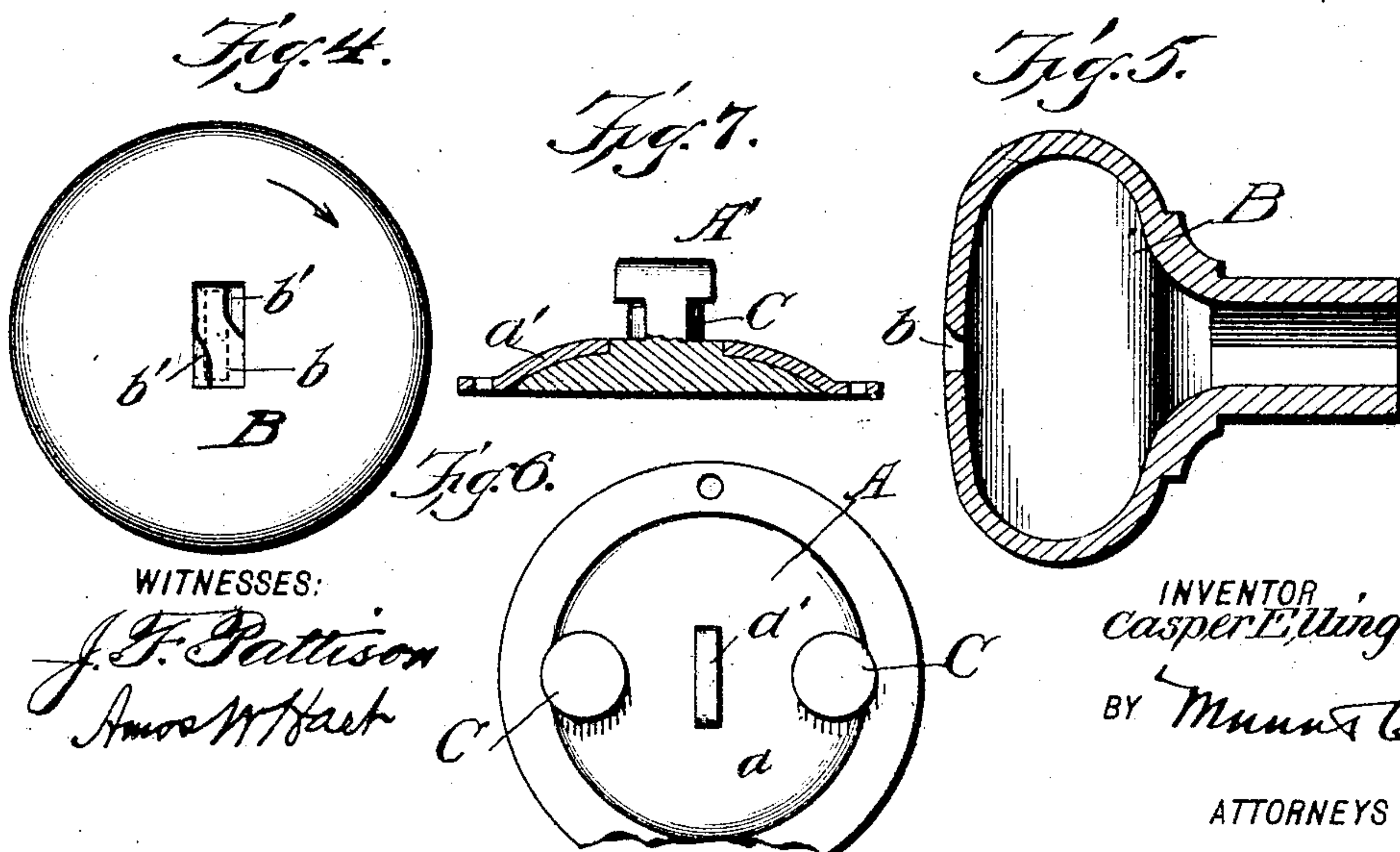
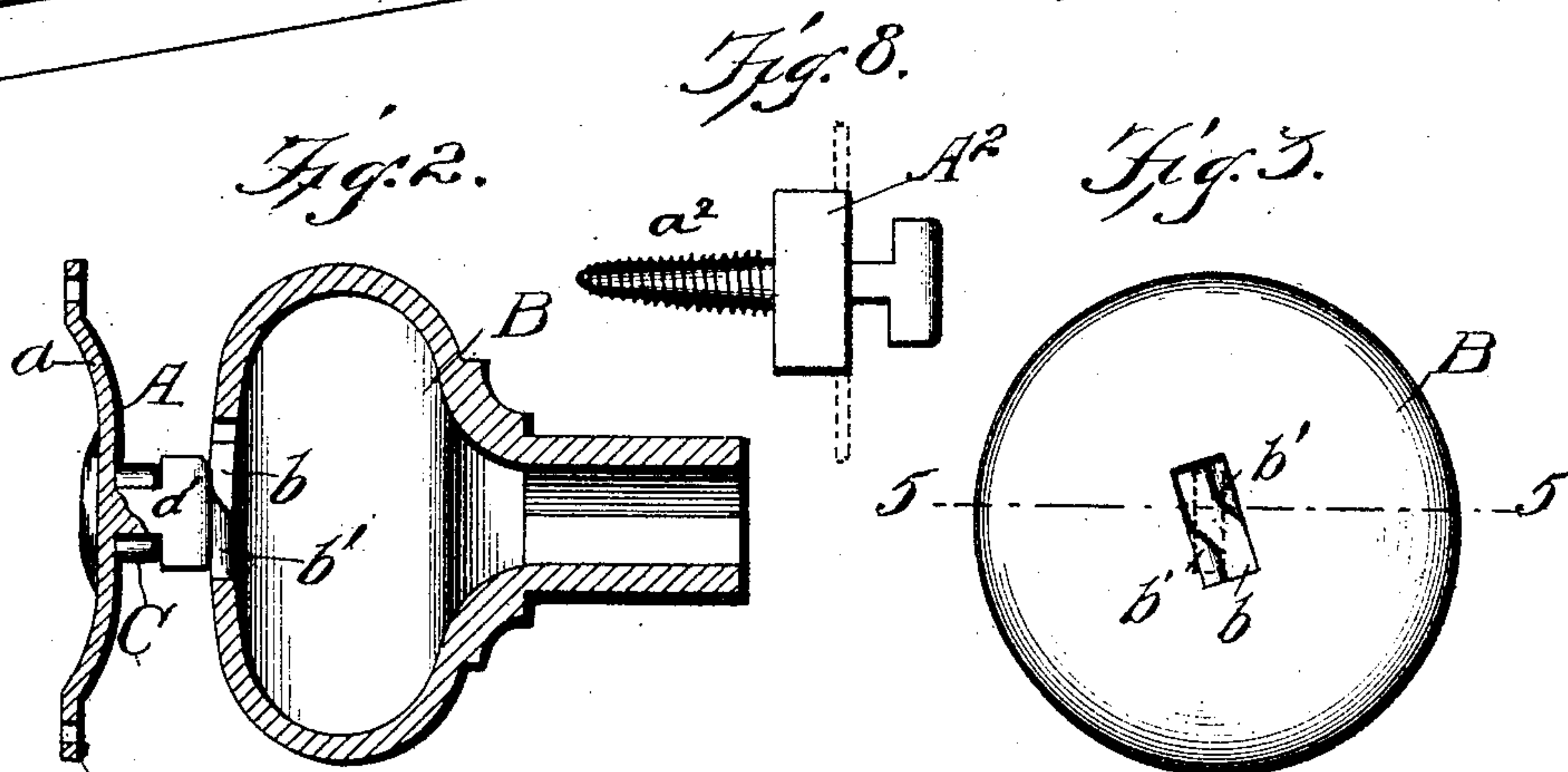
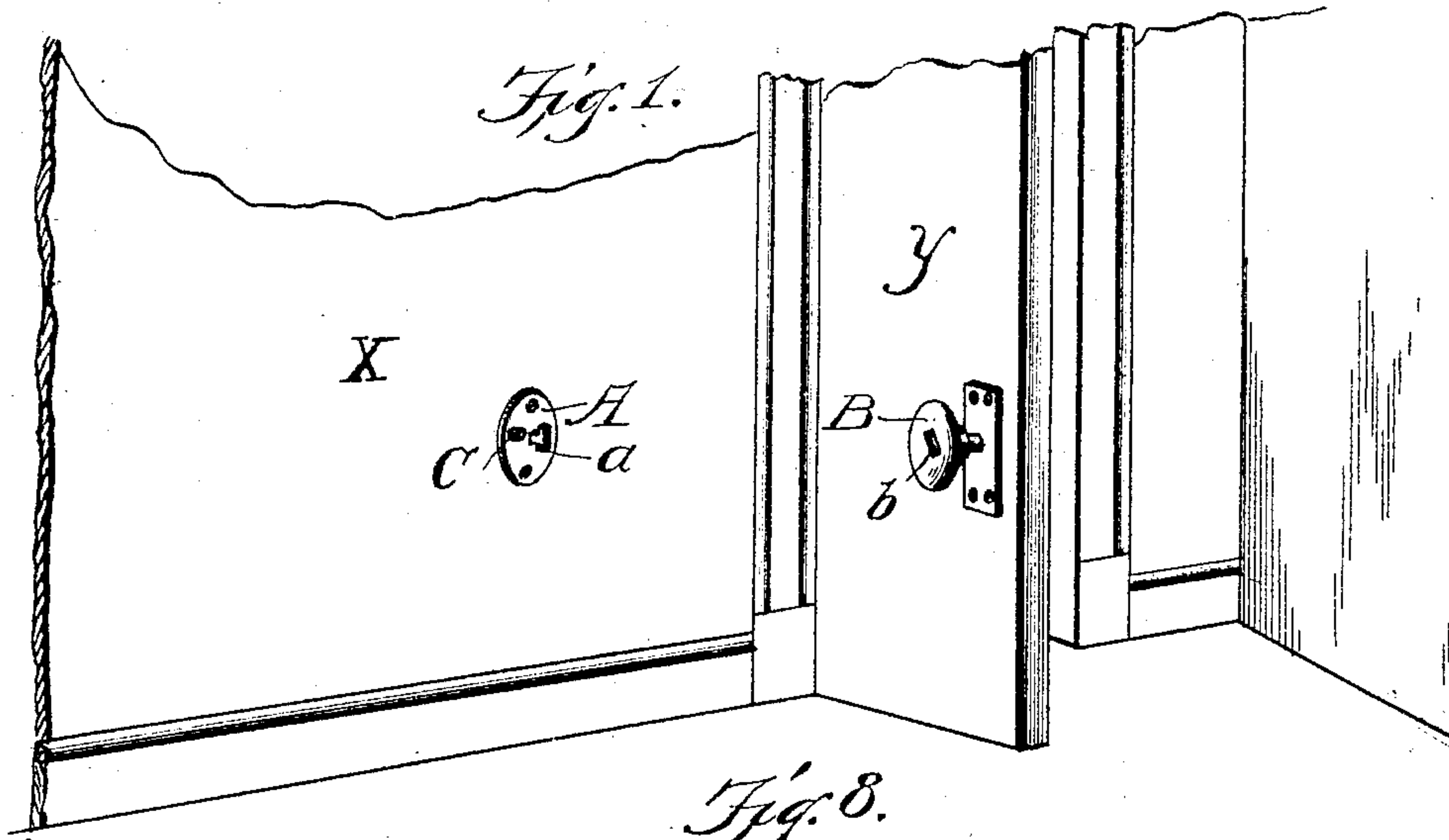


No. 779,917.

PATENTED JAN. 10, 1905.

C. ELLINGEN.
DOOR CHECK.

APPLICATION FILED MAY 5, 1904.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CASPER ELLINGEN, OF SANTA BARBARA, CALIFORNIA.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 779,917, dated January 10, 1905.

Application filed May 5, 1904. Serial No. 206,574.

To all whom it may concern:

Be it known that I, CASPER ELLINGEN, a citizen of the United States, residing at Santa Barbara, in the county of Santa Barbara and State of California, have made a new Improvement in Door-Checks, of which the following is a specification.

My invention is an improvement in a class of devices employed for holding swinging doors open. It is more particularly an improvement in devices which are adapted to engage the knob of a door-latch.

A distinguishing feature of my invention is a fixed catch and a door-knob which are constructively so related to each other that when the door swings open the knob is automatically engaged with and locked by the catch and which may be released by turning it a part of a complete rotation.

The details of construction, arrangement, and operation in respect to this and other features of my invention are as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view illustrating a catch and a door-knob adapted to engage the same, the parts being represented arranged as in use. Fig. 2 is a sectional view of the catch and knob in position for engagement. Figs. 3 and 4 are views serving to illustrate the manner of engagement of the catch and knob. Fig. 5 is a section of the knob on line 5 5 of Fig. 3. Fig. 6 is a plan view of the preferred form of catch. Fig. 7 is a section illustrating a modification of the catch. Fig. 8 is a plan view of another form of catch.

I will first describe my preferred form of invention.

A indicates a catch which is fixed in position upon the wall X adjacent to the swinging door Y and in such relation to the knob B thereof that the knob and catch will engage when the door is swung completely open. As shown, the catch A is formed of a plate *a* and the T-shaped catch proper, *a'*, the two being formed integrally and the catch projecting horizontally from the face of the plate. The latter is secured by screws. It will be noted that the head of the catch is in a vertical plane. The knob B is provided with a narrow rec-

tangular slot *b*, which is located centrally in its face. As shown in Figs. 3 and 4, the edges of the slot *b* project at diagonally opposite points, such projections being beveled on the outer side and forming cams *b'*, which are adapted to engage the head of the catch A, as will now be explained. As will be understood by reference to Fig. 3, when the knob is in normal position the slot *b* thereof is inclined to the vertical at an angle of about fifteen degrees. It will be understood, further, that the knob is held in position by a spring with which a knob-latch is ordinarily provided. When the door swings open, the head of the catch being vertical, (see dotted lines, Fig. 3,) it is obvious that two of its diagonally opposite corners will strike upon the cams or inclines *b'*, and thereby rotate the knob B slightly to the right or far enough to bring the slot *b* into a plane that will permit the head of the catch to enter the slot, whereupon the spring connected with the door-knob rotates the latter back to its normal position, and the cams *b'* thus pass behind the corners of the head of the catch and lock the knob to the latter, as illustrated in Fig. 3. The door-knob is thus automatically engaged by the catch and remains locked therewith, so that the door is held securely open until the knob is rotated back to the right, which of course again brings the sides of the slot *b* into substantial parallelism with the head of the catch B, so that the latter may pass out of the slot and release the door. In Fig. 4 the dotted lines show the catch engaging the cams *b'* and turning the knob to the right.

In order to provide a buffer for the door-knob when engaging the catch, I arrange two soft-rubber blocks C (see Figs. 3 and 6) in suitable openings or recesses in plate *a* on opposite sides of the catch A. (See Fig. 6.) The bases of these blocks are enlarged or provided with flanges which engage the under side of the plate *a*, so that the buffers are held in due position without the aid of supplemental devices. It will be understood that these buffers require to be set in position before the plate *a* is screwed to the wall X.

In Fig. 7 I illustrate a modification of the catch in which the catch proper, *A'*, is made

separate and detachable from the plate a' . The latter is provided with an oblong slot, and the base of the catch A' has a corresponding shape, it being elongated and provided at the ends with a rabbet or shoulders adapted to engage the plate a' at the ends of the slot. Thus the catch A' is inserted in place from behind the plate, and when the latter is duly secured to the wall the catch is held in position to engage the door-knob.

In Fig. 8 I show a further modification, the base of the catch A^2 having a screw a^2 formed integrally therewith instead of being made plain, as in Fig. 7.

What I claim is—

1. The combination of a fixed catch having a T shape, a movable door, and a rotatable knob applied thereto, the same having in its face a slot larger than said catch and provided with cam projections at opposite points so that the knob is rotated when the catch strikes upon them, as and for the purpose specified.

2. The combination, of the fixed catch having a projecting head, a movable door, and a

rotatable knob applied thereto and having its face provided with a slot adapted to receive the head of said catch and provided with surfaces upon which the head of the catch strikes when the door is thrown open, thus effecting rotation of the knob, the head of the catch then passing into the slot and locking with the knob, substantially as described.

3. In means for locking a door open, a rotatable knob having a slot whose diagonally opposite corners are provided with inclines forming cams adapted to coact with a fixed catch, substantially as described.

4. In means for locking a door open, the catch comprising a catch proper having a base provided with shoulders, and a base-plate provided with a slot adapted to receive the base of the catch which engages the plate, substantially as described.

CASPER ELLINGEN.

Witnesses:

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 SOLON C. KEMON.