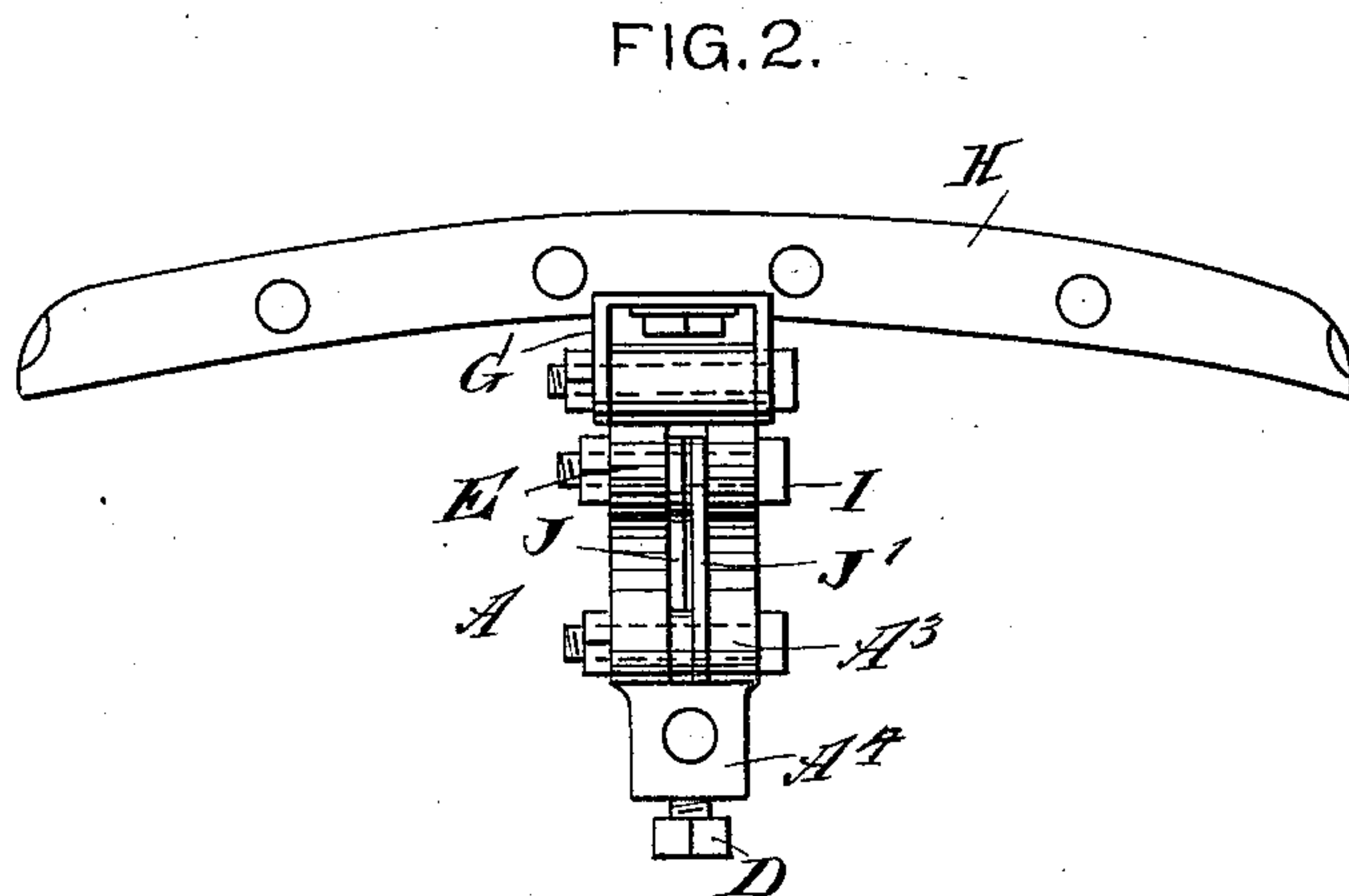
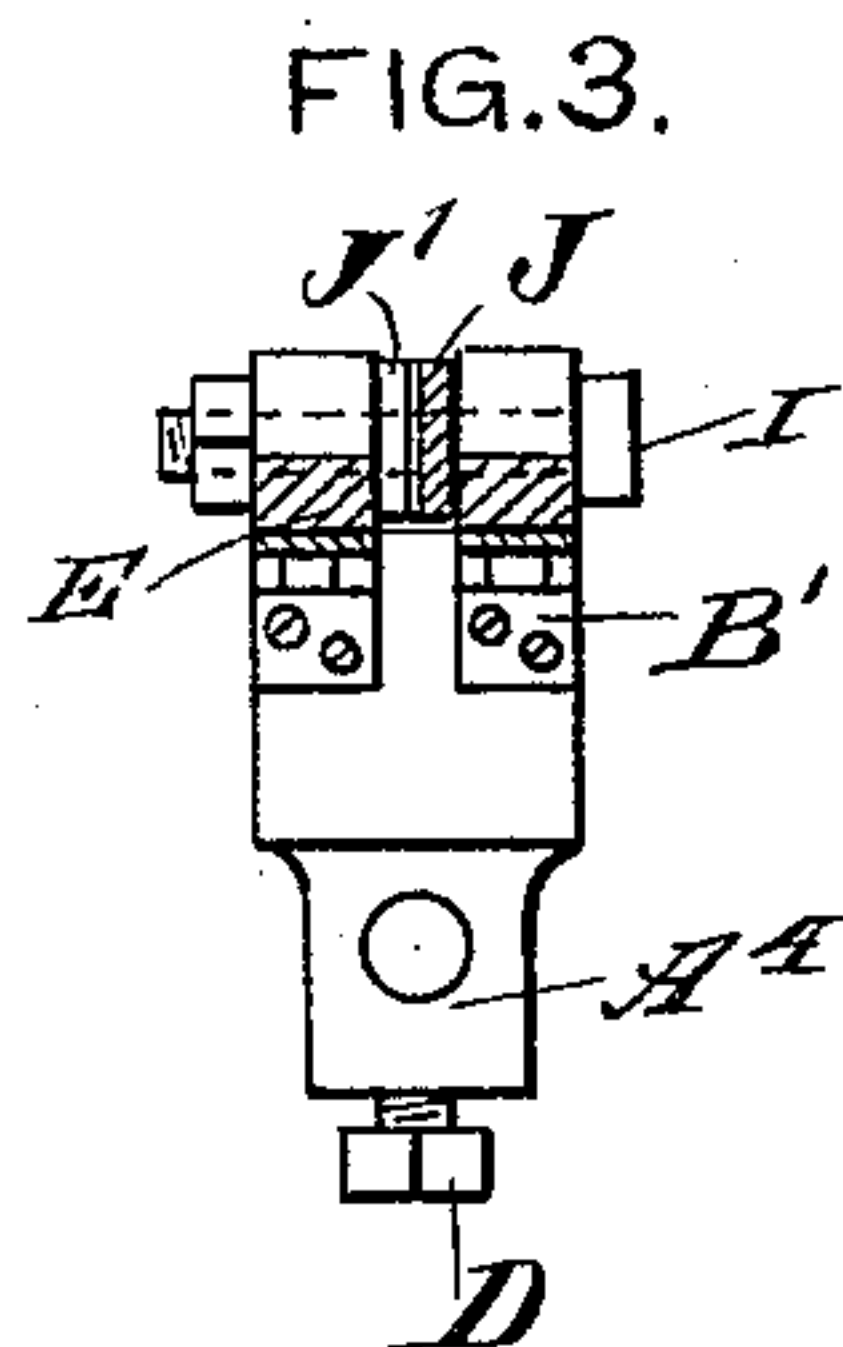
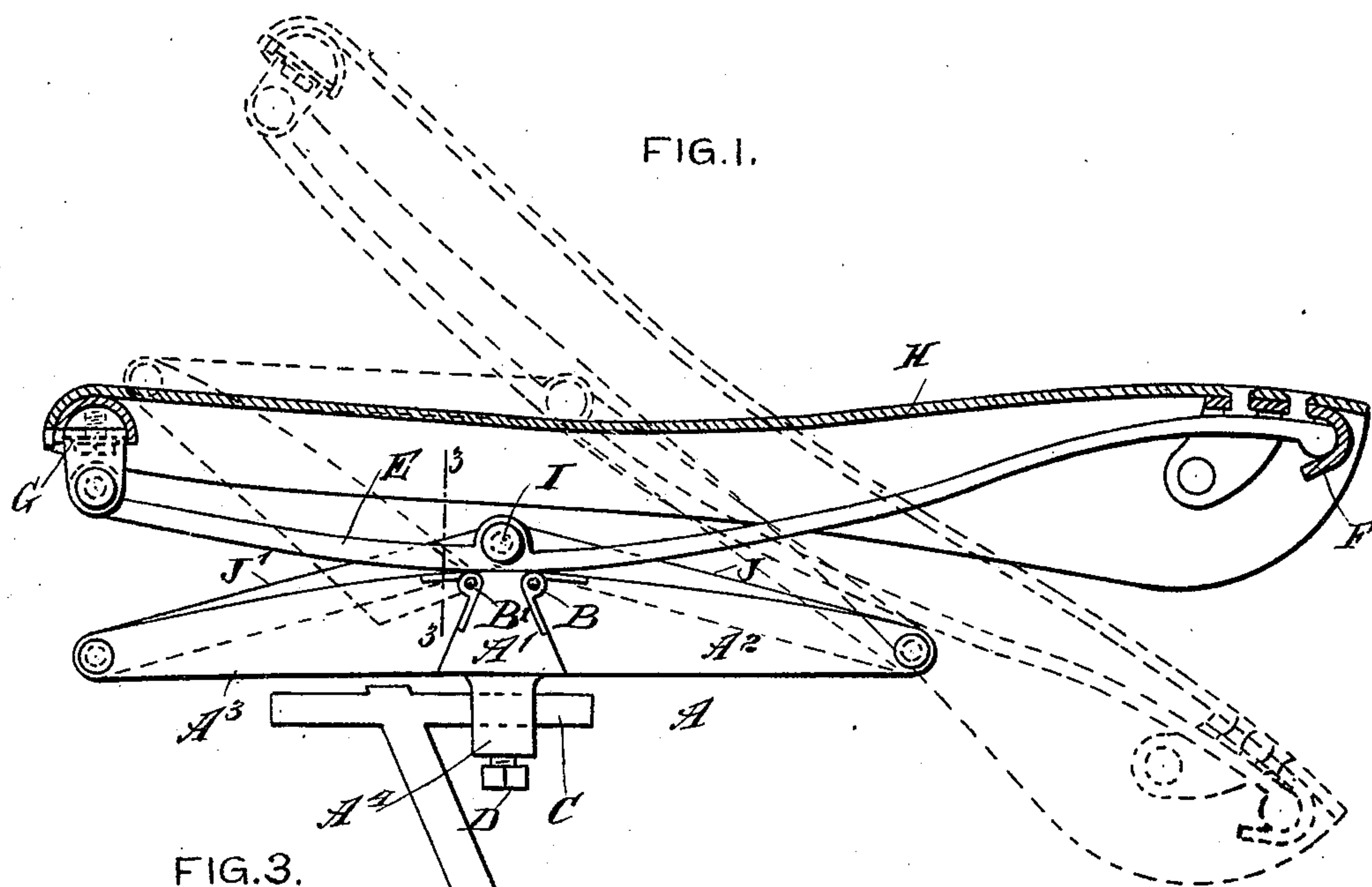


(No Model.)

J. S. BYRNES.  
ROCKER.

No. 584,984.

Patented June 22, 1897.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOSEPH S. BYRNES, OF BROOKLYN, NEW YORK, ASSIGNOR TO HIMSELF AND  
EDMUND P. MARTIN, JR., OF SAME PLACE.

## ROCKER.

SPECIFICATION forming part of Letters Patent No. 584,984, dated June 22, 1897.

Application filed December 4, 1896. Serial No. 614,465. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH S. BYRNES, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Rocker, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved rocker which is simple and durable in construction and designed for use on chairs, bicycle-saddles, and the like to insure an easy rocking motion of the person seated on the chair or saddle.

The invention consists principally of a base having a curved top and made in hinged sections and a rail curved in an opposite direction to the top of the base and adapted to ride thereon.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the 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 side elevation of the improvement arranged as a bicycle-saddle, the seat of the latter being in section. Fig. 2 is an end view of the same, and Fig. 3 is a transverse section of the same on the line 3 3 of Fig. 1.

The improved rocker is provided with a base A, made in sections A' A<sup>2</sup> A<sup>3</sup>, of which the section A<sup>2</sup> is connected by a hinge B to the middle or fixed section A', and the other section A<sup>3</sup> is similarly connected by a hinge B' to the section A', but on the opposite side to which the section A<sup>2</sup> is hinged. The sides of the section A' are beveled, and the sides of the sections A<sup>2</sup> and A<sup>3</sup> adjacent to the sides of the section A' are correspondingly beveled, so as to seat themselves on the section A', whereby the base when in a normal position, as shown in Fig. 1, extends straight on the under side, with the sections A<sup>2</sup> and A<sup>3</sup> resting on the section A'.

On the under side of the fixed section A' is formed an apertured lug A<sup>4</sup>, adapted to engage the bicycle-saddle post C, a screw D serving to fasten the lug in place on the said saddle-post C.

The upper surface of the base A is convex,

and on said base is adapted to ride the under surface of a rail E, curved in an opposite direction to the top surface of the base A, as is plainly shown in the drawings. The forward end of the rail E is pivotally connected with the pommel F of the saddle, and the rear end of the said rail is similarly connected with the cantle G of the saddle, the pommel and cantle being connected by the usual seat H, made of leather or other material.

On the rail E, directly above the fixed section A' of the base, is arranged a transversely-extending pivot I, pivotally connected by links J and J' with the outer ends of the sections A<sup>2</sup> and A<sup>3</sup>, respectively, the said links extending through longitudinal slots in the sections A<sup>2</sup> and A<sup>3</sup>.

Now it is evident that when the device is used as a bicycle-saddle, for instance, as indicated in Fig. 1, then the rail E is free to rock longitudinally on the top surface of the base A, and in rocking forward, for instance down the top surface of the front section A<sup>2</sup>, the said rail draws the rear section A<sup>3</sup> upward by the link J', the said section swinging from the hinge B'. In a like manner, when the rail E rocks rearwardly down the top surface of the rear section A<sup>3</sup>, then the front section A<sup>2</sup> is caused to swing upward by the action of the link J.

It is evident that the rail E is always permanently connected with the base A by the use of the links J and J' and the hinged sections A<sup>2</sup> and A<sup>3</sup>, so that the rail is not liable to move off the base, and at the same time the saddle proper is free to rock forward and backward according to the motion of the body of the rider seated on the seat H. The rail is preferably made of spring metal, so that it readily yields to the weight on the seat H and the jars incident to the bicycle passing over rough roads, and at the same time the rail and seat H readily follow the movement of the rider's body by the rail rocking upon the base A, as previously explained.

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

1. The combination of a base composed of three sections the intermediate of which has

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- means by which it may be secured to a support and the end sections of which are respectively pivoted to opposite sides of the intermediate section, each end section having a slot running longitudinally through it, a link located in each slot, the outer ends of the links being respectively pivoted to the end sections of the base at the outer ends thereof, and the inner ends of the links being aligned with each other, and a rail running longitudinally with the base and bearing on the upper side of the same, the rail and the inner ends of the links being pivotally joined to each other on a common axis, substantially as described.
2. The combination of a base having three sections the intermediate of which is provided with means for securing it to a support and the end sections of which have their inner ends respectively pivoted to opposite sides of the intermediate section, a link pivoted to each outer end of the end sections of the base, the links respectively extending inwardly and having their inner ends located over the intermediate section of the base, and a rail bearing on the upper side of the base, the rail and the inner ends of the links being joined to each other on a common axis, substantially as described.
3. The combination of a base having a curved upper side and formed of three sections the intermediate of which is adapted to be secured to a support and the end sections

of which are respectively pivoted to opposite sides of the intermediate section, the interengaging faces of the sections being plane so as to limit the movement of the sections in one direction, a link pivoted to each end section, and a rail rocking on the base and joined to the inner ends of the links by a pivot common to the links and to the rail, substantially as described.

4. The combination of a base having three sections the intermediate of which has an orificed lug projecting downwardly therefrom whereby the section may be secured to a stationary support, the end sections being respectively pivoted to opposite sides of the intermediate section and the interengaging faces of the sections being plane so that the movement of the sections in one direction may be limited, each end section having a slot running longitudinally through it, a link located in each slot of the end sections, the outer end of each link being pivoted to the outer end of each end section, the links extending inwardly to a point over the intermediate section, and a rail rocking on the base, the rail and the inner ends of the links having pivotal connection on a common axis, substantially as described.

JOSEPH S. BYRNES.

Witnesses:

THEO. G. HOSTER,  
A. A. HOPKINS.