

M. GRGICH.
LOCK.

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1,195,808.

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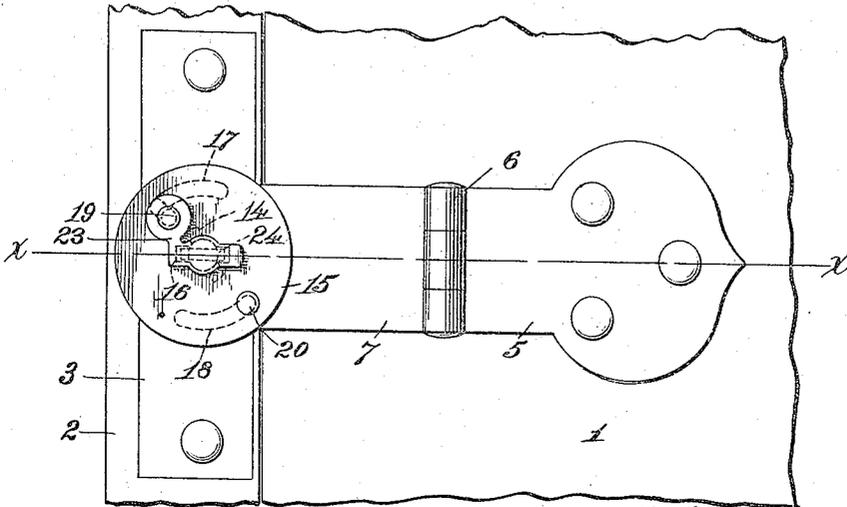


Fig. 1.

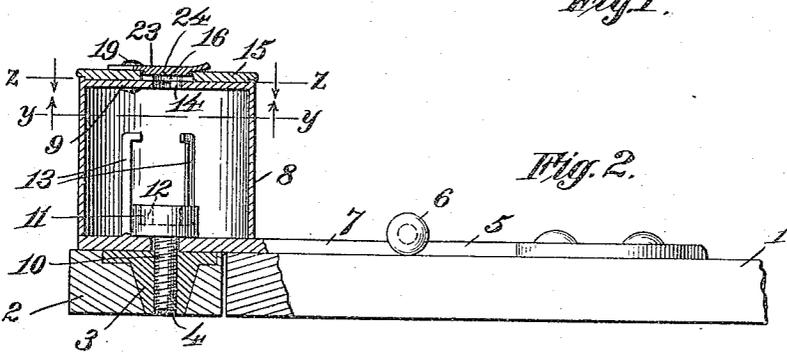


Fig. 2.

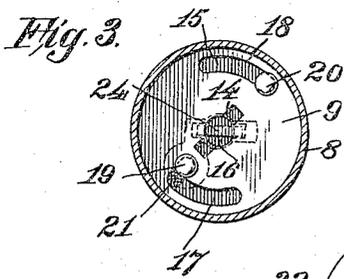


Fig. 3.

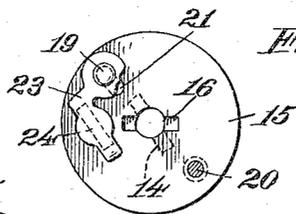


Fig. 5.



Fig. 4.

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MATO GRGICH, OF CHICAGO, ILLINOIS.

LOCK.

1,195,808.

Specification of Letters Patent.

Patented Aug. 22, 1916.

Original application filed August 31, 1914, Serial No. 859,437. Divided and this application filed December 7, 1915. Serial No. 65,465.

To all whom it may concern:

Be it known that I, MATO GRGICH, a subject of the Emperor of Austria-Hungary, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Locks, of which the following is a specification.

My invention relates to locks and particularly to key hole guards for locks.

More specifically the present application is a division of my co-pending application Serial No. 859,437, filed August 31, 1914.

The object of my invention is to provide the key hole of a lock with means to prevent tampering with the lock or rendering the tampering therewith difficult.

A further object of my invention is to provide a key hole guard with means for securing the same in operative position.

Other objects will appear hereinafter.

With these objects in view my invention consists generally in a shiftable plate mounted adjacent the key hole of a lock and provided with an opening adapted in one position to register with the key hole to admit the insertion of the key.

My invention further consists in a key hole guard as mentioned provided with means for securing the same with the aperture out of register with the key hole.

My invention further consists in a key hole guard as mentioned in which the securing device consists of a spring detent mounted on the shiftable plate and adapted in one position to engage within the aperture therein.

More specifically my invention consists in a plate pivotally mounted adjacent a key hole and provided with an aperture adapted to register with the key hole when in one position, said plate being provided with a slot arranged radially with relation to the aperture in the plate, a stud slidably mounted in said slot, a spring detent adapted to engage within the aperture in said plate when said stud is at the inner end of said radial slot, there being an arcuate slot in the lock casing to receive said stud when at the outer end of the radial slot and said arcuate slot being provided with a radial enlargement to permit shifting of the stud.

My invention further consists in various details of construction and arrangement of

parts all as will be fully described herein- after and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a plan view of a lock equipped with a key hole guard embodying my invention, Fig. 2 is a section on the line $x-x$ of Fig. 1, portions being shown in elevation, Fig. 3 is a section on the line $y-y$ of Fig. 2, Fig. 4 is a plan view of the lock casing with the shiftable plate and correlated parts removed, the same being substantially a section on the line $z-z$ of Fig. 2, and Fig. 5 is a plan view of the lock casing equipped with the spring detent shifted to release the plate.

Referring now to the drawings, 1 and 2 indicate relatively movable parts such as a door or other hingedly mounted closure and its cooperating frame. Fixed to the frame 2 is a keeper 3 let into the frame and provided with a threaded bore 4.

Secured to the swinging closure 1 by a suitable fastening means is a strap 5, preferably formed of two sections hingedly connected as at 6, and upon the swinging portion 7 of the strap I arrange the barrel 8 of the lock. The barrel is preferably cylindrical and is closed at its outer end by a head 9 and at its inner end by the member 7 of the strap. Arranged within the barrel is the locking bolt 10 which is preferably coaxial with the barrel and threaded to engage within the threaded bore 4 of the keeper. The bolt is provided with a cylindrical head 11 formed with a socket 12 to receive the end of a key; and parallel guides 13 are provided for the head 11. To lock or unlock the device the key is engaged within the socket in the head of the bolt and the bolt rotated, the guides 13 maintaining the bolt in proper alignment. This portion of the device is covered by my co-pending application above mentioned and forms no part of the present invention, as it will be clear that the key hole guard hereinafter described may be used with various forms of locks but I have described the lock with which I employ the guard in order to present the same more clearly. The head 9 of the lock barrel or casing is provided with a key hole 14 and

shiftable mounted adjacent said key hole is a plate 15. This is preferably arranged to rotate with the center of the key hole as an axis, and is provided with an aperture 16 adapted, when the plate is in one position, to register with the key hole to permit insertion and removal of the key. To shiftablely attach the plate to the barrel head I provide the head 9 with oppositely disposed arcuate slots 17 and 18 which receive headed stud pins 19 and 20 respectively on the plate 15. The pin 20 is preferably rigidly secured to the plate 15 but the pin 19 is loosely mounted in a radial slot 21 formed in said plate. The key hole 14 and aperture 16 are brought into register when said pins are at one end of the slots 17 and 18 and at the opposite end of the slot 17 I provide a radial enlargement 22 which registers with the radial slot 21 when the plate is shifted to the opposite limit of its movement. The pin 19 is then free to be moved inwardly into the said enlargement 22 which locks the plate against movement.

Mounted upon the pin 19 is a swinging member 23 preferably formed of thin spring metal and provided on its under face with a detent 24 which engages within the aperture 16 only when the pin 19 is at the innermost end of the slot 21. This effectually secures the device against being successfully tampered with except by those familiar with the device, as to insert the key it is first necessary to swing the member 23 to disengage the detent from the aperture 16, then to move the pin 19 radially outwardly and then shift the plate until the pins 19 and 20 are at the opposite extremities of the slots.

I claim:

1. A lock casing provided with a key hole, a plate rotatably mounted upon said casing adjacent said key hole with said key hole as a center and provided with a centrally disposed aperture adapted when the plate is in one position to register with said key hole and a shiftable member on said plate for securing said plate in position with said aperture out of register with said key hole.

2. A lock casing provided with a key hole in combination with a plate rotatably mounted adjacent said key hole with said key hole as a center and provided with a centrally disposed aperture adapted when in one position to register with said key hole, and a cooperating slot and shiftable pin on said casing and said plate respectively for holding the latter in position with the aperture out of register with the key hole.

3. A lock casing provided with a key hole in combination with a plate rotatably mounted adjacent said key hole with said key hole as a center and provided with an aperture adapted when in one position to register with said key hole, said casing be-

ing provided with a slot extending in the direction of movement of said rotatable plate, said slot being provided with an off-set portion, and a pin shiftablely mounted upon said plate and adapted to be moved into said off-set portion to lock said plate with the aperture out of register with the key hole, substantially as described.

4. A lock casing provided with a key hole in combination with a plate rotatably mounted adjacent said key hole with said key hole as a center and provided with an aperture adapted when in one position to register with said key hole, said casing being provided with a slot extending in the direction of movement of said rotatable plate, said slot being provided with an off-set portion, a pin shiftablely mounted upon said plate and adapted to be moved into said off-set portion to lock said plate with the aperture out of register with the key hole, and a member mounted on said pin and provided with a detent adapted to engage in said aperture when said pin is in the off-set portion of said slot, substantially as described.

5. A lock casing provided with a key hole in combination with a plate shiftablely mounted adjacent said key hole and provided with an aperture adapted when in one position to register with said key hole, said casing being provided with a slot extending in the direction of movement of said shiftable plate, said slot being provided with an off-set portion, a pin shiftablely mounted upon said plate and adapted to be moved into said off-set portion to lock said plate with the aperture out of register with the key hole, and a resilient member mounted on said pin and provided with a detent adapted to engage in said aperture when said pin is in the off-set portion of said slot, substantially as described.

6. A lock casing provided with a key hole in combination with a plate shiftablely mounted adjacent said key hole and provided with an aperture adapted when in one position to register with said key hole, said casing being provided with a slot extending in the direction of movement of said shiftable plate, said slot being provided with an off-set portion, a pin shiftablely mounted upon said plate and adapted to be moved into said off-set portion to lock said plate with the aperture out of register with the key hole, and a member pivotally mounted on said pin and provided with a detent adapted to engage in said aperture when said pin is in the off-set portion of said slot, substantially as described.

7. A lock casing provided with a key hole in combination with a plate shiftablely mounted adjacent said key hole and provided with an aperture adapted when in one position to register with said key hole, said casing being provided with a slot extending

in the direction of movement of said shift-
able plate, said slot being provided with an
off-set portion, a pin shiftably mounted upon
said plate and adapted to be moved into
5 said off-set portion to lock said plate with
the aperture out of register with the key
hole, and a spring member pivotally mounted
on said pin and provided with a detent
adapted to engage in said aperture when
10 said pin is in the off-set portion of said slot,
substantially as described.

8. A lock casing provided with a key hole
in combination with a plate shiftably
mounted adjacent said key hole and pro-
15 vided with an aperture adapted, when
the plate is in one position, to register with
said key hole, said plate being provided
with a slot positioned substantially radially
with relation to said aperture, a stud pin
20 slidably mounted in said slot, there being a
slot in said lock casing to receive said pin
and provided with a radial enlargement
adapted to register with said radial slot when
the plate is moved to extreme position with
25 its aperture out of register with the key hole
and a spring detent pivotally mounted on
said stud pin and adapted to engage within
said aperture when said stud pin is at the in-

ward extremity of said radial slot, substan-
tially as described.

9. A lock casing provided with a key hole 30
and a pair of oppositely disposed arcuate
slots concentric with said key hole, in com-
bination with a disk provided with a pair of
stud pins engaging in said slots, said plate 35
being provided with a central aperture
adapted in one position to register with said
key hole and also provided with a radial slot
to receive one of said stud pins and permit
radial movement of the same therein, one of 40
said arcuate slots being provided with a
radial enlargement adapted to register with
said radial slot when the plate is positioned
with its aperture out of register with the key
hole and a spring detent on said shiftable 45
stud pin adapted to engage in said aperture
when said pin is at the inner end of said slot,
substantially as described.

In testimony whereof I have signed my
name to this specification in the presence of 50
two subscribing witnesses.

MATO GRGICH.

Witnesses:

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HELEN F. LILLIS.