L. J. HARRIS.

LOCK.

APPLICATION FILED MAY 21, 1908.

931,603. Patented Aug. 17, 1909.

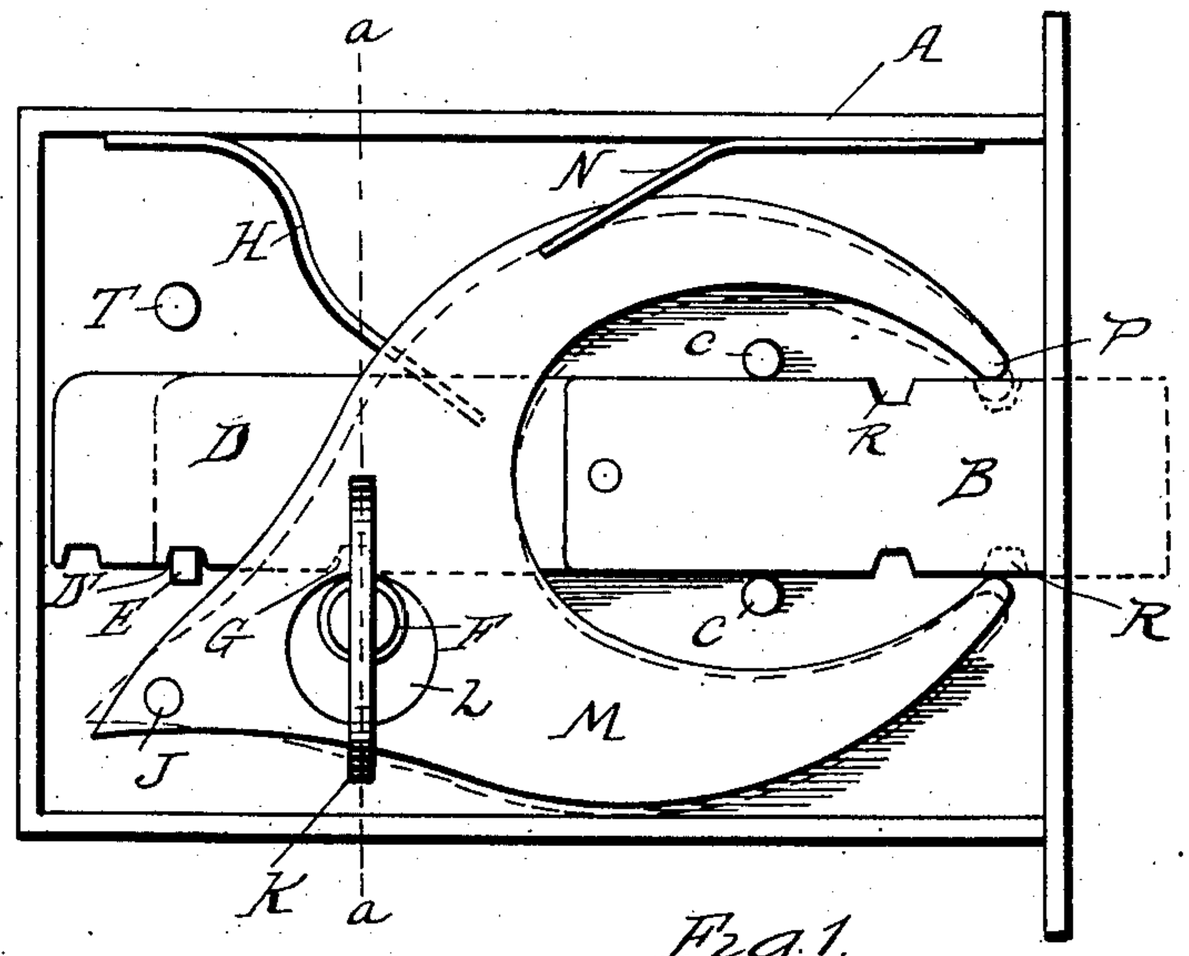

Fig. 1.

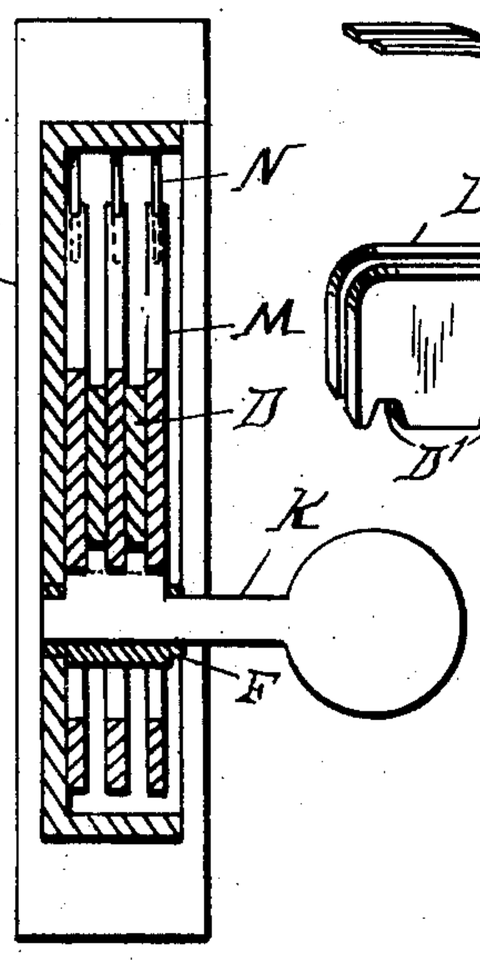

Fig. 2

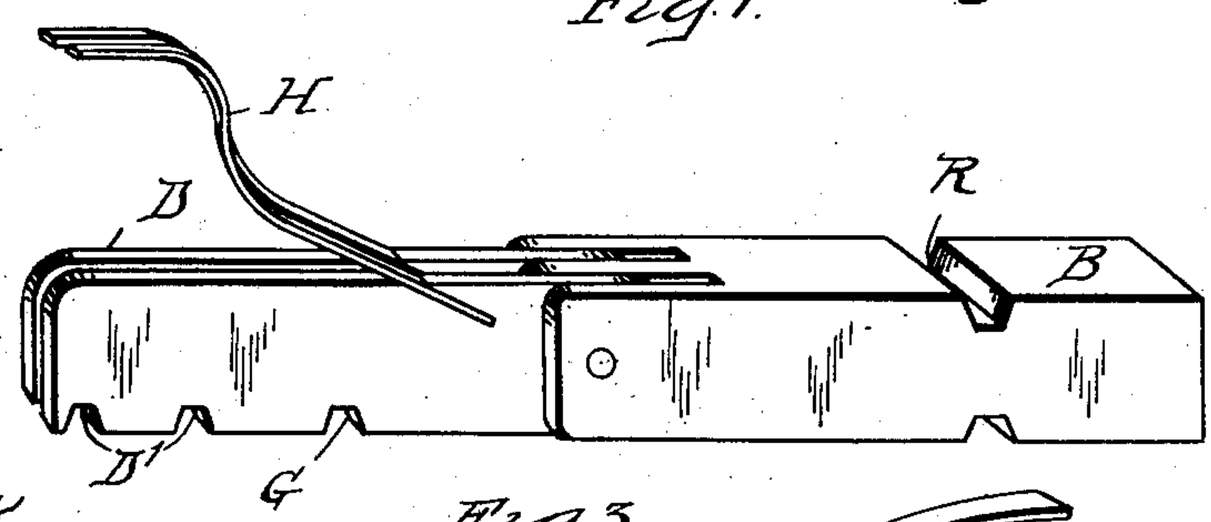

Fig. 3

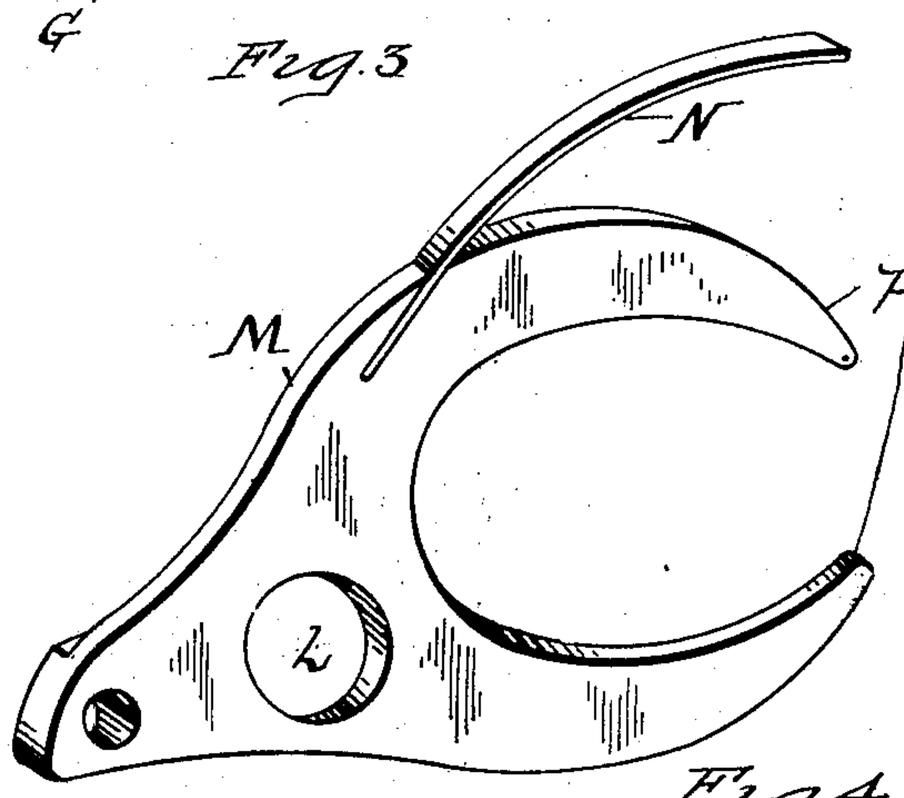

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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LOCK.

No. 931,603. Specification of Letters Patent. Patented Aug. 17, 1909.

Application filed May 21, 1908. Serial No. 434,020.

To all whom it may concern:

Be it known that I, LEMUEL J. HARRIS, a citizen of the United States, residing at Davison, county of Genesee, State of Michigan, have invented a certain new and useful Improvement in Locks, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to locks, and has for its object an improved device adapted to render difficult and almost impossible the picking of a lock by the use of burglars' tools.

In the drawings:—Figure 1, is a sectional elevation. Fig. 2, is a sectional elevation looking lengthwise of the lock along the line *a*—*a*, Fig. 1. Fig. 3, is a detached perspective of the bolt and its hinged latch bars. Fig. 4, is a perspective of one of the bolt-engaging jaw pieces.

A represents the casing of a lock through the usual type of aperture, in one end of which slidably engages the bolt B, which is further guided by pins C above and below it. Pivotally attached to the rear end of the bolt, which is preferably recessed, so that the ends can be dove-tailed, the one within the other, are the forward ends of the latch links D, whose notches D′ engage over a pin E which projects from the casing.

Journaled transversely of the casing is the key guide F, in which is inserted the key K, some of whose shoulders engage in the notches G in the members D, and operate to raise them against the pressure of the spring H, until the notches D′ then in engagement with the pin E, are cleared therefrom, and the bolt B and the slides D are together either projected or retracted as desired.

Pivoted at J are a plurality of similarly shaped jaw members M, one of which passes between the slides D, and the others of which are on each outer side thereof. The body portion of each is cut away with the recess L for the passage therethrough of the key tumbler F, and for the engagement of those portions of the key which are to strike and actuate each one of these members against the resilient pressure of the springs N. The forward point P of each one of these members engages, when the bolt B is approached, in a notched portion R in the body of the bolt, so that even if both of the slides D were improperly actuated, that is, otherwise than by the appropriate key, the bolt would still be held immovable. Furthermore, if not only these two slides D, but even two of the three jaw pieces M were simultaneously raised, although this would be difficult, if not impossible to accomplish without noticeably damaging the lock, the engagement of the point P of the third member M would still operate to efficiently prevent the bolt from being displaced. When the bolt is retracted, the points P simply engage on each side of the unindented surface intermediate the recess R and the forward end of the bolt.

The raising of the slide pieces D too high is prevented by the interposition of the post T, which projects from the inner face of the casing.

It should be understood that the combination of three slide pieces and five jaw members, alternating the one with the other, is equally as feasible, (except for the increased thickness of the completed lock) and because of its increased complexity, more desirable under some circumstances, and I desire it understood that this or any similar change as to the number of matched parts, is entirely within the intended scope of this disclosure.

What I claim is:—

1. In a lock, in combination with a casing, a bolt engaging through a guiding aperture therein, a plurality of retaining members extending rearwardly from pivotal connection with said bolt and in substantial alinement therewith, a lug extending transversely of the casing with which selected notched portions of each of said retaining members are adapted to interlock, a plurality of independent bolt-engaging members pivoted within said casing in alternating arrangement with said retaining members, adapted to hold the bolt, when projected, from withdrawal from such position until each is positively actuated, and means for simultaneously actuating each of said retaining members and said bolt-engaging members, substantially as described.

2. In a lock, in combination with a casing, a bolt slidable therein, a plurality of jaw members adapted to engage the bolt when projected to locking position with respect to the casing and prevent its rearward actu-

ation, retaining members in longitudinal alinement with said bolt and arranged alternatingly with said jaw members by which it may be moved and locked in position, means for yieldingly opposing the movement of the parts, a fixed lug projecting from the inner face of the casing, with which said retaining members are adapted to interlock, and means for engaging to the necessary degree each one of said jaws and retaining members and simultaneously actuating the same, substantially as described.

In testimony whereof, I sign this specification in the presence of two witnesses.

LEMUEL J. HARRIS.

Witnesses:
E. D. BLACK,
WM. W. BLACKNEY.