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May 9, 1933.

F. K. HOWARD

1,908,019

GUN SIGHT

Filed May 19, 1931

Fig. 1.

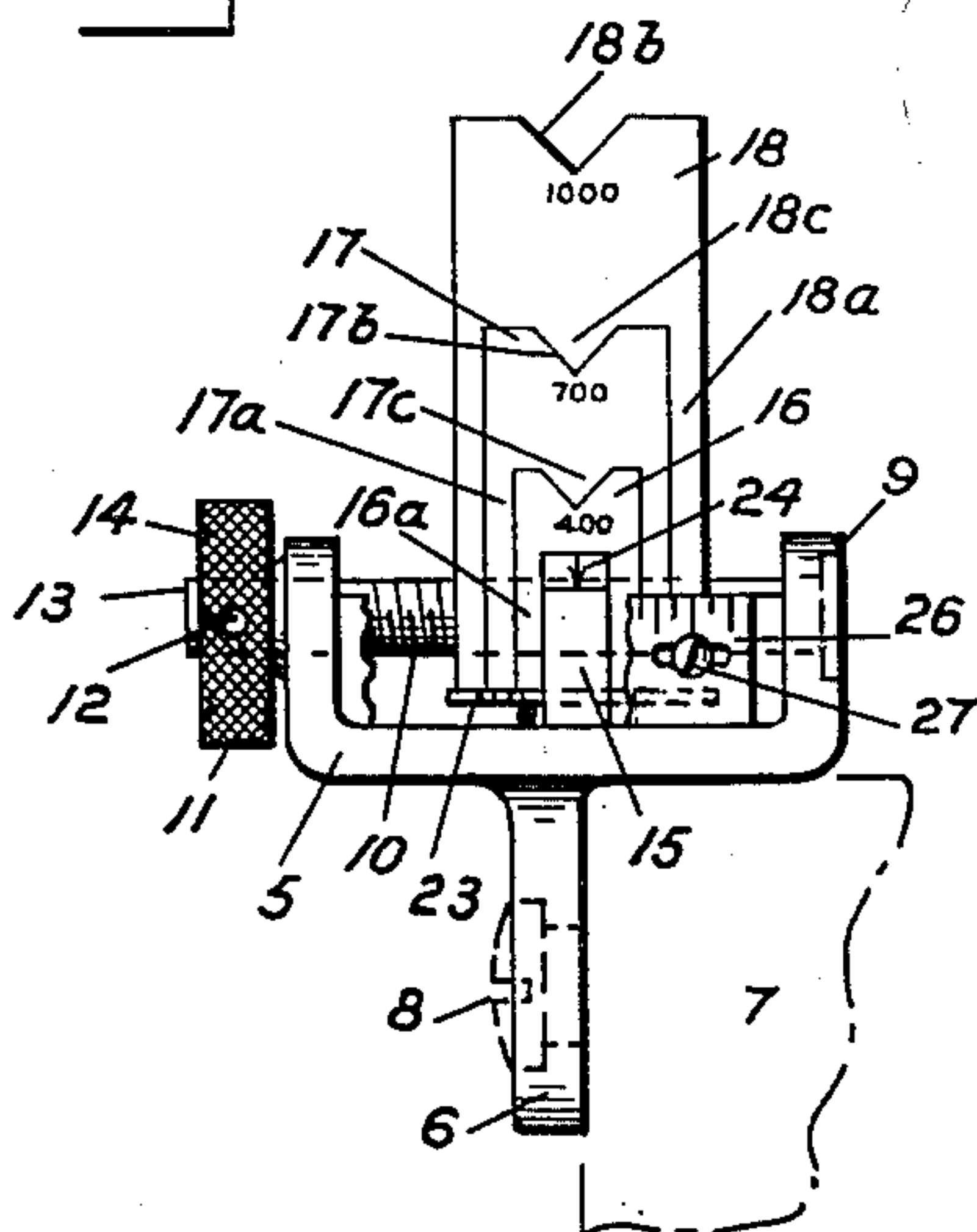


Fig. 2.

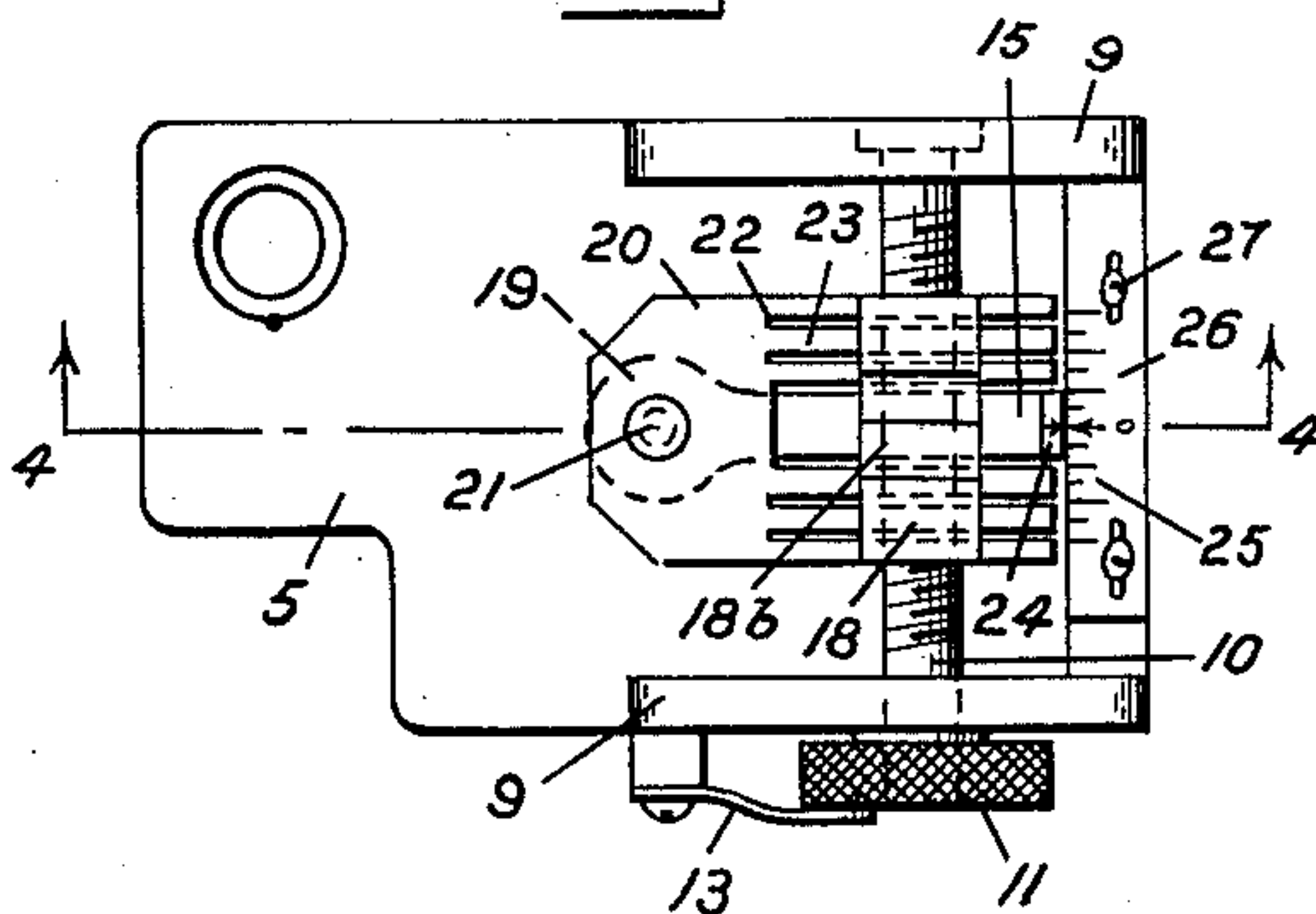


Fig. 3.

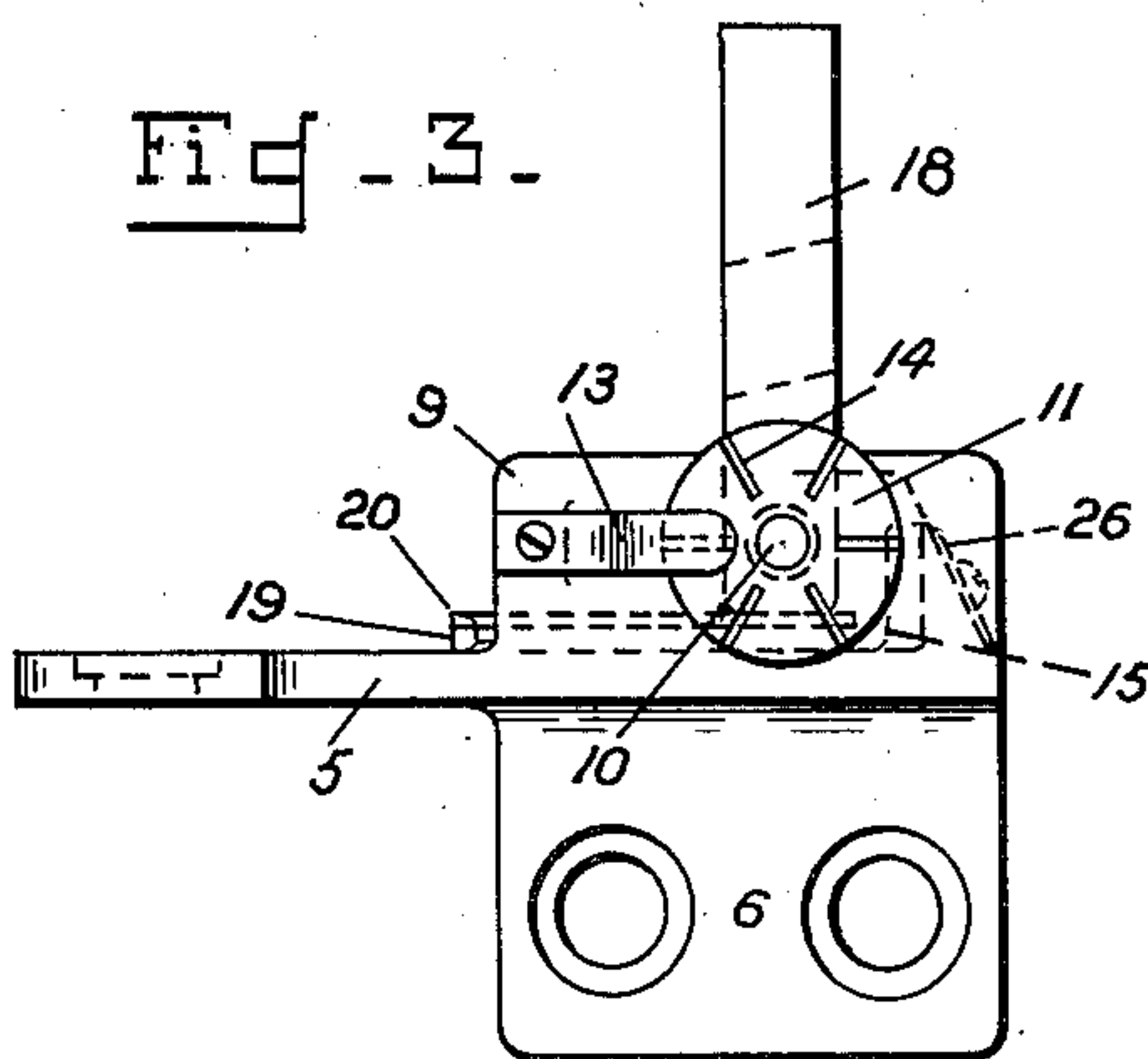


Fig. 5.

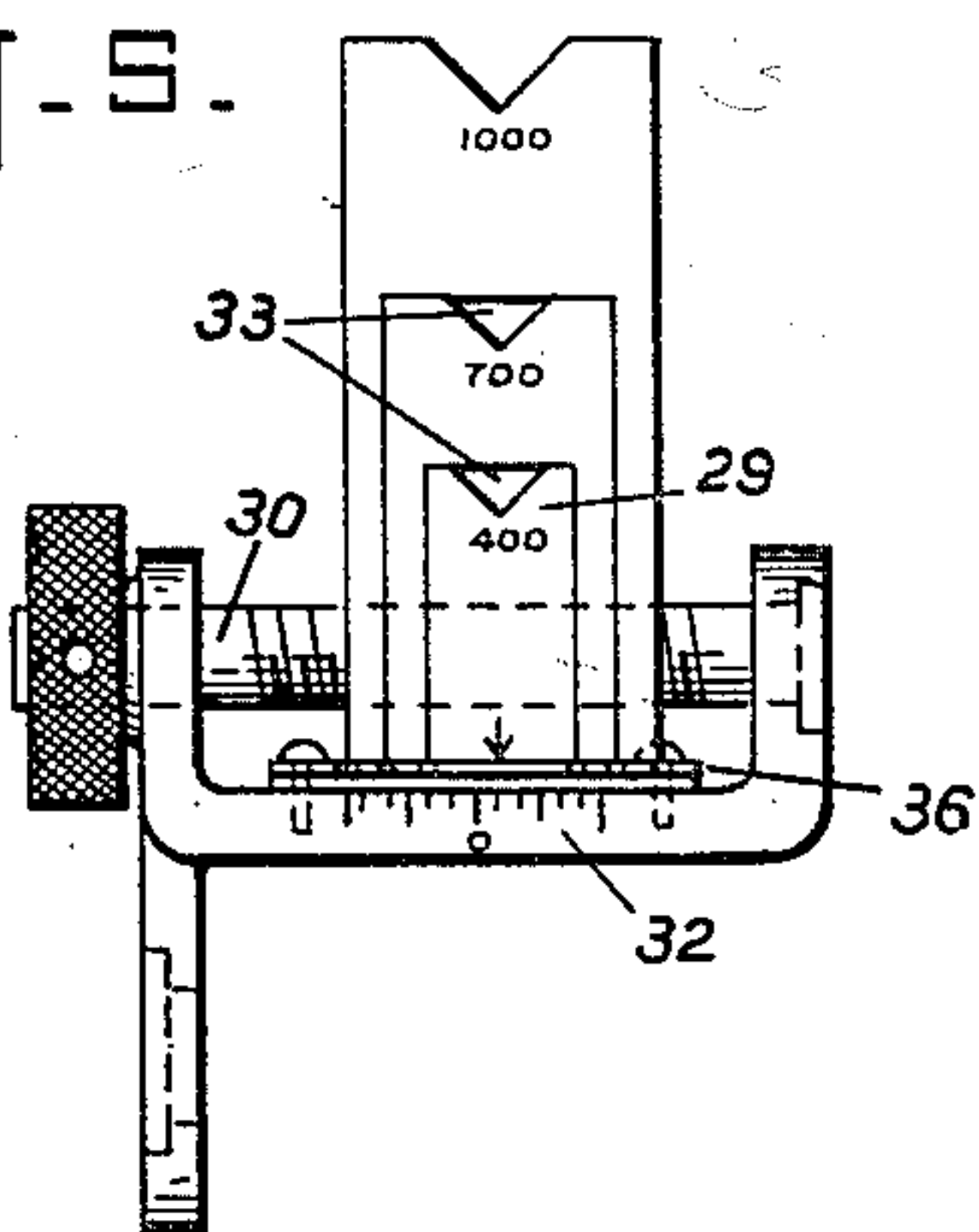


Fig. 6.

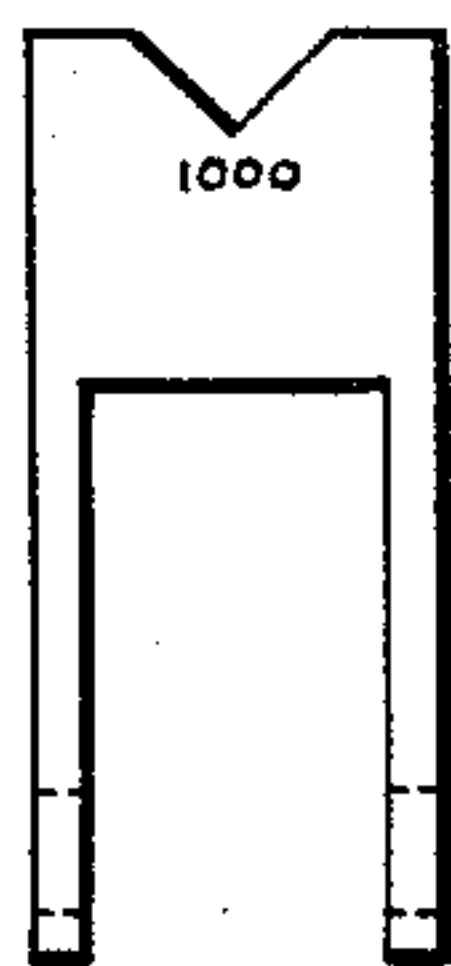


Fig. 7.

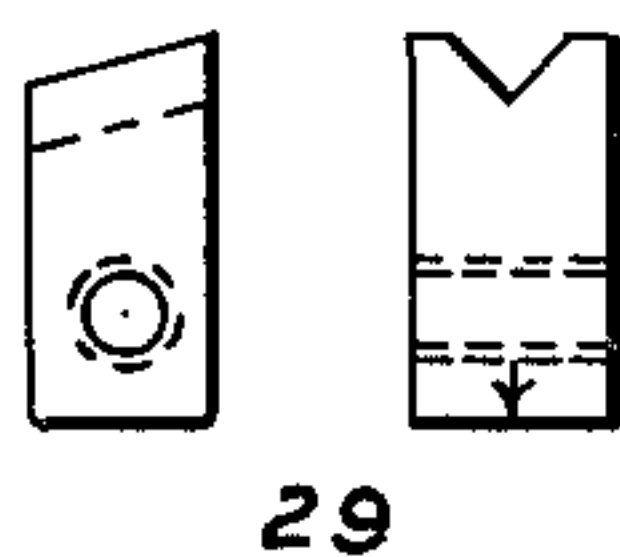
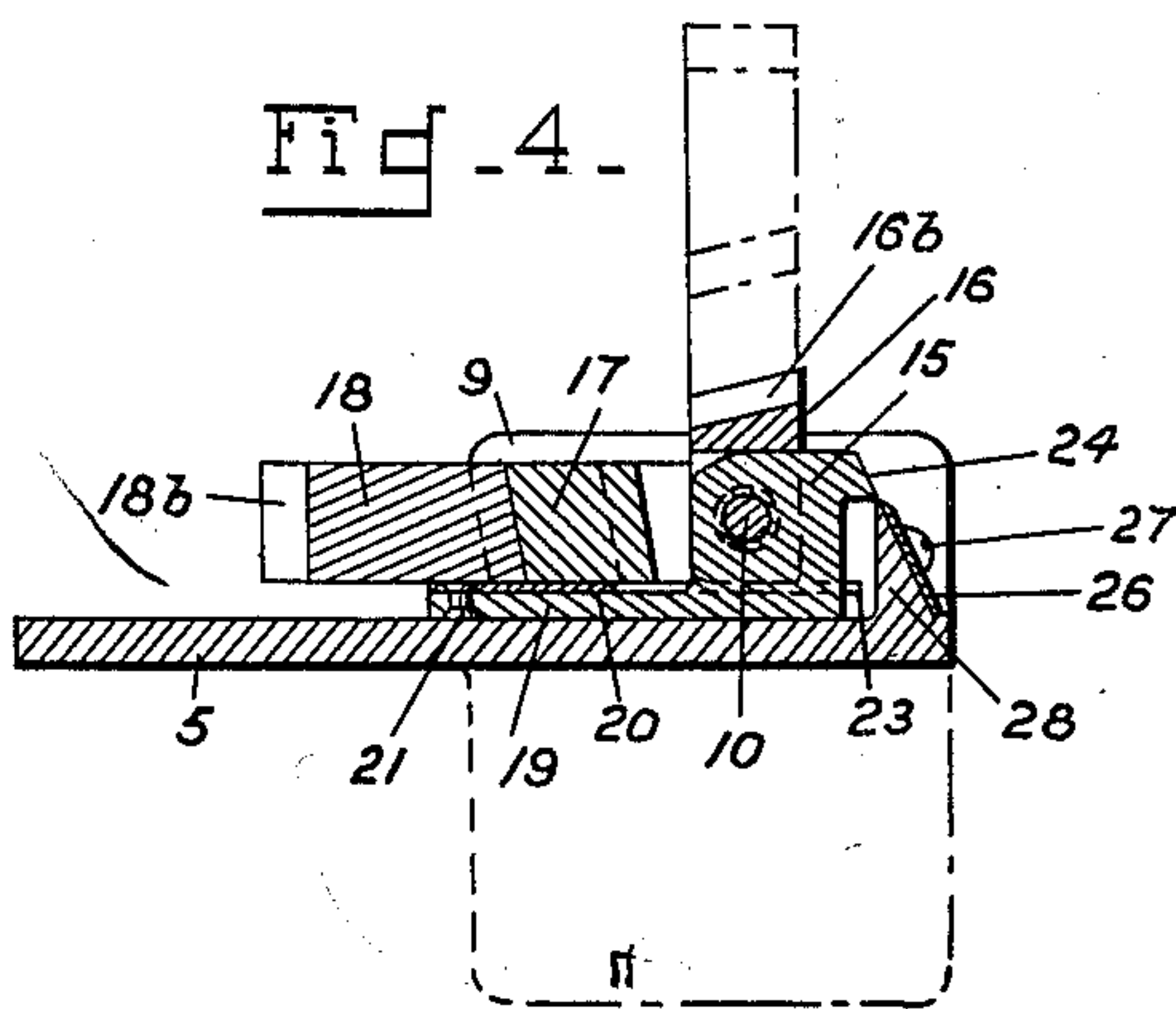


Fig. 4.



1413
X1419

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Patented May 9, 1933

1,908,019

UNITED STATES PATENT OFFICE

FORREST K. HOWARD, OF EAST FALLS CHURCH, VIRGINIA

GUN SIGHT

Application filed May 19, 1931. Serial No. 538,489.

(GRANTED UNDER THE ACT OF MARCH 3, 1883, AS AMENDED APRIL 30, 1928; 370 O. G. 757)

The invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

5 This invention relates to a gun sight.

The purpose of the invention is to provide a small, compact and simple gun sight adapted to be readily applied to a rifle or machine gun. The sight is characterized by a plurality of nested leaves, movable to raised and lowered position and also movable as a unit in applying lateral deviation corrections.

With the foregoing and other objects in view, the invention resides in the novel arrangements and combination of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

A practical embodiment of the invention is illustrated in the accompanying drawing, wherein:

25 Fig. 1 is a view in rear elevation of a gun-sight constructed in accordance with the invention.

Fig. 2 is a plan view.

Fig. 3 is a view in left side elevation.

30 Fig. 4 is a detail sectional view on the line 4-4 of Fig. 2.

Fig. 5 is a view in rear elevation of a modified form of the invention.

35 Figs. 6 and 7 are detail views of two of the leaves of Fig. 5.

Referring to the drawing by numerals of reference,

40 The sight comprises a fixed base 5 including a leg 6 and arranged to be fitted on the receiver 7 of a gun to which it is secured by screws 8. Spaced side plates 9, preferably integral with the base, are formed with apertures in which a screw shaft 10 is journaled. One end of the shaft projects beyond the corresponding plate to receive a

thumbwheel 11 secured by a pin 12. A click latch 13 carried by the base engages radial recesses or slots 14 in the outer face of the thumbwheel and serves to hold the screw shaft in position of adjustment.

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Mounted on the screw shaft is a nut 15 and a series of nested sight leaves 16, 17 and 18, the inside and smallest leaf 16 embracing the nut so that upon movement of the nut the entire group of leaves will be carried along. As seen most clearly in Fig. 4 the legs 16a, 17a and 18a of the sight leaves are loosely mounted on the screw shaft.

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The nut 15 includes a forwardly projecting arm 19 (Figs. 2 and 4) resting on the floor of the base 5. A flat spring 20 overlying the arm 19 and secured to the forward end thereof by a pin 21 extends rearwardly underneath the screw shaft. A number of kerfs 22 divide the spring into individual fingers 23, one being provided for each of the legs of the sight leaves.

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When the sight leaves are in the upright position as shown in Figs. 1, 2, and 3 the spring fingers act on the flattened end faces of the legs and thereby serve to hold the leaves in place. When the leaves are in the lowered position as shown in Fig. 4 the spring fingers act on the sides of the legs and tend to prevent their rotation. The leaves may be individually raised and lowered without affecting the action of the spring fingers on the remaining leaves.

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80 The free ends of the leaves 16, 17, and 18 are each formed with a V shaped sight opening, respectively 16b, 17b and 18b. In the construction illustrated in Figs. 1 to 4 inclusive the two larger leaves 17 and 18 are each provided with a V shaped projection, respectively 17c and 18c, adapted to fit within the correspondingly shaped sight openings in the next smaller leaf of the series so that when in use only the uppermost sight opening will be available and the lower sight 90

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openings will be blocked off to prevent the passage of the light.

The nut 15 is provided with a pointer 24 on its rear end adapted to indicate the lateral position of the nut and leaves with relation to a windage scale 25 inscribed on a plate 26 secured by screws 27 to the inclined face of the back plate 28 of the base 5.

In the illustration the sight leaves are calculated to provide range elevations of 1000, 700 and 400 yards and they are inscribed accordingly.

In operation, when it is desired to apply a windage correction to the sight, the screw shaft 10 is rotated by acting on the thumb-wheel 11. This causes the nut 15, spring 20 and the leaves to be translated across the base. The leaves partake of the movement of the nut irrespective of their raised or lowered position. They are manually swung into or out of operative position.

In the modified form of sight shown in Fig. 5 the general arrangement is similar to that previously described, with the exception of the nut 15 which is omitted. In this instance the smallest leaf 29 is formed into a nut for threaded engagement with the screw shaft 30. A flat spring 31 for holding the leaves in raised or lowered position is placed on the sight base 32. The V shaped projections 16c and 17c of Figs. 1 to 4 may be omitted to provide peep sights 33 for all but the largest leaf.

While three leaves are shown in the drawing it is to be understood that a greater or less number may be employed.

I claim:

1. A gun-sight comprising a base, side plates on the base, a screw shaft journaled in the side plates, a nut on the screw shaft, a plurality of nested leaves loosely mounted on the screw shaft, the inside leaf embracing the nut, and resilient means engageable with the leaves for holding the leaves in position of adjustment.

2. A gun-sight comprising a support, a screw shaft journaled in the support, a plurality of nested leaves mounted on the screw shaft, and means actuated by the turning of screw shaft for laterally shifting the leaves.

3. A gun-sight comprising a support, a screw shaft journaled in the support, and a plurality of nested leaves pivotally carried by the screw shaft, the inside leaf being threadedly connected to the shaft whereby all leaves may be adjusted laterally.

4. A gun-sight comprising a support, a plurality of nested leaves individually pivoted for angular movement relative to the support about a horizontal axis, an actuating mechanism for moving the leaves as a unit transversely of the support along said axis, and an individual spring for each leaf.

5. A gun-sight comprising a support, a plurality of nested leaves individually piv-

oted for angular movement relative to the support about a horizontal axis, and an actuating mechanism for moving the leaves as a unit transversely of the support along said axis.

6. In a gun-sight, a plurality of pivotally mounted nested leaves, each leaf provided with a sight opening, and means on each larger leaf for blocking off the sight opening of the next smaller leaf when the leaves are in sighting position.

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