

R. ADAMS.
LOCK.

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961,996.

Patented June 21, 1910.

2 SHEETS—SHEET 2.

FIG. 6.

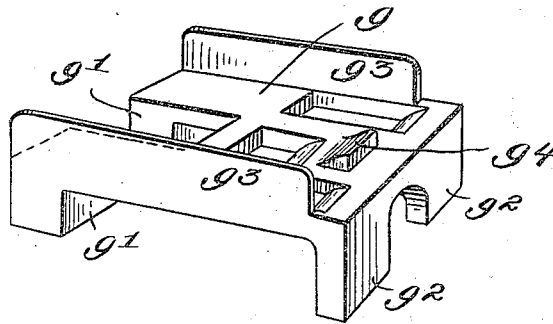
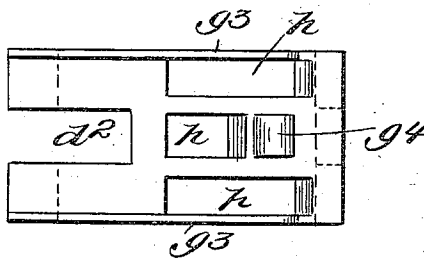


FIG. 7.



Witnesses:

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LOCK.

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To all whom it may concern:

Be it known that I, ROBERT ADAMS, subject of the King of Great Britain, residing at 3 and 5 Emerald street, Theobald's Road, London, England, have invented certain new and useful Improvements in Locks, of which the following is a specification.

The object of my invention is to effect improvements in locks for desks, show cases, window sashes, French windows, bags, portmanteaux, and the like, my invention being hereinafter described with reference to the accompanying drawings.

Figure 1 is a plan of a spring lock of the sliding type (with top plate removed), Fig. 2 is a section on the line $x-x$ of Fig. 1, and Fig. 3 is a section on the line $y-y$ of Fig. 1. Fig. 4 is an elevation of a spring lock of the pivoted type, Fig. 5 is a similar view of a modification of Fig. 4, Fig. 6 is a perspective view of the retractor plate; and Fig. 7 is a top plan view thereof.

Referring to Figs. 1, 2 and 3, a is a case which may be arranged to be sunk within the woodwork or substance of the article to which the lock is fitted; b is the top plate and c is the striker catch plate. In the case a a sliding bolt d is fitted, being driven home by a spring e so that the claws d' may engage with the catches of the striker plate in a manner well known. The bolt d is drawn back by means of a retractor such as the slotted frame or slider g which engages the rear claw by lugs g' , the claw being cut away as shown to accommodate the slider. The rear end of the slider is formed with lugs g^2 which travel on the case a , and the sides are formed with flanges g^3 , the upper edges of which are level with the top of the case. The slot d^2 in the slider permits of the bolt d being driven back by the impact of the striker catches. The slider g is also formed with a plurality of slots h which act in combination with suitable flexible or spring controlled tumblers, levers, or the like which are released by the turning of a key. In the drawings (Figs. 1, 2 and 3) these consist of a number of spring metal strips h' which are secured to a cross-piece h^2 fixed in the case, said strips h' normally engaging with the end walls of the slots h as shown in Fig. 3. One of the strips (h'') may be fashioned, as shown in Fig. 2, to limit the forward motion of the slider by impinging against the projection g^4 on the

slider. The slider is retracted by a key, the bit of which engages the end or ends of one or more of the slots after raising the strips h' or their equivalent.

It will be apparent that the key operates the retractor by the engagement of the bit of said key with the end or ends of one or more of the slots in the said retractor or slider g , and when entering the slots the said key contacts with the metal strips h' causing the same to be moved from engagement with the retractor or slide g , freeing the latter so movement can be imparted thereto.

Figs. 4 and 5 illustrate the application of the retractor or slider G to a bolt i pivoted in the case at i' . In Fig. 4, the end of the slider is slotted at i^2 to engage a stud i^3 or its equivalent fixed to the bolt i and so as to allow the bolt to be thrust inward (by contact with a suitable striking plate) against the force of the spring E , in a similar manner to that already described with reference to Figs. 1, 2 and 3. The slider is adapted to slide within the narrowed part a' of the case a , a slot g^5 being formed in the strengthening web or flange G^3 of the slider to admit of its motion when the key is in position. Flexible strips h' or their equivalent are employed to lock the slider as before described. Fig. 5 shows the slider G' arranged to retract the bolt i against a spring e^2 by means of an arm k fitted with a projection or stud k^2 fixed to or integral with said bolt. The end of the slider G' is formed as a fork g^6 to engage the stud k^2 , and flexible strips h' or their equivalent are employed to lock the slider as before described.

I claim:—

1. A lock comprising a case, a spring actuated bolt, a retractor operative upon the latter, and a resilient lock member normally in engagement with the retractor to hold the same against movement.

2. A lock comprising a case, a spring controlled bolt, a slotted retractor in engagement with said bolt, a plurality of spring metal strips engaging the end walls of the slot and said retractor, and means for disengaging said strips from the retractor and operating said retractor to draw back the bolt.

3. A lock comprising a case, a spring controlled bolt within the latter, a slotted retractor engaging said bolt, resilient means in engagement in the slot in the retractor

for locking the same, and means for displacing said resilient means to operate the retractor for drawing back the bolt.

4. A lock comprising a case, a spring actuated bolt, a retractor engaging the bolt and having a slot therein, yieldable locking means normally in the path of movement of the retractor and in engagement with the said slot to hold the said retractor against
5 movement, and means movable through the
10

slot for displacing the yieldable means to free the retractor for actuating the bolt.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROBERT ADAMS.

Witnesses:

GEORGE C. DOWNING,
WALTER J. SKERTEN.