

No. 689,429.

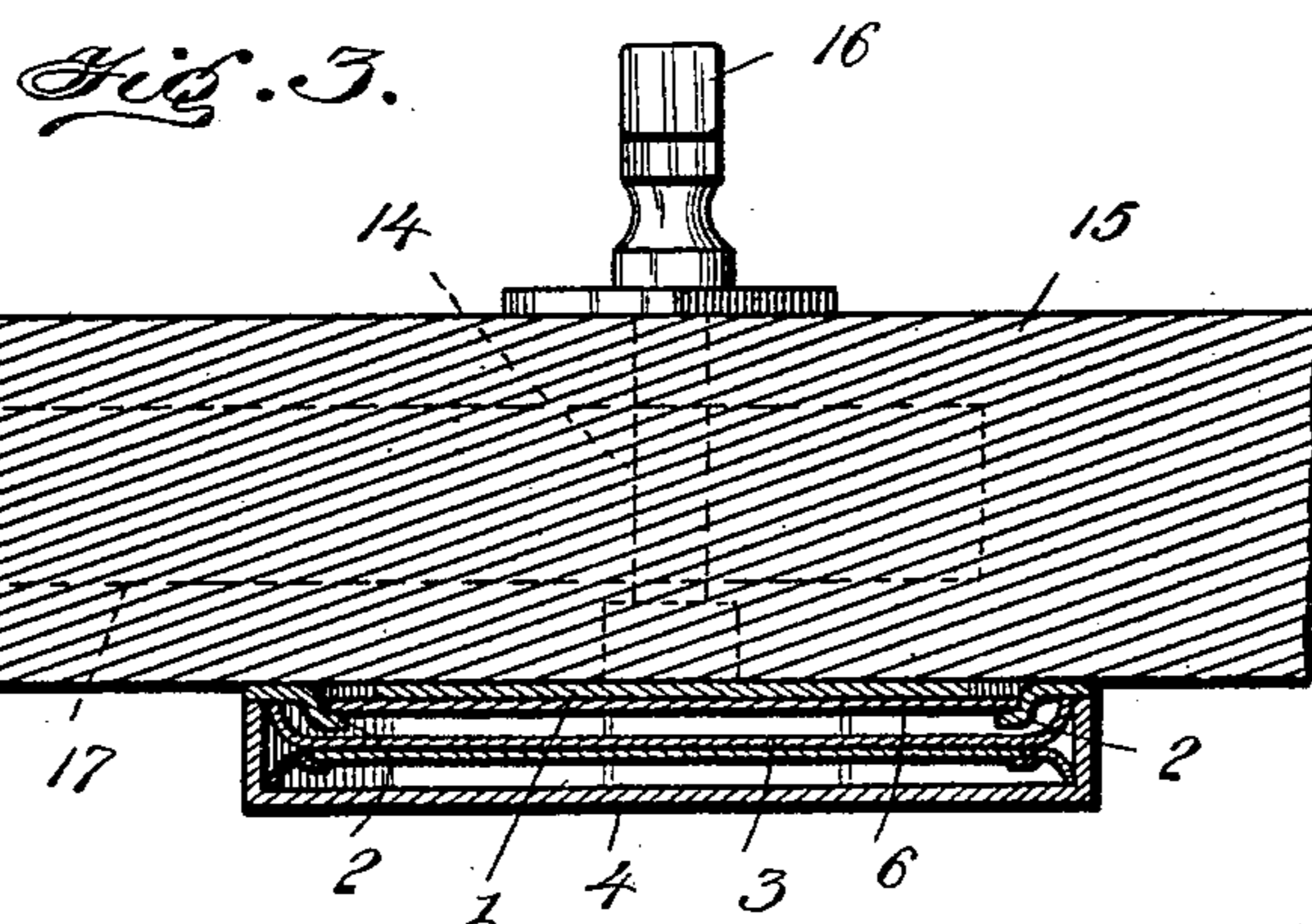
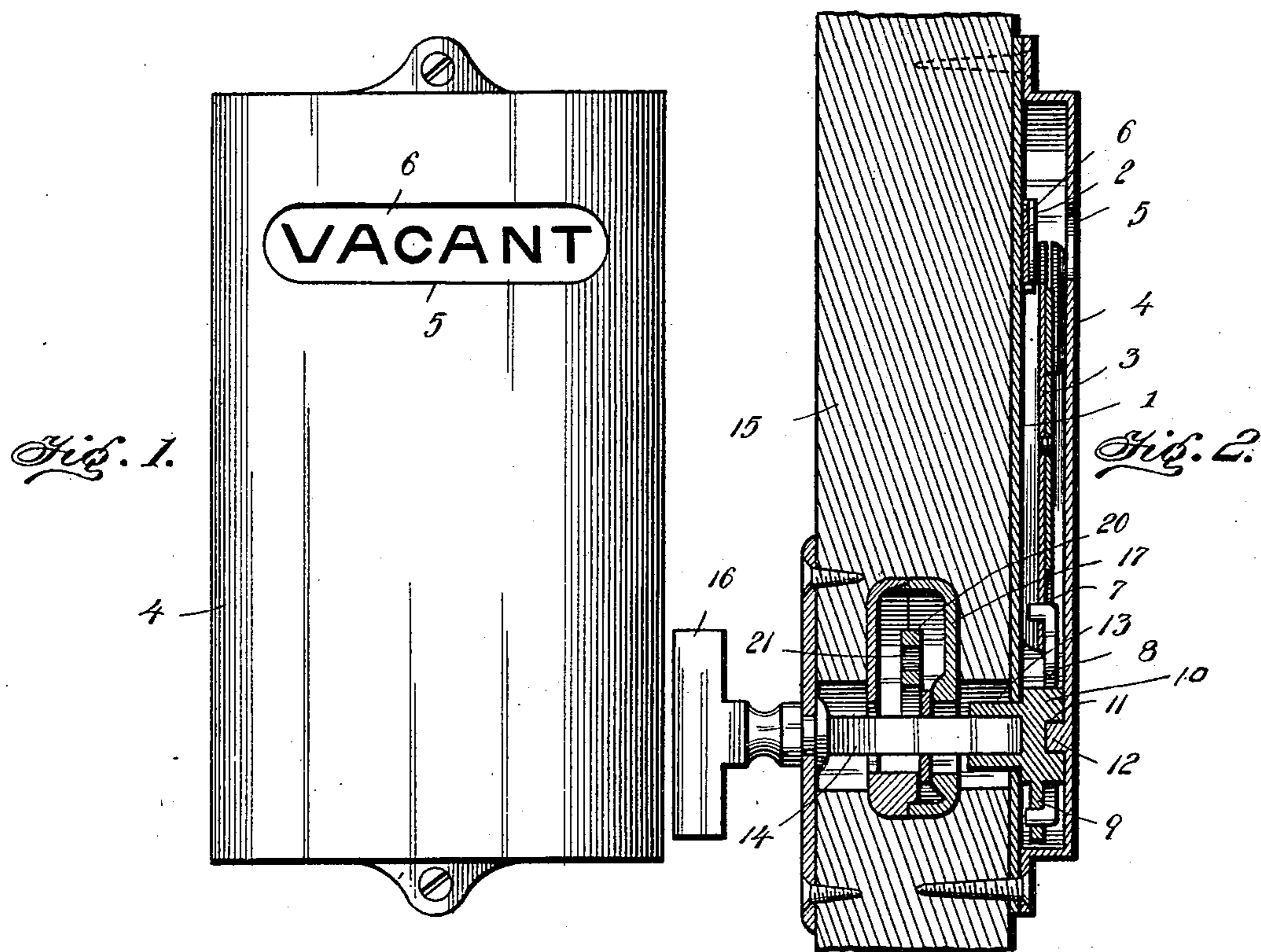
Patented Dec. 24, 1901.

P. A. SMITH.
INDICATOR.

(Application filed July 28, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Inventor
Preston A. Smith.

Witnesses
J. W. Riley,

Herbert W. Lawson.

Wit my hand and seal this 10th day of June 1906.

Wm. J. Evans. Attorney.

P. A. SMITH.
INDICATOR.

(Application filed July 28, 1900.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 4.

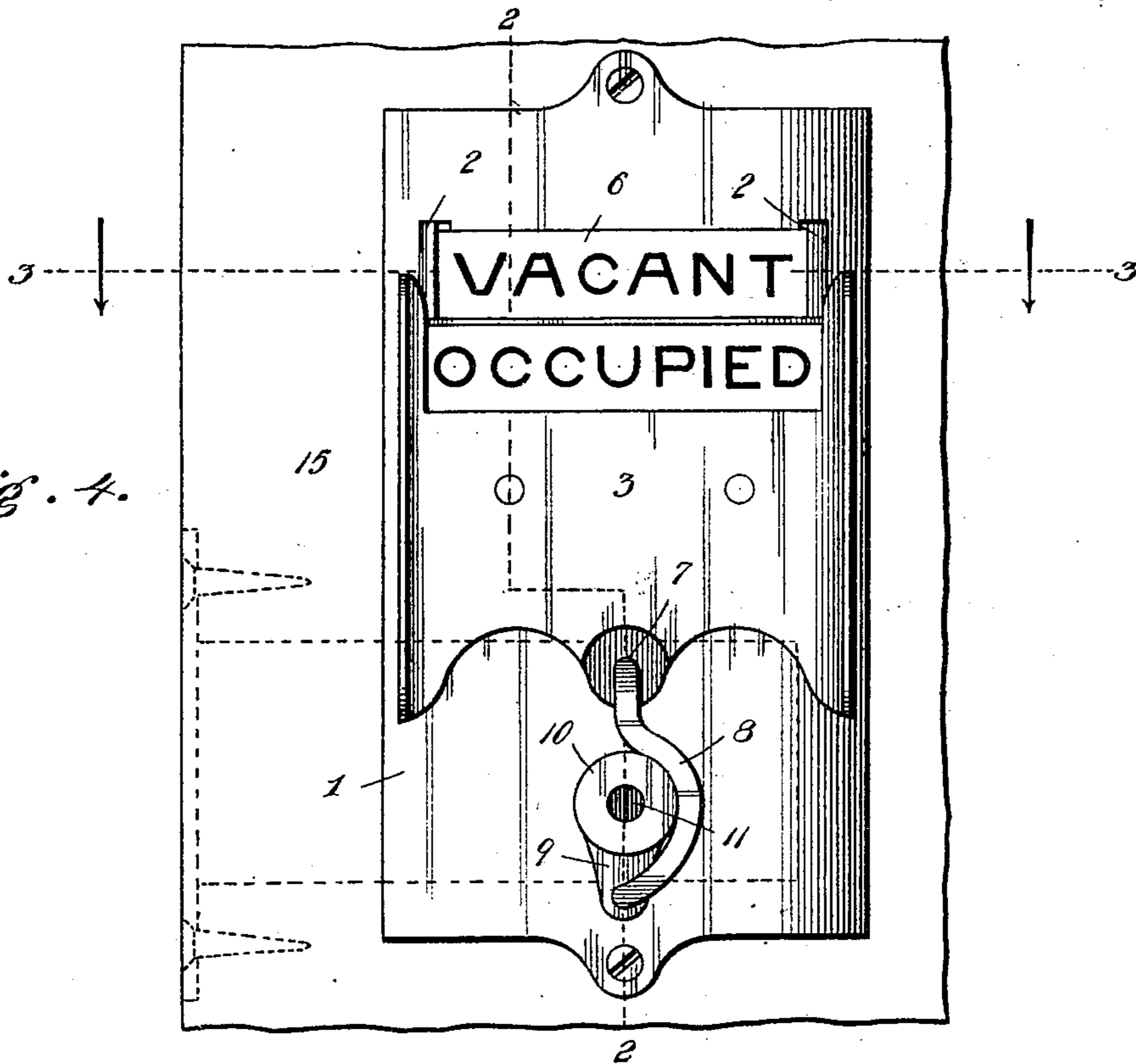


Fig. 5.

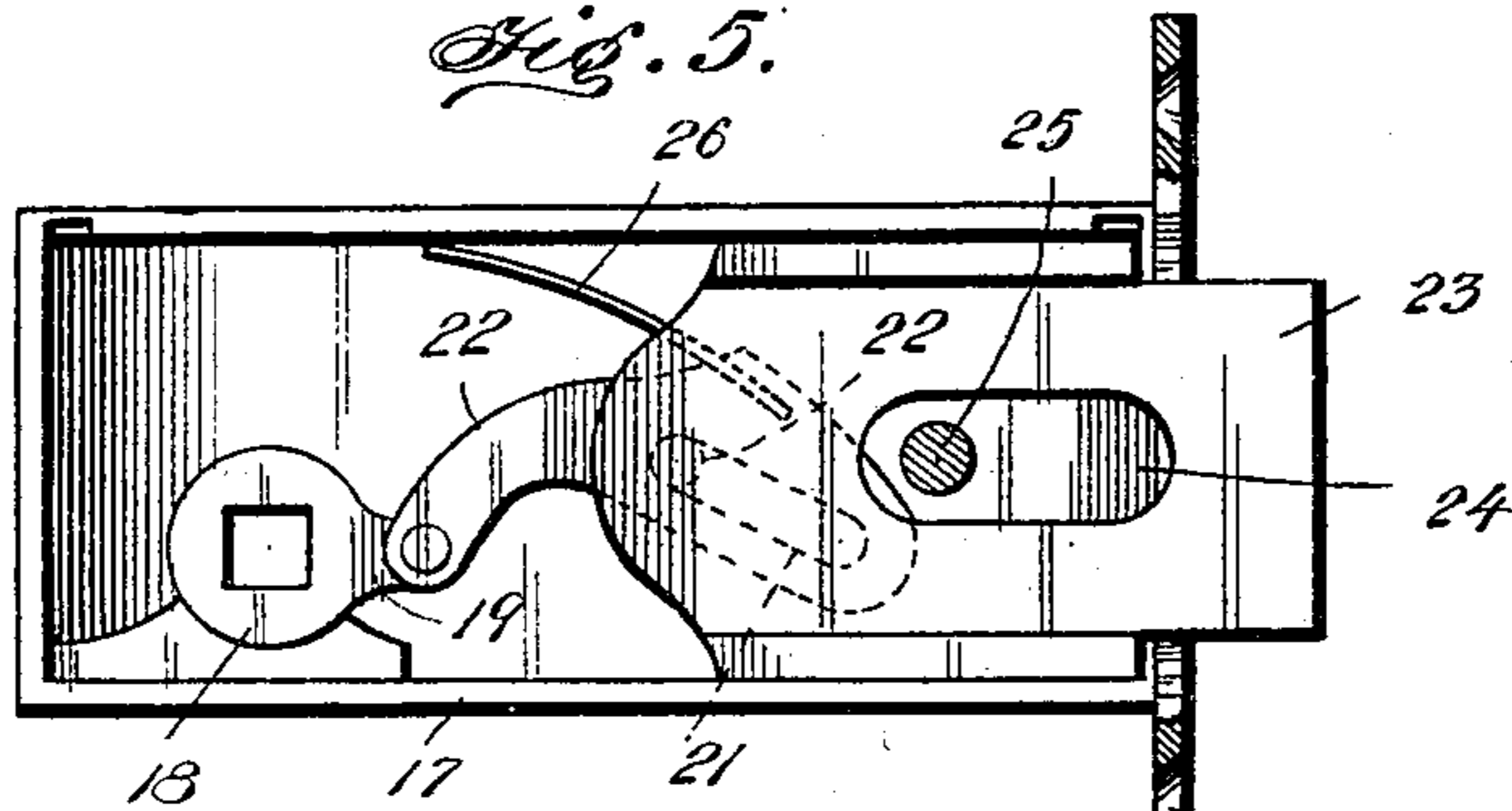
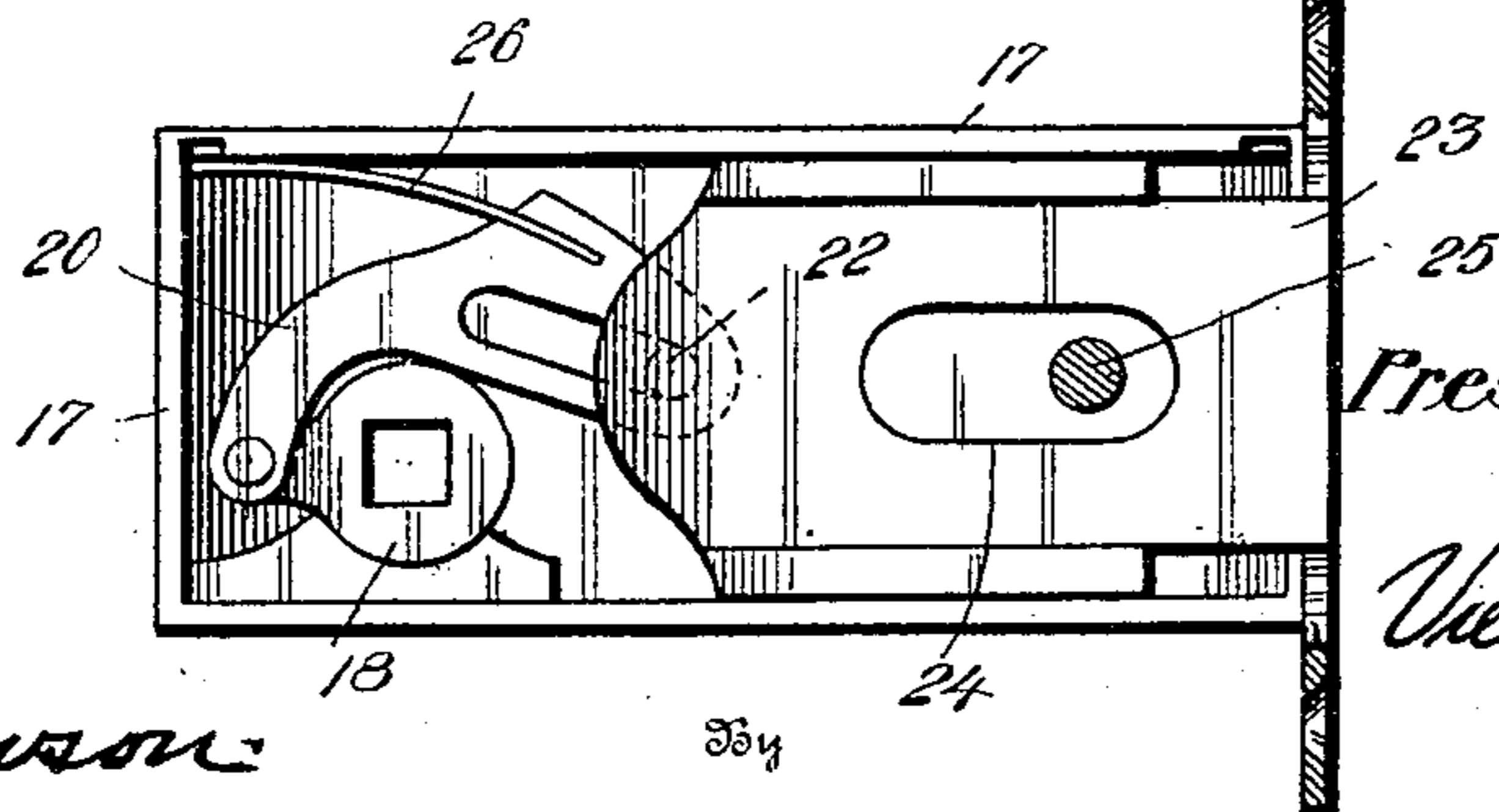


Fig. 6.



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UNITED STATES PATENT OFFICE.

PRESTON A. SMITH, OF RICHFORD, VERMONT.

INDICATOR.

SPECIFICATION forming part of Letters Patent No. 689,429, dated December 24, 1901.

Application filed July 28, 1900. Serial No. 25,176. (No model.)

To all whom it may concern:

Be it known that I, PRESTON A. SMITH, a citizen of the United States, residing at Richford, in the county of Franklin and State of Vermont, have invented new and useful Improvements in Indicators, of which the following is a specification.

This invention relates to new and useful improvements in door-indicators; and its primary object is to provide a device of this character which is simple and durable in construction and which will when the door is locked or unlocked indicate upon the outer side of said door or other structure to which it is secured suitable information, such as to whether or not the room is occupied or vacant, the word "Occupied" being displayed when the door is locked.

To this end the invention consists in the novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of invention, and in which—

Figure 1 is a front elevation. Fig. 2 is a section on line 2 2, Fig. 4. Fig. 3 is a section on line 3 3, Fig. 4. Fig. 4 is a front elevation of the device with the face-plate removed, and Figs. 5 and 6 are longitudinal sections through the bolt when in projected and retracted positions, respectively.

Referring to said figures by numerals of reference, 1 is the rear plate of the indicator, and secured thereto near the upper end are brackets 2, adapted to receive a card or other device containing suitable printed matter, as the word "Vacant." A slide 3, which is preferably formed of two plates bent in opposite directions at their edges, as shown in Fig. 3, also contains suitable printed matter, as the word "Occupied." The outwardly-turned edges of the slide are adapted to bear upon the plate 1 and the casing 4, which incloses the same, said casing being secured to said plate in any suitable manner. This casing is provided with an aperture 5 in the front face thereof, which normally registers with the fixed card 6.

The slide 3 is provided with an opening 7, and this opening receives the end of a curved link 8, the opposite end of which projects into an arm 9, extending from a knob 10. This

knob is recessed in its outer face, as at 11, for the reception of a stud 12, formed upon the inner surface of the face of the casing 4. The knob is provided with a reduced portion 13, which is journaled within an opening formed within the plate 1, and this reduced portion is provided with a recess for the reception of the square end of a spindle 14, which extends through the door 15 and is provided at its outer end with a knob 16. The spindle extends through a casing 17, which is suitably secured within the edge of the door, and engages a sleeve 18, having an arm 19 extending therefrom. This arm is pivotally secured to one end of a curved link 20, having a slot 21 therein, which receives a stud 22, formed upon one face of a sliding bolt 23. This bolt is slotted, as at 24, for the reception of a guide-pin 25. A bow-spring 26 is secured to the link and bears upon one side of the casing, said spring serving to hold the arm 19 normally at either side of the vertical center of its sleeve 18.

It will be understood that when the knob 16 is turned in one direction the sleeve 18, which is carried therewith, will raise the link 20 and compress spring 26 until the arm 19 has passed the vertical center of said sleeve. The spring will then promptly force the arm downward, and the end of the slot 21 contacting with the pin 22 will throw the bolt 23 either inward or outward, according to the direction in which the knob 16 is turned.

When the knob 16 is moved as above described the small knob 10 at the opposite end of the spindle will be carried therewith, throwing arm 9 upward or downward and obviously moving the slide 3 therewith. It will be seen that when the slide 3 is raised the same will cover the fixed card 6, and the printed matter upon the slide will be displayed through the aperture 5 instead.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof; and I therefore reserve the right to make such changes and alterations as fairly fall within the scope of my invention.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

5 The combination with a door, of a plate secured thereto formed with an opening, a casing secured to said plate formed with an aperture, and having a stud projecting from its inner side opposite the opening in the plate, a slide within the casing, a knob provided at its outer end with a circular recess to receive
10 said stud and reduced at its inner end to fit the opening in the plate rotatably, and formed with a squared opening, an arm projecting

from said knob, a curved link connecting said slide and arm, a casing within the door and a spindle extending through the last-named casing and projecting into the squared recess of the knob. 15

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

PRESTON A. SMITH.

Witnesses:

C. B. COMINGS,
W. B. COMINGS.