No. 721,802. PATENTED MAR. 3, 1903.

J. A. HORNE.

CYLINDER LOCK.

APPLICATION FILED DEC. 9, 1902.

NO MODEL.

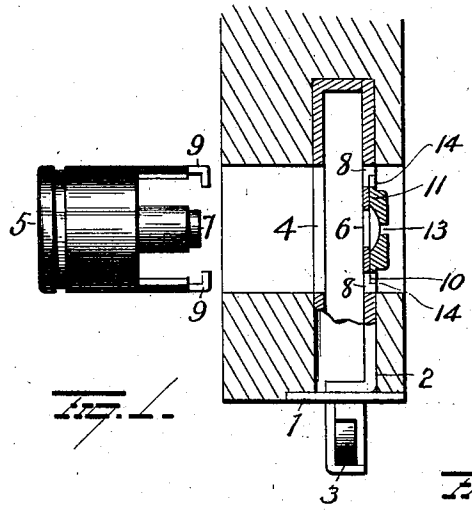


Fig. 1.

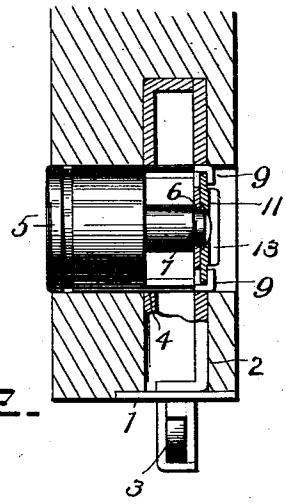


Fig. 2.

Fig. 3.

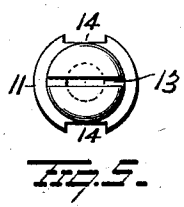


Fig. 5.

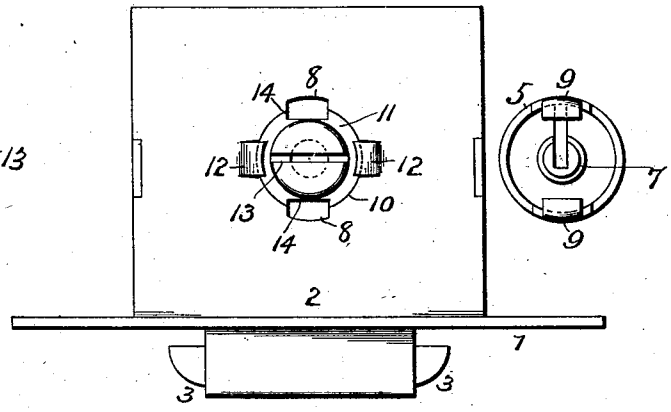
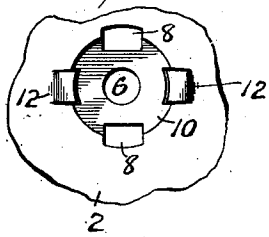
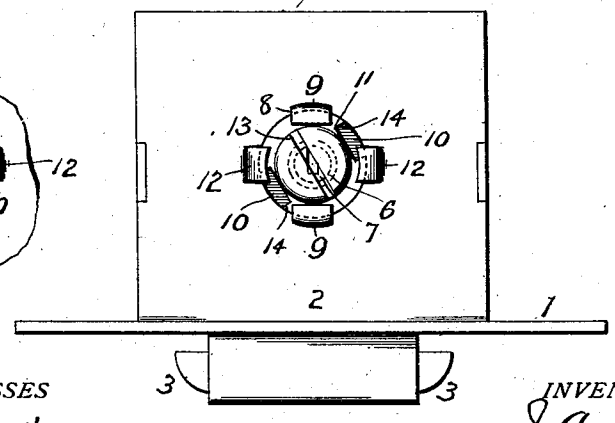


Fig. 4.

Fig. 6.





WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH A. HORNE, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE YALE & TOWNE MANUFACTURING COMPANY, OF STAMFORD, CONNECTICUT.

CYLINDER-LOCK.

SPECIFICATION forming part of Letters Patent No. 721,802, dated March 3, 1903.

Application filed December 9, 1902. Serial No. 134,608. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. HORNE, of Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Cylinder-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 mortise cabinet-locks, the object being to provide a lock of this character with simple and easily-operated means for detachably connecting the cylinder to the lock-casing; and it 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 sectional view showing the manner of assembling the lock and casing. Fig. 2 is a similar view showing the parts assembled. Fig. 3 is a view of the rear side of the casing, the key-cylinder being removed and shown at the side. Fig. 4 is a rear view showing the cylinder locked in place, and Figs. 5 and 6 are detail views.

1 represents the face-plate carrying the casing 2, within which are mounted the spring locking-bolts 3, of any approved construction. The casing is provided in its front face with a circular opening 4 to receive the inner end of the key-cylinder 5 and in its rear face with a smaller opening 6 to receive the rear or free end of the key post or guide 7 and with two rectangular openings 8, preferably on diametrically opposite sides of the opening 6, for the passage of the hooked projections 9 on the rear or inner end of the cylinder 5. The outer surface of the rear face of the casing is provided with a depressed circular seat 10, concentric with the opening 6, to receive the locking-disk 11, which latter rests on or within said seat 10 and is held in place by the overhanging lips 12, which latter are struck up from the rear face of the casing or secured to said casing in any approved manner. These lips 12 overlap the outer edge of the disk 11, and while they permit of a free rotation of the disk in or on its seat they absolutely prevent displacement of said disk after the parts have been once assembled. The disk 11 is thickened at its center and provided on its outer face with a slot 13 for the reception of a screw-driver or other tool employed for turning the disk, and it is provided on its periphery with diametrically opposite slots or cut-away sections 14, through which the hooked projections 9 on the cylinder 5 pass. When the cylinder is placed in position, the projections 9 thereon pass through the rectangular openings 8 in the rear plate of the casing and through the slots or cut-away portions in the disk 11, and when so placed by giving the disk a part rotation the periphery of the latter takes under the hooks on the projections 9 and locks the cylinder in place. To remove the cylinder, it is simply necessary to turn the disk 11 until the cut-away portions thereof aline with the rectangular openings 8 in the rear plate of the casing, thus leaving the cylinder free to be withdrawn. In applying this lock to a desk-cover or door of a cabinet the mortise is formed in the edge of the cover or door and the cylindrical hole for the key-cylinder is formed transversely through the door from one side to the other. The lock is then secured in the mortise and the cylinder to the lock, the cylindrical hole through the cover or door exposing the disk from the inner or under side of the cover or door, so that when the latter is open the disk can be reached from the inner or under side.

I do not limit myself to any particular locking mechanism, but consider myself at liberty to apply my improvements to a cylinder-lock of any construction whatsoever. It is also evident that slight changes and alterations in the details of construction may be resorted to without departing from the spirit of my invention. Hence I would have it understood that I do not confine myself to the exact details of construction shown, but consider myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

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

1. In a cylinder-lock, the combination with a lock-casing, and a movable locking-plate carried on the rear or inner plate of said cas-

ing, of a key-cylinder having hooked projections which pass through the lock-casing, the hooks in the cylinder adapted to pass beyond the locking-plate and overlap the latter when the parts are in a locked position.

2. In a cylinder-lock, the combination with a lock-casing having an opening in its front face, and a movable disk carried on its rear face, of a key-cylinder adapted to enter the front face of the casing and having hooked projections which pass through the rear face, the said hooked projections being engaged by the movable disk.

3. In a cylinder-lock, the combination with a casing having an opening in its front face, a rotating disk mounted in a recessed seat in the rear face of the casing and means for holding said disk on its seat, of a key-cylinder adapted to pass through the opening in the front face of the casing and provided at its rear end with hooked projections, the hooks on the projections adapted to overlap the disk and be locked in place thereby.

4. In a cylinder-lock, the combination with a casing having an opening through its front face, and a plurality of smaller openings through its rear face, a circular disk resting against the rear face of the casing and lips overhanging said disk and locking the same in place, of a key-cylinder passing through the front face of the casing and provided with hooked projections which pass through the smaller openings in the rear face of the casing, and overlap the disk when the latter is turned.

5. In a cylinder-lock, the combination with a casing having an opening through its front face and a plurality of smaller openings through its rear face, and a rotating disk mounted on the outer face of the rear plate of the casing and provided with slots in its periphery, of a key-cylinder provided at its rear or inner end with hooked projections which pass through the openings in the rear plate of the casing and through the slots in the disk and are locked in place by a partial rotation of said disk.

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

JOSEPH A. HORNE.

Witnesses:
SCHUYLER MERRITT,
NATHAN G. CHATTERTON.