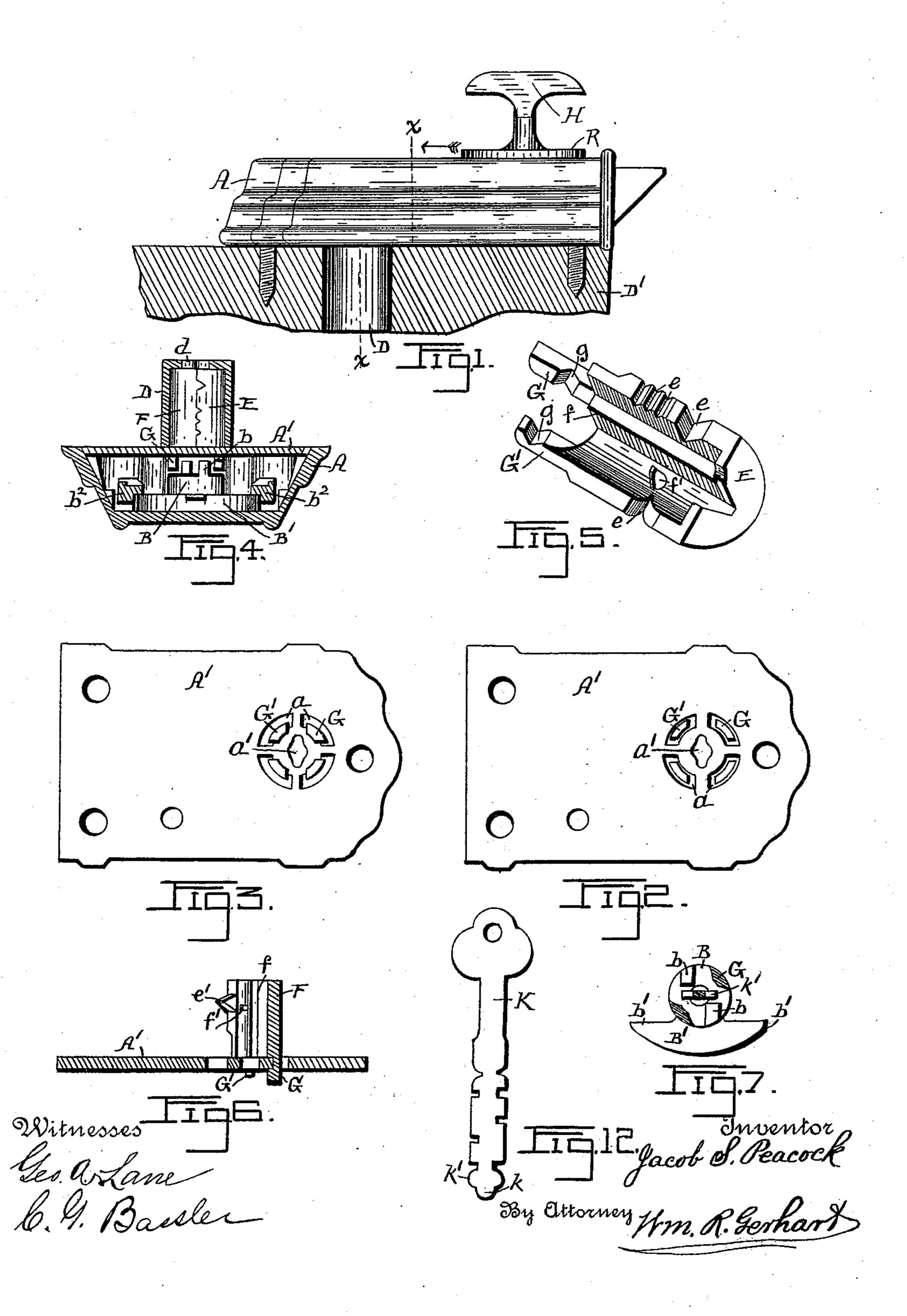
## J. S. PEACOCK. CYLINDER LOCK.

No. 539,591.

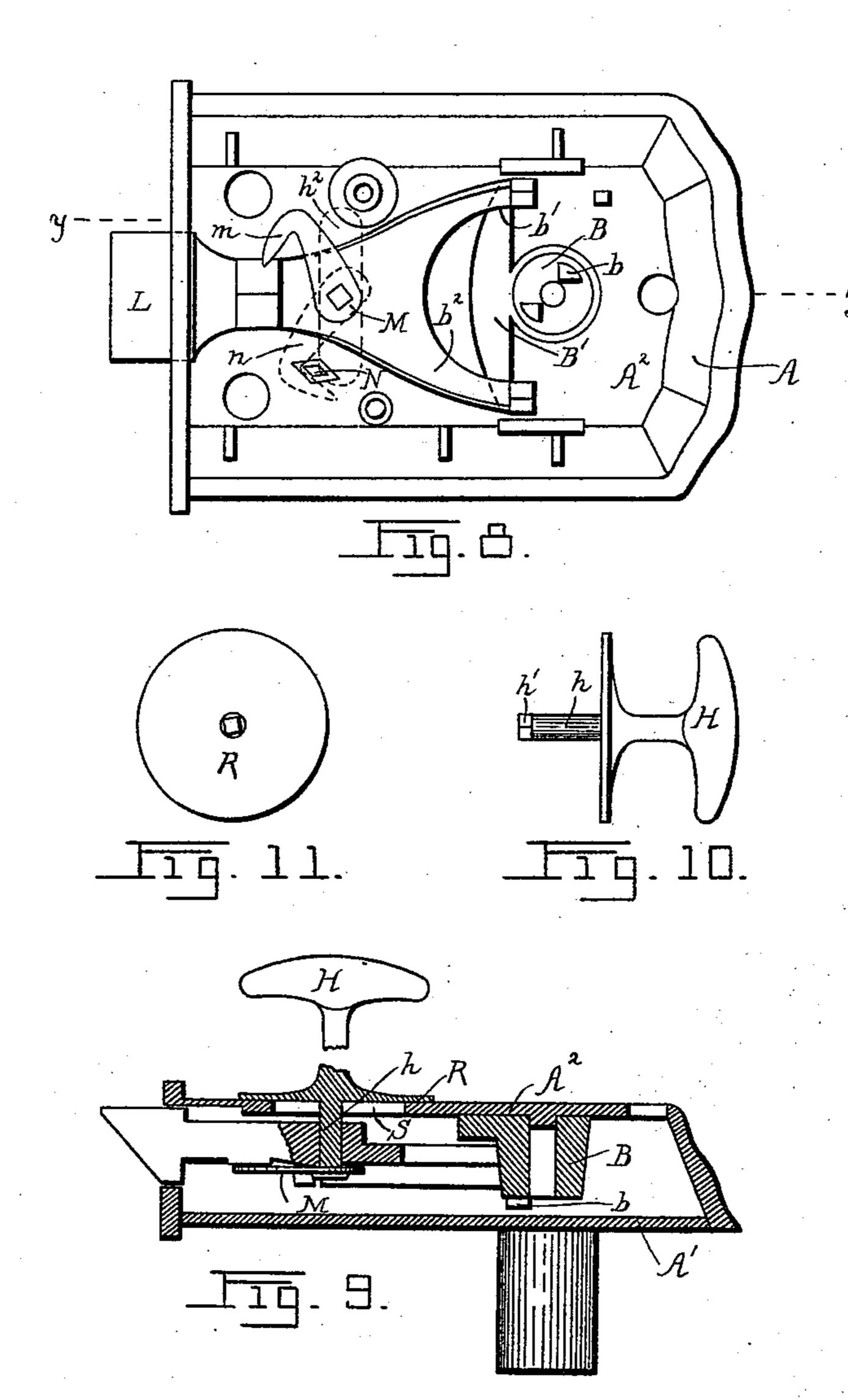
Patented May 21, 1895.



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Mitnesses Seo, a. Sand b. N. Bassler

Inventor Jacob S. Peacock By Attorney H.M. R. Gerhard

## United States Patent Office.

JACOB S. PEACOCK, OF LANCASTER, PENNSYLVANIA.

## CYLINDER-LOCK.

SPECIFICATION forming part of Letters Patent No. 539,591, dated May 21, 1895.

Application filed February 4, 1895. Serial No. 537,161. (No model.)

To all whom it may concern:

Be it known that I, JACOB S. PEACOCK, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State 5 of Pennsylvania, have invented certain Improvements in Locks, of which the following is a specification.

This invention relates to improvements in the key-cylinder and members inclosed thereto by of that class of locks known as "cylinderlocks;" and the object of the improvement is to simplify and cheapen the construction of those parts.

The invention consists in the construction 15 and combination of the various parts, as hereinafter fully described, and then pointed out in the claims.

In the accompanying drawings, which form a part of this specification, Figure 1 is a top 20 edge view of a night-latch embodying my improvement, showing a section of a portion of a door and the key-cylinder passing through the same. Fig. 2 is an inside face view of the back or closing plate of the lock, the arms of 25 the key-guide sections being shown in position to be locked to said plate; and Fig. 3, a similar view, but showing the arms of the keyguide sections locked to said plate. Fig. 4 is a vertical section of the lock on the broken 30 line x x of Fig. 1. Fig. 5 is an enlarged inner perspective view of one of the key-guide sections. Fig. 6 is a section through the back plate and one of the key-guide sections, showing the manner of connecting said sections 35 and that plate. Fig. 7 is a face view of the tumbler, the key and the long arms of the keyguides being shown in section and engaged with the tumbler. Fig. 8 is a side elevation of the lock, the back plate being removed to 40 afford a view of the operating parts. Fig. 9 is a horizontal section on the line y y of Fig. 8. Figs. 10 and 11 are side and end elevations, respectively, of the latch-handle and 45 is a side view of the key.

Similar letters indicate like parts throughout the several views.

Referring to the details of the drawings, A indicates the lock-case; A', the back or clos-50 ing-plate; B, the tumbler having oppositely located studs, b, on the face thereof; and B', gaging shoulders on the forks  $b^2$  of the latch, to retract the same. These parts are constructed and operated in the usual well known 55 manner.

D indicates the key-cylinder which passes through the door D', as shown in Fig. 1, and is provided with the usual key-hole, d, in its front end.

The key-guide is located in the key-cylinder, and is divided into semi-cylindrical sections E and F, which, when united, form a cylinder of like dimensions with the interior of the key-cylinder, and are provided with 65 suitable ribs or stops, f, and wards, f', for the key. The longitudinal edges of these keyguide sections have registering notches, e, and teeth, e', which retain said sections in their relative longitudinal positions when the parts 70 are being united. On the inner ends of the key-guide sections are arms G G', which pass through curved openings a in back-plate A'. Each key-guide section has an arm G and an arm G'; and in the inner faces of all these 75 arms are formed notches g, adapted to engage the inner rims of openings a surrounding keyhole a' in said back-plate, the arms G being longer than arms G' and engaging the face of tumbler B between the studs b, to prevent 80 displacement of the tumbler by movement toward the back-plate. It will be seen from the construction described, that all the parts can be formed, trimmed, and adjusted each to the other with ease, precision, and at a minimum 8; cost.

On the inside of the door the latch L is retracted by a handle H, the stem h of which passes through an elongated slot, S, in the front plate  $A^2$  of the case. Stem h extends 90 through, and is revoluble in, a circular opening in the latch and has its inner end squared. On this squared end is fitted a dog, M, the prong m on which is adapted to engage the front of a detent, N, and lock the latch in its 95 the escutcheon connected therewith. Fig. 12 | forward position, as shown by broken lines nin Fig. 8. Similarly, the latch is held in a retracted position by the engagement of the dog with the back of detent N. The dog is actuated by the turning of handle H, which is roo elongated, as shown in Fig. 1, and by its position indicates that of the dog. When the handle is horizontally disposed, as shown in the wing on said tumbler having arms, b', en- | Fig. 1, the dog is in front or rear engagement

with the detent, and when in a vertical position, as shown by broken lines  $h^2$  in Fig. 8, the dog is disengaged from said detent.

In my lock, I cast the handle H, the stem h, and the escutcheon R together. This construction greatly simplifies and cheapens the construction of the lock. The stem of the handle and the escutcheon thus formed together may be used with other locks and with handles detachably connected with the stem.

In assembling the parts of the lock, arms G and G' are inserted through openings a of the back-plate with notches g in position to engage the inner rims of said openings. The key-cylinder is then placed over the key-guide, binding the sections thereof together and causing the close engagement of notches g with the rims of openings a. The key-guide sections are made to fit so tightly therein that the key-cylinder has to be forced over them under pressure, so that it is retained in place by the friction between the contacting parts.

In operation, the heel k of key K engages a central opening in the tumbler B, which is actuated by the pressure of key bits k' on

studs b of the tumbler.

I do not limit myself to the details of construction herein shown and described, as it is obvious that many changes may be made therein without departing from the principle of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. The combination, with a lock-case, of an external tubular key-guide divided longitudinally into sections and registering with the key-hole of the lock, and means for securing

said key-guide to the case.

2. The combination, with a lock-case having openings therein around the key-hole, of an external tubular key-guide divided longitudinally into sections, arms on said sections having notches therein adapted to engage the rims of said openings, and means for holding the notches in engagement with said rims.

3. The combination, with a lock-case of a sectional key-guide, the edges of the sections being provided with registering teeth and notches, and a key-cylinder taking over the 50 key-guide, substantially as and for the pur-

pose specified.

4. The combination, with a lock-case having openings in a plate thereof, of a sectional keyguide, arms formed on the sections of the key-55 guide and having notches therein adapted to engage the rims of the openings in the lock-plate, and a key-cylinder constructed to take over the key-guide sections and engage the notches in the arms thereof with the rims of 60 the openings in said lock-plate, substantially

as and for the purpose specified.

5. The combination, with a lock-case having openings in a plate thereof, of a sectional keyguide, the edges of the sections being protided with registering teeth and notches, arms formed on the sections of the key-guide and having notches therein adapted to engage the rims of the openings in the lock-plate, and a key-cylinder constructed to take over 70 the key-guide sections and engage the notches in the arms thereof with the rims of the openings in said lock-plate, substantially as and

for the purpose specified.

6. The combination, with a lock-case having 75 openings in a plate thereof, of a sectional keyguide, the edges of the sections being provided with registering teeth and notches, arms formed on the sections of the key-guide and having notches therein adapted to engage the 8c rims of the openings in the lock-plate, said arms projecting into the lock-case beyond said plate and retaining a tumbler in its transverse position, and a key-cylinder constructed to take over the key-guide and engage the 85 notches in the arms thereof with the rims of the openings in said lock-plate, substantially as and for the purpose specified.

JACOB S. PEACOCK.

Witnesses:
JACOB HALI

JACOB HALBACH, WM. R. GERHART.