P. F. AUGENBRAUN.

MEANS FOR ATTACHING A LOCK CYLINDER TO A PLATE OR OTHER SIMILAR ARTICLE.

APPLICATION FILED JULY 13, 1916.

1,207,465. Patented Dec. 5, 1916.

Fig. 1.

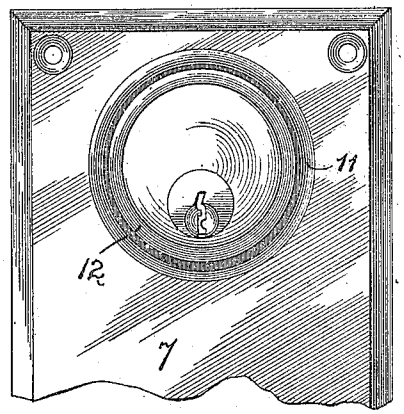


Fig. 2.

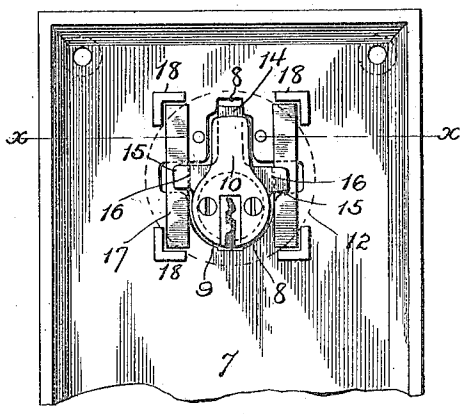


Fig. 4.

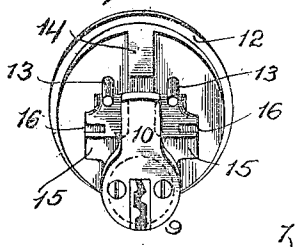


Fig. 3.

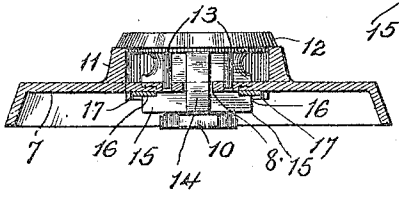


Fig. 6.

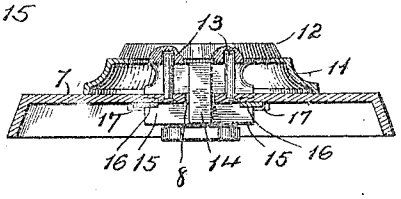


Fig. 5.

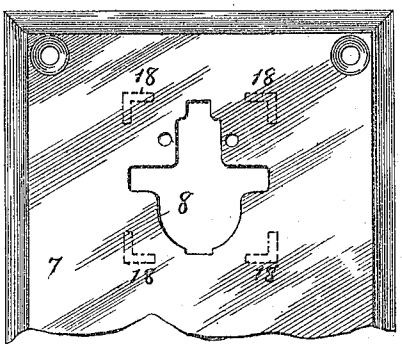


Fig. 7.

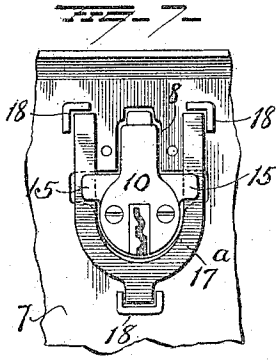


Fig. 8.

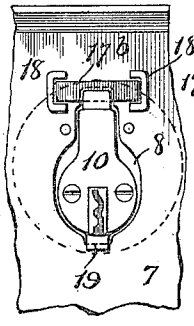
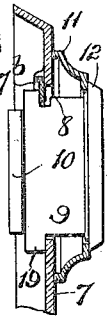


Fig. 9.



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UNITED STATES PATENT OFFICE.

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

MEANS FOR ATTACHING A LOCK-CYLINDER TO A PLATE OR OTHER SIMILAR ARTICLE.

1,207,465. Specification of Letters Patent. Patented Dec. 5, 1916.

Application filed July 13, 1916. Serial No. 109,074.

To all whom it may concern:

Be it known that I, PETER F. AUGENBRAUN, a citizen of the United States, and a resident of Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Means for Attaching a Lock-Cylinder to a Plate or other Similar Article; 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 means for attaching a lock cylinder to a plate or other similar article,—the object being to dispense altogether with screw threaded connections between the cylinder and the plate, and the invention consists in the parts and combinations of parts as will be more fully explained and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation of a lock plate with my invention applied thereto. Fig. 2 is a view from the rear. Fig. 3 is a view in section on the line x x of Fig. 2. Fig. 4 is a view of the cylinder detached. Fig. 5 is a view of the plate, the cylinder being removed. Fig. 6 is a view in section showing the pins on the head extending into holes in the plate, and also showing a modification of the flange which forms the seat for the cylinder, and Figs. 7, 8 and 9 are views of modifications.

It will be obvious that to make a screwless attachment of a lock cylinder to a plate, which will present a neat and finished appearance and be secured mechanically, it will be necessary to positively secure the cylinder from rotating or from moving endwise with reference to the plate. This I have accomplished by the construction in which 7 represents a plate, adapted for attachment to a door or other object and provided with an opening 8 for the passage of the inner end of the cylinder 9 and the cam 10 carried by the key plug in the cylinder, the cylinder, key plug and cam being of the ordinary construction used in pin tumbler locks. The plate is preferably provided with an outwardly projecting flange 11 which may be integral with the plate or which may be a sheet or cast metal collar resting on the plate as shown in Fig. 6. This flange forms the seat for the head 12 of the cylinder, and encircles the opening in the plate for the passage of the inner end of the lock.

The head of the cylinder is provided on its rear face with a series of pins 13, the free ends of which are adapted to enter holes in the plate 7 and prevent any rotary movement of the cylinder. I have shown two pins, but the number is not material, and instead of forming the pins integral with the head of the cylinder and entering holes in the plate 7, they may be formed integral with the plate 7 and enter sockets in the rear face of the head 12, as shown in Fig. 6. Instead of using pins, the rotary movement can be prevented by making the opening 8 in the plate 7 so as to snugly fit the cylinder and projection 14 therefrom. The cylinder is also provided at opposite sides with wings or lugs 15, each of which latter is provided with a slot or kerf 16, into which the metal strips 17, preferably spring metal, are forced, the ends of said strips bearing against the rear face of plate 7 and held against displacement by the shoulders 18 cast integral with the plate 7.

To apply the cylinder, its rear end is passed through the opening 8 in plate 7 and seated on the flange 11, and when so placed the pins 13 will prevent any rotary movement of the cylinder in or on the plate. The metal strips are then forced or sprung into the slot 16, and when in position their ends abut against the shoulders 18 which absolutely prevent accidental end or sidewise displacement. Instead however of employing two independent metal strips as previously described, they may be united in horseshoe form as at 17^a in Fig. 7, or one strip 17^b only may be employed as in Figs. 8 and 9. In this latter construction the cylinder is provided with a lug 19 which hooks over the inner face of the plate 7.

It is evident that other changes may be made without departing from the spirit and scope of my invention, hence I would have it understood that I do not confine myself to details shown and described but consider myself at liberty to make such changes as may 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 lock, the combination of a lock

casing having an opening, a cylinder the end of which passes through said opening, the cylinder and opening being so shaped as to prevent any rotary movement of the cylinder in the opening, the said cylinder being provided with a lug, and a fastening strip engaging the front face of the lug and the rear face of the lock casing for locking the cylinder to the casing.

2. In a lock, the combination of a plate having an opening therein, a cylinder the inner end of which passes through said opening, the said cylinder being provided with side lugs, and spring strips engaging said lugs and the rear face of the plate for locking the cylinder to the plate.

3. In a lock, the combination of a plate having an opening therein and a flange around said opening, a cylinder having side lugs, seated on said flange with its inner end and lugs passing through the said opening, the cylinder and opening being so shaped as to prevent any rotary movement of the cylinder relative to the plate, and fastening strips engaging said lugs and the inner face of the plate for locking the cylinder against endwise movement.

4. In a lock, the combination of a plate having an opening, a flange surrounding said opening, a cylinder having side lugs, and seated on said flange with its inner end and side lugs passed through said opening, pins engaging said cylinder and plate for preventing rotary movement of the cylinder, and strips engaging the side lugs and rear face of the plate for locking the cylinder against endwise movement.

5. In a lock, the combination with a plate having an opening therein and provided on its rear face with a series of shoulders, a cylinder having side lugs, the rear end and side lugs of said cylinder passing through the opening in the plate, and spring fastening strips engaging said side lugs and rear face of the plate, the said strips being held against displacement by the shoulders on the plate.

6. In a lock, the combination of a lock casing having a non-circular opening therein, a lock cylinder the inner end of which conforms in shape to said opening, whereby the cylinder is prevented from rotating in the casing, the said cylinder having a lug on its end within the casing and a fastening strip engaging the front face of the lug and the rear face of the casing for locking the cylinder to the casing.

7. The combination with a lock casing having a non-circular opening in one face and a flange around said opening, a lock cylinder having a lug, the inner end of the cylinder conforming in shape to the opening in the casing whereby the cylinder is prevented from turning in the casing, and a fastening strip engaging the front face of the lug and the rear face of the casing for holding the outer end of the cylinder against the flange on the casing.

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

PETER F. AUGENBRAUN.

Witnesses:
S. C. WHITNEY,
CHAS. A. BERRY.

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