May 17, 1927. 1,629,172

J. J. MURPHY

CYLINDER LOCK

Filed Jan. 19, 1926

Fig. 1.

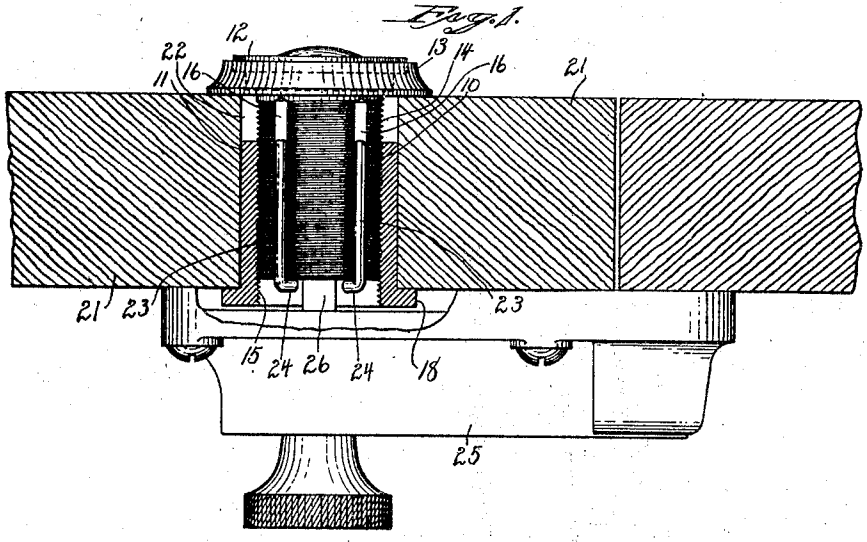


Fig. 2.

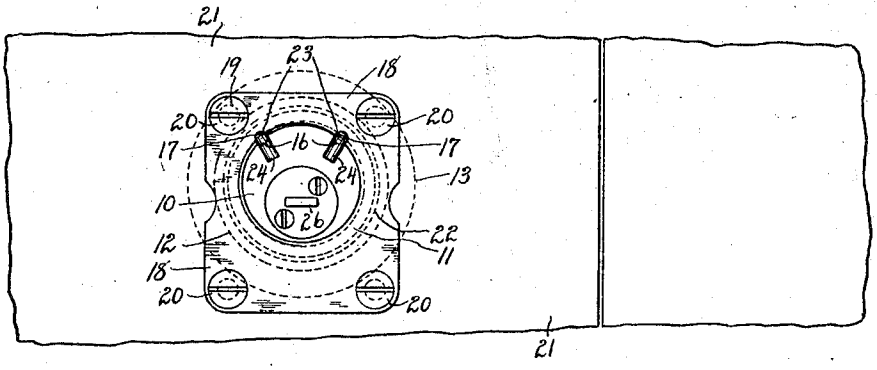


Fig. 3.

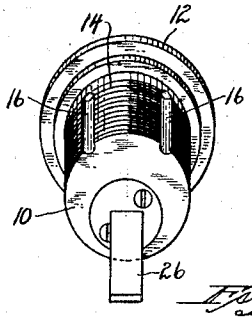


Fig. 4.

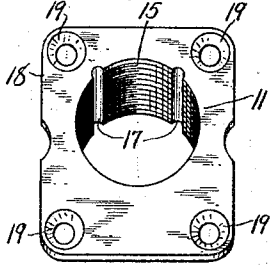
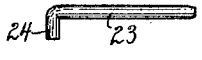


Fig. 5.



Inventor
James J. Murphy
by Seymour Earle & Nichols
attys.

Patented May 17, 1927. 1,629,172

UNITED STATES PATENT OFFICE.

JAMES J. MURPHY, OF TERRYVILLE, CONNECTICUT, ASSIGNOR TO EAGLE LOCK CO., OF TERRYVILLE, CONNECTICUT, A CORPORATION.

CYLINDER LOCK.

Application filed January 19, 1926. Serial No. 82,238.

Fig. 1 is a plan view, partly in section, of a cylinder lock embodying my invention, as installed.

Fig. 2 is a view thereof, in inside elevation, with the latch-unit removed.

Fig. 3 is a detached, persective view of the cylinder-unit.

Fig. 4 is a corresponding view of the housing-unit.

Fig. 5 is a detached view of one of the locking-pins.

My invention relates to an improvement in that class of cylinder locks known in the trade as "night-latches," the object being to provide such a lock-mechanism with simple and effective, "jimmy-proof" means, whereby the lock is prevented from being forced by the surreptitious bodily rotation of its cylinder from the exposed front end thereof.

With these ends in view, my invention consists in a cylinder lock characterized by being constructed and adapted to receive locking-means for insertion from the rear of the lock, between the cylinder and the housing thereof, whereby the cylinder is prevented from being bodily rotated from its exposed front end, after the installation of the lock.

My invention further consists in a cylinder lock characterized by having its externally-threaded cylinder provided with one or more longitudinal grooves, and also by having its internally-threaded housing provided with one or more similar longitudinal grooves, the said grooves in the cylinder and housing being spaced apart, so that, when brought into registration, they will receive locking-pins, by which the cylinder and housing are positively held against relative rotation after the installation of the lock.

My invention further consists in a lock of the character described, having certain further details of construction and combinations of parts as will be hereinafter described and pointed out in the claims.

In carrying out my invention, as herein shown, I employ a standard cylinder lock having a cylinder-unit 10 and a housing- or sleeve-unit 11 of any approved construction. At its forward end, the cylinder-unit is formed with an annular flange 12 which, when the lock is installed, sets into an ordinary annular escutcheon 13.

The said cylinder-unit 10 is formed with external threads 14, adapting it to be screwed into the corresponding internal threads 15 of the housing-unit 11 in the usual manner.

As shown, the external threads 14 of the cylinder-unit are intersected by two longitudinal, semi-cylindrical grooves 16 entering it from its inner end, while the internal threads 15 of the housing-unit are intersected by two corresponding, semi-cylindrical grooves 17 extending into it from its inner end, which is furnished, as shown, with a mounting-flange 18 having screw-holes 19 for the reception of screws 20, by which the housing-unit is secured to the inner face of the door 21, which is formed with a transverse bore 22 to receive it.

The grooves 16 of the cylinder-unit and the grooves 17 of the housing-unit are similarly spaced apart, so that, when brought into registration, they together form substantially round openings just large enough for the reception of removable locking-pins 23, bent at a right angle at their rear ends to form stop-arms 24 when inserted into the said grooves, the pins 23 then lying substantially half within the cylinder-unit and half within the housing-unit, and positively preventing the same from relative rotation, should an attempt be made to forcibly rotate the cylinder from the outside of the door by applying a pipe-wrench or any other effective tool to the annular flange 12 of the cylinder for the rotation of the same, and hence the operation of the latch-unit 25 through the bar 26, which couples the latch-unit with the cylinder-unit.

In installing a lock constructed in accordance with my invention, the cylinder-unit and the housing-unit are inserted into the bore 22 of the door 21 from the opposite sides thereof and screwed together, so that the grooves 14 in one part are aligned with the grooves 15 of the other part, after which the locking-pins 23 are inserted into these registered grooves from the rear face of the housing-unit, the flange 18 of which is now secured to the door by the screws 20, whereby the housing- and cylinder-units are held against relative rotation in the bore 22 of the door,—the housing-unit by the screws 20 and the cylinder-unit by the locking-pins 23.

The number of grooves in the units may

be varied as desired,—one groove in each unit would suffice, but I prefer to employ two or more.

Preferably, the locking-pins, or whatever form the locking-means may assume, are made removable, but this is not essential, as such means might be fixed after installation.

I claim:

1. In a cylinder-lock, the combination with an externally-threaded cylinder-unit for insertion into a door from the outside thereof, of an internally-threaded housing-unit for insertion into the door from the inside thereof, to which it is secured, whereby the two units are extensibly connected and installed in the door against longitudinal movement in either direction, and means concurrently engaging with the said units for preventing their relative rotation in the door, the said means being insertable from the rear end of the locking-unit.

2. In a cylinder-lock, the combination with an externally-threaded cylinder-unit for insertion into the door from the outside thereof, of an internally-threaded housing-unit for insertion into the door from the inside thereof, the said housing-unit being provided with a flange by means of which it is attached to the inside of the door, whereby the two units are extensibly connected and installed in the door against longitudinal movement in either direction, and means for preventing the relative rotation of the said units within the door, the said means being inserted through the inner end of the housing-unit to concurrently engage with the internal periphery thereof and the external periphery of the cylinder-unit.

In testimony whereof, I have signed this specification.

JAMES J. MURPHY.