

J. KAYE.
LATCH.

No. 258,431.

Patented May 23, 1882.

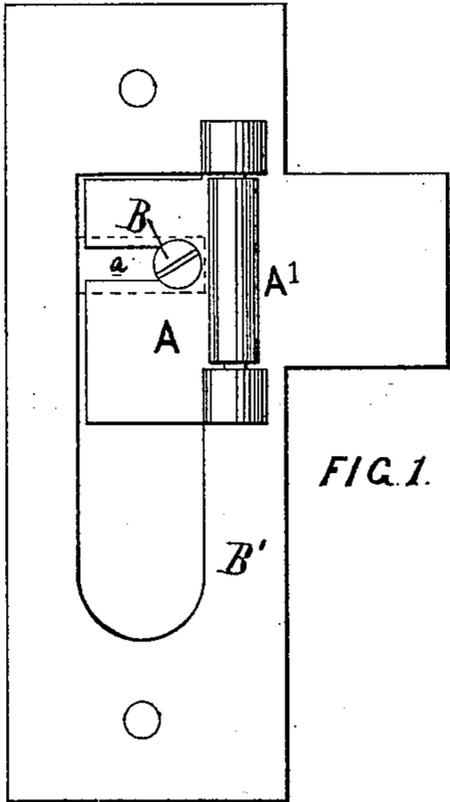


FIG. 1.

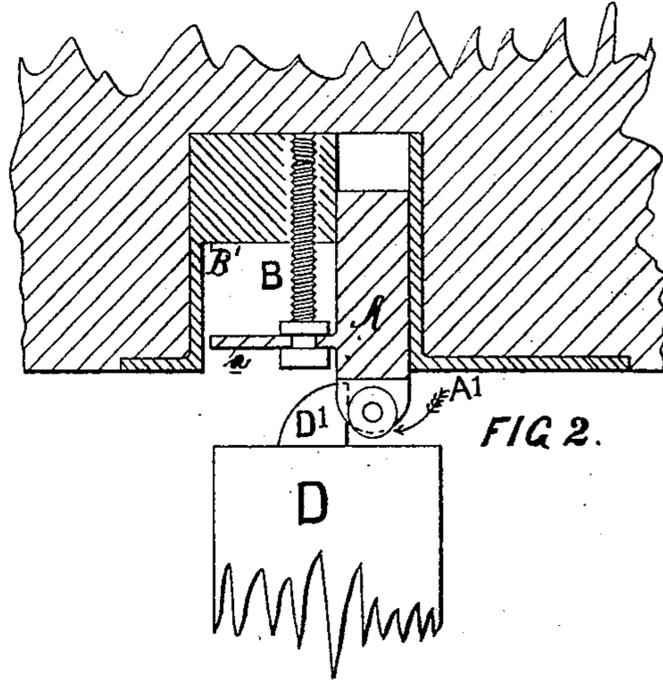


FIG. 2.

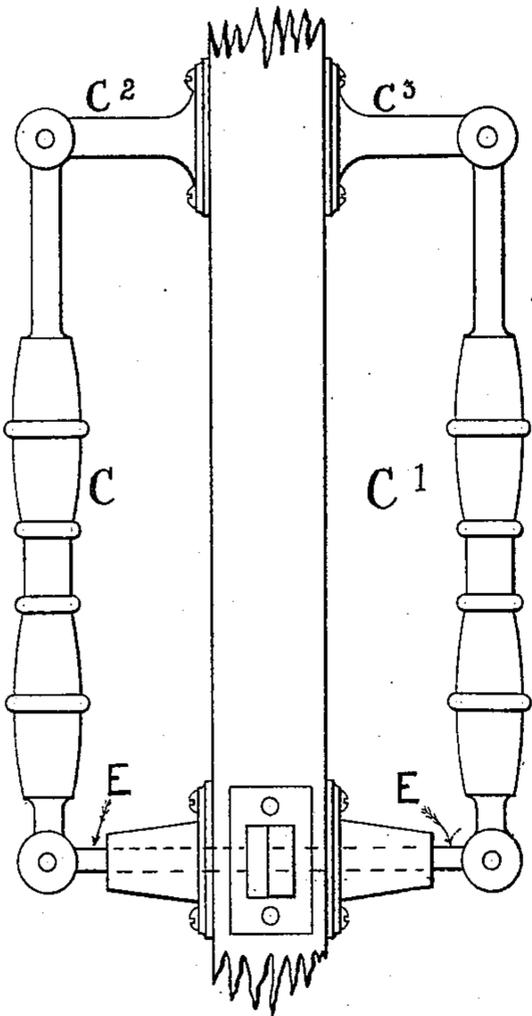


FIG. 3.

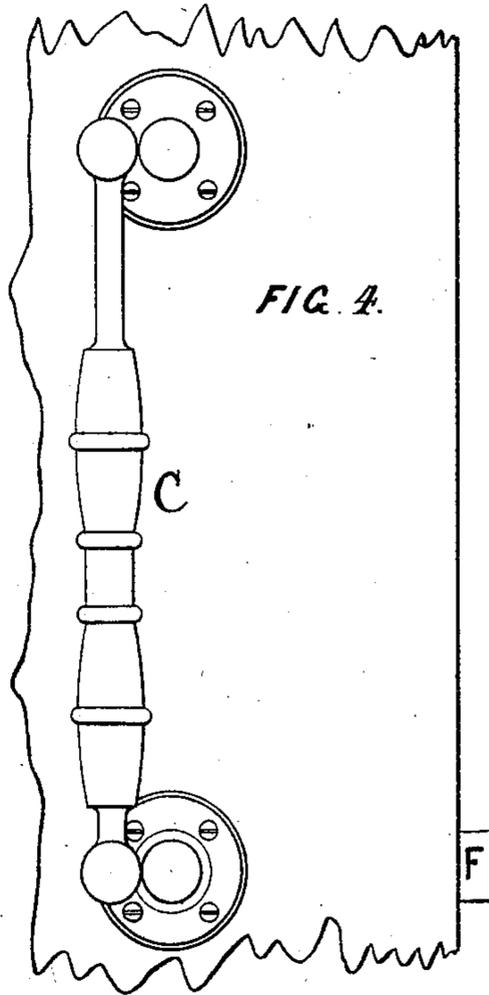


FIG. 4.

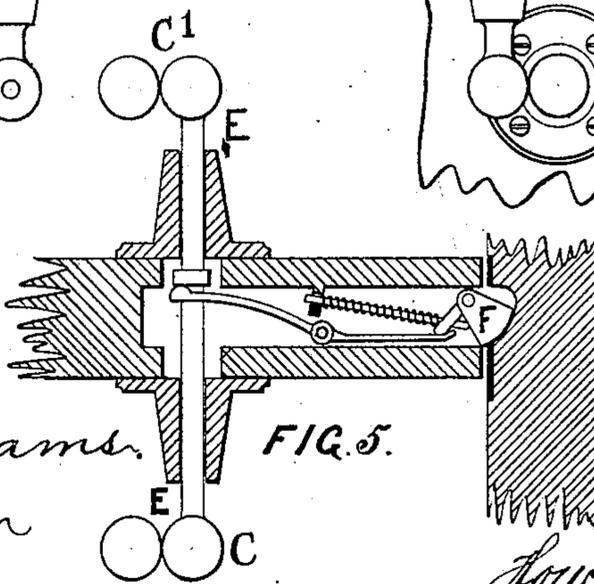


FIG. 5.

Witnesses:

David S. Williams.
James F. Jobin

Inventor
Joseph Kaye
by his Attorneys
Hausman and Lee

(Model.)

2 Sheets—Sheet 2.

J. KAYE.
LATCH.

No. 258,431.

Patented May 23, 1882.

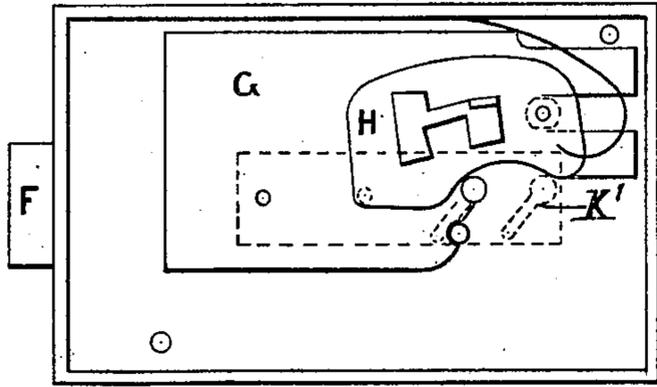


FIG. 6.

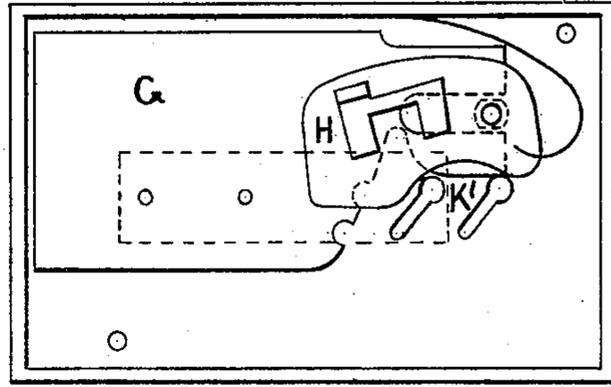


FIG. 8.

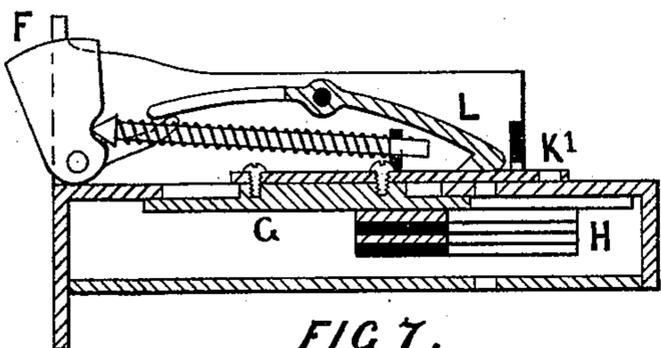


FIG. 7.

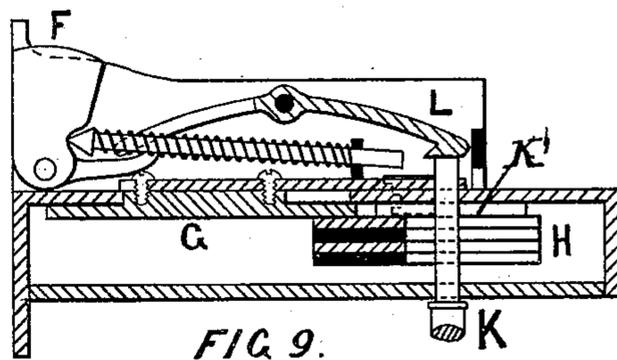


FIG. 9.

Witnesses

David S. Williams
James F. Tobin

Inventor
Joseph Kaye
by his attorneys
Howson and son

UNITED STATES PATENT OFFICE.

JOSEPH KAYE, OF KIRKSTALL, NEAR LEEDS, COUNTY OF YORK, ENGLAND.

LATCH.

SPECIFICATION forming part of Letters Patent No. 258,431, dated May 23, 1882.

Application filed January 12, 1881. (Model.) Patented in England April 21, 1880, No. 1,643.

To all whom it may concern:

Be it known that I, JOSEPH KAYE, a subject of the Queen of Great Britain and Ireland, and residing at Kirkstall, near Leeds, in the county of York, England, have invented certain Improvements in Locks and Latches, (for which I have obtained a patent in Great Britain, No. 1,643, dated April 21, 1880,) of which the following is a specification.

My invention relates to locks and latches such as are employed for fastening doors of apartments, carriages, casements, and the like, the objects of my improvements being to provide adjustment for shrinkage of the door and convenience and security in the operation of the lock or latch. These objects I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a front view of my improved striking-plate; Fig. 2, a sectional plan of the same. Fig. 3 is an edge view, Fig. 4 a side view, and Fig. 5 a sectional plan, of a door with one form of my latch. Fig. 6 is a front view, and Fig. 7 a sectional plan, of my security latch-lock; and Figs. 8 and 9, corresponding views of the same with the latch withdrawn by the key.

I provide the door-latch with an improved strike, which is mortised into the door-jamb, and is adjustable by means of a regulating-screw toward or from the door to allow for shrinkage and expansion of the latter.

Referring to Figs. 1 and 2, the frame B' of the strike is mortised into the door-jamb, and in a recess and slot in this frame is fitted the sliding piece A, which is provided with an anti-friction roller, A', for the bolt D' of the door D to come into contact with. This sliding piece is provided with a slotted flange, a, in which is fitted the grooved head of an adjusting-screw, B, adapted to a threaded opening in the frame B', so that by simply turning this screw to the right or left the sliding piece A, owing to this swivel-connection, may be adjusted toward or from the door to compensate for shrinkage or expansion, and insure the catching of the latch-bolt D' behind the roller.

I prefer to employ, in connection with this striking-plate, latch-locks of the kind described in Letters Patent No. 219,485, September 9, 1879; and I operate this latch through the me-

dium of vertical handles hinged to the door, so that by pulling the vertical handle on one side of the door, or pushing the like handle on the other side, the latch is withdrawn to allow the door to open.

Figs. 3, 4, and 5 illustrate a door provided with a latch of the character referred to, E being the transverse sliding stem, acting through the medium of a pivoted lever on the spring-latch F. To the ends of this stem are hinged the lower ends of vertical handles C C', joined by a spring or hinge joint at their upper ends to brackets C² C³ on the opposite sides of the door, so that on pulling the handle C or pushing the handle C' the catch F of the lock is withdrawn, and the door is pulled or pushed open.

The handles C C', instead of being arranged vertically, may be horizontal, and instead of being jointed by pins to the brackets C² C³, as shown, may be attached to the door by spring-limbs, giving sufficient flexibility to admit of the required movement of the stem E.

I arrange a latch-lock of the kind above referred to so as to provide security—as, for example, for use as a night-latch—by working it with a key in the following manner: Within the lock, facing the key-hole, I fit a sliding plate, which may be provided with tumblers like the bolt of a lock, and which has a hole through which, when the plate is brought to one position, the key can be pushed. The key, being inserted and turned partly round, moves the sliding plate to the said position, and thereupon the key can be pushed farther in, causing withdrawal of the latch, so that the door can be opened.

Referring to Figs. 6, 7, 8, and 9, F is the latch, and K the key for operating it.

On first introducing the key into the lock it is supposed to be prevented from further insertion by the sliding plate G, but on turning the key round the plate slides forward, so as to present a hole, K', through which the key can be pushed, so as to act on the end of the lever L, and so cause withdrawal of the latch F. Any known arrangement of tumblers—such as H—can be introduced into the front part of the lock, so as to provide against the use of false keys.

To withdraw the key from the lock it must be

turned backward to bring the bit of the key opposite the key-hole in the front case of the lock through which it was first inserted, and in thus turning the key backward the sliding plate G
5 is moved back to its normal position, (Fig. 7 and dotted lines, Fig. 6,) so as to cover the opening in the back of the case and prevent the insertion of any instrument to act on the lever L of the latch mechanism.

10 I do not desire to claim broadly an adjustable striking-plate or a latch operated by pivoted handles; but

I claim as my invention—

15 1. A striking-plate having a movable striking-face, and a screw, B, having a swivel-connection with said movable striker, whereby the

turning of the screw will adjust the striker toward or from the door, all substantially as set forth.

2. The combination of the casing, latch, and 20 lever L with a sliding plate, G, and a key adapted to operate the sliding plate, and also the said lever, when the plate is thrown back, substantially as described.

In testimony whereof I have signed my name 25 to this specification in the presence of two subscribing witnesses.

JOSEPH KAYE.

Witnesses:

JOHN WAUGH,
HAROLD WM. MILNES.