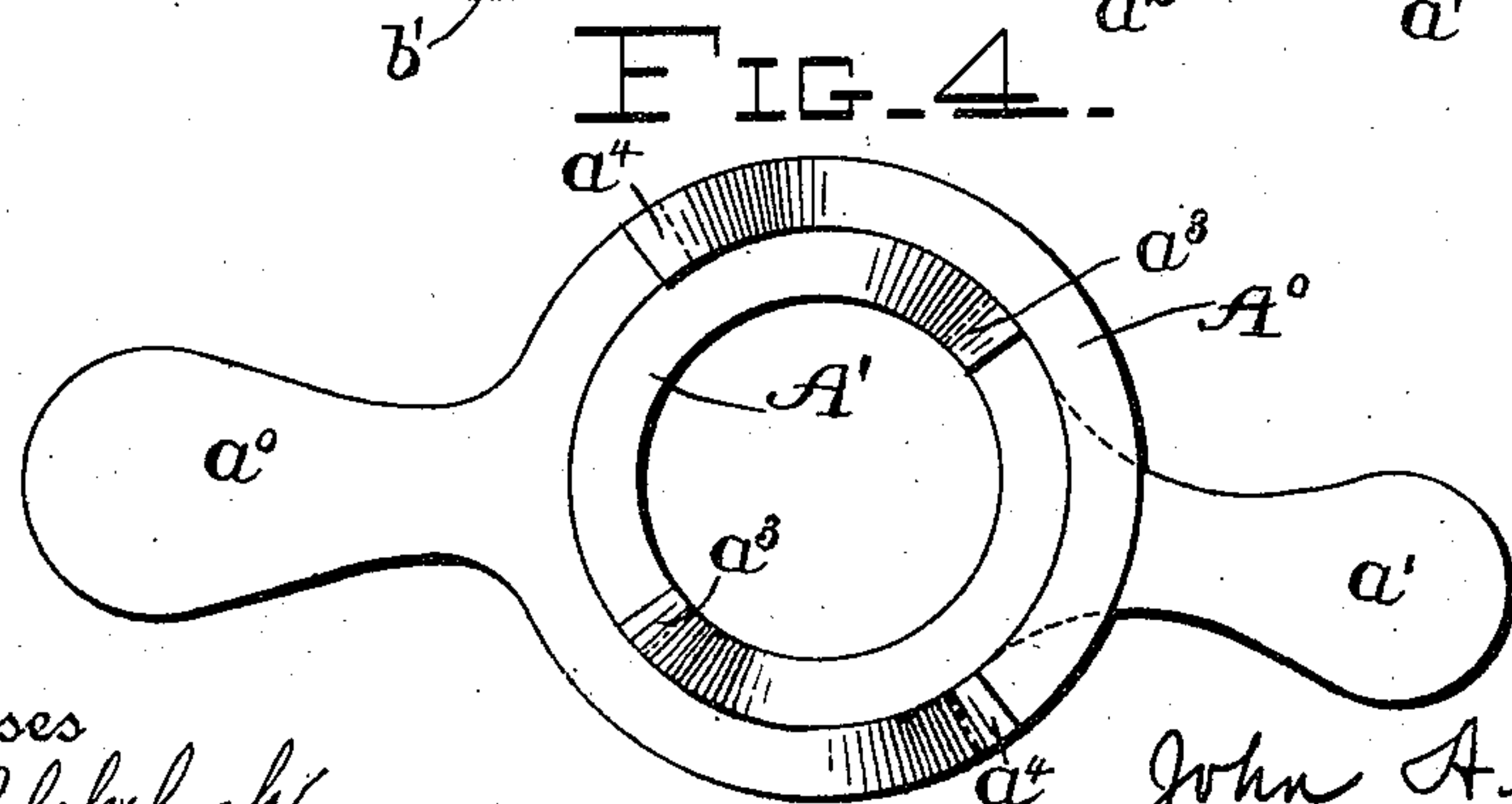
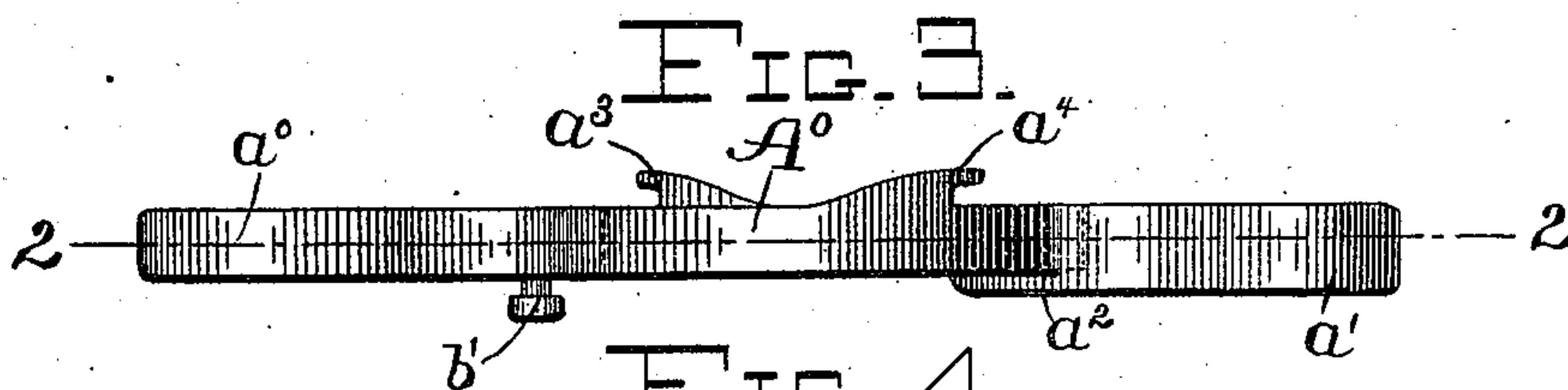
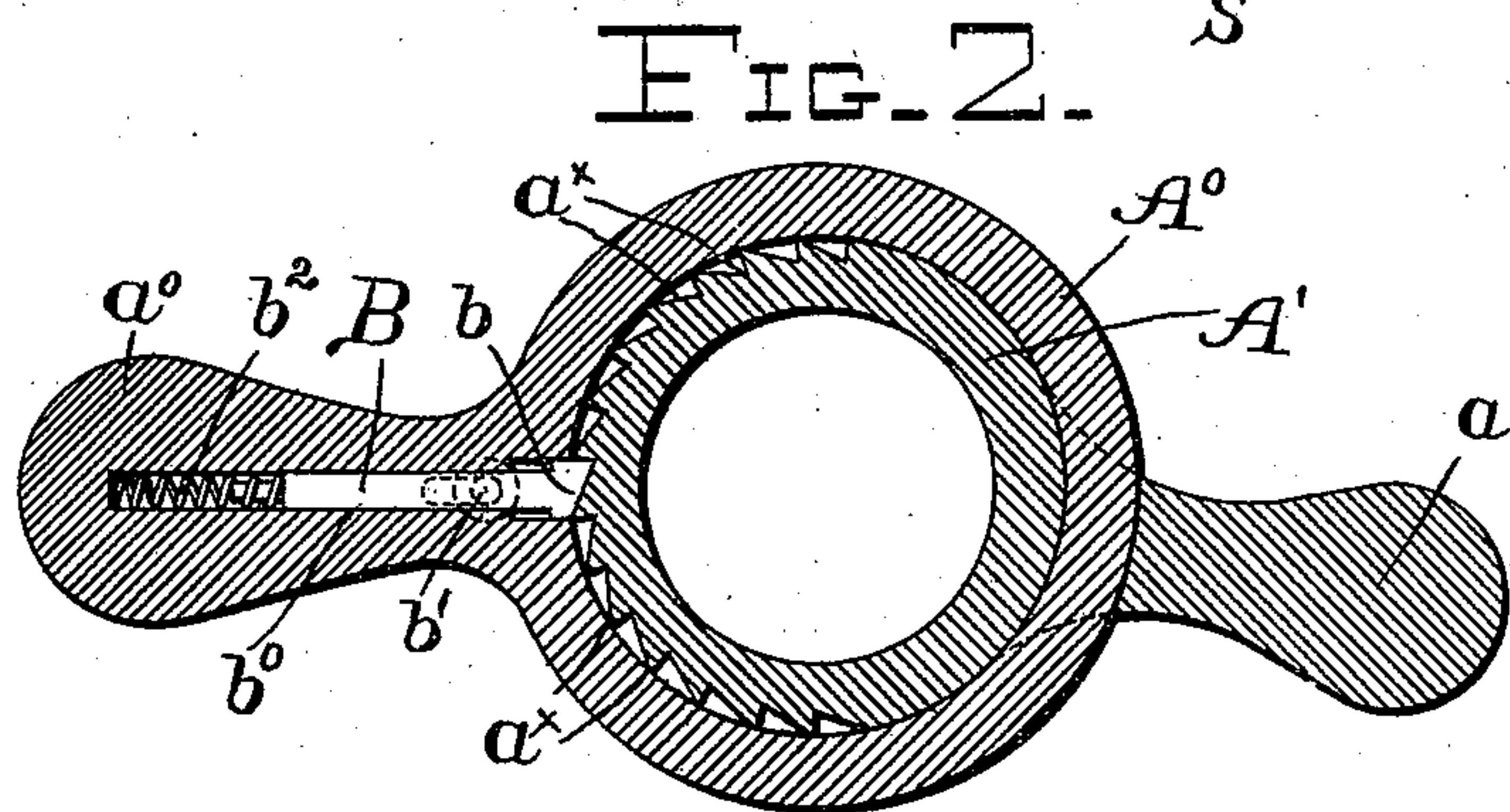
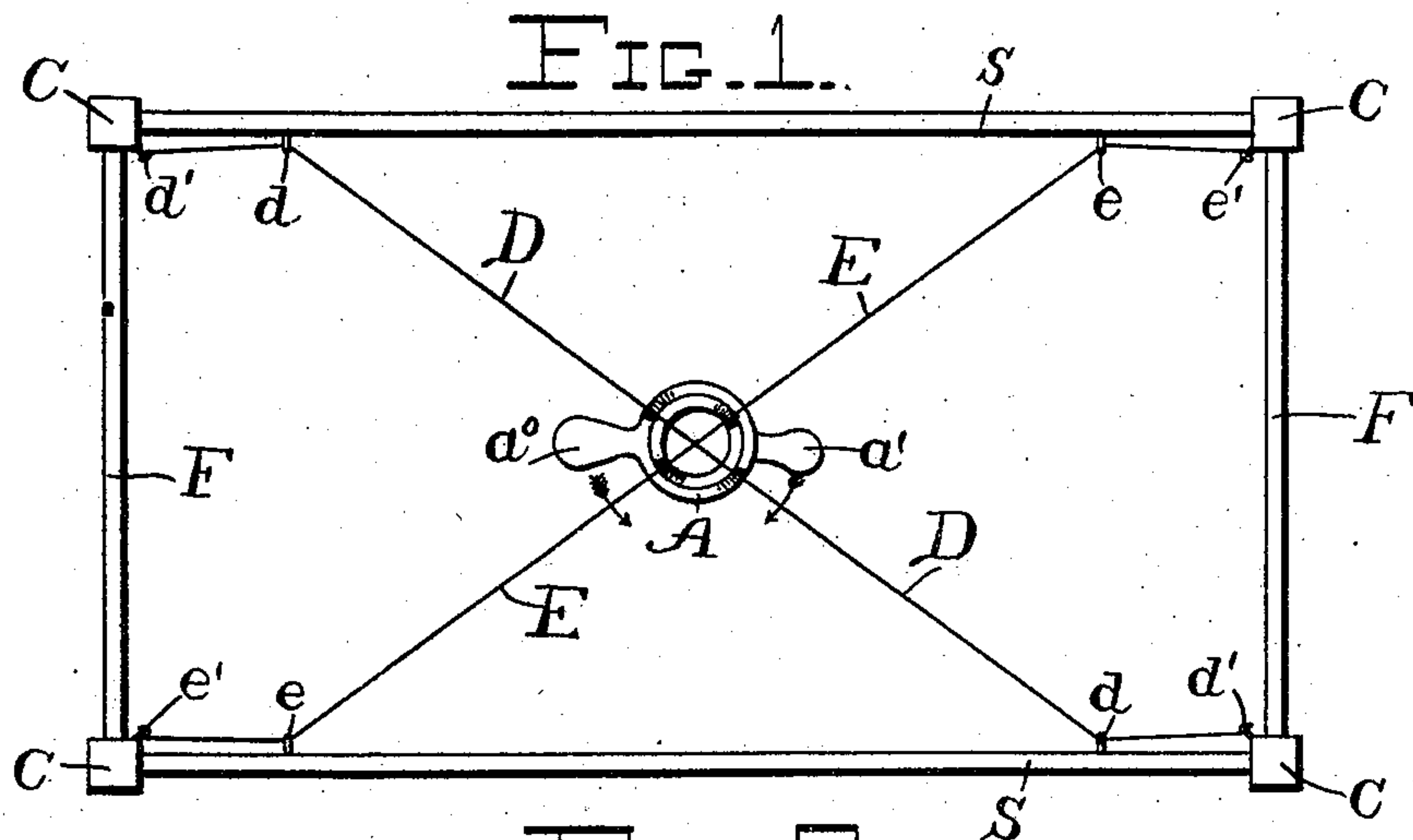


(No Model.)

J. A. FRETWELL.
FURNITURE BRACE.

No. 574,794.

Patented Jan. 5, 1897.



Witnesses
D. H. Blakelock.
John C. Wilson.

Inventor
John A. Fretwell,
by Whitman & Wilkinson,
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN A. FRETWELL, OF BUFORD, GEORGIA.

FURNITURE-BRACE

SPECIFICATION forming part of Letters Patent No. 574,794, dated January 5, 1897.

Application filed August 4, 1896. Serial No. 601,650. (No model.)

To all whom it may concern.

Be it known that I, JOHN A. FRETWELL, a citizen of the United States, residing at Buford, in the county of Gwinnett and State of Georgia, have invented certain new and useful Improvements in Furniture-Braces; 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 relates to improvements in devices for tightening the braces used in connection with furniture, such as chairs, bedsteads, and the like, and has for its object to provide a simple, cheap, and efficient means for tightening wires or cords attached to the various members of the article of furniture and thus drawing the said members firmly together.

My invention consists in the novel devices hereinafter described and claimed.

Reference is had to the accompanying drawings, wherein the same parts are indicated by the same letters throughout the several views.

Figure 1 represents a plan view of a bedstead having my improved tension device applied thereto. Fig. 2 is an enlarged sectional view of my device, the section being taken on the line 2 2 in Fig. 3. Fig. 3 is an enlarged side elevation of the device, and Fig. 4 is a plan view of the same.

A represents the tension device, which is composed of the two concentric rings A' and A^0 , having hand-grips or arms a' and a^0 , respectively, for turning the same. The ring A' fits within the ring A^0 , and the handle a' of the former is cut away, as at a^2 , to fit over the latter, as shown most clearly in Fig. 3. In the handle a^0 of the outer ring A^0 a recess b^0 is formed to receive a coil-spring b^2 and a sliding bolt B, having beveled catch b , which is pressed forward by said spring and which engages beveled notches a^x on the periphery of the inner ring A' and thus locks the said ring against backward rotation.

The latch-bolt B may be thrown back and disengaged from the notches a^x to allow the inner ring to turn backward, when desired, by means of the projecting knob b' , which is attached to said bolt and moves in a slot in the handle a^0 .

A pair of overhanging lugs or cleats a^3 a^3 are formed at diametrically opposite points on the ring A' , and a similar pair of lugs or cleats a^4 a^4 are formed at diametrically opposite points upon the ring A^0 , and these lugs or cleats are adapted to engage the wires D and E, used in securing the members of the bedstead together, as shown in Fig. 1. In the said figure the wires D and E are crossed, the wire D being secured at its ends by means of eyebolts d' to two diagonally opposite corner-posts C of the bedstead and reeving through staples or eyebolts d , secured to the side pieces S of the bed. The wire E is secured at its ends by means of the eyebolts e' to the other two diagonally opposite corner-posts C and reeve through eyebolts e , secured to the side pieces S. The end pieces F, being ordinarily permanently attached to the corner-posts C, the wires need not connect with them directly.

The operation of the device is as follows: The device is applied to the crossed wires D and E at their intersection, as shown in Fig. 1, the cleats a^3 and a^4 being hooked over the four branches of the wires. The cleats on the inner ring being oppositely disposed to the cleats on the outer ring when the handles a' and a^0 of the respective rings are brought together in the direction of the arrows in Fig. 1 the wire will be drawn around and tightened. The device locks at each notch a^x , and so after the wires are drawn sufficiently tight the handles may be released and the device will become automatically locked, as will be obvious.

The device may be readily removed by disengaging the latch B, as will be obvious.

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

1. In a furniture-brace the combination with a plurality of wires or cords secured to the various members of the article to which it is applied; of a tension device composed of two concentric rings, each provided with a pair of cleats adapted to engage one of said wires or cords; a hand-grip on each of said rings for turning the same, and means for locking said rings against backward rotation, substantially as described.

2. In a furniture-brace, the combination

with a plurality of wires or cords secured to the various members of the article to which it is applied; of a tension device composed of two concentric rings each provided with a pair of cleats arranged at diametrically opposite points thereon, a hand-grip on each of said rings for turning the same, and means for automatically locking said rings against backward rotation, substantially as described.

3. In a furniture-brace, the combination with a plurality of wires or cords secured to the various members of the article to which it is applied; of a tension device composed of two concentric rings each provided with a pair of cleats arranged at diametrically opposite points thereon; a radially-extending arm on each ring for turning the same, and means for automatically locking said rings against backward rotation, but allowing of a forward rotation thereof, substantially as described.

4. A tension device of the character described, comprising a pair of hollow concentric rings adapted to turn relative to each other; cleats formed at diametrically opposite points on each of said rings; a radially-extending hand-grip on each ring; a series

of beveled notches on one of said rings; a spring-pressed beveled latch on the other of said rings, adapted to engage said beveled notches, and a knob for withdrawing said latch, substantially as described.

5. In a tension device of the character described, the combination with the outer ring A^0 having cleats a^4 formed thereon at diametrically opposite points, and having hand-grip a^0 for turning the same; a beveled latch, and a coil-spring pressing said latch forward, fitting in a recess in said hand-grip; and a knob for withdrawing said latch; of the inner concentric ring A' having cleats a^3 being oppositely disposed to the cleats a^4 ; the hand-grip a' on said inner ring cut away as at a^2 , to fit over said outer ring, and beveled notches a^x formed on the periphery of said inner ring and adapted to be engaged by said beveled latch, substantially as described.

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

JOHN A. FRETWELL.

Witnesses:

WALTER LACY,
P. N. FRETWELL.