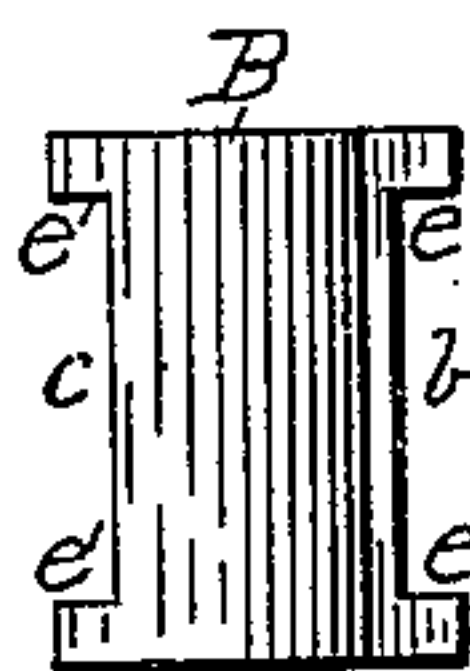
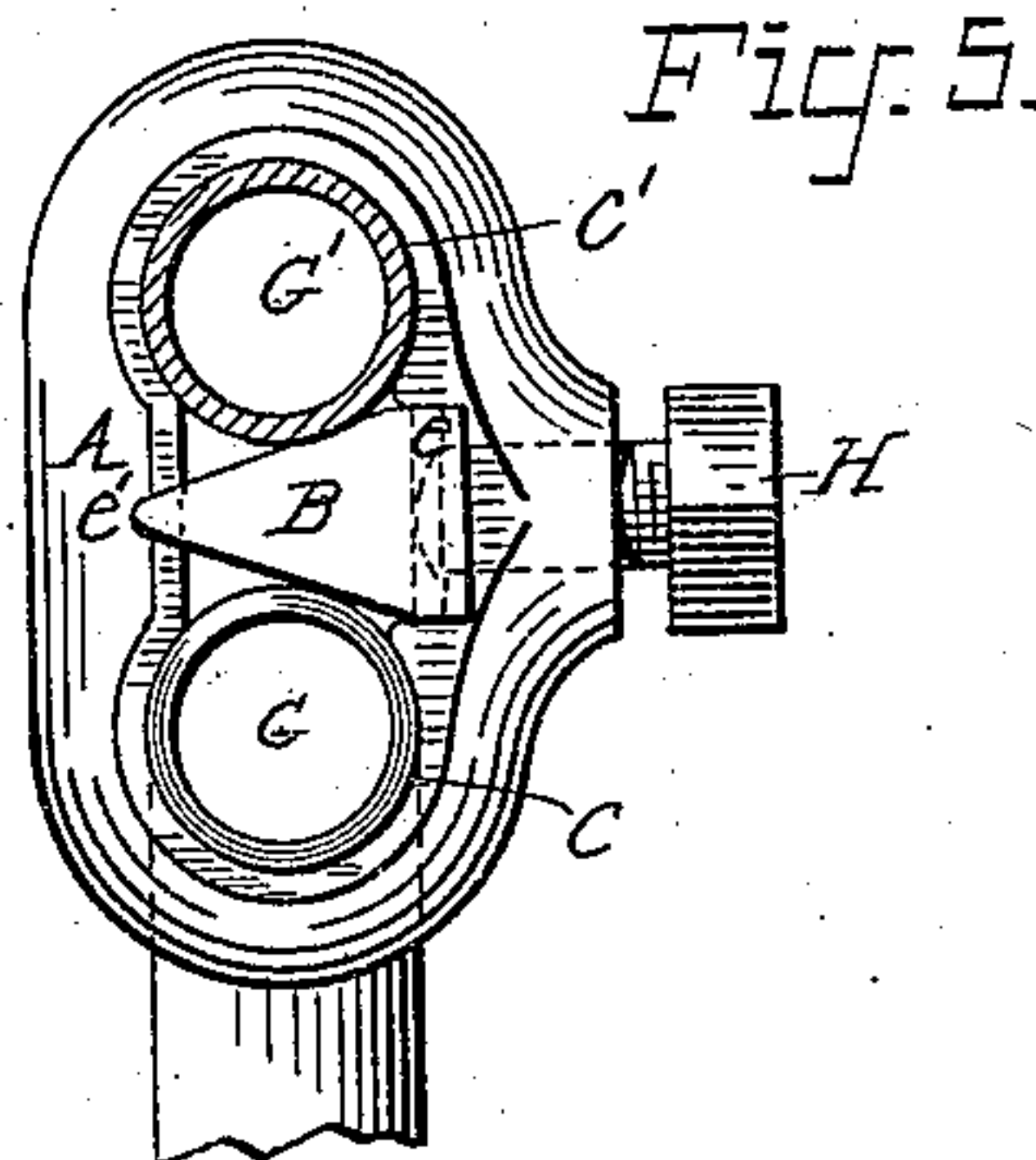
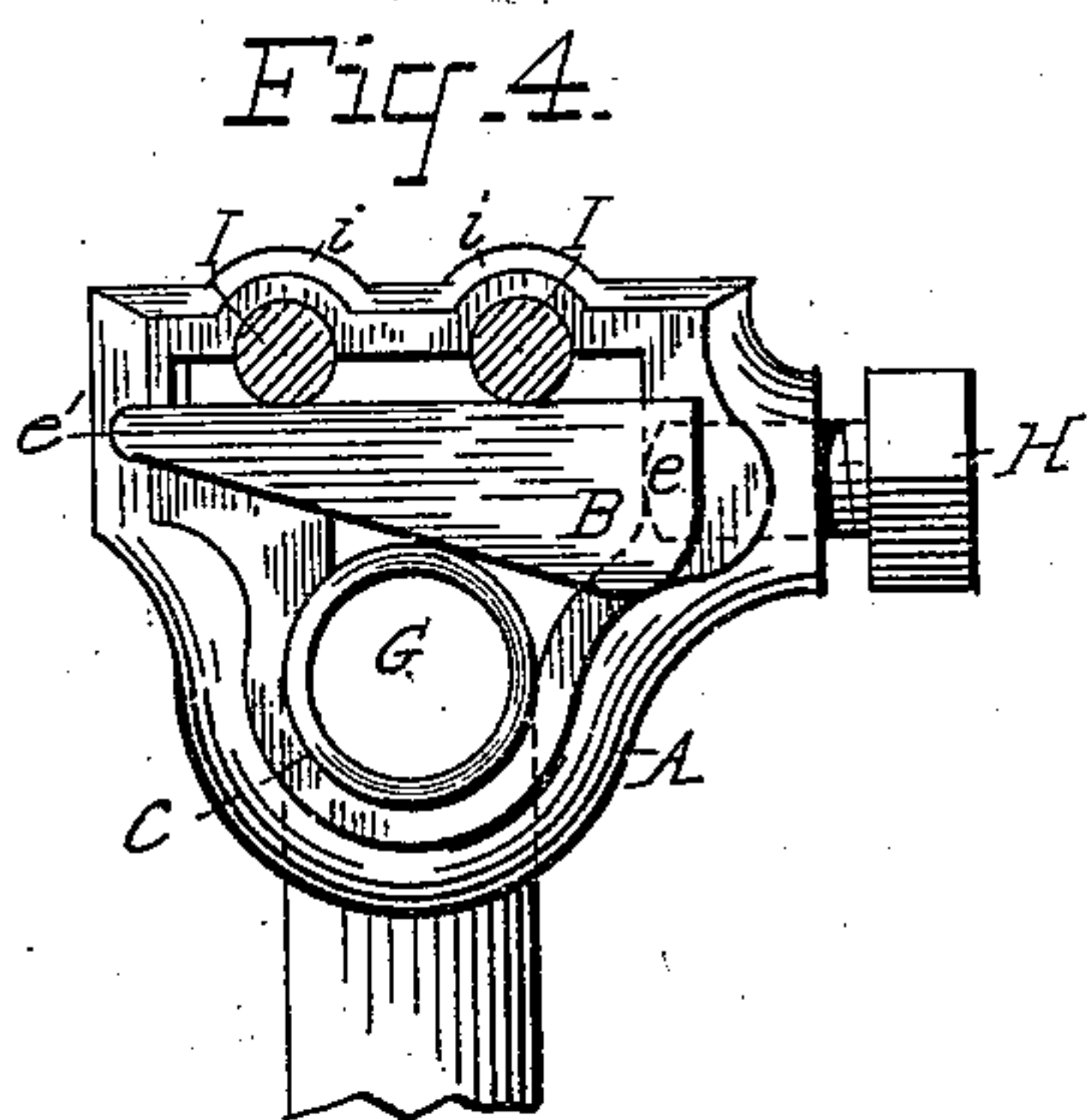
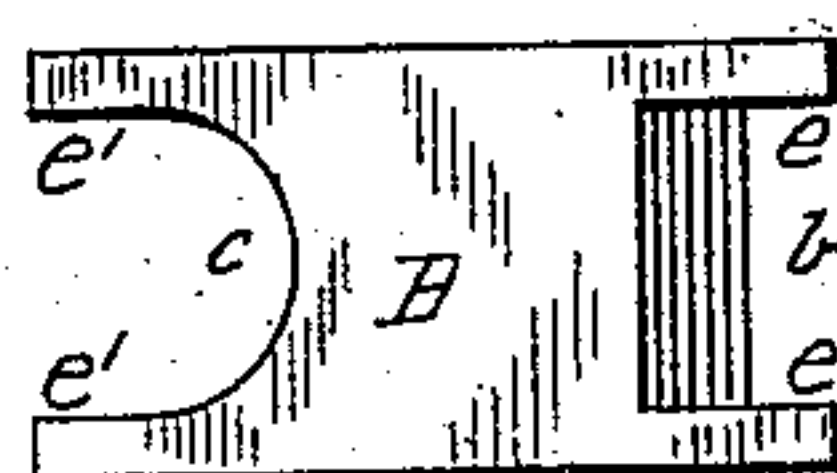
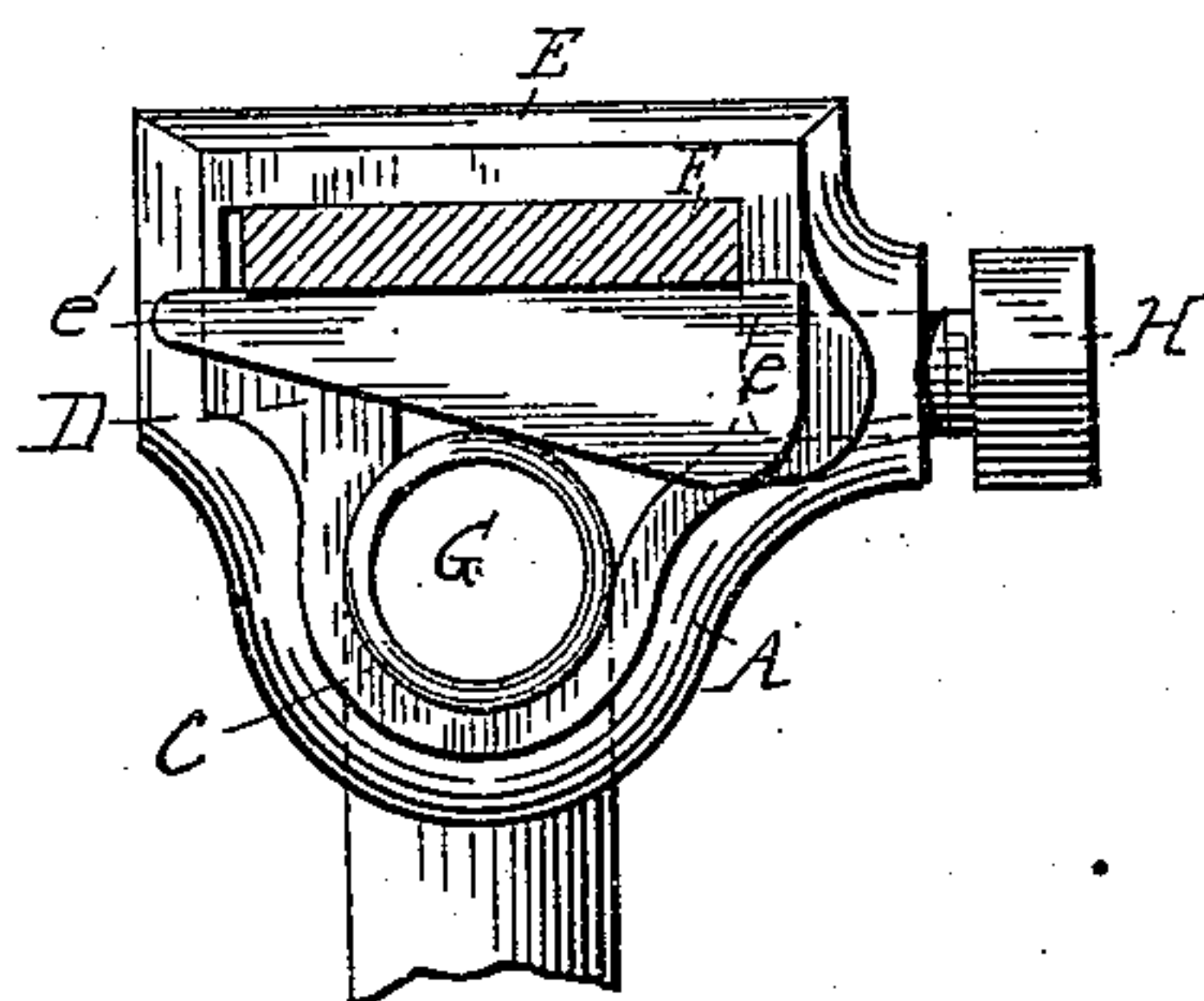
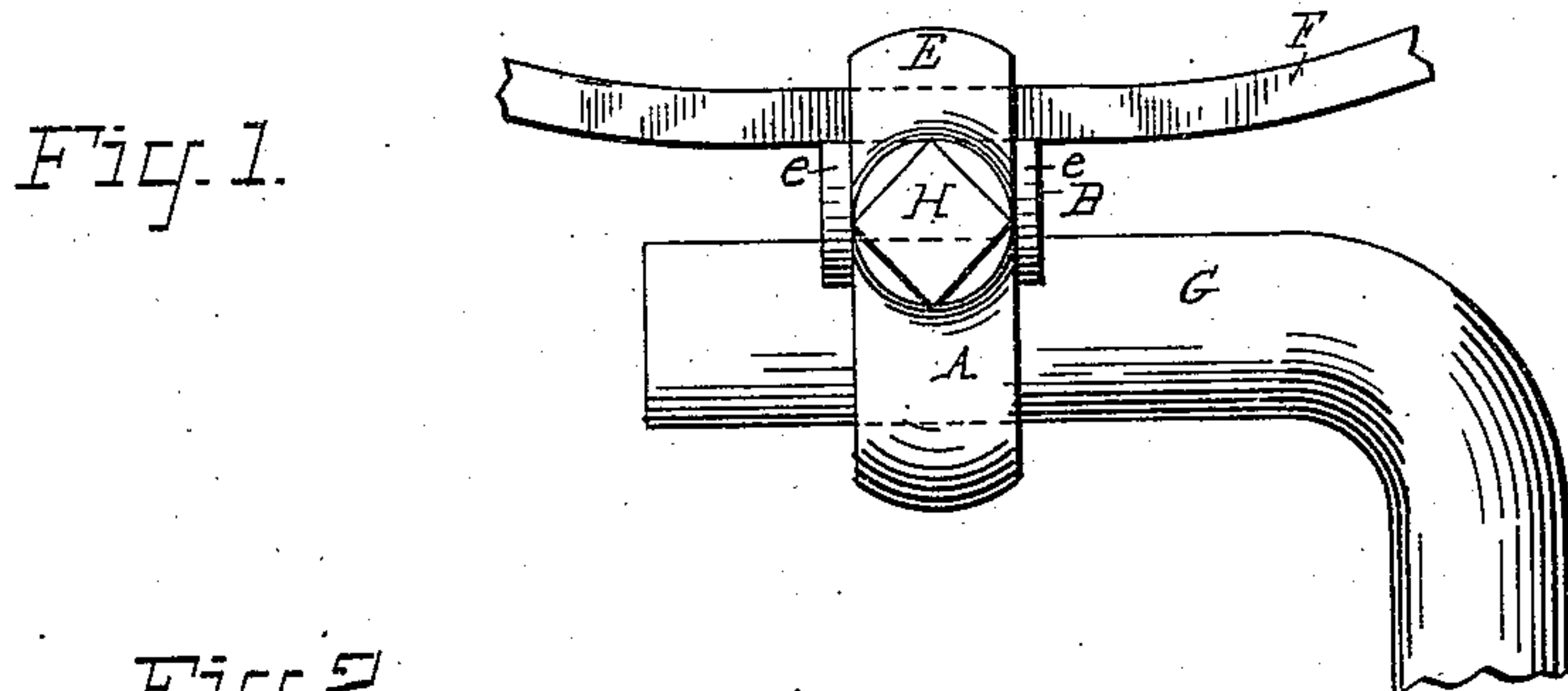


(No Model.)

E. WARD.  
SADDLE CLIP FOR BICYCLES.

No. 551,016.

Patented Dec. 10, 1895.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EUGENE WARD, OF NEWARK, NEW JERSEY.

## SADDLE-CLIP FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 551,016, dated December 10, 1895.

Application filed June 28, 1895. Serial No. 554,309. (No model.)

*To all whom it may concern:*

Be it known that I, EUGENE WARD, a citizen of the United States, residing at the city of Newark, Essex county, New Jersey, have invented certain new and useful Improvements in Saddle-Clips for Bicycles and Similar Vehicles, of which the following is a specification.

My invention relates to a clip which is used to secure the spring of the saddle to its supporting L-post; and it consists in the peculiar construction of the clip, as hereinafter more fully described.

In the drawings, Figure 1 is a side elevation of my clip with a section of spring and of the L-post. Fig. 2 is a front view of the same. Fig. 3 is a bottom view of the key-wedge. Fig. 4 is a modification of the clip for holding a wire spring instead of a flat spring. Fig. 5 shows a modification wherein a rod is substituted for the saddle-spring, and Fig. 6 is a top view of the key-wedge shown in Fig. 5.

Similar letters designate similar parts in all the figures.

A is the body of the clip, which is formed or cast in a single piece, and is provided beneath its crown E with a suitable seat for the spring F, and is also provided with a seat C for the L-post G. A key-wedge B is provided with arms *e e* and *e' e'* and is inserted in the clip A between the spring E and the L-post G, the recesses *b* and *c* in its ends allowing it to be adjusted from side to side of the clip. The set-screw H passes through the clip A and bears with its end against the back of the key-wedge B, the forward end of which is supported by the inclined bearing D of the clip A, and by tightening the set-screw the key-wedge will be driven tightly between the spring and the L-post, firmly locking them in place. By placing the set-screw at the side of the clip and between the L-post and spring I save the space that it would occupy if placed below the L-post and am able to set the saddle lower upon the bicycle. The set-screw is also more conveniently accessible and the clip can be more readily adjusted as desired. In my clip, also, I provide carefully-fitted seats, of the whole thickness of the clip, for the spring and L-post, and clamp them

firmly in these seats by filling the intermediate space with the key-wedge B, which bears evenly with its entire width against their opposing faces, thus exerting its force within the side lines of the clip and giving a direct and positive grip upon the spring and L-post over the whole length of their seats. This insures the holding of the spring and L-post with great steadiness in their seats and with much less pressure and strain on the clip than is possible where the point of the set-screw is made to bear directly against one part, as the L-post, transmitting its force through that against the spring. It also avoids the tendency to bend or warp the L-post or the spring, which tendency is exerted by clips wherein the seats do not afford continuous support in the direct line of the clamping pressure. Such clips have a constant tendency to distort and strain the spring and L-post, requiring increased strength and weight of metal to resist such tendency; and in my construction the strain upon the clip is more evenly distributed and the pressure upon the thread of the set-screw is greatly reduced.

The bearing D is inclined at an angle which, if extended, would coincide with the crown of the L-post G. The lower side of the key-wedge B, therefore, rests evenly upon the L-post and the bearing D, and the key-wedge when pressed home is raised through its entire length uniformly against the lower side of the spring. Any tendency of the key-wedge to rock, and thereby grip one edge of the spring more firmly than the other, is thus overcome, and the arms *e e e' e'*, embracing the sides of the clip, prevent the lateral displacement of the key-wedge.

In Fig. 4 I have shown a modification of my clip wherein the crown of the clip is provided with recessed seats *i i* to receive a wire spring I I instead of the flat spring F, and in Figs. 5 and 6 I have shown a further modification wherein the upper half of the clip is a duplication of the lower half, its seat C' corresponding with the lower seat C and being adapted to hold a saddle-rod G'. I have spoken of the saddle as being supported upon a spring; but it is obvious that the operation of the clip will be the same whether it is used with a rigid support or with a spring.



Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination, in a saddle clip, of a  
5 body or casting provided with a saddle-support seat and an L post seat, with a key-wedge adapted to be inserted between said seats, to lock the saddle-support and L post therein, substantially as described.
- 10 2. The combination, in a saddle clip, of a body or casting provided with a saddle-support seat, an L post seat, and an inclined key-wedge bearing, with a key-wedge adapted to be inserted between said seats, bearing with  
15 its forward end upon the inclined bearing of the clip body, to lock the saddle-support and L post in place, substantially as described.
3. The combination, in a saddle-clip, of a body or casting, provided with a saddle-sup-  
20 port seat, an L post seat and an inclined key-wedge bearing, with a key-wedge, provided with arms to embrace the sides of the clip, and adapted to be inserted between the saddle-support and L post to lock them in their  
25 respective seats, substantially as described.
4. The combination, in a saddle-clip, of a body or casting, provided with a saddle-sup-

port seat, an L post seat and an inclined key-wedge bearing, a key-wedge, provided with arms to embrace the sides of the clip and  
30 adapted to be inserted between the saddle-support and L post, to lock them in place, and a set screw to press said key-wedge into place, substantially as described.

5. The combination, in a saddle clip, of a  
35 body or casting, provided with a saddle-support seat in its upper portion, an L post seat in its lower portion, a set screw inserted through the side of said clip between said seats, a key-wedge, entering horizontally be-  
40 tween the saddle-support and L post, to lock them in place, and being driven home by said set screw, substantially as described.

6. The combination in a saddle-clip of a  
45 body or casting provided with a saddle-support seat and an inclined key-wedge bearing, a key-wedge entering between said saddle-support seat and key-wedge bearing to lock the saddle-support in its said seat, and means for attaching said clip to the L-post.

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Witnesses:

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