

(No Model.)

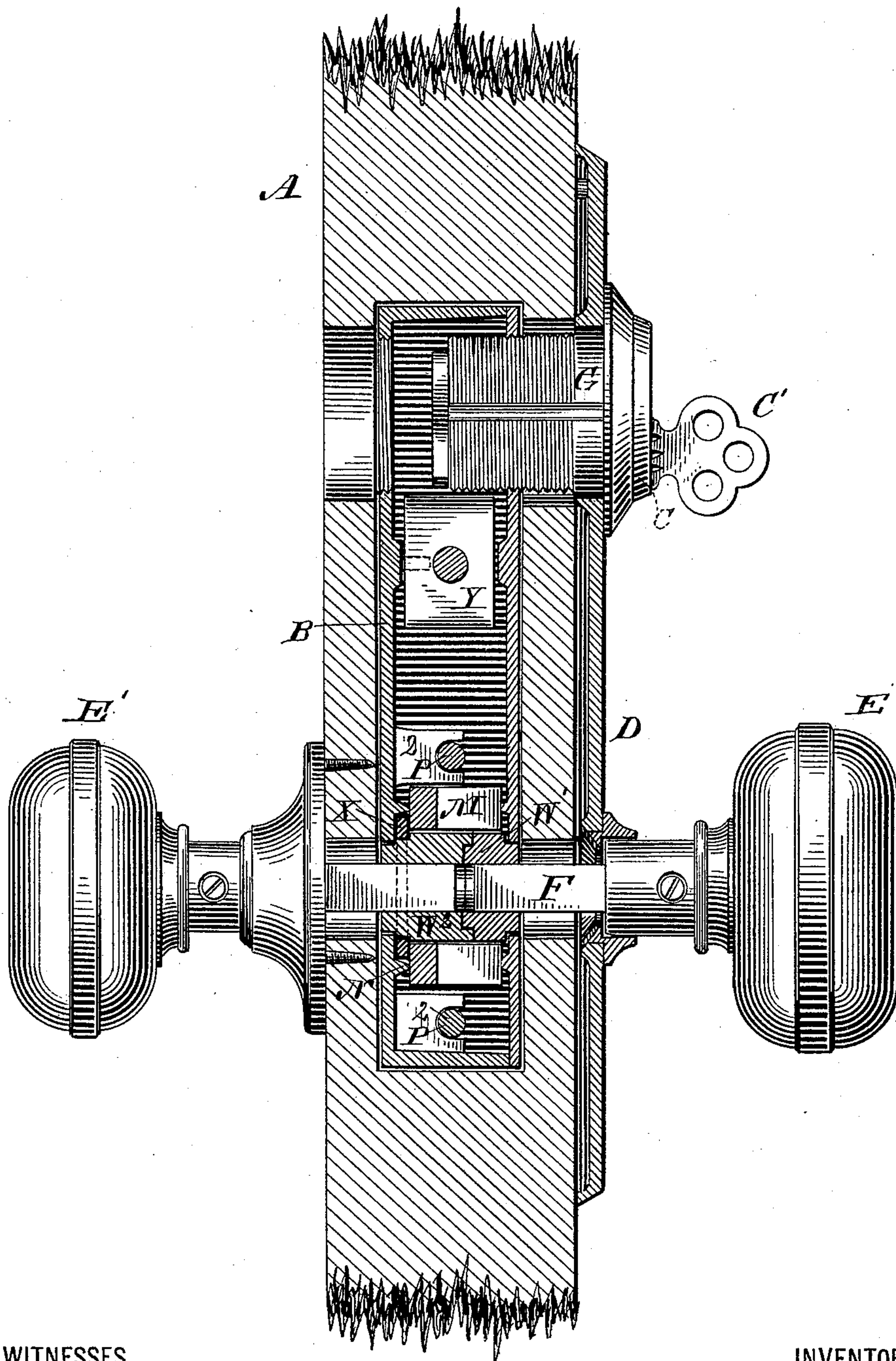
3 Sheets—Sheet 1.

T. F. KEATING.
LOCK.

No. 420,558.

Patented Feb. 4, 1890.

Fig. 1.



WITNESSES

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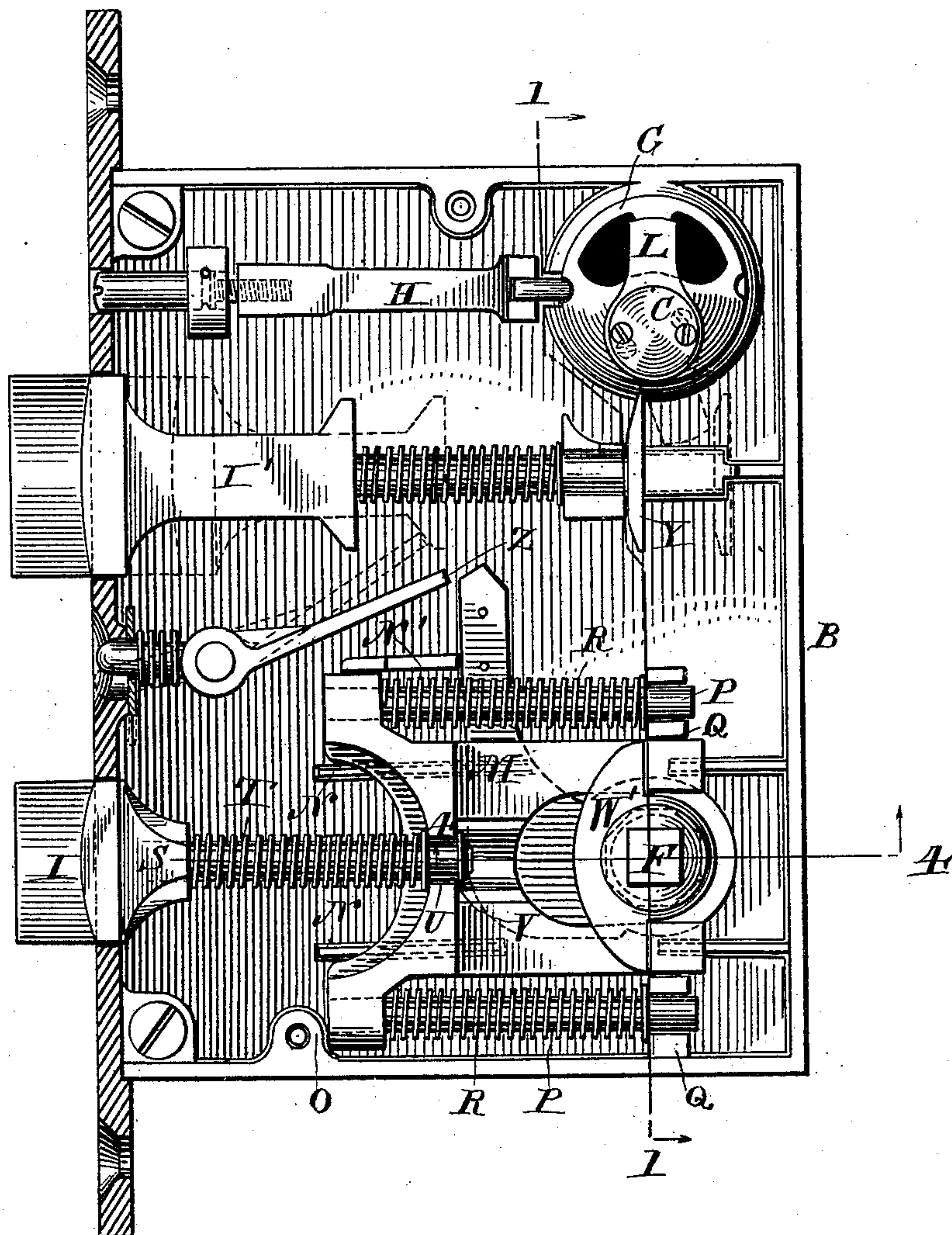
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Fig. 2.



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3 Sheets—Sheet 3.

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Fig. 3.

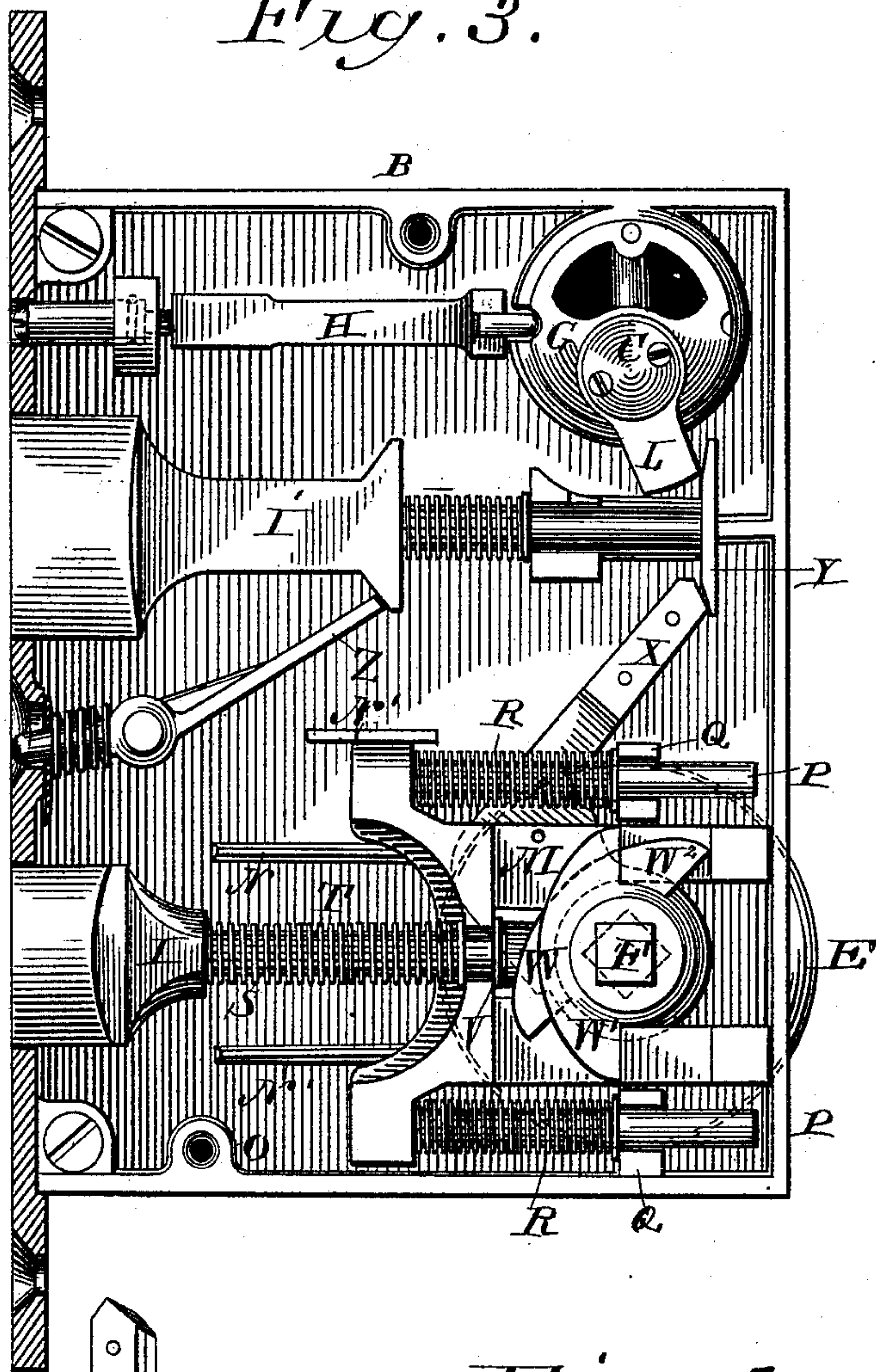


Fig. 4.

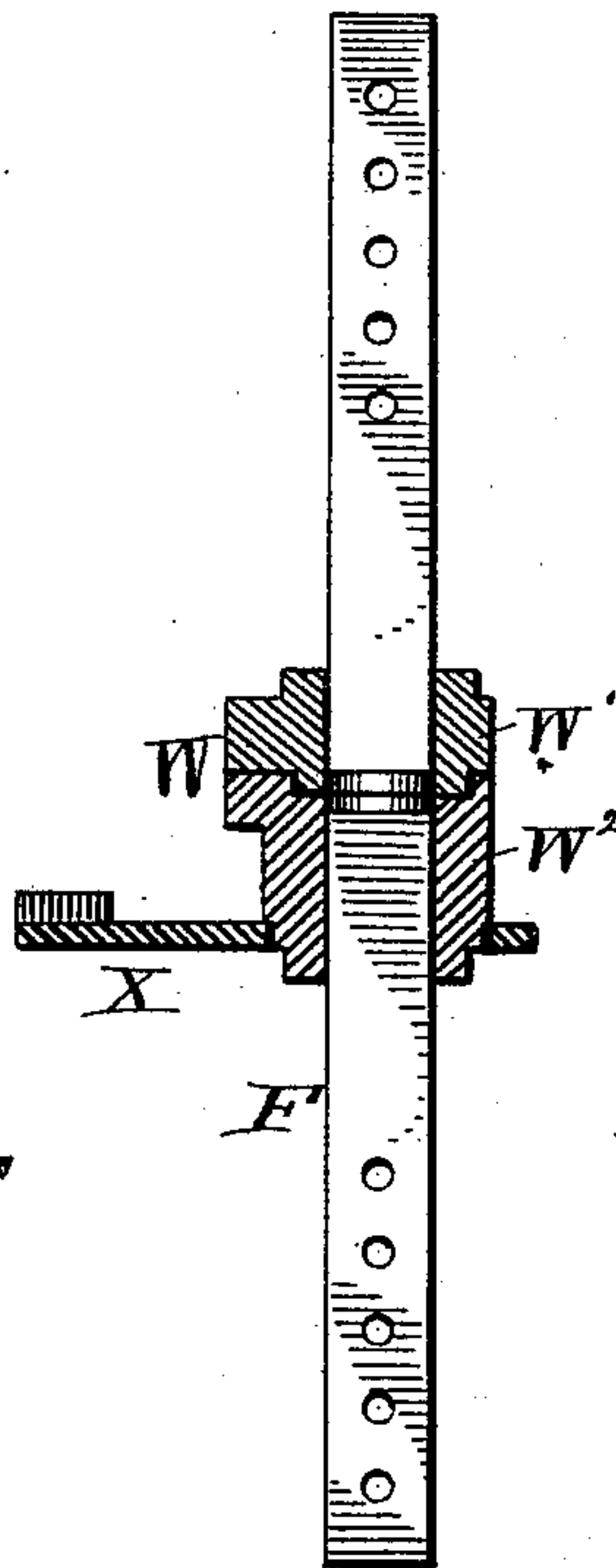
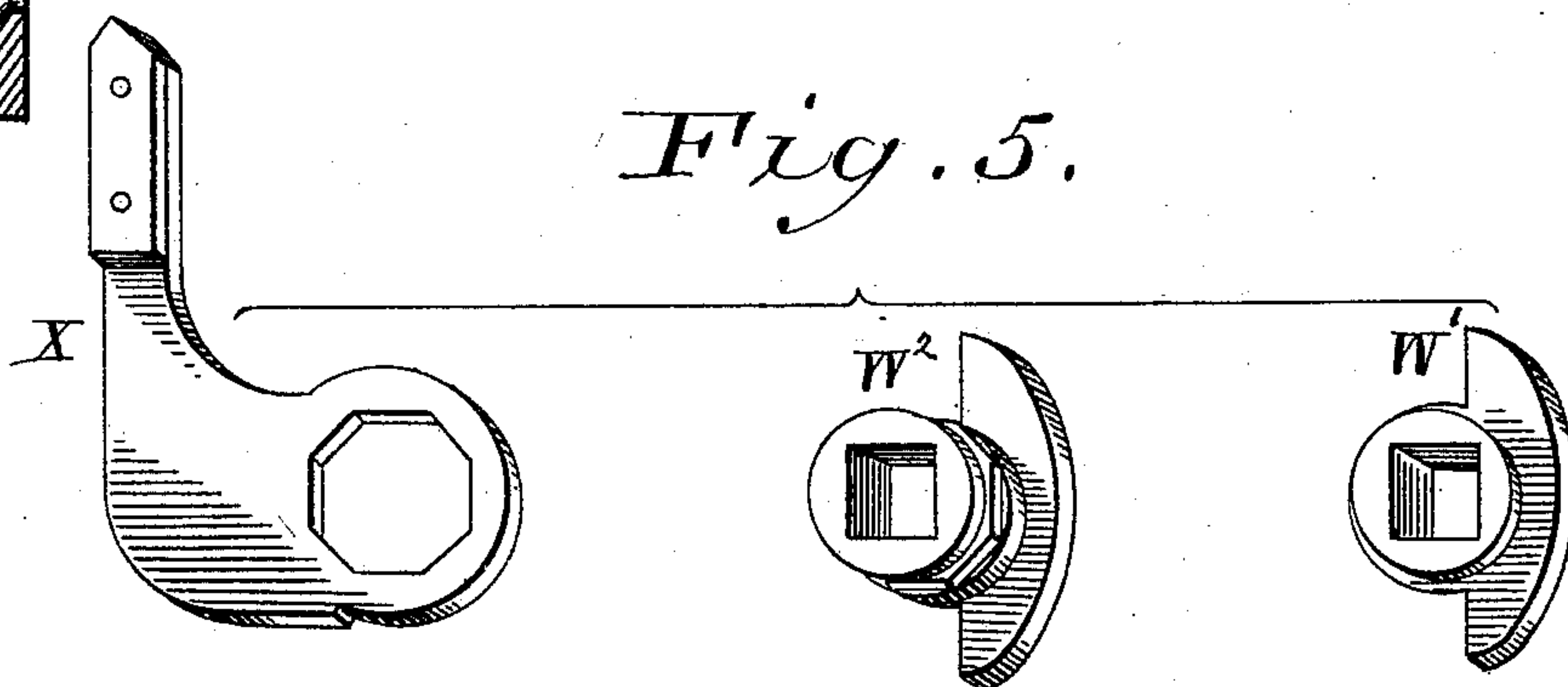


Fig. 5.



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UNITED STATES PATENT OFFICE.

THOMAS F. KEATING, OF NEW YORK, N. Y., ASSIGNOR TO THE YALE & TOWNE MANUFACTURING COMPANY, OF STAMFORD, CONNECTICUT.

LOCK.

SPECIFICATION forming part of Letters Patent No. 420,558, dated February 4, 1890.

Application filed August 16, 1888. Serial No. 282,873. (No model.)

To all whom it may concern:

Be it known that I, THOMAS F. KEATING, of the city, county, and State of New York, have invented certain new and useful Improvements in Locks, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to provide a door-fastening with two spring-bolts, both of which may be operated from the inside of a door by means of a knob and spindle and only one of which can be operated from the outside of the door by such means, the other being provided with a lock and key to work it from the outside.

My invention consists in a certain organization of parts, which, after describing in detail by reference to the drawings, I shall succinctly specify in my claims.

In the drawings, Figure 1 is a vertical section of a door with my lock applied, taken through the lock on the line 1 1 of Fig. 2. Fig. 2 is a plan view of my improved door-lock with the lock-plate removed, so as to exhibit the internal parts in the fastening position. Fig. 3 is a view similar to Fig. 2, but showing the internal parts in the unfastened position. Fig. 4 is a view of the swivel-spindle and its divided hub and attached arm. Fig. 5 shows in perspective the different parts of the hub and the arm detached from the hub.

Referring to the letters upon the drawings, A indicates a section of a door; B, the case of a mortise-lock; C, the rotary plug of a tumbler-lock; C', the key; D, a knob and escutcheon-plate; E, the outside knob; E', the inside knob, and F a swivel-spindle. G indicates an escutcheon, and H a screw-fastening of the escutcheon. I and I' indicate spring latch-bolts suitable for a snap-lock. L is the lock wing or sweep. All these parts may be of usual construction.

The two spring latch-bolts, each in itself of ordinary construction, I connect operatively and with a swivel-spindle in a peculiar way for the purposes of my invention.

M indicates a sliding spring-carriage with suitable bearings N N' to keep it in place.

O is a stop which limits the forward movement of the carriage.

P P are rods fixed in the carriage, projecting backward and resting in supports Q Q, which serve as abutments to the coiled springs R R around the rods. These springs are applied so as to tend to throw the carriage forward. The latch-bolt I, provided with a rod S and a spring T, as usual, is connected with the carriage, so as to slide forward and back with it, but also so as to slide forward and back independent of it, the carriage at U acting merely as a support for the bolt-rod and a stop for the bolt-spring T.

V is a collar fixed on the end of the bolt-rod, by means of which the bolt is drawn back by the backward movement of the carriage.

W is a spindle-hub divided into two parts, which may work independently, either of which will, when rotated, throw back the carriage M and the lock-bolt I.

W' is that part of the spindle-hub which is next the outside of the door, and W² is that part which is next the inside. To the end of the part W² is secured an arm X, which, when the part W² is turned by the spindle, will engage with a plate or lug Y on the end of the spring-rod of the latch-bolt I' and throw the bolt back. Thus by operating the part W² of the spindle-hub both latch-bolts I and I' can be thrown back to unfasten a door. The swivel-spindle is so adjusted that that part of it with which the inside door-knob is connected will operate the part W² of the hub and the other part of the spindle will only operate the part W' of the hub, and will therefore only throw back latch-bolt I.

It is sometimes desirable to adjust the door-fastenings so that the door can be opened from both sides by the knobs alone, so I provide an ordinary pivotal stop Z to fasten back the latch-bolt I', as shown in the drawings; but when this latch-bolt is not fastened back it is necessary to use the key C' of the lock to throw it back from the outside of the door. By thus providing a door-fastening with two bolts which may be either spring-

bolts or not I am able to make the fastenings operative by both knobs or by only one, at will, which is often very convenient.

What I claim is—

5 1. In a locking mechanism, the combination of two spring-bolts, two knobs, a swivel-spindle, and a special lock and key to operate from the outside, and a stop to hold the bolt operated by the key in the unfastened position, substantially as set forth.

10 2. In a lock, the combination of a swivel-

spindle and split hub with two spring-bolts, one part of said hub actuating one bolt only and the other part both bolts, substantially as described.

In testimony of all which I have hereunto subscribed my name.

THOMAS F. KEATING.

Witnesses:

THOMAS A. REID,
MATHEWS D. HALPIN.