(Model.)

E. NYSWONGER. COMBINED LOCK AND LATCH.

No. 304,277.

Patented Aug. 26, 1884.

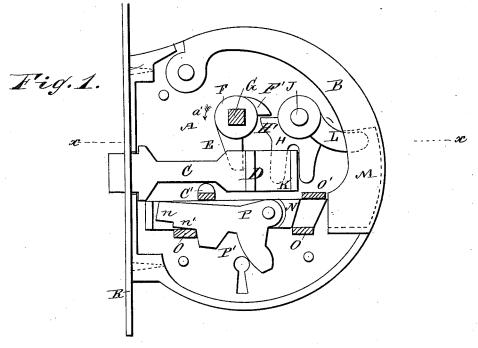
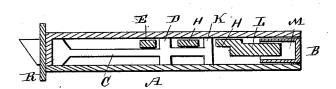


Fig. 2.



WITNESSES:

le Bedgirick

INVENTOR:

E. nyswonger

ATTORNEYS.

United States Patent Office.

ELIJAH NYSWONGER, OF HANFORD, CALIFORNIA.

COMBINED LOCK AND LATCH.

SPECIFICATION forming part of Letters Patent No. 304,277, dated August 26, 1884.

Application filed March 27, 1884. (Model.)

To all whom it may concern:

Be it known that I, ELIJAH NYSWONGER, of Hanford, in the county of Tulare and State of California, have invented a new and Improved Locking-Latch, of which the following

is a full, clear, and exact description.

The object of my invention is to provide a new and improved lock which operates without a spring, and which can be so adjusted 10 that it cannot be opened from the outside.

This invention is an improvement on the latch-lock for which United States Letters Patent No. 291,392 were issued to me on the 1st day of January, 1884; and it consists in 15 various improvements and combinations of parts and details, whereby the construction of the lock is materially simplified, as will be fully set forth and described hereinafter.

Reference is to be had to the accompanying 20 drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal elevation of my improved locking-latch, the side of the casing 25 being removed and part being shown in section. Fig. 2 is a sectional plan view of the

same on the line x x, Fig. 1.

The lock-casing is formed of a fixed section, A, and a heavy lock-section, B, hinged to the top of the section A. The sliding bolt C, beveled at its outer end, rests and slides on a lug, C', and is provided with a laterally-projecting upright or transverse rib, D, on which the orange of the caller E con act. on which the arm E of the collar F can act 35 to push the bolt inward, which collar is mounted on the knob spindle G. A fork, H, is pivoted at its top or closed end on a pivot, J, in the lock casing, the prongs of the said fork H being at opposite sides of a transverse 40 or upright laterally-projecting rib, K, on the bolt C, and one prong of the fork being between the ribs D and K. A curved arm, L, projects from the upper end of the fork Hinto a recess, M, in the inner edge of the lower 45 part of the hinged weighted section B of the lock, and when the bolt C is thrown the upper end of the recess M rests on the free end of the arm L. The collar F is provided with a projection, F', adapted to act upon a projection,

two projections, O, of the lock-casing, and is guided by the said projections O and a projection, O', above the said bolt and by the lug C'. On the bolt N a tumbler, P, is pivoted, which is provided with a notch, P', for re- 55 ceiving the bit of the key-rod, and with the two offsets, n and n', adapted to rest on that projection O nearest the outer end of the lock. The bottom of the recess M extends to within a short distance from the lower end of the 60 hinged section B, so that when the said section B is lowered the inner end of the bolt N can pass into it. The end plate, R, which is sunk into a recess or mortise on the edge of the door is screwed to the outer end surface of the 65 casing. The casing is first adjusted in the door, and then the end plate, R, is screwed on.

The operation is as follows: When the bolt

is thrown, it and the several parts are in the position shown in Fig. 1, the bolt being held 70 in place by the weighted section B, which rests upon the arm L of the fork and causes the right-hand prong of the fork H to press on the outer edge of the rib K. If the bolt is to be withdrawn, the knob-spindle G is turned 75 in the direction of the arrow a', causing the arm E of the nut F to act on the rib D and move the bolt inward. As soon as the handle-knob is released the weighted section B, which has been raised by the arm L, acts on 80 the said arm and swings it down, causing the inner prong of the fork H to force the bolt outward. Likewise, if the door is closed without turning the knob-spindle, the bolt is forced inward in the usual manner until the catch is 85 passed, and is then thrown outward by the weighted section B. If it is desired to lock the parts in such a manner that the bolt cannot be withdrawn, the key is turned and moves the bolt N inward, causing the inner end of 90 the bolt N to pass into the recess M of the hinged section B, thus preventing the hinged section from being raised, and preventing the bolt from being withdrawn, as this cannot be done without raising the weighted section 95 B. The offset n of the tumbler P then rests upon the outer projection, O, thus preventing the inner end of the bolt N from being with-drawn from the recess M in the hinged sec-50 H', of the fork H. A sliding bolt, N, rests on I tion B. If the said hinged section is to be un- 100 locked, the key is turned, and first raises the tumbler P and moves the bolt N outward, and then the offset n' rests on the outer projection, O.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a lock, the combination, with the lock-casing A, of the bolt C, the hinged section B of the case, the pivoted fork H, having an arm, to L, and of the collar F on the knob-spindle, substantially as herein shown and described.

2. In a lock, the combination, with the casing A, of the bolt C, the hinged section B of the case, having a recess, M, the pivoted fork H,

having an arm, L, and of the collar F on the 15 knob-spindle, substantially as herein shown and described.

3. In a lock, the combination, with the casing A, of the hinged section B of the case, the bolt C, having ribs D and K, the collar F, having 20 an arm, E, and the pivoted fork H, having an arm, L, substantially as herein shown and described.

ELIJAH NYSWONGER.

Witnesses:

John P. Boice, William Homes Nyswonger.