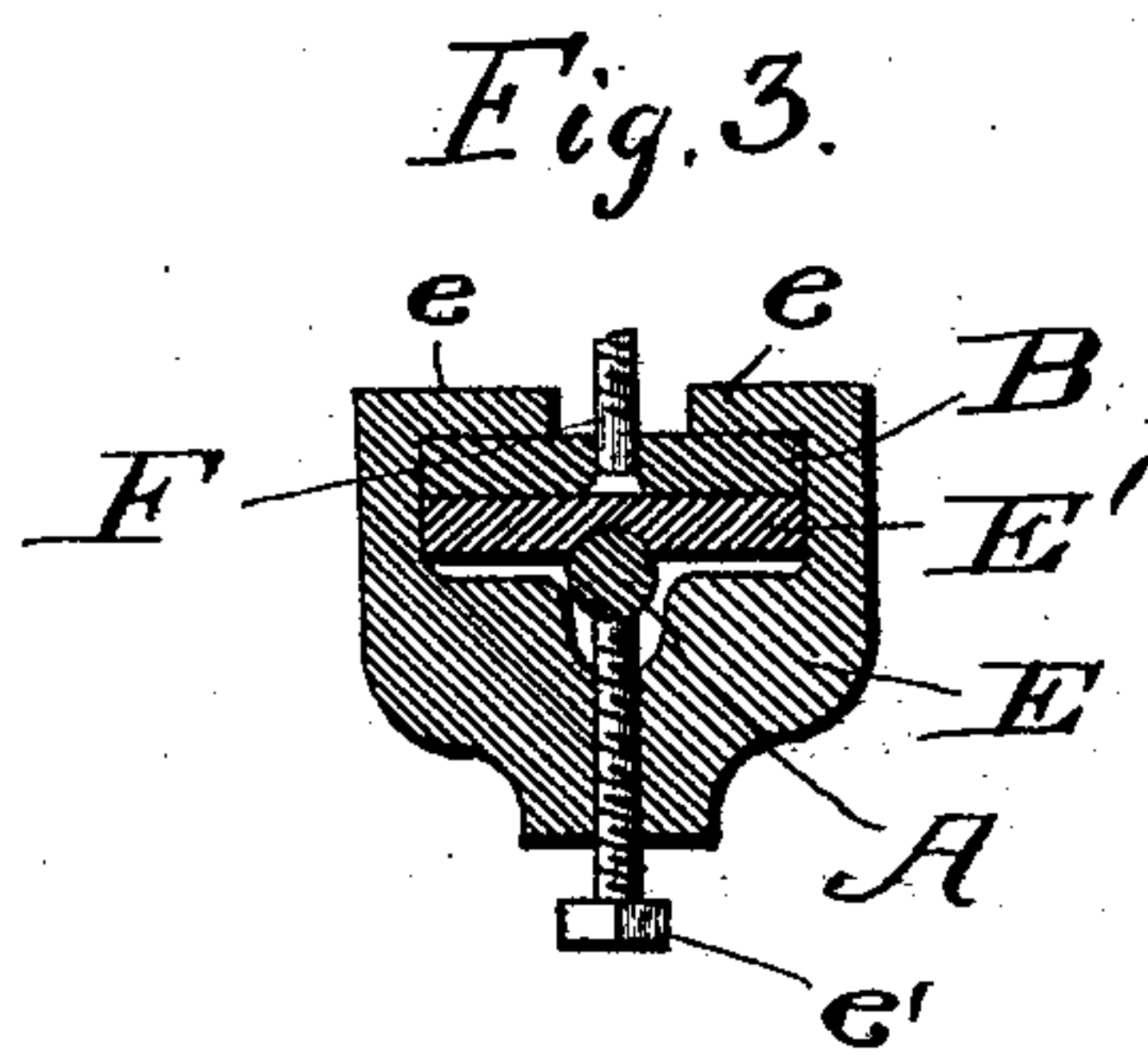
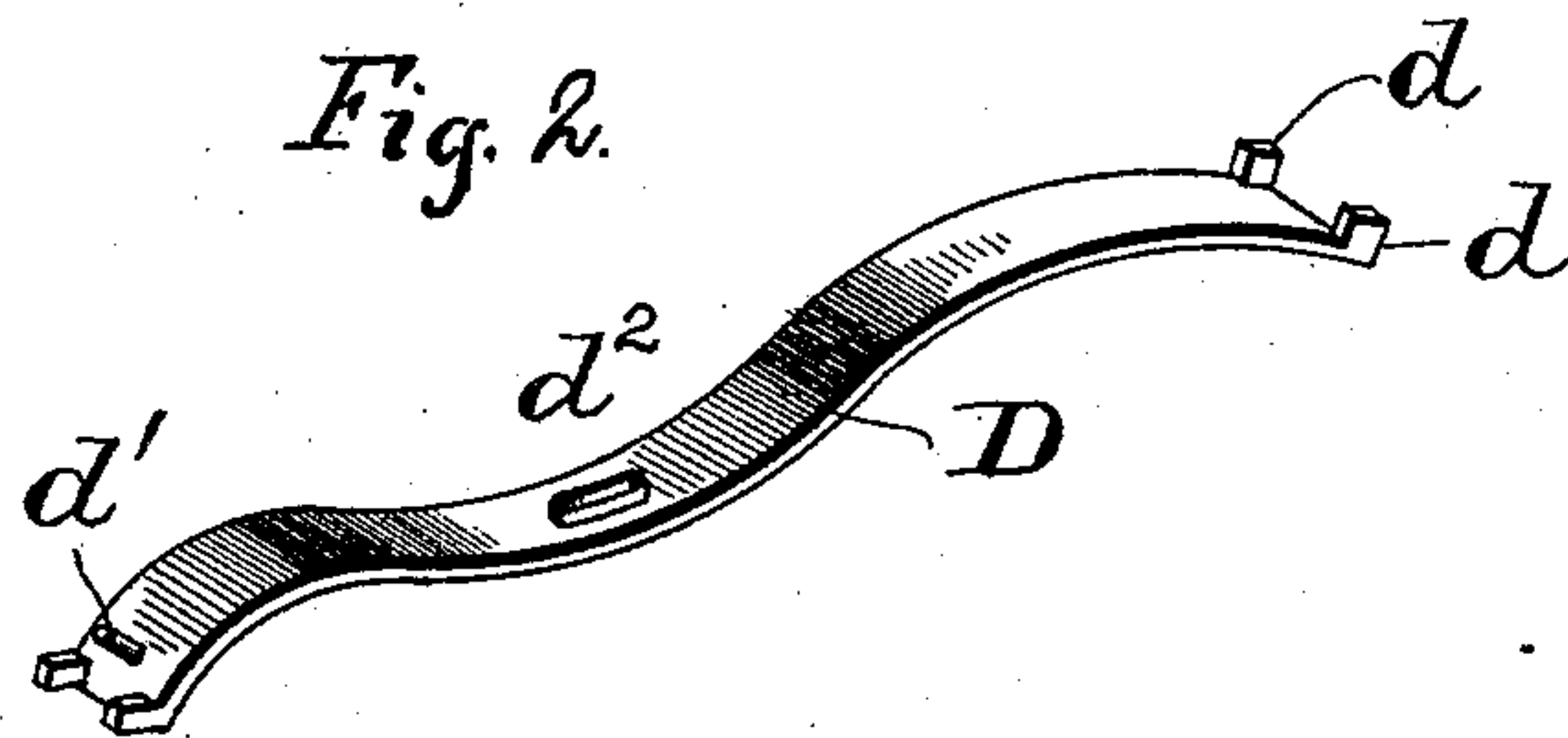
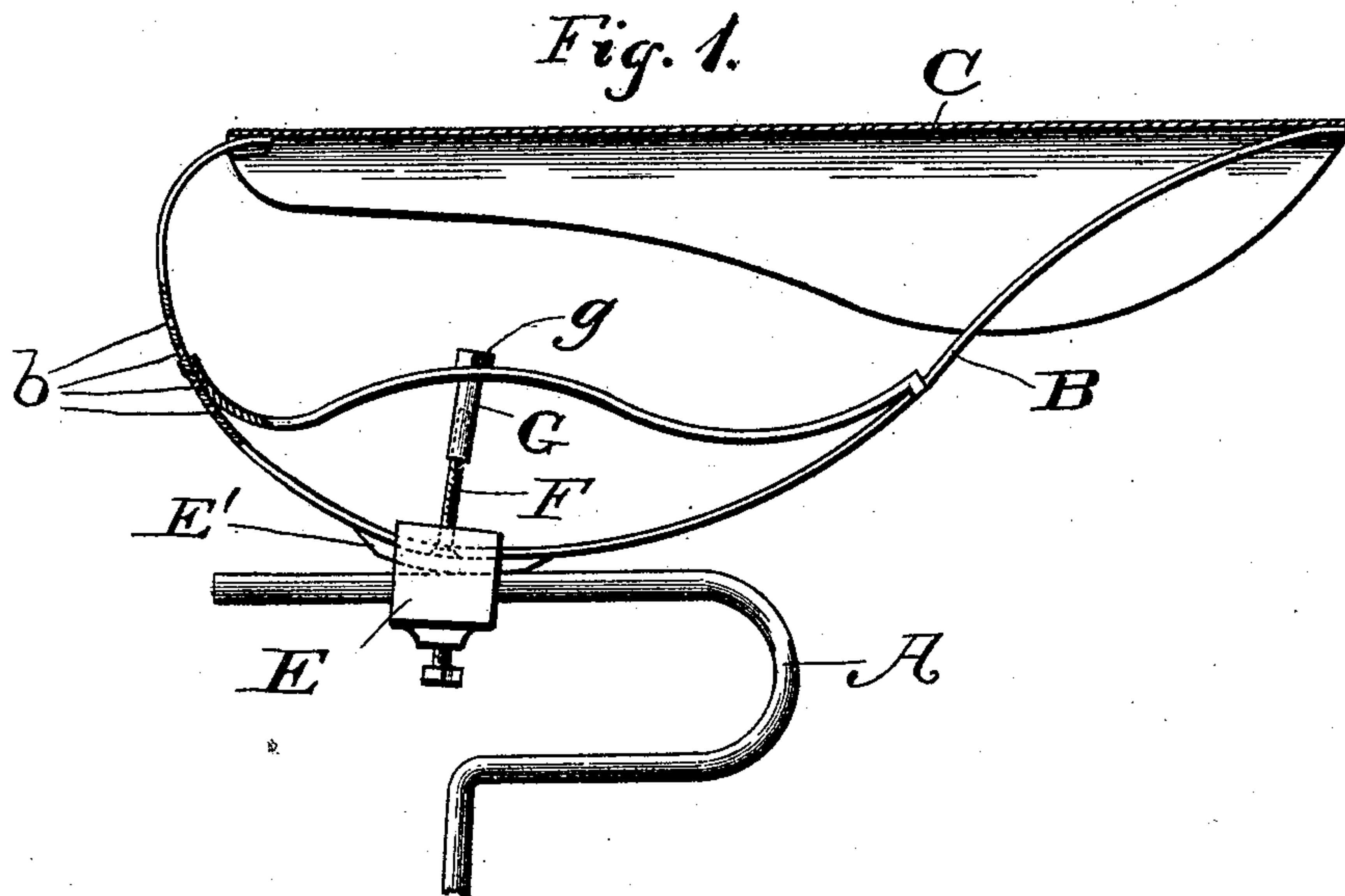


(No Model.)

H. McDONALD.
BICYCLE SADDLE.

No. 498,136.

Patented May 23, 1893.



Witnesses

Chas. F. Schmitt.
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UNITED STATES PATENT OFFICE.

HUGH McDONALD, OF WILLIAMSPORT, PENNSYLVANIA.

BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 498,136, dated May 23, 1893.

Application filed December 5, 1892, Serial No. 454,157. (No model.)

To all whom it may concern:

Be it known that I, HUGH McDONALD, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Bicycle-Saddles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in bicycle saddles and consists in the novel features hereinafter fully described, reference being had to the accompanying drawings which illustrate one form in which I have contemplated embodying my invention and said invention is fully disclosed in the following description and claims.

Referring to the said drawings Figure 1 represents a sectional view of my improved saddle, parts being shown in elevation. Fig. 2 is a detail perspective view of the tension bar, and Fig. 3 is a sectional view of the clip for attaching the saddle to the saddle support.

In the drawings A represents the saddle support secured to the machine frame in any desired way.

B is the main supporting spring of the saddle which I term the saddle spring.

C is the seat portion of the saddle made and attached to the ends of the saddle spring in the usual manner. The front portion of the saddle spring adjacent to the pommel of the saddle is provided with a series of apertures or recesses *b* as shown in Fig. 1.

D represents a tension bar composed preferably of spring material and formed as shown having the end which engages the forward portion of the spring B provided with a pin or stud *d'* for engaging one of the apertures *b* of the spring, as shown in Fig. 1. The opposite end of the tension bar D is provided with lugs *d* which engage the edges of the spring and this end of bar D has a sliding engagement with the spring. The tension bar D at its central portion is given a curve opposite to the curve of the saddle spring, and the said bar is provided adjacent to this curved portion with an aperture *d*².

The saddle spring is secured to the saddle

support by a clip E which consists of a block having a recess extending through the same provided with inwardly extending upper edges *e e* as shown in Fig. 3, to engage the upper face of the spring. The lower part of the clip is provided with a set screw *e'* and the clip is also provided with a supporting plate *E'* for engaging the under side of the saddle spring, said plate having its lower face grooved or recessed to engage the saddle support A as shown. The clip is placed in engagement with the saddle spring and plate *E'* and is then placed on the saddle support as shown in Fig. 3. The set screw is then tightened and the parts are clamped in position. The saddle spring may be adjusted to any desired position by loosening the set screw slightly and sliding the spring forward or rearwardly in the clip. The saddle spring is provided with a screw threaded bolt or screw F which is secured to the spring in this instance by passing through an aperture therein which is made to receive an enlarged head, with which the bolt is provided, but it may be secured to the spring in another manner if preferred. A screw threaded sleeve G extends through the aperture *d*² in the tension bar and engages the screw or bolt F, the said sleeve having an enlarged head *g* engaging the upper face of the spring which is preferably given a polygonal form in order that it may be turned by means of a wrench. When the bolt F is secured to the spring in the manner before described I prefer to counter-sink the aperture in the spring to receive the head of the bolt as shown in Fig. 3, so that the bolt will not project below the lower face of the spring.

When it is desired to tighten the seat portion of the saddle, the sleeve G is turned so as to draw down the tension bar which effects the desired result. By unscrewing the sleeve G sufficiently the forward end of the tension bar can be raised to withdraw the stud *d'* from the aperture *b* and it can be placed in a higher aperture *b* if it is desired to make the front part of the spring more rigid or in a lower aperture *b* if it is desired to render the front part of the spring more flexible.

As changing the stud or pin *d'* from one pole to another is liable to alter the altitude of the pommel the spring may be adjusted

by means of the spring clip to compensate for such a variation, and the saddle can readily be made to suit the comfort of the rider.

What I claim, and desire to secure by Letters Patent, is—

1. In a bicycle saddle the combination with the saddle spring, of the tension bar having at one end a fixed engagement with said spring and a sliding engagement therewith at its other end, means for adjusting said tension bar longitudinally with respect to said spring and adjusting devices for varying the pressure of said tension bar upon said spring at its points of contact therewith, substantially as described.

2. In a bicycle saddle the combination with the saddle spring, of the tension bar engaging said spring at two points, the adjusting bolt engaging the spring intermediate said points of engagement, and the screw threaded sleeve secured to said tension bar intermediate its ends and engaging said bolt for causing said bar to exert a pressure upon said spring at the points of contact therewith, substantially as described.

3. In a bicycle saddle the combination with the saddle spring provided with a series of apertures adjacent to one end, of the tension bar having one end provided with a lug for engaging one of said apertures and having its

other end engaging another portion of said spring and adjusting devices for varying the tension of the tension bar, substantially as described.

4. In a bicycle saddle the combination with the saddle spring, provided with a series of apertures adjacent to one end of a tension bar, provided at one end with a stud for engaging one of said apertures and at its other end with lugs for engaging the edges of another portion of said spring and the adjusting devices for varying the tension of said bar, substantially as described.

5. The combination with the saddle spring having its front portion provided with a series of apertures, and the seat supported thereby, of a tension bar having its forward end provided with a construction for engaging one of the apertures in said spring having its other end movably engaging said spring, an adjustable clip for engaging the saddle spring and securing it to a rigid support and devices for adjusting the tension of the tension bar, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HUGH McDONALD.

Witnesses:

MICHAEL W. WOOD,
JOHN H. WATSON.