

(Model.)

2 Sheets—Sheet 1.

A. O. TANNENBERG.  
LOCK.

No. 485,899.

Patented Nov. 8, 1892.

Fig. 1.

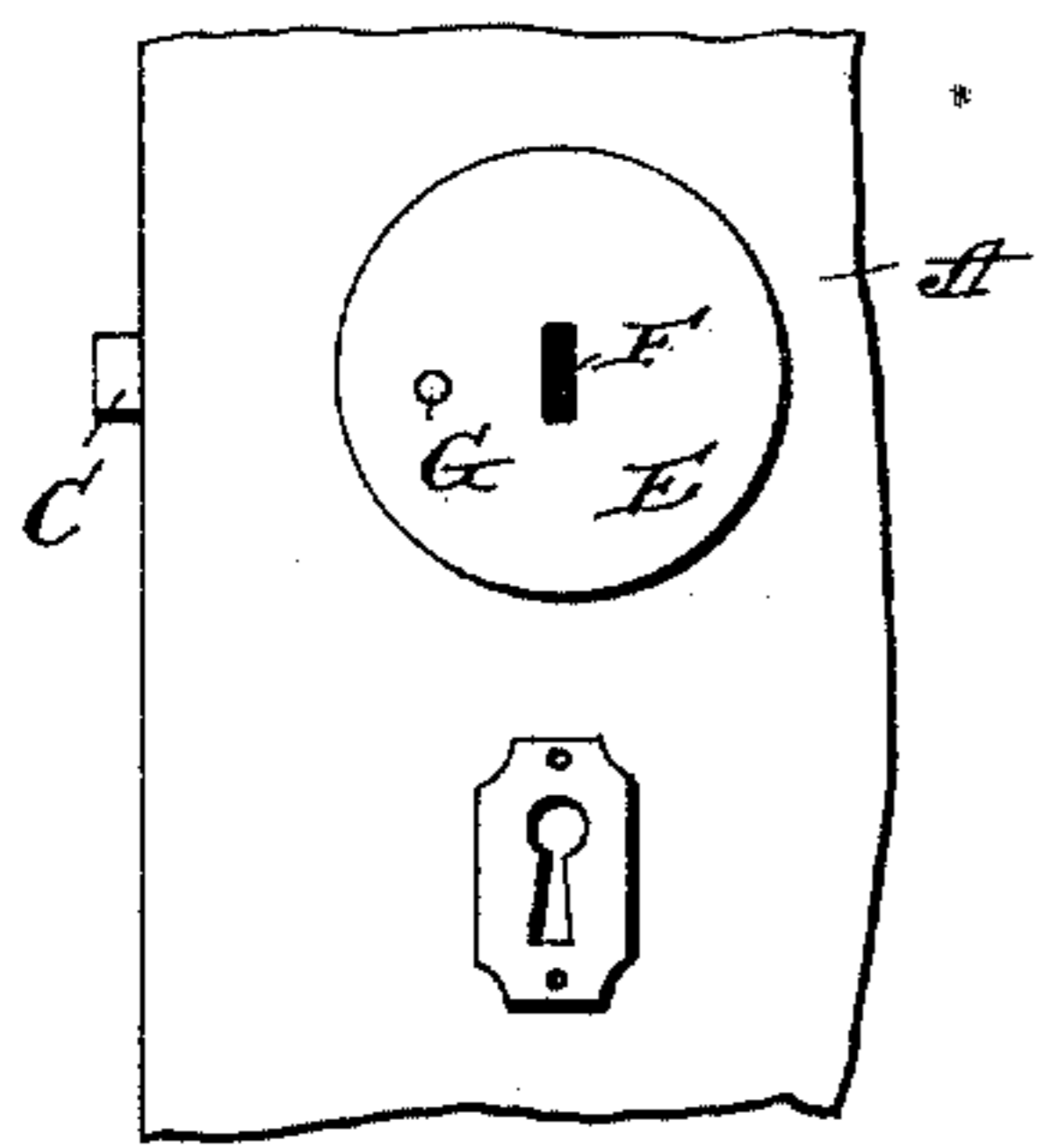


Fig. 2.

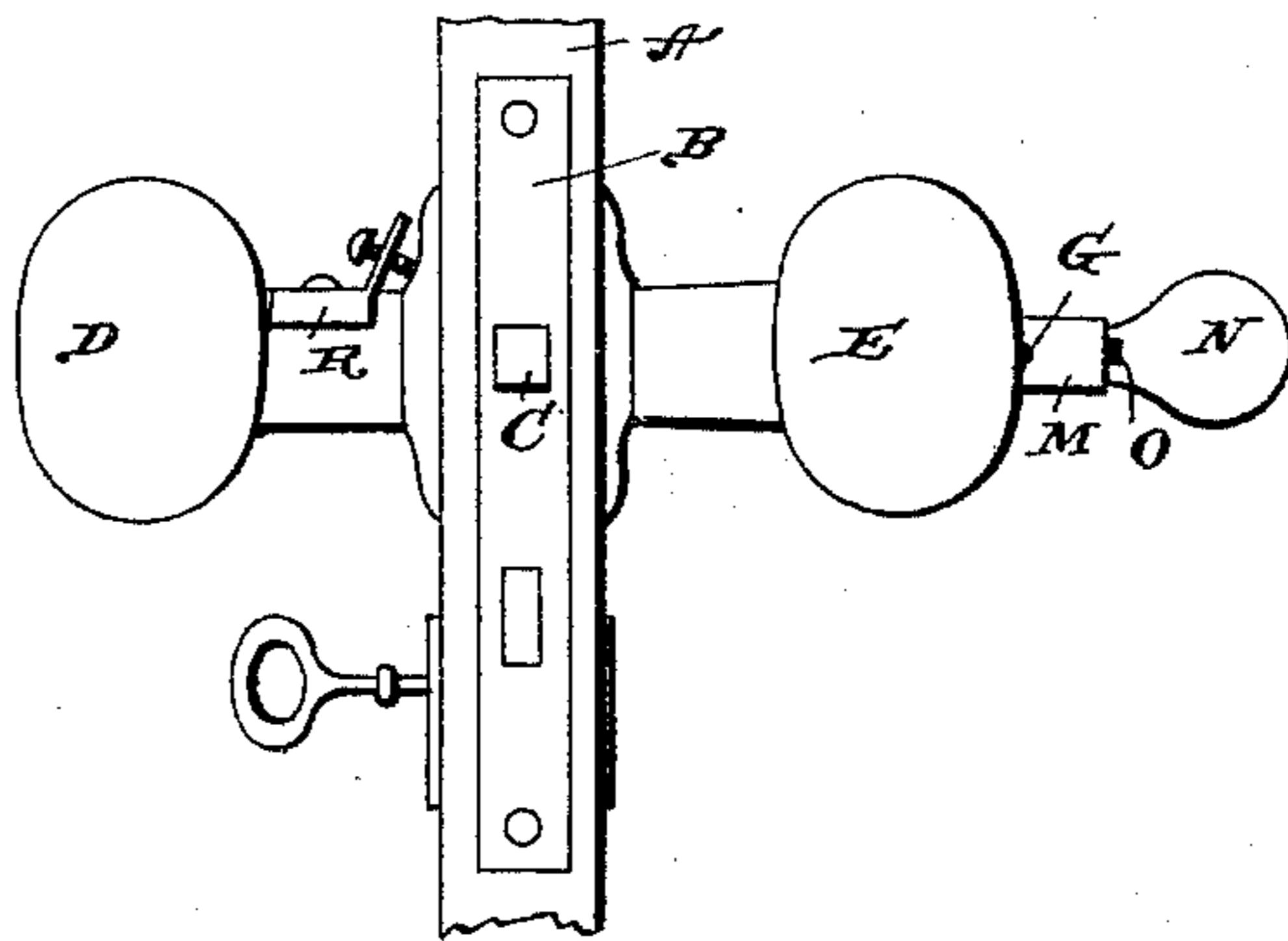


Fig. 3.

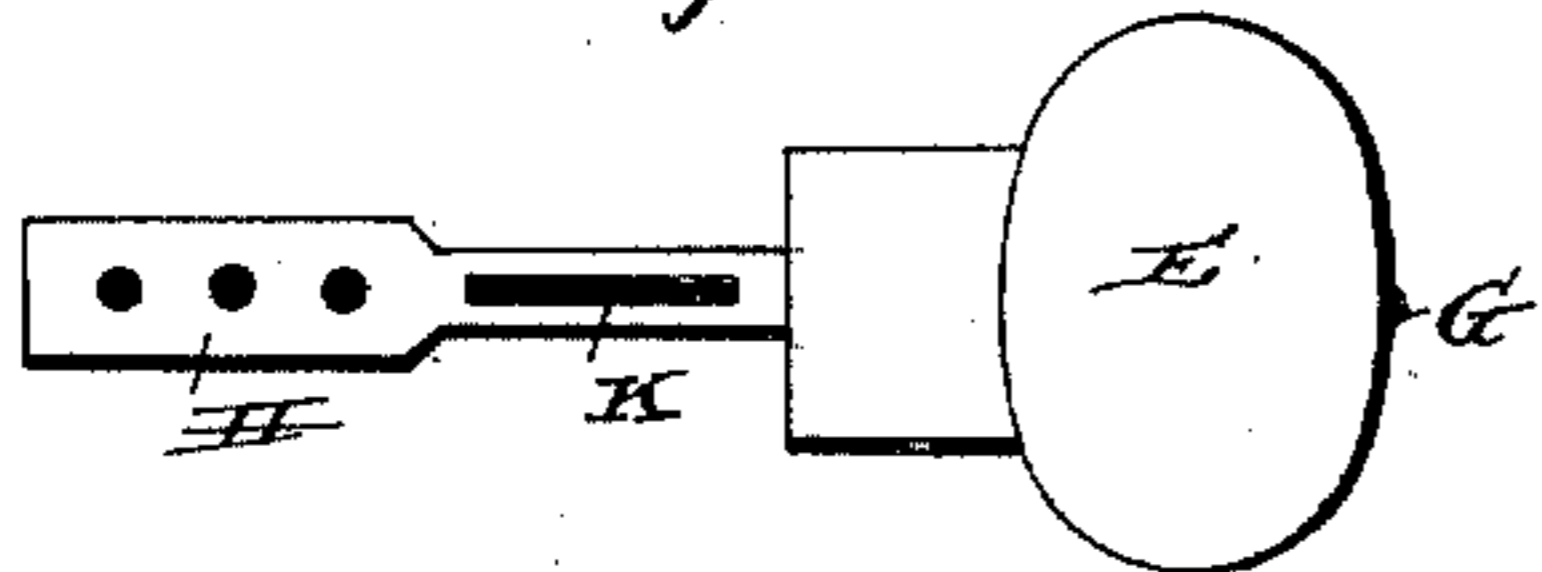


Fig. 4.

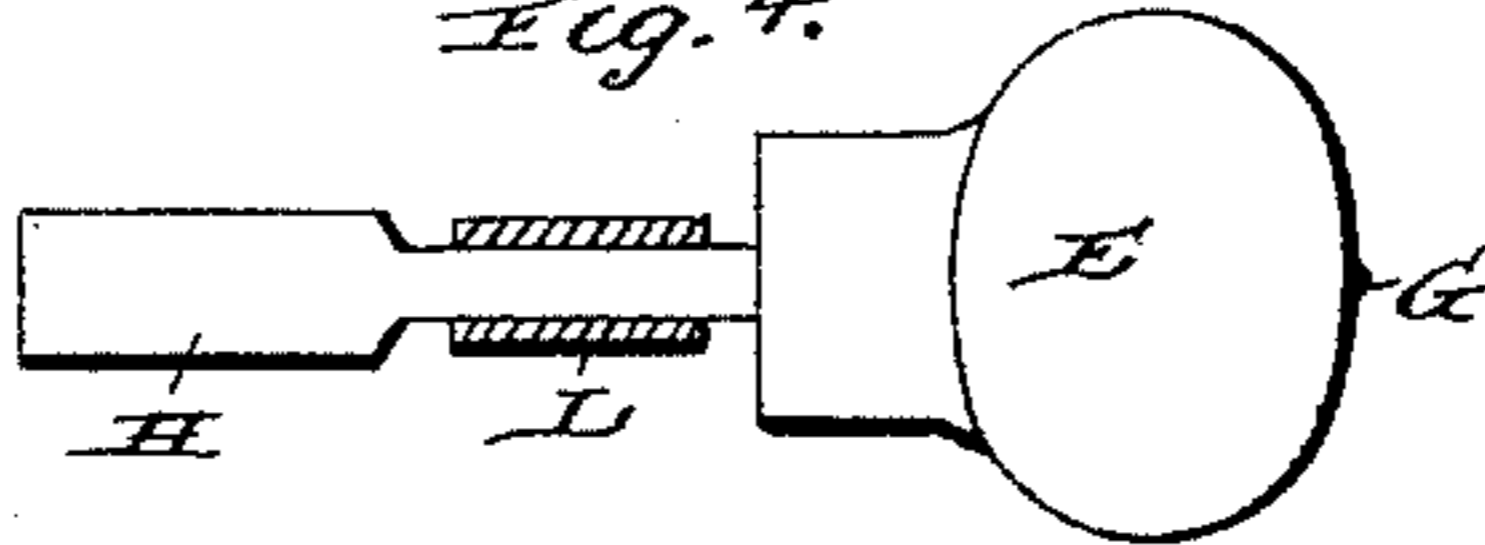


Fig. 5.

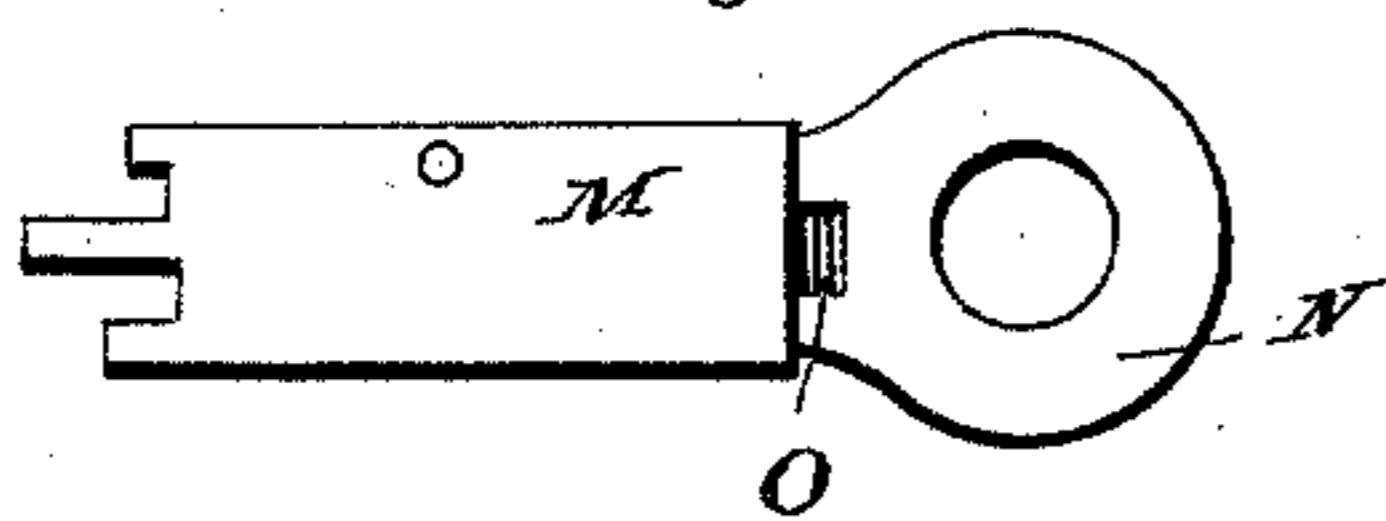


Fig. 8.

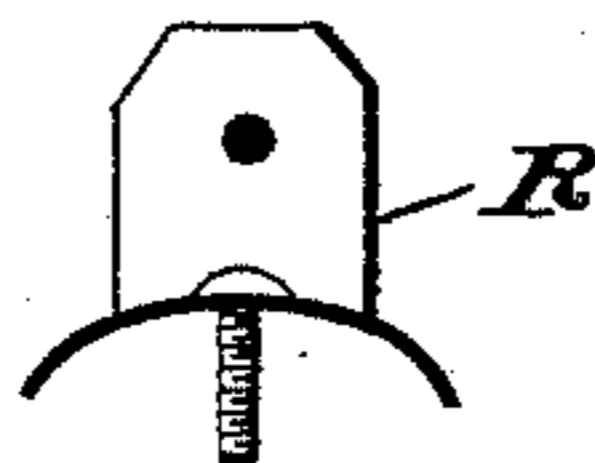


Fig. 6.

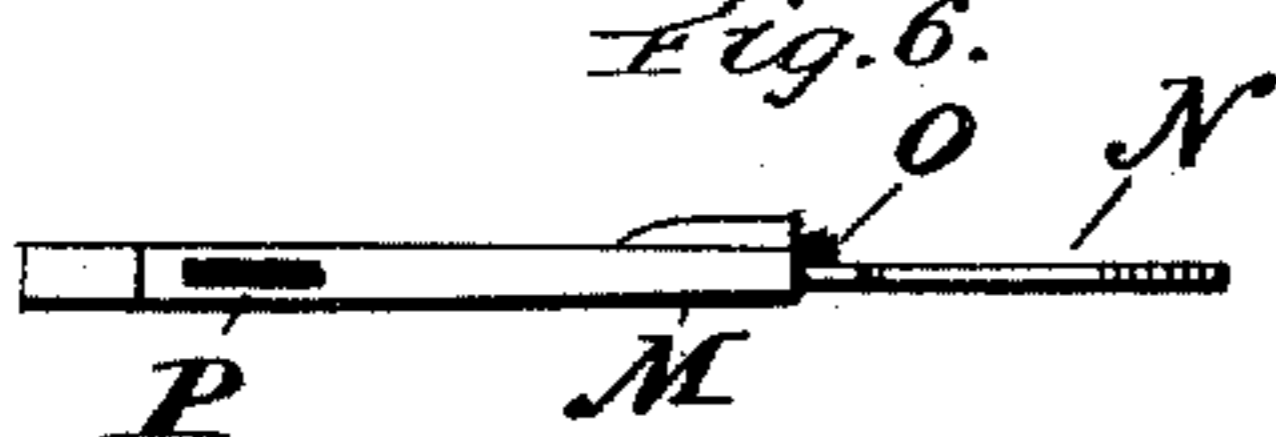


Fig. 7.

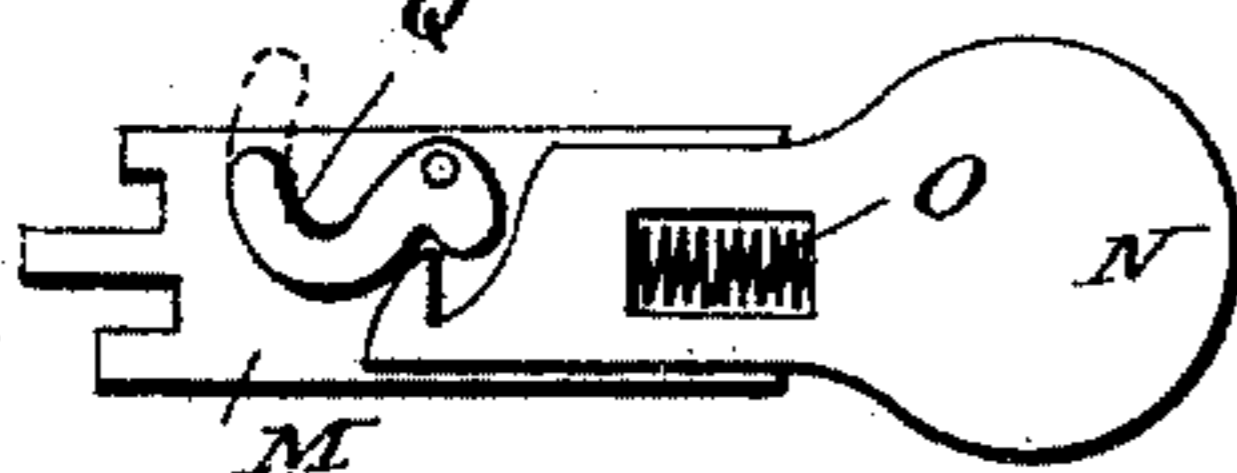
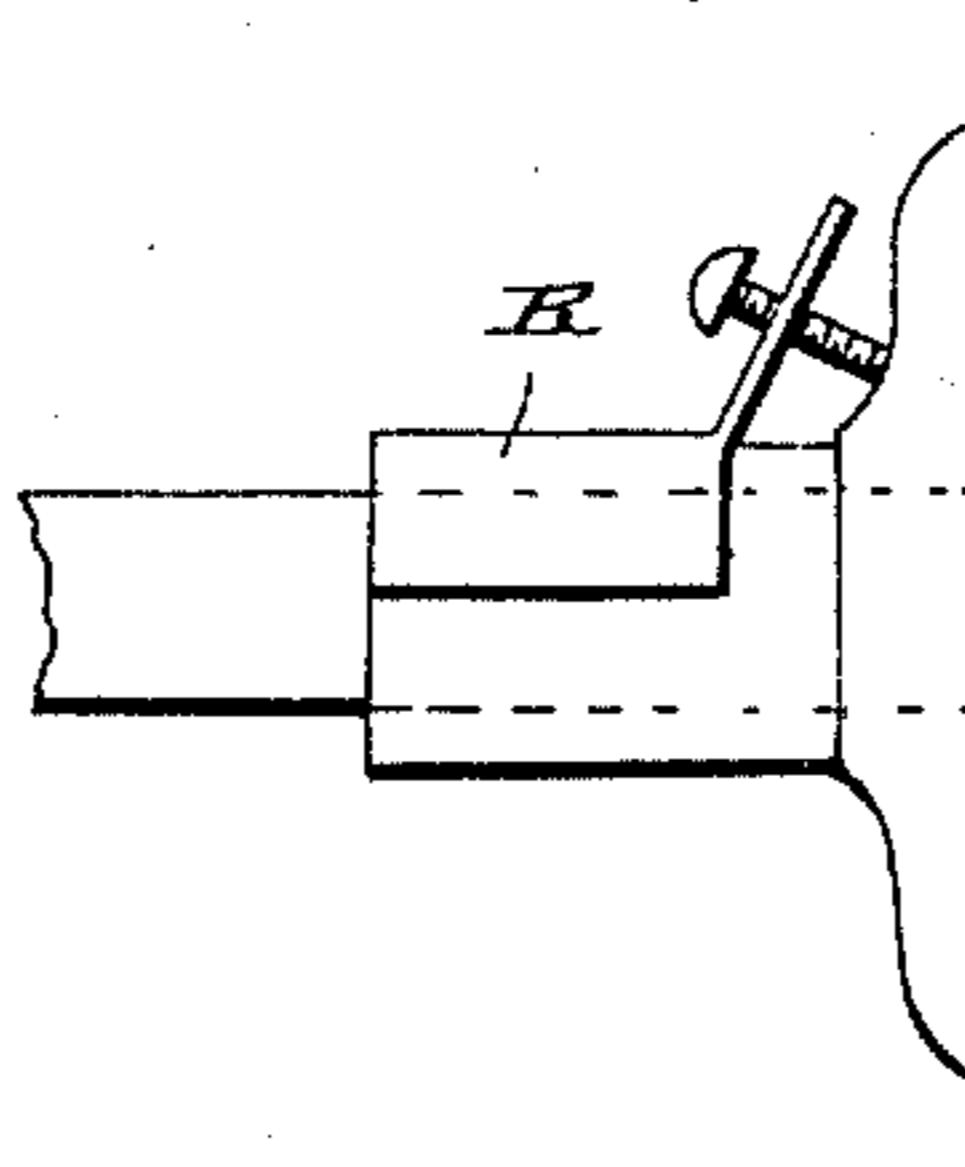


Fig. 9.



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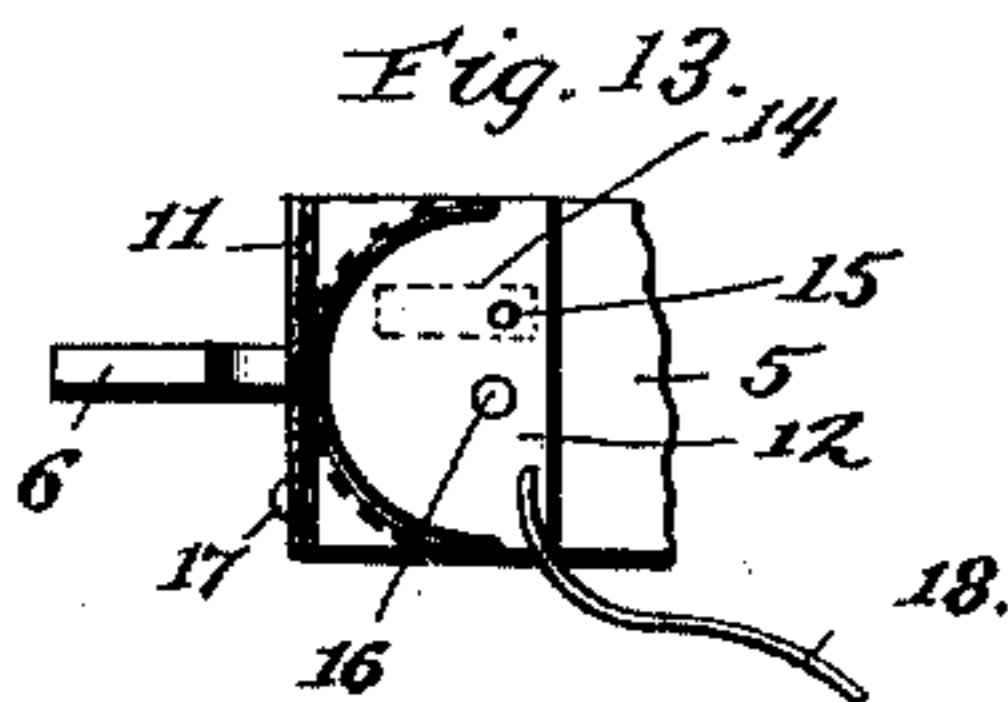
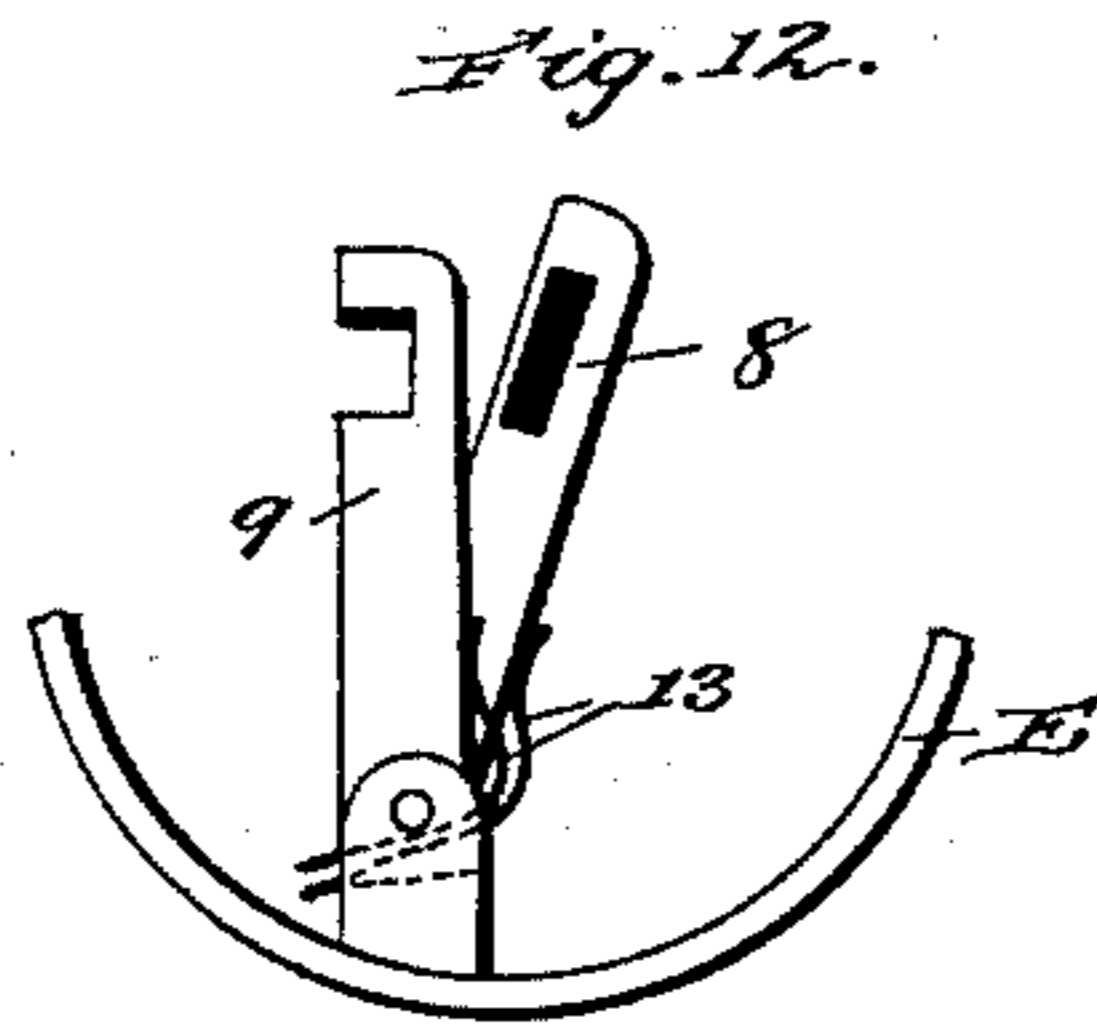
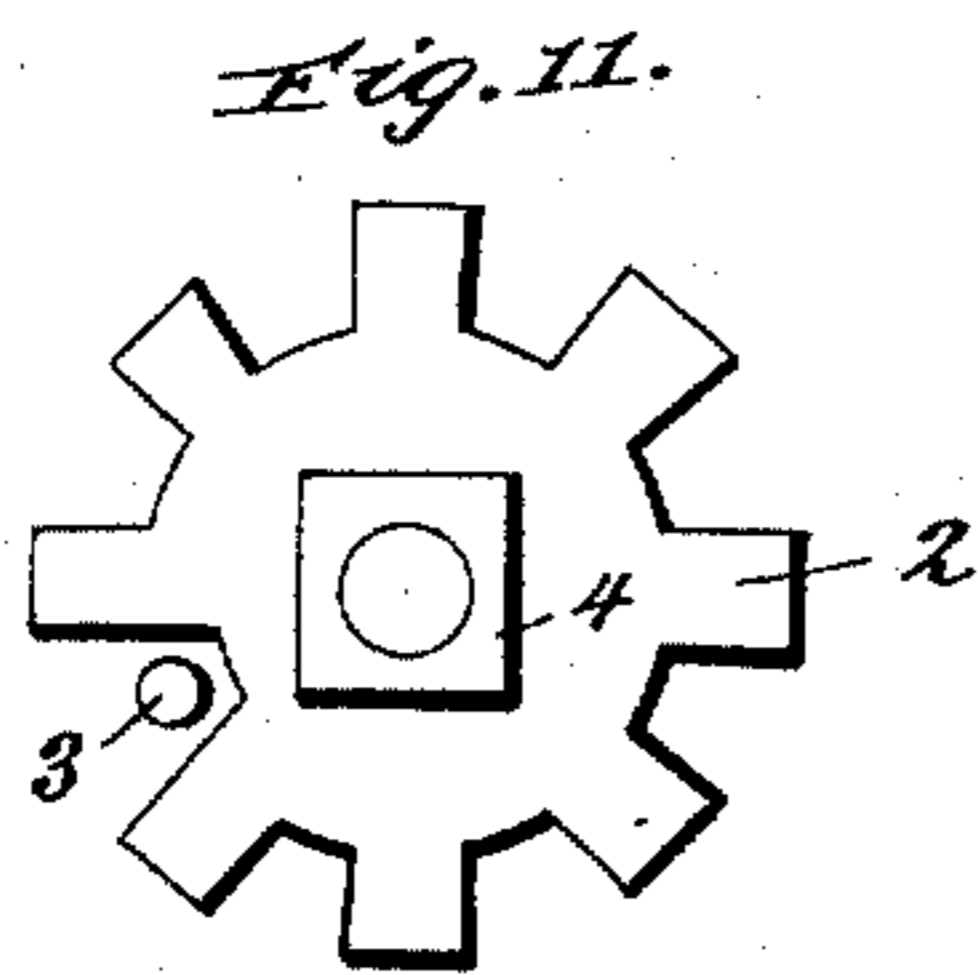
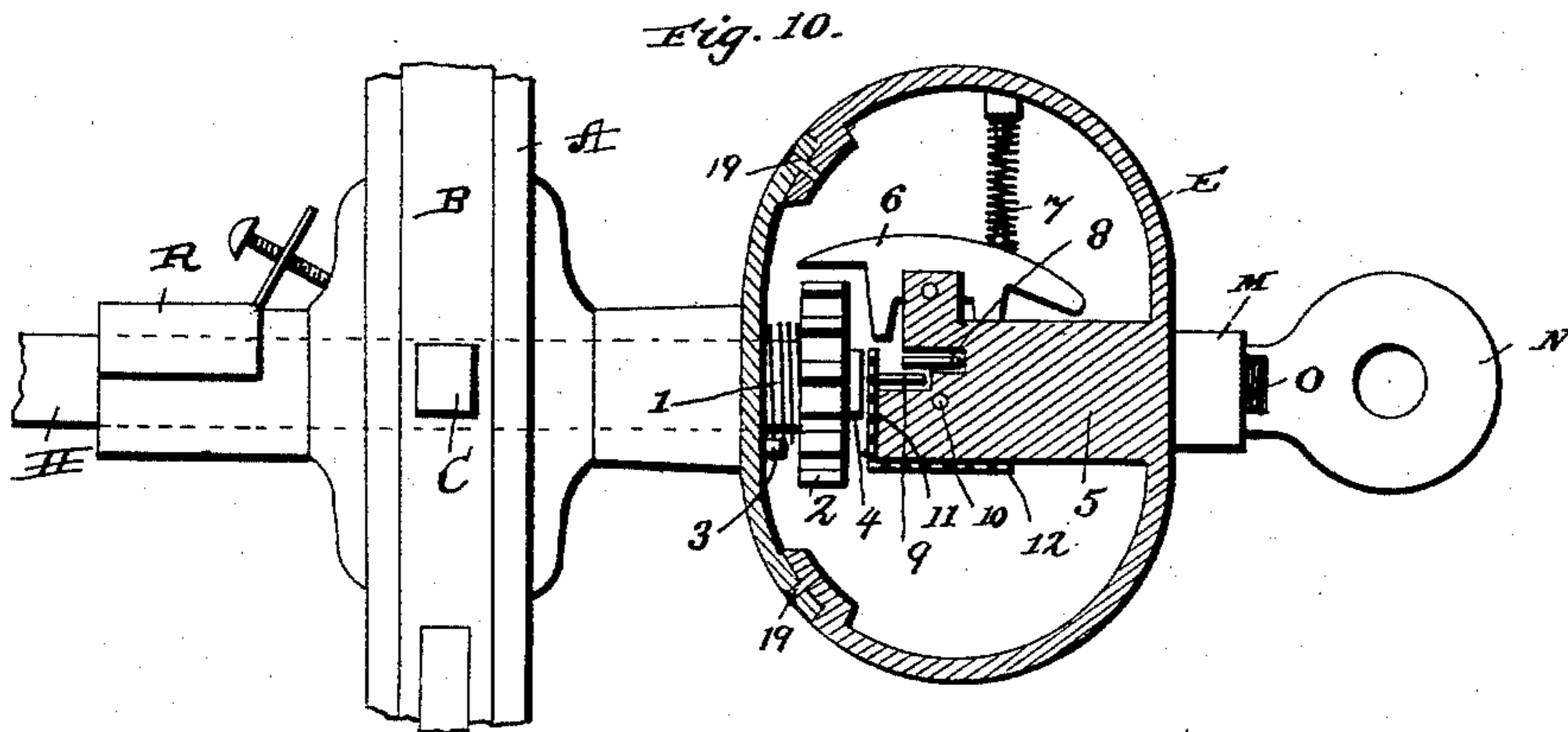
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2 Sheets—Sheet 2.

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Witnesses:

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# UNITED STATES PATENT OFFICE.

AUGUST O. TANNENBERG, OF NEW ORLEANS, LOUISIANA, ASSIGNOR TO  
WILLIAM H. BOFINGER, OF SAME PLACE.

## LOCK.

SPECIFICATION forming part of Letters Patent No. 485,899, dated November 8, 1892.

Application filed September 21, 1891. Serial No. 406,419. (Model.)

### *To all whom it may concern:*

Be it known that I, AUGUST OTTO TANNENBERG, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Knob-Latches; 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 use the same.

My invention relates to an improvement in a knob-latch, and its novelty will be fully understood from the following description and claims when taken in connection with the annexed drawings; and the objects of my invention are to provide the knob of a door with a spring-lock that will enable the bolt of a mortise or other door-lock to be readily opened. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front view. Fig. 2 is a sectional side view. Fig. 3 is a side view showing spindle with one knob detached and slot in spindle. Fig. 4 is a side view showing spindle with plate in slot. Fig. 5 is a flat side of key. Fig. 6 is an edge view of key. Fig. 7 is a sectional view showing interior of key. Fig. 8 is a front view of attachment on knob. Fig. 9 is a sectional side view showing attachment on knob in position. Fig. 10 is a sectional side view showing interior construction of knob. Fig. 11 is a top view of ratchet within knob, also pin within ratchet. Fig. 12 is a side view of tumblers. Fig. 13 is a side view of safety-plates.

Similar letters and numerals refer to similar parts throughout the several views.

In the drawings, A refers to a door, in which there is placed a lock B, provided with a bolt C, operated by means of knobs D and E, the latter being placed on the outside of the door fronting the street and provided with a lock in its interior, which will hereinafter be described, F showing a keyhole for inserting a key to operate the lock within knob E, and at a point shown by G is a lug or projection which can be felt in the dark and enable keyhole F to be readily found.

H is the square end of spindle; K, a slot in spindle; L, a plate, which is inserted in slot K.

Any form of latch-key may be used; but I have shown a key of a very desirable construction and which operates my knob-latch, and it consists of the case M, end N, and a spring O, as shown in Figs. 6 and 7, the case M being provided with a slot, as shown by P, and through which the dog Q projects when pressure is placed upon end N.

R indicates an angular plate having a hole at opposite ends. This plate is secured at one end to the knob-shank by a screw, as shown, and a stop-screw is employed in its opposite end which bears against the plate or rose, so that when the pivot D has been drawn out, as will be presently described, it may be held in such position.

The spindle-connecting knobs has on one end of same a ratchet, as shown by 2, and is also provided with a spring, as shown by 1, thus enabling the spindle to be drawn back and forth or slightly compressed. At a point shown by 3 is a pin held in a rigid position, and as spindle is pressed back said pin 3 engages the ratchet. 4 is a nut which holds ratchet in position upon spindle.

5 is a metal block or cross-arm within knob E.

6 is a lever provided with a spiral spring, which is held in position by the means shown.

8 and 9 designate tumblers.

10 is a stay-pin for preventing key being inserted beyond a certain distance.

11 and 12 are safety-plates and close over tumblers and prevent picking or opening of knob latch or lock by means of a wire or any device except a night-key such as is provided for each specific latch or knob-lock.

13 are springs on tumblers.

14 is a slot.

15 is a pin attached to plate 12 and moves in slot 14.

16 and 17 are pivots for plates 11 and 12.

The mode of operating my knob-latch is similar to an ordinary spring-lock, except that I use the bolt of an ordinary door-lock to make a fastening and dispense with an extra lock and provide a lock for the outside or street knob of a door. By simply inserting the key through hole F and pressing the end N the dog Q projects through slot P and actuates lever 6, and at same time tumblers are moved the ratchet 2 is pressed from you until it engages

pin 3, when by simply turning the knob the spindle is turned and the bolt C reversed and an entrance is effected. Where it is desired to use the knobs without the aid of a key, the spindle is drawn out its full extent by means of knob D, the attachment R adjusted, and in this manner both knobs turn the spindle and operate the bolt C without the aid of a key. When the set-screw is released, it then requires the aid of a key in knob E to operate bolt C.

A striking advantage of my invention is its economical construction and requiring only one lock to be placed upon an ordinary street-door. The plate on spindle may be filed to fit any lock, thus placing a round spindle within the body of the lock when not operated.

Having described my invention and the manner in which the same is or may be carried into effect, I would say in conclusion that I do not limit myself to the precise details shown in illustration, as the same may be varied to some extent; but

What I claim, and desire to secure by Letters Patent, is—

1. The combination, with a lock, of the hollow knob E, having the block or bearing 5

therein, and also having the stud 3, the spindle having the ratchet-wheel 2 on the end within the hollow knob, and also having the spiralsprings surrounding the spindle between the inner wall of the knob and the ratchet, the pivoted spring-backed tumbler also arranged in the knob, and the spring-actuated pivoted lever 6, the whole adapted to operate with a key, substantially as specified.

2. The combination, with a door-lock, of the spindle passing through the same, the knob D on the square end of said spindle, a knob on the opposite end of said spindle, which latter knob is provided with means whereby it may be locked, so as to turn with the spindle, and also allowed to turn independently thereof, and the plate R, secured to the shank of the knob D and carrying a stop-screw, whereby the loose knob may be fixed to the spindle so as turn therewith, substantially as specified.

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

AUGUST O. TANNENBERG.

Witnesses:

ALPHONSE J. CUNEO,  
PERCY D. PARKS.