

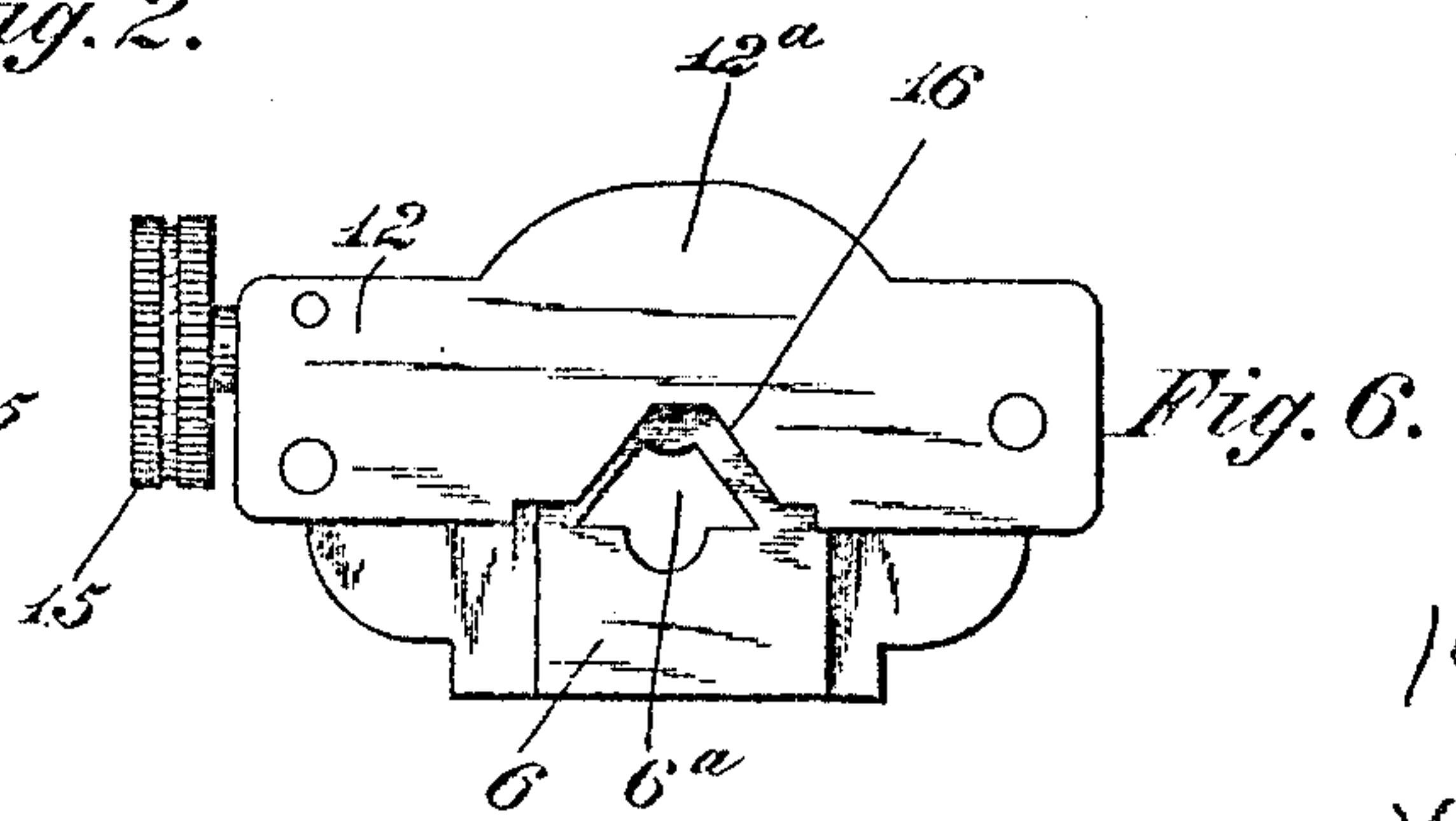
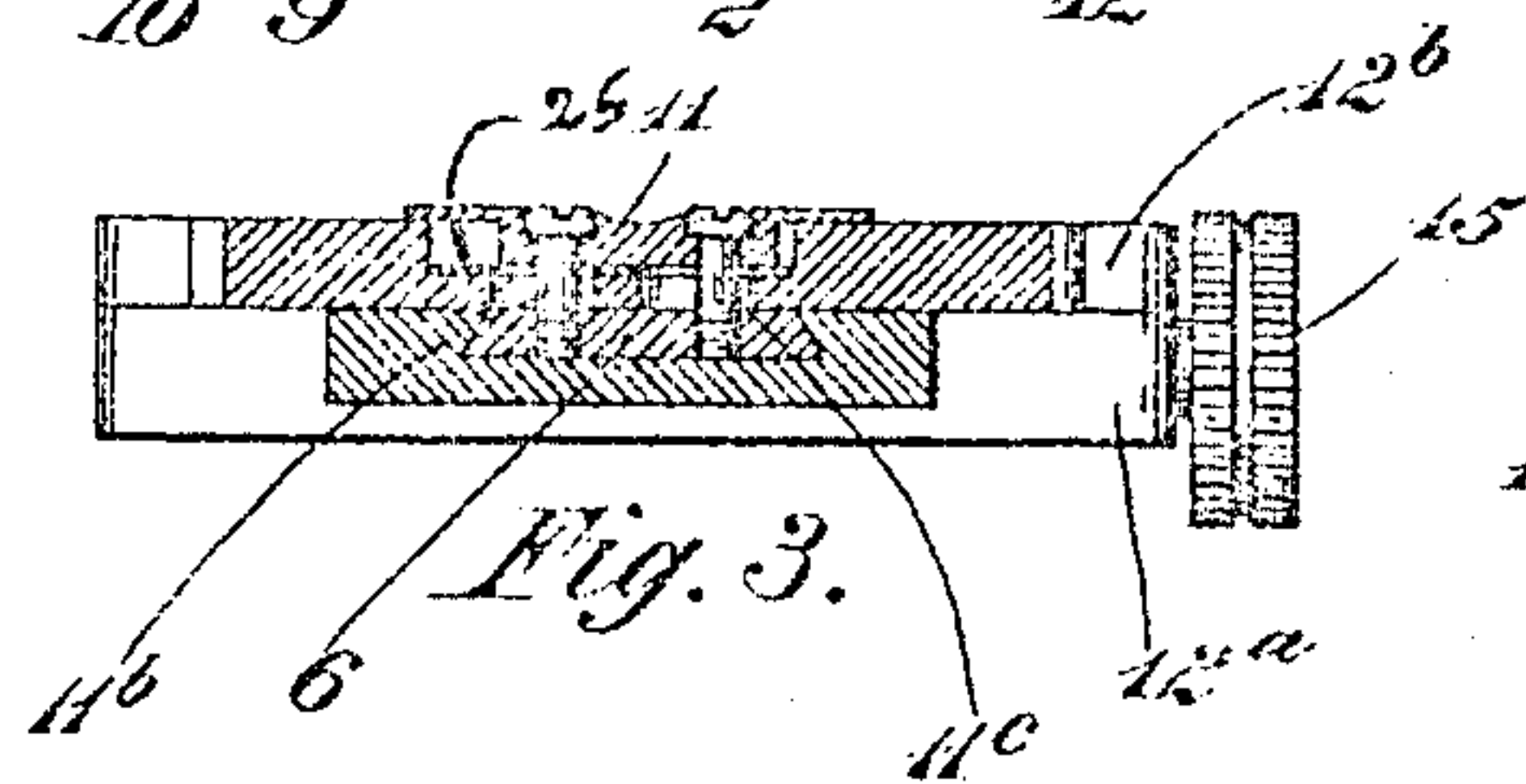
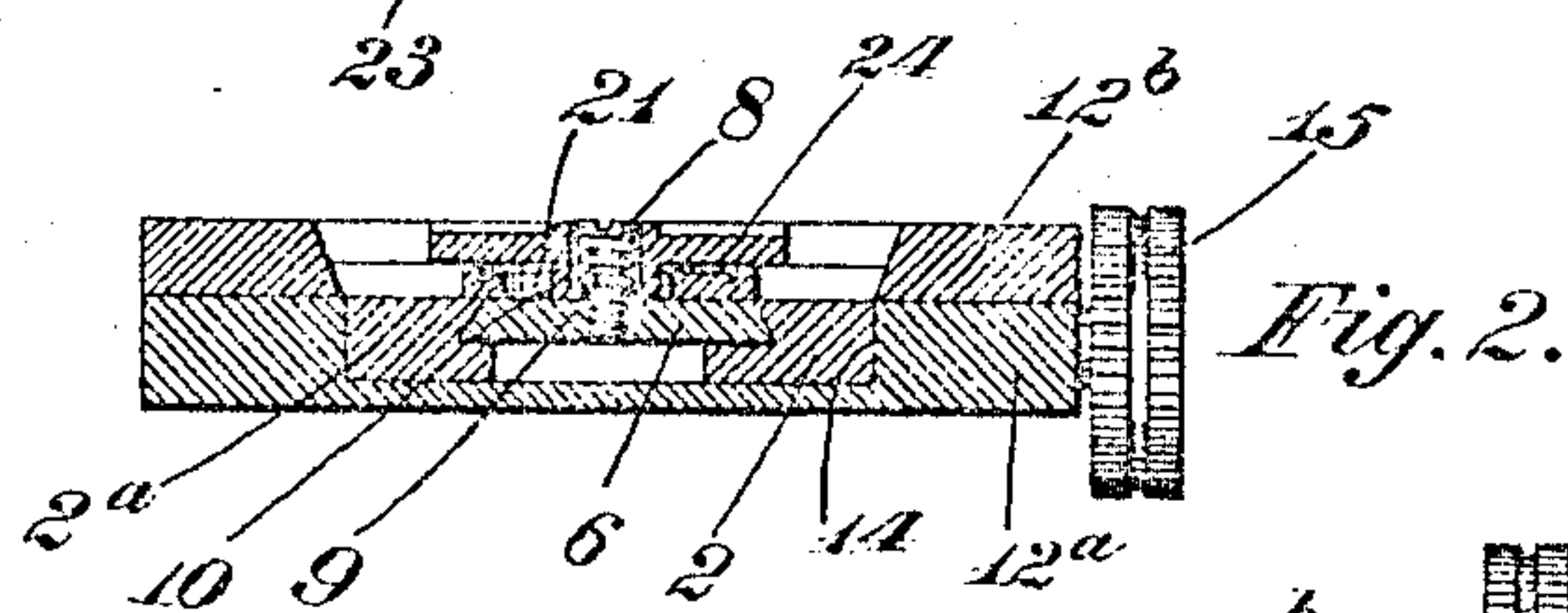
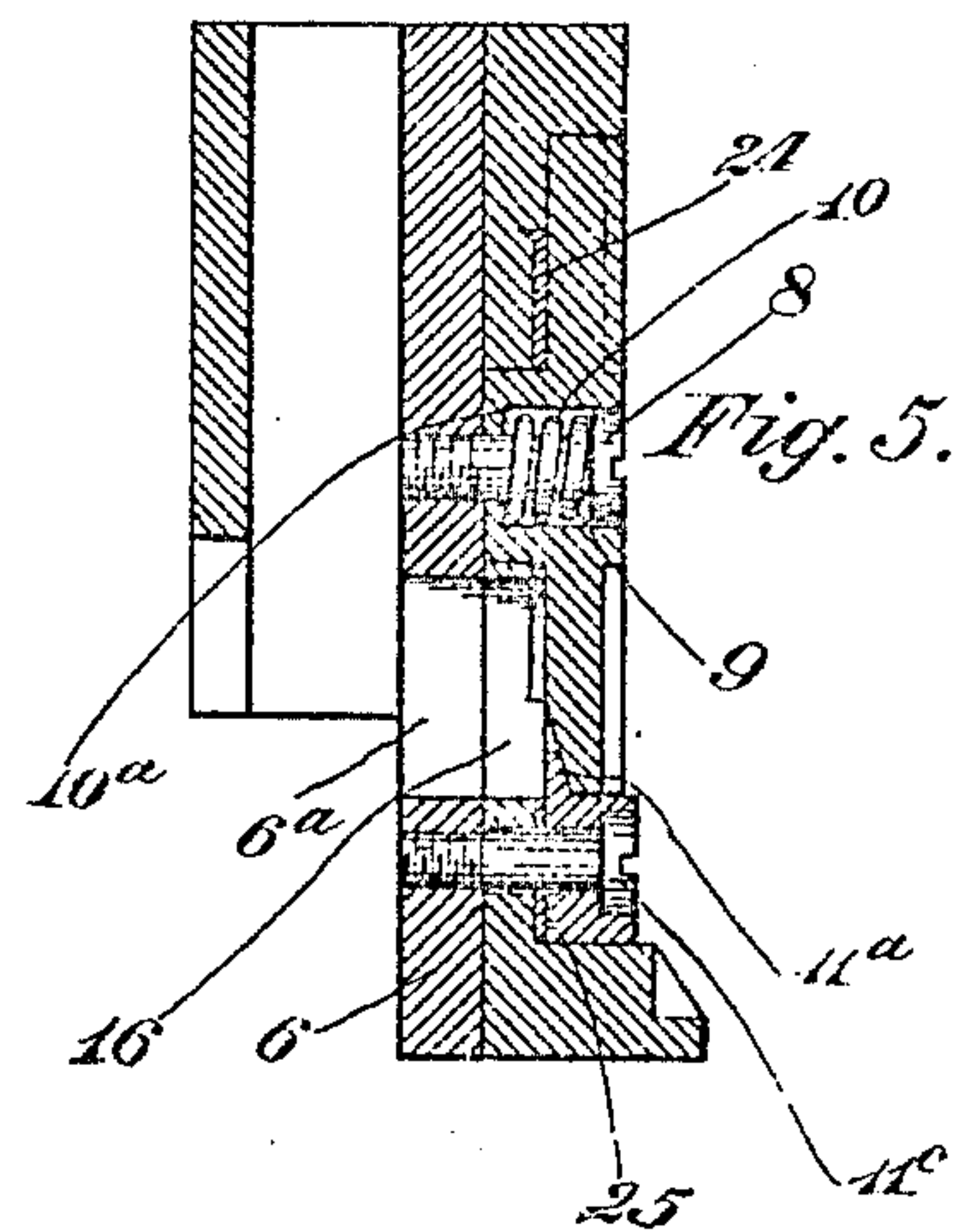
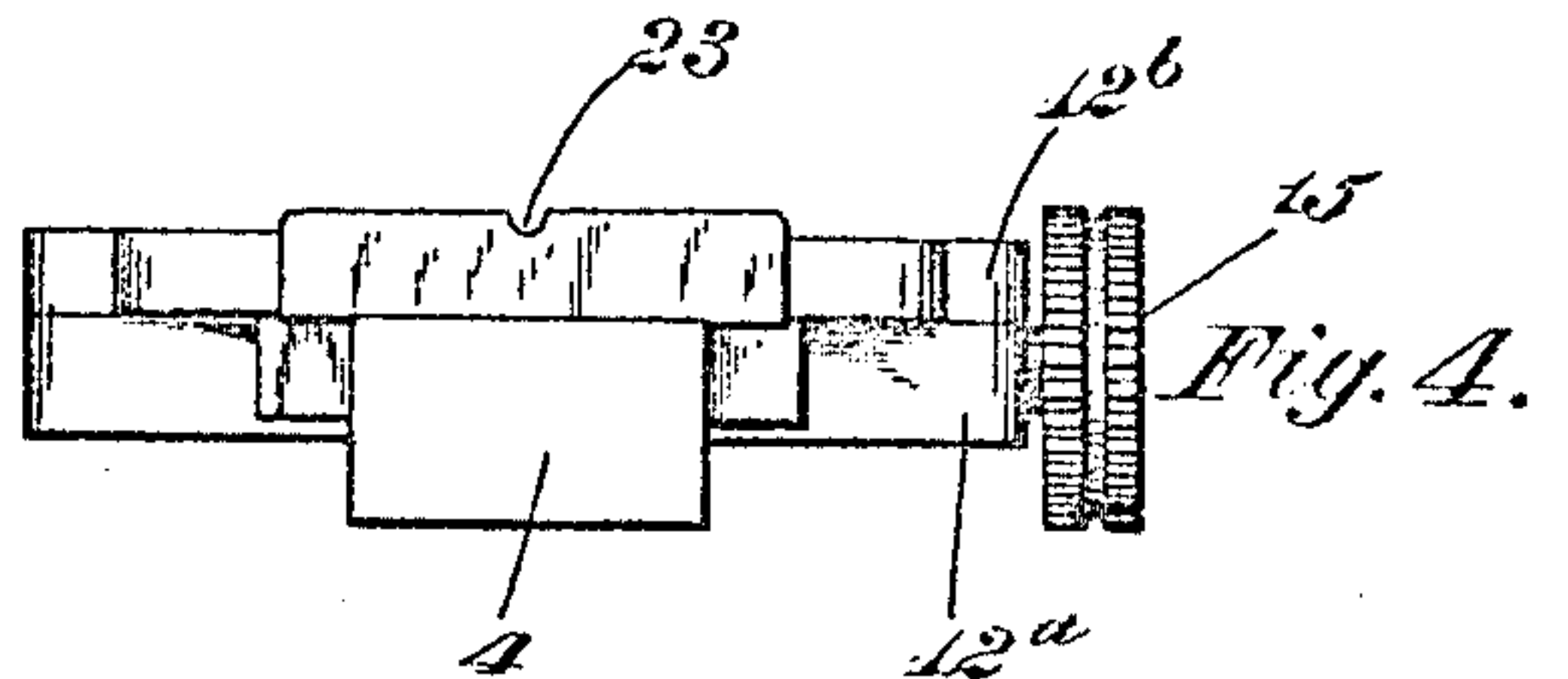
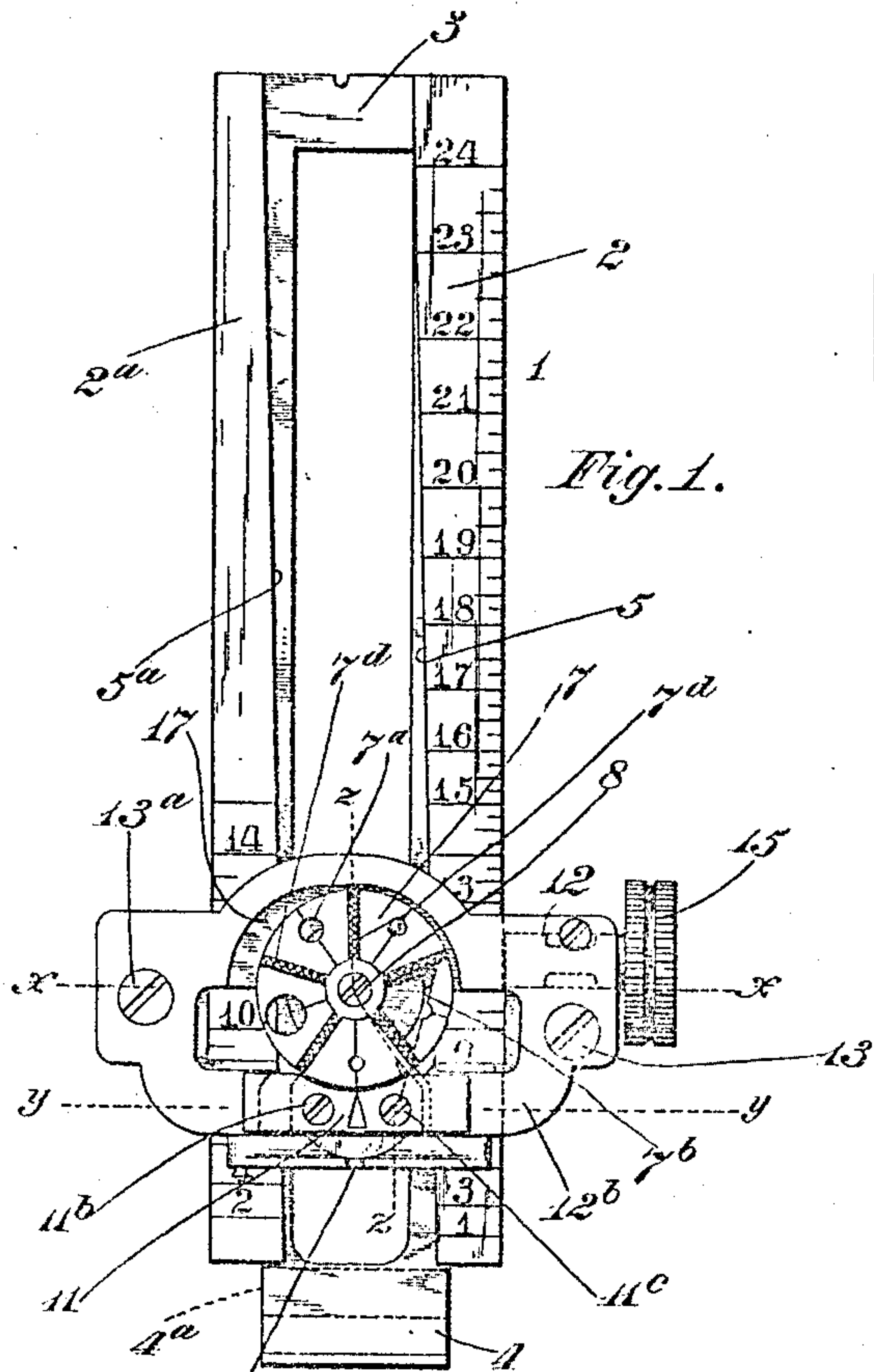
PATENTED NOV. 5, 1907.

ASSELL & F. C. BLENKNER.

GUN SIGHT.

APPLICATION FILED MAY 1, 1907.

2 SHEETS--SHEET 1.



Witnesses

Bert. Finckel  
Alice B. Cook.

Inventors

*John Y. Bassell*

*Fred C. Blenkner*

by *Finckel & Finckel*  
their Attorneys.

54

No. 870,337.

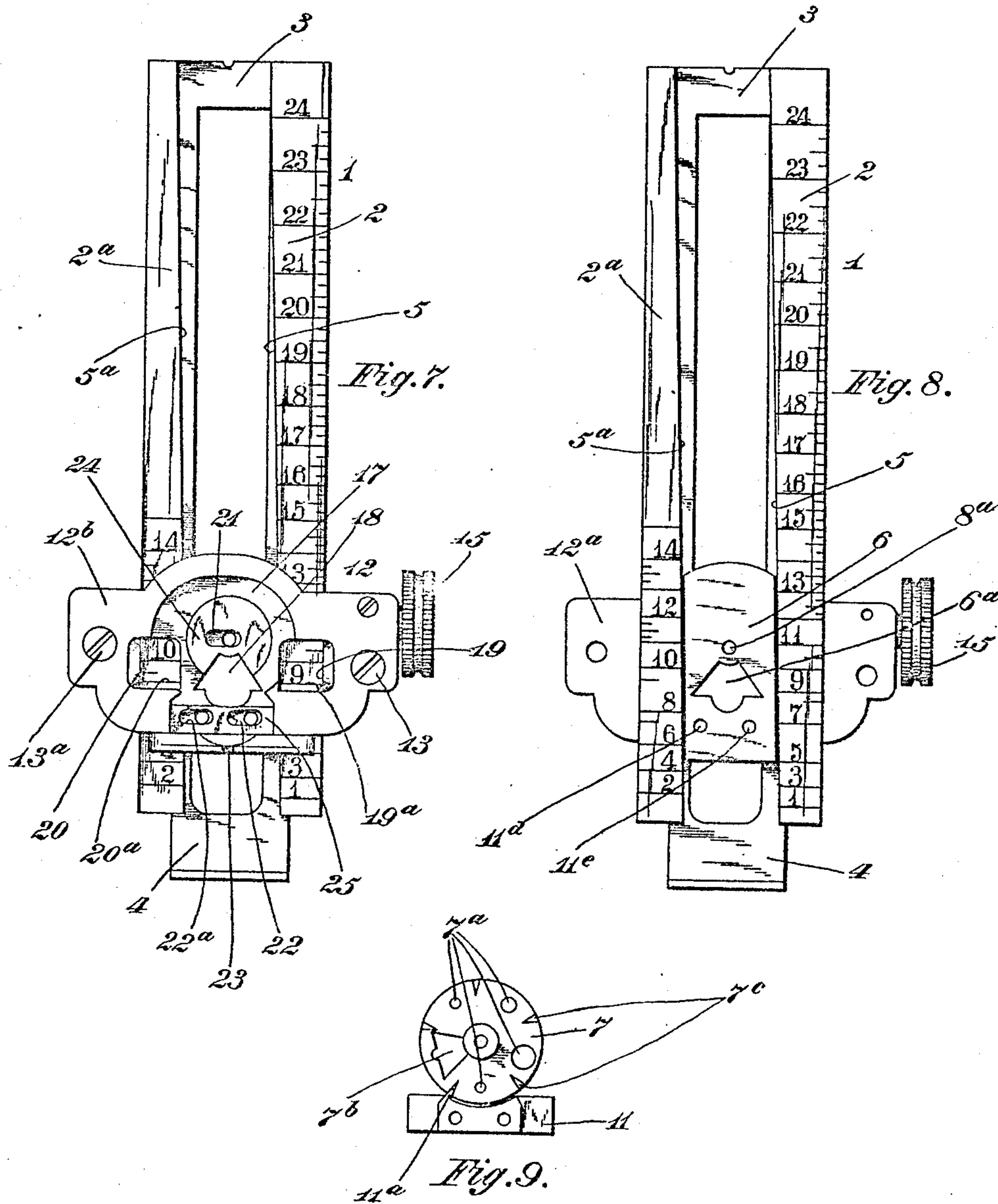
PATENTED NOV. 5, 1907.

J. Y. BASSELL & F. C. BLENKNER.

GUN SIGHT.

APPLICATION FILED MAY 1, 1907.

2 SHEETS—SHEET 2.



Witnesses  
Benj. Finckel  
Alice B. Cook

Inventors  
John Y. Bassell  
Fred C. Blenkner  
by Finckel & Finckel  
Attorneys.



# UNITED STATES PATENT OFFICE.

JOHN Y. BASSELL AND FRED C. BLENKNER, OF COLUMBUS, OHIO.

## GUN-SIGHT.

No. 870,337.

Specification of Letters Patent.

Patented Nov. 5, 1907.

Application filed May 1, 1907. Serial No. 371,311.

*To all whom it may concern:*

Be it known that we, JOHN Y. BASSELL and FRED C. BLENKNER, citizens of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Gun-Sights, of which the following is a specification.

The invention relates more particularly to rear-sights for guns, of the combined peep and open notch type and especially adapted for military service, and the object of the invention is to provide a simple, compact and durable construction that shall be capable of speedy, accurate and stable adjustment to the varying range conditions and the visual needs of individual marksmen.

An embodiment of the invention is shown in the accompanying drawings, but the invention is not limited to the precise details of construction shown.

In said drawings—Figure 1 is a front elevation of the device with the standard and sight-slide thereon in elevated position; Fig. 2 is a transverse sectional view on the line  $x-x$  of Fig. 1; Fig. 3 is a transverse sectional view on the line  $y-y$  of Fig. 1; Fig. 4 is a front elevation of the device with the standard and sight-slide in lowered position and showing the lower notch or battle sight in position for service; Fig. 5 is a vertical sectional view through the sighting mechanism taken on the line  $z-z$  of Fig. 1; Fig. 6 is a rear elevation of the sight-slide; Fig. 7 is a view similar to that of Fig. 1 with the rotatable sight-disk and latching-block therefor removed; Fig. 8 is a view similar to that of Fig. 7 with the front leaf of the sighting member carriage and other parts removed to show the drift-slide. Fig. 9 is a rear view of the sight-disk and locking-block.

In the several views 1 designates a leaf or standard comprising, as usual, two parallel wings 2 and 2<sup>a</sup> connected at their upper ends by a bridge 3, and at their lower ends by a hinge-joint member 4 provided with an opening 4<sup>a</sup>, shown in dotted lines in Fig. 1, for a hinge pintle for connection with a companion hinge member on the rifle (not shown). The wings 2 and 2<sup>a</sup> are provided at their inner edges with correspondingly inclined grooves or undercuts, as indicated at 5 and 5<sup>a</sup> respectively, to form an inclined guideway. The wing 2 contains a graduated scale extending substantially its entire length, and the wing 2<sup>a</sup> has a partial scale.

6 designates a drift-slide comprising a flat plate beveled at opposite edges to fit closely, but slidably, in the guideway in the leaf formed by the undercuts 5 and 5<sup>a</sup>, said drift-slide being provided with an opening 6<sup>a</sup> to permit a line of view through the sights to be hereinafter referred to.

7 designates a rotatable disk containing a plurality of peep-sight openings 7<sup>a</sup> of different diameters, and an open notch-sight 7<sup>b</sup>, the centers of the peep-sights and the center of the circle upon which the notch-

sight is cut all being equally distant from the axis of rotation of said disk. The disk 7 is pivotally secured to the drift-slide 6 by means of a screw 8 threaded into said slide at 8<sup>a</sup>. A small coil-spring 9 is inserted in a recess 10 in the sight-disk and bears against the head of the screw 8 and a shoulder 10<sup>a</sup> provided on the disk 7. Said disk is thus normally pressed inwardly so that a pin or tooth 11<sup>a</sup> at the inner edge of a block 11 will engage notches 7<sup>c</sup> arranged at intervals on the under surface of said disk to latch the disk in set position of the respective sight openings to prevent accidental rotation of the disk. Said block 11 is also rigidly secured to the drift-slide 6 by means of screws 11<sup>b</sup> and 11<sup>c</sup> threaded into said slide at 11<sup>d</sup> and 11<sup>e</sup>. The usual small white metal lines are placed above and below the sight openings to assist the eye in aiming and in holding the gun so that the front and rear sights are in vertical alinement. The sight-disk is also provided with a series of milled ribs 7<sup>b</sup> primarily intended for engagement by the finger-nail or other suitable instrument to rotate the disk for adjusting the various sighting apertures to sighting position. Said ribs are arranged between the various sights, thus serving to divide the disk into distinctive fields and segregate the sight openings and the white metal lines above and below the same for further assisting the eye in aiming. Manifestly, also, the ribs tend to protect the face of the disk from becoming worn or polished.

12 designates a sighting member carrier or sight-slide and comprises a rear-plate 12<sup>a</sup> engaging the rear surface of the leaf or standard 1, and a front-plate 12<sup>b</sup> engaging the front face of said leaf, said plates being secured together beyond the outer edges of the leaf wings by means of screws 13 and 13<sup>a</sup>. The plate 12<sup>a</sup> is provided with a slot 14 of a depth equal to the thickness of the leaf 1, and the walls of said slot closely engage the back and outer edges of the leaf so that the carrier is guided in a straight line vertically in its movement on the leaf. A set-screw 15 is employed to secure the sight-slide at any desired position on the leaf. The rear-plate 12<sup>a</sup> is provided with a notch 16 to register with the opening 6<sup>a</sup> in the drift-slide 6. The front-plate 12 is recessed, as indicated at 17, to receive the sight-disk 7 so that said disk lies flush with the outer surface of said plate. The recess 17 of the plate 12<sup>b</sup> is provided with a central opening 18 to register with the opening 6<sup>a</sup> in the drift-slide 6 and notch 16 in the plate 12<sup>a</sup>, whereby a through line of vision is provided for any of the peep-sights 7<sup>a</sup>, or a field view for the open notch-sight 7<sup>b</sup> in the sight-disk when the several sighting apertures are moved to sighting position. The front-plate 12<sup>b</sup> is also provided with scale-observing openings 19 and 20 the bottom edges 19<sup>a</sup> and 20<sup>a</sup> of which aline with the center of the several sight openings in the disk when they are brought into sighting position, hence when said sight-member



carriage 12 is adjusted with the edges 19<sup>a</sup> and 20<sup>a</sup> at any desired mark on the scale, the marksman may select from the various sights on the disk the one best suited to the prevailing atmospheric conditions or his particular visual needs, or he may readily change from one sight to another without releasing and re-adjusting the sight member carriage on the leaf. The front-plate 12<sup>b</sup> is also provided with a slot 21 in which the screw 8 connecting the drift-slide 6 and sight-disk 7 is laterally movable, thus permitting the lateral adjustment of the sight-disk 7 for drift correction. The block 11, heretofore referred to, is also seated in the recess 17 in the front-plate and lies adjacent to the sight-disk with its upper edge curved to conform to the curvature of said disk. The front-plate 12<sup>b</sup> is also provided with slots 22 and 22<sup>a</sup> for the passage and lateral movement of the screws 11<sup>b</sup> and 11<sup>c</sup> connecting the block 11 and the drift-slide 6. Said registering block 11 is also provided, midway between its ends, with a white metal piece of triangular shape, the apex of which lies in the curved edge of the block and in alinement with the white metal lines above and below the sights on the disk when such sights are moved to sighting position. The front-plate 12<sup>b</sup> also carries a notch or battle sight 23 which is, as usual, arranged at a fixed elevation, and in the present construction may be brought into service in any position of the sight-slide or carriage by throwing down the leaf.

To prevent adhesion of the parts due to corrosion, a thin non-corrosive metal plate 24 is inserted between the sight-disk and the sight-slide, and a similar plate 25 is interposed between the sliding-block 11 and said sight-slide.

In operation the sight-slide or carrier is moved to the desired range mark on the scale with the lower edge of the scale-observing opening coinciding with the range mark. It will readily be seen from the foregoing description of the construction, that, as the sight-slide is moved to the desired range elevation there is an automatic lateral movement of the sighting member for drift correction. It will also be seen that a sighting member is provided that will fulfil, within a wide range of possibilities, the needs of individual marksmen as determined by their different visual characteristics or the variable atmospheric conditions. When the sight-slide is adjusted to the desired mark by moving the lower edge of the scale-observing opening into coincidence with the range mark on the scale and securing the sight-slide by means of the set-screw, the marksman, by merely rotating the disk, can then select the sight best suited to his individual needs and no further adjustment of the sight-slide is necessary for changing the sight opening at the determined range.

As the parts are few and simple the device may be assembled with ease, furthermore, the construction is strong and durable and in use may be adjusted with speed and exactness by the most inexperienced soldier.

What we claim and desire to secure by Letters Patent is:

1. In a gun sight, the combination of a leaf having a vertical guideway and a guideway to provide for driftage correction, a carrier on said leaf comprising a part mov-

able on and controlled by said vertical guideway and a part movable on and controlled by said driftage guideway, a rotatable sighting member connected with the part of said carrier controlled by the driftage guideway and engaged by the part of the carrier controlled by the vertical guideway, said sighting member having a plurality of sight apertures of various sizes the sighting centers of which are equally distant from the axis of rotation of said member.

2. In a gun sight, the combination of a leaf having a vertical guideway and a guideway to provide for driftage correction, a carrier on said leaf comprising a part movable on and controlled by said vertical guideway and a part movable on and controlled by said driftage guideway, a rotatable sighting member connected with the part of said carrier controlled by the driftage guideway and engaged by the part of the carrier controlled by the vertical guideway, said sighting member having a plurality of sight apertures of various sizes the sighting centers of which are equally distant from the axis of rotation of said member, and a lower notch or battle sight on the part of the carrier controlled by said vertical guideway whereby said battle sight moves in a substantially vertical line in adjusting said carrier.

3. In a gun sight, the combination of a leaf having a vertical guideway and a guideway for driftage correction, a slide movable in and controlled by the guideway for driftage, a rotatable sighting member carried by said slide, said rotatable member having sight apertures of various sizes the sighting centers of which are equally distant from the axis of rotation of said member, a second slide movable on and controlled by said vertical guideway, said second slide having a scale-observing opening, the edge of the slide below said opening alining with the several sight openings when the latter are in sighting position.

4. In a gun sight, the combination of a leaf having a vertical guideway and a guideway for driftage correction, a carrier on said leaf comprising a part movable on and controlled by said vertical guideway and a part movable on and controlled by said driftage guideway, a recess in the part controlled by the vertical guideway, a rotatable sighting member provided with sight apertures of various sizes the sighting centers of which are equally distant from the axis of rotation of said member, said sighting member being seated in said recess in the part of the carrier controlled by the vertical guideway and connected with the part of the carrier controlled by the driftage guideway.

5. In a gun sight, the combination of a sight leaf and a rotatable sighting member thereon having a plurality of sight openings, said sighting member being provided on its outer face with a series of radial ribs intermediate said sight openings and dividing the outer surface of the sighting member into separate and distinct fields for the several sight openings.

6. In a gun sight, the combination of a sight leaf provided with a vertical guideway and a guideway to provide for driftage correction, a sighting member having a plurality of sight openings of various sizes the sighting centers of which are equally distant from the axis of rotation of said member, a carrier for the sighting member comprising a part movable on and controlled by said vertical guideway and a part movable on and controlled by said driftage guideway, said sighting member being rotatably connected with the part controlled by the driftage guideway, and said sighting member being engaged by the part controlled by the vertical guideway, and a latching device for said sighting member comprising a block connected with the part of the carrier controlled by the driftage guideway, said block having a projection at its edge adapted to engage notches provided at the edge of the under surface of the rotatable sighting member to hold the latter in set position for sighting.

7. In a gun sight, the combination of a leaf having a guideway to provide for driftage correction, a slide movable in and controlled by said guideway, a rotatable sighting member carried by said slide, said rotatable member having sight apertures of various sizes the sighting centers of which are equally distant from the axis of rotation of said member, guide lines for the sight apertures on the



sighting member, and an index carried by said slide for vertical alinement with said guide lines when the several sight apertures are in sighting position.

- 5 8. In a gun sight, the combination of a leaf having a vertical guideway and a guideway to provide for driftage correction, a carrier on said leaf comprising a slide movable in and controlled by the driftage guideway and a slide movable on and controlled by the vertical guideway, a rotatable sighting member carried by the slide on the vertical guideway and connected with and controlled for driftage by the slide in the driftage guideway, said sighting member having sight apertures of various sizes, the sighting centers of which are equally distant from the axis of rotation of said member.
- 10 9. In a gun sight, the combination of a leaf having a vertical guideway and a guideway to provide for driftage correction, a carrier on said leaf comprising a slide movable in and controlled by the driftage guideway and a slide movable on and controlled by the vertical guideway, a rotatable sighting member carried by the slide on the vertical guideway and connected with and controlled for driftage by the slide in the driftage guideway, a latching

member carried by the slide on the vertical guideway and connected with and controlled for driftage by the slide in the driftage guideway, and means on the sighting member 25 to be engaged by said latching member to latch the sighting member in sighting position.

10. In a gun sight, the combination of a leaf having a vertical guideway and a guideway to provide for driftage correction, a carrier on said leaf comprising a slide movable in and controlled by the driftage guideway and a slide movable on and controlled by the vertical guideway, a rotatable sighting member carried by the slide on the vertical guideway and connected with and controlled for driftage by the slide in the driftage guideway, said sighting member having sight apertures of various sizes, and a lower notch or battle sight on the slide controlled by the vertical guideway. 30 35

JOHN Y. BASSELL.  
FRED C. BLENKNER.

Witnesses to both signatures:

BENJAMIN FINCKEL,  
ALICE B. COOK.