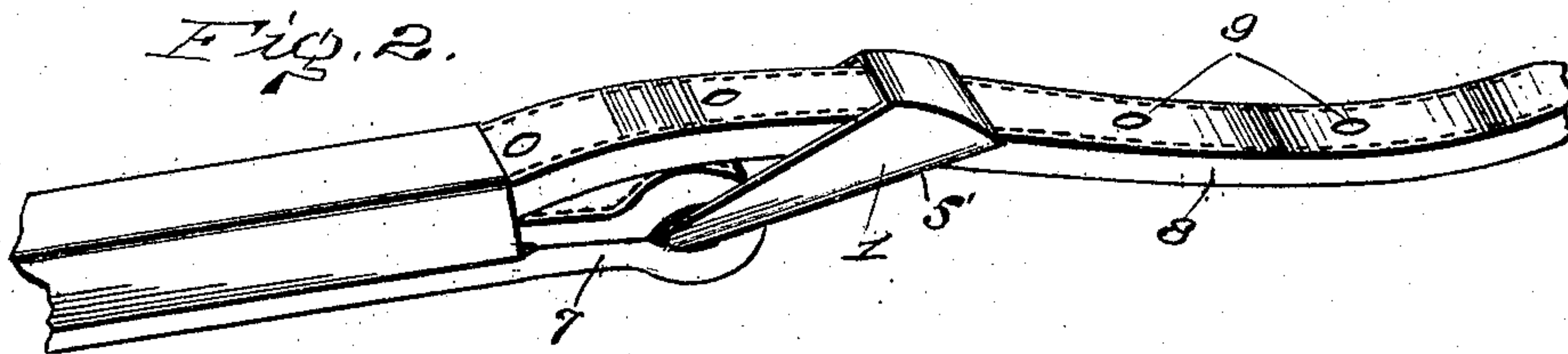


Fig. 3.

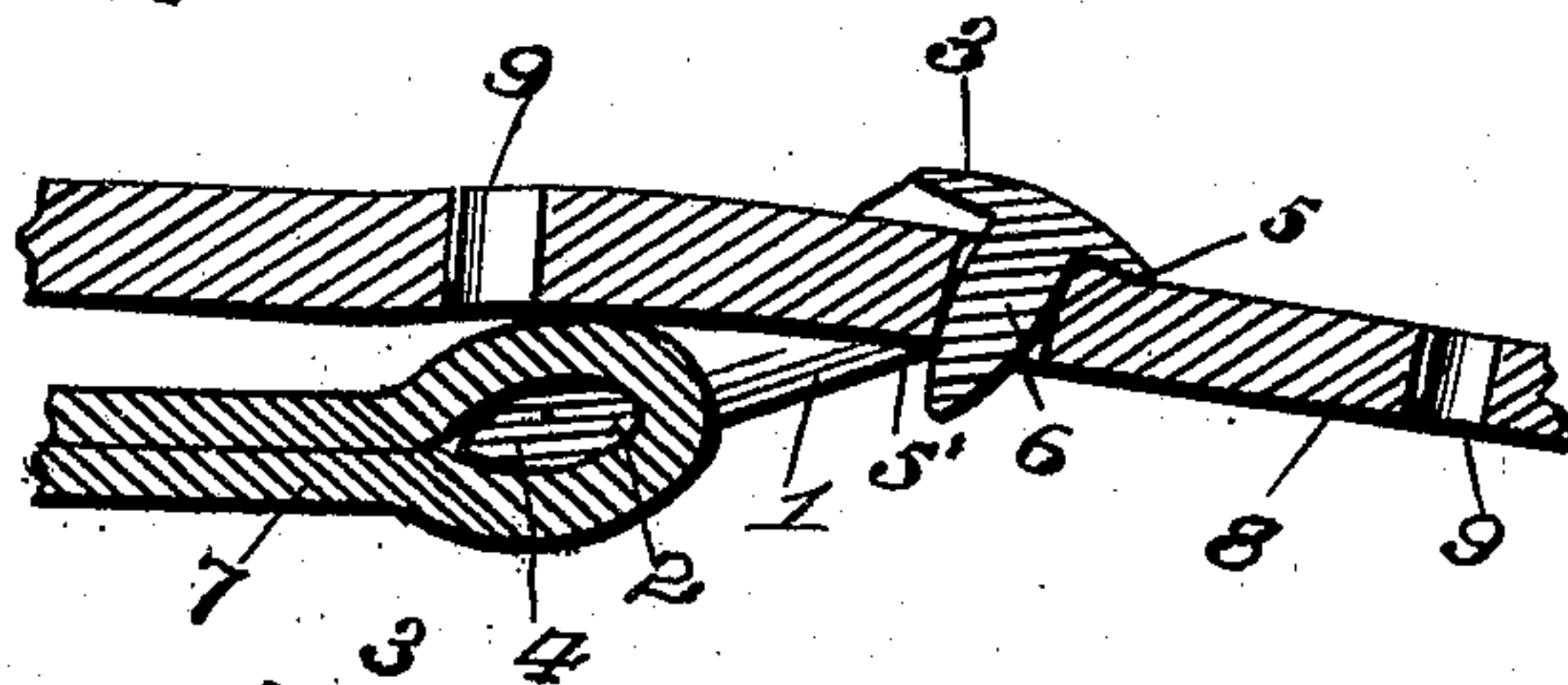
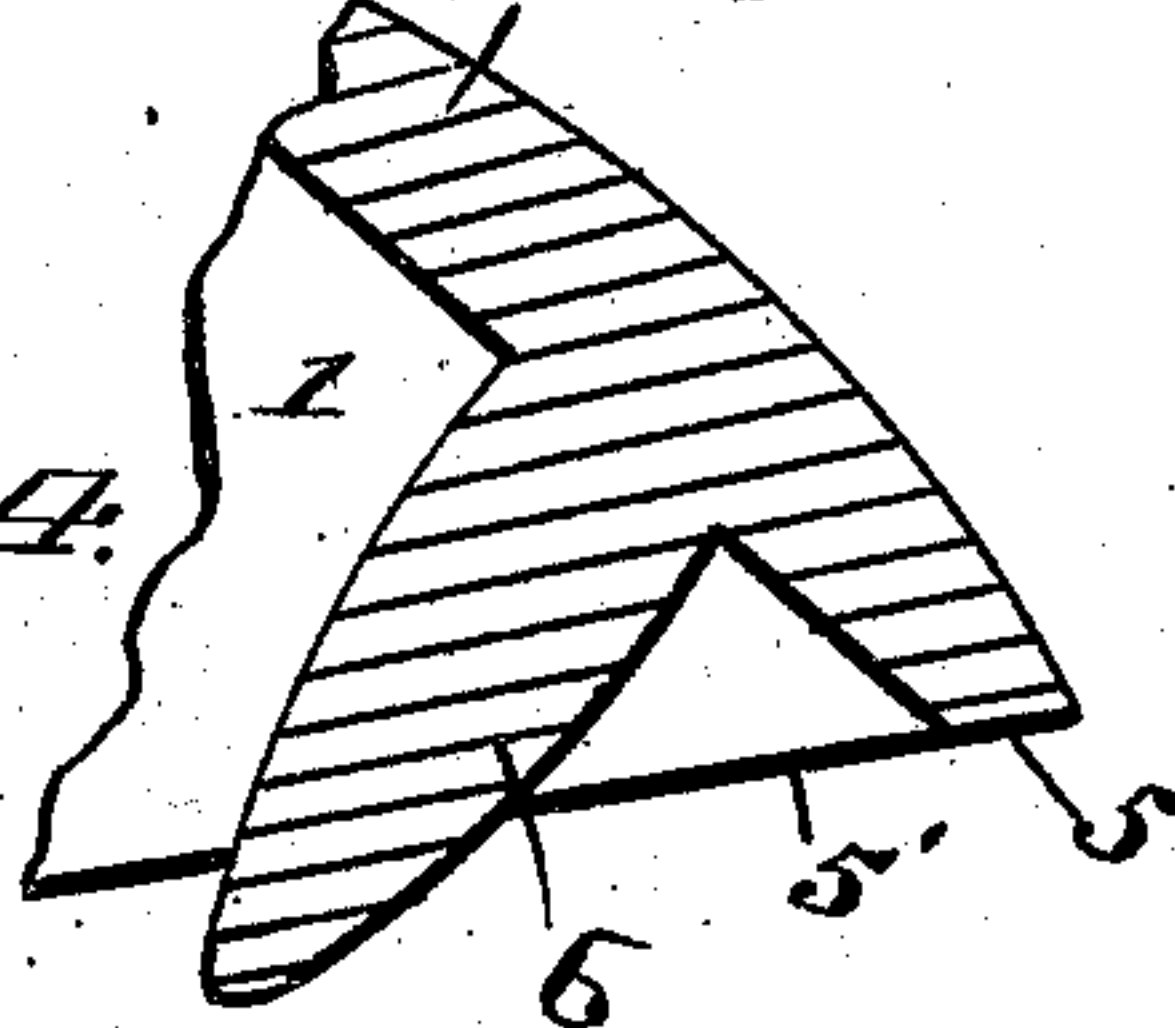


Fig. 4.



Witnesses

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BUCKLE.

No. 885,701.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES A. PATTERSON, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Buckles, of which the following is a specification.

The invention relates to an improvement in buckles designed primarily for harness connections, and adapted in use to firmly secure strap-members in attached relation.

The main object of the invention is the production of a one-piece buckle so constructed that an increased strain on the straps connected thereby serves to more firmly seat the buckle in place, the binding action being directed in a line at an angle to the line of strain and being directly proportionate to the amount of strain.

The invention in the preferred embodiment of details will be described in the following specification, reference being had to the accompanying drawings, in which

Figure 1 is a perspective of my improved buckle. Fig. 2 is a perspective of my buckle shown as connecting two strap members, and Fig. 3 is a longitudinal central section of the same. Fig. 4 is an enlarged central, longitudinal section, partly broken away, of the improved buckle.

Referring now to the drawings, wherein similar reference numerals refer to like parts throughout the several views, my improved buckle comprises two similar side bars 1, maintained in spaced parallel relation by a connector-bar 2 at one end, and by a clamping plate 3 at the opposite end, said plate being of appreciable thickness at its forward edge to form the binding face 5, the latter lying in the same plane as the forward edges 5' of the side bars 1. The side bars are spaced a distance somewhat in excess of the width of the strap for which the particular buckle is designed, and preferably gradually increase in width from the connector-bar 2 to the clamping plate 3. The connector-bar 2 is by preference of oval shape in cross section, and is centrally formed with a relatively rearwardly-extending projection 4, preferably semi-circular in plan and of gradually decreasing thickness from its connection with the bar toward its free edge. The important feature in connection with the projection 4 is that it is extended in a plane passing through the longitudinal median line of both side bars 1, this particular construction hav-

ing an important function in the use of the buckle, as will presently be set forth. The clamping plate 3, joining one end of the side bars, is in such relative position to said bars that its inner face lies in a plane disposed at other than a right angle to the longitudinal axis of either side bar. This inclination has a particular purpose in the use of the buckle, and is arranged downwardly and forwardly from the highest point of the buckle when in operative position, as clearly shown in Fig. 3. The face 5 of the clamping plate 3 and hereinafter termed the binding face, lies in a plane at an angle other than a right angle to the plane of the inner face of the clamping plate and, as before stated, in the same plane as the forward edges 5' of the side bars 1.

The clamping plate is provided with a tongue or stud 6, arranged at a direct right angle to the inner face of said plate and preferably disposed closer to the binding face 5 than to the rear edge of the clamping plate. The stud is of sufficient length to extend through the cooperating strap member and is rounded and reduced at the free end to facilitate its connection with the strap openings.

In use, one strap member 7 is looped around the connector-bar and secured by stitching or otherwise, the projection 4 extending rearwardly from the bar between the strap plies or layers. The second or connected strap member 8, formed with the usual openings 9 for the reception of the stud 6, is passed between the side bars and beneath the clamping plate 3, the stud being entered in the desired opening 9. In this position strain upon either strap member causes the projection 4 to be slightly tilted with the effect to force the clamping plate into closer contact with the strap member 8. This result will be fully obvious when it is understood that the inner face of the clamping plate normally rests flat upon the upper strap, and hence the projection 4, when the buckle is in use, lies in such relative position to the lower strap that strain on the strap members tends to aline the projection with the lower strap and therefore tilt or bind the clamping plate upon the upper strap.

Under excessive strain the clamping plate will be so inclined with relation to the upper strap as to cause the binding face 5 to bear directly thereon, as shown in Fig. 3. If said face, which is of appreciable width, were disposed at right angles to the plate 3, the effect of strain would be to cause the edge of the

face to cut into and damage the strap, but by my arrangement and construction the comparatively broad surface of the face is presented to the strap and cutting thereof avoided.

5 The buckle is by preference constructed of a single piece of material and in use serves to secure two strap members in such manner that strain thereon tends to more firmly seat the buckle in place.

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

15 A one-piece buckle comprising spaced side bars, a clamping plate having an inner flat face and an outer curved face, connecting the side bars at one end, the inner face of said plate lying at an angle to the line of normal strain, a stud projecting at direct right angles

to said inner face of the clamping plate, the forward edge of the clamping plate being of appreciable width to form a binding face and lying in a plane coincident with the plane of the forward edges of the side bars and at an angle to the plane of the inner face of the clamping plate, a connector-bar joining the side bars at the opposite end, and an approximately semicircular projection extending rearwardly from the connector-bar in a plane coincident with a plane passing through a median longitudinal line of the side bars.

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In testimony whereof I have affixed my signature, in presence of two witnesses.

CHARLES A. PATTERSON

Witnesses:

C. W. HODSON,
M. C. BROWNE.