R. SCHOELL.

KNOB SPINDLE AND LOCK.

APPLICATION FILED MAY 18, 1912.

1,044,262. **Patented Nov. 12, 1912.**

Fig. 1.

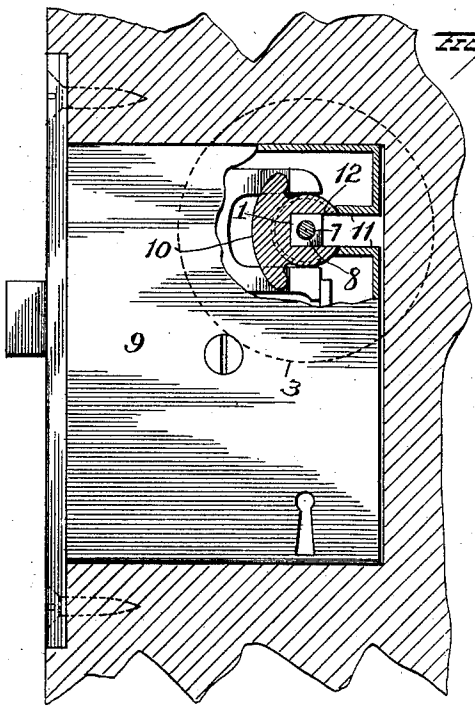


Fig. 2.

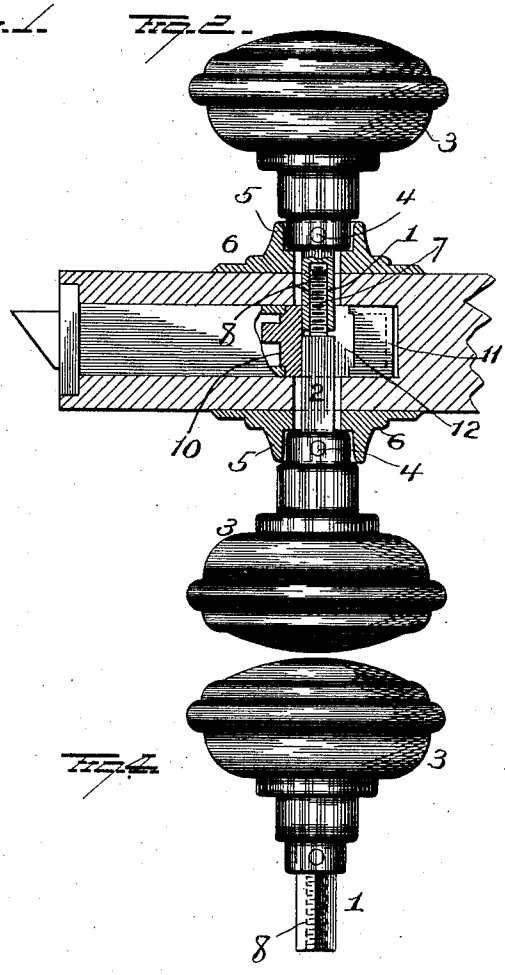


Fig. 3.

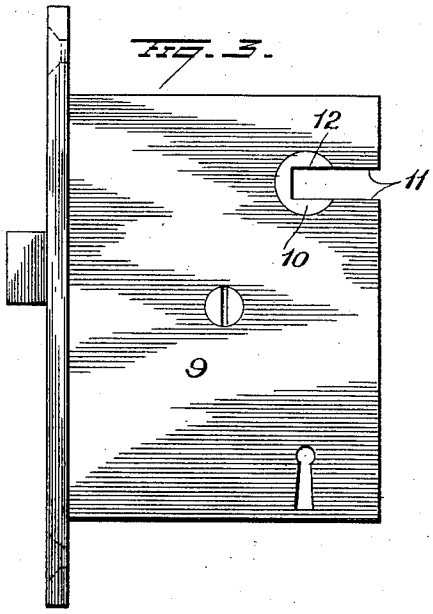
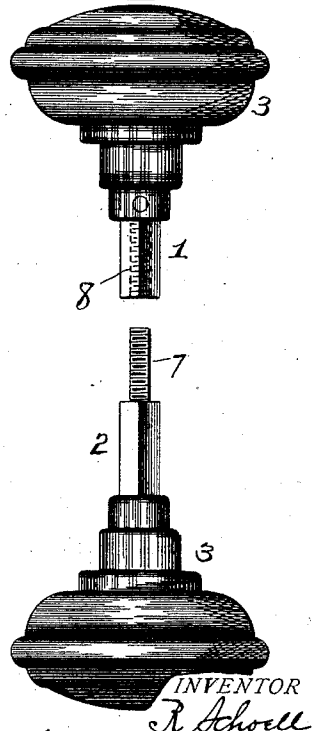


Fig. 4.



WITNESSES

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KNOB-SPINDLE AND LOCK.

1,044,262. Specification of Letters Patent. Patented Nov. 12, 1912.

Application filed May 18, 1912. Serial No. 698,258.

To all whom it may concern:

Be it known that I, REINHOLD SCHOELL, a citizen of the United States, residing at Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Knob-Spindles and 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 knob spindles and locks, the object being to provide a lock so constructed that it can be disconnected from the knob spindle and removed from the door without removing the spindle from the door or disconnecting either knob.

A further object is to provide a spindle adjustable as to length so as to adapt itself to the thickness of the door to which it may be applied, and a lock casing and roll back constructed to permit the roll back to be connected up with the spindle after the latter has been adjusted and secured to the door.

With these objects in view my invention consists in a spindle divided transversely into two sections detachably connected at their inner ends, and a lock casing and hub of the roll back, both slotted to receive the two ends of the spindle whereby the spindle may be first adjusted and secured to the door, and the lock then moved into position to connect the roll back with the spindle.

The invention further consists in the two part spindle connected by screw joint whereby the spindle may be lengthened or shortened to accommodate itself to doors of different thicknesses, in combination with a lock casing and roll back, having alined slots whereby the lock may be applied to the spindle after the latter has been adjusted and secured to the door.

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

In the accompanying drawings, Figure 1 is a view in vertical section through a door and knob spindle and showing the lock in elevation. Fig. 2 is a view in horizontal section through the door, rear end of the lock casing, roll back and spindle. Fig. 3 is a view of the lock removed, and Fig. 4 is a view of the two sections of the spindle disconnected.

1 and 2 represent the two sections of a spindle, each of which carries a knob 3, permanently secured to the spindle sections by rivets 4, or detachably secured by screws in the usual manner, which securing devices, either rivets or screws, are concealed by the sleeves 5 on the escutcheons 6 when the parts are assembled. One section 2 of the spindle is provided with a threaded inner end 7, and the section 1 is provided with a threaded hole 8 to receive the threaded end 7 of its companion section 2. The two spindle sections are introduced from the opposite sides of the door and are secured together by the screw end 7 of one section engaging the threaded hole 8 in the end of the other section. The screw and threaded hole can be of a length sufficient to provide for the necessary adjustments of the spindle to accommodate the latter to doors of different thicknesses.

9 is the lock casing and 10 is the roll back, mounted in the casing in the usual manner. The portion of the casing in rear of the roll back is provided with a slot 11, which latter extends forwardly to the roll back 10, and the latter is also slotted as at 12, which slot, normally alines with the slot 11 in the lock casing 1. The slots 11 and 12, are of the same width as the spindle, so that by introducing the lock into the mortise in the door, the slot 11 alines with the spindle so that when the lock is fully entered in the mortise, the spindle will be properly positioned in the center of the hub of the roll back. The hub of the roll back is as long as the lock casing is thick consequently it permits of the extension or elongation of the spindle a distance equal to the length of the hub of the roll back. The angular inner portion of both sections of the spindle must of course be overlapped by the hub of the roll back, but the length of the said hub is sufficient to allow for the necessary adjustment of the spindle to properly fit the door and still overlap the angular ends of both sections of the spindle, so as to prevent any independent rotary movement of either section of the spindle.

The lock is secured to the door by screws passing through the face plate in the ordinary manner.

When the two parts of the spindle are screwed together, to the proper adjustment for the door on which they are to be used, the hub of the roll back engages the inner angular ends of both sections of the spindle and absolutely prevents either from unscrewing, so that when the lock has been properly placed on the spindle, the adjustment of the latter cannot be changed, nor can the spindle, or either section thereof be pulled out. This gives very accurate adjustment to the spindle, and absolute security against its coming loose, while the means securing the knobs to the spindle sections are concealed by the sleeves 5 on the escutcheon, and are therefore not accessible from the outside.

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

1. In a lock, the combination of a two part spindle detachably connected at their inner ends and a single roll back the hub of which engages both sections of the spindle.

2. In a lock, the combination of a two part spindle, each part carrying a knob, and having a connection at their inner ends which permits of longitudinal adjustment to suit doors of different thicknesses, and a single roll back the hub of which overlaps and engages the angular ends of both sections of the spindle.

3. In a lock, the combination of a two part spindle, one part provided at its inner end with a screw adapted to enter a threaded hole in the other part, and a single roll back the hub of which engages the angular ends of both sections of the spindle.

4. In a lock, the combination of a sectional spindle, the sections of which are adapted to be connected so as to prevent longitudinal separation, a lock case slotted to receive the inner ends of both sections of the spindle, and a roll back mounted to turn in said casing, the said roll back having a slot adapted to normally rest in line with the slot in the casing whereby the lock may be passed onto the spindle until the latter rests within the hub of the roll back.

5. In a lock, the combination of a spindle divided transversely into two sections, one of which is provided at its inner end with a screw and the other with a threaded hole to receive said screw, and a lock casing and roll back, both slotted to receive the inner ends of both sections of the spindle, whereby the latter may be first applied and adjusted to a door, and the lock then placed in position with its roll back engaging both sections of the spindle.

6. In a lock, the combination with a spindle, of a lock casing and roll back both slotted to permit the roll back to be moved onto the spindle.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

REINHOLD SCHOELL.

Witnesses:
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