

NO. 757,208.

PATENTED APR. 12, 1904.

C. A. LEIBMAN.
INGOT MOLD.

APPLICATION FILED AUG. 14, 1903.

NO MODEL.

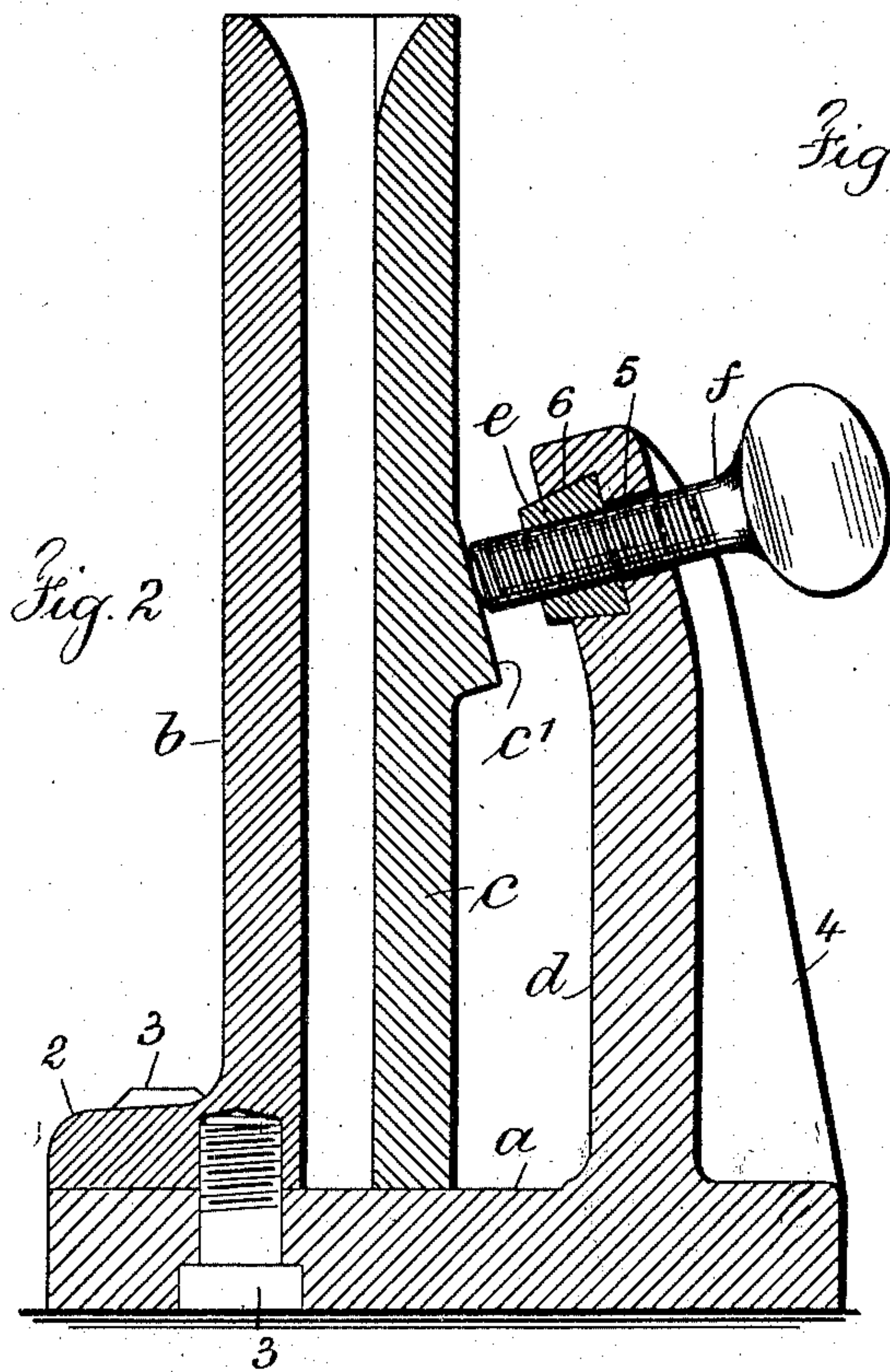


Fig. 1.

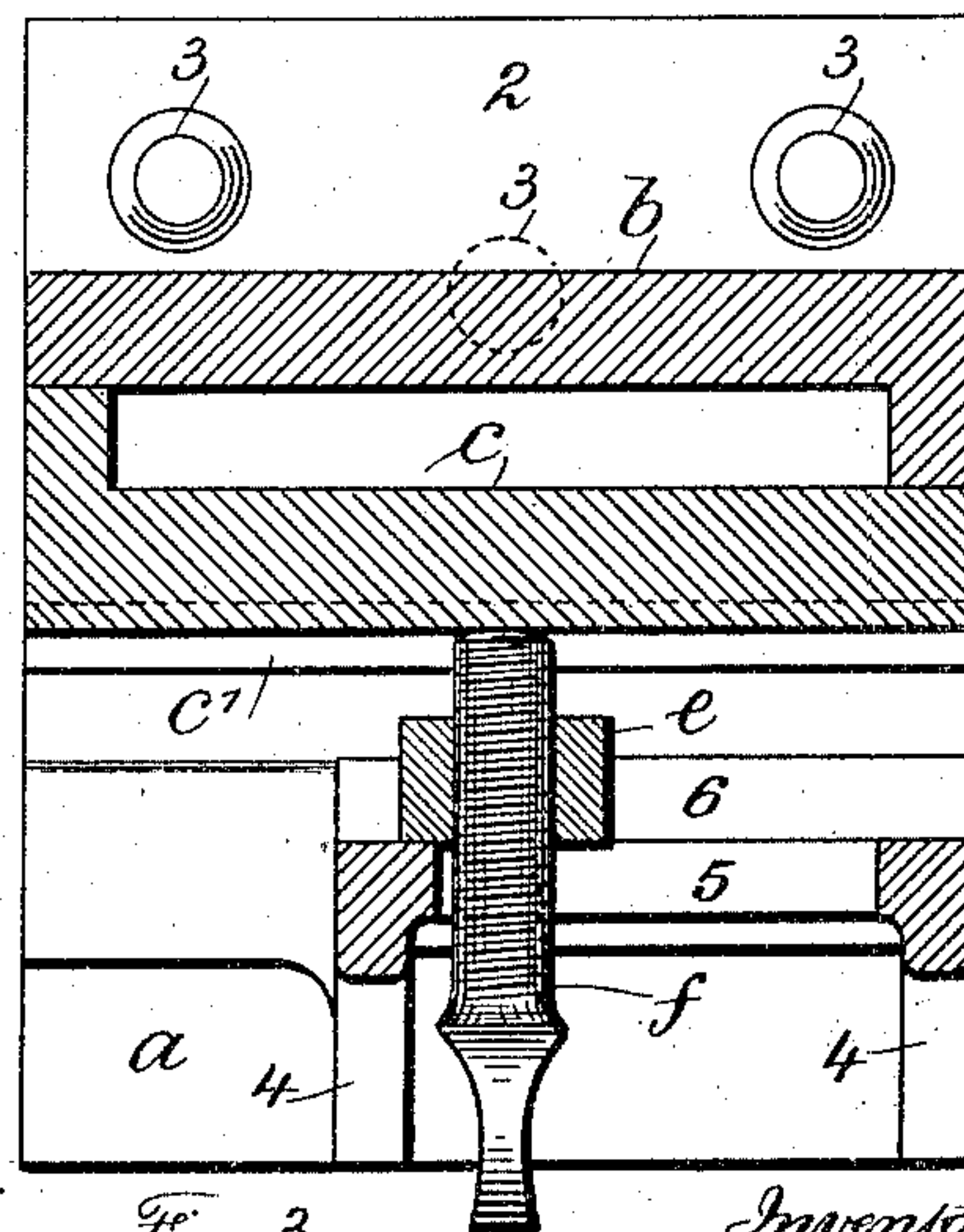
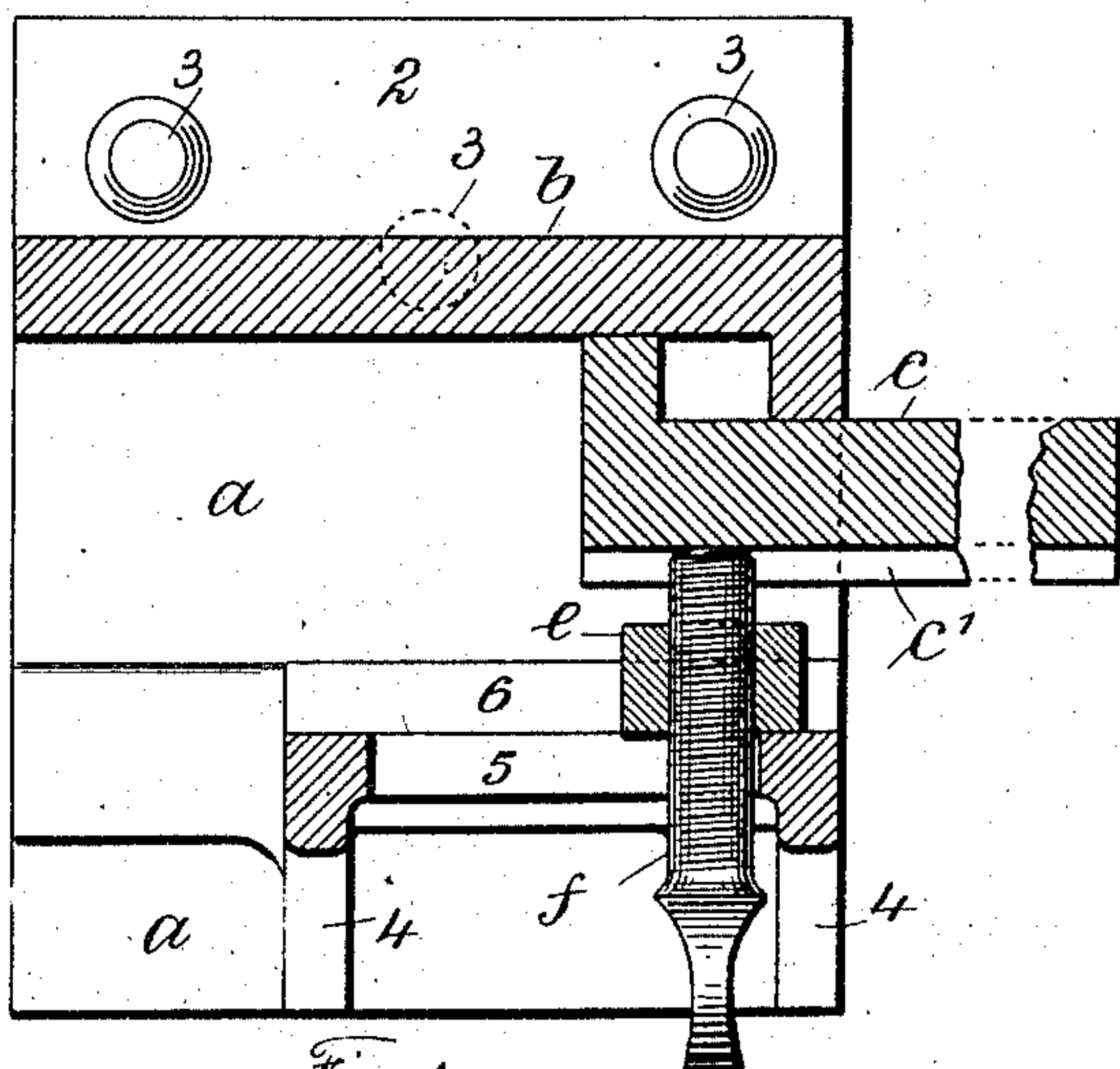
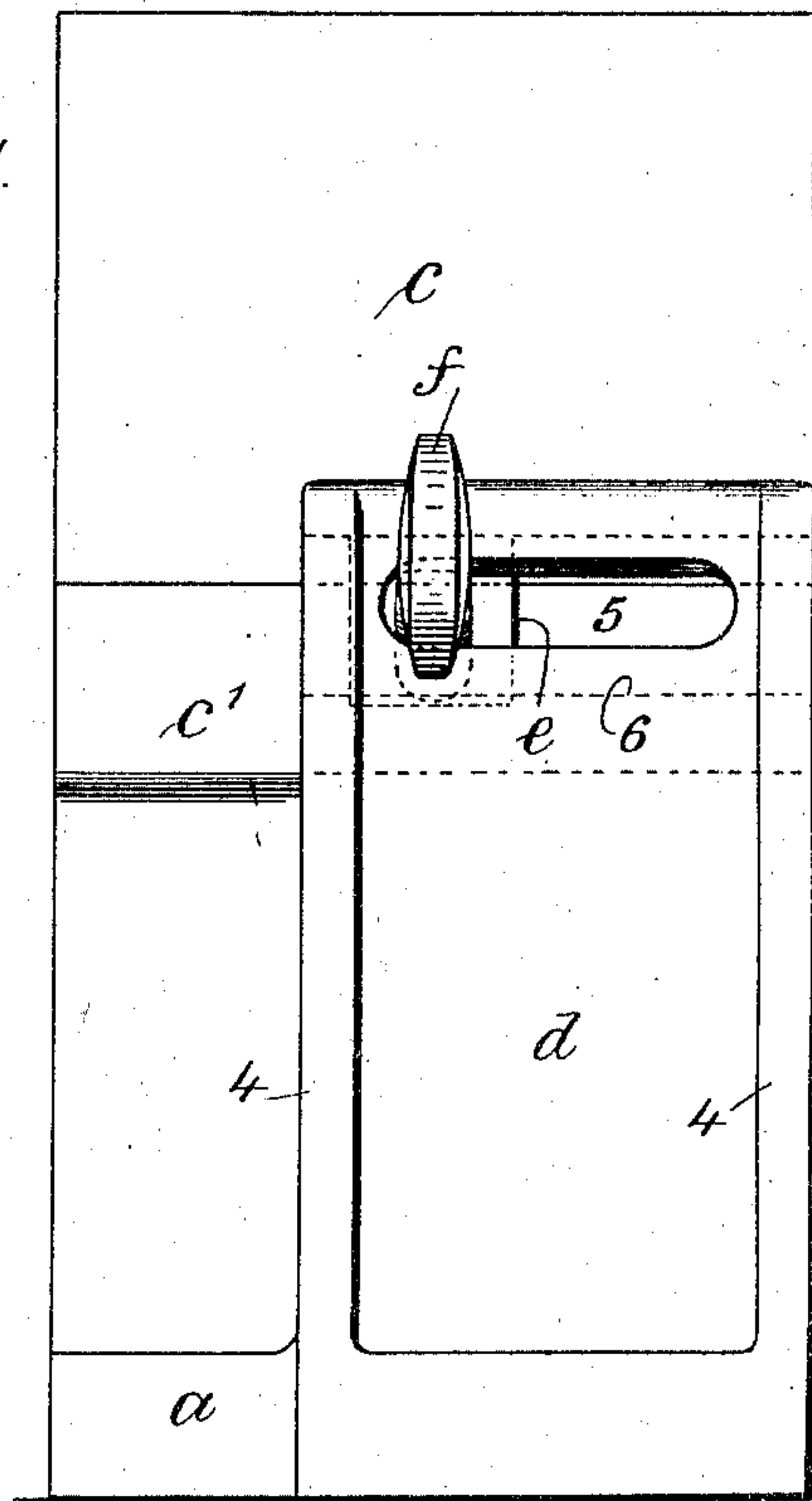


Fig. 4.

Witnesses
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Fig. 3.

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att

UNITED STATES PATENT OFFICE.

CHARLES A. LEIBMAN, OF NEW YORK, N. Y., ASSIGNOR TO E. P. REICH-
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INGOT-MOLD.

SPECIFICATION forming part of Letters Patent No. 757,208, dated April 12, 1904.

Application filed August 14, 1903. Serial No. 189,432. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. LEIBMAN, a citizen of the United States, residing in the borough of Brooklyn, city of New York, county of Kings, and State of New York, have invented an Improvement in Ingot-Molds, of which the following is a specification.

My invention relates to molds particularly adapted for jewelers' use in casting ingots of gold, silver, and other metals. Heretofore in instruments of this class molds have been employed whose matrices are made in halves, one of which is fixed and the other slidably adjustable in relation thereto, so that different-sized ingots could be cast in the same mold, a clamp being used to secure the halves of the matrices together in any desired position. As commonly constructed this clamp device is fixed so that in but one position is the pressure exerted on the adjustable half of the matrix applied centrally, with the result that in this position only is the pressure equal on both sides of the matrix, and consequently in any other position the joint on one side is tighter than that on the other; and the object of my invention is to obviate this difficulty and produce an ingot-mold in which the pressure exerted on the adjustable half of the matrix, regardless of its slidable position, may be applied centrally at all times in order that the joints on both sides of the matrix may be equally tight in all positions.

In carrying out my invention I employ a base, a matrix made in halves, one of which is secured to the base and the other slidably adjustable on the base, a post extending parallel with the matrix members from one edge of the base to a point more than half-way across the same and provided with a horizontally-disposed slot and adjacent dovetail groove, a tapered nut in said groove, and a clamp-screw passing through said slot into and through said nut and adapted at its end to bear against a shoulder on the adjustable half of said matrix, the said screw and nut being slidably adjustable in said slot and groove in order that the pressure exerted by the screw on the adjustable half of the matrix may be

applied centrally and equally in any position on both edges of the matrix.

In the drawings, Figure 1 is an elevation of my improved ingot-mold. Fig. 2 is a vertical central section of the same. Fig. 3 is a sectional plan of the parts in the position shown in Figs. 1 and 2, and Fig. 4 is a sectional plan of the parts in the position for casting a small ingot.

a represents a base of any suitable material, and preferably rectangular in plan.

b c represent L-shaped halves of a matrix of corresponding area, the half *b* being provided with a flange 2 and secured to the base *a* by one or more screws 3 from the same or opposite directions, and the half *c* is provided with a shoulder *c'* and adapted to be slidably adjustable on the base *a*, so as to vary the internal aperture within the limits of the mold to receive the molten metal according to the size ingot desired to be cast.

A post *d*, having end strengthening-flanges 4, is preferably integral with the base *a* and extends from one side of the base to a point more than half-way across the same and is parallel with the halves *b c* of the matrix. The upper end of the post *d* is provided with a slot 5 and an adjacent dovetail groove 6 in the side next to the adjustable member of the matrix and in line with the slot. A tapered nut *e* is fitted in the groove 6; and a clamp-screw *f* is passed through the slot 5 into and through the nut *e*, and the end thereof is adapted to bear against the said shoulder *c'* on the adjustable member of the matrix, the said nut *e* and screw *f* being slidably adjustable in the said groove 6 and slot 5. It will now be apparent that in any position in which the adjustable half *c* of the matrix may be placed for casting an ingot of desired size the nut *e* and clamp-screw *f* may be adjusted to the position for applying the latter to the shoulder of the adjustable half of the matrix at a point central of and midway between the vertical sides of the ingot to be cast in order that the pressure on both edges of the matrix may be the same, making both joints equally tight. The upper end of the post *d* is in-

clined toward the mold sufficiently to be parallel with the face of the shoulder c' , so that the screw f , passing at right angles through the inclined portion of the post d and bearing on the shoulder c' , is at an inclination with the base and also exerts a downward pressure on the adjustable member c of the matrix, forcing the lower end of the same against its seat on the base and causing a tight joint.

10 I claim as my invention—

1. An ingot-mold comprising a base, a two-part matrix, one member being fixed to said base and the other member slidably adjustable thereon, a post upon said base and adjustable means movable laterally on the post for clamping the movable member of the matrix so that in any position the pressure on both edges of the matrix is the same, making both joints equally tight.

20 2. An ingot-mold comprising a base, a two-part matrix, one member of which is fixed to the base and the other member slidably adjustable thereon, a post upon said base and extending parallel with the matrix members from one edge of the base to a point more than half-way across the same, and adjustable means for clamping the movable member of the matrix so that in any position, the pressure on both ends of the matrix is the same, making both joints equally tight.

30 3. An ingot-mold comprising a base, a two-part matrix, one member of which is fixed to the base and the other member slidably adjustable thereon, and having an external shoulder;

a post upon said base and extending parallel with the matrix members from one edge of the base to a point more than half-way across the same and having a slot and a dovetail groove in its upper end arranged horizontally, a tapered nut in said groove and a clamp-screw passing through said slot and into and through said nut, whereby the said screw and nut may be moved and adjusted to contact centrally with the shoulder of the adjustable member of the matrix in any position to make the joints at both ends of the matrix equally tight.

4. An ingot-mold comprising a base, a two-part matrix, one member of which is fixed to the base and the other member slidably adjustable thereon, a post upon said base and extending parallel with the matrix members from one edge of the base to a point more than half-way across the same, and having a slot and a dovetail groove in its upper end arranged horizontally, a tapered nut in said groove, and a clamp-screw passing through said slot and into and through said nut whereby the said screw and nut may be moved and adjusted to contact centrally with the shoulder of the adjustable member of the matrix in any position to make the joints at both ends of the matrix equally tight.

Signed by me this 12th day of August, 1903.

CHAS. A. LEIBMAN.

Witnesses:

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BERTHA M. ALLEN.