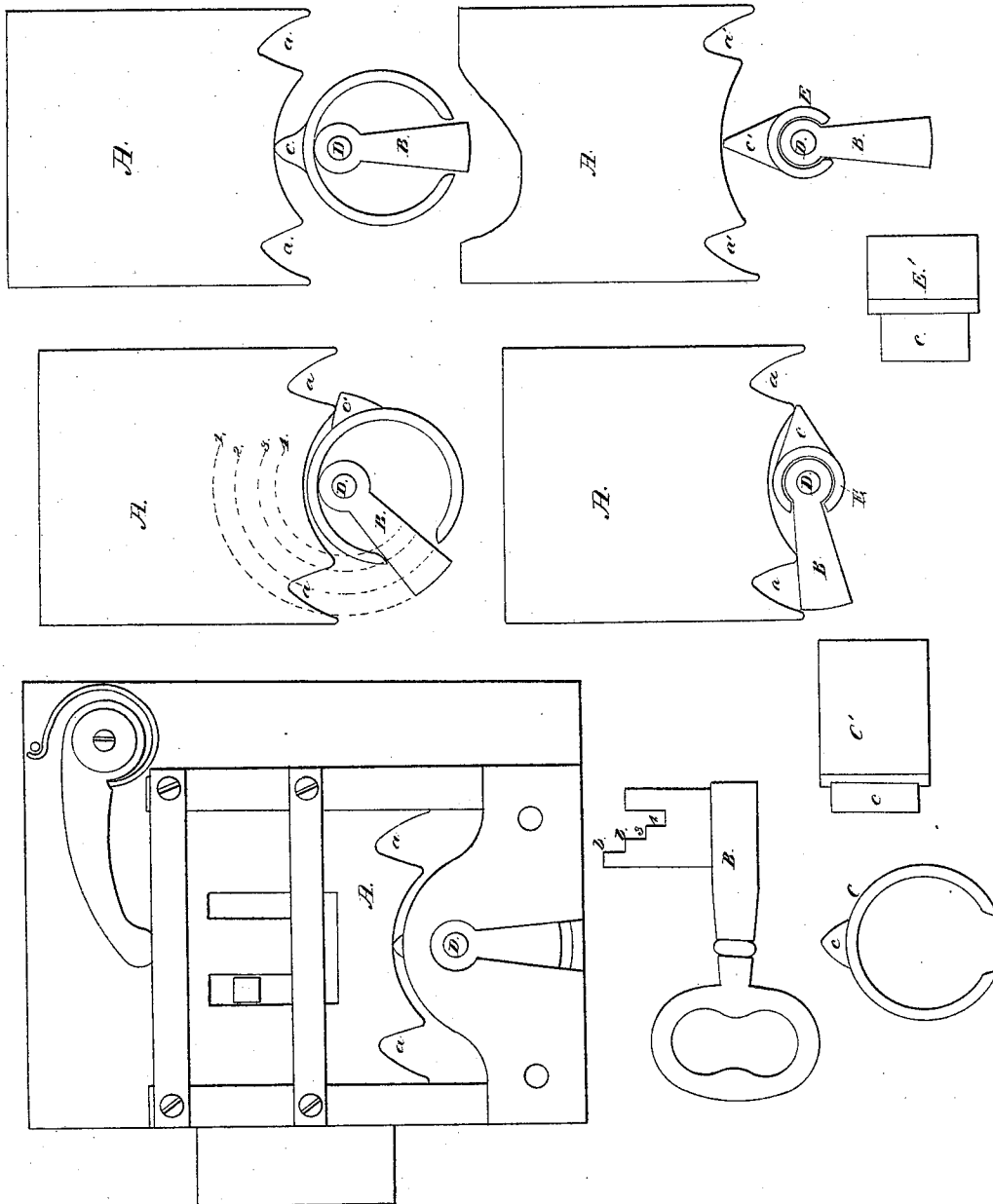


L. Yale,
Lock.

N^o 15,031.

Patented June 3, 1856.



UNITED STATES PATENT OFFICE.

LINUS YALE, JR., OF NEWPORT, NEW YORK.

LOCK.

Specification of Letters Patent No. 15,031, dated June 3, 1856.

To all whom it may concern:

Be it known that I, LINUS YALE, JR., of Newport, in the county of Herkimer and State of New York, have invented a new and Improved Method of Constructing Locks; and I do hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawings.

10 The nature of my invention consists, in providing any and all tumbler locks, which are operated with a winged or ordinary formed key, with a form of tumbler calculated to receive only the impression of the
15 short and medium length bits of the key, and a swap or follower revolving around, (either concentrically or eccentrically) the drill-pin or key hole which erases or wipes out all impressions or marks made or left
20 by the key upon the tumblers, so that it is impossible to read the key from the tumblers either by means of a mirror or a map.

To enable others skilled in the art to make and use my invention I will proceed
25 to describe its construction and operation.

I construct a lock in any of the usual ways, either with simple tumblers or auxiliary or secondary tumblers—not meaning to confine my improvement to locks of any
30 particular variety of the class above mentioned. The tumblers A, instead of being made with their bottoms or key edge a simple arc, are notched near their corners *a' a'* in order that the longest bit *b' b'* of
35 the key B, shall reach beyond the inner cut of the notch and thereby have precisely the same effect upon the tumbler, so far as printing its length upon it is concerned—as the shorter of the long bits or as all bits
40 whose swap is less than sufficient to reach to the outer cut of the notch or beyond the inner cut. In other words making all the long bits produce the same impression. See dotted lines 1 2 3 4 all of which except
45 4 indicate effects precisely alike upon the tumblers *i. e.* in regard to having impressions upon them. The 4th bit not being long enough to reach beyond the point at

which it raises the tumbler but rather falling within that point leaves its length im- 50
printed upon the tumbler which affords ample opportunity for the burglar to imitate it. Now in order to prevent entirely the form of the key from being read on the tumblers I put in a piece C seen in 55
section C' which is provided with a projecting rib or wing *c'*. This curb and wing attached, surrounding as it does the drill-pin D, is revolved every time the lock is turned by the key B, and inevitably sweeps 60
off all impression of the key as the rib or wing *c'* strikes the tumbler at the notch and raises it sufficiently to pass under it like an even bitted or straight key, and following the key always removes its impression. 65

The rib *c'* performs just a revolution at each turn of the key and rests perpendicularly over the drill pin. In attaching it to a curb C, revolving eccentrically around the key hole it may be very low or short 70
as is evident on an inspection of the drawing. But for some locks this rib or wing may be attached to the concentric curb E, and in section E', or even simply hung 75
upon the drill pin without a curb, particularly as the necessity for a curb or "revolving disk" is by this erasure of the key print, rendered entirely unnecessary, except to enable the rib to be made so much shorter that the distance at which the tumblers are 80
raised is in some locks—as the "Paratopic"—an additional benefit, as it relieves the auxiliary springs without keeping the others over strained.

What I claim as new and desire to secure 85
by Letters Patent is—

1. The peculiar form of the tumbler A, or an equivalent form in combination with a changeable key for the purpose and object described. 90

2. The rib or wing *c'* used in any manner for the purpose and object described.

LINUS YALE, JR.

Witnesses:

GEO. H. HURLBUT,
W. L. WILSON.