

United States Patent Office.

N. PETRE, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND JOSEPH H. SUGGETT.

Letters Patent No. 67,213, dated July 30, 1867.

IMPROVEMENT IN LOCK LATCHES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, N. PETRE, of the city, county, and State of New York, have invented a new and useful Improvement in Locks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The present invention relates more particularly to that class of locks commonly known as latch-locks; the principal object of the improvements being to render the lock all the more secure against being picked or surreptitiously opened. In the accompanying plate of drawings a lock made according to the present invention is illustrated—

Figure 1 being a view of the interior to the lock.

Figure 2, transverse section taken in the plane of the line *x x*, fig. 1.

Figure 3, an inside view to a lock, showing a modification in its construction and arrangement of parts, and

Figure 4 a view of a key adapted to lock shown in figs. 1 and 2.

Similar letters of reference indicate corresponding parts.

A, in the drawings, represents the casing or box to the lock, made of a rectangular shape; B the hub, through which the spindle to the knob passes. This hub is arranged to turn in the lock-casing between its two side plates C and D, and around its periphery is notched at several points E. F, the latch-bolt, playing at one end through the face-plate G of lock-case A. This latch-bolt extends inside of the casing A, and at its inner end H is made with a hook, I, by which it engages with the notches in the hub B hereinbefore referred to, and is there held by the action of the bent spring J properly arranged to act on such bolt therefor. By turning the knob, either to the right or to the left, the hub is correspondingly turned, when through it, if the latch-bolt is hooked therewith, the said bolt will be drawn in or left free to be forced out by the action of the bent spring P properly arranged therefor, as the case may be. K, a barrel or cylinder, arranged upon inside of casing A between its two side plates. This barrel is arranged to eccentrically turn within an inner casing or holder L of the lock, and upon one side is provided a raised flange, M, circular in direction, and eccentric to the centre of the cylinder. N, a pin at centre of circular flange M, which pin is extended through the barrel, and projects into the circular-shaped recess cut out upon the opposite side of the barrel. This recess O is eccentric to the centre of barrel, and the portion of the pin projecting through it is exposed, and receives the key that is inserted in the key-hole P of the lock-casing. The key is shown in fig. 4, and its bit, Q, is provided with a pin, R, that, when the key is inserted in the key-hole of the lock, enters the hole *c* of the barrel therein, and causes such barrel to be turned either to the right or left, according to the direction in which the key is turned, and thus through its edge or periphery eccentric to the pin N thereof, to so act upon the side of the latch-bolt as to raise it sufficiently to disengage its hook from the hub to the knob-spindle, and to there hold it when the key is drawn out or removed, whereby no movement of the bolt through the turning of the knob-spindle can possibly occur. The edge of the barrel is notched at *d*, into which, when the barrel is turned to raise the bolt, a projection, *f*, on such bolt drops or enters, and thus serves the more fully to retain the bolt in place. In the lock shown in fig. 3 the bolt eccentric barrel is shown as arranged to act directly upon the bolt of the lock, and thus throw it out if properly turned therefor.

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

1. The eccentric barrel K, in combination with the latch-bolt F, and notched hub E, substantially as described for the purpose specified.
2. The notched eccentric K, in combination with the spring latch-bolt F, and notched hub B, as described, whereby the latter is prevented from engaging with the latch F when locked, substantially as described for the purpose specified.

The above specification of my invention signed by me this 5th day of July, 1867.

Witnesses:

WM. F. McNAMARA,
ALBERT W. BROWN.

N. PETRE