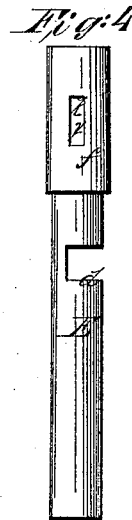
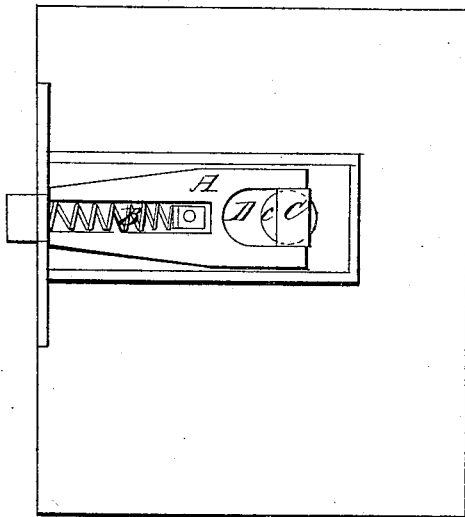
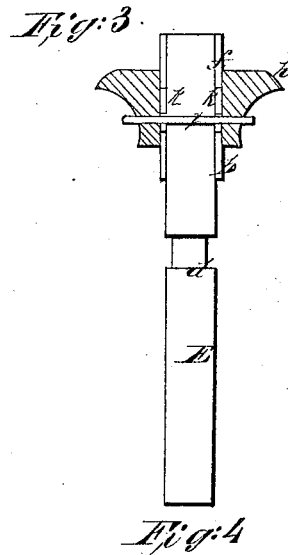
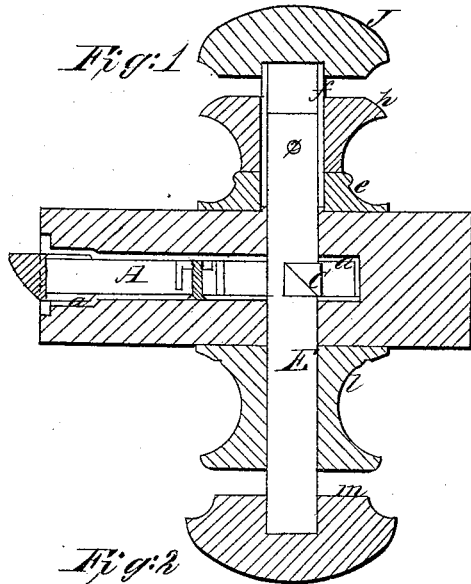


A. W. Upton,

Door Latch.

N^o 53,364.

Patented Mar. 20, 1866.



Witnesses:

*C. J. Whitney
George Stratton*

Inventor:

Albert W. Upton

UNITED STATES PATENT OFFICE.

ALBERT W. UPTON, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN KNOB-LATCHES.

Specification forming part of Letters Patent No. 53,364, dated March 20, 1866.

To all whom it may concern:

Be it known that I, ALBERT W. UPTON, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Mortise-Latches for Doors, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a transverse section of my invention as applied to the edge of a door. Fig. 2 is a side elevation of the interior portion of my improvement after one side, *a*, of the case and the knob-arbor have been removed. Fig. 3 is a longitudinal vertical section of a detached knob-arbor and sleeve; and Fig. 4 is a top view of the same.

In my said invention the sliding latch *A* is forced outward by a spring, *B*, as usual; but to facilitate the process of opening the door I make an inclined heel, *C*, at the back end of the latch *A* and an opening, *D*, just forward of said heel, through which and the holes *e*, in the sides *a* of the case a knob-arbor, *E*, is inserted. A shoulder, *d*, on the knob-arbor *E* acts against the inclined heel *C*, so that by moving the knob-arbor longitudinally in the door and transversely therewith the shoulder *d*, bearing against the inclined heel, forces the latch back, and the door may be opened.

A washer, *e*, is fastened to one side of the door, and one end of a sleeve, *f*, is secured within said washer. The outer portion, *g*, of

one knob is attached to the sleeve *f*, and the middle portion, *h*, of said knob slides on the sleeve *f*, a pin, *x*, passes through the portion *h* of the knob, the knob-arbor *E*, and sleeve *f*, and slides in longitudinal slots *k*, made through the bottom and top sides of the sleeve.

The portion *l* of the opposite knob is secured to the door and the outer portion, *m*, to the knob-arbor *E*, which slides in the portion *l* when the latch is moved.

Pushing against the knob *m* or pulling the portion *h* of the opposite knob forces the shoulder *d* against the inclined heel *C* and moves the latch back to open the door.

I am aware that a door-latch has been patented which consists of two bolts, one in the door and the other in the stile, that in the door being operated by a lever and longitudinal sliding arbor.

I do not claim the above-described latch, neither in principle or operation; but

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

The combination of the inclined heel *C* on the latch *A*, the shoulder *d* on the arbor *E*, the slotted sleeve *f*, pin *x*, and the divided knobs, the whole arranged substantially as and for the purpose specified.

ALBERT W. UPTON.

In presence of—

J. S. WHITNEY,
GEORGE STRATTON.