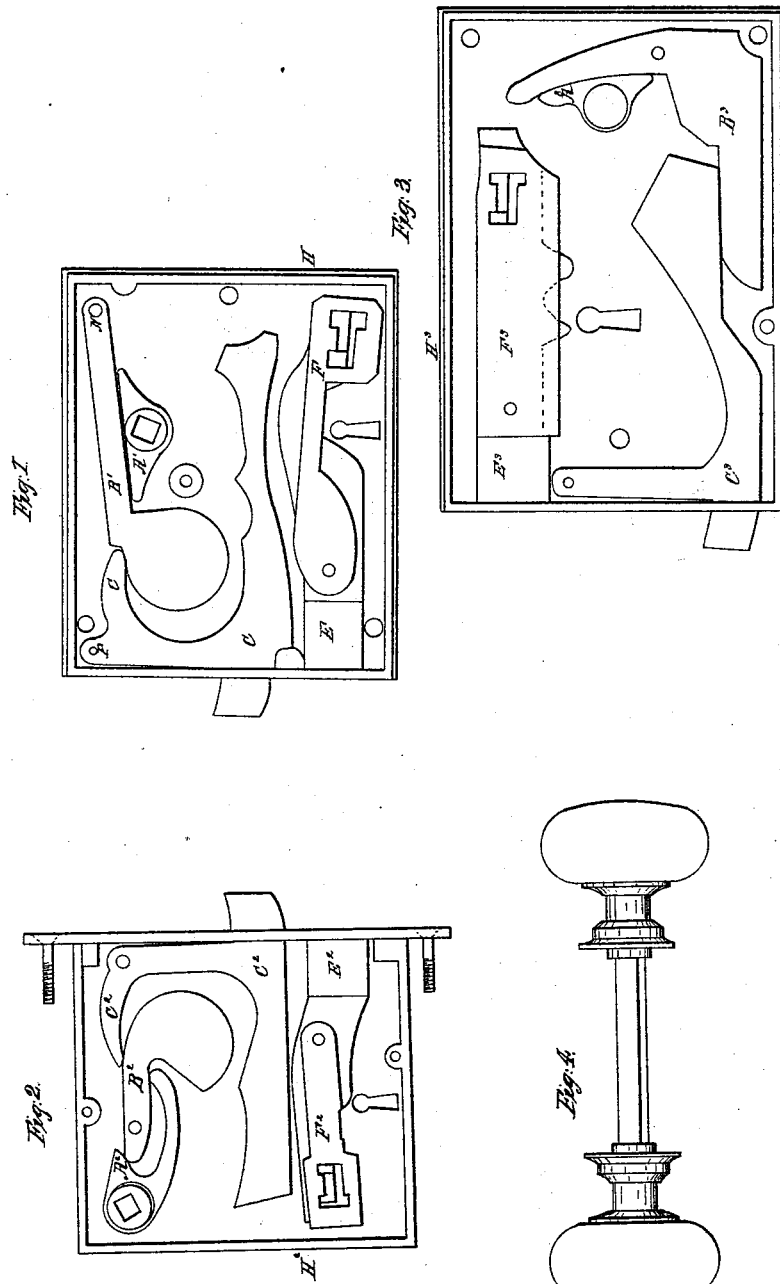


S. Noyes,

Latch.

N^o 2,963.

Patented Feb. 20, 1843.



UNITED STATES PATENT OFFICE.

SAMUEL NOYES, OF BEVERLY, MASSACHUSETTS, ASSIGNOR TO RHODOLPHUS KINSLEY,
OF SPRINGFIELD, MASSACHUSETTS.

COMPOUND LEVER-GRAVITATING LOCK OR LATCH FOR DOORS, &c.

Specification of Letters Patent No. 2,963, dated February 20, 1843.

To all whom it may concern:

Be it known that I, SAMUEL NOYES, of Beverly, in the county of Essex and State of Massachusetts, have invented a new and
5 useful Improvement in the Construction of Locks, Latches, or Latches for Doors and for other Purposes, called the "American Compound Lever-Gravitating Lock and Latch," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a view of the interior of the lock. Fig. 2 is a view of the modification of the lock or latch. Fig. 3 is a view of another
15 modification of the lock or latch. Fig. 4 is a view of the knob-spindle.

The box or case H of the lock and latch may be made in the usual manner.

The latch C forms nearly a right angle
20 on the sides next the front and bottom of the case the catch projecting from the angle thereof, and passing through the usual mortise in the face-plate of the case. The latch or catch is suspended from and vibrates on a
25 pin or pivot P passed through an aperture in the vertical limb of the latch and inserted into the case. The latch or catch at or near the termination of the vertical part through which the aforesaid pin or pivot passes is
30 turned back toward the center of the case forming a tail or arm C' against which the weighted vibrating lever B' strikes in its ascending movement for drawing back or unlocking the catch. The weight of the
35 horizontal arm of the catch is sufficient to throw the catch out from the case and to retain it in that position until raised by the lever.

The lever B' for raising the catch or
40 drawing it into the case and also for returning the tumbler and knob spindle to their usual position, is made of an irregular figure weighted at its outer extremity and swinging or vibrating on a pin V which pin or

pivot is inserted into the case. The larger 45 or weighted end of the lever is of an irregular convex form (as represented in the drawings) which present several modifications thereof equally well adapted for raising the latch and for returning the tumbler 50 to its proper position without the application of weight of the latch as in other locks.

The tumbler A' for lifting the weighted lever and with it the latch is placed against the lever and is perforated for the knob- 55 spindle and is made to lift the lever by turning it either to the right or left. This tumbler may be made straight, curved forked or in any convenient form to effect the operation of raising the lever and receding the catch. The tumbler and weighted 60 lever thus arranged forms a compound lever.

The catch in receding into the case by the closing of the door acts independently of the compound lever and thus prevents the friction experienced in the use of other locks in which the knob spindle is brought to its required position by the weight of the latch and the parts connected thereto.

E represents the bolt for locking and E 70 the guard for securing the bolt.

What I claim as my invention and which I desire to secure by Letters Patent is—

The arrangement of the compound lever in combination with the weighted latch in 75 the manner and for the purpose set forth that is to say arranging the compound lever so that the weighted latch in receding into the case by the closing of the door to which it is applied shall act independently of the 80 compound lever.

Dated at the town of Beverly, Essex county, Massachusetts, this eighth day of December, A. D. 1842.

SAMUEL NOYES.

Signed in presence of—

JOHN I. BAKER,
JOHN A. GREEN.