S. SEGAL.

PIN LOCK PROTECTING DEVICE.

APPLICATION FILED JAN. 15, 1918.

1,304,105. Patented May 20, 1919.

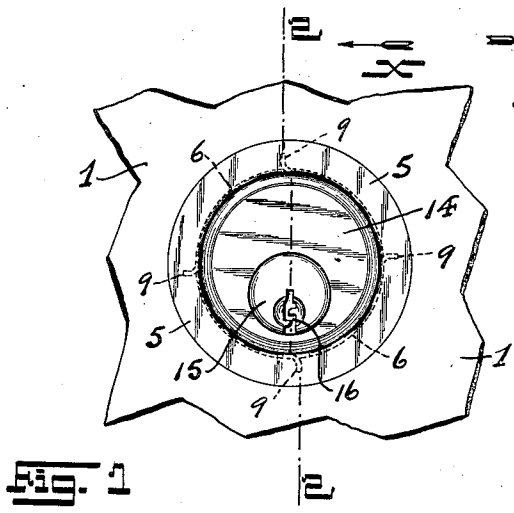


Fig. 1

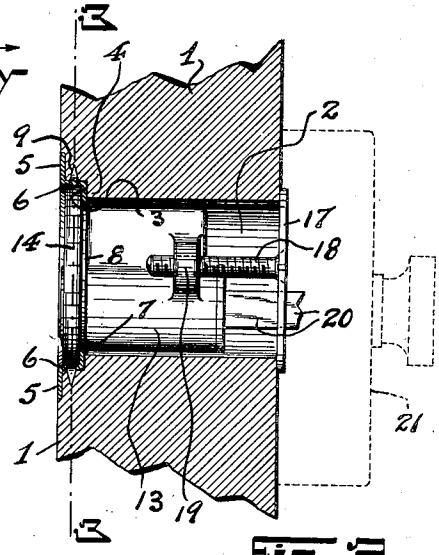


Fig. 2

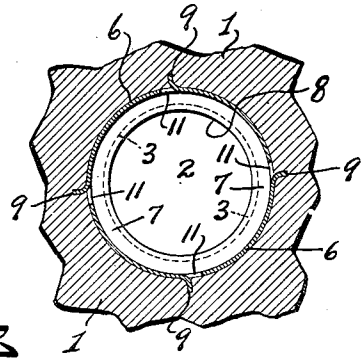


Fig. 3

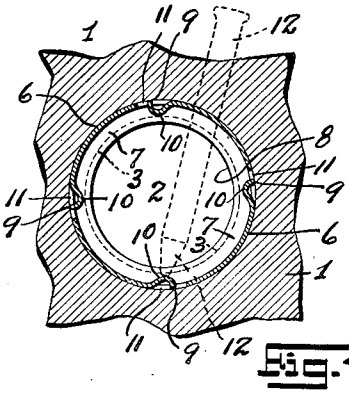


Fig. 4

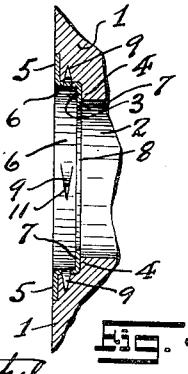


Fig. 5

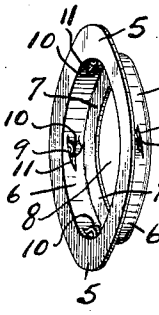


Fig. 6

WITNESSES:

Fredk H. W. Frantzel

INVENTOR

Samuel Segal,

BY

Frantzel and Richards,

ATTORNEYS.

UNITED STATES PATENT OFFICE.

SAMUEL SEGAL, OF NEW YORK, N. Y.

PIN-LOCK-PROTECTING DEVICE.

1,304,105. Specification of Letters Patent. Patented May 20, 1919.

Application filed January 15, 1918. Serial No. 211,948.

To all whom it may concern:

Be it known that I, SAMUEL SEGAL, a citizen of the United States, residing at New York, State of New York, have invented certain new and useful Improvements in Pin-Lock-Protecting Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

The present invention relates, generally to improvements in pin tumbler locks; and the invention has reference, more particularly, to an improved construction of means for mounting and protecting the escutcheon plate of a pin tumbler lock in connection with the door or other place served by the lock.

The present invention has for its principal object to provide a novel construction of protecting device arranged in connection with a door face or the like to provide a countersunk seat for the escutcheon plate of a pin tumbler lock; the same so surrounding and guarding said escutcheon plate that the latter cannot be forcibly grasped by a tool and thereby wrenched around to turn the whole lock, and thus permit the operative manipulation of a bolt or latch mechanism controlled by the pin tumbler lock.

A further object of the present invention is to provide in connection with said protecting device, a novel means for securing the same to the door or other place with which the pin tumbler lock is to be associated.

Other objects of the present invention, not at this time more particularly enumerated, will be clearly understood from the following detailed description of the same.

With the various objects of the present invention in view the same consists, primarily, in the novel protecting device for the escutcheon plates of pin tumbler locks hereinafter set forth; and the invention consists, furthermore, in the novel arrangements and combinations of the various devices and parts, as well as in the details of the construction of the same, all of which will be hereinafter more fully described, and then finally embodied in the claim appended to this specification.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a face view of a portion of a door or the like provided with my novel construction of protecting device operatively arranged with the escutcheon plate of a pin tumbler lock; Fig. 2 is a vertical longitudinal section through said door and protecting device, taken on line 2—2 in said Fig. 1, looking in the direction of the arrow x, the pin tumbler lock and its escutcheon plate being shown in side elevation; Fig. 3 is a transverse section, taken on line 3—3 in said Fig. 2, looking in the direction of the arrow y, said pin tumbler lock being removed; Fig. 4 is a transverse section similar to that shown in Fig. 3, but illustrating the manner of setting the fastening means of said protecting device; Fig. 5 is a view similar to that shown in Fig. 2, with the pin tumbler lock removed; and Fig. 6 is a perspective view of the novel protecting device before the same is applied to a door or the like.

Similar characters of reference are employed in all of the hereinabove described views, to indicate corresponding parts.

Referring now to the said drawings, the reference character 1 indicates a portion of a door or other place with which the pin tumbler lock is arranged. Formed in said door is a bore or opening 2 for the reception of the pin tumbler lock. Formed in the outer face side of said door, at the outer end of said bore or opening 2 is an annular countersunk seat 3, concentric to the said bore or opening 2, and of increased diameter, said seat 3 being formed by the shoulder 4.

The reference character 5 indicates the annular metallic face plate of my novel protecting device. Integrally connected with the inner edge of said face plate 5 is an inwardly projecting annular flange 6 forming the annular side walls of the protecting device, and integrally connected with the free edge of said flange 6 is an annular bottom flange 7 which lies in the plane of said face plate 5, said bottom flange 7 bounding an opening 8 adapted to be registered with the bore or opening 2 of said door. Said flanges 6 and 7, as related to said face plate 5, provide a depressed or countersunk seat, adapted to receive and inclose the escutcheon plate of a pin tumbler lock, as will presently more particularly appear. The flange 6 is pro-

vided with integrally connected sharp-pointed prongs or fastening members 9, cut or stamped out of the body of said flange, and spaced one from the other about the circumferential extent of said flange. Normally said prongs or fastening members 9 are bent inwardly from their base or point of connection with said flange 6, as at 10, and their free ends or points then turned outwardly to direct the same through the opening 11 thus formed, but withdrawn within the circumference of the outer surface of said flange 6, and as thus arranged offering no impedance to the insertion of said protecting device into the countersunk seat 3 formed in the outer face of the door as above stated.

In applying my novel protecting device to the door 1, the depressed portion thereof, formed by the flanges 6 and 7, are inserted within the countersunk seat 3, so that said bottom flange 7 rests against said shoulder 4, while the said flange 6 is inclosed by the sides of said countersunk seat 3. Preferably, said face plate 5 is countersunk flush with the outer surface of the door face, as shown. When thus positioned within the countersunk seat 3, the protecting device is ready to be permanently secured to the door 1. This is accomplished by striking the bowed or inwardly curved prongs or fastening members 9 with a punch 12 (indicated by dotted lines in Fig. 4) to drive said sharpened free ends of said prongs or fastening members outwardly through the openings 11, and thence into the wood or other material of the door, at the same time flattening down the prong bodies so that they do not project into the seat bounded by the walls of the protecting device. The prongs or fastening devices 9 thus caused to project radially from the outer surface of the side flange 6 in penetrating relation to the body of the door 1, firmly and fixedly secure said protecting device in place, and held against either withdrawing or turning movement relative to said countersunk seat 3.

The protecting device being thus secured to the door 1, the pin tumbler lock may be placed in position. The pin tumbler lock comprises, usually, a substantially cylindrical casing 13 containing the pin tumbler mechanism, and connected with the forward end of said casing 13 is an escutcheon plate 14 containing the key-barrel 15 having the key slot 16. Ordinarily in applying such a lock to a door, the casing 13 is inserted in an opening, prepared for its reception, up to the escutcheon plate 14, the latter remaining exposed and raised above the outer surface of the door face. It sometimes happens that when so mounted, the escutcheon plate is grasped by a gripping tool, clamp, wrench or the like, at its exposed sides or periphery, by those wishing to violate the lock, and forcibly enter through the door, and when so grasped sufficient force is applied thereto to wrench around the casing 13, tearing it loose from its fastening devices, and permitting, by the turning of the cylinder 13, a sufficient turning of the coupling bar leading to a bolt or latch mechanism on the inside of the door, to cause the successful operation of the latter. It is the purpose of my novel protecting device to guard against violations of the lock in such manner. To this end the cylinder 13 is inserted through the opening 8 of the protecting device into the bore or opening 2 of the door 1, until its escutcheon plate 14 is received within and entirely surrounded by the flange 6 and seated against the bottom flange 7, so that its periphery is countersunk within the protecting flange 6. The anchor plate 17, arranged against the inner face of the door, holds the fastening screws 18 which are engaged in the ears 19 of the cylinder 13, and which serve to draw up in secured position the cylinder 13 and its escutcheon plate 14, to both prevent displacement of the cylinder from normal position within the opening, or the prying out of the escutcheon plate 14 from the protecting device. The coupling bar 20 extends rearwardly from the pin tumbler lock to its operative association with a suitable lock or latch mechanism 21 fixed on the inner side of the door, as indicated by dotted lines in Fig. 2.

It will thus be apparent that the escutcheon plate 14 is entirely surrounded by the metallic protecting device, so that its periphery is protected against the application of a tool thereto for the purpose of wrenching or turning around the same and the cylinder 13 connected therewith. At the same time the escutcheon plate 14 when in position covers over, with its periphery, the fastening prongs or members 9 so that the same cannot be reached with a tool for the purpose of prying the same out of the body of the door to loosen the protecting device.

While the integrally formed prongs or fastening members provide the preferable means of fastening the protecting device to the door, I do not necessarily limit myself to such construction, since a separable fastening means may be used in place of the same.

I am aware that some changes may be made in the several arrangements and combinations of the various devices and parts, as well as in the details of the construction of the same, without departing from the scope of my present invention as above described, and as defined in the appended claim. Hence, I do not limit my invention to the exact arrangements and combinations of parts set forth in the above specification, nor do I confine myself to the exact details of

the construction of said parts as illustrated in the accompanying drawings.

I claim:—

The combination with a pin-lock barrel having an escutcheon plate at its forward end providing an annularly projecting rim of a protecting device comprising a face-plate having a central opening therein, a rearwardly extending annular flange bounding said opening, a bottom flange extending inwardly from the rearward edge of said rearwardly extending annular flange and at right angles thereto, said annular flange and said bottom flange providing a depressed annular seat in which said escutcheon plate is countersunk with its rim engaged in stopped relation upon said bottom flange while said pin-lock barrel extends rearwardly through said opening bounded by said annular seat, means engaging the inner end of said pin-lock barrel to prevent outward withdrawing movement thereof tending to displace said escutcheon plate rim from countersunk relation to said annular seat, and means for securing said protecting device to the body with which said pin-lock barrel is associated.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 9th day of January, 1918.

SAMUEL SEGAL.

Witnesses:

GEORGE D. RICHARDS,

ADOLPH HANSEN.