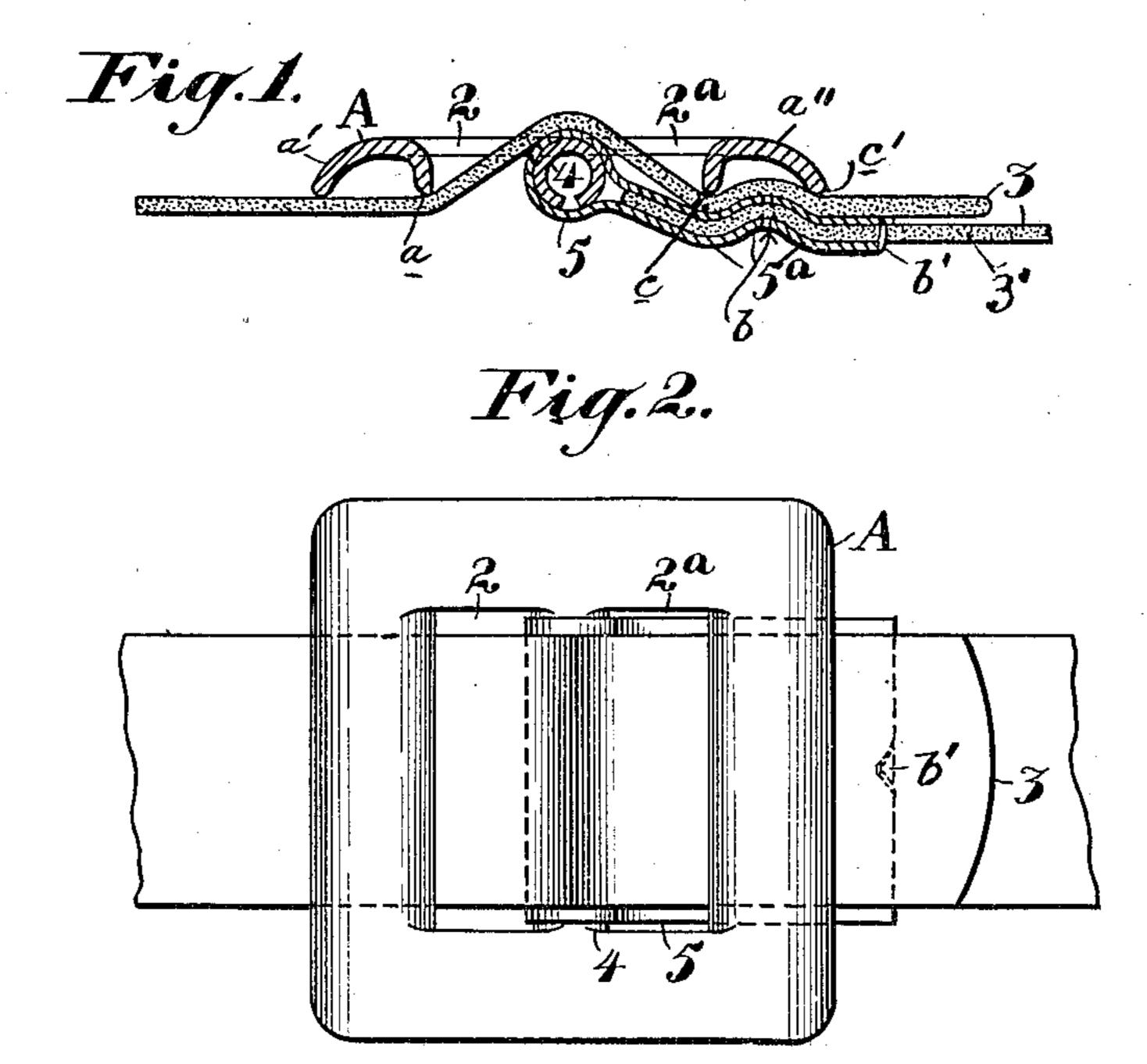
No. 825,600.

PATENTED JULY 10, 1906.

## E. M. HOAGLAND.

BUCKLE.

APPLICATION FILED FEB. 17, 1905.



Witnesses:-T.C. Fliedner

House

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By-Gw. H. Mong day

## UNITED STATES PATENT OFFICE.

ELLERY M. HOAGLAND, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO WILLIAM H. KELLY, OF SAN FRANCISCO, CALIFORNIA.

## BUCKLE.

Jo. 825,600.

Specification of Letters Patent.

Patented July 10, 1906.

Application filed February 17, 1905. Serial No. 246,081.

To all whom it may concern:

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

My invention relates to an improvement in devices for fastening leather and like straps.

It consists in a novel construction and combination of parts and in details which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 shows an enlarged sectional view of of my device. Fig. 2 is a plan view of same.

It is the object of my invention to provide a device in which the parts are so constructed that sufficient frictional or gripping effect is produced to hold the parts of the strap in any desired position or state of tension.

The main plate of the device A has slots made through it, and the edges of these slots are turned downward and may be serrated, if

desired. As shown in Fig. 1, the plate A has two of the slots 2 and 2a and the strap 3 passing under the outer end of A, bends sharply upward in contact with the binding edge a of the slot 2, and thence passes through the said 30 slot 2, thence over the top of the central bar .4 of the device, thence downward through the second slot 2a, thence passes out approximately parallel with the plate and binds against the downturned edge c of this second 35 slot and also against the downturned edge  $c^\prime$ of the outer bar a''. The tension upon the strap will thus maintain the portions of it outside of the plate approximately in line therewith, and this portion of the strap will 40 bind sufficiently on the downturned edges to prevent its slipping. In order to secure the opposite end 3' of the strap 3 to the device, I have shown the central bar 4 of the plate A as being curved into a segmental form, and 45 around it is fitted a metal plate bent so as to clasp the segment, as shown at 5, and having the two sides extended from this segmental portion in undulating curves, as shown at 5<sup>a</sup>. These curves are of such a character that 50 they will substantially coincide with the curvature of the outer end bar  $a^{\prime\prime}$  of the plate A—that is to say, the end bar a'' is slightly concaved in bending it, so as to form the

frictional edges c and c'—and the curvatures l

5ª of the clamping member or lever is such 55 that when the member or lever is in the position shown in Fig. 1 the said curvature 5<sup>a</sup> will substantially coincide with the edges c and c' of the end bar a'', while the intermediate convex curvature of said member or le- 60. ver will substantially coincide with the curvature of said end bar a''. This arrangement results in the strap being gripped between the end bar  $a^{\prime\prime}$  and the curved or undulating portion of the clamping member or lever and 65 against the edges c and c' of said bar a''. The object of this part or lever 5 5ª is to provide a further binding effect upon the strap 3 by pressing it upward into the curvature of the bar  $a^{\prime\prime}$ , and when there is a tension upon the 70 strap 3 it will bend the strap 3 itself, so that where it passes between the plate A and the part 5ª it will be compressed and held very closely against the downturned edges c c' of the bar  $\bar{a}''$ . In order to secure the end 3' of 75 the strap, I have punched one or more holes bthrough the curved part of the clamping member or lever, so as to form small spurs or projections which embed themselves in the strap, and I may, as an additional security, 80 form the outer edge of the clamping member or lever with a tongue b', adapted to be formed into the strap in the manner usual in this art.

Having thus described my invention, what 85 I claim, and desire to secure by Letters Pat-

1. A buckle comprising a plate with a central bar and outside bars one at each side of the central bar and spaced therefrom to form 90 intermediate slots, said central bar being curved into segmental form and the other bars being curved in cross-section, a sheet of metal clasping and turnable upon the segmental central bar, and having its ends undulating 95 substantially coincident to the curvature of one of said outside bars, and a strap passed through the slots of the plate and locked by the edges of one of the curved bars and the undulating portions of the turnable sheet.

2. A fastening device for straps and the like consisting of a plate having a plurality of transverse slots punched therethrough, forming a central and outside bars, said outside bars being curved in cross-section and said rescentral bar being curved into segmental form, and a plate bent to turnably fit said central bar having the ends extended and undulat-

ing to coincide with the curvature of the under portion of one of the end bars of the main plate, said strap adapted to be gripped between the undulating portion of the plate and the edges of one of the outside bars.

3. A buckle comprising a plate with outside bars and a central bar spaced therefrom to form intermediate slots, said outside bars being curved transversely to form binding portions against which a strap is pressed, and said central bar being segmental in cross-section, and a clamping member turnably attached to the central bar and having an undulating surface adapted to grip the strap between itself and one of the outside bars.

4. A buckle comprising a plate having

curved central and outside bars with intermediate slots, said outside bars having binding portions against which a strap may be pressed, and a member for the strap end said 20 member being turnable on the central bar and having an undulating outline coacting with one of said end bars to lock the strap therebetween.

In testimony whereof I have hereunto set 25 my hand in presence of two subscribing witnesses.

## ELLERY M. HOAGLAND

Witnesses:

S. H. NOURSE, EUGENE W. LEVY.