

(No Model.)

A. K. LEITCH.
LOCK.

No. 491,779.

Patented Feb. 14. 1893.

FIG. 1.

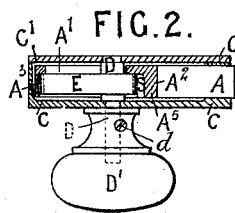
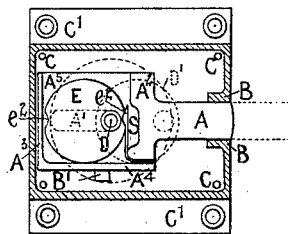
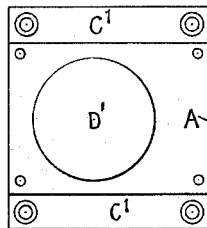


FIG. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

ARCHIBALD KEIR LEITCH, OF DELTOTTE, CEYLON.

LOCK.

SPECIFICATION forming part of Letters Patent No. 491,779, dated February 14, 1893.

Application filed July 24, 1891. Serial No. 400,549. (No model.) Patented in England February 14, 1890, No. 2,455, and in Belgium February 25, 1891, No. 93,929.

To all whom it may concern:

Be it known that I, ARCHIBALD KEIR LEITCH, planter, of Great Valley Estate Deltotte, Ceylon, a subject of the Queen of Great Britain and Ireland, have invented Improvements in Locks or Locking-Bolts, (for which I have obtained Letters Patent in Great Britain, No. 2,455, dated February 14, 1890, and in Belgium, No. 93,929, dated February 25, 1891,) of which the following is a specification.

My invention consists of certain improvements in that class of locks in which the bolt is to be operated by an eccentric.

In the accompanying drawings, Figure 1 represents a sectional side view; and Fig. 2 a longitudinal sectional view at right angles to Fig. 1, showing my improved mechanism as applied to a rim or mortise form of lock; Fig. 3 is an outside view of Fig. 1.

Referring to the drawings, a slide bolt A is mounted to reciprocate on edge in the end guides B within a box, case or lock C. At right angles to the bolt A, is mounted a spindle D rotating through the sides of the case C, and preferably through a longitudinal slot A' in the bolt A, the width of the diameter of the spindle to assist in guiding the bolt. The spindle has an ordinary knob handle D' secured to it by a pin d, or it may be fitted with a lever or flat handle on the inside of the lock case, or inside of the door when the lock is inserted in a mortise, the position of which handle would indicate when the bolt was locked or unlocked.

The spindle D has an eccentric E mounted on it, close up to the bolt A. In its simplest form the eccentric works between two cross projec-

tions or flanges A² and A³ on the inner face of the bolt A, and thus throws or pushes the bolt out or in, according to the direction in which the eccentric E is turned by the spindle D and handle D'. A spring S is fitted to engage with slight notches e² in the eccentric E to steady it and prevent it from being shaken out of its locked or unlocked position, the strength of the spring being not so great as to interfere with the turning of the cam E. A projecting part A⁴ of the bolt A forms a stop to prevent the eccentric E from making more than a half revolution when locking or unlocking the bolt and a guide B' is used to steady the bolt further.

The case may be fitted with the back flange C' made large enough for screwing to the inside of doors or windows as a separate self-contained latch bar.

I claim as my invention:—

In a lock, the combination of an outer casing, having guides for the bolt and a notched circular eccentric E with a longitudinally reciprocating bolt provided with a spring for said notches and with projections A² A³ between which the eccentric fits, and a third projecting part A⁴ to prevent the eccentric from making more than half a revolution in either direction, all substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARCHIBALD KEIR LEITCH.

Witnesses:

J. D. WICKEREMCRATUE,
JNO. L. STRANADOLEBEE.