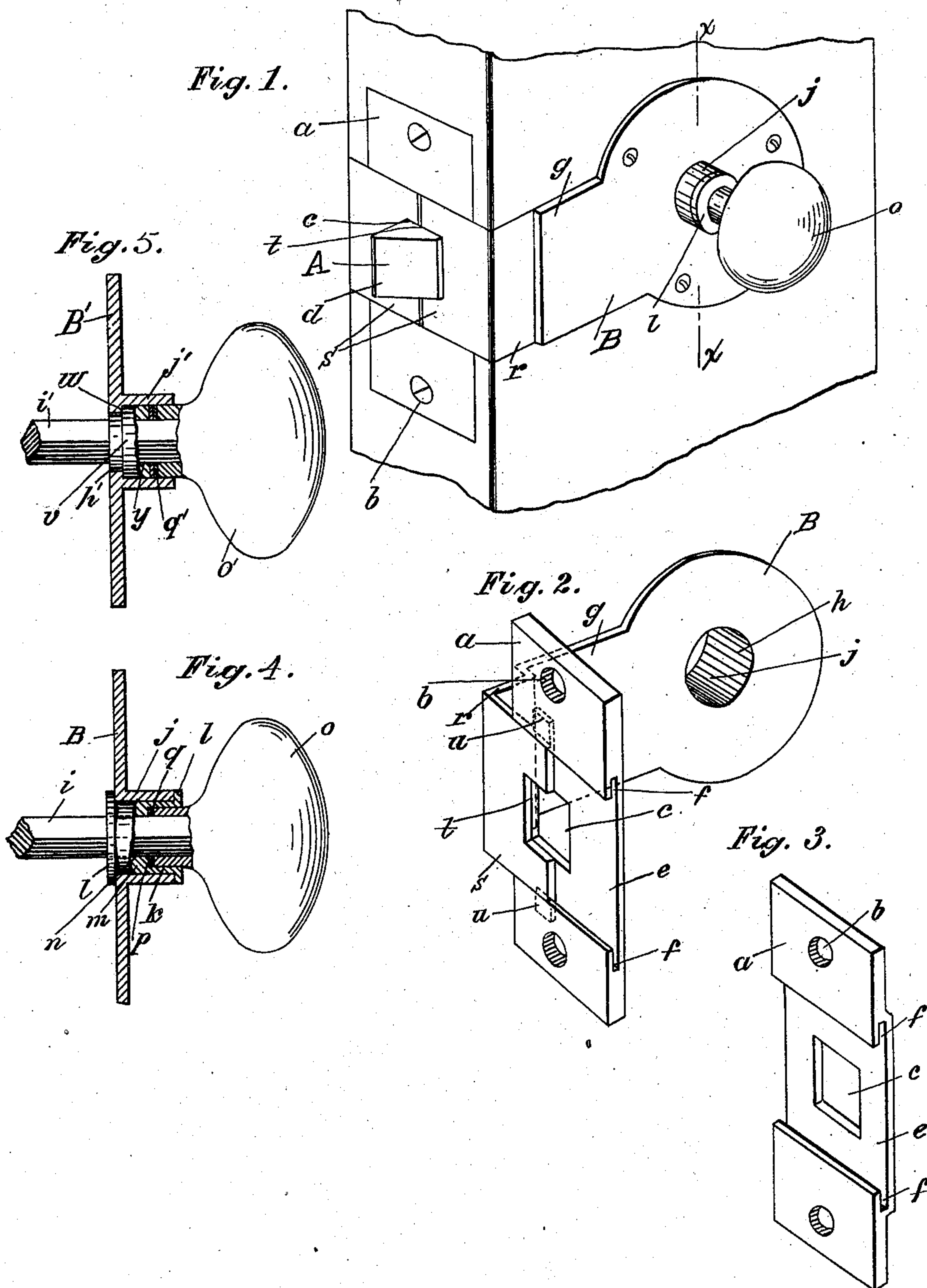


LATCH.

APPLICATION FILED OCT. 7, 1909..

963,450.

Patented July 5, 1910.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES EDWARD LOWE, OF McALESTER, OKLAHOMA, ASSIGNOR OF ONE-THIRD TO WALTER CARL ELLIS AND ONE-THIRD TO CLAUD D. ELLIS, BOTH OF GUTHRIE, OKLAHOMA.

LATCH.

963,450.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES EDWARD LOWE, a citizen of the United States, and a resident of McAlester, county of Pittsburg, State of Oklahoma, have invented new and useful Improvements in Latches, of which the following is a full, clear, and exact specification.

My invention relates more particularly to escutcheon plates to be used where a latch only is used, and is a modification of those shown in my application filed Oct. 10th, 1908, Serial Number 457,081, and like the plates there shown, comprises means whereby they may be accurately positioned with respect to the latch to bring the knob bolt hole of the latch exactly in alinement with the corresponding holes in the plates.

The plates are adapted to be used with varying thicknesses of doors and make substantially one piece with the latch casing. The plates may be used with any of the ordinary latches in common use after making the necessary changes in the facing plate. I have preferred to show the plates in connection with my latch which is shown in my application previously referred to.

Referring to the drawings—Figure 1 is a perspective view of a part of a door containing a latch and my escutcheon plates. Fig. 2 is a perspective view of one of the escutcheon plates, and the face plate of the latch. Fig. 3 is a perspective view of a slightly modified form of face plate. Fig. 4 is a cross-sectional view of a part of Fig. 1 taken through the line $x-x$. Fig. 5 is a modification of the parts shown in Fig. 4.

The latch A is provided with the usual face plate a having screw holes b for securing it to the door and the hole c for permitting the latch member d to extend there-through. Upon the front of the plate a is formed the transverse recess e and the hole c is preferably centrally located within this recess. In the upper and lower walls of the recess adjacent the bottom are formed slots $f-f$ extending the entire width of the plate and to a suitable depth. Where the thickness of the facing plate is insufficient to allow the recess to be formed, the type shown in Fig. 3 may be used; here the wall behind the recess extends beyond the back of the plate, which enables a recess to be formed of the requisite depth.

The escutcheon plate B may be of any de-

sirable form, but I have preferred to show it round and terminating in a strip g . At the center of the plate is the hole h to receive the bearing for the knob spindle i . Any convenient form of bearing may be employed, as for instance that shown in my application already referred to. The bearing used here is however somewhat different; upon the plate is formed a hub j extending for a suitable distance beyond the plate and within it is the loosely fitting bushing k having flanges $l-l$ at either end extending outward to retain it in place. The inner end m of the bushing is made solid and through it is formed a square hole n into which passes the knob spindle, the ends of which are secured in similar holes in the knobs o in the usual way. The knobs fit snugly within the bushings k and abut against the shoulders p , or if there is any play this may be taken up in the usual way by one or more washers q . This mechanism holds the knobs securely in position and prevents their undesirable rattling and tilting downward, which is usual, especially with heavy knobs.

The plate B with the strip g sets out upon the door, but near the edge of the door the strip is offset forming the part r . This is mortised in the door to make a flush joint, to permit the door when shut to come properly against the door stop. The strips are here bent over at right angles forming the lips s , which are of a size to fit snugly within the recess e of the face plate and to make a flush joint therewith. With the minimum thickness of door the lips should come to the center of the face plate. The lips are cut out forming the notches t to permit their fitting about the latch to the center line of the face plate. On the upper and lower edges of the lips adjacent the ends are lugs $u-u$ positioned for engagement within the slots $f-f$ which secure the escutcheon plates firmly in position. The two plates may be made similar except the corresponding parts are oppositely disposed. In the case of a door of minimum thickness the lips come together at the center of the face plate but with wider doors there will be more or less space between the lips depending upon the thickness of the door in any instance. When this space becomes too great, a larger latch should be used, which will have escutcheon plates with lips correspondingly longer.

Having thus described my invention I claim

1. In a mortise door latch a face plate, a transverse recess in the front of the plate, an opening in the plate at the center of the recess for permitting the latch to project, grooves in the upper and lower walls of the recess, an escutcheon plate on either side of the latch, a right-angular extension on the front edge of each plate, a notch formed in the free end of each extension half the size of the hole for the latch and lips projecting from the upper and lower edges near the free ends of the extensions adapted for engagement within the grooves of the face plate.

2. In a mortise door latch a face plate, a transverse recess in the front of the plate,

an opening in the plate at the center of the recess for permitting the latch to project, grooves in the upper and lower walls of the recess, an escutcheon plate on either side of the latch, an extension on the front edge of each plate and in the same plane therewith, inwardly offset ends to said extensions, right angular terminations to said extensions, a notch formed in the free end of each extension half the size of the hole for the latch, and lips projecting from the upper and lower edges near the free ends of the extensions adapted for engagement within the grooves of the face plate.

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