April 18, 1933. W. PRIOR, JR 1,904,882

BURGLARPROOF LOCK

Filed April 20, 1929

Fig. 1

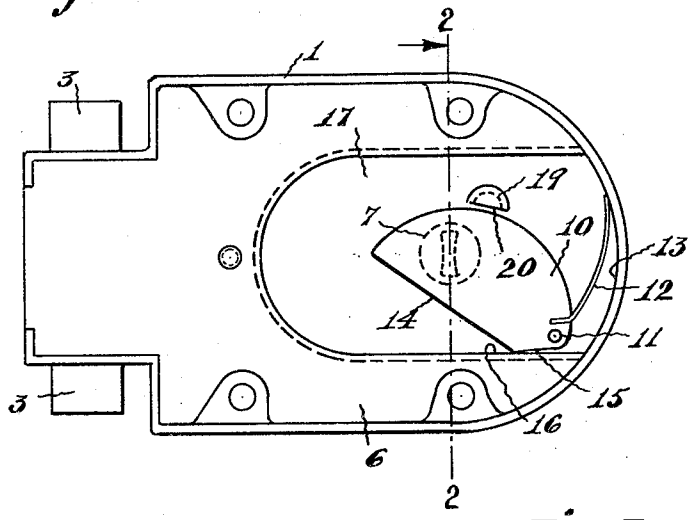


Fig. 2

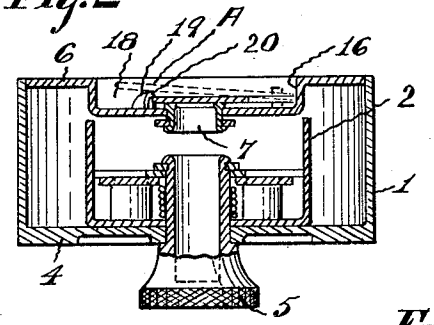


Fig. 3

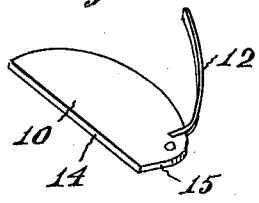


Fig. 5.

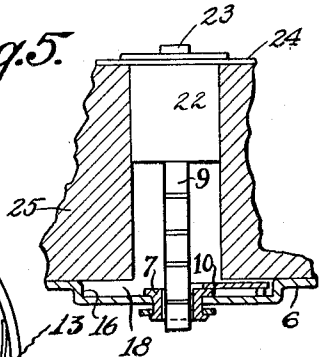
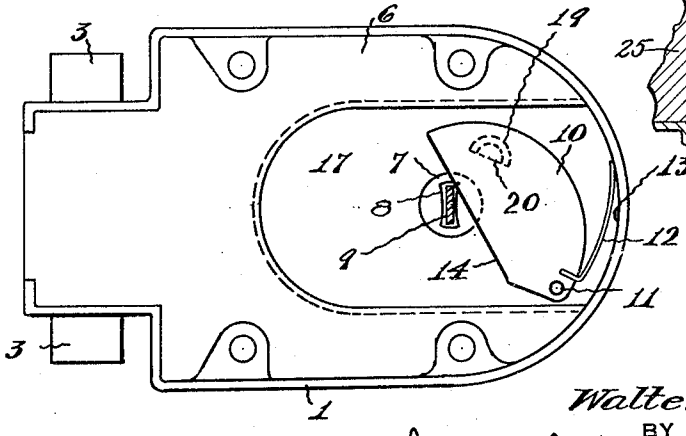


Fig. 4



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Patented Apr. 18, 1933 1,904,882

UNITED STATES PATENT OFFICE

WALTER PRIOR, JR., SOUTH ORANGE, NEW JERSEY, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO AUGUST F. W. VIEHWEGER, OF POUGHKEEPSIE, NEW YORK, AND ONE-HALF TO HARRY B. MORGAN, OF AMENIA, NEW YORK

BURGLARPROOF LOCK

Application filed April 20, 1929. Serial No. 356,662.

My present invention relates to an improvement in locks and, while not so limited, it is specifically directed to burglarproof locks of a known type, and has for its main object the provision of means thereon whereby to add to the protective means in such locks.

In the customary installation of this type of lock, the lock proper is usually mounted on the inside of a door with its cooperating striker, and is controlled by the usual knobs for inside manipulation. Such type of lock is usually provided with an exteriorly mounted key operated pin tumbler mechanism of familiar barrel type, such mechanism being so mounted upon the exterior face of the door in order to permit of easy access to throw the bolts by such key from outside of the door. In such installation the door is usually bored to fit the pin tumbler mechanism and to pass the bolt operating lever therefrom to its operative connection with the interiorly mounted lock.

In attempting to force such locks, the intruder very often wrenches or pries the pin tumbler mechanism from its seat and thus exposes the inner face of the lock and its appurtenant throw mechanism to the use of a screw driver which may be introduced into the opening thus exposed and the throw mechanism thrown back, moving the bolts and permitting of easy access to the room.

To overcome this failing and to prevent easy access to such a lock or, in some respects, to delay easy entry by the above mentioned methods, I have provided the lock proper with means herinafter outlined, to automatically interpose an interference to such easy lock operation without, in any way, obstructing the regular and normal function of the proper action of the undisturbed lock, such protective means being normally inoperative when the lock is undisturbed but becoming instantly operative as a protective means when the pin tumbler cylinder is removed.

A further object is to provide means for immediately locking the protective means in its protecting position when caused to function so that said protecting means is, of itself, protected against manipulation and removal or destruction.

A further object is the provision of a simple economical means whereby the desired ends may be accomplished.

Modifications may be made in the structure of my device without departing from the spirit of the invention or the scope of the appended claims.

In the accompanying drawing:

Fig. 1 is a rear view of a lock showing the conventional back plate thereon with my device in operative lock protecting position.

Fig. 2 is a sectional view taken on the line 2—2, Fig. 1, showing characteristic constructional features of such a lock but emphasizing the features of my invention more in detail.

Fig. 3 is a perspective view of the protective baffle member removed from its operative position in a lock.

Fig. 4 is a view, similar to Fig. 1, showing the baffle member in set, ready to operate, position in a lock normally undisturbed.

Fig. 5 is a plan view showing the coacting parts of the lock in operative assembly.

In illustrating the lock herein only such details of the well known type of lock are shown as cooperate with my device, and it is thought that such lock needs no elaborate description to define its functions and its cooperation with my protective device.

As shown in Figs. 1 and 4 the lock comprises a surrounding casing 1, usually of cast or struck up metal, the rear of which is open to permit of assembly of the operative bolt operative mechanism 2 therein, Fig. 2, which controls the bolts 3 to operate the same.

The front of the lock 4 is provided with a manually operable knob 5 whereby, in the usual fashion, the bolts 3 may be manually moved from the inside of the door 25, to which it may be applied.

The back or cover plate 6, usually faced against the inside face of a door, when the lock is applied, mounts the usual bushing 7 rotatably mounted therein, which bushing also carries means to operate to throw the bolts 3 when it is rotatably moved.

The bushing 7 is provided with a slot 8, Fig. 4, through which is passed a flat actuator or bar 9, shown sectioned in said figure,

in its operative position. Said bar is an extension from the rotatable barrel of a cylindrical pin tumbler casing 22. The usual key is inserted in a key rim 23 of an escutcheon 24, on the outer side of the door 25, to rotate the actuator 9 and therefore the bushing 7 to throw the bolts 3.

In Fig. 4 the bar 9, when in normally operative position, as shown, in its extension from the bushing 7 through the door thickness to its pin tumbler connection, acts to hold up a baffle plate 10, as in Fig. 4, said baffle plate having pivotal connection with the back plate 6 by means of a pin 11 and is further provided with a set-in flat spring member 12 which coordinates with the wall 13 of the lock casing 1. Thus, as shown in Fig. 4, the thin baffle plate, best shown in its details in Fig. 3, has one face 14 constantly pressing upon the transversely mounted cylinder throw bar 9 and is thus held throughout the normal, undisturbed functioning of the lock.

Should the cooperating key cylinder be torn or removed from its operative position in a door, its removal would carry with it the bar 9 which is normally attached to said cylinder, and the withdrawal of the bar 9 would, consequently, remove the support to the spring tensioned baffle 10 and thus cause the baffle to be thrown over to the position shown in Fig. 1, where it is stopped by the stop face 15 thereof formed by flattening the baffle, as shown, and its cooperation with the indented wall 16 which surrounds the baffle plate and, with the floor 17, forms an operative recess or chamber in the back plate 6 to provide operative space for the free operation of my device. This space is best shown in Fig. 2, at 18, where the bushing 7 is partly disposed in the recess, there being an opening in the floor or wall 17 for said bushing, as shown.

The baffle plate is, preferably, made of a hardened steel to resist drilling when it is stopped in the covering position as shown in Fig. 1.

To prevent its being forced back to expose the slot 8 in the bushing 7, the baffle is provided with a back stop 19, Figs. 1, 2 and 4, which is formed by being punched up out of the floor 17 of the back plate. This stop has a rounded face at the rear thereof to permit of the riding thereover by the baffle member when closing the slot 8, but it has a squared front face 20 whereby to act as a stop ledge when the baffle has fallen to protective position as shown in Fig. 1.

The normal inoperative relative positions of the baffle and back stop are fully shown in Fig. 4, and by the dotted position of the baffle, Fig. 2, at A.

Thus, it will be noted that I have provided a burglar or jimmy-proof lock with means to protect it against unauthorized opening when the destructive removal of a portion of the lock, such as its cylinder, exposes its interior to outside manipulation.

Having thus described my invention, what I claim and desire to protect by Letters Patent is:

1. A lock of the character described, comprising a casing, a recessed rear plate, a bushing having an actuator disposed within said plate, a baffle plate pivotally leaning on said actuator, a resilient member affixed by one of its ends to said baffle member and its other end loosely bearing on the walls of said casing whereby when said actuator is removed said resilient member will cause the baffle plate to cover said bushing, and a stop pin in said recess for preventing the retraction of said baffle plate.

2. A lock of the character described, comprising a recessed rear plate, bolt operating mechanism disposed within said recessed rear plate, a baffle plate pivotally leaning on said bolt operating mechanism whereby when said bolt operating mechanism is removed said baffle plate will pivot downwardly and cover said bolt operating mechanism, and a stop pin in said recess for preventing the retraction of said baffle plate.

3. A lock of the character described, comprising a casing, a recessed rear plate, bolt operating mechanism disposed within the recess of said plate, baffle means pivotally leaning on said bolt operating mechanism, a resilient member affixed by one of its ends to said baffle means and its other end loosely bearing on the walls of said casing whereby when said bolt operating mechanism is removed said resilient member will cause said baffle means to fall down and baffle or protect said bolt operating mechanism, and means in said recess for preventing the retraction of said baffle means.

4. In a lock of the character described a casing, a bolt operating mechanism having thereon a part which is outwardly positioned with relation to said casing, a part which is inwardly positioned with relation to said casing and an inward extension of said first mentioned part. a shiled member movably connected to said casing and normally held in a non-shielding position by said extension, whereby when said first mentioned part and said extension are surreptitiously removed, said member is automatically interposed to shield and prevent access to the said last mentioned part and a stop on said casing for preventing the surreptitious returning of said shield member to its non-shielding position by tampering with said last mentioned part from the outer side of said lock.

5. A lock comprising in combination a casing having a bolt therein and including a recessed plate, a bushing movably cooperating with said bolt and having a slot in said recess, a bolt actuator disposed in said slot, a shield

movably mounted in said recess and normally engaging said actuator, a single spring disposed between the wall of said casing and said shield to urge the latter for covering said slot on surreptitious removal of said actuator, and a stop on the wall of said recess to hold said shield in the covering position.

6. A lock comprising in combination a casing having a bolt therein and including a recessed plate, a bushing movably cooperating with said bolt and having a slot in said recess, a destructible bolt actuator disposed in said slot, a shield movably mounted in said recess and normally engaging said actuator, said shield having thereon a stop face, a single spring disposed between the wall of said casing and said shield to urge the latter for covering said slot on destruction of said actuator, and a stop formed by the wall of said recess to cooperate with said face for holding said shield in the covering position.

7. A lock comprising in combination, a casing having a bolt therein and including a recessed plate, a pivot carried by the wall of said recess, a bushing movably cooperating with said bolt and having a slot in said recess, a destructible bolt actuator disposed in said slot, a shield movably mounted in said recess and normally engaging said actuator, said shield having thereon a stop face, a single spring disposed between the wall of said casing and said shield to urge the latter for covering said slot on destruction of said actuator, and a stop formed by the wall of said recess to cooperate with said face for holding said shield in the covering position.

8. A lock comprising in combination a casing having a bolt therein and including a recessed plate, said recess having a vertical wall and a base boundary wall, which latter is provided with an opening, a pivot carried by said base wall, a bushing movably cooperating with said bolt and having a slot in said recess, said bushing being disposed in said opening, a bolt actuator disposed in said slot, a shield movably mounted on said pivot and normally engaging said actuator, a leaf spring having one of its ends movably seated on the inner periphery of said casing and having its other end rigid with said shield to urge the latter for covering said slot on surreptitious removal of said actuator, and a stop on said base wall to hold said shield in the covering position whereby to prevent actuation of said bolt.

Signed at 121 Sussex Ave., Newark, in the county of Essex and State of New Jersey, this 4th day of April, A. D. 1929.

WALTER PRIOR, JR.