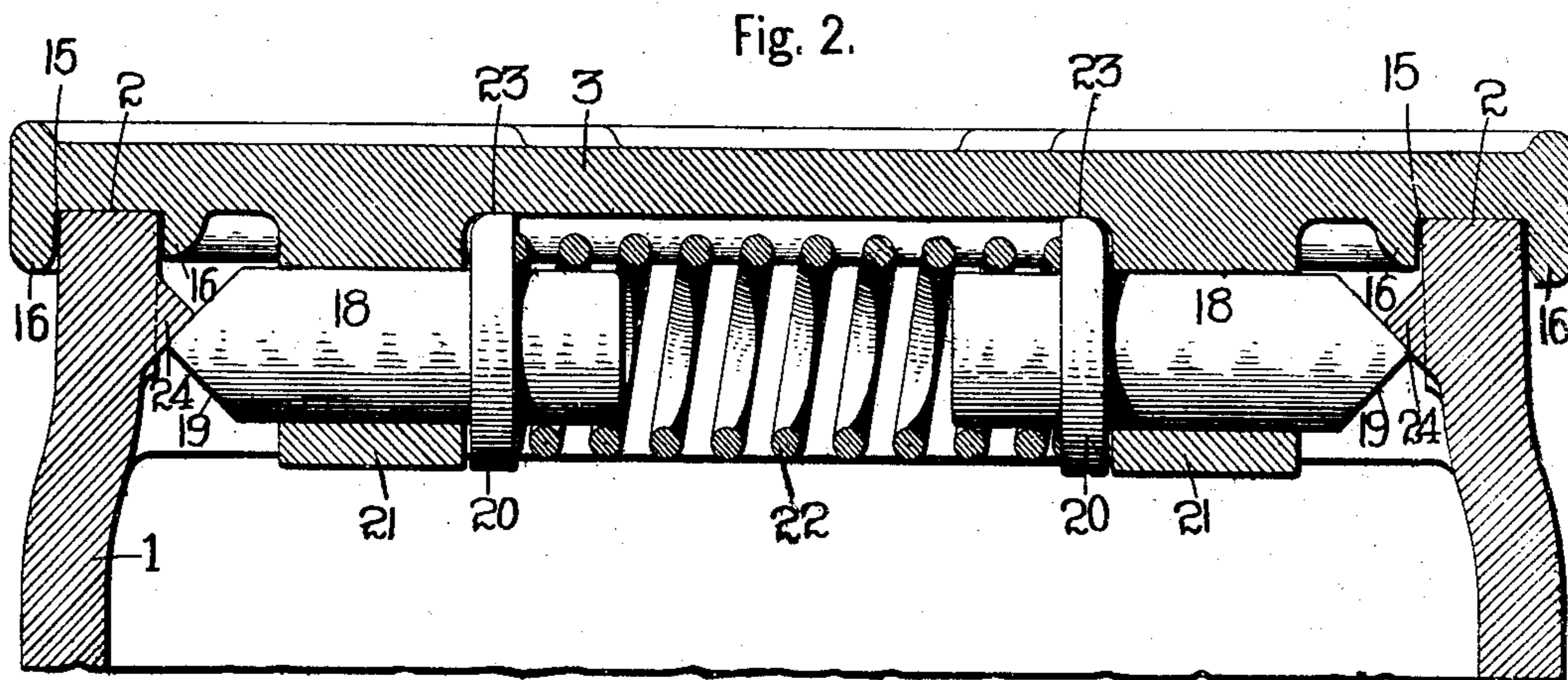
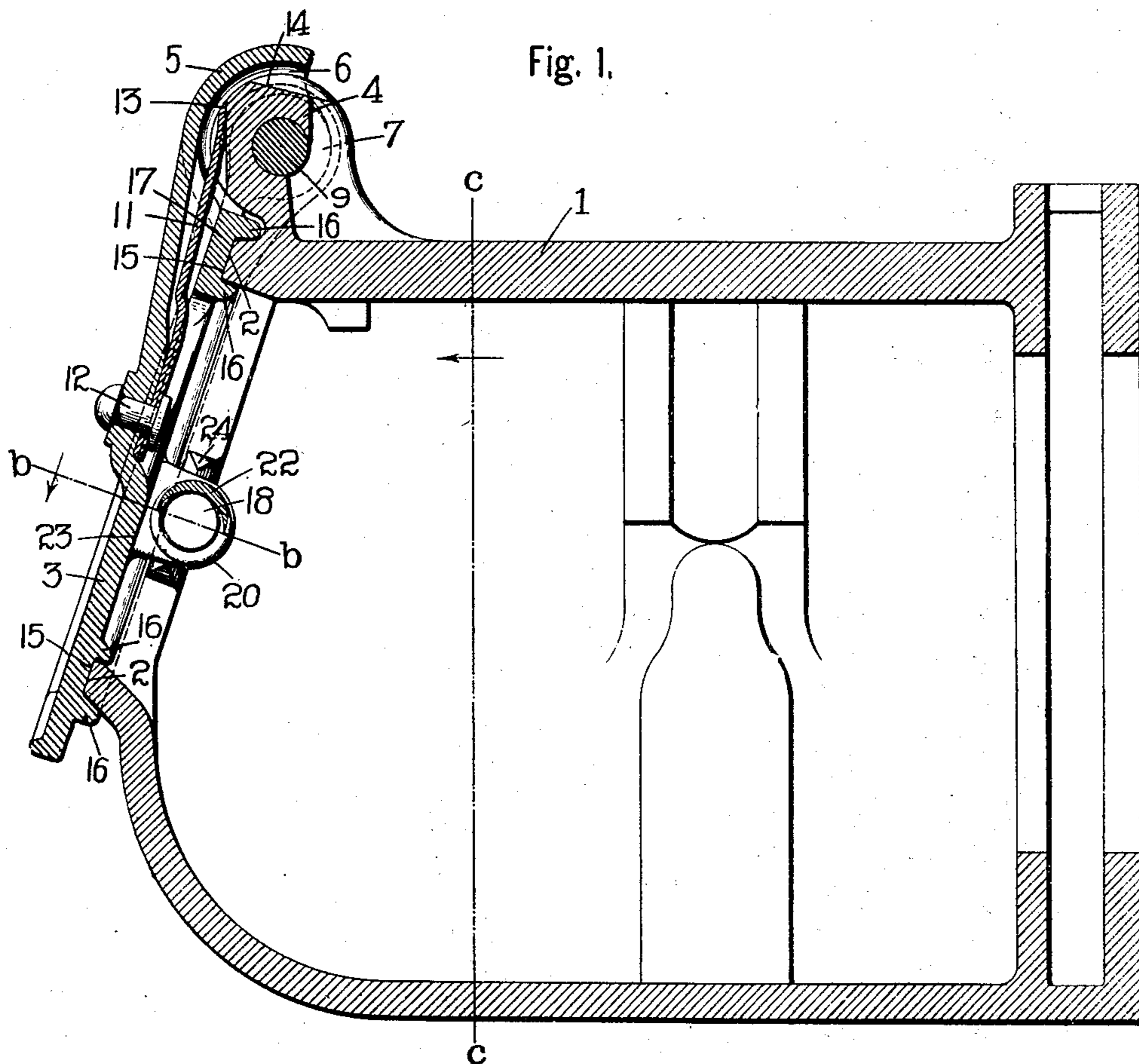


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PATENTED JUNE 2, 1908.

J. W. GIBNEY.
DUST PROOF SELF LOCKING JOURNAL BOX COVER.
APPLICATION FILED OCT. 16, 1907.

2 SHEETS—SHEET 1.



Witnesses.
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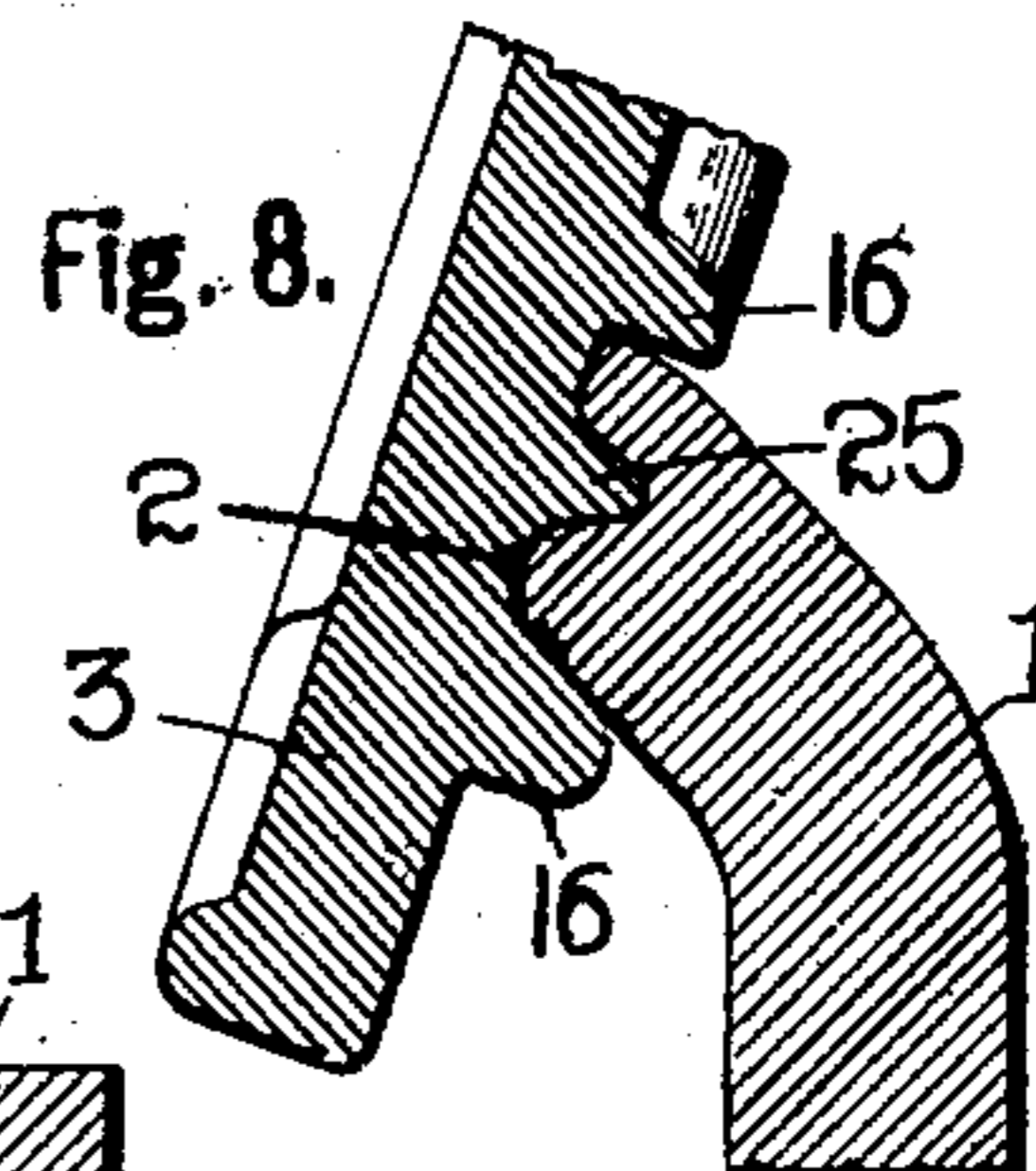
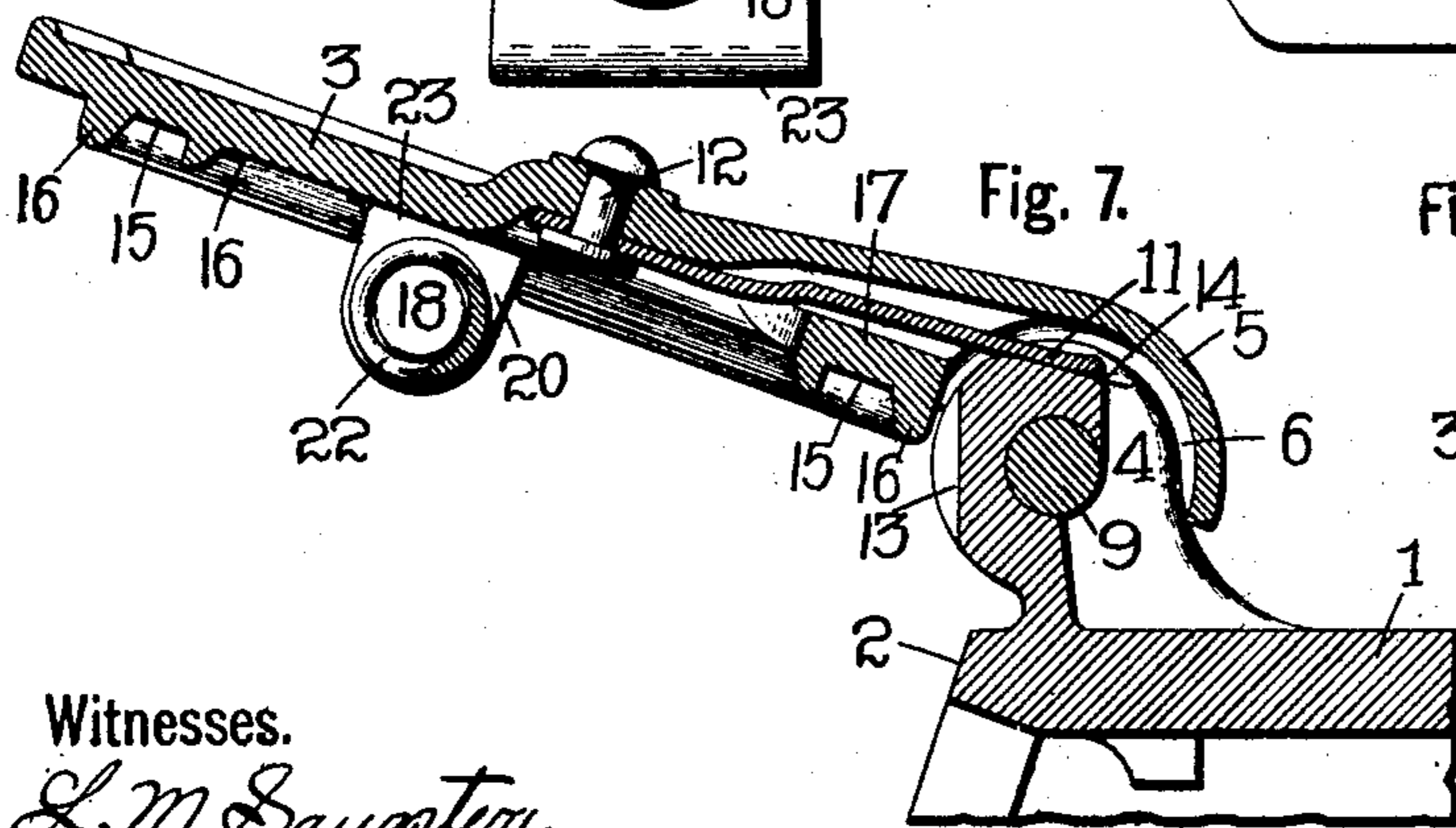
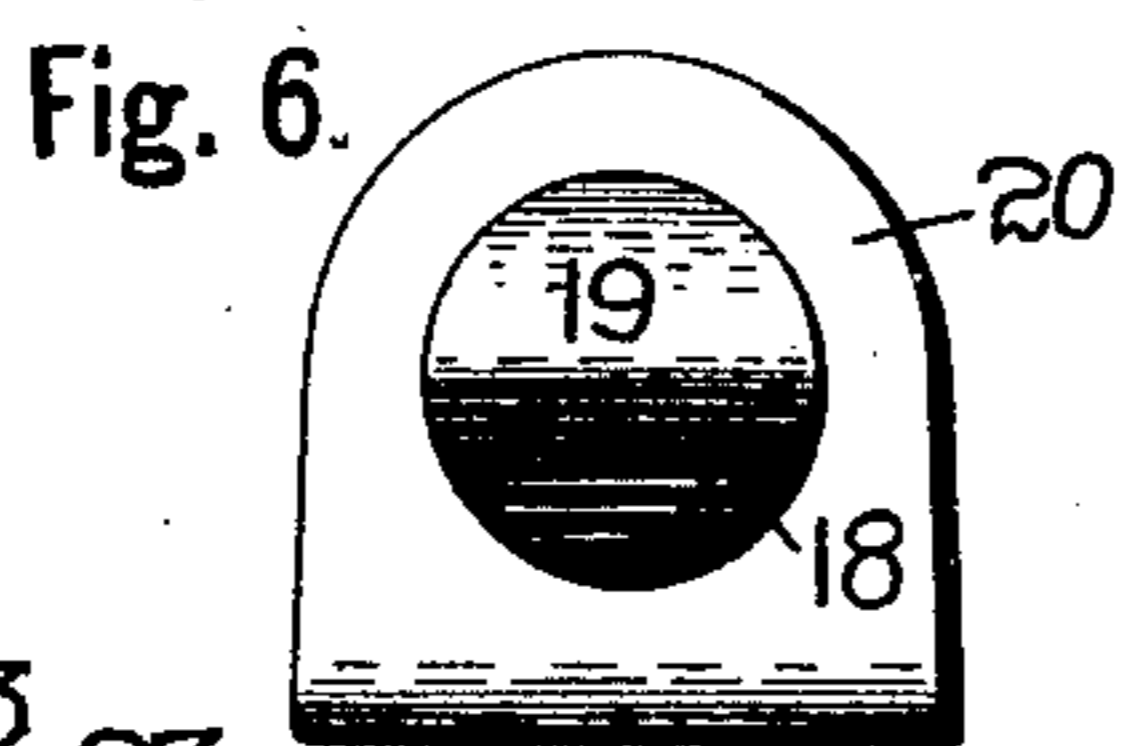
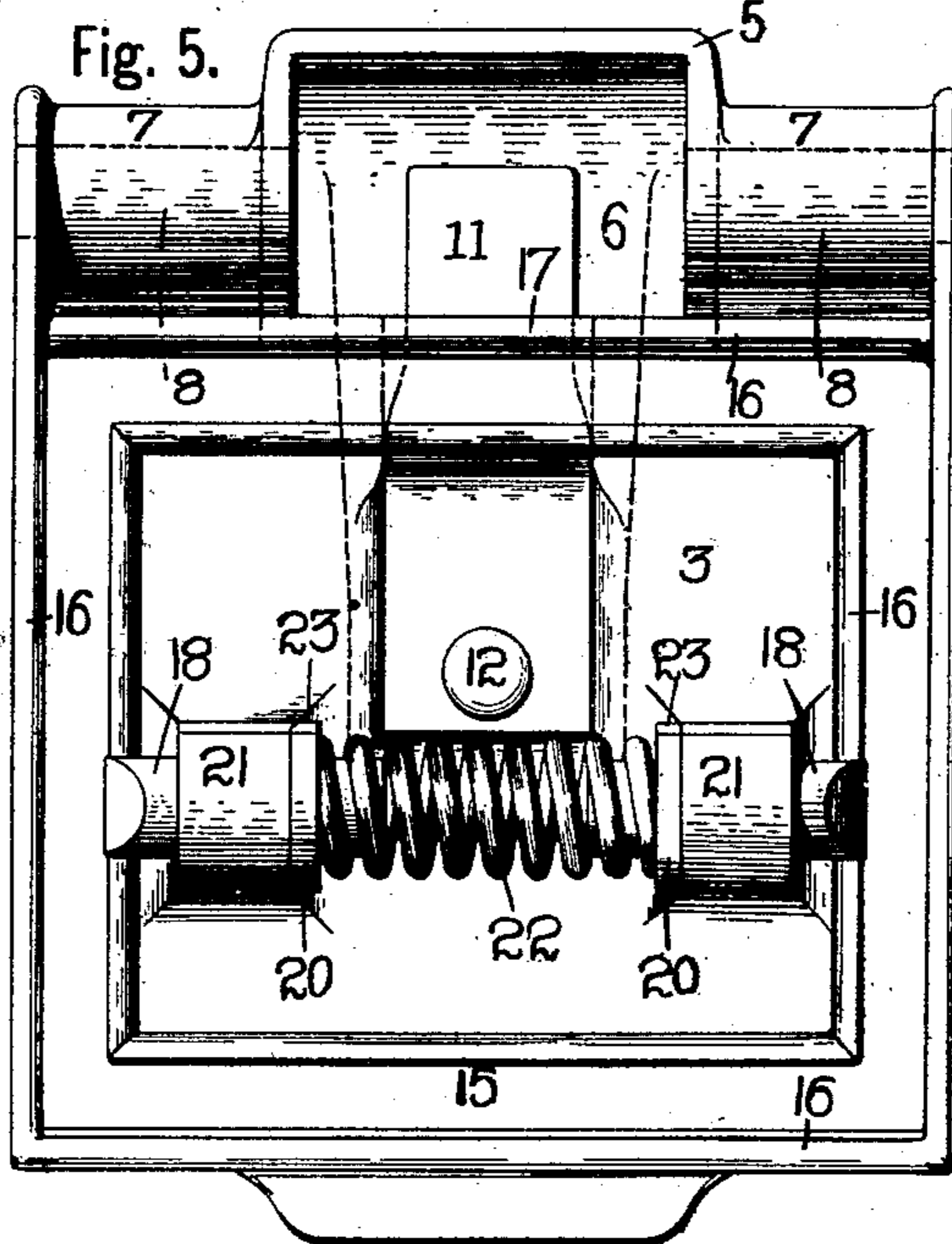
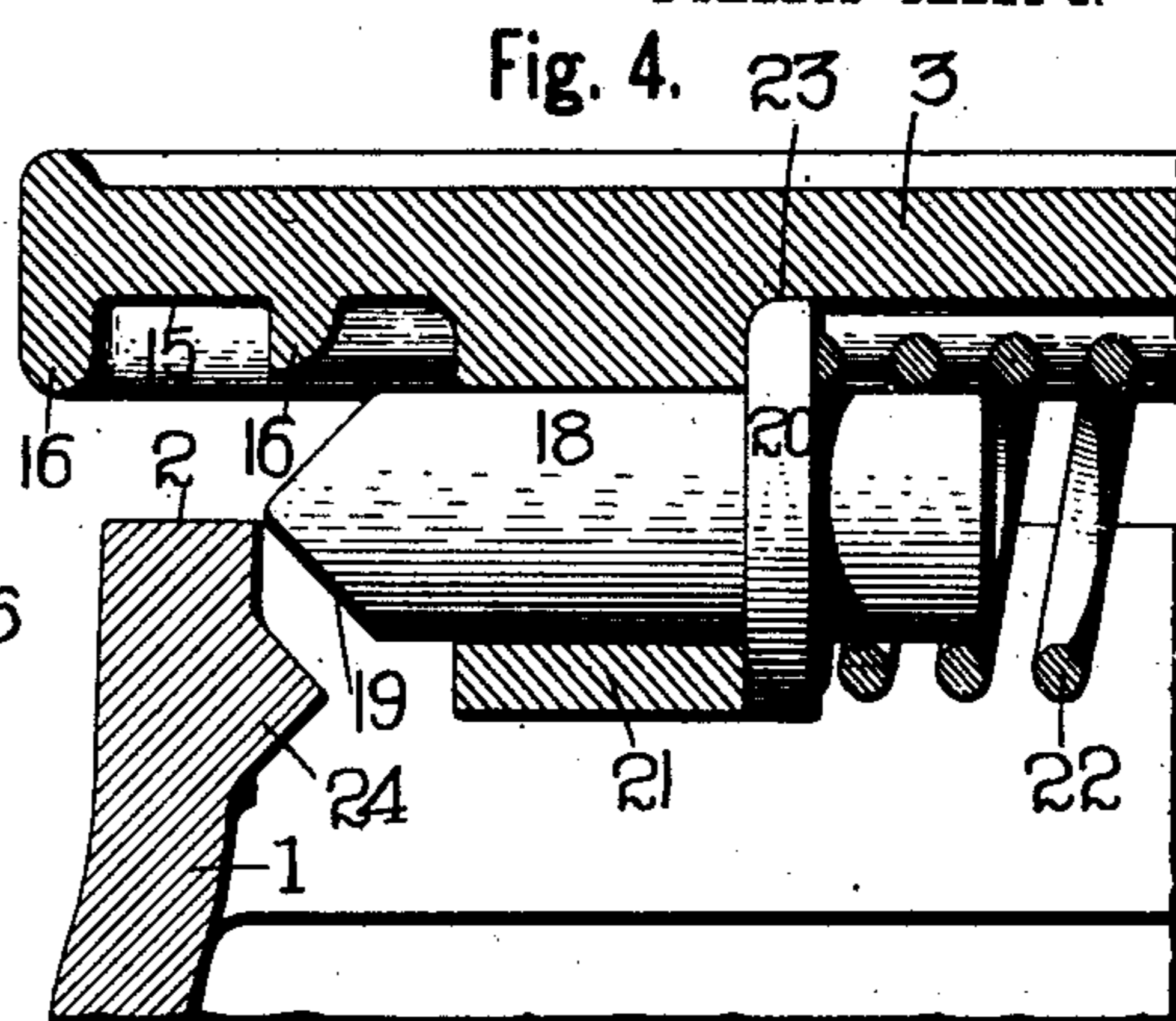
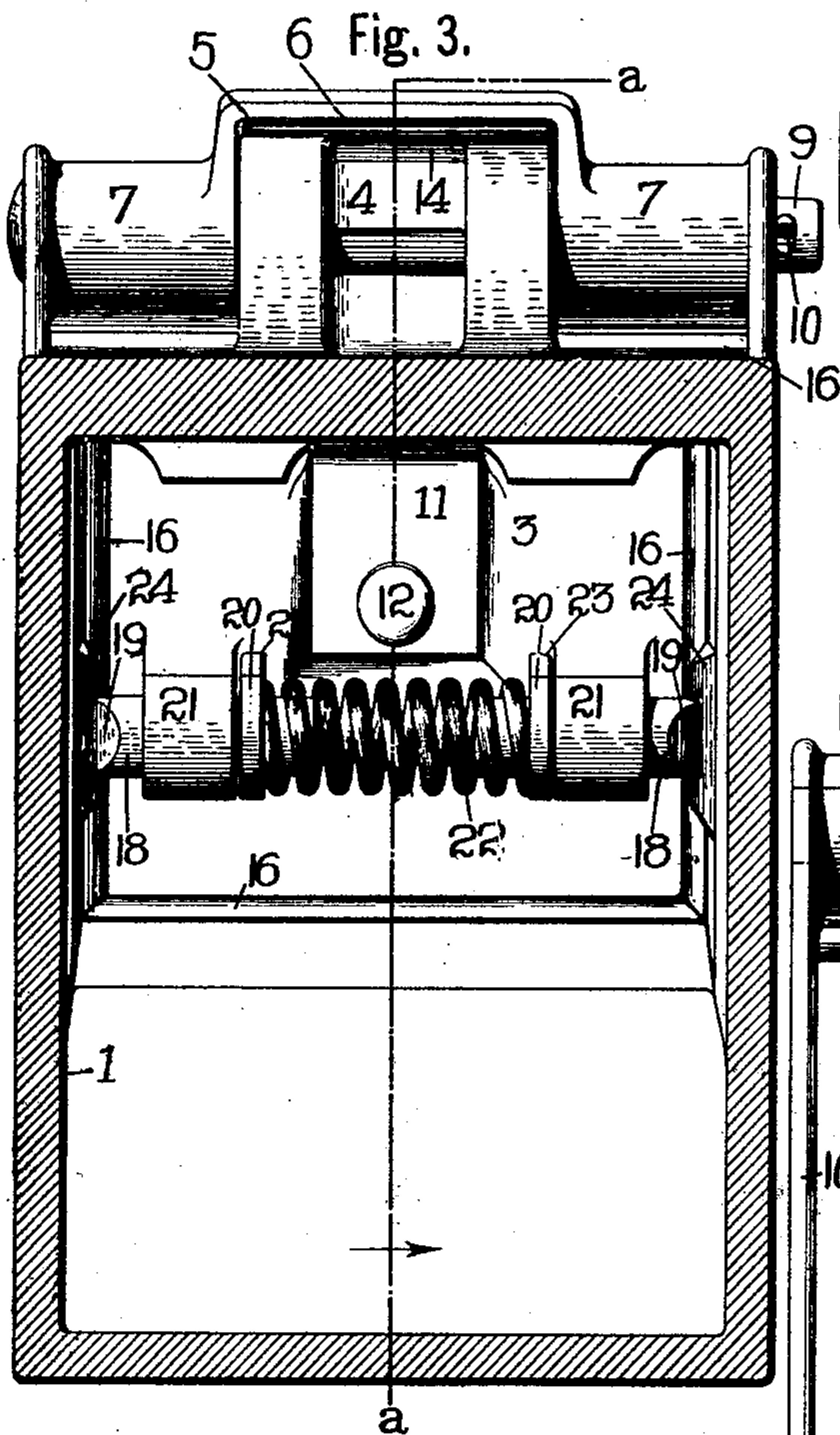
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE

JAMES W. GIBNEY, OF BUFFALO, NEW YORK, ASSIGNOR TO W. P. TAYLOR COMPANY, OF BUFFALO, NEW YORK, A CORPORATION OF NEW YORK.

DUST-PROOF SELF-LOCKING JOURNAL-BOX COVER.

No. 889,780.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed October 16, 1907. Serial No. 397,731.

To all whom it may concern:

Be it known that I, JAMES W. GIBNEY, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a certain new and useful Improvement in Dust-Proof Self-Locking Journal-Box Covers, of which the following is a specification.

This invention relates to an improved means for locking the cover of car journal boxes to the box and the object of the invention is to produce a cover which is self-locking and dust-proof and in which the cover is automatically centered as it is closed.

Another object of the invention is to so form the cover and its seat that there is little or no wear and to so construct the fastening means that there is no likelihood of breakage or loss of parts.

The invention also relates to certain details of construction, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings in which,—

Figure 1 is a central longitudinal section on line *a a*, Fig. 3 through a car journal box equipped with my improved dust proof self locking cover. Fig. 2 is an enlarged fragmentary horizontal section on line *b b*, Fig. 1, through the journal box and my improved dust proof self locking cover, showing the cover closed and locked. Fig. 3 is a vertical transverse section on line *c c* Fig. 1, through the journal box showing an inside view of my dust proof self locking cover in locking position. Fig. 4 is a fragmentary view similar to Fig. 2 showing the cover almost closed. Fig. 5 is a detached inside view of my improved dust proof self locking cover. Fig. 6 is an enlarged detached end view of one of the latches. Fig. 7 is a fragmentary section through the journal box on line *a a* Fig. 3, showing my improved dust-proof-self locking cover in open position. Fig. 8 is an enlarged fragmentary section through the car journal box and my improved dust proof self locking cover, showing another form of seat for the cover.

In referring to the drawings for the details of construction, like numerals designate like parts.

A car journal box 1, of standard or conventional style is provided with an opening, the surrounding margin 2, of which is formed to

constitute a seat for a cover or lid 3, which is hinged to the box.

A lug 4, projects upward from the box and constitutes one member of the connecting hinge, and the cover or lid is formed with an enlarged bulged portion 5, at one end providing a space or chamber 6, in which the lug 4, fits. The upper portions 7, on the sides of the bulged portion are enlarged and provided with openings or eyes 8, constituting the other members of the hinge.

The hinge members are pivoted together by a pintle 9, which is secured in place against longitudinal movement tending to remove it from the lugs by a split pin 10. The bulged portion is continued from one end of the cover to about the center thereof and provides an interior recess or chamber in which the cover spring 11, is located. The cover spring 11, is nearly flat being bent but slightly at one point to pass freely over that portion of the cover seat spanning the recess and is fastened at its inner end to the cover by a rivet 12. The outer end of the spring 11, bears against the lug 4, the surface of which is flattened on two sides as at 13 and 14, in Figs. 1 and 7, to maintain the cover both open and shut with a spring tension.

The cover is provided with a seat 15 having both sides provided with flanges 16 between which the marginal seat 2 of the car journal box is adapted to fit to form a tight joint when the cover is closed. The seat 15 extends entirely around the cover; the bulged portion of the cover being spanned by a bridge piece 17, see Fig. 1.

The cover when closed is locked in place with a spring tension by means of a latching device attached to the cover which engages lugs on the interior of the box and not only serves as a locking device but also automatically centers the cover with respect to the box as it is closed.

The preferred construction of the latching device is shown in Figs. 2, 3, 4 and 5, especially Fig. 5, and consists of two opposed latches which are supported at opposite ends of a spiral spring.

The latches are of similar form each comprising a bar 18 of circular cross section having a pointed and beveled outer latching end 19 and a flange member 20 located at an intermediate portion of the bar, as shown in Fig. 2. The bar 18 and flange 20 are prefer-

ably cast integral to absolutely prevent independent movement of one or the other.

The latches are slidably supported in openings in lugs 21 on the inner surface of the cover, with a spiral spring 22, between them, which projects over the inner ends of the latches and bears against the inner surfaces of the flange members 20.

That portion of the edge of the flange members in contact with the inner surface of the cover is flattened as shown at 23 in Fig. 6 to prevent rotation of the latches, and also support them in their sliding movement. Tapered lugs 24 are formed on the inner surface of the opposite side walls of the box, see Fig. 2, against which the beveled ends 19 of the latches impinge while the cover is being closed, being pressed into close contact by the central spiral spring 22 and serving to center the cover with respect to the box so that it will seat perfectly thereon. By this means the cover when closed is spring locked in place by an independent spring latching device and held securely against rattling or movement. This also renders the cover practically dust proof.

The latching device is located in a horizontal position about midway of the cover and not only locks the cover in place but also serves to prevent lateral movement of the cover when closed. The placing of the latching device upon the middle of the interior of the cover raises it above the oil-saturated waste with which the journal box is usually filled and thereby obviates any clogging of the latches. Probably the most important advantage is that the cover is centered automatically as it is closed upon the box so that it is seated perfectly thereon.

While the latching device is shown attached to an intermediate portion of the cover, it is possible to locate the same at other points and still obtain the same result.

In Fig. 8 a fragment of another form of interlocking seam between the cover and box is shown in which the cover is provided with a middle approximately V shaped depending enlargement flange 25, located between its side flanges which fits into a V shaped groove in the seat on the car journal box. For localities that are especially sandy or dusty this form of seam would probably be preferred as it is about as dust proof as it is possible to make.

The margin of the opening in the box is preferably chilled to render its surface smooth and even and thus form a better and more perfect seat for the cover.

I claim as my invention—

1. In a car journal box, the combination with a box having inwardly extending lugs,

of a cover for said box and a latching device attached to about midway of the interior of the cover and having spring-pressed latches adapted to engage the inwardly projecting lugs of the box whereby the cover is both automatically locked and centered with respect to said box.

2. In a car journal box, the combination with a box having inwardly extending lugs, of a cover for said box and a latching device for securing the cover to said box consisting of a spring and two opposed latches mounted at the opposite ends of said spring and adapted to engage the inwardly extending lugs whereby the cover is automatically locked and centered with respect to the box.

3. In a car journal box, the combination with a box having interior lugs on opposite sides thereof, of a cover for said box and a latching device attached to about midway of the interior of the cover and having oppositely tensioned spring-latches adapted to engage the interior lugs of the cover when said cover is closed whereby the cover is automatically centered and locked with respect to the box.

4. In a car journal box, the combination with a box, a cover for said box and a cover spring, of a latching device for securing the cover to said box which is entirely independent of the cover spring and consists of two opposed spring-tensioned latch members adapted to engage opposite sides of the box when the cover is closed whereby the cover is automatically centered with respect to the box as it is closed.

5. In a car journal box, the combination with a box having inwardly extending lugs provided with inclined surfaces, of a cover for said box and a latching device attached to the interior of the cover and having spring-pressed latches the ends of which are provided with inclined surfaces adapted to impinge and slide upon the inclined surfaces of the lugs as the cover is closed whereby the cover is automatically centered as it is closed.

6. In a car journal box, the combination with a box, having interior lugs on opposite sides thereof, of a cover for said box, eye lugs extending from the inner surface of the cover, two opposed latches each slidably mounted in the eye of one of the lugs and having flange members and a spiral spring between the latches bearing with its opposite ends against the flange members.

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Witnesses:

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