

No. 647,215.

P. BRODIE & R. P. BLAKE.
SADDLE FOR BICYCLES.

Patented Apr. 10, 1900.

(Application filed Dec. 4, 1899.)

(No Model.)

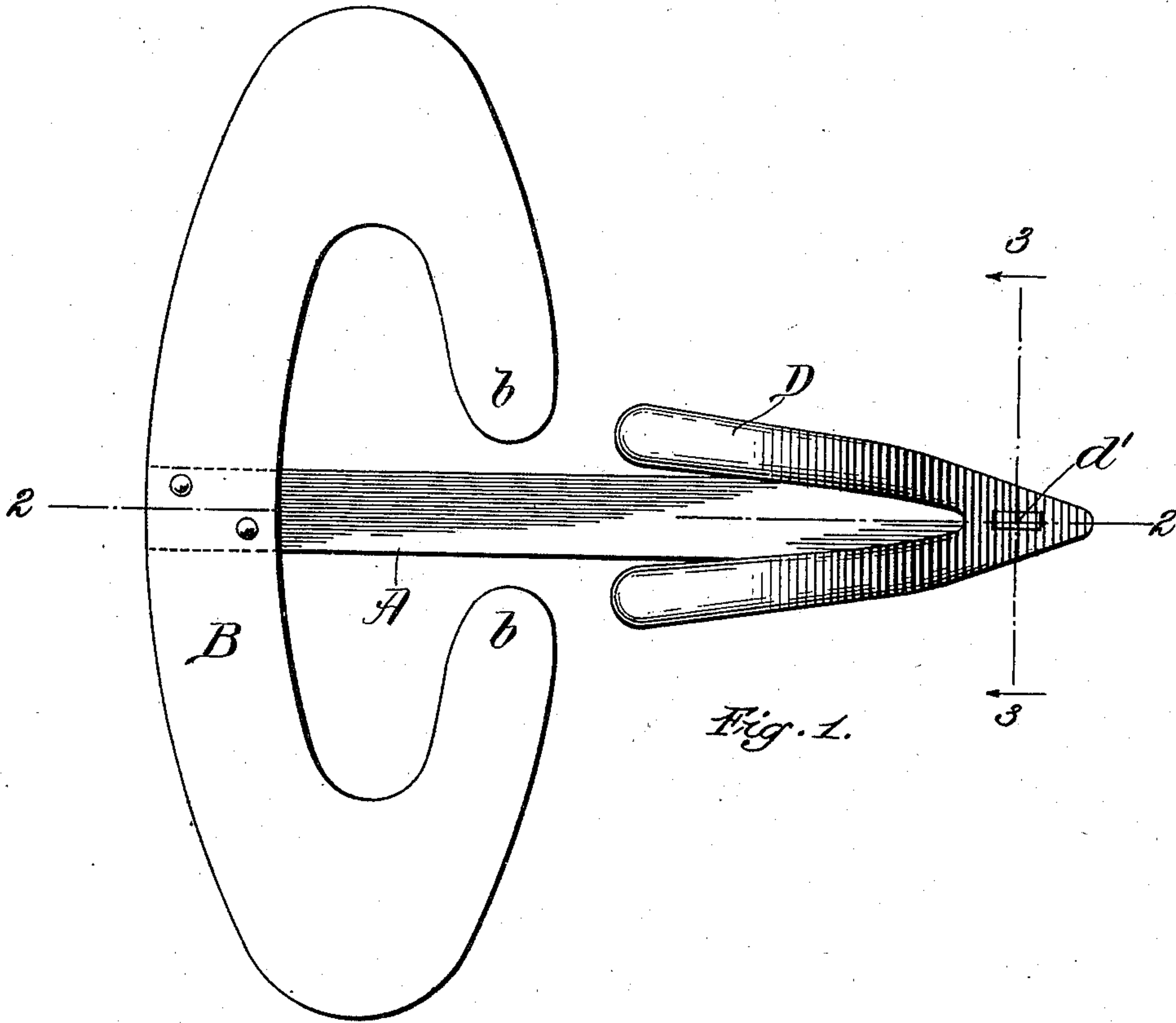


Fig. 1.

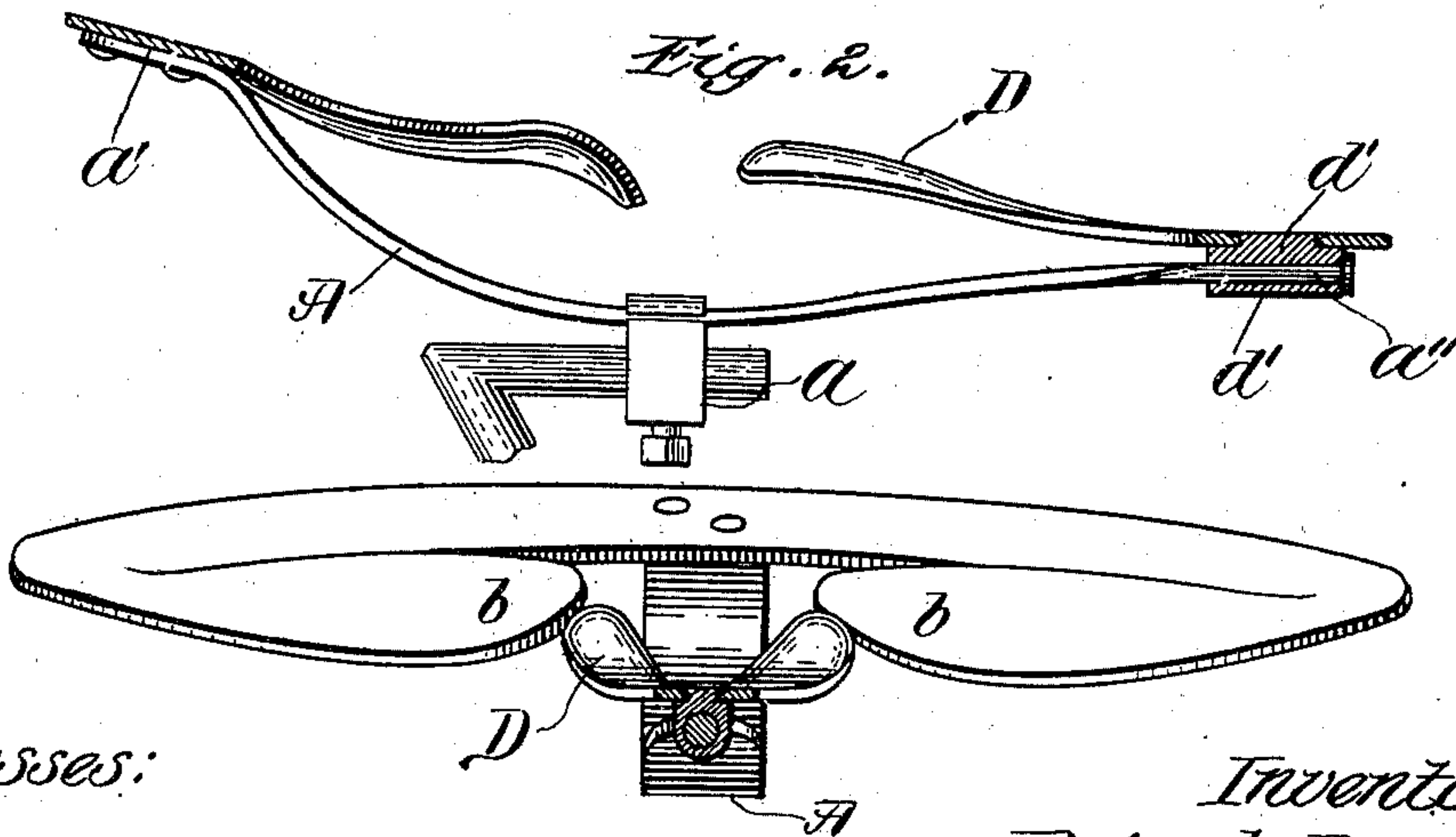


Fig. 2.

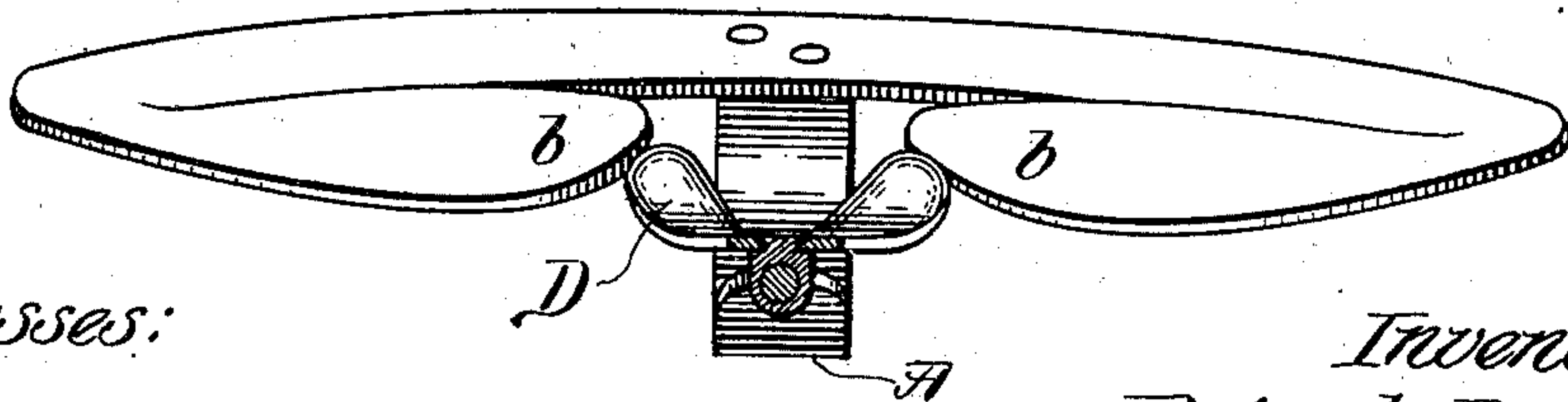


Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

PATRICK BRODIE AND ROBERT P. BLAKE, OF BOSTON, MASSACHUSETTS.

SADDLE FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 647,215, dated April 10, 1900.

Application filed December 4, 1899. Serial No. 739,081. (No model.)

To all whom it may concern:

Be it known that we, PATRICK BRODIE and ROBERT P. BLAKE, of Boston, Suffolk county, Massachusetts, have invented a new and useful Improved Saddle for Bicycles and the Like, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of our saddle, and Fig. 2 is a sectional elevation on line 2 2 of Fig. 1. Fig. 3 is a section on line 3 3 of Fig. 1 looking in the direction of the arrow.

The object of our invention is to provide a seat in which no pressure will be possible upon any portion of the rider's person where such pressure is undesirable either for reasons of comfort or health, and to this end we provide a saddle made up of two separate portions mounted upon the supporting-spring independently of each other and each performing distinct functions.

In the drawings the supporting-spring, which serves not only as a spring to give elasticity to the saddle and to take up and neutralize the jars passed from the roadway through the wheels, but also to support and maintain the two parts of the saddle in their operative relations, is marked A. The spring A is secured to the vehicle in the ordinary well-known manner, as is indicated in Fig. 2, by a clamp *a*, connecting the spring with the saddle-post of a bicycle. The spring A can be moved longitudinally through the clamp in the well-known way, and by reason of its curve the saddle may be tilted to the required angle.

Fast to the rear end *a'* of the spring A is a metallic frame B of substantially the shape shown in the drawings—that is to say, a narrow plate secured upon the rear end of the spring, at right angles thereto, and curving forward until the two horns or ends *b* of the frame are opposed to one another at a distance of about an inch and a half. The edges of the horns *b* are rolled over slightly in order to form an easier seat, and it will be obvious that the entire frame being fast only at the back will have its full elasticity and resilience, depending as to this upon the nature and temper of the metal of which the frame is formed.

The dimensions of the central aperture of the frame B are an important part of our de-

vice, for it is our design to support the weight of the rider not upon the tuberosities of the ischii—that is to say, the bony projections—but to allow these to be carried over the aperture, while the frame B, suitably upholstered, if desired, shall receive and sustain the load, thus giving a greatly-extended bearing-surface and doing away correspondingly with the saddle soreness which follows the concentration of weight and shock upon a relatively-small surface.

We have found in practice that a suitable size for the central aperture is about six inches in length by two and one-half inches in width, the width being the dimension which corresponds with the length of the bicycle; but it is obvious that these dimensions will and may be varied to suit the individual for whom the saddle is intended. Thus, for example, the dimensions would be considerably less in the case of a saddle intended for a child.

To the forward end of the spring A is pivoted neck D, which projects backward toward the main part of the saddle and is designed to serve the purposes of similar parts in other saddles—that is to say, to give the rider a hold against being thrown off sidewise. The form and mechanical connection and organization of parts of this neck D, so far as we are aware, are absolutely new with us. Its salient peculiarities are three in number—first, it is wider than is customary and is forked; second, it is supported from its front end, that end projecting toward the main body of the saddle being unsupported and unconnected directly with the body of the saddle, and, third, it is so connected to the forward end of the spring A by means of a pivot as to be capable of such axial movement as is desired. The pivot-pin is marked *a''* and the clasping part *d'*. This neck D is preferably so formed as to slope from the rear end toward the front, as shown in Fig. 2, so that in case the rider slips or is thrown forward there is no possibility of injurious contact between the neck and the person of the rider.

The mode of operation is as follows: The rider is seated centrally over the aperture of the saddle proper formed by plate B, the tuberosities of the ischii or bony projections being unsupported—that is to say, resting within the oval aperture formed by the plate B. It

will be observed that the space between the horns *b b* is sufficient to remove any danger of pressure upon delicate organs, while the length of plate B from point *b* to the point of
5 attachment to the spring A is such that the horns *b b* will yield and spring beneath the leg of the rider as the legs are moved. It will be obvious, too, that the forking of neck D, leaving an open space, taken in connection
10 with the fact that an open space is left between the rear end of the neck and the horns *b b* will insure that no injurious pressure will result even if the rider should slip forward, while the pivoting of the neck allows the neck
15 to adjust itself to the action of the rider.

What we claim is---

In a saddle the combination of a supporting-spring; frame-plate B secured at the rear end of said spring and curving around to the points *b b* suitably separated from each other, 20 and a forked neck D mounted upon the supporting-spring at its forward end and projecting backward to cooperate with the seat part of the saddle, substantially as described.

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Witnesses:

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