

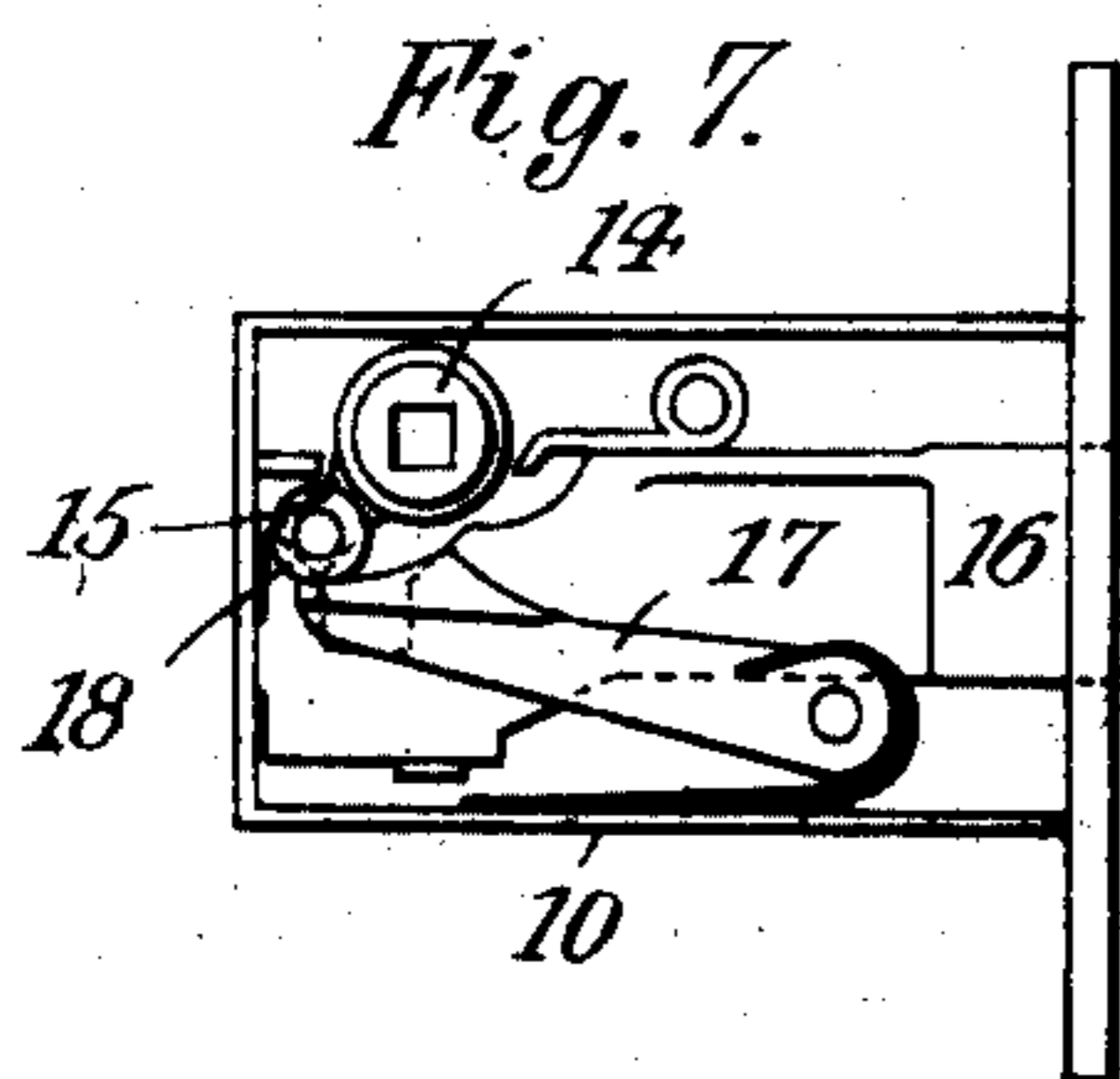
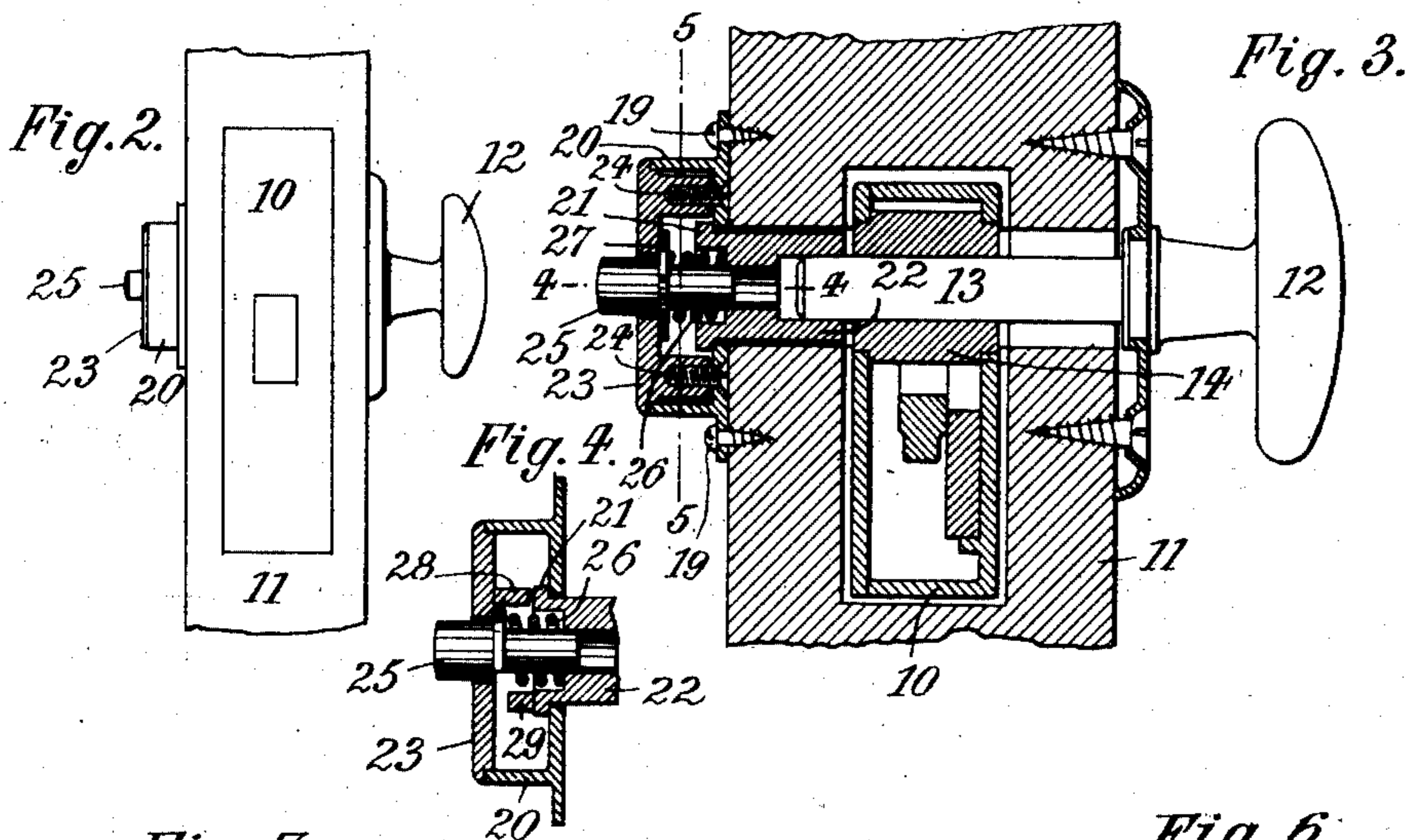
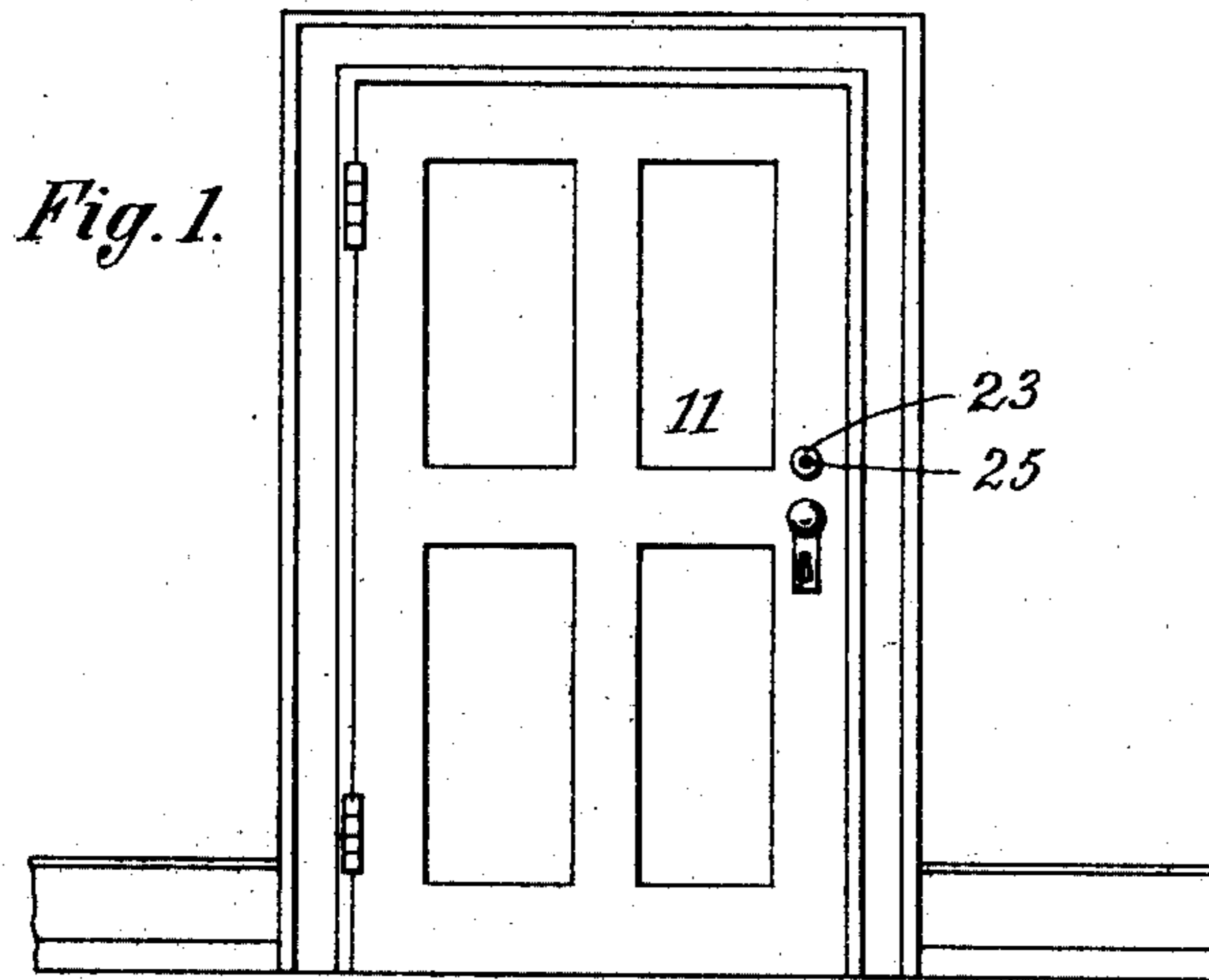
No. 864,670.

PATENTED AUG. 27, 1907.

F. MUSCHENHEIM.

DOOR LOCK.

APPLICATION FILED AUG. 23, 1906.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERICK MUSCHENHEIM, OF NEW YORK, N. Y.

DOOR-LOCK.

No. 864,670.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed August 23, 1906. Serial No. 331,688.

To all whom it may concern:

Be it known that I, FREDERICK MUSCHENHEIM, a citizen of the United States, residing at New York city, Manhattan, county and State of New York, have invented new and useful Improvements in Door-Locks, of which the following is a specification.

This invention relates to a door lock which is provided with means for ascertaining at the exterior of a room whether the door is locked or not. Thus a maid passing along the hall of a hotel, can quickly find out whether a room is empty or occupied, without trying the lock, or otherwise disturbing the occupants.

In the accompanying drawing Figure 1 is an outside view of a door provided with my improved lock; Fig. 2 an end view of part thereof; Fig. 3 a vertical section of the lock; Fig. 4 a section on line 4—4, Fig. 3; Fig. 5 a section on line 5—5, Fig. 3 looking to the left; Fig. 6 a similar section looking to the right; and Fig. 7 a detail of the bolt-operating means with the cover removed.

The casing 10 of the lock is received within a mortise of door 11 and is operated by means of a knob 12 accessible from the interior of the room. As shown, the squared spindle 13 of knob 12 engages the squared opening of a barrel 14 having an arm 15. This arm operates the lock bolt 16, and at the same time depresses a tumbler 17 by means of a roller 18. The means for shooting the bolt may however be varied at pleasure as will be readily understood.

To the exterior of door 11 is attached by screws 19 or otherwise an annular socket 20. This socket receives the head or flange 21 of a tubular sleeve 22 having a squared bore which is engaged by the outer end of spindle 13. In this way the sleeve is taken along by the spindle and participates in its rotation. Socket 20 is provided with a perforated cover 23 secured thereto by screws 24. Through cover 23 projects outwardly a push button or movable member 25 normally thrown outward by spring 26 and held against displacement by

a collar 27. The push button 25 is axially movable independent of spindle 13, so that it may be moved inward and outward without causing a corresponding movement of the spindle. Collar 27 is mutilated or of segmental shape being partly cut away as shown in Fig. 5. It is held against rotation by means of a pin 28 on cover 23 that engages a corresponding notch of the collar. Opposite to collar 27, there projects from the head 21 of sleeve 22 a pin 29. The parts are so assembled that when the lock is closed, pin 29 will be brought opposite the said part of collar 27, while when the lock is opened said pin is brought opposite the cut away part of said collar. Thus when the door is locked, a pressure on push button 25 will be ineffectual because pin 29 will prevent its inward movement. On the other hand, if the door is unlocked, a pressure on the push button will cause it to move inward against the action of spring 26, the latter throwing the button outward as soon as pressure is released.

It will thus be seen that, a maid while passing along the hall of a hotel, can readily ascertain by touch and without disturbing the occupants of a room whether or not the latter is occupied. In this way time is economized and annoyance avoided.

What I claim is:

1. A door lock provided with a lock bolt, an operating spindle, a spring-influenced push button axially movable independently from the spindle, and means controlled by said spindle for locking and releasing said button, substantially as specified.

2. A door lock provided with a lock bolt, an operating spindle, a push button, a mutilated collar on said button, and a pin operatively connected to the spindle, said pin being adapted to be engaged by and disengaged from said collar, substantially as specified.

Signed by me at New York city, New York this 22d day of August 1906.

FREDERICK MUSCHENHEIM.

Witnesses:

FRANK V. BRIESEN,
ERNEST PFENNIGWERTH.