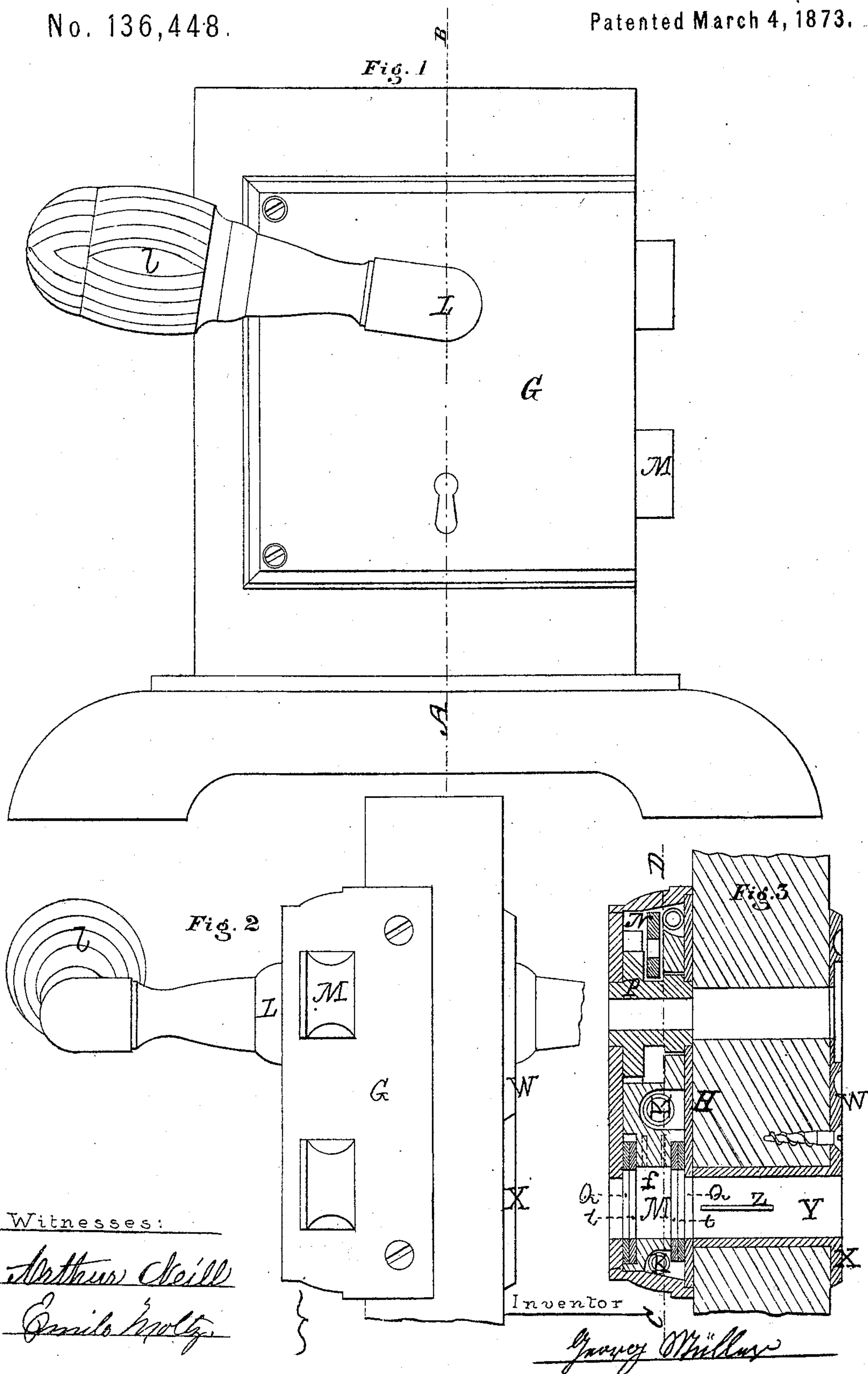


**G. MULLAR.**  
**Combined Latches and Locks.**

No. 136,448.

Patented March 4, 1873.



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Fig. 4.

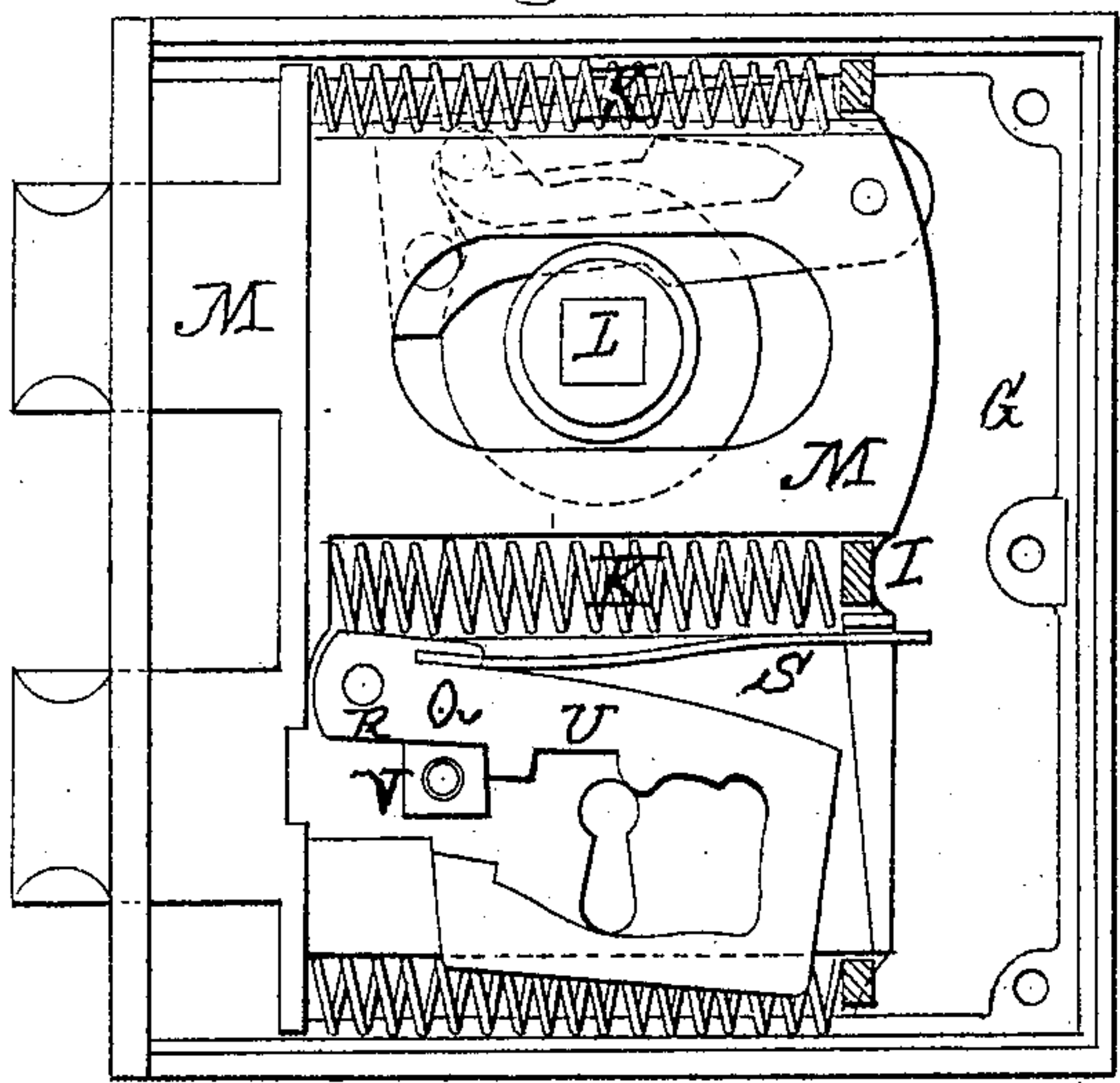


Fig. 6.

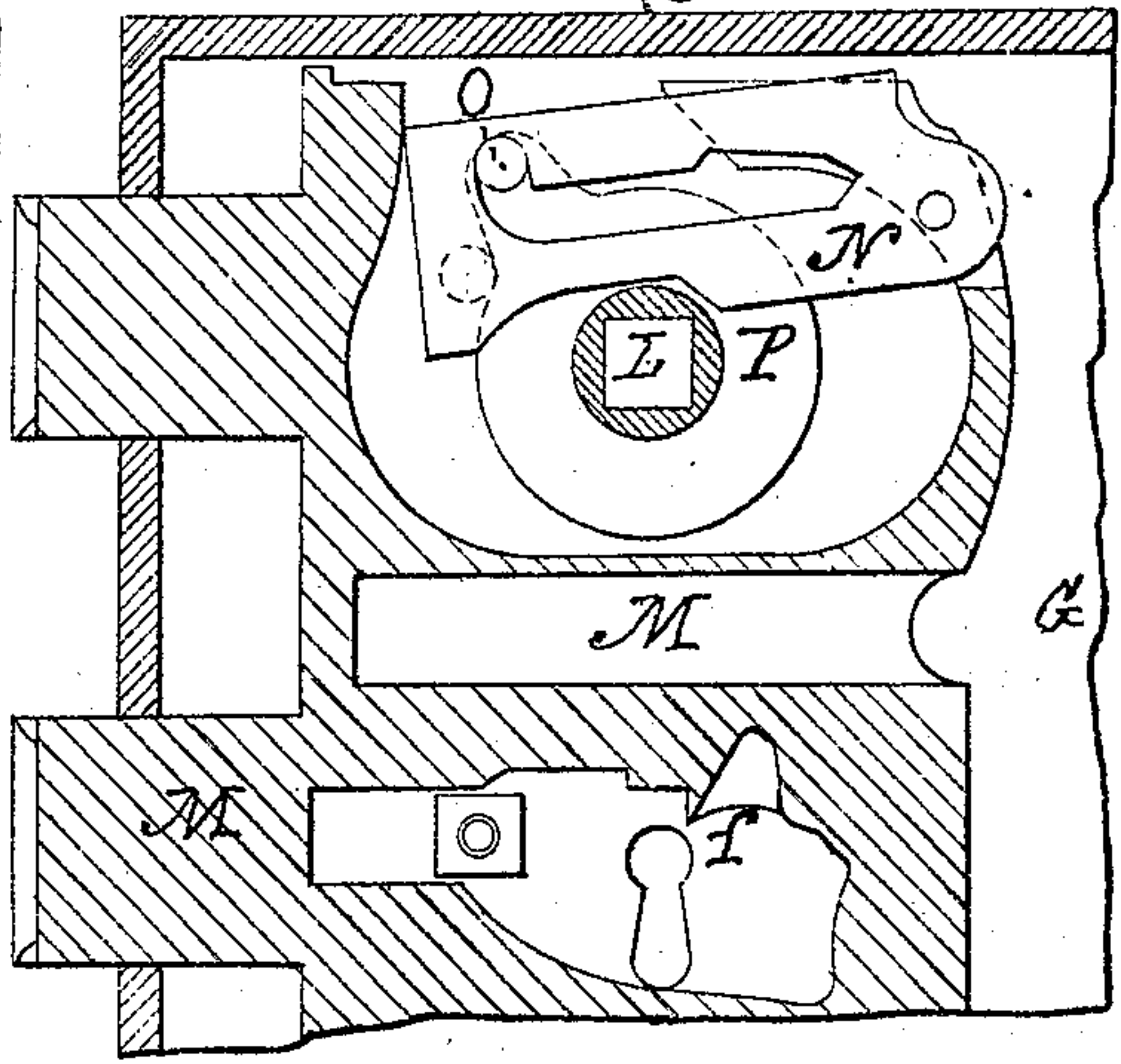


Fig. 5.

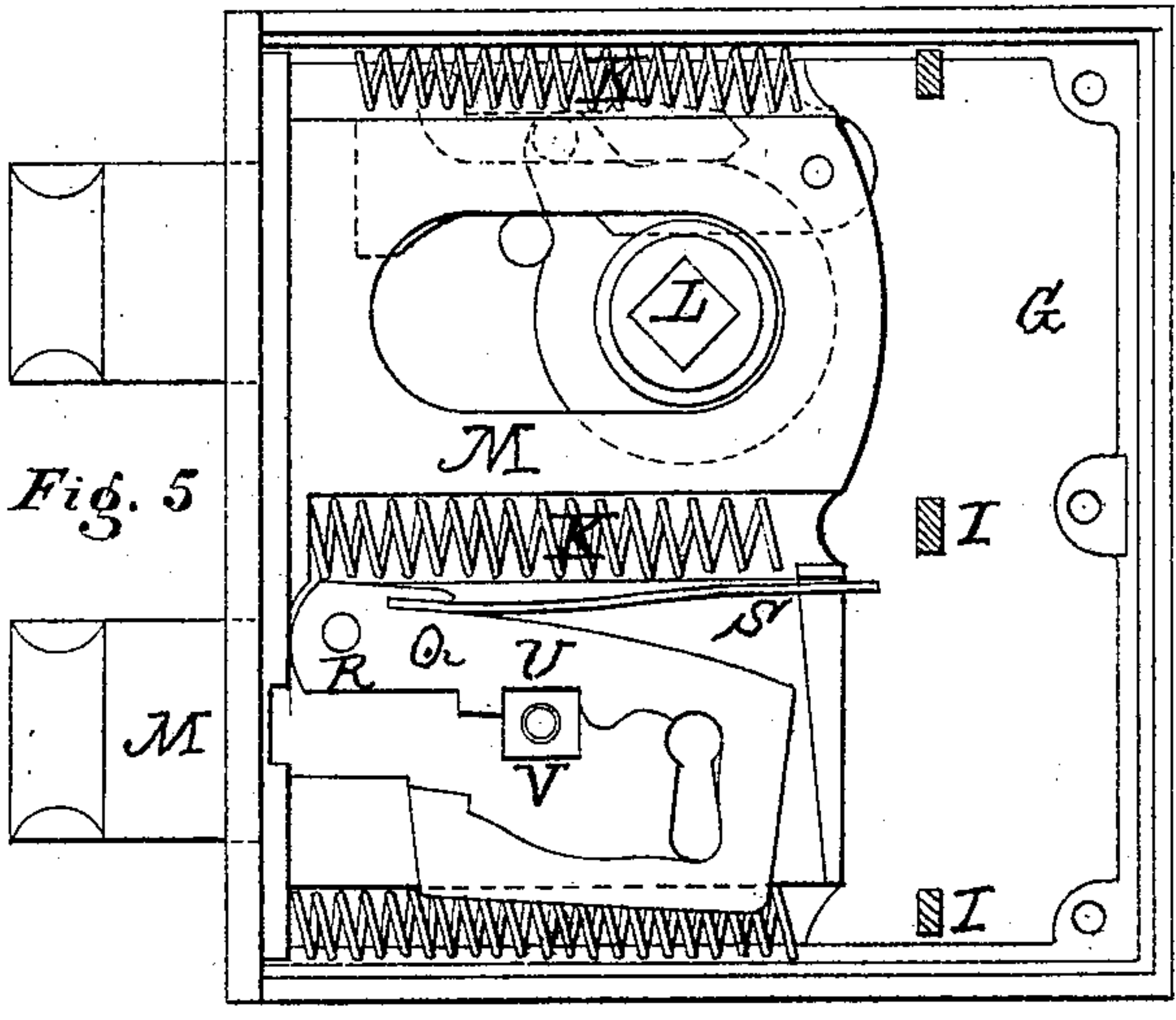


Fig. 7.

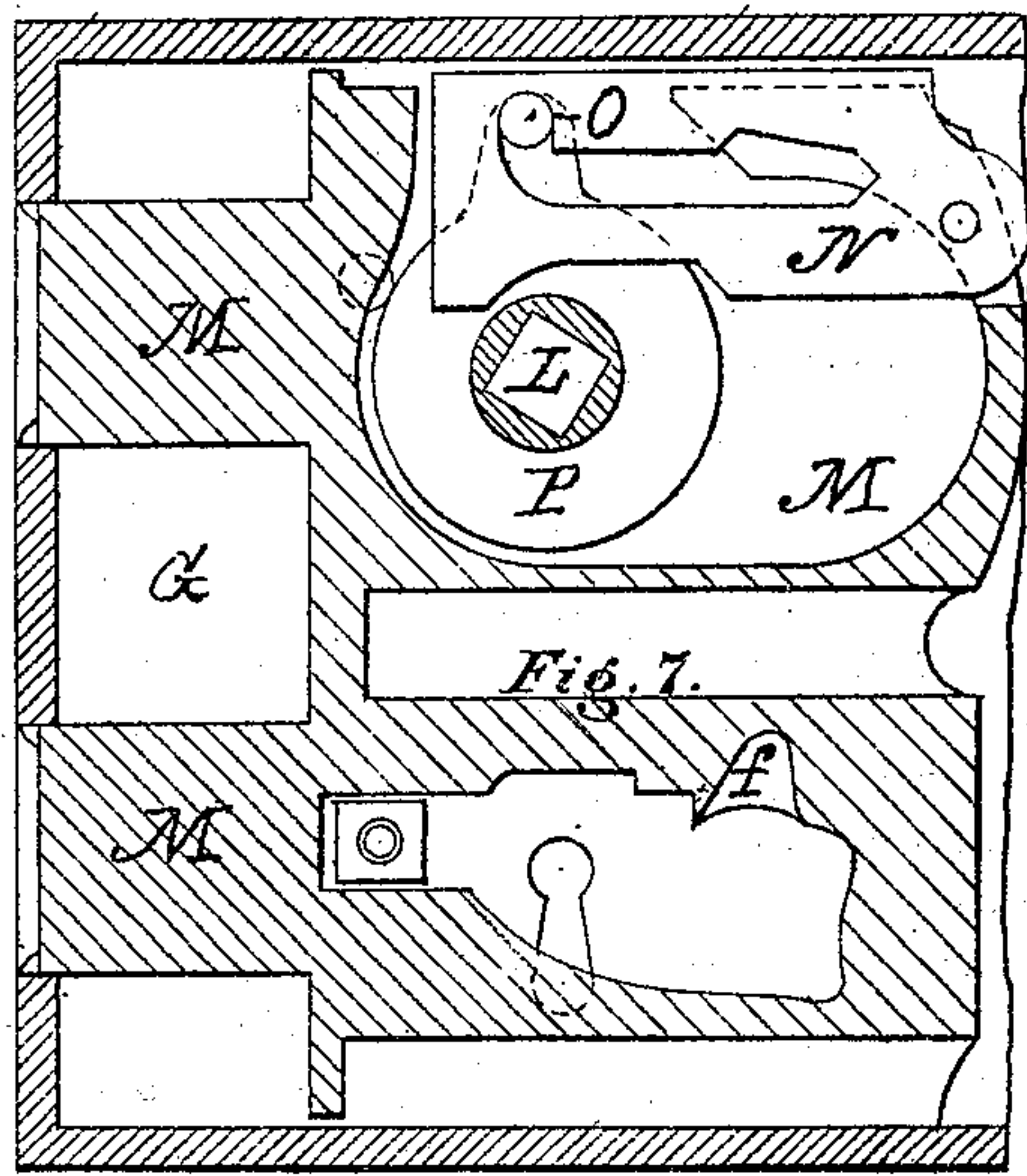


Fig. 8.

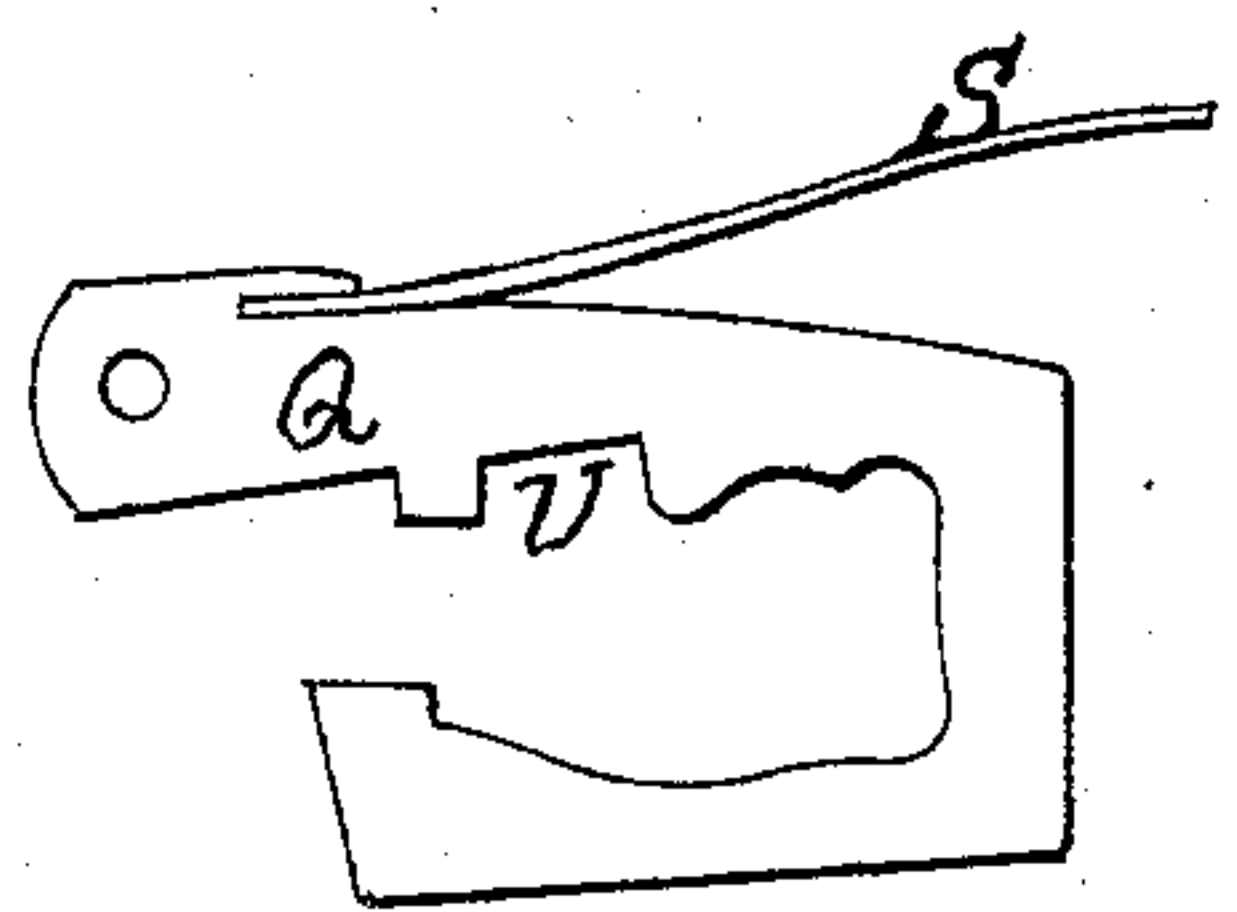


Fig. 9.

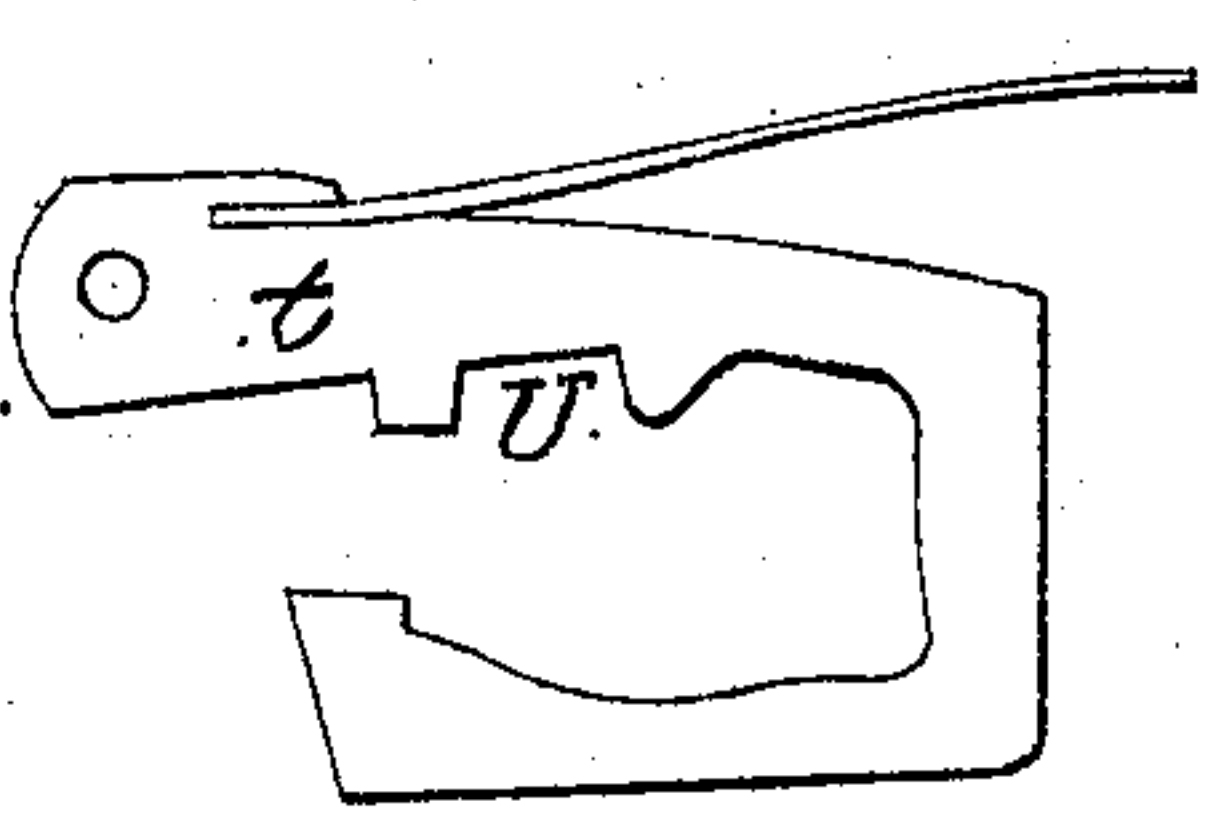
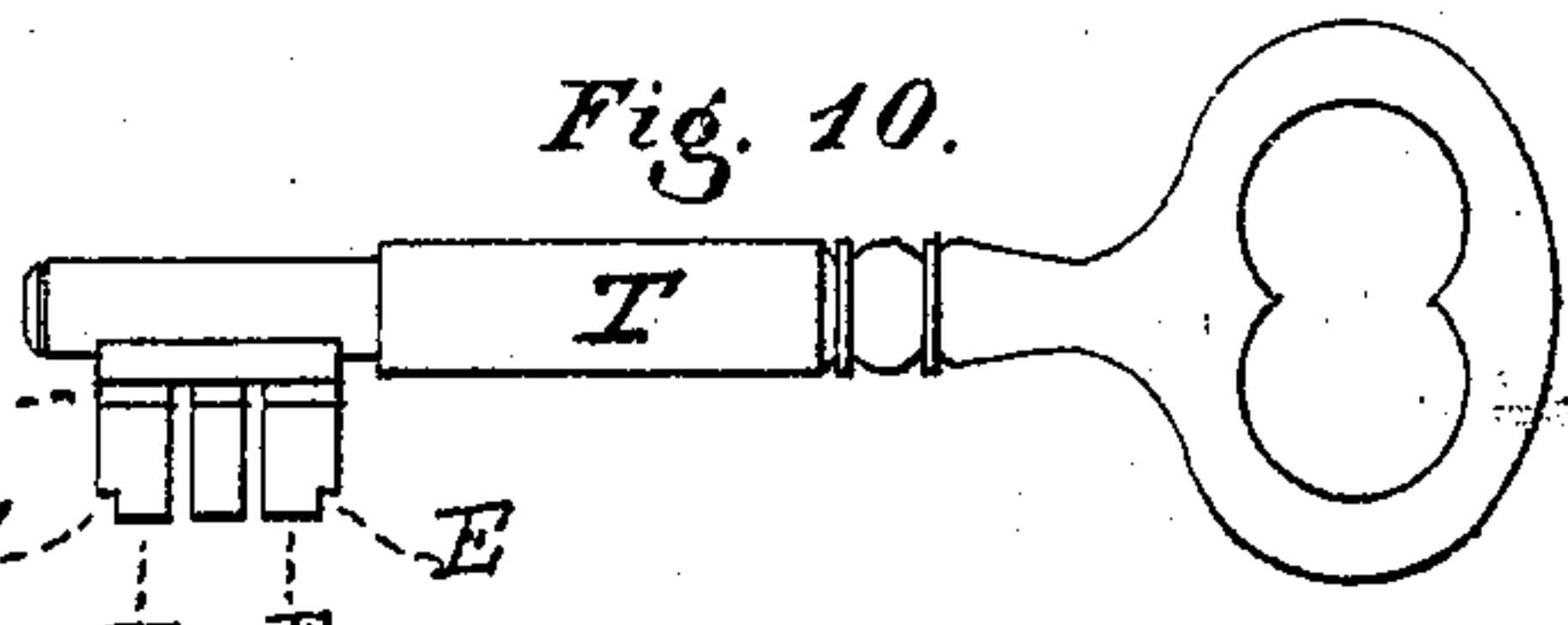


Fig. 10.



Witnesses

Arthur Keill  
Ernst Moltz

Inventor

George Muller



# UNITED STATES PATENT OFFICE.

GAORG MÜLLAR, OF NEW YORK, N. Y.

## IMPROVEMENT IN COMBINED LATCHES AND LOCKS.

Specification forming part of Letters Patent No. 136,448, dated March 4, 1873.

*To all whom it may concern:*

Be it known that I, GAORG MÜLLAR, of the city, county, and State of New York, have invented certain Improvements in Door-Locks, of which the following is a specification:

The nature of my invention consists of a sliding double spring-bolt, which is actuated by a knob-spindle connected to the bolt by means of a slotted link and collar when used as a latch, and by a key which acts upon two sets of tumblers pivoted to the bolt when used as a lock. It also consists in casting the knob-rose, the escutcheon, and the continuous key-hole or pipe all in one piece.

In the accompanying drawing, Figure 1 is an elevation of the lock; Fig. 2, an end view; Fig. 3, a section on line A B, Fig. 1; Fig. 4, a view of lock with lid removed, showing double sliding bolt unlocked; Fig. 5, a view of same locked; Fig. 6, a section on line C D of Fig. 3, showing connecting-link between double sliding bolt and knob-spindle; Fig. 7, a view of same with the double bolt drawn entirely back by the knob-spindle; Fig. 8, a plan of one of the two outside tumblers which embrace the square locking-post and fit to recesses E E in key; Fig. 9, a plan of one of the inside tumblers, which also embrace square post and fit to parts F F on key; and Fig. 10, a plan of key.

In the said drawing, G is the case and H the lid of the lock. The lid has stops I, against which the spiral springs K abut and aid in pushing the double bolt forward when operated by the knob-spindle L. This knob-spindle is connected with the double sliding bolt M by a slotted cam-link, N, pivoted to the bolt, into which a pin, O, on the collar P of the spindle plays, and, aided by the springs K, operates the double bolt. (See Figs. 4, 6, and 7.)

The next part of the lock is that operated by the key for locking and unlocking, in which Q are the outer tumblers, attached to the double sliding bolt M by pivots R, and actuated by the springs S. (See Figs. 4 and 5.)

These tumblers are adjusted by means of the recesses E in the bit of the key T; and two similar tumblers, t, which underlie the outer tumblers, are adjusted by means of the projections F on the key-bit. f' are the wards in the bolt, which the key enters in locking and unlocking.

The bolt slides back and forth independent of the tumblers when operated by the knob-spindle L, (see Fig. 4;) but when desired to lock the lock the tumblers are raised by the key and carried forward with the double bolt until the notches U in the tumbler embrace the square stationary post V, (see Fig. 5,) when the lock is locked, and vice versa in unlocking.

I will further remark that knob or handle l, which is a variegated combination of wood for ornament, is also lighter than metal, and offers less resistance to the springs in throwing the bolt forward.

W is the rose or facing of the spindle-handle. X is the escutcheon, and Y a continuous pipe, through which the key passes, all three being cast in one piece; and Z is a spline in the pipe Y, which enters a groove, Z', in the key, thereby preventing entrance of other than the proper key.

Furthermore, when desired to reduce this lock in size for use on closets, furniture, &c., I cut the lock through the center, as it were, and use but a single bolt with similar appliances.

What I claim is—

1. The sliding bolt M, spindle L, collar P, slotted link N, stops I, spiral springs K, tumblers Q, and post V, combined, arranged, and operating as set forth.

2. The rose W, escutcheon X, and pipe Y, cast in one piece, either with or without the spline Z and groove Z' in the key T, substantially as and for the purposes described.

GAORG MÜLLAR.

Witnesses:

ARTHUR NEILL,  
EMILE MOLTZ.