

(No Model.)

3 Sheets—Sheet 1.

C. E. DURYEA.
VELOCIPED SADDLE.

No. 432,125.

Patented July 15, 1890.

Fig. 1.

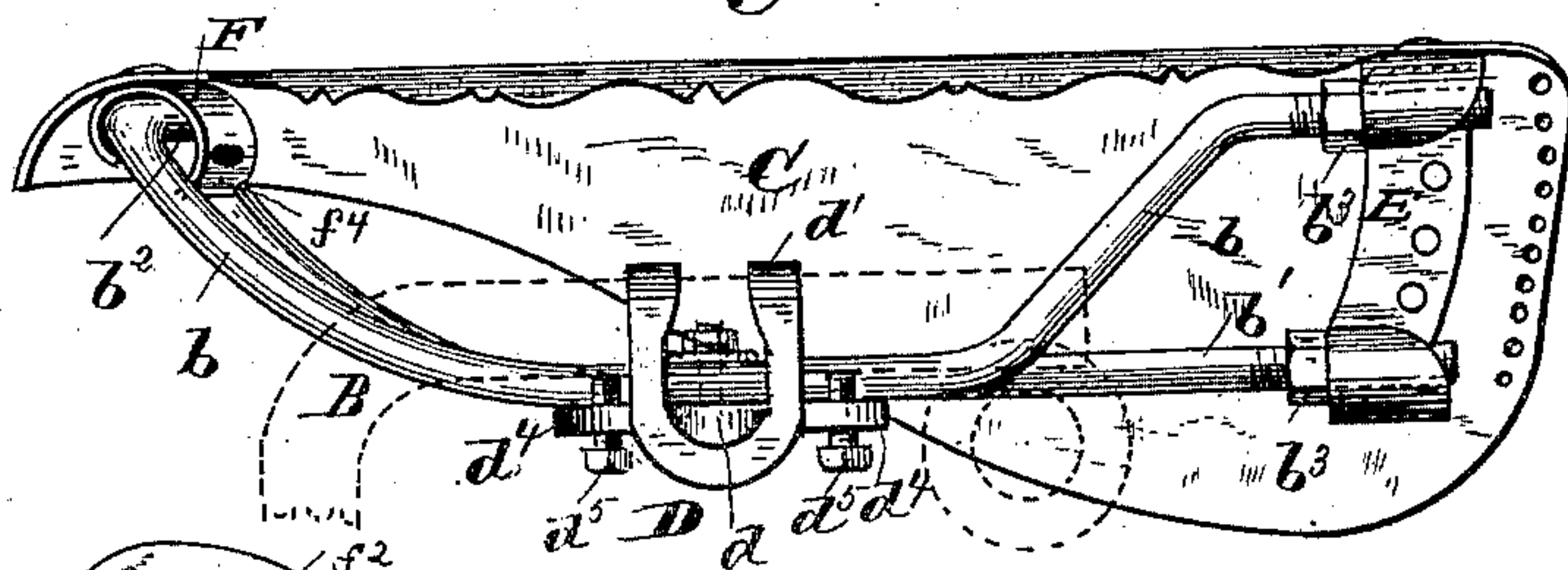


Fig. 2.

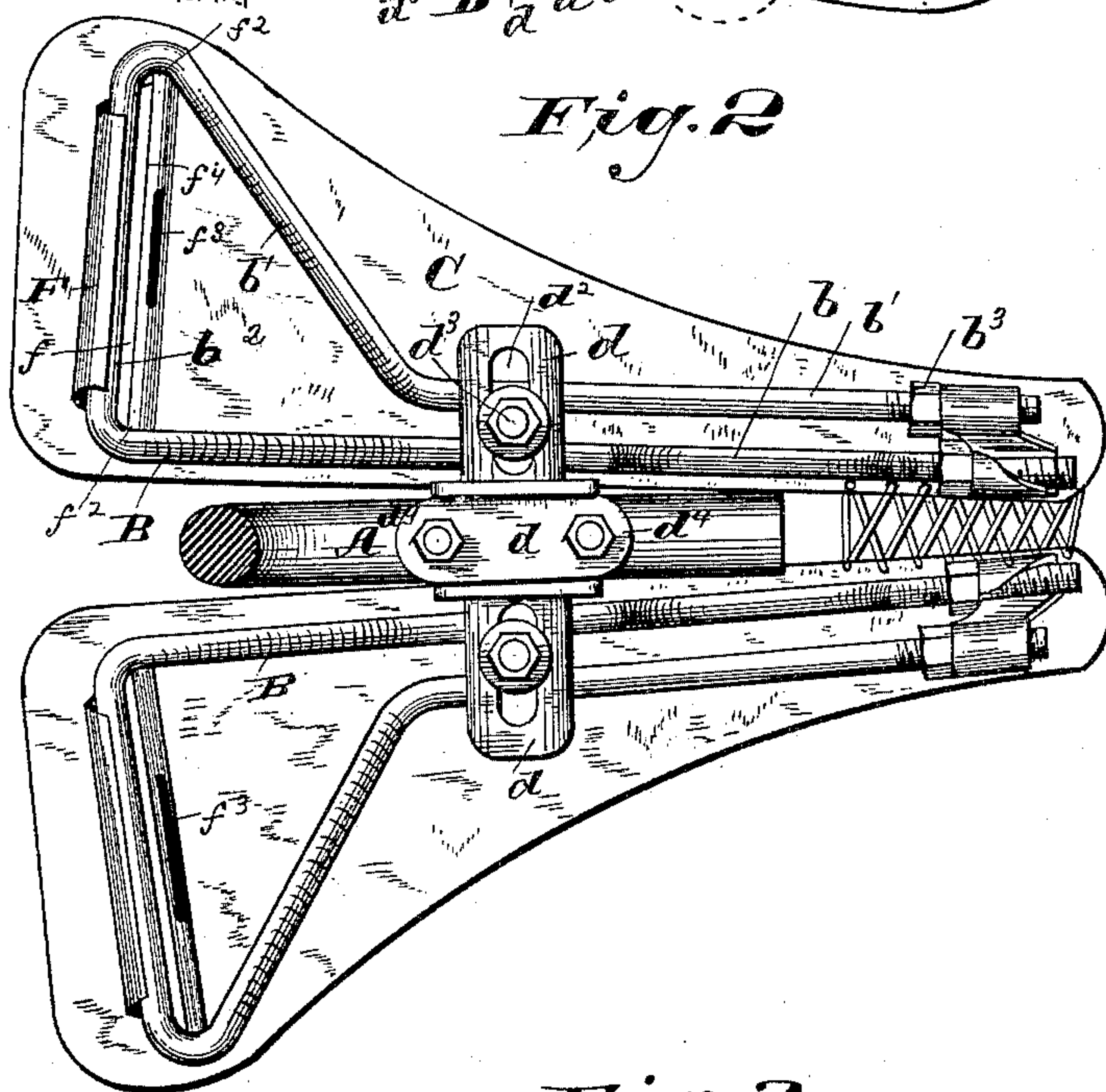
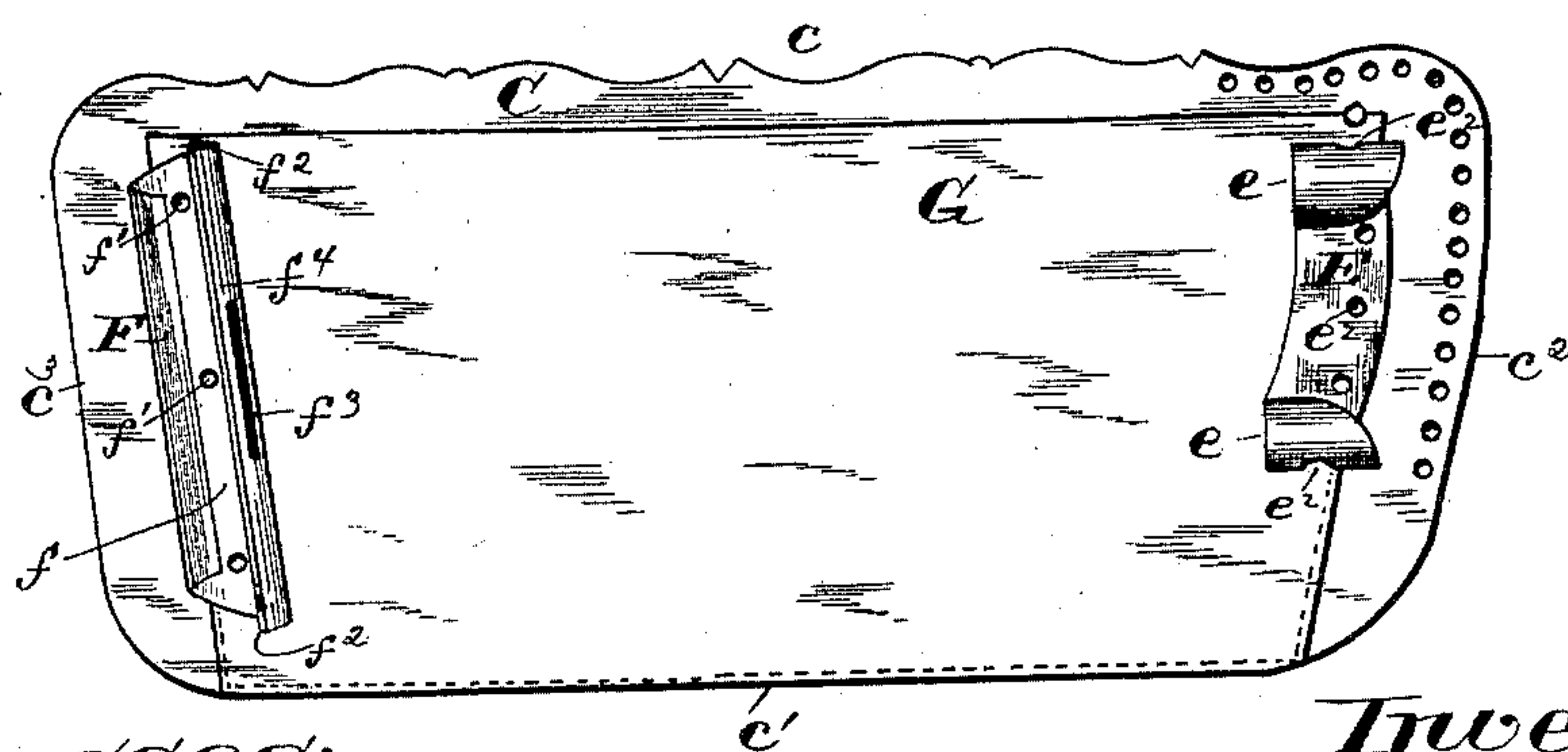


Fig. 3.



Witnesses:

J. P. Ritter.

J. M. Ritter

Inventor.

Charles E. Duryea

by E. J. Walker

his Attorney

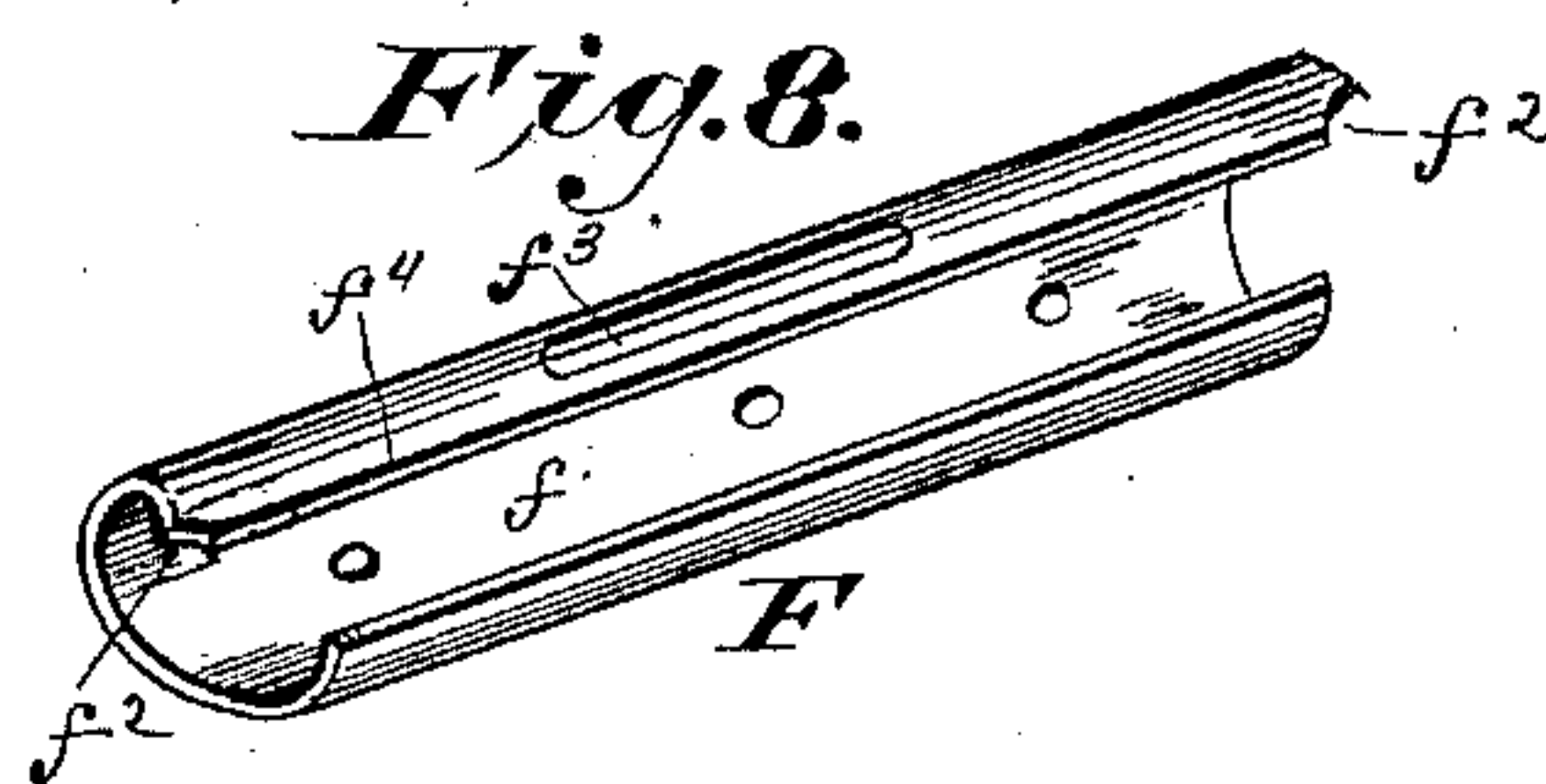
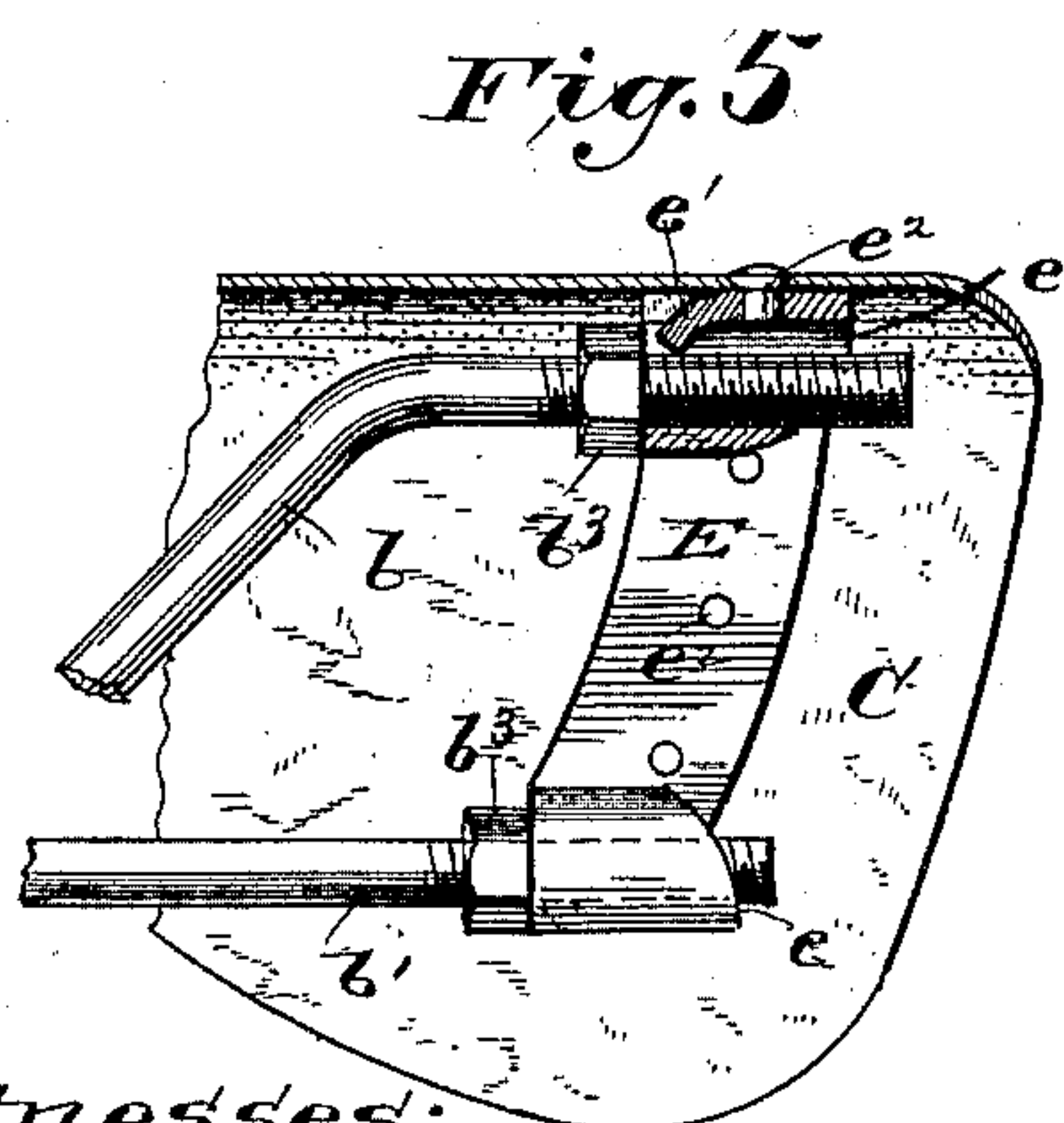
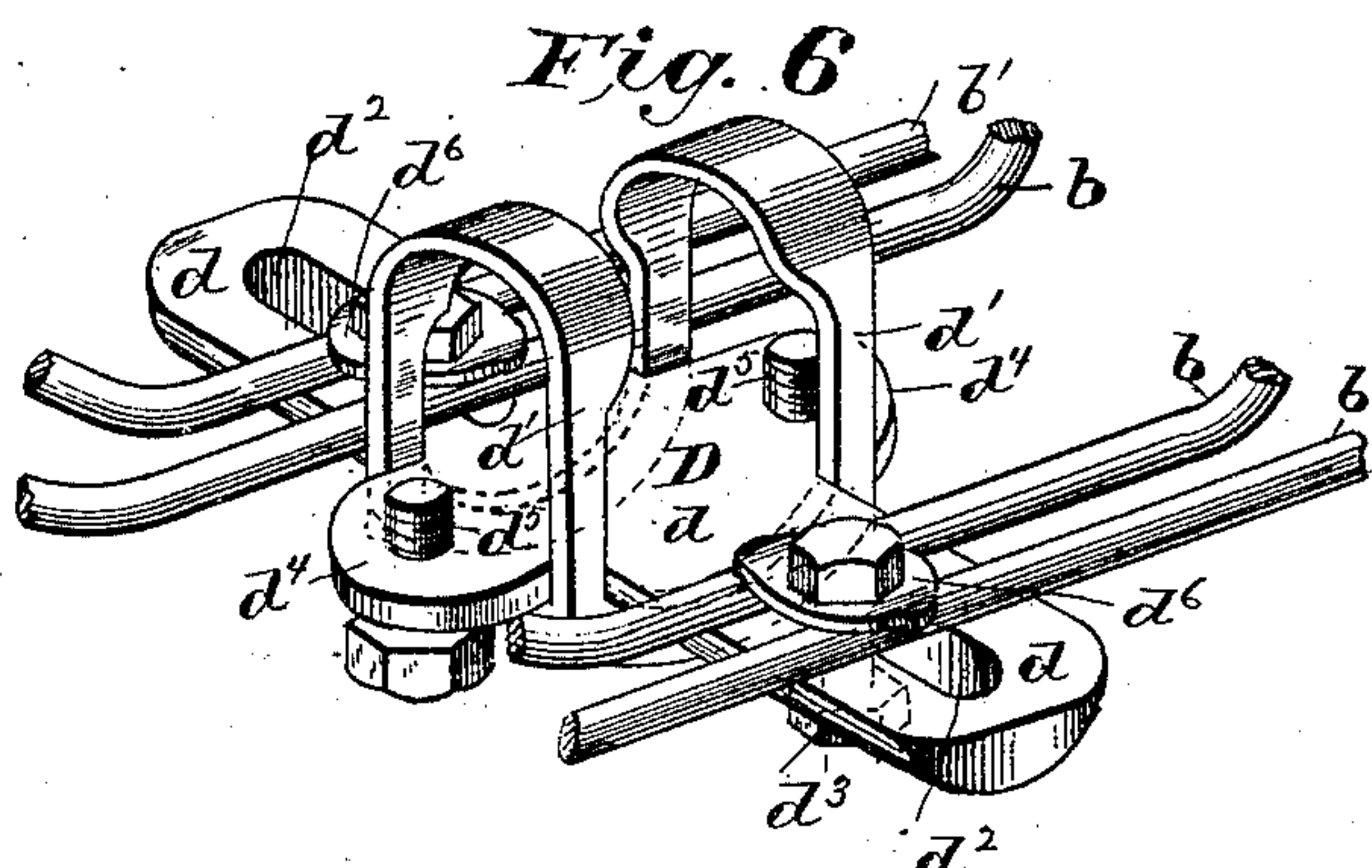
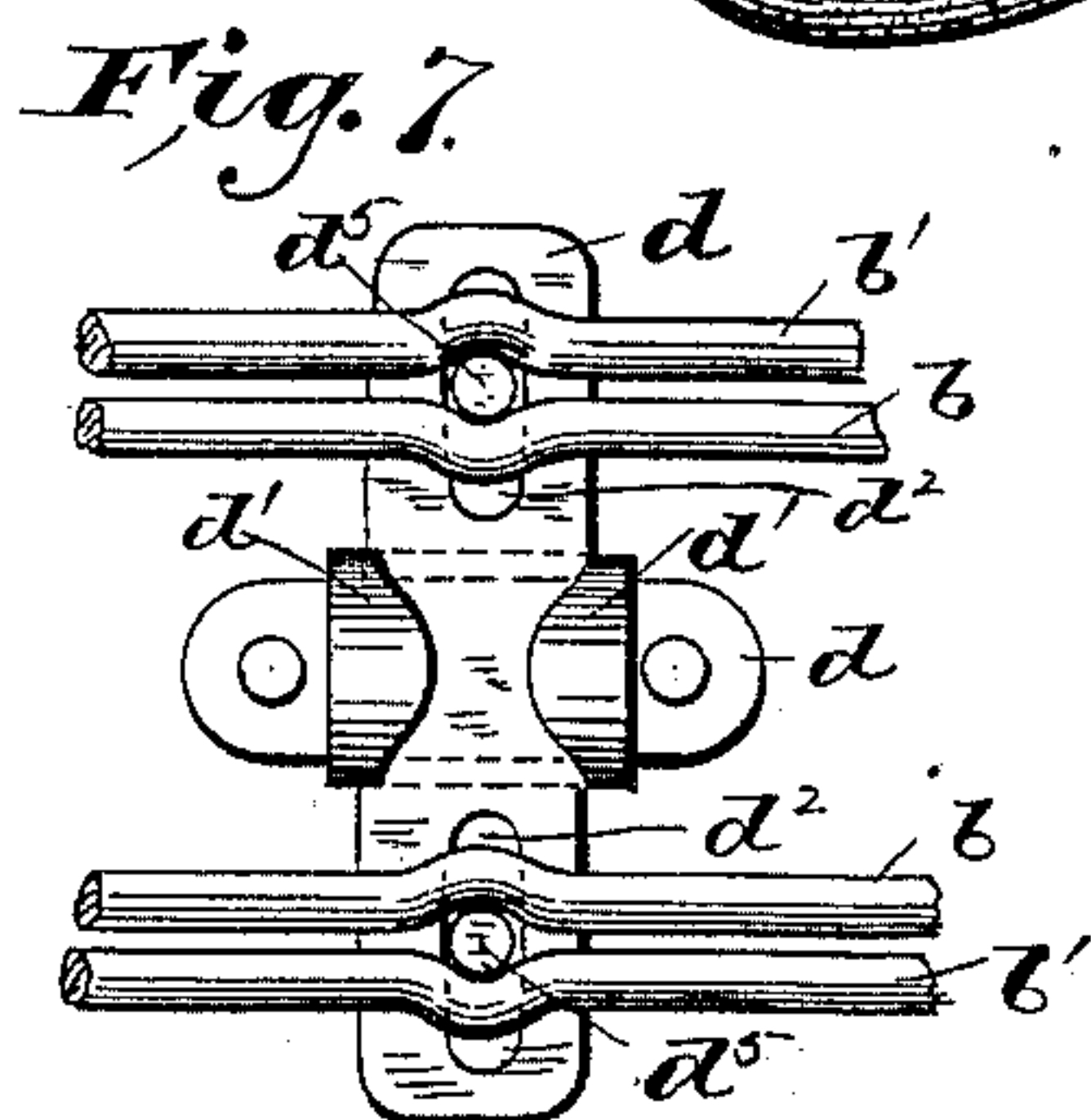
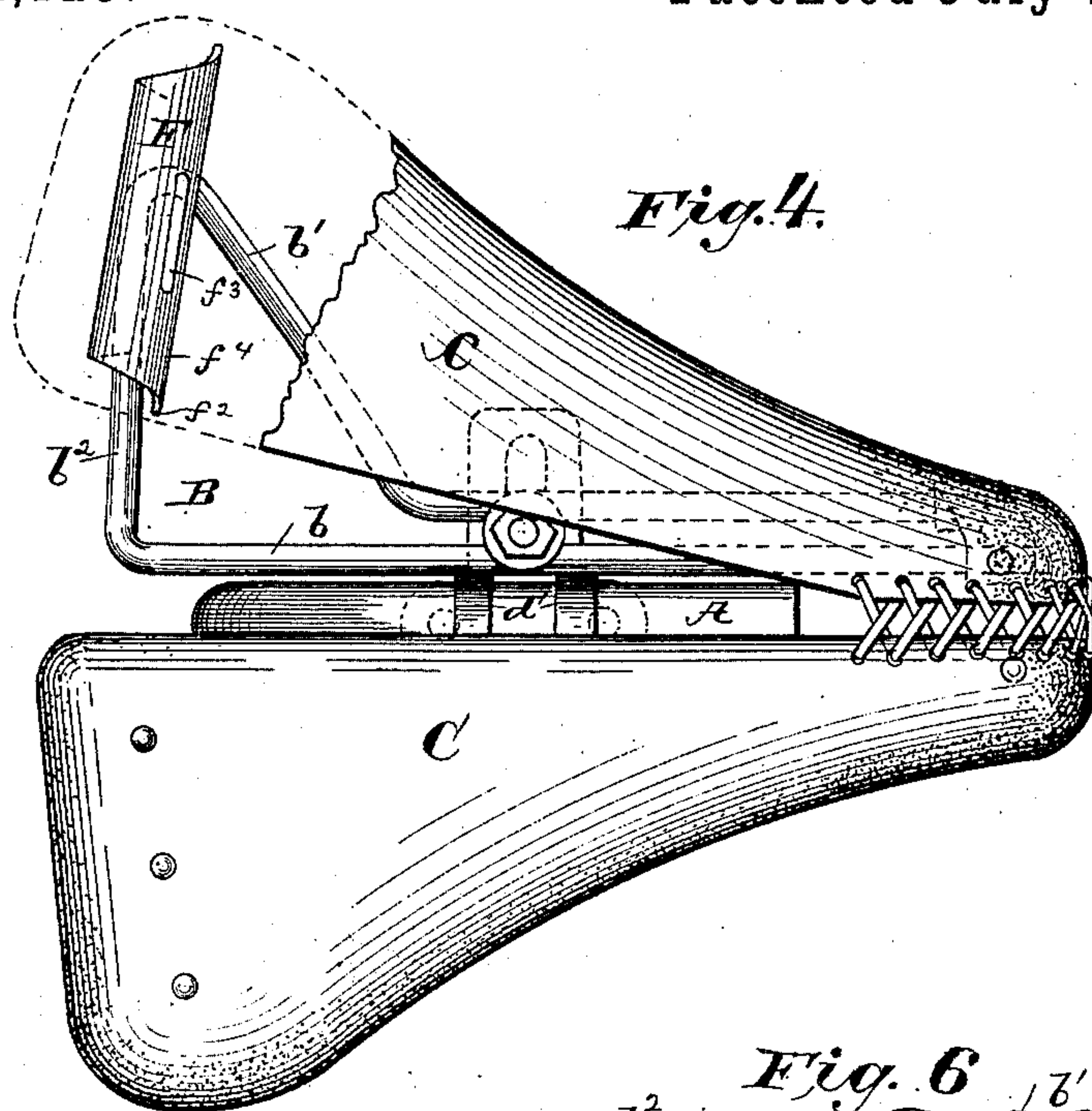
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3 Sheets—Sheet 2.

C. E. DURYEA.
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Patented July 15, 1890.



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(No Model.)

3 Sheets—Sheet 3.

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Fig. 9

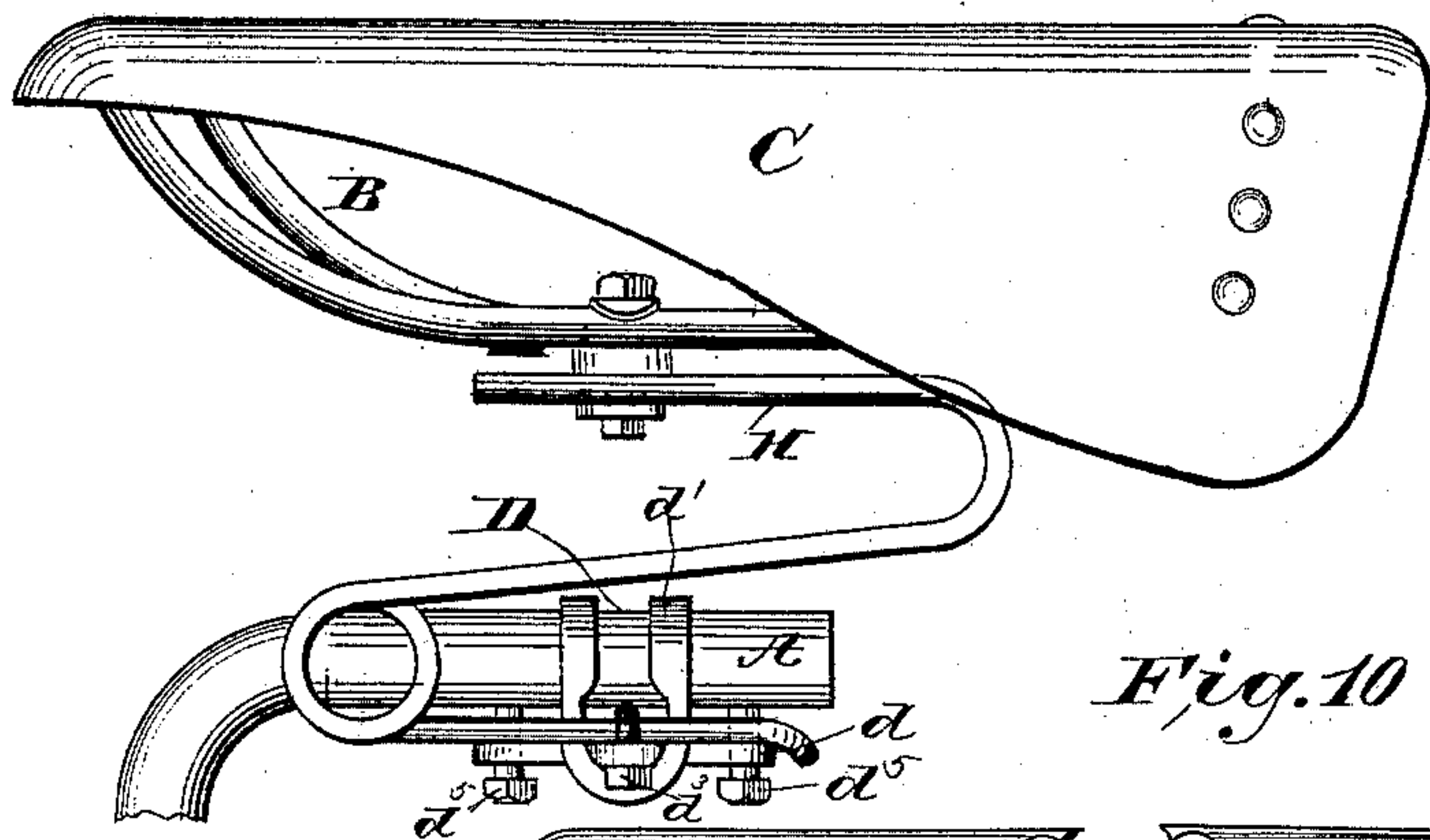


Fig. 10

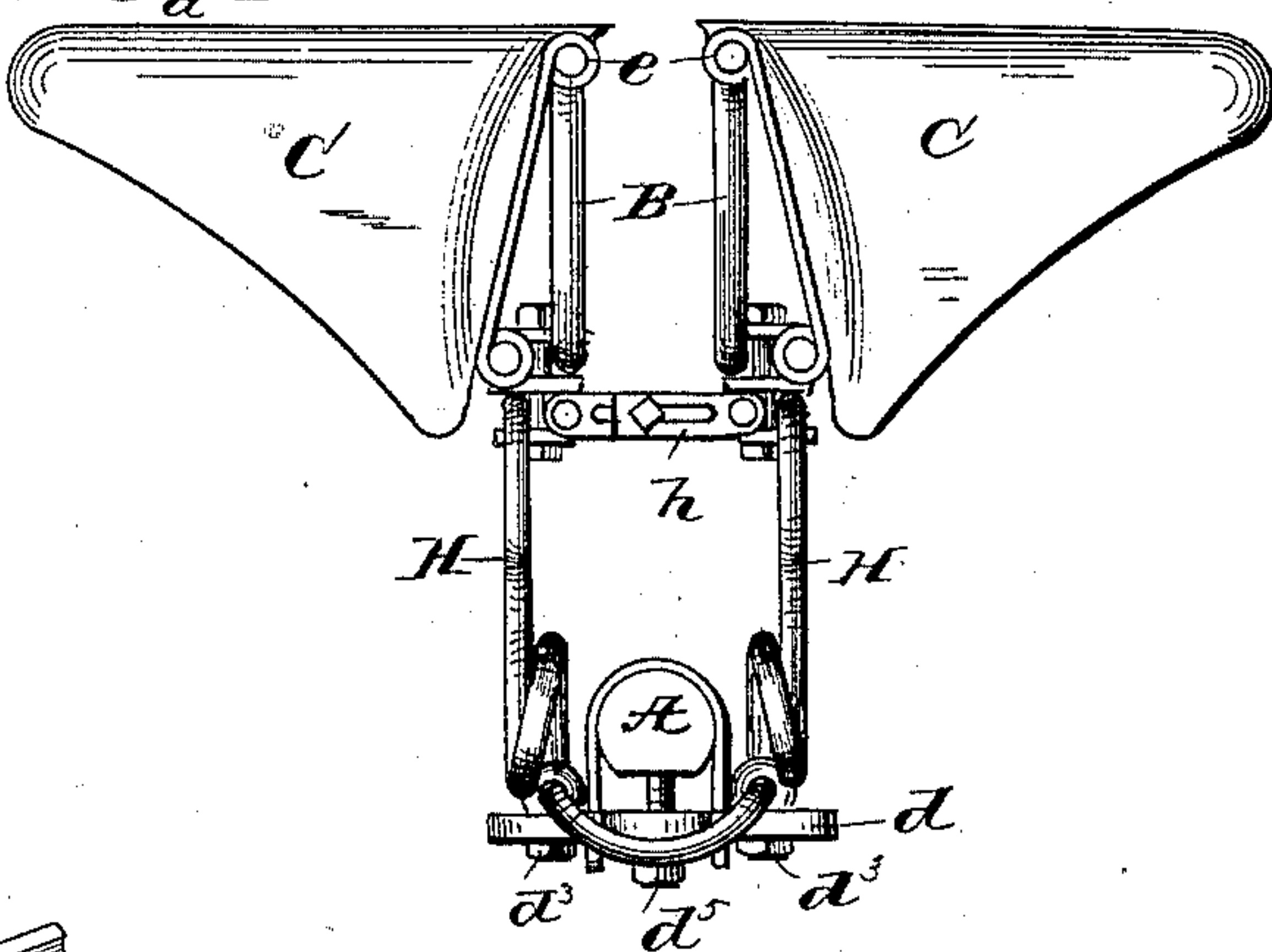


Fig. 12.

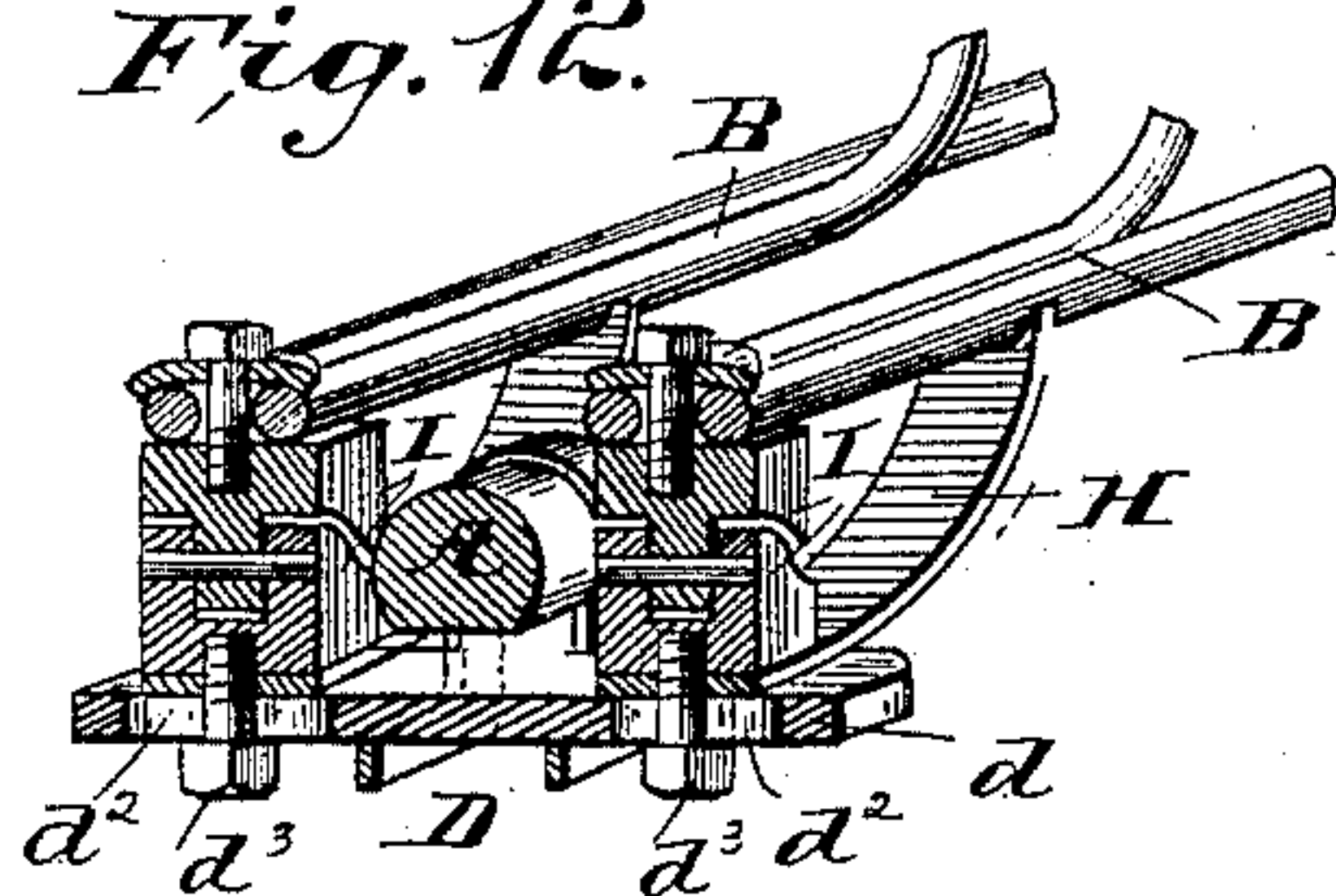
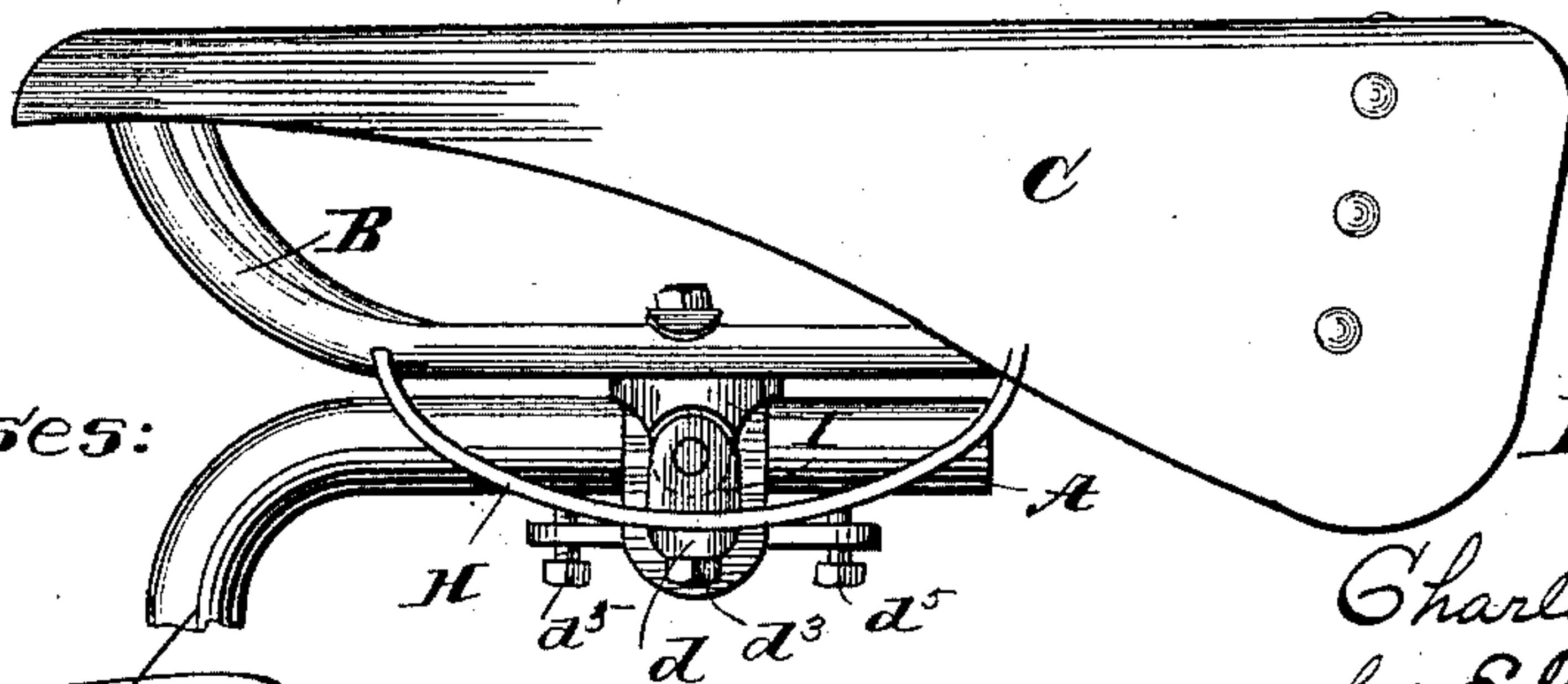


Fig. 11.



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Inventor.

Charles E. Duryea
by E. S. Walker
his Attorney.

UNITED STATES PATENT OFFICE.

CHARLES E. DURYEA, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR,
BY DIRECT AND MESNE ASSIGNMENTS, TO THE ROUSE-DURYEA CYCLE
COMPANY, OF PEORIA, ILLINOIS.

VELOCIPED-SADDLE.

SPECIFICATION forming part of Letters Patent No. 432,125, dated July 15, 1890.

Application filed December 12, 1889. Serial No. 333,395. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. DURYEA, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Velocipede-Saddles; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in velocipede-saddles, and I have designed the same for use more particularly on that class of bicycles known as "Safeties," in which a saddle-post is provided; but the saddle proper may be employed with equally good results on other styles of bicycles by varying the form of the saddle-clip.

One of the objects of my invention is to provide a saddle which may be vertically and horizontally adjustable at either front or rear, and for this purpose I construct the saddle in two parts, separated longitudinally of the machine and horizontally adjustable independently of each other.

Another object of my invention is to provide a saddle adapted either for lady or gentlemen riders, and for this purpose I provide a leather covering rounding at its forward end and loosely lace the two halves together at the front end to a point in rear of its point of attachment with the saddle-frame.

Another object of my invention is to so attach the leather covering to the frame that it may be readily removed and replaced.

With these and minor objects in view the invention consists in certain novel features of construction and combinations, to be hereinafter more fully described and claimed.

In the accompanying drawings, Figure 1 represents a side elevation of one half of my improved saddle, the saddle-post being shown in dotted lines. Fig. 2 represents a bottom view of the saddle complete in position on the saddle-post. Fig. 3 represents a plan of the leather covering for one half of the sad-

dle, the fastening being secured thereto. Fig. 4 is a top plan of the saddle, a part of one covering being broken away to show the manner of removing or replacing the rear of the covering. Fig. 5 is a detail of the forward end of one part of the frame and covering, the upper fastening being shown in section. Fig. 6 is a detail of the clip for securing the saddle to the saddle-post and showing the manner of securing the saddle-frame to the clip. Fig. 7 is a modified form of saddle-frame. Fig. 8 is a detail perspective of the rear fastening for the cover. Figs. 9, 10, 11, and 12 represent the two halves of my improved saddle mounted upon independent springs.

The same letters of reference indicate identical parts in all the figures.

In the drawings, A indicates the saddle-post; B, the saddle-frame; C, the leather covering; D, the saddle-clip; and E and F, respectively, the front and rear fastenings for the covering.

The saddle B is composed of two halves of identically the same construction, with the exception that they are rights and lefts, and I shall therefore describe one part only. The frame is composed of a single piece of stout wire bent one upon itself, as shown in Figs. 2 and 4, the arms b b' being substantially parallel in vertical planes from their free ends to a point in rear of the saddle-clip D, where they curve upward and the part b' outward, the straight part b^2 , connecting the arms b and b' , being at an acute angle to the arm b . The forward end of the arm b' is straight, while the corresponding end of the arm b is curved upward and forward and terminates substantially in line with the arm b' , and at their ends the arms are provided with screw-threads and nuts b^3 .

The leather covering C is of the shape shown in Fig. 3, the longitudinal sides c c' of which are substantially parallel, and the ends c^2 c^3 diverge toward the inner edge c .

Near the ends c^2 c^3 , respectively, are secured the front and rear cover-fastenings E and F by means of rivets or otherwise. The front fastening E is formed of a single flat strip of

metal having its ends turned over to form sleeved openings e at either end thereof for the reception of the free ends of the arms b b' of the frame, and the outer side of said openings e have each a tongue e' , turned inward to bear against the screw-threaded end of the wire frame to prevent the adjusting-nut b^3 from coming in contact with the covering, and said fastening is also provided with a number of rivet-holes e^2 , by which it is secured to the leather covering C, two of said rivet-holes being in the turned-over ends of said fastening. It will thus be seen that by providing both of said openings with a turned-in tongue and rivet-hole the fastening can be used on either the right or left hand side of the saddle-covering. The rear fastening F is formed of a single piece of thin sheet metal bent into tubular form, C shape in cross-section, the opening f extending throughout its entire length and the ends of said metal being cut diagonally, as shown. The fastening is provided with two or more rivet-holes f' , by which it is secured to the leather covering C, and at its longer or inner edge is provided with notches f^2 for engaging the wire frames b b' , the length of the fastening corresponding to the greatest distance between the arms b b' of the frame B. In each of the rear fastenings F, I provide a slot f^3 for the passage of the strap of the tool-bag. It will thus be seen that when it is desired to remove the leather covering it is only necessary to press the inner or long edge f^4 slightly inward to disengage the notches f^2 from the frame B, when the covering and fastening can be slipped to one side, the slot f being sufficiently wide to allow the frame to pass through. The front fastening is then slipped from off the free ends of the arms b b' of the frame B. The tension of the leather can at all times be regulated by the adjusting-nuts b^3 . The outer end of the horizontal portion b^2 of the frame B lies closer to the nuts b^3 than the inner end; hence slipping the rear end of the covering outward loosens the covering and facilitates the detaching.

The saddle-clip D consists of a plate d , substantially semicircular on its under side, supported in a yoke d' , formed of a single elliptical piece of metal having its central portion cut away, as shown, and bent to conform to the shape of the saddle-post in cross-section, the ends of the cut-away portion conforming to the curvature of the under side of the plate d supported therein. The plate d is provided at its ends with elongated slots d^2 for the passage of the clamping-bolts d^3 , and on the plate d , midway of its length and between the arms of the yoke d' , are formed two laterally-projecting ears d^4 , provided with screw-threaded openings for the reception of set-screws d^5 , which bear against the under side of the saddle-post, as shown. Each of the clamping-bolts d^3 passes between the arms of the saddle-frame and carries at its upper end a washer d^6 , having two of its opposite edges

turned down to partially overlap the arms of the frame B.

In Fig. 7 I have shown the arms b b' of the frame B arranged side by side nearly in contact and curved in opposite directions at the point where the clamping-bolt d^3 passes between them, by which construction the parts of the saddle can be more firmly clamped to the saddle-clip D than by the construction shown in Fig. 6; but such construction does not admit of longitudinal adjustment of the saddle on the clip, as is the case with Fig. 6.

From the above description it will thus be seen that by adjusting the bolts d^3 the saddle can be adjusted in width, either at front or rear, or at both front and rear, to suit any size of rider, and by means of the set-screws d^5 the saddle can be raised at front and lowered at rear, or vice versa, to suit the different riders.

In order to prevent the dresses of lady riders catching in the opening between the two parts of the saddle, I prefer to loosely lace the two parts of the leather covering together from the lower part of the front end to a point in rear of the front fastening E.

In order to dispense with the use of a separate tool-bag, I provide a pocket G in the under side of the leather covering, as shown in Fig. 3, for the reception of a wrench, oil-can, or cloth for cleaning the machine, &c., the pockets opening toward the center to prevent the contents from falling out while the machine is in use, and secured at its ends to the saddle-cover by the rivets of the front and rear fastening, the outer edge being sewed to the saddle-cover, as shown in Fig. 3.

A further advantage of my improved saddle is that the free forward ends, being more or less elastic, will yield downward to some extent at each downward movement of the rider's leg. This motion of each side of the saddle with each leg tends to prevent chafing.

In order to increase the downward-yielding tendency of the saddles, I may form a coil in each of the free ends of the arm of the saddle-frames just in front of the clip D, as shown in dotted lines in Fig. 1, or by mounting each half of the saddle upon separate springs, as shown in Figs. 9 to 12. In these latter figures the clip D is secured to the saddle-post in the same manner above described; but instead of mounting the saddle-halves directly on the clip, I mount each half on a separate S-spring H, which springs are secured to the clip D. The saddle-frames B are adjusted in width by means of an adjustable link h connecting the upper ends of the springs H. In Figs. 11 and 12 I secure the saddle-frames to the clip D by means of a spring-hinge adjustable on the plate d of the clip D. In this construction I is the hinge and H a semi-elliptical spring, both of which are secured on the slot d of the clip D, and the ends of the spring H bear against the saddle-frame and support the saddle in a horizontal position. It will thus be seen that

the constructions shown in Figs. 9 to 12 admit of universal adjustment and at the same time allow the front of the saddle to readily yield to the legs of the rider, and thereby prevent chafing.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A velocipede-saddle composed of two separable sections, each capable of independent lateral adjustment, substantially as and for the purposes described.

2. A velocipede-saddle composed of two separable frame-sections laterally adjustable independently of each other and provided each with a removable covering, substantially as and for the purposes described.

3. In a velocipede-saddle, the combination, with the saddle-clip, of a saddle mounted thereon and vertically adjustable at front and rear, said frame being laterally adjustable each side of the center, and a removable covering for said frame, substantially as and for the purposes described.

4. In a velocipede-saddle, the combination of two separable independently-laterally adjustable frame-sections, a removable covering for each section, and means for adjusting the tension of the covering of each section, substantially as and for the purposes described.

5. The combination, with the frame of a velocipede-saddle, of a removable covering therefor and a pocket in the under side of said covering, substantially as and for the purposes described.

6. In a velocipede-saddle, the combination, with a two-part saddle-frame, of a removable covering detachably connected with each frame and a slotted tubular fastening secured to the rear of each covering and adapted to slide on the rear of said frame, said fastening having notches in the ends for engaging with the frame, substantially as and for the purposes described.

7. The combination, with a two-part saddle-frame, each part composed of a wire rod, bent substantially as shown, of a plate having openings in its ends adapted to fit loosely over the ends of said frame, a slotted tubular plate adapted to fit over the rear of said frame and having notches in its ends for engaging with the frame, and a covering secured to said plates at front and rear, substantially as and for the purposes described.

8. In a velocipede-saddle, the combination, with a two-part frame, each of which consists of a wire frame, substantially as shown, and provided at their free ends with adjusting-

nuts, of a removable covering having front and rear fastenings for attaching said coverings to the frame, and a tongue on the front fastening bearing against the frame for holding it out of contact with the covering, substantially as and for the purposes described.

9. In a velocipede-saddle, the combination, with a saddle-clip and two-part saddle adjustably secured thereto, of clamping-bolts passing through slots in said clip and carrying washers for embracing said frame, and set-screws in said clip for vertically adjusting the front and rear of the saddle, substantially as and for the purposes described.

10. In a velocipede-saddle, the combination, with a two-part frame, of a removable covering for each part, said covering being connected together at the front end by lacing, substantially as and for the purposes described.

11. The combination, with a velocipede-saddle, of a saddle-clip consisting of a plate to which the saddle is secured and a yoke encircling said plate and saddle-post, and two set-screws for securing the clip to the saddle-post and arranged in the clip longitudinally of the saddle, whereby the saddle may be canted longitudinally, substantially as and for the purposes described.

12. A velocipede-saddle formed of two wholly independent halves capable of yielding independently of each other, whereby motion from one leg of the rider is not transmitted to the other, substantially as and for the purposes described.

13. A velocipede-saddle composed of two wholly independent longitudinal halves arranged relatively to the saddle-post that their forward ends may independently yield to the motion of the leg of the rider, substantially as and for the purposes described.

14. A velocipede-saddle composed of two wholly independent halves, each provided with a tension adjustment for the covering, substantially as and for the purposes described.

15. A velocipede-saddle composed of two wholly independent halves, each half having an independently-detachable covering, substantially as and for the purposes described.

16. A velocipede-saddle composed of two independent longitudinal halves, substantially as and for the purposes described.

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

CHARLES E. DURYEA.

Witnesses:

E. T. WALKER,

CHARLES S. DRURY.