

No. 720,284.

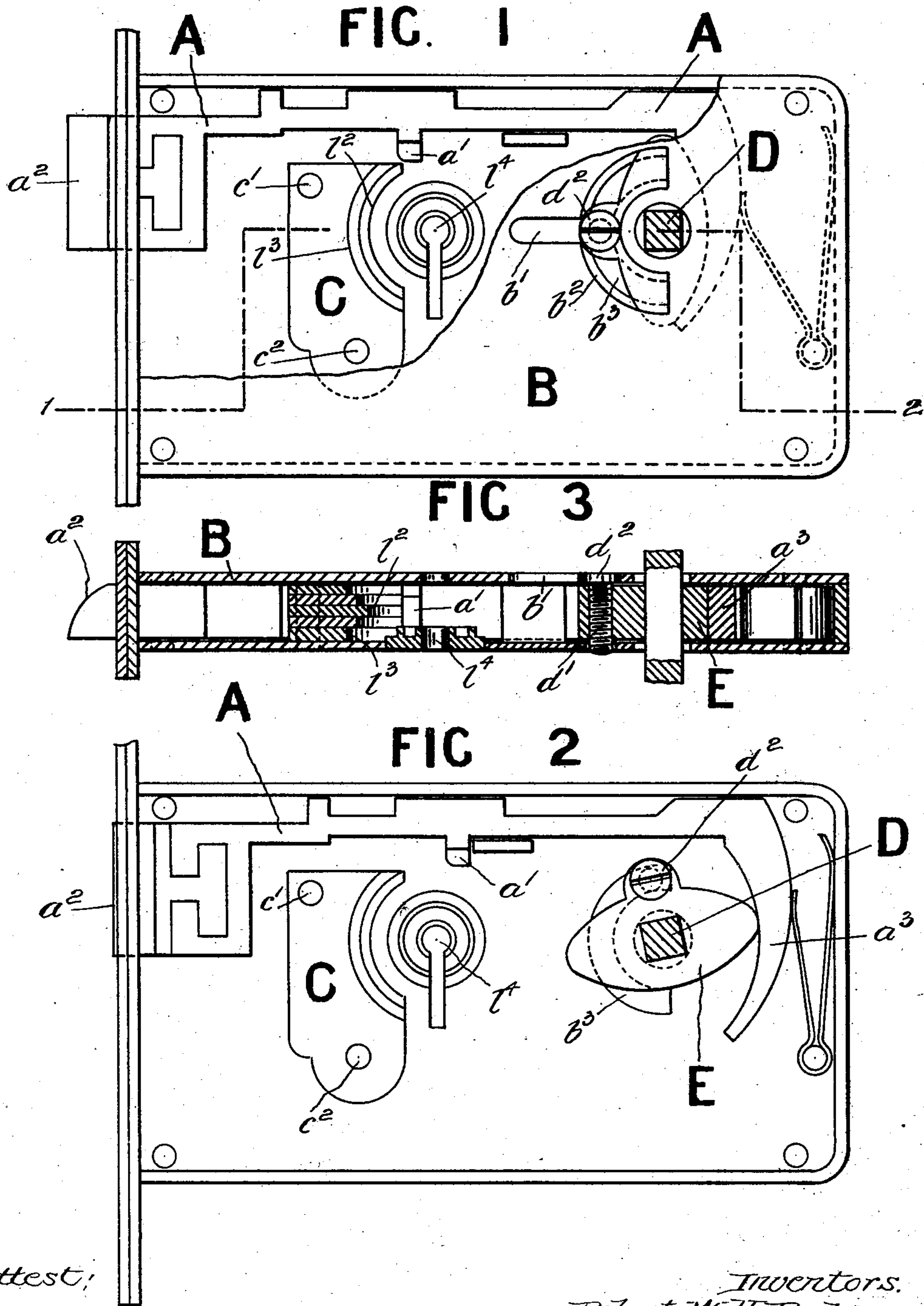
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LOCK AND LATCH.

APPLICATION FILED NOV. 7, 1901.

NO MODEL.



Attest:

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UNITED STATES PATENT OFFICE.

ROBERT WILLIAM HENRY RODNEY, OF THORNBURY, AND JAMES HARRY PARKES, OF WILLENHALL, ENGLAND.

LOCK AND LATCH.

SPECIFICATION forming part of Letters Patent No. 720,284, dated February 10, 1903.

Application filed November 7, 1901. Serial No. 81,419. (No model.)

To all whom it may concern:

Be it known that we, ROBERT WILLIAM HENRY RODNEY, a resident of Thornbury, in the county of Gloucester, and JAMES HARRY PARKES, a resident of Union Iron Works, Willenhall, in the county of Stafford, England, subjects of the King of Great Britain, have invented certain new and useful Improvements in Locks or Latches, of which the following is a specification.

Our invention has for its object improvements in combined locks and latches by which we are not only enabled to simplify the construction, and thus reduce the cost of production, but we provide an additional safety contrivance without adding to the component parts, and also provide simple means of reversing the nose-piece, so as to make the lock suitable for right or left hand doors.

In order that our invention may be more clearly understood and easily carried into practical effect, we have appended hereunto a sheet of drawings upon which we have illustrated examples of our lock.

Figure 1 is a view of our lock with a portion of the cover-plate of the case broken away for the sake of clearness. Fig. 2 is a view of our lock with the cover-plate removed and the latch-bolt drawn inward. Fig. 3 is an irregular inverted cross-sectional edge view taken on the line 1 2.

In our new or improved lock we dispense with the usual locking-levers and use what we term "fixed guides" made up of plates or a single block dispensing with the usual spring necessary with locking-levers. To accomplish this, we fix the guides or plates C by the pins c' and c^2 . When using more than one plate or guide, as shown on the drawings, they are so arranged one on the other as to form projections l^2 and recesses l^3 —that is to say, the edge of the one guide or plate stands nearer to or farther away from the keyhole l^4 . On the latch-bolt A we cast or form the projection a' and then cut the sides of this projection away, so as to leave only a part—say half—of what still remains of the projection opposite a part of the guide which is recessed, which necessarily means that if the key-wards fit all

the guides only, say, one of the central wards of the key would come into contact with that part of the projection which is opposite that particular guide-recess, and therefore opposite the particular ward of the key. Thus it will be seen that a skeleton or only partly-made key would not operate the lock.

By our new lock or latch we provide simple means for reversing the nose-piece a^2 , so as to make the lock or latch suitable for a right or left hand door. The outer end of the bolt A is cast with a T-shaped slot, into which is fitted the reversible nose-piece a^2 . To reverse the nose-piece, it is necessary to withdraw the latch-bolt a certain distance out. This we accomplish by removing the knob-spindle D and then unscrewing the pin d' until the head d^2 projects above the cover-plate B, thus allowing the reduced part of the pin to slide in the longitudinal slot b' in the cover-plate of the case. The latch-bolt is now pushed back into its normal position, the spindle D refitted, and the screw d' tightened up, the lock now being suitable for a left-hand door. To operate the latch-bolt A, the knob-spindle D is turned either way, thus causing the tumbler E to tilt or rock and at the same time acting upon the concave face of the tailpiece a^3 , and thus drawing the latch-bolt inward. As this tumbler E rocks or tilts in the withdrawing of the latch-bolt the head d^2 and extreme end of the pin work in the slots b^2 and b^3 , thus relieving the strain on the spindle D.

What we claim, then, is—

1. In a combined lock and latch, a sliding latch-bolt having a hook-shaped rear end, a tumbler for engaging said hook-shaped end, a knob-spindle engaging the tumbler to operate the same, a lock-casing having a slot, a pin working in the said slot and connected to the tumbler, fixed guides corresponding to the key-wards and a lug on the said lock and latch having its sides cut away, substantially as described.

2. In combination, a lock-case, a latch-bolt sliding therein, a reversible nose-piece at the front end of said bolt, a tumbler for operating the latch-bolt, a screw-pin on the tum-

bler, the said casing having a curved slot for the head of the pin to move in and having a straight slot parallel with the direction of movement of the latch-bolt for the stem of the
5 pin to move in when said pin is unscrewed sufficiently to remove its head from the curved slot, substantially as described.

In witness whereof we have hereunto set our hands in presence of two witnesses.

ROBERT WILLIAM HENRY RODNEY.
JAMES HARRY PARKES.

Witnesses:

A. W. DENTON INGHAM,
ERNEST WYER.