

(No Model.)

F. P. BURKHARDT.
MORTISE LOCK.

No. 527,011.

Patented Oct. 2, 1894.

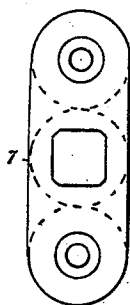


Fig. V.

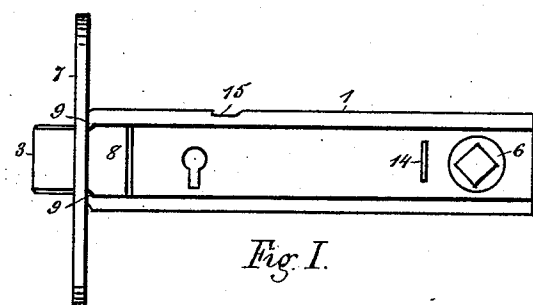


Fig. I.

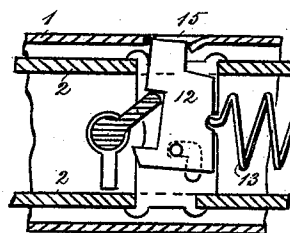


Fig. IV.

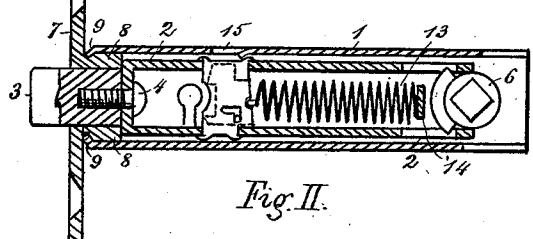


Fig. II.

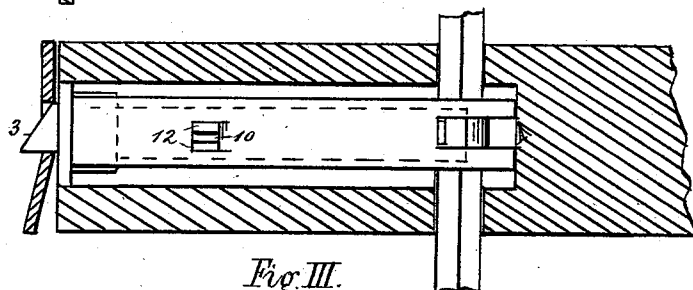


Fig. III.

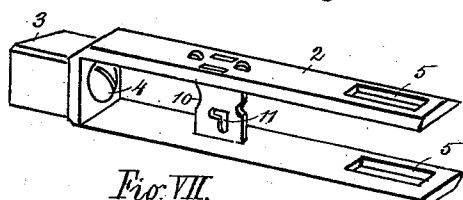


Fig. VII.

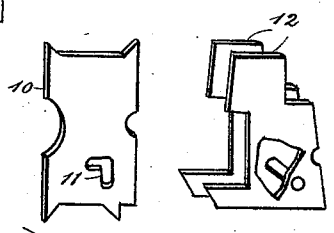


Fig. VI.

WITNESSES:

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BY

INVENTOR,
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ATTORNEY.

UNITED STATES PATENT OFFICE.

FRANKLIN P. BURKHARDT, OF CHELAN, WASHINGTON, ASSIGNOR OF THREE-FOURTHS TO ALBERT M. PERSHALL AND ALFRED F. NICHOLS, OF SAME PLACE.

MORTISE-LOCK.

SPECIFICATION forming part of Letters Patent No. 527,011, dated October 2, 1894.

Application filed March 16, 1894. Serial No. 503,898. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN P. BURKHARDT, a citizen of the United States, residing at Chelan, in the county of Okanogan and State of Washington, have invented a new and useful Improvement in Mortise-Locks, which improvement is fully set forth in the following specification and accompanying drawings, in which—

10 Figure 1 is a side view of my improved mortise lock; Fig. 2, a vertical longitudinal sectional view; Fig. 3, a top view; Fig. 4, an enlarged detail view showing the manner of locking the bolt; Fig. 5, a front view of the face plate; Fig. 6, a detail view of the wards and the interposed plate upon which they swing, and Fig. 7, a detail view of the sliding frame and its adjuncts.

15 My invention pertains to improvements in mortise locks and its object is to provide a novel and useful device which may be cheaply constructed, easily and quickly applied, durable and effective in operation and capable of being readily adapted to doors swinging in either direction.

25 Referring to the accompanying drawings, 1 designates the exterior casing of the lock which is approximately elliptical in cross section and is made of suitable sheet metal. A U shaped frame 2 slides freely within the shell and is rotatably attached to a bevel faced bolt 3 by a screw or rivet 4. The opposite end of the frame is provided, above and below, with slots 5 to admit the lug of the knob wheel 6. The face plate 7 has on its inner side a collar 8 having at its junction with the plate a groove which engages the inwardly bent jaws 9 of the adjoining end of the case. When it is desired to reverse the beveled end of the bolt it is only necessary to turn the face plate a half circle. The bolt will necessarily turn at the same time and is thus easily adapted for doors which swing either to the right or left.

45 A separating plate 10 is permanently attached to the top and bottom of the sliding frame and is provided with an angular slot 11 to receive a transverse rivet or pin which connects the wards 12, the rear edges of which are notched to admit one end of a spiral spring 13, the opposite end of which

bears against a back stop 14 which extends through the case.

The operation of the device will be readily understood. It will be observed that the bolt answers the purpose of a latch and is normally kept in closed position by the spring 13. In order to lock the bolt, the key is turned in the usual direction and lifts the wards so that their tops project through and engage the slot 15 in the top of the case. The pin which connects the wards then moves into the horizontal extension of the slot 11. The bolt is thus securely locked and cannot be withdrawn except by a reverse movement of the key. It will be observed that the bit or web of the key should be cleft and thus enabled to pass the intermediate plate 10 and act on both wards. It is also obvious that the form of either or both wards may be slightly varied so that each lock will require a special key.

The facility with which this lock may be fitted to a door is worthy of notice. For example, if the extreme diameter of the shell or case and the width of the face plate be three quarters of an inch, it will require only three ordinary tools, viz: a three quarter center bit, a small chisel and a screw driver to do the work, and in boring out the seat of the face plate the center bit will invariably indicate the exact place to insert the fastening screws.

What I claim as new is—

In a mortise lock and latch, the combination of the herein described case or shell, having slots therein; the face plate rotatably attached thereto; the spring actuated frame adapted to move reciprocally within the case, the reversible bolt rotatably attached to the frame; the swinging tumblers engaging with the slots in the case, and the intermediate plate 10 provided with an angular slot, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 23d day of February, 1894, in the presence of witnesses.

FRANKLIN P. BURKHARDT.

Witnesses:

WM. GIBSON,
C. E. WHALEY.