

No. 758,027.

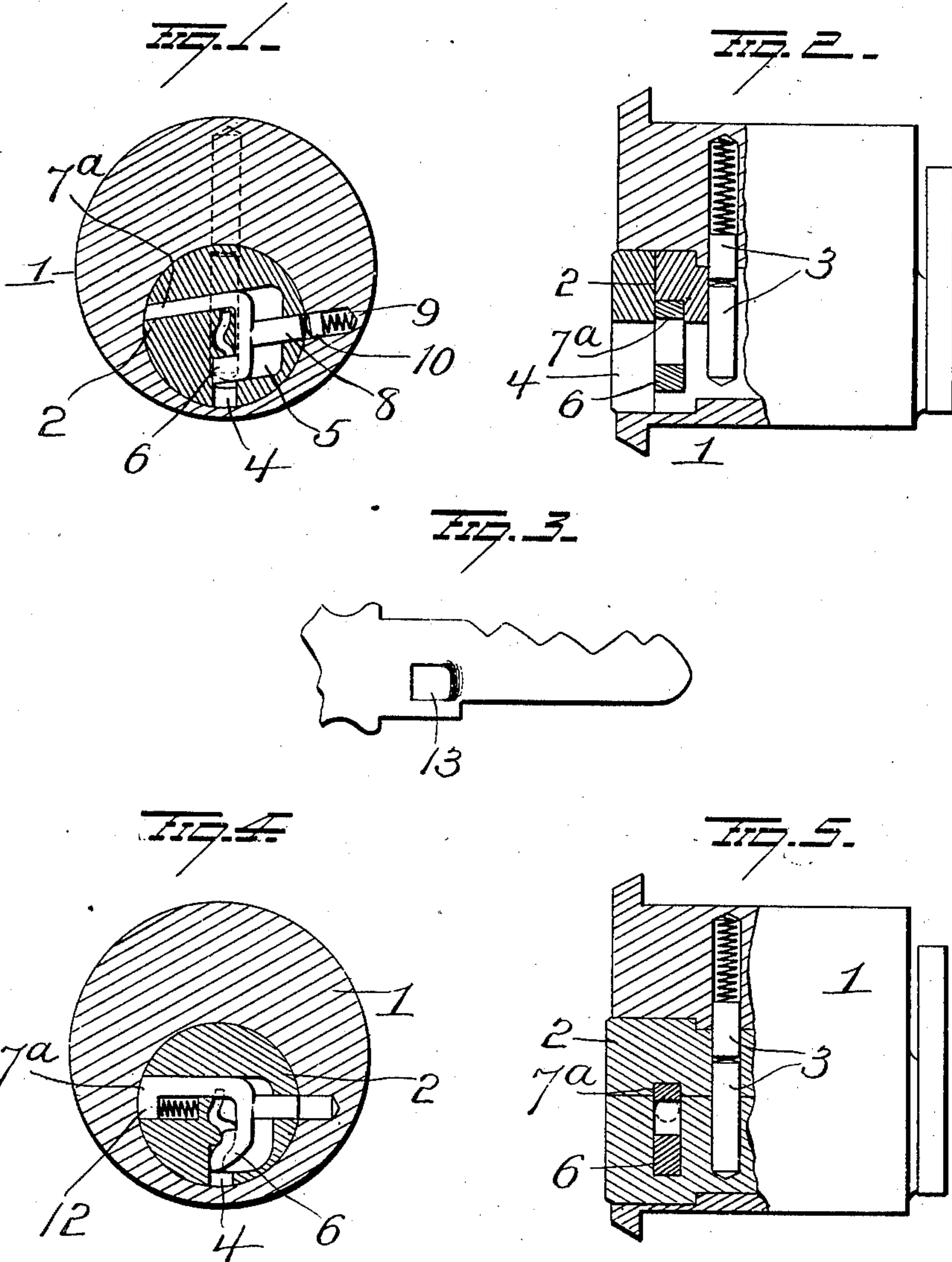
PATENTED APR. 19, 1904.

W. H. TAYLOR.

PIN LOCK.

APPLICATION FILED DEC. 18, 1903.

NO MODEL.



WITNESSES
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PIN-LOCK.

SPECIFICATION forming part of Letters Patent No. 758,027, dated April 19, 1904.

Original application filed July 22, 1903, Serial No. 166,625. Divided and this application filed December 18, 1903. Serial No. 185,720.
(No model.)

To all whom it may concern:

Be it known that I, WARREN H. TAYLOR, of Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and
5 useful Improvements in Pin-Tumbler Locks with U-Shaped Curtains; 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 ap-
10 pertains to make and use the same.

My invention relates to an improvement in pin-tumbler locks and is a division of applica-
tion, Serial No. 166,625, filed July 22, 1903.

The object of the present invention is to pro-
15 vide an improved guard or curtain normally obstructing the key-slot in advance of the pin-tumblers and operating through the interven-
tion of a pin or shank thereon to lock the plug to its case upon the insertion of a key
20 and hold it so locked against rotation until all the pin-tumblers have been properly set by said key and the guard or curtain permitted to resume its normal position; and it consists
25 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 view in transverse section of a pin-tumbler lock embodying my invention. Fig. 2 is a
30 view in elevation, partly in section, of same. Fig. 3 is a view in elevation of the key for said lock; and Figs. 4 and 5 are views of a lock, showing a modified form of guard or curtain.

35 1 represents the tumbler-case of a pin-lock, 2 the plug, and 3 the ordinary two-part spring-actuated pin-tumblers which normally lock the plug against movement in the case. This plug is provided with the usual key-slot 4.

40 In the construction shown in Fig. 1 the key-slot 4 communicates, near its outer free end and in advance of all the pin-tumblers, with a cavity 5, in which the lower and shorter member 6 of the guard or curtain 7 normally
45 rests. This lower member of the guard or curtain obstructs that portion of the key-slot below the free ends of the pin-tumblers and

absolutely prevents any engagement of the pin-tumblers by a tool or key without first moving the shorter member 6 of the guard or
50 curtain 7 laterally to a point outside of the path of the key or tool. This guard or curtain is, as shown in Fig. 1, of substantially U shape, with its upper member 7^a of greater length than the lower member and resting
55 and moving in a recess formed in the plug above the key-slot, and is provided centrally with a pin or shank 8, the free end of which normally rests in a plane with the periphery
60 of the plug, and hence when in its normal position does not obstruct or interfere in the slightest with the free rotary movement of the plug 2. When, however, the curtain is
65 pushed laterally, as is necessary before the pin-tumblers can be reached by the key or picking-tool, the shank 8 thereof enters the recess 9 in the case 1 and locks the plug
against rotation and holds it so locked until the guard or curtain resumes its normal
70 position. The case 1 is provided with a recess 9, located in a line with the shank or pin 8 of the guard or curtain 6, to receive the shank or pin 8 when the latter is moved lat-
75 erally by the insertion of a key or tool, and located within said recess is a follower 10, forced outwardly by spring 11, located within the recess in rear of the follower. The jun-
80 cture of the follower 10 and the free end of shank or pin 8 is normally on the line of juncture of the plug 2 and case 1, so that when these parts are in their normal positions the plug is free to turn. When, however, a key or other in-
85 strument is introduced into the key-slot, the curtain will be moved laterally and the shank thereof forced into the recess 9 in the case 1, thus compressing the spring. As soon, how-
ever, as pressure on the curtain or guard is relieved the spring causes the parts to resume their normal positions.

90 With the construction shown in Figs. 4 and 5 the curtain and its pin or shank are located in a horizontal instead of an inclined position, as shown in Fig. 1, and the restoring-spring instead of being within the recess in the case

is located within a recess in the plug and bears against a depending toe 12, formed integral with the longer member of the guard or curtain 7. In other respects the locks are substantially identical in construction and operation and in both the shorter member of the guard or curtain normally closes the key slot or way at a point so low that a picking-tool cannot be introduced to a position to engage the pin-tumblers without moving the guard or curtain, and thus, as before explained, locking the plug to the case and holding it so locked until the guard or curtain has been restored to its normal position.

In both constructions also the longer member of the U-shaped guard or curtains forms extended bearing, which effectually operates to hold the guard or curtain in its proper position. The key for the locks above described is shown in Fig. 3 and is provided at a point in rear of the bittings with a slot 13, which slot when the key is fully inserted rests adjacent to the free end of the shorter member 6 of the guard or curtain, thus permitting the latter to move back to its normal position. This movement of the guard or curtain withdraws its shank or pin 8 from the case, and as the pin-tumblers have been set by the key the plug will be free to turn. The act of withdrawing the key again forces the pin or shank 8 into recess 9 in the case 1 and locks the plug; but as soon as the point of the key passes the shorter member of the guard or curtain the latter moves to its normal position and again obstructs the key-slot.

I make no claim in this application, broadly, to the combination of a tumbler-case, plug, pin-tumblers carried by the plug, and a guard or curtain normally in such a position that the plug may be freely revolved, but which when moved by the insertion of a key or other instrument operates to lock the plug to the case, the said guard or curtain being located in advance of some or all of the pin-tumblers and engaging the key below the bitted portion of the latter, as such construction is covered by my pending application, Serial No. 166,625, filed by me July 22, 1903. It is evident, however, that numerous changes in the construction and arrangement of the parts of the device herein shown may be varied without departing from the spirit of this invention. Hence I would have it understood that I do not confine myself to the exact details herein shown and described, but consider myself at liberty to

make such changes as fairly fall within the spirit and scope of this invention.

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

1. The combination with a tumbler-case, a plug, and pin-tumbler carried by said plug, of a substantially U-shaped guard or curtain carried by said plug, one member of said guard or curtain normally obstructing the key-slot, and arranged to engage a side face of the key, a pin or shank carried by said guard or curtain for locking the plug to the cylinder or case and holding it so locked until the guard or curtain again assumes its normal position and a spring tending to hold said guard or curtain in its normal position.

2. The combination with a tumbler-case, a plug, and pin-tumblers carried by said plug, of a substantially U-shaped guard or curtain carried by said plug, and provided with an integral shank or pin for engagement with the case, one member of said U-shaped guard or curtain normally obstructing the key-slot in advance of the pin-tumblers, and a spring tending to hold said guard or curtain in its normal position.

3. The combination with a tumbler-case, a plug and pin-tumblers carried by said plug, of a substantially U-shaped guard or curtain carried by said plug and provided with an integral shank, one of the members of said guard or curtain being shorter than the other and normally obstructing the key-slot in the plug in advance of the pin-tumblers, and a spring tending to hold said guard or curtain in its normal position.

4. The combination with a tumbler-case, a plug and pin-tumblers carried by said plug, of a guard or curtain substantially U shape and provided with an integral pin or shank, one member of said U-shaped guard or curtain being shorter than the other, the shorter member normally obstructing the key-slot in advance of the pin-tumblers, and a spring engaging the longer member and tending to hold said guard or curtain in its normal position.

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

WARREN H. TAYLOR.

Witnesses:

SCHUYLER MERRITT,
PATRICK KEEFFE.