

No. 744,677.

PATENTED NOV. 17, 1903.

R. B. BRIGGS.
MITER BOX.

APPLICATION FILED MAR. 28, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1

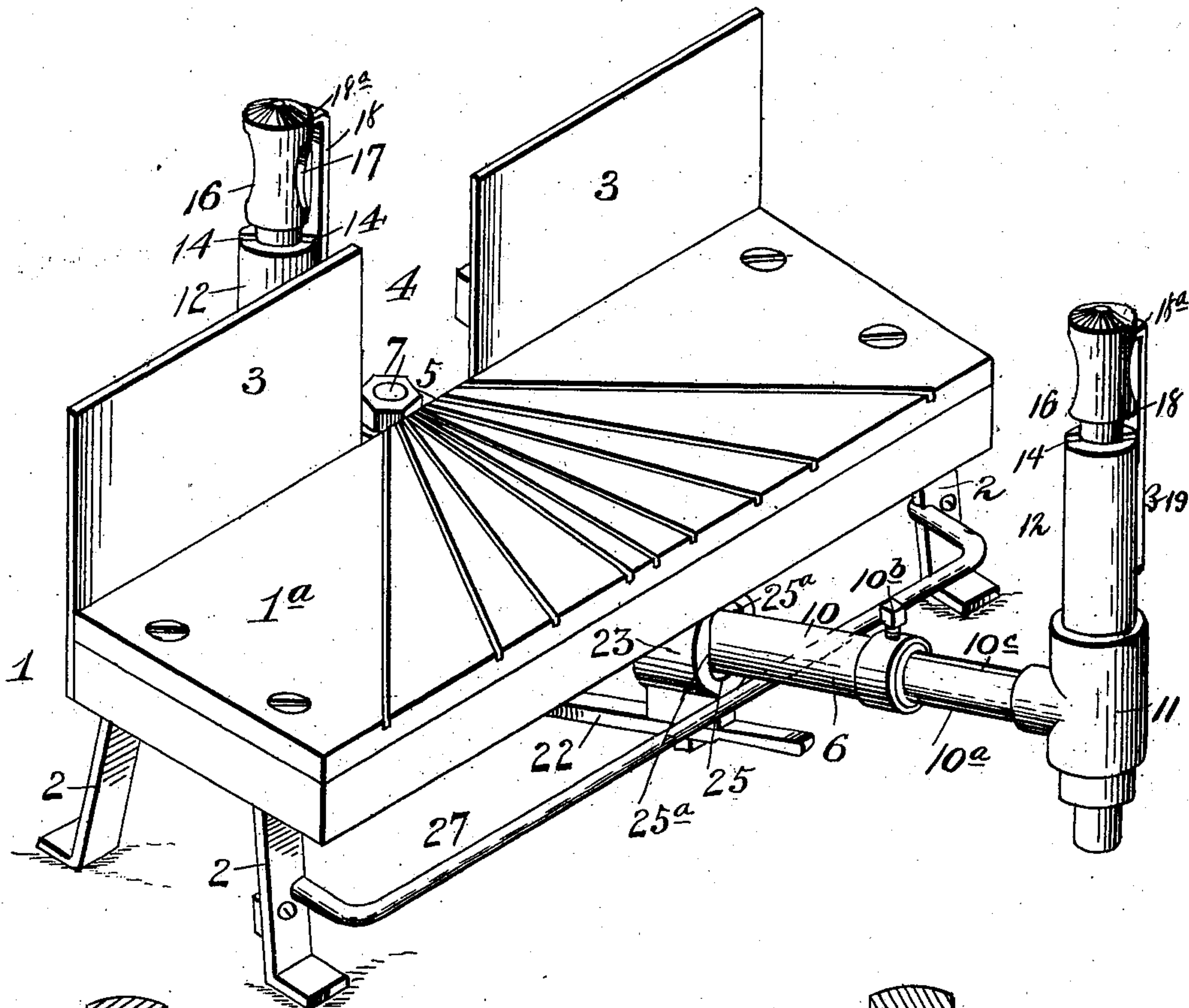
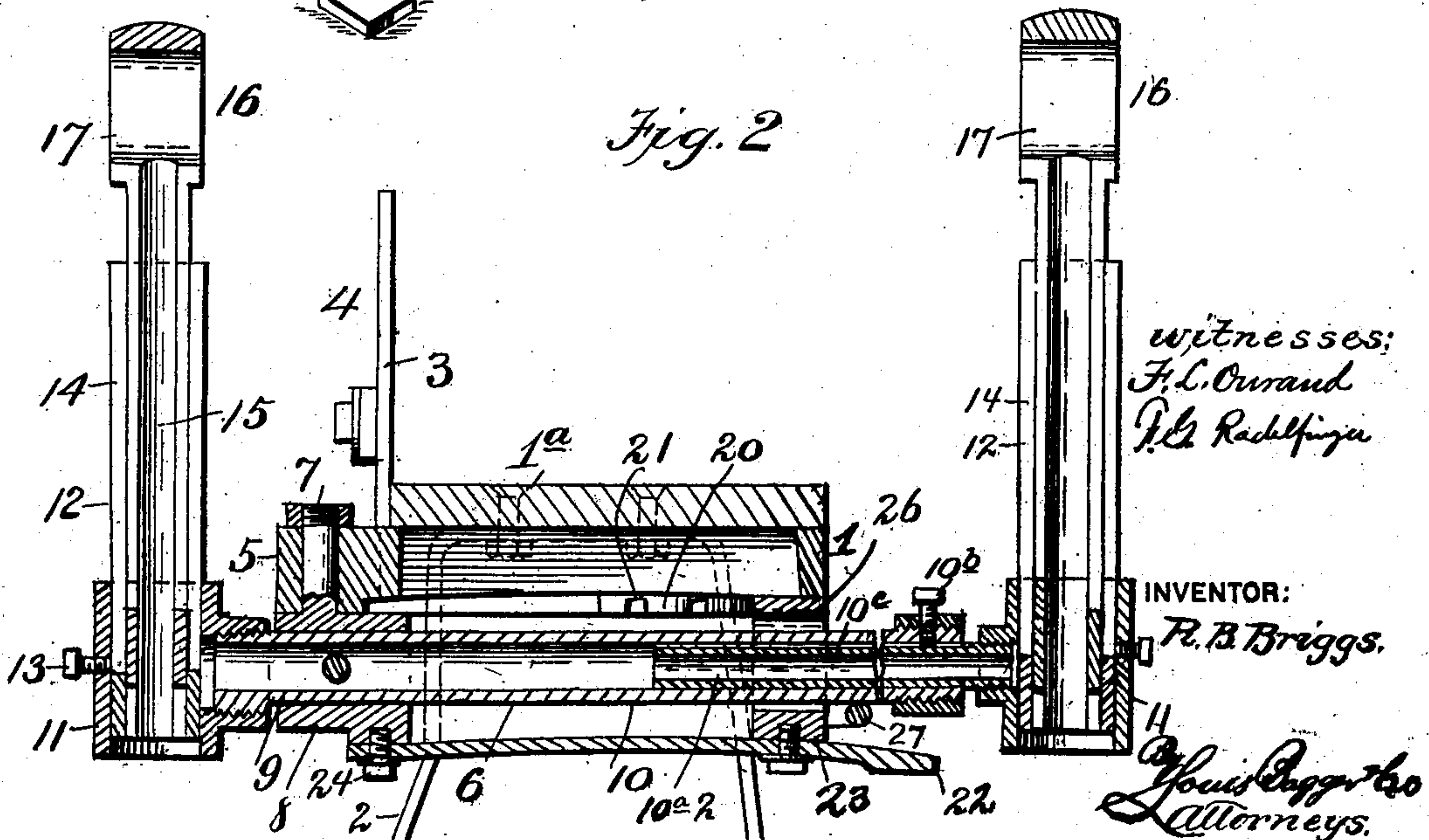


Fig. 2



No. 744,677.

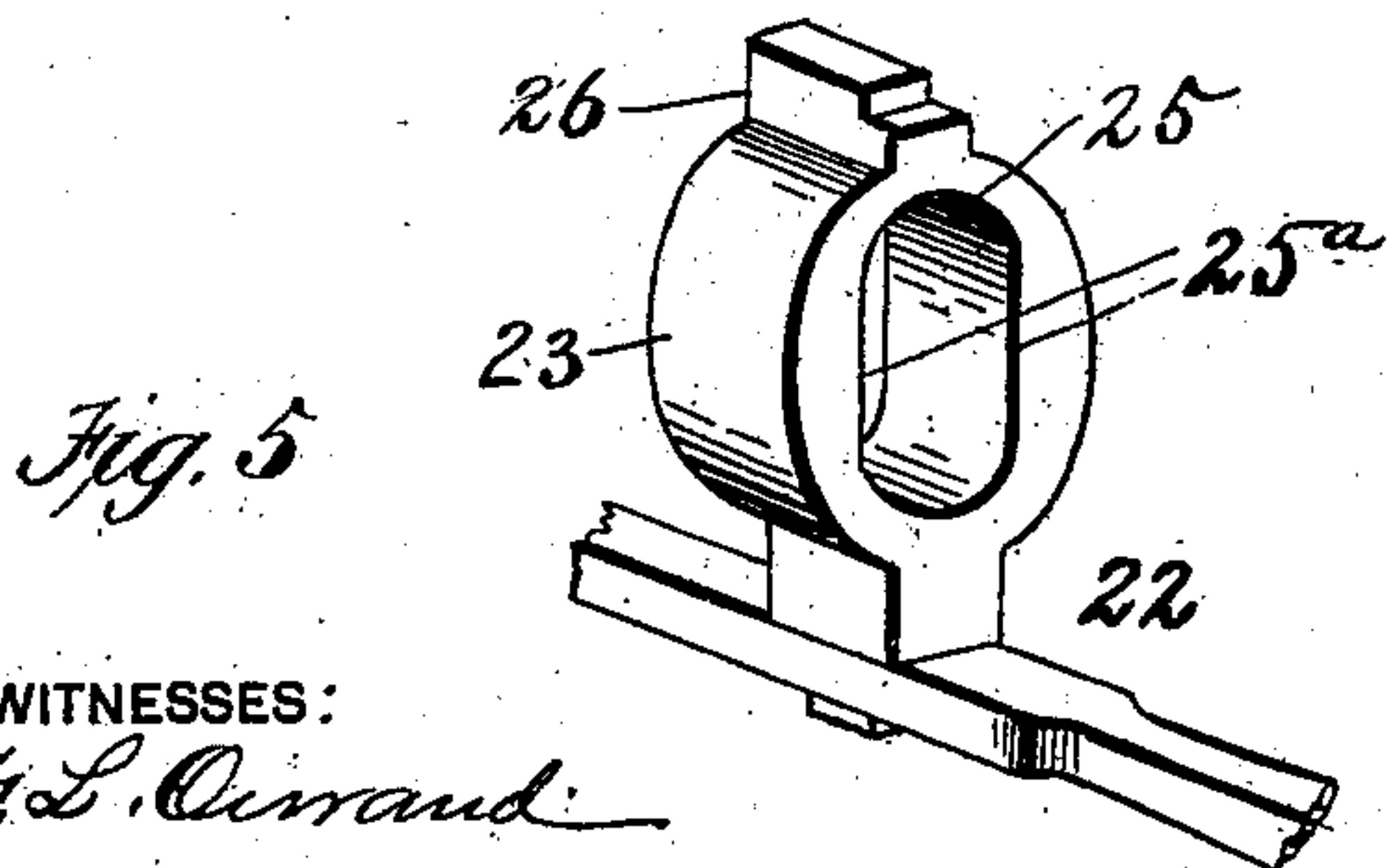
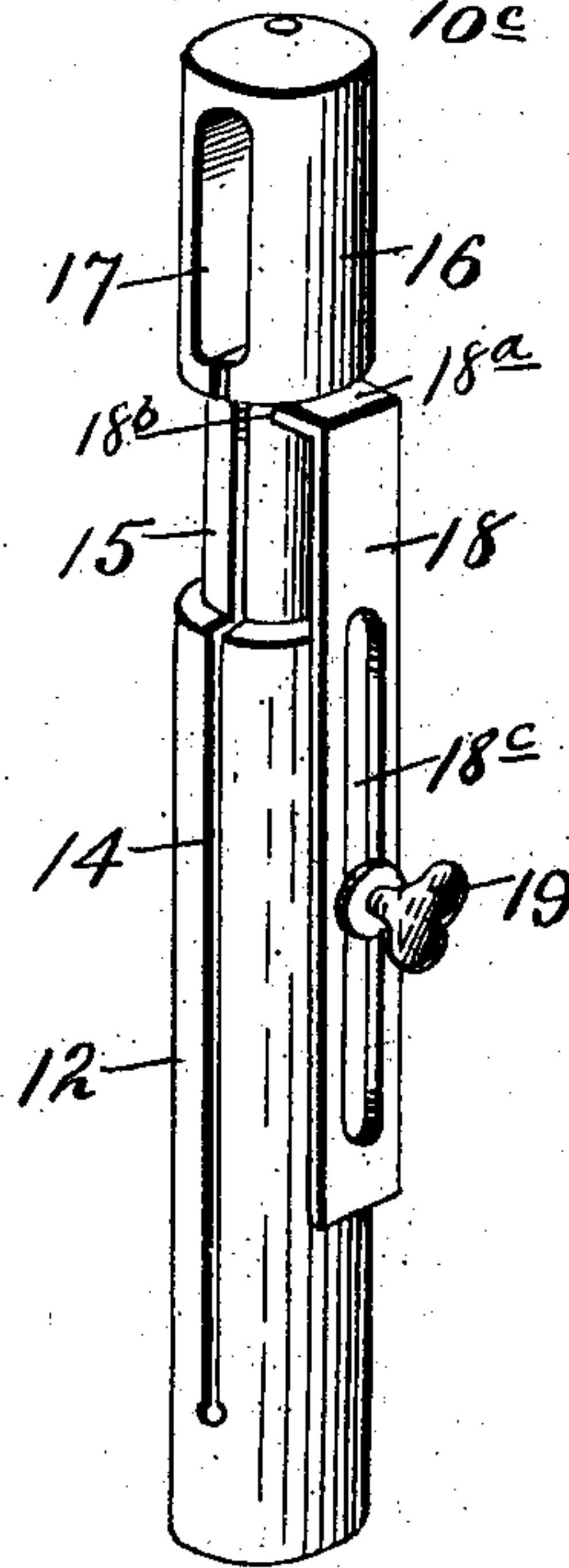
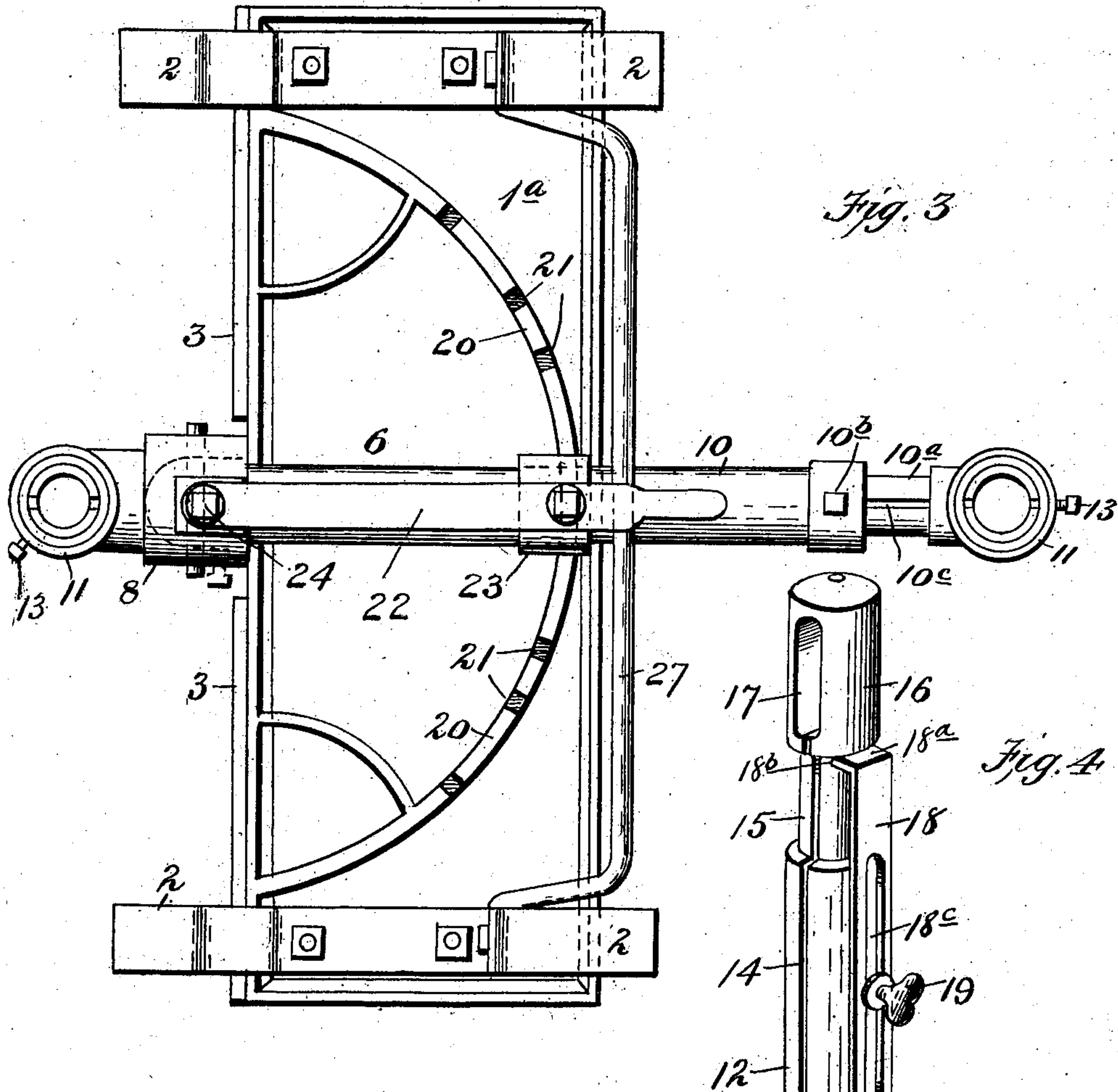
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WITNESSES:

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UNITED STATES PATENT OFFICE.

RICHMOND B. BRIGGS, OF NORTH ADAMS, MASSACHUSETTS, ASSIGNOR OF
ONE-HALF TO LEROY W. GODFREY, OF NORTH ADAMS, MASSACHUSETTS.

MITER-BOX.

SPECIFICATION forming part of Letters Patent No. 744,677, dated November 17, 1903.

Application filed March 28, 1903. Serial No. 150,055. (No model.)

To all whom it may concern:

Be it known that I, RICHMOND B. BRIGGS, a citizen of the United States, residing at North Adams, in the county of Berkshire and State of Massachusetts, have invented new and useful Improvements in Miter-Boxes, of which the following is a specification.

My invention relates to miter-boxes; and the object of the same is to construct a device of this character which shall be simple in construction and efficient in operation.

The novel construction employed by me in carrying out my invention is fully described and claimed in this specification, and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a perspective of my miter-box. Fig. 2 is a vertical section taken longitudinally of the arms. Fig. 3 is a bottom plan of the same. Fig. 4 is a detail of one of the standards. Fig. 5 is a detail of the latch mechanism.

Like numerals of reference designate like parts in the different views of the drawings.

The numeral 1 designates the table of my miter-box, which is supported on four legs 2 and has a back 3 cut away at 4 to permit the passage of a saw. The top 1^a of the table is made of wood to obviate injuring the saw. A bracket-arm 5 is formed on the back of the table and located just below the opening 4 to serve to support a member 6, pivoted thereto on a vertical spindle 7, formed on a collar 8, keyed on the member 6. The member 6 has a short arm 9 and an oppositely-extending longer arm 10. An apertured head 11 is secured to the end of the arm 9, and loosely mounted in this head is a standard 12, normally clamped by a set-screw 13. The standard 12 is traversed through the greater portion of its length by a guide-slot 14, and a slotted stem 15 is loosely mounted in said standard and bears an apertured head 16, having a guide-aperture 17 therein to serve as a guide for the back of a jointer's saw. The arm 10 is made hollow to accommodate an extension member 10^a, which is held against rotation by set-screw 10^b, which engages a longitudinal groove 10^c therein. A head 11 is carried by the member 10, which is identical with the head carried by the arm 9 and

supports like parts. To yieldingly secure the stems 15 against rotation, a clamp is provided, which comprises a slotted bar 18, bearing a toe 18^a, rounded out at 18^b to adapt it to engage the stem 15, and a set-screw 19, which engages the slot 18^c.

Mounted on the under side of the table 1 is a semicircular member 20, which has a series of notches 21 formed therein corresponding to the common or usual miters—thirty degrees, forty-five degrees, sixty degrees, ninety degrees, &c. The number and positions of the notches 21 may be varied at pleasure, to correspond to any miter desired. The arc may also be graduated to degrees.

To set the arms 9 and 10 to correspond to the notches 21 and to secure it against accidental displacement, a latch is provided which comprises a stiff-spring latch-lever 22 and a collar 23, carried thereby and embracing the arm 10. The latch 22 is secured at one end by a set-screw 24, seated in an aperture in the collar 8, and the collar 23 has an elongated aperture 25 therein to permit a vertical movement thereof, the sides 25^a of the aperture being made plane to fit snugly the sides of the arm 10 to prevent any horizontal movement of the arm 10 independent of the collar. A catch 26 in the form of a square lug is formed on the collar 23, and serves to engage any one of the notches 21. A bar 27 connects the two front legs 2 of the table 1 to serve as a guide-bar for the arm 10 and as a purchase for the hand in operating the latch 22.

In the operation of setting the device the latch-bar 22 is forced down to disengage the catch 25 from the notch 21, engaged by it, after which the arm 10 may be swung around until the catch 25 is opposite the notch 21 corresponding to the desired miter, when it is released. The work is then placed on the table and the saw inserted in the guide-slots 15^a in the stems 15.

I do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of my invention.

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

1. In a miter-box, the combination of a table, a semicircle mounted on the under side of said table and having notches formed therein corresponding to different miters, a member pivoted to said table and having oppositely-extending arms, vertical standards mounted on said arms and having guide-grooves therein for the saw, a stiff-spring latch-lever mounted on said member and carrying an elongated collar loosely fitting around said member and provided with a catch located to engage any one of said notches, substantially as described.

2. In a miter-box, the combination with a table for supporting the work, of an arm piv-

oted to said table, an arc provided with notches, a latch-lever attached at one end to said arm, and a collar carried by said latch and loosely fitting said arm, said collar being provided with a catch located to be brought into engagement with any one of said notches, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RICHMOND B. BRIGGS.

Witnesses:

JOSEPH P. REED,

EDWARD C. KIELY.