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ATTACHMENT FOR DOOR LATCH HANDLES.

APPLICATION FILED JAN. 28, 1913.

1,097,626. Patented May 26, 1914.

Fig. 1.

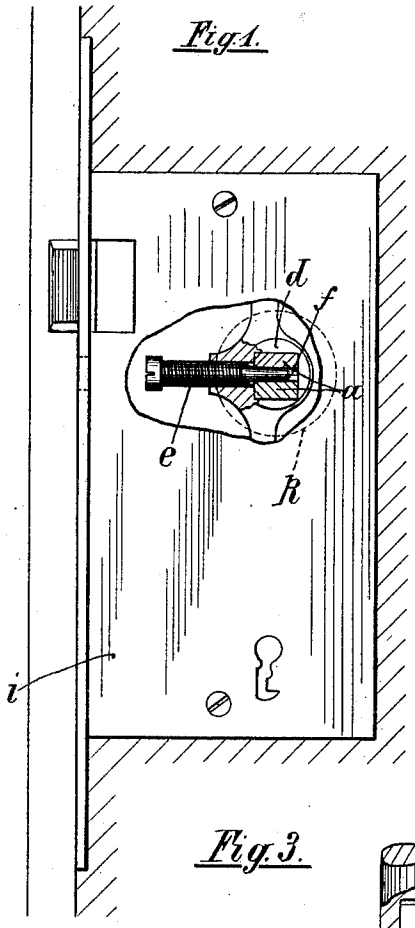


Fig. 2.

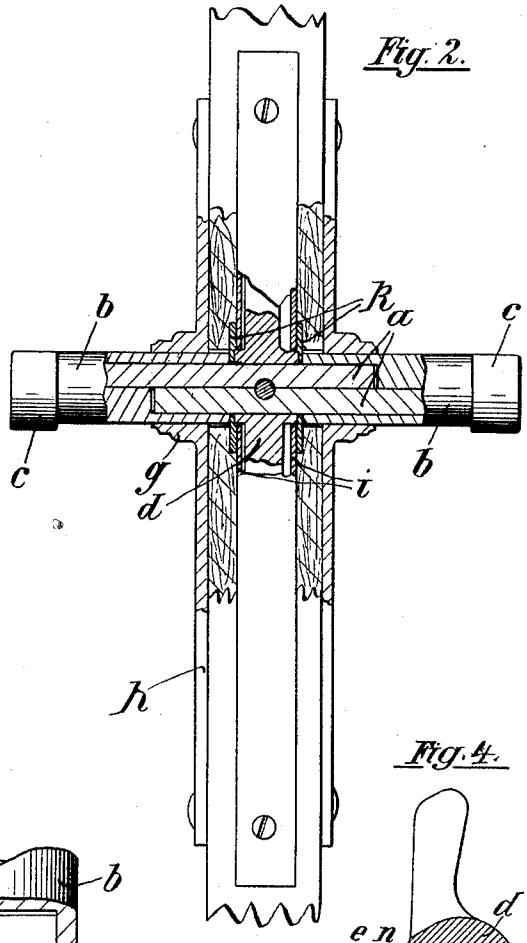


Fig. 4.

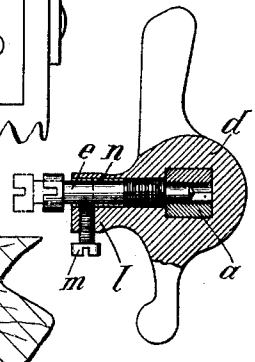
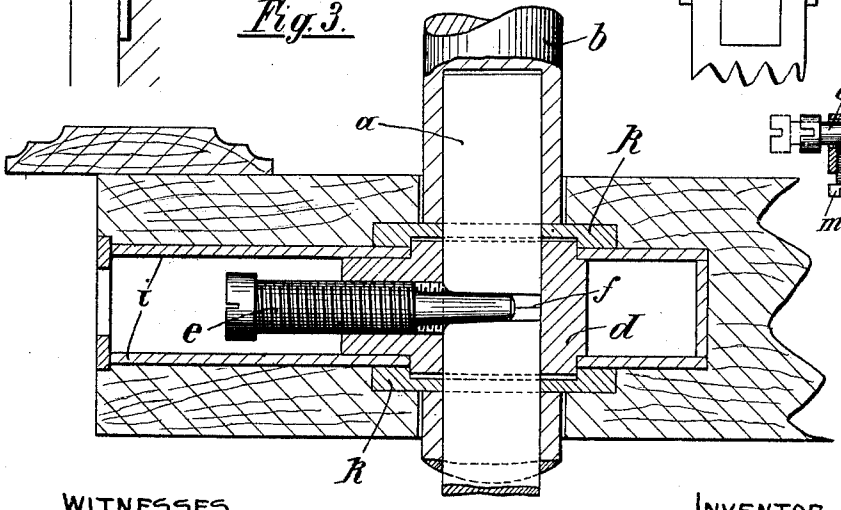


Fig. 3.



WITNESSES

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ATTACHMENT FOR DOOR-LATCH HANDLES.

1,097,626. Specification of Letters Patent. Patented May 26, 1914.

Application filed January 28, 1913. Serial No. 744,656.

To all whom it may concern:

Be it known that I, FRIEDRICH HAIZMANN, a citizen of the German Empire, residing at Stuttgart, in the Kingdom of Wurttemberg, Empire of Germany, have invented certain new and useful Improvements in Attachments for Door-Latch Handles; 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.

This invention relates to improvements in means for mounting door knobs, handles or similar devices and the spindles thereof upon door latch cases particularly of the mortise type.

One object of the invention is to provide a special form of spindle that will be suitable to any usual thickness of door and will not get out of proper adjustment or rattle or have its parts accidentally separated.

The invention is particularly described with reference to some forms of construction illustrated by way of example in the accompanying drawings, in which:—

Figure 1 is a side view of the improved lock with the main plate or casing partly broken away; Fig. 2, an end view and partial section; Fig. 3, an enlarged horizontal section of a lock provided with the improvement. Fig. 4 is a sectional view through the follower showing the stopping device for the tightening screw.

The parts of the divided spindle *a* which rest flat one upon each other and the ends of which engage in opposite directions in recesses in the necks *b* of the handles *c*, pass in the usual manner through the roll back *d*. A screw or threaded pin *e* has its point pressed between the two parts *a*, whereby these are forced against the roll back and are also fastened securely in the neck *b* of the handle *c*. A radial recess, for example in the shape of a cylindrical perforation, serves, according to this invention, for receiving the smooth point of the threaded pin *e*. Now in order to allow for the varying thicknesses of the doors, the neck *b* is made smooth and may lie in a collar *g* on the escutcheon *h*. According as the door is thinner or thicker the handles project correspondingly more or less out of the collar *g*.

In order to prevent the handles *c* rattling, a sheet metal disk or washer *k* is placed outside of each of the main plates *i* in which disk the boss of the roll back *d* is mounted. The necks *c* of the door handles bear at their inner ends against these disks *k*, so that rattling is prevented.

In order to prevent the screw *e* from being screwed out of the roll back *d* completely, there is provided in the projection *l* of the roll back *d* a stop, for instance in form of a screw *m*, arranged transversely to the screw *e* and the latter has a groove *n*, in which the screw *m* engages and which may press against the shank. By this device the screw *e* may only be screwed back until its shoulder formed by the groove *n* at the end of the threads comes against the stop *m*, as can be seen from Fig. 4.

I declare that what I claim is:—

1. In a door latch, the combination of a roll-back having a passage therethrough; a split spindle having members passing through said roll-back; handle necks having recesses receiving the ends of said members, each member being loosely received by one recess; and a single unitary means for simultaneously positively locking said members against longitudinal movement in the roll-back.

2. In a door latch, the combination of a roll-back having a passage therethrough; a split spindle having members passing through said roll-back; handle necks having recesses receiving the ends of said members, each member being loosely received by one recess; and a single unitary means for simultaneously locking said members to the roll-back and to the handle necks and positively locking the members against relative longitudinal displacement.

3. In a door latch, the combination of a roll-back having a passage therethrough; a split spindle having members passing through said roll-back; handle necks having recesses receiving the ends of said members, each member being loosely received by one recess; and a pin engaging between said members and positively locking said members against longitudinal movement in the roll-back and to the handle necks.

4. In a door latch, the combination of a roll-back having a passage therethrough; a split spindle having members passing through said roll-back; handle necks having recesses receiving the ends of said members, each member being loosely received by one recess; and a threaded pin engaging between said members and positively locking

said members against longitudinal movement in the roll-back and to the handle necks.

5. In a door latch, the combination of a roll-back having a passage therethrough; a split spindle having members passing through said roll-back; handle necks having recesses receiving the ends of said members, each member being loosely received by one recess; and a single unitary threaded pin engaging between the said members and locking said members to the roll-back and to the handle necks and positively locking the members against relative longitudinal displacement.

6. In a door latch, the combination of a roll-back having a passage therethrough and a radial bore communicating with said passage; a split spindle passing through said passage, the members of said spindle being provided with coöperating semi-cylindrical recesses together coöperating to form a cylindrical radial perforation; handle necks having recesses receiving the ends of said members, each member being loosely received by one recess; and a pin snugly received in said radial perforation and simultaneously forcing said members in the handles and roll-back and positively holding said members against relative longitudinal displacement.

7. In a door latch, the combination with a door having a mortise, a lock in the mortise having a roll-back and a split spindle passing through the roll-back and the mortise; handle necks having recesses receiving the spindle; escutcheons on both faces of the door and having collars receiving the handle necks; said necks being of constant diameter throughout a distance extending to points remote from the collars on both sides of the collars; and means for forcing the parts of the split spindle apart to lock in the roll-back and recesses.

8. In a door latch, the combination with a door having a mortise, of a lock casing in the mortise and having openings in the side plates thereof; a roll-back in said casing having circular extensions passing through said openings; a spindle; means holding the spindle in the roll-back; washers surrounding the spindle and having inturned annular flanges receiving said circular extensions and engaging said side plates; and cylindrical handle shanks bearing against said washers and forming continuations of the spindle.

9. In a door latch, the combination of a roll back having a passage passing therethrough and a radial opening communicating with said passage; a split spindle passing through said passage, the parts of said split spindle being provided with coöperating recesses together forming a substantially cylindrical perforation registering with said opening; a screw in said opening and having its end fitting in said perforation; and provided with a wide annular groove; and a stop carried by the roll back and engaging in said groove.

In testimony whereof I affix my signature, in presence of two witnesses.

FRIEDRICH HAIZMANN.

Witnesses:

KARL RILTH,

PRIDE KLAIBER.

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