

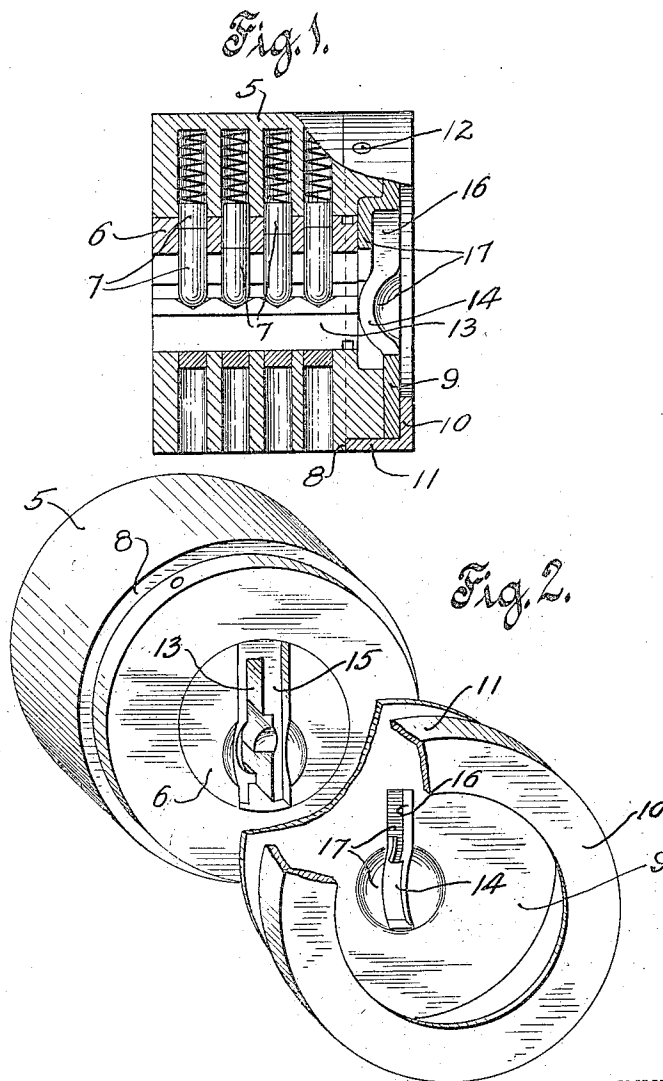
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DRILL PROOF CYLINDER LOCK

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INVENTOR

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NORMAN B. HURD, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE AMERICAN HARDWARE CORPORATION, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

DRILLPROOF CYLINDER LOCK.

Application filed March 19, 1923. Serial No. 626,052.

To all whom it may concern:

Be it known that I, NORMAN B. HURD, a citizen of the United States of America, residing at New Britain, Connecticut, have invented new and useful Improvements in a Drillproof Cylinder Lock, of which the following is a specification.

My invention relates to a cylinder lock, and more particularly to a burglar proof or armored lock.

It is an object of the invention to provide an armor face plate for the cylinder and plug of a cylinder lock so as to prevent damage to the pin tumbler elements of the lock by drilling from the front end.

It is a more specific object to provide an armor face plate having novel means for causing the face plate and plug of a cylinder lock to rotate together.

The above objects may be attained by the means disclosed in the drawings illustrating a preferred form of the invention and in which,

Fig. 1 is a view in side elevation of a lock embodying features of my invention, a portion of the lock being shown in central longitudinal section.

Fig. 2 is a perspective view of the lock shown in Fig. 1, parts being relatively displaced to illustrate the invention.

5 designates the cylinder of a well known type of cylinder lock. 6 designates a plug rotatably mounted in the cylinder. The cylinder and plug are provided with registering chambers or passages for pin tumbler elements 7-7.

The front end of the cylinder is rabbeted or cut away at the periphery so as to form a shoulder seat 8. An armor face plate 9, preferably of hardened steel, is of a size to substantially cover the front of said cylinder and plug. In the form shown, the face plate 9 is rotatably secured to the cylinder by means of a ferrule 10 including the rearwardly extending flange 11 adapted to abut the shoulder seat 8. A plurality of pins such as 12 pass radially through the flange 11 and radially into the cylinder so as to securely hold the ferrule which in turn holds the face plate in place on the cylinder but permits rotation thereof.

The plug 6 has a key slot 13, and the face plate has a corresponding registering key slot 14 therein. A transverse slot 15 is

formed in the front face of the plug 6, and preferably intersects the key slot. The face plate 9 has a depressed portion 16 on the front side forming the boss 17 on the rear side, which boss is adapted to fit within the transverse slot 15 when the parts are assembled. This interfitting slot and boss constitute in effect a tongue and groove connection between the plug and face plate which serves to cause the face plate and plug to rotate as a unit under the influence of the key.

It will be seen that with a lock as above described, the pin tumbler elements will be protected against damage by drilling from the front end of the cylinder; and, since the ferrule is held in place by means of pins which will normally be covered when the lock is in place, the ferrule cannot be removed so as to remove the armor face plate.

I do not wish to be strictly limited to the form of the invention herein disclosed, since changes may be made within the scope of the appended claims.

I claim:

1. In a cylinder lock, a cylinder, a plug rotatably mounted therein, an armor face plate on the front of said cylinder, a ferrule fitting over said armor face plate and secured to said cylinder for securing said face plate to the cylinder but permitting relative rotation thereof on the cylinder, said face plate and said plug having registering key slots therein.

2. In a cylinder lock, a cylinder, a plug rotatably mounted therein, an armor face plate for the front end of said cylinder and plug, a ferrule fitting over said face plate and including a rearwardly extending flange extending over said cylinder, pins extending radially into said cylinder and through the flange on the ferrule for securing the ferrule and face plate to said cylinder, said face plate being free to turn relatively to said cylinder, said cylinder and said plug having registering key slots therein.

3. In a cylinder lock, a cylinder, a plug rotatably mounted therein, said plug having a transverse slot across the front face thereof, an armor face plate rotatably secured to said cylinder, said face plate having a depressed boss thereon fitting in the transverse slot in the front end of said plug, whereby the plug and face plate will be caused to ro-

tate together, said plug and face plate having registering key slots therein.

4. In a cylinder lock, a cylinder, a plug rotatably mounted therein and having a key slot, said plug having a transverse slot in the front end thereof intersecting said key slot, an armor face plate for the front end of said cylinder, said face plate having a depressed portion at the front forming a boss on the rear side fitting in the transverse slot in the front of the plug, said face plate having a key slot registering with the key slot in said plug, and a ferrule extending over said face plate and secured to said cylinder.
5. In a cylinder lock, a cylinder having a peripheral rabbet thereon, forming a seat shoulder, a plug rotatably mounted in said cylinder, said plug and cylinder having registering tumbler element passages therein, an armor face plate substantially covering the front end of said cylinder and plug, a ferrule fitting over said armor face plate and seated on the shoulder of said cylinder and secured to said cylinder for holding the face

plate rotatably thereon, said plug and face plate having interlocking tongue and groove connection with each other for causing the face plate to rotate with said plug, said plug and face plate having registering key slots therein.

6. In a cylinder lock, a cylinder, a plug rotatably mounted therein, said plug and cylinder having registering passages for pin tumbler elements, an armor face plate substantially covering the front end of said cylinder and plug, a ferrule fitting over the front end of said cylinder and securing the armor plate rotatably thereon, pins extending radially through said ferrule and radially into said cylinder for securing the ferrule in place thereon, said face plate and said plug having a tongue and groove connection with each other for causing the armor face plate and plug to rotate together, said plug and face plate having registering key slots therein.

NORMAN B. HURD.