

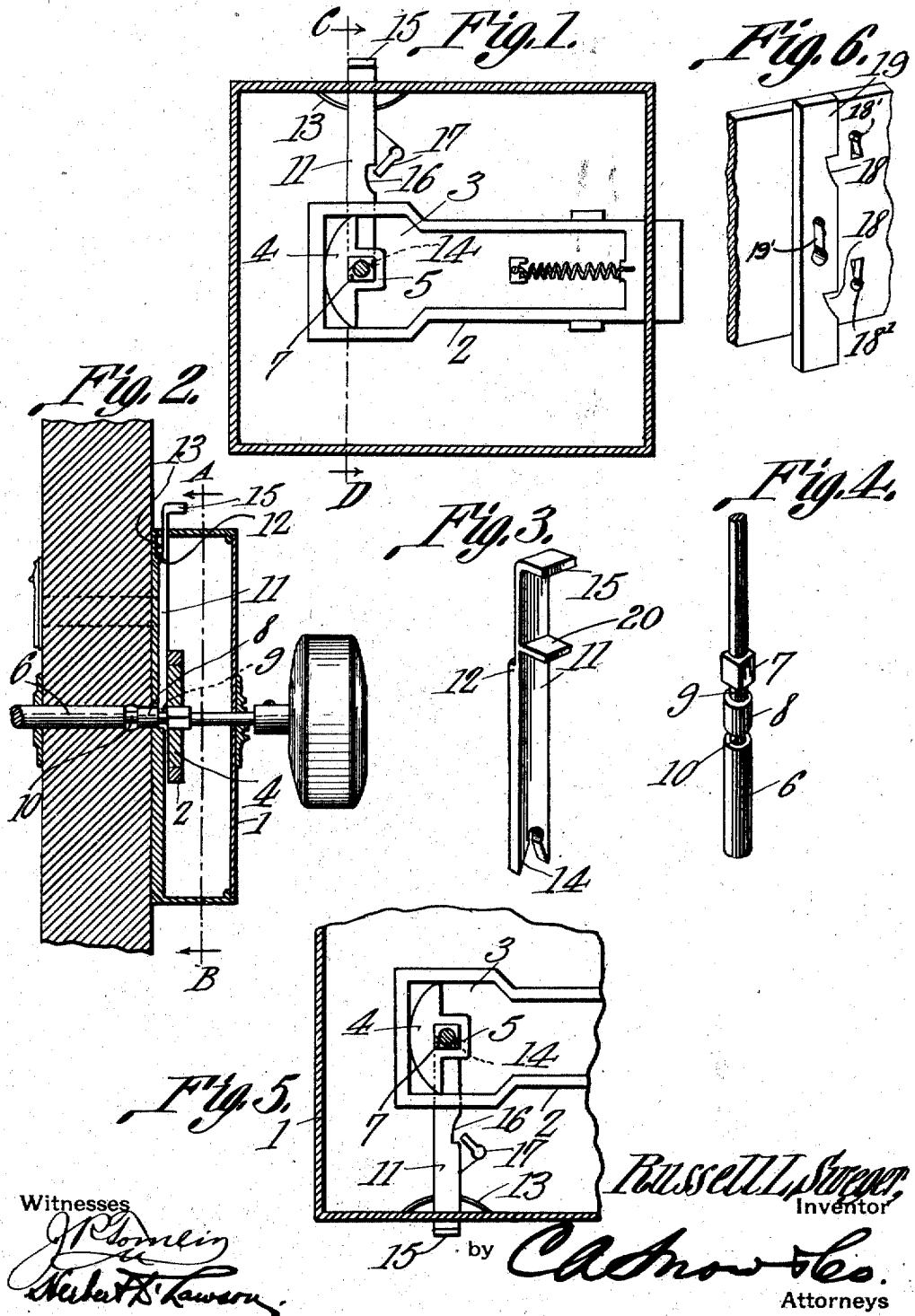
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DOOR LOCK.

APPLICATION FILED JULY 1, 1910.

985,224.

Patented Feb. 28, 1911.



UNITED STATES PATENT OFFICE.

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DOOR-LOCK.

985,224.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed July 1, 1910. Serial No. 570,005.

To all whom it may concern:

Be it known that I, RUSSELL L. SWEGER, a citizen of the United States, residing at Carlisle, in the county of Cumberland and State of Pennsylvania, have invented a new and useful Door-Lock, of which the following is a specification.

This invention relates to door locks and one of its objects is to provide simple means whereby the knob spindle of the lock can be secured in or out of engagement with the bolt retracting wing or roll back of the lock, the said spindle being shiftable longitudinally into either of said positions.

A further object is to provide means whereby a key can be used for unlocking the spindle to permit said spindle to be shifted longitudinally into any position desired relative to the said operating wing.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a section through the casing of the lock, said section being taken on the line A—B of Fig. 2. Fig. 2 is a section on line C—D Fig. 1. Fig. 3 is a perspective view of a slightly modified form of spindle lock. Fig. 4 is a perspective view of an intermediate portion of the spindle. Fig. 5 is a section through a portion of a modified form of lock and showing the spindle lock extending downwardly to the bottom of the casing. Fig. 6 is a perspective view of a portion of a modified form of spindle lock and showing the adjoining part of the lock casing, this lock being adapted for use in a reversible lock casing.

Referring to the figures by characters of reference 1 designates the lock casing having a spring pressed latch bolt 2 therein formed with an elongated opening 3 in which is arranged a retracting wing or roll back 4 having an angular sleeve 5 projecting therefrom. A knob spindle 6 is slidably and revolvably mounted within the casing 1 and is provided at intermediate points with an angular collar 7 and a cylindrical collar 8, there being an annular groove 9 between the two collars and another annular groove 10 between the collar 8 and the adjoining

portion of the spindle 6. A slide 11 is mounted within the casing and has a shoulder 12 against which bears a spring 13 which serves to hold one end of said slide normally pressed against the spindle at a point between the wing or roll back 4 and the wall of the casing 1. That end of the slide adapted to contact with the spindle, is preferably formed with an angular recess 14 and the other end thereof projects beyond the casing 1 and has a finger piece 15 thereon. A notch 16 is formed in one edge of the slide and is normally located adjacent the key-hole 17 formed within the casing 1.

It is to be understood that either of the collars 7 and 8 may be located within the angular sleeve 5. When the collar 7 is arranged within this sleeve, the spring 13 will automatically seat the recessed end 14 of slide 11 within the groove 9. It will be seen therefore that when the spindle 6 is rotated, the wing or roll back 4 will be moved therewith and will operate to retract the bolt 2. When the collar 8 is arranged within the sleeve 5, the slide 11 will be seated within the groove 10 and will hold the spindle against longitudinal movement. With the parts thus arranged, the spindle can be rotated in either direction without causing any movement of the wing or roll back 4. It will thus be seen that the bolt 2 cannot be retracted unless the spindle 6 is shifted longitudinally so as to bring the collar 7 into the sleeve 5. This is obviously impossible unless the slide 11 is shifted out of engagement with the groove 10. This can only be done by a person pulling on the finger piece 15 or by inserting a proper key into the hole 17 and turning it into the notch or recess 16 so as to force the strip longitudinally.

Although in Figs. 1 and 2 the finger piece of the slide 11 has been shown located above the casing 1, it is to be understood that, if preferred, the parts may be reversed as shown in Fig. 5 and with the finger piece underneath the casing. This is particularly desirable because the finger piece is thus practically concealed from view and is not likely to be tampered with by children or others unacquainted with the working of the lock.

If desired, the lock can be used either as a left-hand or a right hand lock by providing two key-holes 18 as in Fig. 6 and forming an opening 19 in the middle portion of a

strip 19 extending through the lock, for receiving the knob spindle. The strip 19 has key receiving recesses 18 therein, so that, when a key is inserted into either of the holes 18' and rotated, it will swing into the adjacent recess 18 and shift the strip 19 longitudinally so as to move said strip out of engagement with the spindle. With the key holes 18' arranged as shown in Fig. 6, the casing can be placed with either of the holes uppermost and the lock thus used either at the right or at the left of a door.

Instead of forming notches within the strips 11 and 19 for the reception of the key, an ear or projection 20 may be arranged transversely upon the strip as shown in Fig. 3, this projection also, if desired, serving as a bearing for the spring 13.

Various changes can of course be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claims.

What is claimed is:—

1. A lock including a bolt, a roll back, a longitudinally movable spindle having annular grooves, there being a rounded portion and an angular portion upon the spindle and adjacent the grooves, either of said portions being shiftable into the roll back, and a key-operated spindle holding member normally seated in one of the grooves to hold the spindle against longitudinal movement.

2. A lock including a casing, a bolt, a roll

back, a longitudinally movable spindle extending through the casing and roll back and having spaced annular grooves, there being a cylindrical portion and an angular portion upon the spindle and adjacent the grooves and either of which is shiftable into the roll back, a slide mounted within the casing and having an opening of variable width through which the spindle extends, means for normally holding the slide seated within one of the grooves to hold the spindle against longitudinal movement, said slide having key engaging portions, and means for guiding a key to said portions to shift the slide and release the spindle.

3. A lock including a casing, a bolt, a roll back, a longitudinally movable spindle having spaced annular grooves, said spindle being provided with a rounded portion and an angular portion adjacent the grooves, either of said portions being movable into the roll back, a slide extending beyond the casing and having an opening through which the spindle extends, said opening being of variable width and the wall thereof being normally seated within one of the grooves, and key operated means for shifting the slide out of engagement with the spindle.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

RUSSELL L. SWEGER.

Witnesses:

WARREN G. HUGHES,
HARRIETT SWEGER.