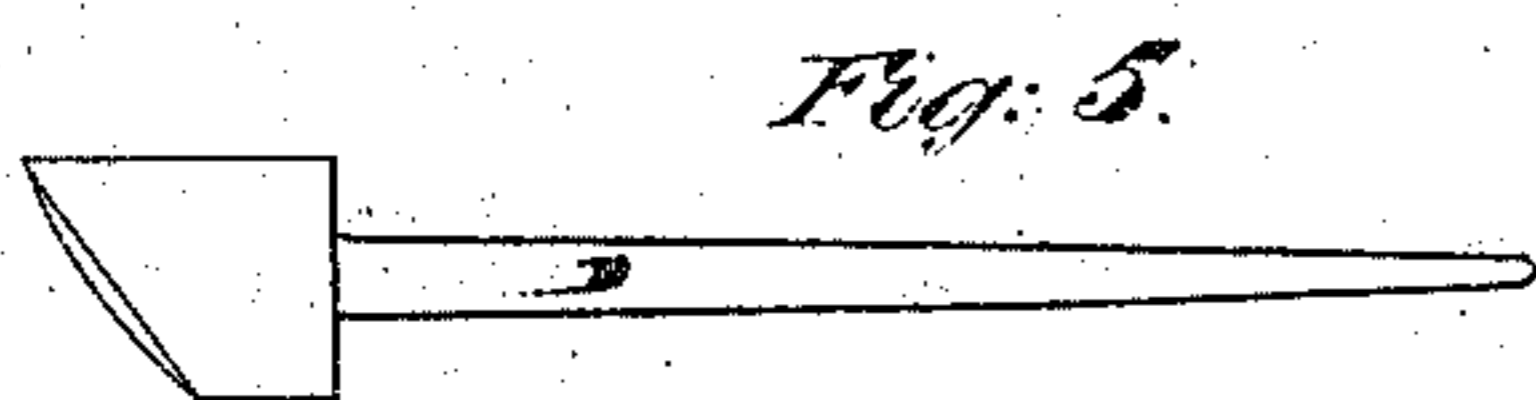
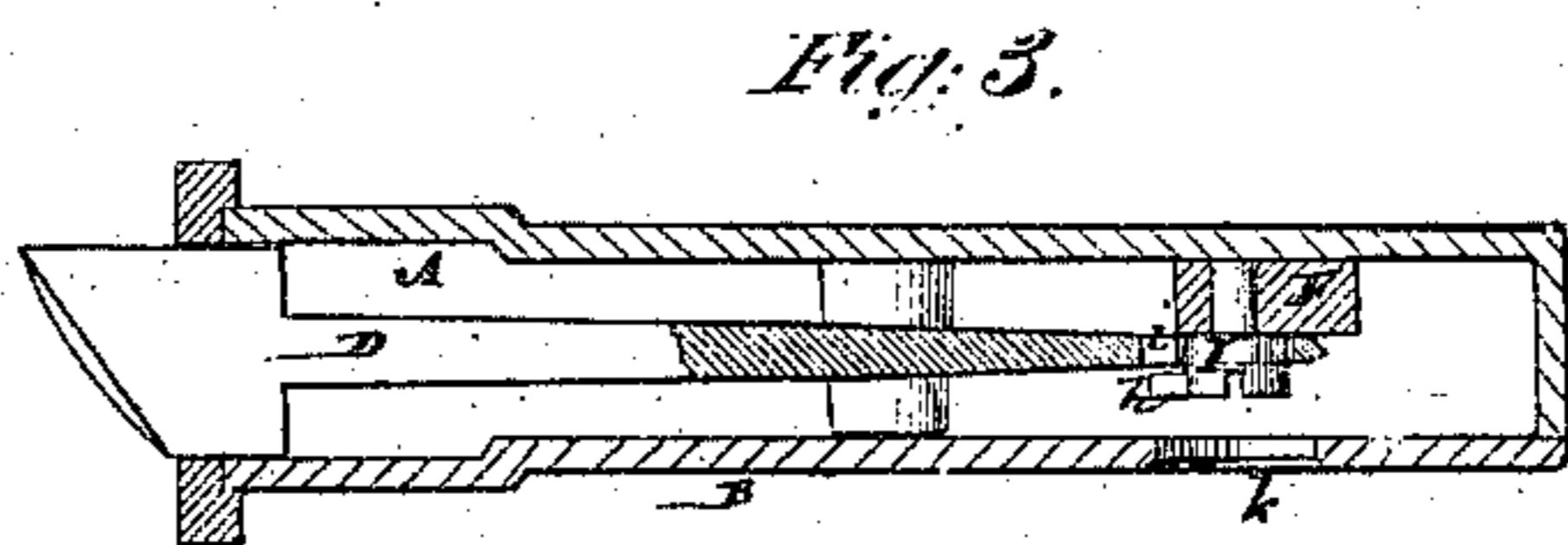
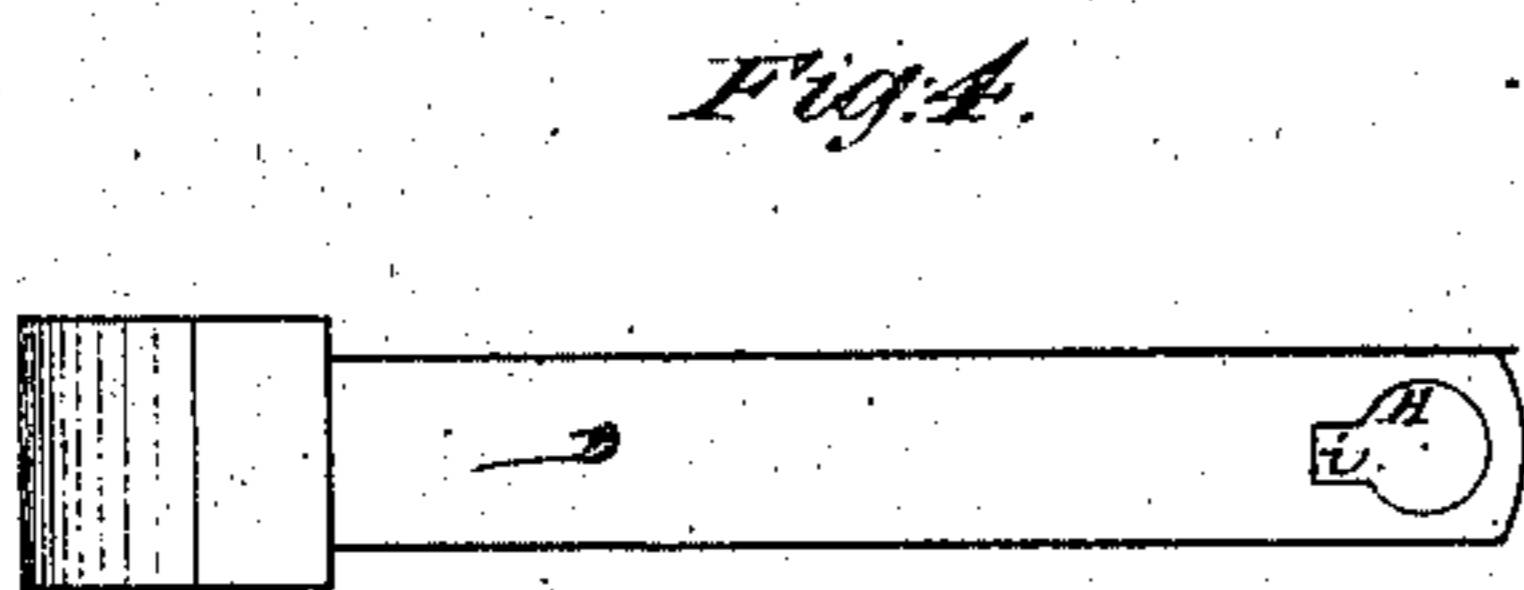
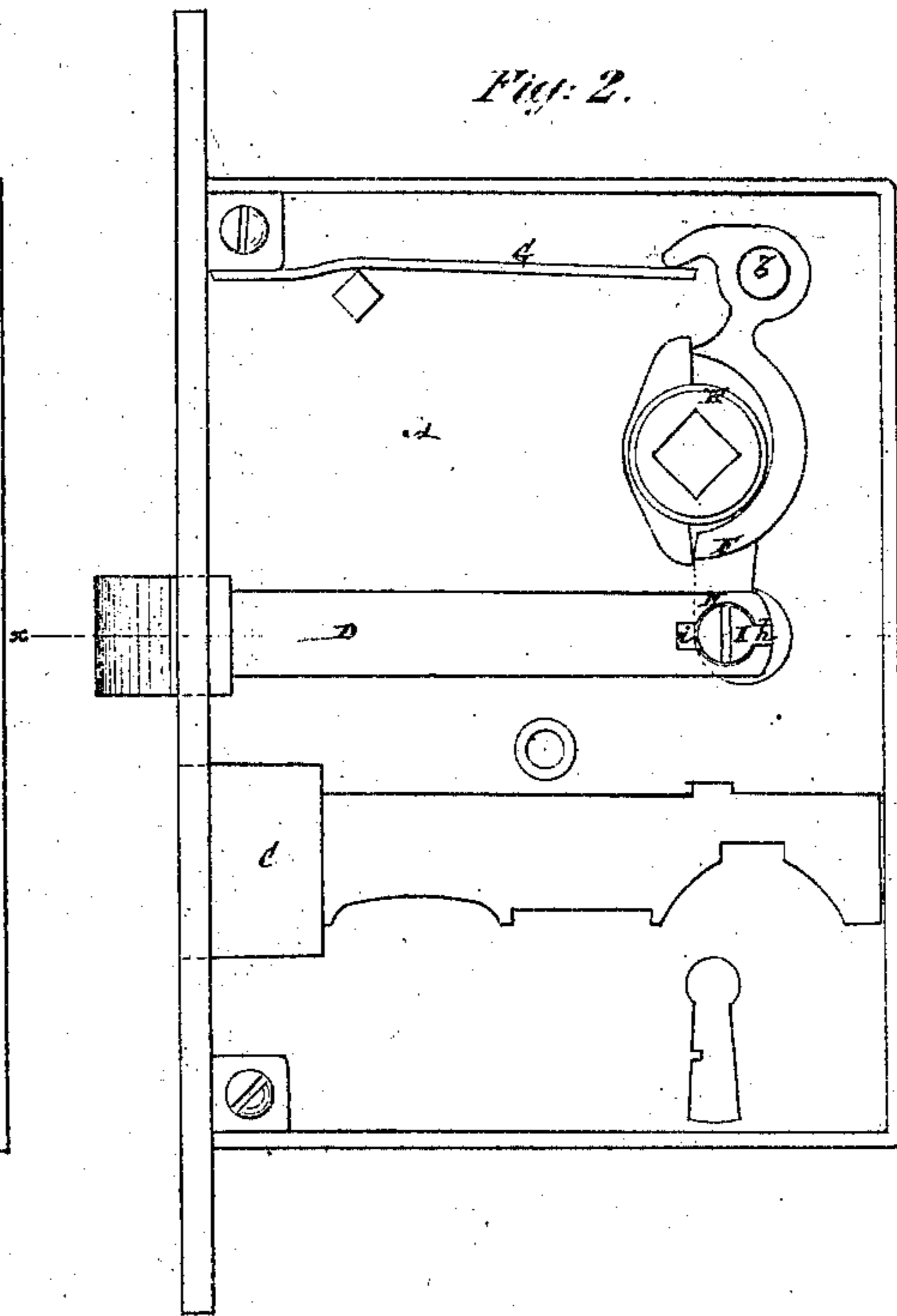
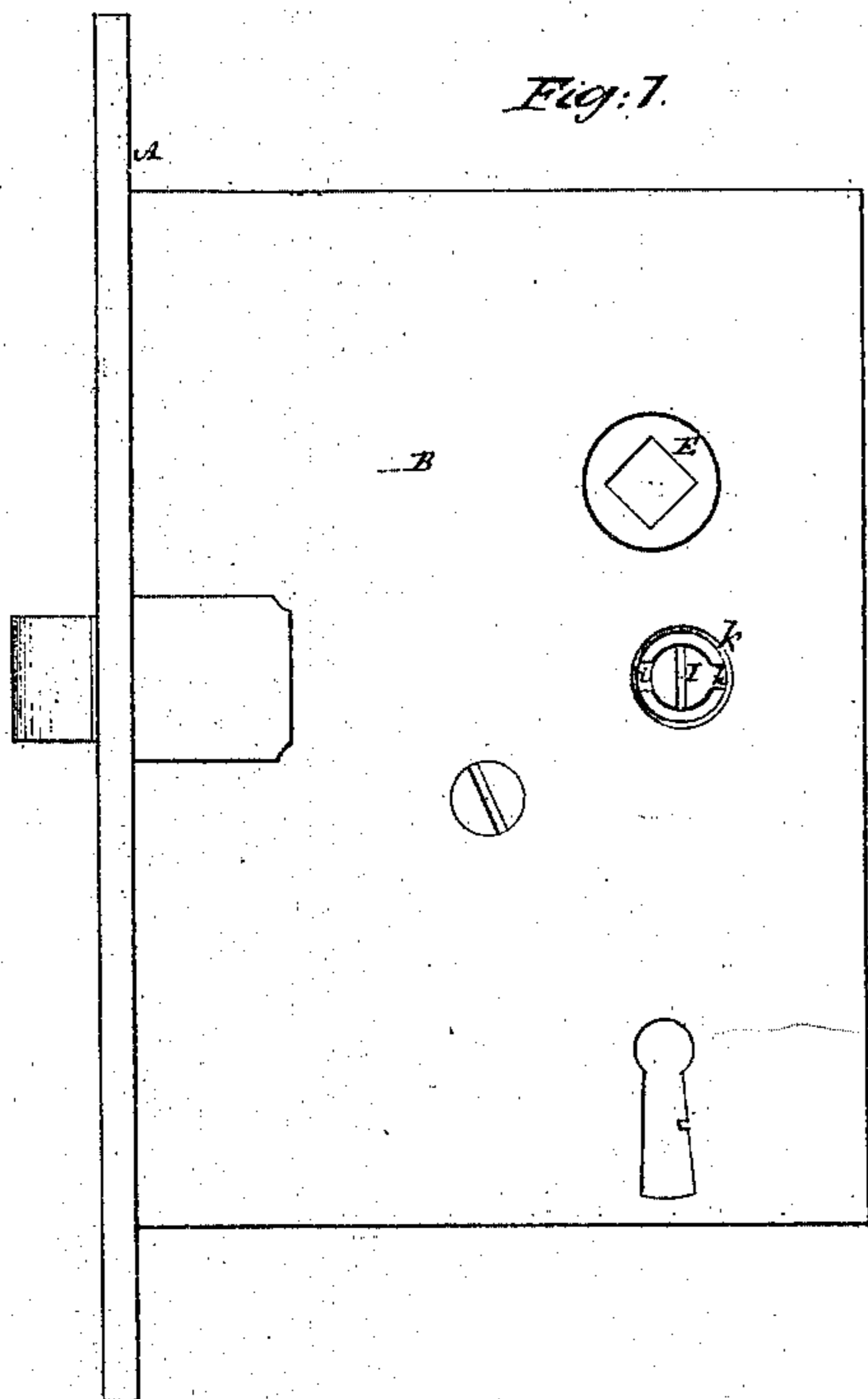


W.A. Hopkins,

Reversible Latch.

No. 105,334.

Patented July 12, 1870.



Witnesses:
Fred. Harper
R. H. Rabreau

W.A. Hopkins

United States Patent Office.

WILLIAM A. HOPKINS, OF NEW YORK, N. Y.

Letters Patent No. 105,334, dated July 12, 1870.

IMPROVEMENT IN REVERSIBLE KNOB-LATCHES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM A. HOPKINS, of the city, county, and State of New York, have invented a new and useful Improvement in Reversible Knob-Latches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a face view of the exterior of a lock having my improvement applied to it;

Figure 2, an exterior view of the same with the outer plate of the case removed;

Figure 3, a transverse section, taken as indicated by the line *z z* in fig. 2; and

Figures 4 and 5, longitudinal face and side views of the reversible latch, detached.

Similar letters of reference indicate corresponding parts.

In reversible latch arrangements, as applied to locks, for the purpose of adapting the latter to right or left-hand doors, and in which the latch has been shot or drawn back as a bolt by means of a knob-spindle or devices connected therewith, the reversal of the latch has been provided for in various ways, including not only the turning of the latch in a socket, but also the detachment of the latch at its inner end from the device by which it is operated, and whereby it is capable of being secured in reverse positions. To this end the latch or bolt has been secured in a detachable manner to the operating lever by a fixed pin, and combined with a movable bearing within the case, so that the sliding of said independent bearing provides for the detachment of the bolt from the lever and its removal from the case, and for its reinsertion in a reversed position.

My invention, while it provides for the reversal of the latch by the detachment of it from the operating lever, essentially differs from this arrangement, and dispenses both with an independent sliding bearing and with a fixed pin on the end of the operating lever, and

The invention consists in a peculiarly-constructed slot in the inner end of the latch, in combination with a peculiarly-shaped locking-pin for attachment of the latch to the lever, said pin being made capable of turning or adjustment from the exterior of the case,

to provide in a secure and convenient manner for the attachment and detachment of the latch by changing the relative positions of the locking portion of the pin and slot in the end of the latch.

In the accompanying drawing—

A represents the lock-case, and

B the outer plate thereof.

C is the locking-bolt, and

D the sliding latch.

E is the hub, with its followers, actuated by the knob-spindle, and

F the operating lever, pivoted, as at *b*, said lever being under control of the hub E and a spring, G, to effect the movement of the latch.

The inner end of the latch may be thinned down, as represented in figs. 3 and 5, and has a suitably-shaped slot, H, in it, to give it a locking and unlocking character in connection with a screw or pin, I, made capable of turning within the operating lever F which carries it.

The head of this pin I projects through the slot H, and is capable of being rotated therein, so that a wing or lip, *h*, on the side of said head and exterior to the slotted portion of the latch, may either be brought into line with a branch, *i*, of the slot H, or out of line therewith. This may be done by a screw-driver entered through a hole, *k*, in the lock-plate, and made to fit a nick in the head of the pin, which latter, when turned so that its lip *h* lies over the opening *i*, allows of the latch D being slipped off the pin and drawn out of the case, and, after being reversed, reinserted or slipped over the pin again, when, by simply turning the pin so that its locking lip *h* is out of line with the opening *i*, the latch is locked in its gear with the operating lever F.

What is here claimed, and desired to be secured by Letters Patent, is—

The locking slot H, with its branch *i*, in the inner end of the latch D, in combination with the movable pin I, provided with a locking-lip, *h*, and the operating lever F, substantially as and for the purpose herein set forth.

W. A. HOPKINS.

Witnesses:

FRED. HAYNES,
R. E. RABEAU.