

(No Model.)

W. H. TAYLOR.
CYLINDER LOCK.

No. 588,196.

Patented Aug. 17, 1897.

Fig. 1.

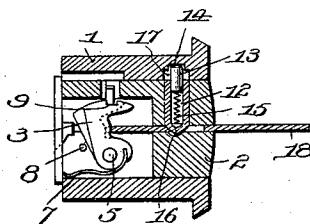


Fig. 2.

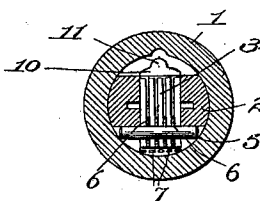


Fig. 3.

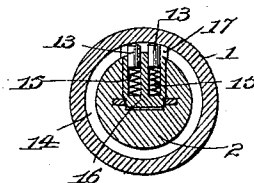
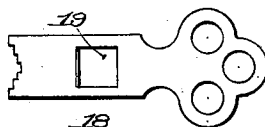


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WARREN H. TAYLOR, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE
YALE & TOWNE MANUFACTURING COMPANY, OF SAME PLACE.

CYLINDER-LOCK.

SPECIFICATION forming part of Letters Patent No. 588,196, dated August 17, 1897.

Application filed December 7, 1895. Serial No. 571,422. (No model.)

To all whom it may concern:

Be it known that I, WARREN H. TAYLOR, a citizen of the United States, residing at Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Cylinder-Locks, of which the following is a specification.

My invention relates to that class of locks wherein the locking mechanism is contained within a cylinder or escutcheon the plug of which is connected by any suitable means with the bolt-operating mechanism in the case of the lock.

My object is to produce a mechanism which is simple and secure, and to accomplish this I provide, in addition to the series of tumblers in the rear of the cylinder which serve to dog the fence which locks the plug to its surrounding cylinder, a tumbler or series of tumblers formed in two parts located in the front part of the plug and one of which parts forms a curtain which closes or obstructs the keyhole and which when any but the proper key is inserted will telescope with the other parts and raise up so as to lock the plug to its surrounding cylinder and thus prevent the unlocking of the lock. I preferably form the outer portion of this front tumbler of spring-pressed pins, the springs of which also serve to hold the inner portion normally out of engagement with the casing.

In order that my invention may be fully understood, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 is a horizontal section of a cylinder-lock having my improvements applied. Figs. 2 and 3 are vertical sections of the lock, and Fig. 4 is a view of the key employed.

In said drawings, 1 represents the casing or cylinder, and 2 the plug.

3 represents a number of tumblers which are pivoted on the pin 5, and 6 are washers located between the tumblers.

7 represents springs having one end fixed to the tumblers and the other end bearing against the plug for disconcerting the tumblers after the key is withdrawn, and 8 rep-

resents a pin for limiting the movement of the tumblers in one direction.

The tumblers are provided with the usual gates 9, which, when they are assembled, permit the fence 10 of the dog 11 to fall into them and thus permit the plug to be rotated.

12 represents an auxiliary tumbler, or, if desired, a number may be used, located in the front part of the plug. This tumbler carries the pins 13, which move around in the groove 14, and the springs 15, which fit in a vertically-movable shell 16 and hold the said shell normally out of the opening 17, formed for it in the cylinder-casing. In this form of lock I employ an end-bitted key 18, provided with an opening 19.

It will be seen that when the proper key is inserted after the tumblers have been assembled the auxiliary tumbler fits in the opening in the key and the plug is allowed to rotate. By varying the position of this front or auxiliary tumbler it is evident that additional combinations or changes may be given to a series of locks, and the same result may be accomplished by adding additional tumblers of this style; and it is also clear that the presence of these auxiliary tumblers very much increases the difficulty of picking the lock, because in order to operate the rear tumbler it will be necessary to raise the front tumbler, and without a key which is properly bitted to operate both the rear and front tumblers it will be extremely difficult to get them both at the same time in the proper position to allow the plug to rotate and unlock the lock.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. The combination of a cylinder or casing, the plug located in said casing, tumblers carried by said plug, a dog for said tumblers and an auxiliary tumbler also carried by said plug and formed in two parts, one of said parts being adapted to normally close or obstruct the entrance to the keyway, and which when moved so as to open the keyway telescopes with the other and locks the plug to the cylinder, substantially as described.

2. The combination of a cylinder or casing,
a plug in said casing carrying the tumblers
and a dog, an auxiliary tumbler carried by
the plug normally obstructing the keyway,
5 said tumbler consisting of a shell which is
adapted to be moved into engagement with
the casing, and spring-pressed pins working
in a groove in the casing and adapted to keep

the shell normally out of engagement with
the casing, substantially as shown and de- 10
scribed.

WARREN H. TAYLOR.

Witnesses:

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GEO. E. WHITE.