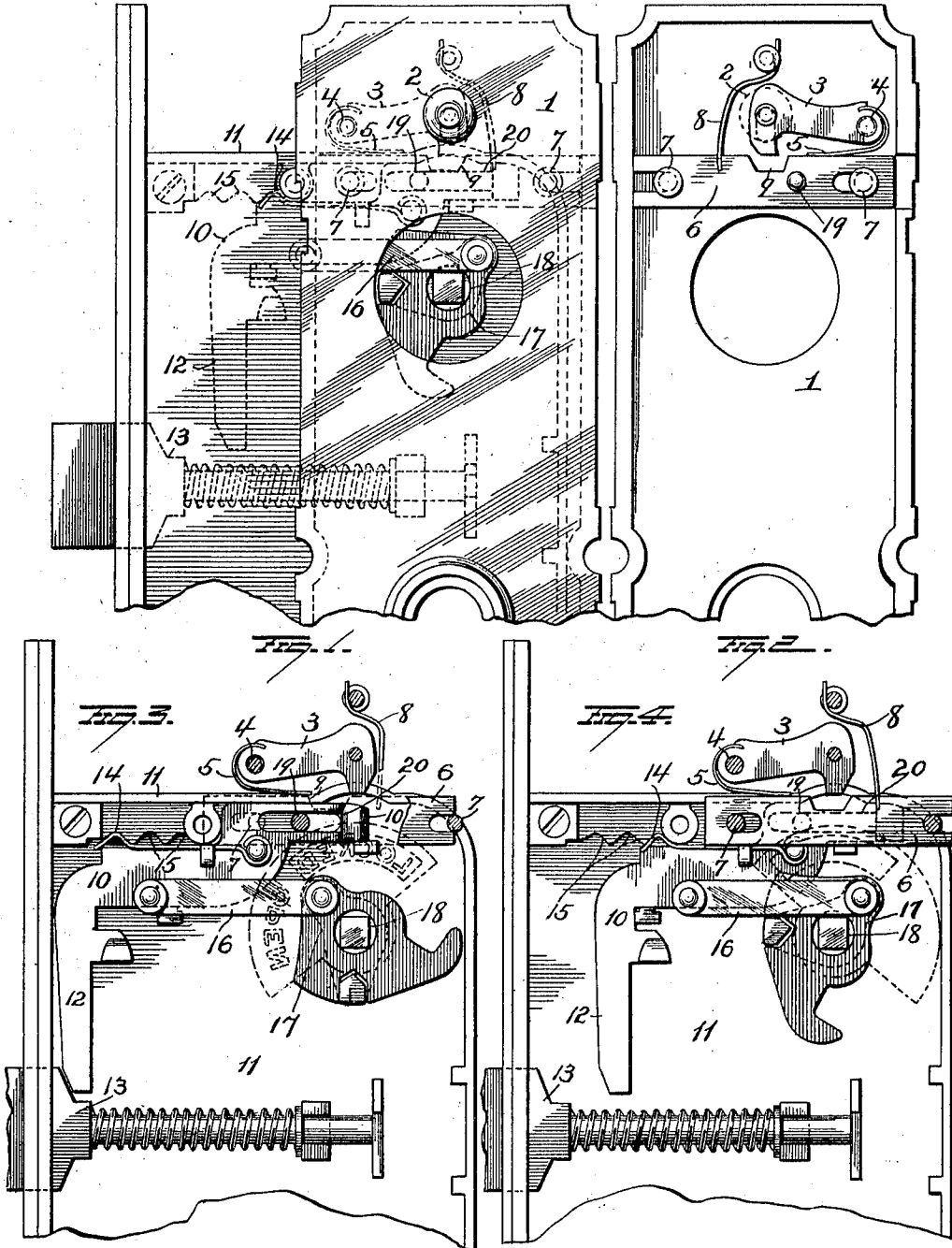


P. F. AUGENBRAUN.
INDICATOR FOR LOCKS.
APPLICATION FILED MAY 23, 1911.

1,022,221.

Patented Apr. 2, 1912.

2 SHEETS—SHEET 1.



WITNESSES
E. Nottingham
G. J. Downing

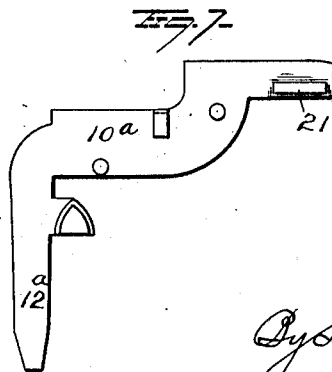
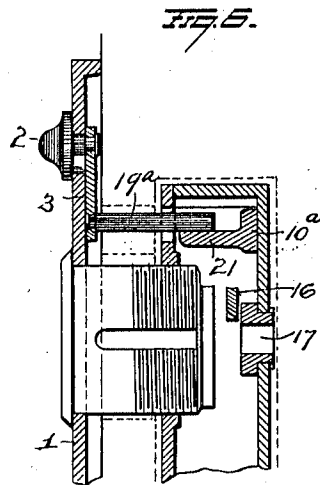
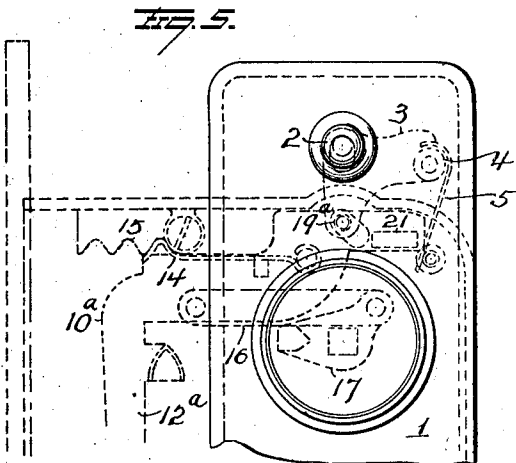
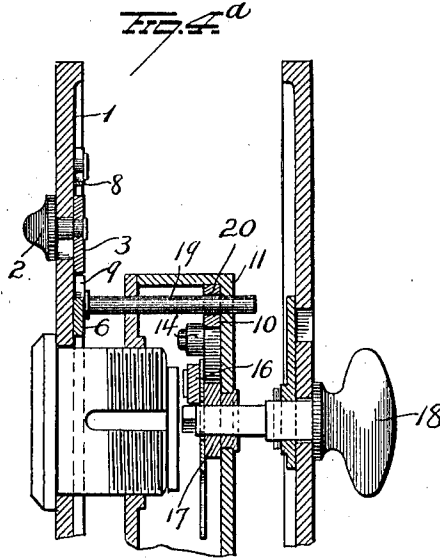
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UNITED STATES PATENT OFFICE.

PETER F. AUGENBRAUN, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE YALE & TOWNE MANUFACTURING COMPANY, OF STAMFORD, CONNECTICUT.

INDICATOR FOR LOCKS.

1,022,221.

Specification of Letters Patent.

Patented Apr. 2, 1912.

Application filed May 23, 1911. Serial No. 629,047.

To all whom it may concern.

Be it known that I, PETER F. AUGENBRAUN, of Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Indicators for Locks; 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.

My invention relates to an improvement in indicators for locks, the object being to provide a lock adapted particularly for hotel use, with means accessible from the outer or corridor side of the door, for indicating whether the door is locked from the inside, and it consists in a finger piece or equivalent movable indicating member, mounted on the outer escutcheon and provided with means located in the path of movement of a part of the lock and adapted to be engaged by said part, so that said indicator when engaged by said part will be locked against movement, and when not engaged by said part will be free to be moved.

My invention further consists in the parts and combinations of parts and in the details of construction as will be more fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation of the escutcheon plate showing my improvement with the cooperating parts of a lock in dotted lines. Fig. 2 is a view in rear elevation of the escutcheon plate. Fig. 3 is a view in elevation of a portion of a lock showing the bolt in its locked position and the manual indicator locked against movement. Fig. 4 is a similar view showing the bolt unlocked and the indicator free. Fig. 4^a is a view in section through the inner and outer escutcheon plates and the lock, and Figs. 5, 6 and 7 are views of a modified form of locking means for the indicator.

1 represents an escutcheon plate provided with a finger piece or manual indicator 2, the shank of which passes through a slot in the escutcheon and is secured to the elbow of a bell crank lever 3 pivoted at 4 to the inner face of the escutcheon 1. This bell crank lever 3 is provided with a spring 5 which tends to normally hold its free end out of contact with the slide 6 slotted as shown in Fig. 2, and mounted on the studs 7 secured to the rear face of the escutcheon and pass-

ing through said slots. The slide 6 is located under the free end of the bell crank lever 3, and its upper edge forms a rest or stop for, and prevents any movement of the latter when the door is locked, and is provided with a spring 8 which latter is carried by the slide and engages an abutment on the escutcheon, and tends to hold the slide 6 at one extreme of its movement. This slide is also provided on its upper edge with a recess 9, which, when the slide is moved by the bolt mechanism, as will be hereinafter described, will come under the free end of the bell crank, and permit the bell crank to be moved by pressure on the thumb piece or indicator 2. It will therefore be seen that when the slide 6 is in one position, the thumb piece or indicator will be locked against movement, and when in another position it will be free to move, and can be so combined with a movable part of a lock, that the locked indicator will indicate that the door is locked from the inside, and if movable, indicate that the door is not locked from the inside, or the arrangement can be the reverse, so that the indicator if free, will indicate a locked door, and if locked, indicate that the door is unlocked. In the construction shown the construction is such that when the door is locked from the inside, the indicator will be locked against movement.

In the construction shown in Figs. 1 to 4^a, the lock has a bolt locking slide 10 mounted to move in the upper portion of the lock case 11, and provided with a depending arm 12, which, when in one position, rests adjacent to the inner end of the head of the bolt 13 and locks the same against retraction, and when in its other extreme, is out of the path of movement of the bolt. This slide is yieldingly held in position by the spring 14 carried thereby, engaging notches 15 in the lock casing, and is moved by the link 16 connected at one end to the slide and at its other end to the cam 17. This cam has an angular opening therein to receive the shank of the knob 18 located on the inner side of the door. By turning the knob 18 in one direction the locking slide will be moved outwardly thus carrying its bolt locking arm 12 over to a position to lock the bolt 13 against retraction, thus locking the door from the inside, and when turned in the opposite direction withdraws the arm 12 from the bolt 13 thus leaving the latter free to be retracted

by the bolt retracting knob from the inside and by the key or knob from the outside. The slide 6 on the rear face of the escutcheon 1 is provided with a post 19 which extends
 5 through a slot in the door through a slot in the face plate of the lock and through a slot 20 in the slide 10.

As before explained the free end of the bell crank 3 normally rests on the upper
 10 edge of slide 6 and said bell crank and the finger piece or indicator 2 connected thereto, are normally locked against movement. The post 19 on slide 6 passes into or through
 15 a slot 20 in slide 10, and when the latter is in its extreme position to the left or when its depending arm 12 is deadlocking bolt 13, the post 19 will be located intermediate the end walls of the slot 20, thus leaving slide 6
 20 resting against the upper edge of the slide and the indicator 2 immovable. When however the bolt locking slide 10 is shifted to the right so as to release the bolt, an end wall of the slot 20 in slide 10 engages post
 25 19 and shifts the latter and slide 6 carrying same to the right until the recess 9 in slide 6 is under the free end of the bell crank, thus removing the obstruction to the operation of the bell-crank, and permitting the
 30 latter to be moved by the finger piece or indicator.

It will be apparent that the parts may be so arranged that the slide 10 will, when moved to its position to deadlock the bolt
 35 actuate the post and slide 10 to release the indicator so that the latter will be free to be moved when the door is locked from the inside, and be locked against movement when the door is not locked, and the recess
 40 in the slide 10, and the bell crank 3 may be so located relatively, that the slide must be moved to lock the indicator instead of releasing it.

In the construction shown in Figs. 5, 6 and 7, the slide 6 is dispensed with and the
 45 post 19^a is secured directly to the free end of the bell crank lever 3, and as the bell crank is pivoted at 4, the post 19^a has a movement in the arc of a circle concentric with the pivot of the bell crank. The post
 50 passes through a slot in the lock case, and is adapted to be engaged by shoulder 21 on the bolt locking slide 10^a. In Fig. 5, the slide 10^a is shown in its extreme position to the right with its depending arm 12 removed from the bolt, and the shoulder 21 out of the path of movement of the post 19^a. By now shifting the slide 10^a to the left or
 55 to its position for locking the bolt, the shoulder 21 will be moved under the post and thus lock it and the indicator against movement.

In both constructions described the indicator is always outside of the escutcheon
 65 and has simply a sliding movement over

the face of the escutcheon, and is superior to the push button type, because the maid or other attendant who wishes to see whether the door is locked from the inside before
 70 trying her key does not have to push on the indicator and thus rattle the door, and possibly annoy or wake up the occupant of the room.

It is evident that many slight changes might be resorted to in the relative arrangement of parts shown and described without
 75 departing from the spirit and scope of my invention. Hence I would have it understood that I do not confine myself to the exact construction and arrangement of parts
 80 shown and described, but

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:—

1. In a lock, the combination with an
 85 escutcheon having a slot therein, of an indicator mounted to slide over the outer face of said escutcheon, and a lever pivoted to the inner face of said escutcheon and carrying the indicator, the said lever coöperating
 90 with means adapted to be engaged by a movable part of the lock whereby the indicator will be locked against movement.

2. In a lock, the combination with an
 95 escutcheon having a slot therein, of an indicator mounted to have a sliding movement over the outer face of said escutcheon, a lever pivoted to the inner face of the escutcheon and carrying said indicator, a lock having a movable member and means coöperating with said pivoted lever and movable member of the lock whereby when said
 100 movable member of the lock is manually moved in one direction it will engage a part of said coöperating means and lock the indicator against movement.

3. In a lock, the combination of an escutcheon having a slot therein, an indicator mounted to slide on the outer face of same, a bell crank lever pivoted to the inner face of said escutcheon and connected with the indicator, a lock having a movable member and a post interposed between the indicator and said movable member of the lock, and coöperating with both, whereby the post will
 115 be locked against movement and the indicator blocked, when the movable member of the lock is in one position.

4. In a lock, the combination of an escutcheon having a slot therein, an indicator
 120 mounted to slide on the outer face of same, a bell crank pivoted to the inner face of said escutcheon and connected to the indicator, a lock having a sliding element, a slide carried by the escutcheon and adapted when in one position to lock the bell crank against movement and a post carried by the slide on the
 125 escutcheon and adapted to be engaged and moved by the sliding element of the lock.

5. In a lock, the combination of an es- 130

cutcheon having a slot therein, an indicator mounted to slide thereon, a spring actuated bell crank lever pivoted to the inner face of the escutcheon and connected to the
5 indicator, a lock having a sliding element, a side carried on the inner face of the escutcheon and actuated in one direction by a spring, and provided with a recess into which the free end of the bell crank lever may be
10 moved when said slide is in one position,

and a post carried by the slide on the escutcheon and adapted to be engaged and moved by the sliding element of the lock.

In testimony whereof, I have signed this specification in the presence of two sub- 15 scribing witnesses.

PETER F. AUGENBRAUN.

Witnesses:

REINHOLD SCHOELL,
HAROLD S. WISDOM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
