

No. 652,464.

Patented June 26, 1900.

A. RITTER.
SHUTTER WORKER.

(Application filed Mar. 20, 1900.)

(No Model.)

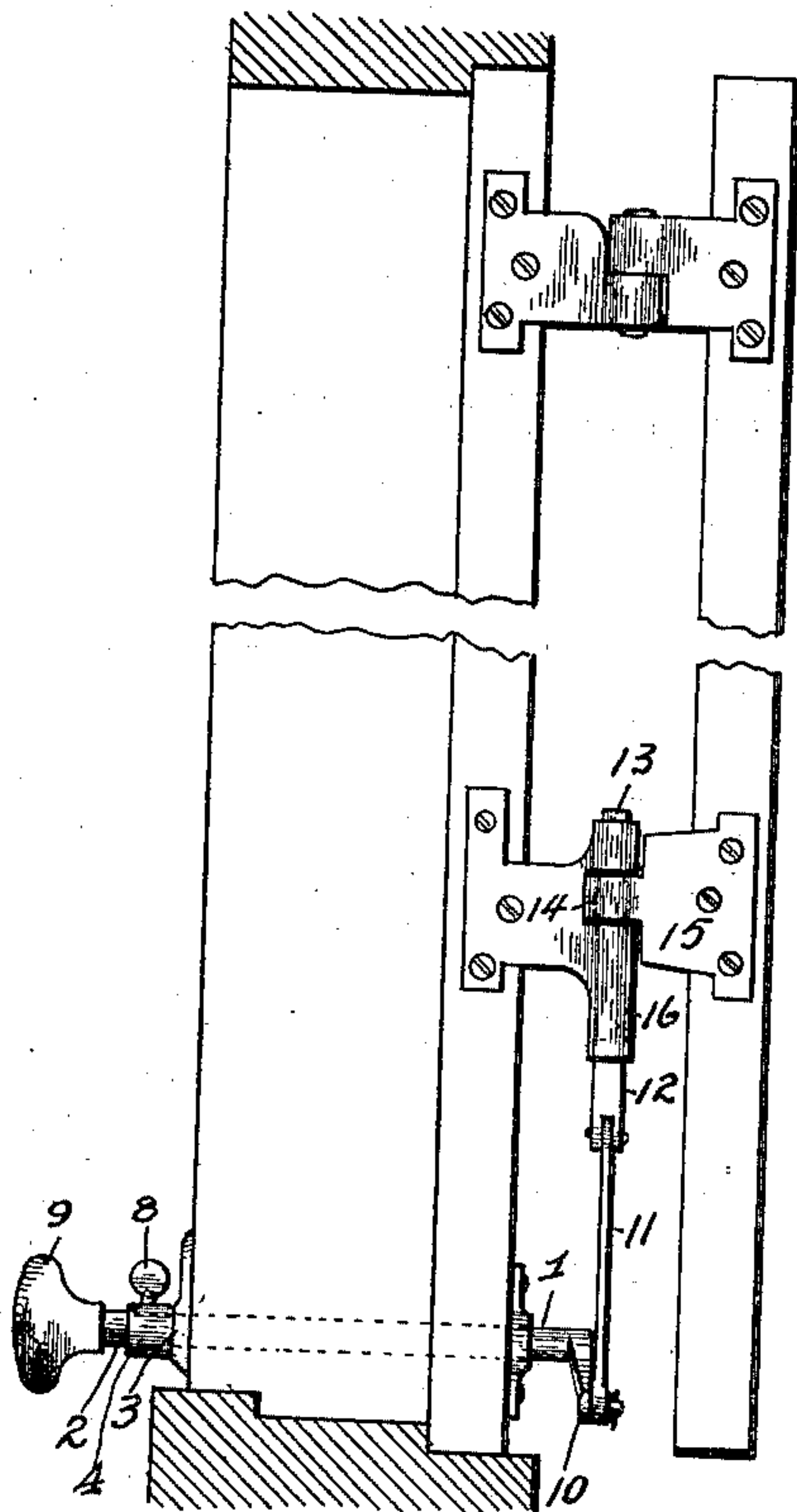


Fig. 1.

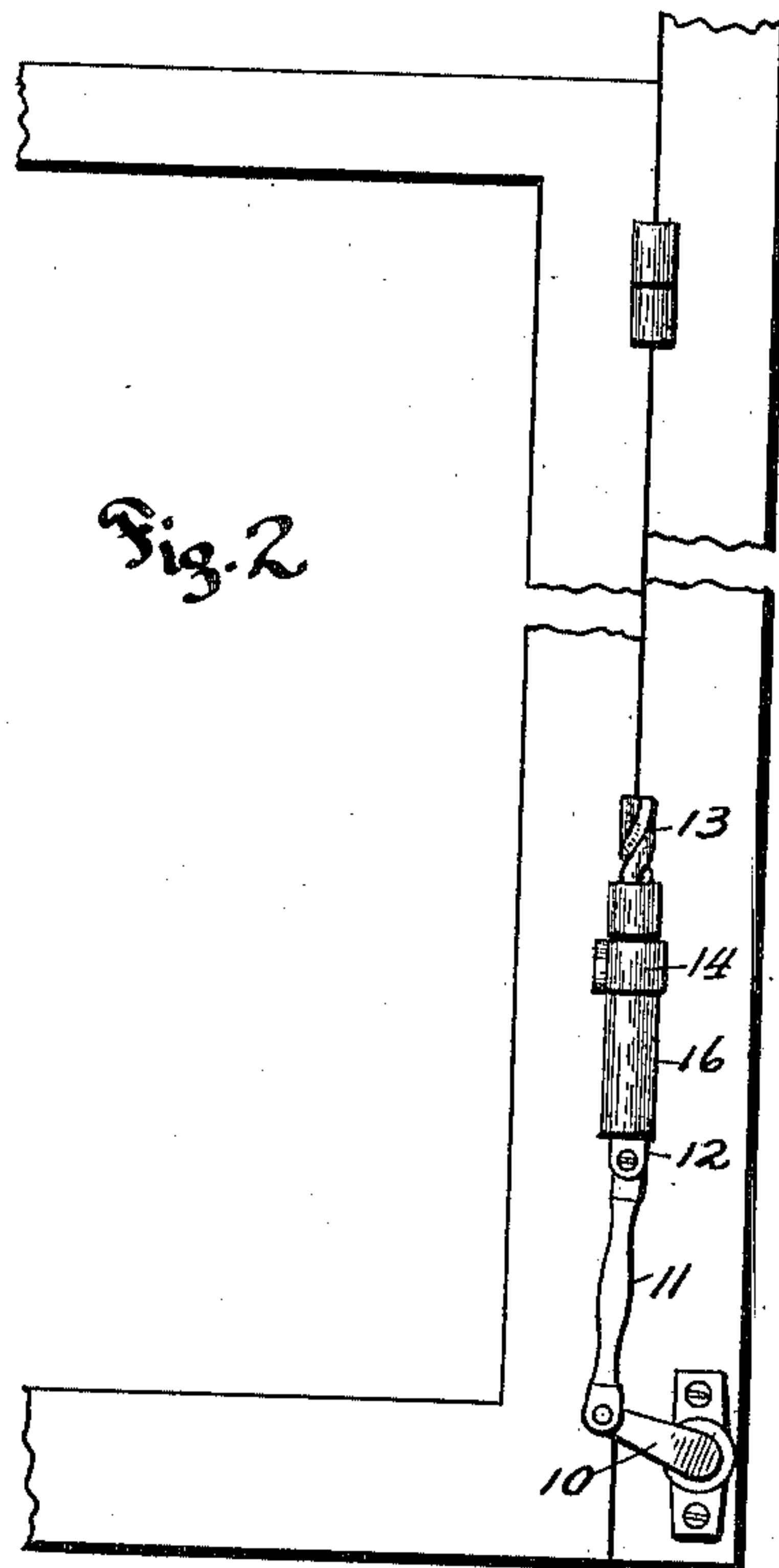


Fig. 2.

Fig. 3.

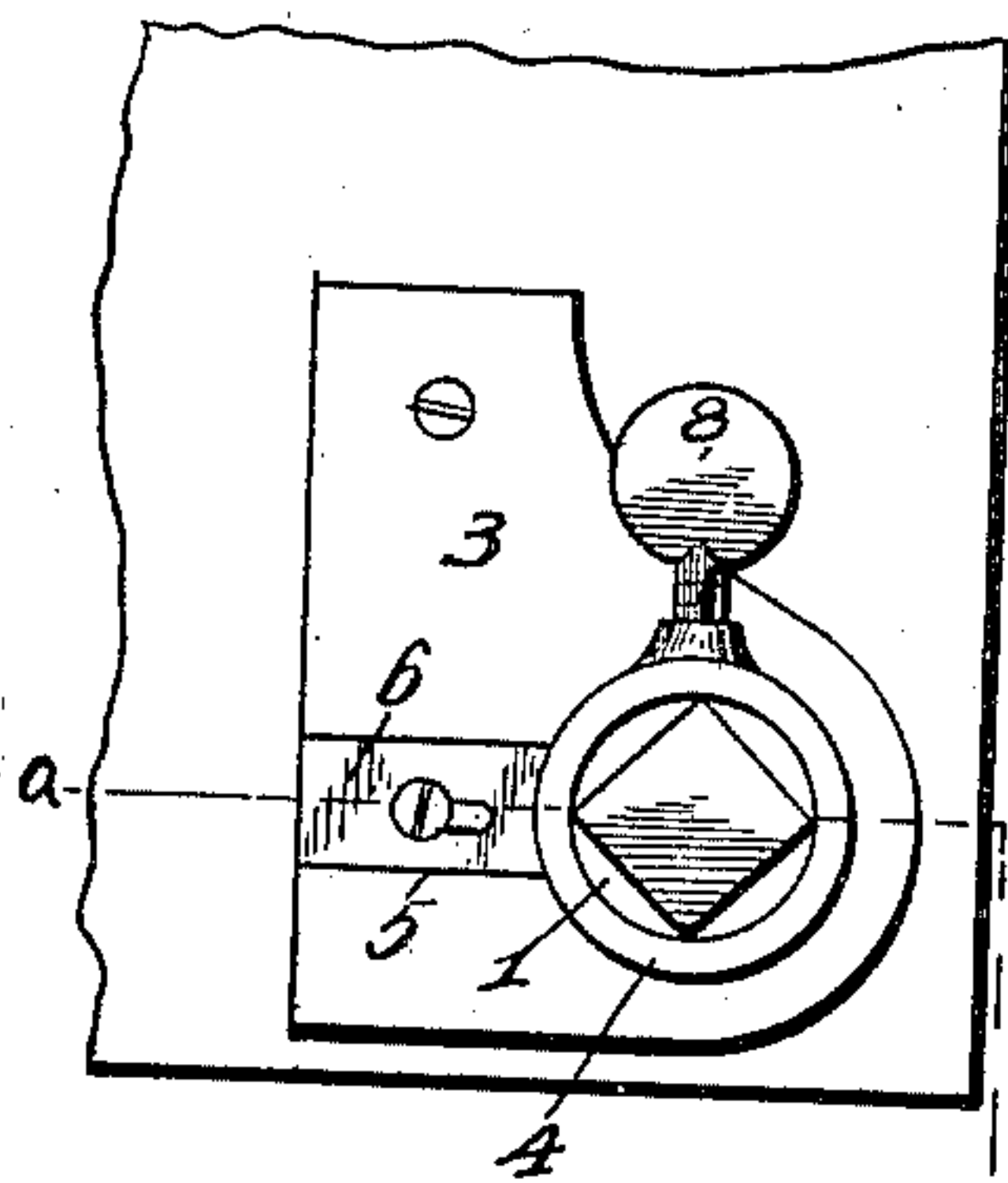


Fig. 4.

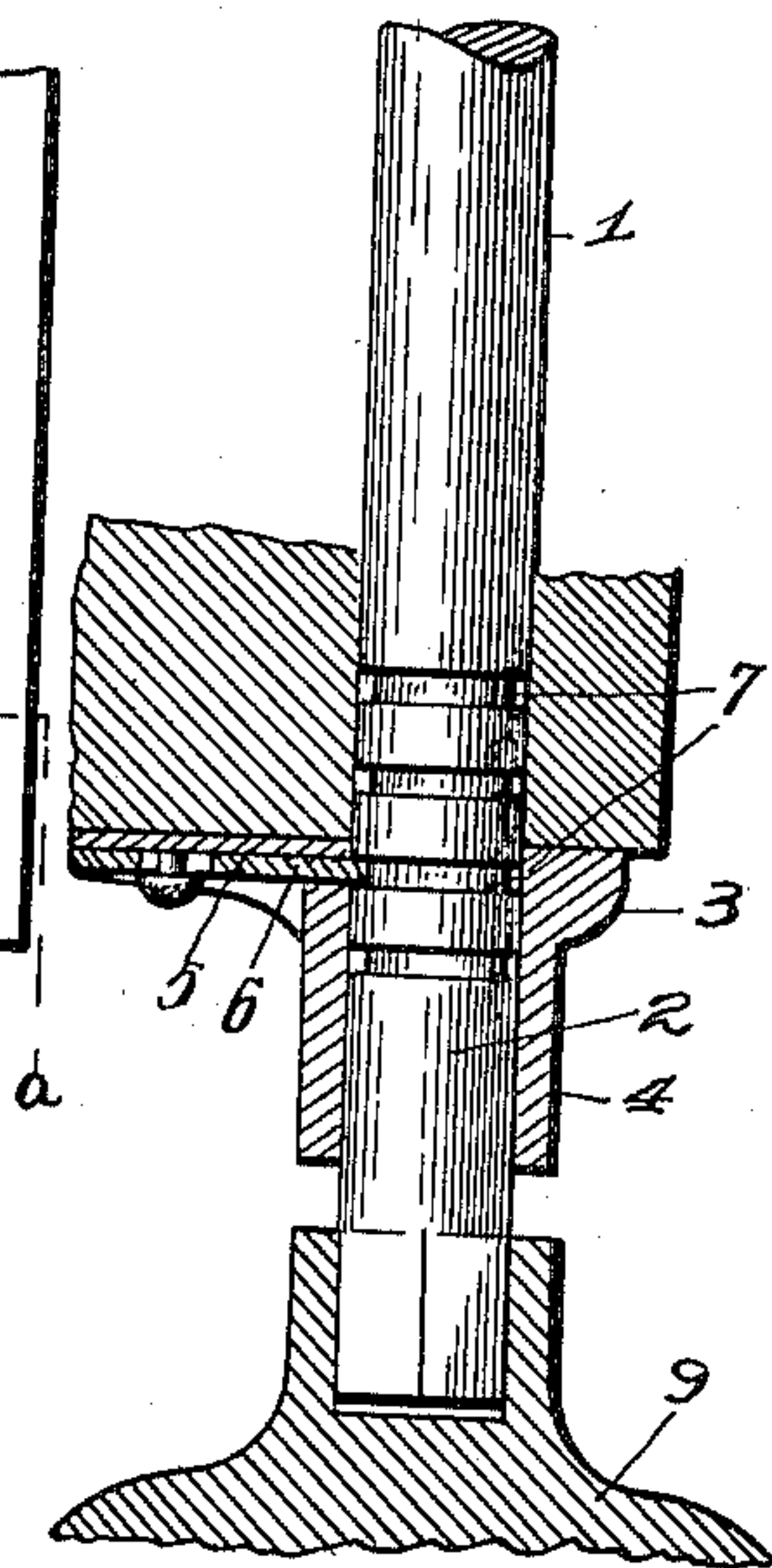


Fig. 5.

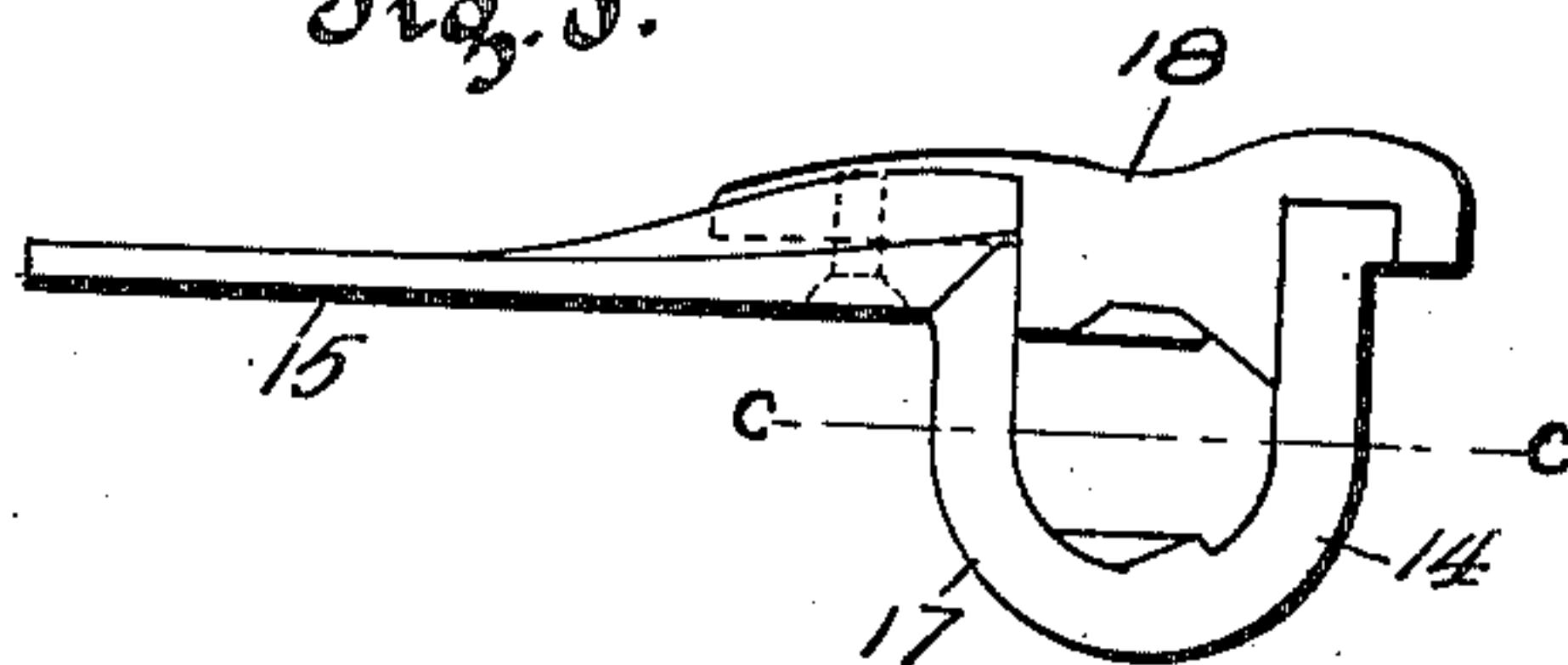


Fig. 6.



Witnesses.

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SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 652,464, dated June 26, 1900.

Application filed March 20, 1900. Serial No. 9,409. (No model.)

To all whom it may concern:

Be it known that I, ANTON RITTER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain
5 new and useful Improvements in Shutter-Workers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and
10 use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in
15 a device for operating window-blinds; and it consists in the novel arrangement, construction, and combination of parts, as will be more fully hereinafter described, and set forth in the claims.

20 One object of this invention is to construct a device whereby the outer blinds of a window can be manipulated from within the room without raising the window whatsoever.

Another object is that the same may be ap-
25 plied to any blind now in use with but little change and that said blinds may be opened or closed completely or part of the way and held in said adjustment by means of the manipulation within.

30 Referring to the drawings, Figure 1 is a vertical sectional view of a window with parts broken away, showing my invention in position. Fig. 2 is an outer view of a window and blind with parts broken away, showing
35 my invention when the blind is in a closed position. Fig. 3 is an inner view of my invention, showing the window-casing broken away and the operating-knob removed. Fig. 4 is a detail cross-sectional view of the same,
40 taken on the line *a a* of Fig. 3. Fig. 5 is a top plan view of the operating hinge-leaf made part of my invention. Fig. 6 is a cross-sectional view of the same, taken on the line *c c* of Fig. 5.

45 In the construction of the device as shown I provide a rock-shaft consisting of a rod 1, extending horizontally through the sides of the window-casing near the base and its ends projecting a short distance beyond. Over
50 its inner end 2 is placed a metallic casting 3, having a portion of itself terminating in a sleeve 4. In this casting is provided a shall-

low groove 5, extending through the base of the sleeve and in which is placed and adjustably held a key-plate 6. This plate 6 is
55 for the purpose of engaging into grooves 7, formed in the rod 1, for preventing said rod from moving longitudinally in the casing. The sleeve is also provided with a set-screw 8, which is for the purpose of tightening the
60 rod and holding said blind in the adjustment in which it is placed and also for locking the blinds at night when the blinds are closed. The inner end of said shaft 1 is provided with a knob 9, by which it is operated. The outer
65 end of said shaft is provided with a crank-arm 10, which is connected by a link 11 to an upright operating-bar 12, the lower portion of said bar being square, while the upper portion is formed in a spiral 13. The spiral
70 13 operates in an internally correspondingly spiraled socket 14, forming a part of the operating hinge-leaf 15, which is secured to the blind. The socket and spiral are both guided and supported in an elongated sleeve 16,
75 forming a part of the other leaf of the hinge which is secured to the window-frame. (See Fig. 1.)

It will be observed that the hinge-leaf 15 is composed of two parts 17 and 18, each of
80 which has internal spirals to correspond with the spirals formed on the bar, and said parts are placed and held together by a screw, as shown by dotted lines in Fig. 5.

By this device both blinds of a window
85 can be opened or closed or placed at any angle and held by the manipulation of the knob from within the room without raising the window.

Having fully described my invention, what
90 I claim is—

1. In a shutter-worker, the combination with a rock-shaft journaled through the window-casing and cranked at its outer end; of a shutter-hinge leaf having a spiral socket,
95 an operating-bar having a spiral portion engaging said socket and a square portion below it, a guide-sleeve for the square portion, and a link pivotally connecting the latter with said crank, as and for the purpose set
100 forth.

2. In a shutter-worker, the combination with a rock-shaft journaled through the window-casing and cranked at its outer end; of

a shutter-hinge leaf having a spiral socket, an operating-bar having a spiral portion engaging said socket and a square portion below it; connections between the latter portion and
5 the crank, and a casing-leaf connected with the shutter-leaf and having a guide embracing the square portion of the operating-bar, as and for the purpose set forth.

3. In a shutter-worker, the combination
10 with an upright spiral operating-bar, and means for moving it longitudinally; of a shutter-hinge of which one leaf is attached to the window-casing and the other to the

shutter, the last-mentioned leaf being in two parts each having internal spiral threads to
15 correspond with those on the operating-bar, and fastening-screws passing through both parts and into the shutter, as and for the purpose set forth.

In testimony whereof I affix my signature 20
in presence of two witnesses.

ANTON RITTER.

Witnesses:

ONNA SCHOEPP,
CORA SMITH.