No. 740,932. PATENTED OCT. 6, 1903.

A. ENGLERTH & H. SCHUETT.

SAFETY BUCKLE.

APPLICATION FILED MAR. 18, 1903.

NO MODEL.

Fig. 1

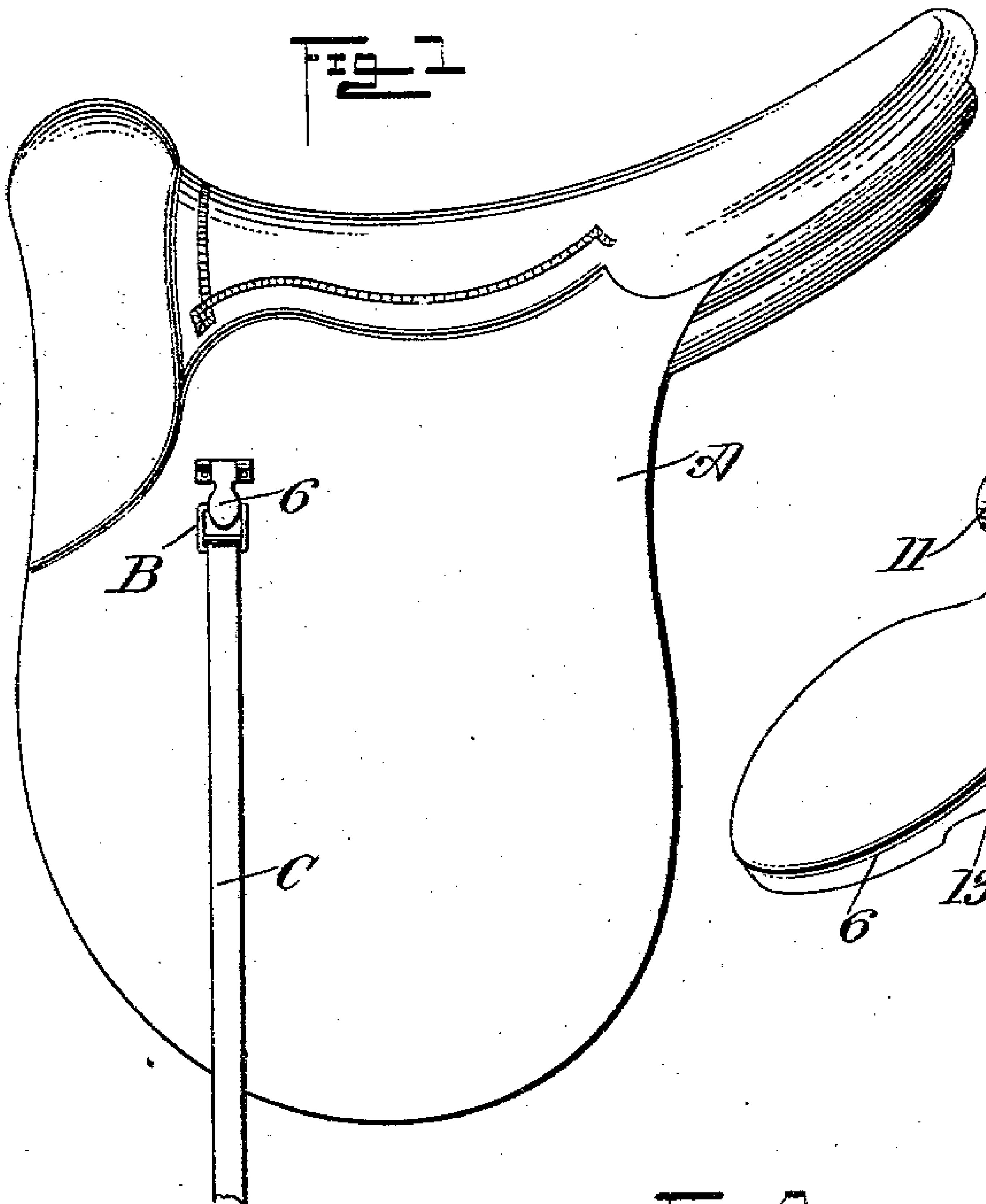


Fig. 2

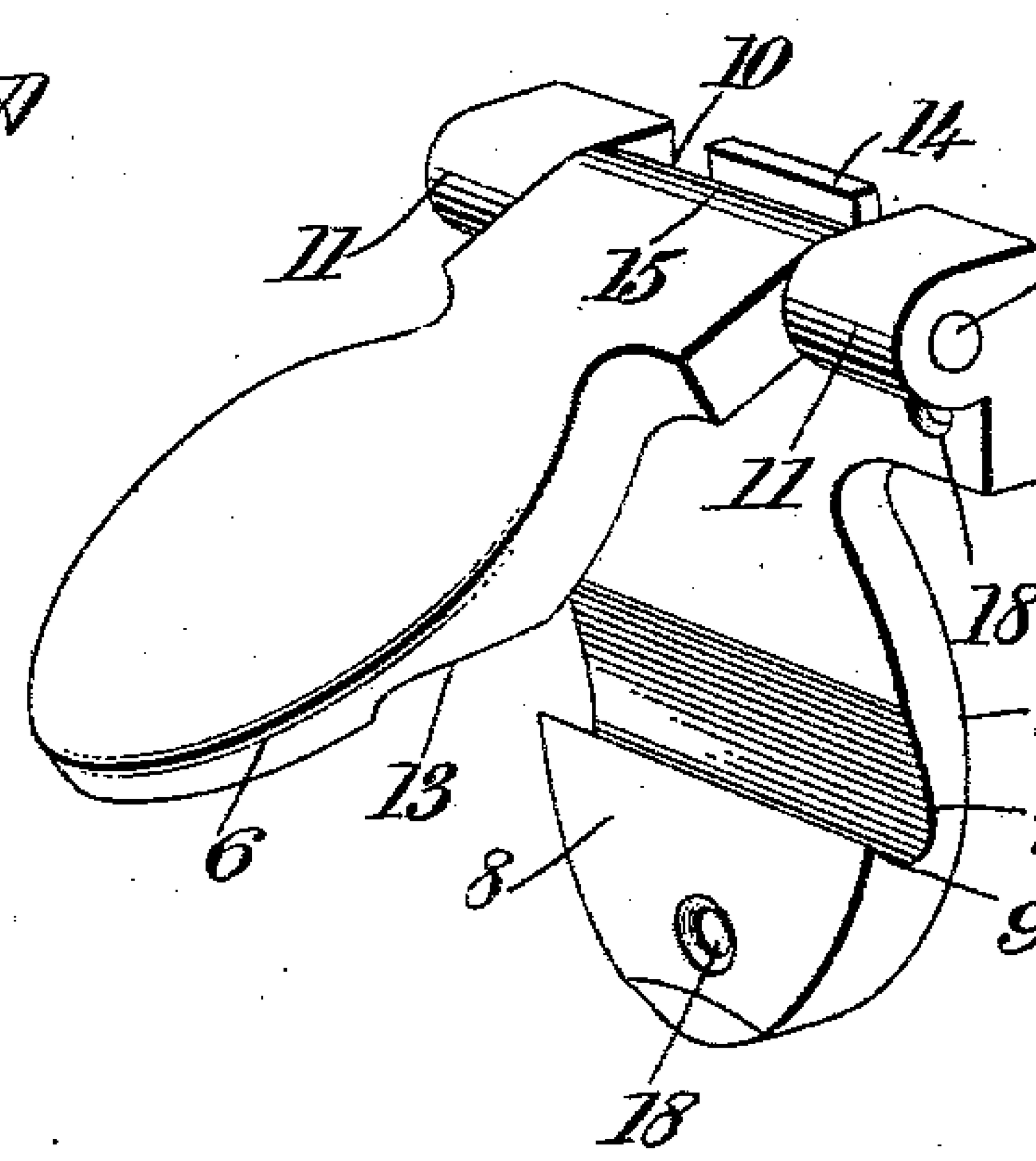


Fig. 3

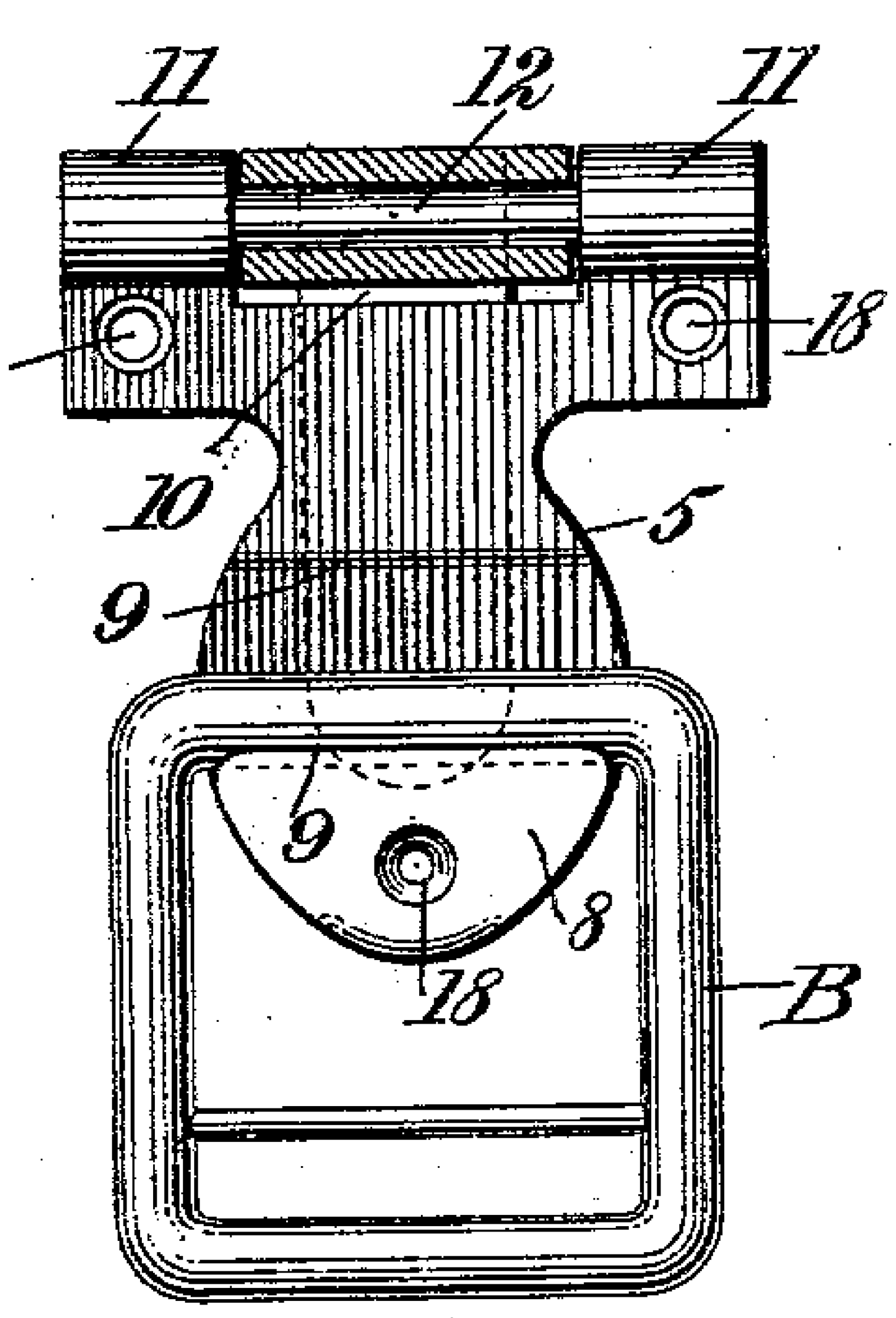


Fig. 4

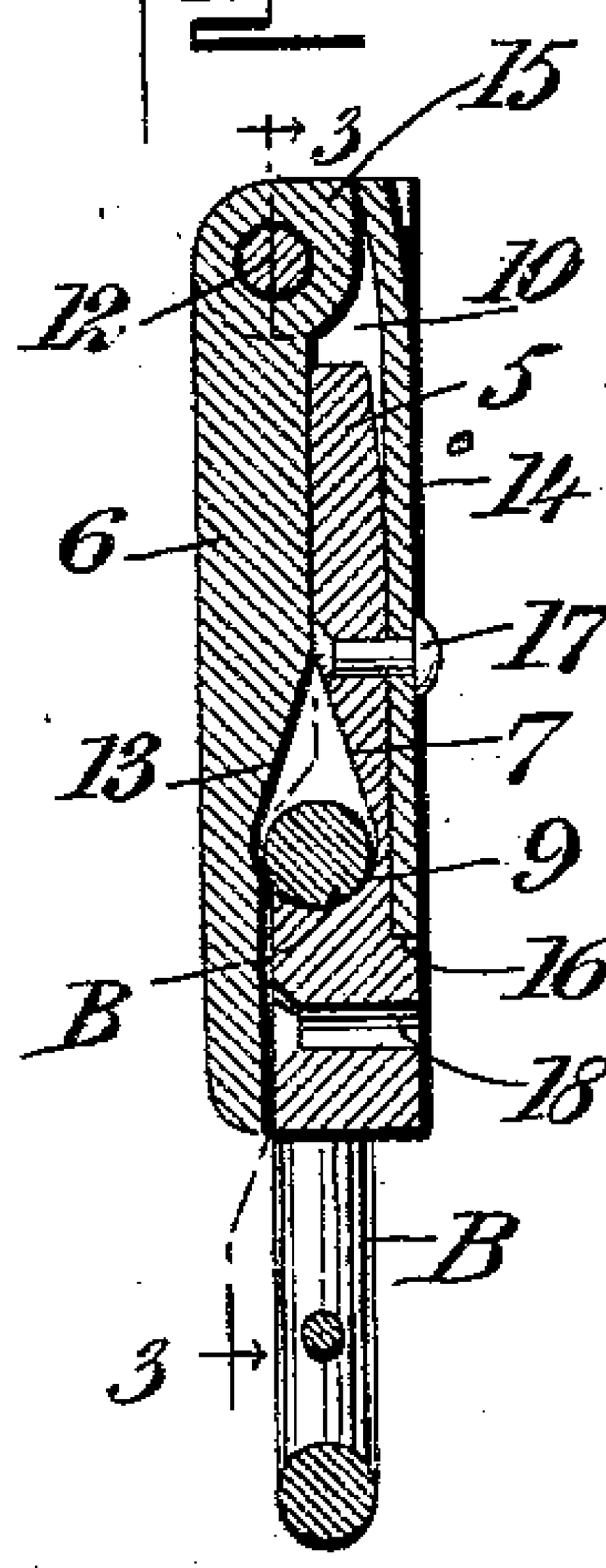
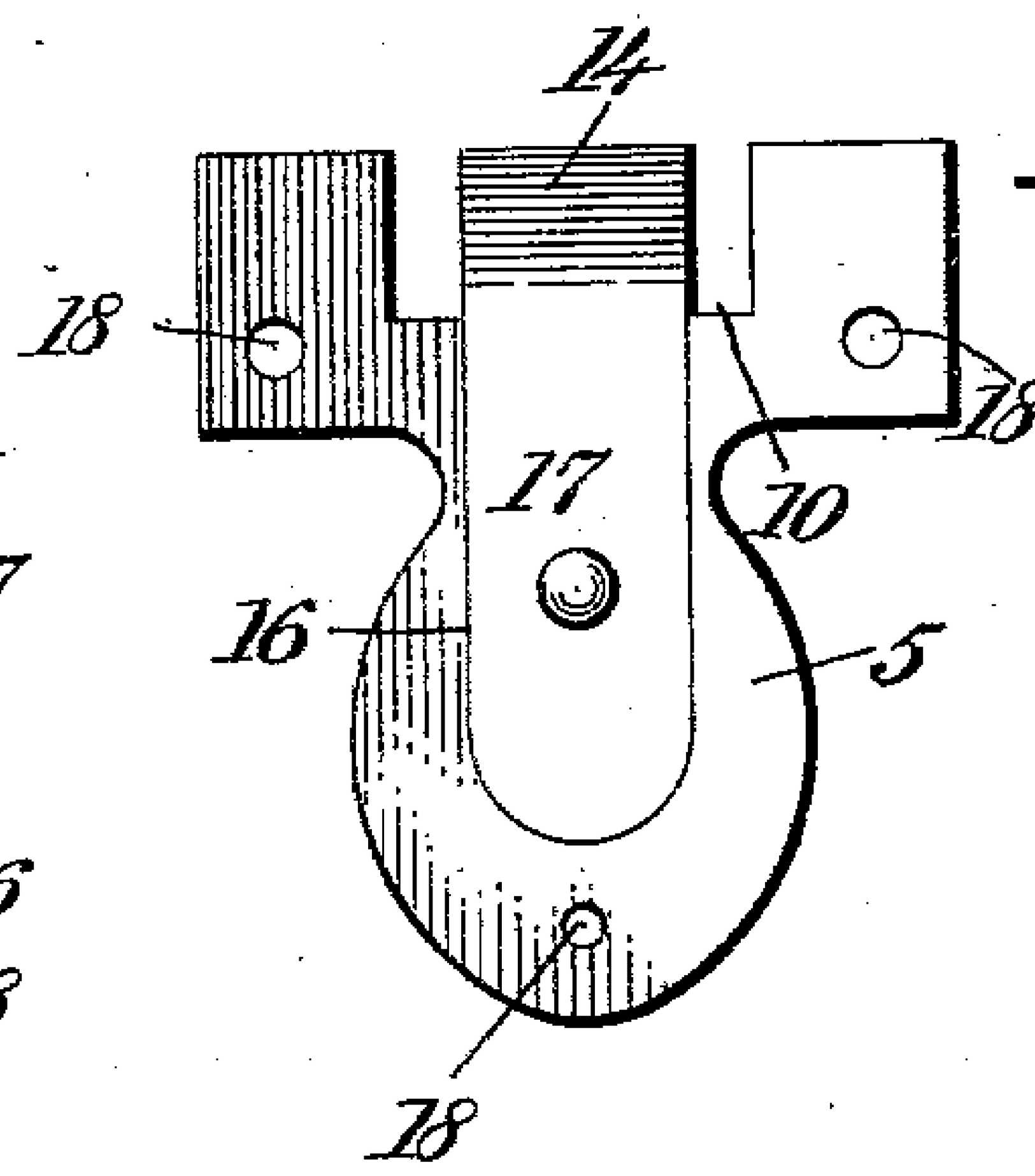


Fig. 5



WITNESSES:

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No. 740,932. Patented October 6, 1903.

UNITED STATES PATENT OFFICE.

ANTON ENGLERTH AND HENRY SCHUETT, OF CHICAGO, ILLINOIS.

SAFETY-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 740,932, dated October 6, 1903.

Application filed March 18, 1903. Serial No. 148,389. (No model.)

To all whom it may concern:

Be it known that we, ANTON ENGLERTH and HENRY SCHUETT, citizens of the United States, and residents of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Safety-Buckles, of which the following is a full, clear, and exact description.

Our invention relates to improvements in buckles adapted for attachment to a riding-saddle for the purpose of connecting a stirrup-strap thereto in a way to retain the strap on the saddle under normal conditions of use, but when the rider is thrown the pull of the strap in an abnormal direction operates to open the buckle and automatically release the stirrup and strap.

The object that we have in view is to provide a buckle of such construction that its metallic parts may be stamped by suitable dies, which can be readily fastened to the saddle in such position as to be concealed from view, and which is simple and strong in construction, cheap of manufacture, and reliable in service.

Further objects and advantages of the invention will appear in the course of the subjoined description, and the novelty will be defined by the annexed claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a view in side elevation of an ordinary riding-saddle, illustrating the application of our improved safety-buckle for the stirrup-strap. Fig. 2 is the perspective view, on an enlarged scale, of the safety-buckle detached from the saddle and showing the members thereof in an open position. Fig. 3 is a sectional elevation through the improved safety-buckle with the strap loop or ring fitted thereto, the plane of the section being indicated by the dotted line 3 3 of Fig. 4 looking in the direction of the arrows. Fig. 4 is a vertical section through the safety-buckle with the strap-loop attached thereto and showing the parts in their closed relation, and Fig. 5 is a rear elevation of the improved safety-buckle.

The improved safety-buckle of our invention consists, primarily, of two members, (indicated by the numerals 5 6 in the drawings,) said members being preferably in the form of plates and being hingedly connected. The member 5 serves as the base or fixed part of the buckle when applied to a riding-saddle A, while the member 6 is adapted to operate as a clasp in confining a loop B within the buckle, said loop serving as the support for a strap C, adapted to carry an ordinary riding-stirrup. (Not shown.)

The member 5 has one face thereof cut away or recessed in an inclined direction, as indicated at 7, thereby producing a solid portion 8 and a shoulder 9 at the lower part of the member. The shoulder 9 is curved transversely, as indicated more clearly by Figs. 2 and 4, and the inclined face 7 is disposed to meet with an end portion of this curved face of the shoulder. The plate or member 5 is provided at its top edge with a transverse notch 10, and on opposite sides of this notch the plate is formed with integral lugs 11, the same arranged to extend beyond the front face of the plate and to afford the pivotal bearings for the hinged clasp member 6 of the buckle. This clasp member 6 is of such width at one end portion as to fit snugly between the lugs 11 at the top edge of the member 5, and through the lugs 11 and the upper end of the member 6 passes a pin or arbor 12, the latter serving to pivotally connect the member 6 to the base member 5.

The members 5 and 6 of the improved buckle are fashioned or shaped correspondingly, and when said members are closed, as shown by Fig. 4, the buckle presents the appearance of a neat flat plate, which is divided longitudinally. The inner face of the hinged member 6 is inclined at 13 and disposed in opposing relation to the inclined face 7 of the base member, and this hinged member is adapted to have its lower inner portion rest snugly on the thickened lower portion 8 of said base member. The inclined faces 7 13 of the base and clasp members 5 6, respectively, form a space adapted to receive the upper cross-bar of the strap-loop B, said cross-bar fitting snugly in the curved shoulder 9 of the base member, as shown by Fig. 4. The weight and strain of the stirrup are sustained by the

shoulder of the thickened lower portion of the base member 5 of the buckle, because the strap 6 and the loop B transmit the strain directly to the shoulder. The hinged member 6 serves to confine the loop B securely within the buckle, and said member is normally kept in its closed position by the pressure of a spring 14. The upper hinged edge of the member 6 is fashioned to form a cam having a projecting shoulder, (shown more clearly in Fig. 4 and indicated by the numeral 15,) said cam-shaped edge of the member 6 projecting into the recess 10 in the top edge of the base member 5. The spring 14 is in the form of a flat or leaf spring, and it is attached firmly to the rear face of the member 5, as represented by Figs. 4 and 5. Said rear face of the member 5 is provided with a longitudinal cavity 16, adapted to receive the spring, which is fastened securely to the base member in a suitable way—as, for example, by the rivet 17. The free portion of the spring 14 extends into the recess 10 and bears against the cam edge 15 of the member, said spring serving to normally hold the member 6 in its closed position, as shown by Fig. 4. The spring 14 is disposed flush with the rear side of the base member 5, thus compactly arranging the parts and minimizing the tendency of the spring to break.

In the operation of our invention the member 6 may be raised by turning it on the pivot 12, thus causing the cam edge 15 to ride against the spring and to deflect the latter sufficiently for the member 6 to assume the open position, (shown by Fig. 2,) the end of the spring bearing against a flat end edge of the hinged member to maintain it in its adjusted position. The loop B may now be easily fitted in the recessed face 7 of the base member, so that the cross-bar of the loop will rest in the curved edge of the shoulder 9. The operator may now press the member 6 to its closed position, wherein it lies parallel to the member 5, said member 6 being held securely in said closed position by the pressure exerted on the cam edge 15 by the strong flat spring 14. The loop B serves to suspend the strap C and the stirrup from the improved buckle, and, as before indicated, the weight and strain of the stirrup are brought to bear against a solid portion of the buckle. The strap and stirrup are held securely in the buckle under normal conditions of service of the stirrup; but when strain is brought to bear on the buckle in an abnormal direction—as, for example, when the rider is thrown and his foot catches in the stirrup—the loop B is adapted to pull on the member 6 with sufficient force to overcome the tension of the spring 14, whereby the buckle is opened to automatically release the loop B and free the strap from the saddle.

The plate 5 is shown as having a series of openings 18 adapted to receive screws or rivets for fastening the buckle to the riding-saddle substantially in the position indicated by Fig. 1; but it is evident that the position of the buckle and the means for fastening it to the saddle may be modified within the skill of the operator.

The particular form of loop B and the slope of the shoulder 9 on the member 5 are not material. For example, the top bar of the loop B may be made wedge-shaped or tapering in cross-section, and this requires the shape of the shoulder 9 to be correspondingly changed.

It is to be understood that we do not limit ourselves to the form, proportion, and size of the several parts and that we reserve the right to make such modifications and alterations as fall within the scope of the appended claims.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A safety-buckle for saddles, comprising a base member secured to the saddle with its rear side in flat engagement therewith, said member having a vertical recess in its rear side extending downwardly from the top thereof, a flat spring secured in said recess with its upper end free, means on the inner face of said base member to be engaged by the loop of the stirrup-leather, and a clasp member normally covering the face of said base member and pivoted at its upper end to the upper end of the base member and having a projection above said pivot pressed by said spring to resist the opening of the clasp member and to normally hold the same pressed into engagement with the front face of the base member, the outer face of said spring being flush with the rear face of said base-piece whereby the pressure of the leather of the saddle against the rear face of said spring supplements the resiliency of the spring when said clasp is operated.

2. A safety-buckle for saddles, comprising a flat base member secured to the saddle, the rear side of said member being flat and the lower end thereof thicker than the upper end, a transverse shoulder on the inner face of said member at the point of union between said thicker and thinner parts thereof, said thinner part being transversely recessed at said shoulder to increase the depth of the shoulder, a buckle or loop received upon said shoulder, the front face of said loop being flush with the front face of the lower thickened portion of the base member, a clasp carried upon said base member, and means for holding the clasp normally in engagement with said base member.

3. A safety-buckle for saddles comprising a flat base member with the lower end thereof thicker than the upper end, a transverse shoulder on the inner face of said member at the point of union between said thicker and thinner parts thereof, said thinner part being transversely recessed at said shoulder to increase the depth of the shoulder, the rear wall of said recess forming an incline, said base

member having lateral projections at its upper end, a clasp member pivoted to the upper portion of said base member and having a spring-pressed portion above said pivot to normally hold the clasp member pressed against the front face of the base member, the upper portion of said clasp member being as much thicker than the lower portion thereof, as the lower portion of the base member is thicker than its upper portion, whereby the inner faces of the base and clasp members meet in flat engagement with each other and the outer faces of these two members are parallel, an incline on the inner face of said clasp uniting the thicker and the thinner portions thereof, said incline being similar to and opposite the incline formed by the side of the transverse recess of the base member, the top sides or edges of the two inclines being coincident, and a buckle or loop received upon said shoulder near the lower end of said base member, the front face of said loop being flush with the inner face of the thin portion at the lower end of the clasp, and the sides of said loop extending outwardly about equidistant with the lateral projections at the upper end of the base member.

4. A safety-buckle for riding-saddles comprising a base member secured to the saddle, the rear side of said member being in flat engagement with the saddle and provided with a vertical recess extending downwardly from the top of said base member, a flat spring secured in said recess with its upper end free, the outer face of said spring being flush with the rear face of said base-piece, a transverse upwardly-facing shoulder on the outer face of said base member, near the lower end thereof, said shoulder being formed in part by making the lower end of said member thicker than the upper portion thereof, said member having a transverse inclined recess at the rear side of said shoulder the lower side of said recess being the deepest part thereof and coinciding with the face of said shoulder to double the width thereof, said shoulder being concaved on its face, a buckle or loop received upon said concaved shoulder, the front face of said loop being flush with the front face of the lower thickened portion of the base member, a clasp member pivoted to the upper portion of said base member and having a portion above said pivot pressed by said spring to normally hold the clasp member pressed against the front face of the base member, the upper portion of said clasp member being as much thicker than the lower portion thereof as the lower portion of the base member is thicker than its upper portion, whereby the inner faces of the base and clasp members meet in flat engagement with each other, and the outer faces of these two members are parallel, and an incline on the inner face of said clasp uniting the thicker and the thinner portions thereof, said incline being similar to and opposite the incline formed by the side of the transverse recess of the base member, the top sides or edges of the two inclines being coincident.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

ANTON ENGLERTH.
HENRY SCHUETT.

Witnesses:
FLORA V. SPENCER,
CHRIS JOHANSON.