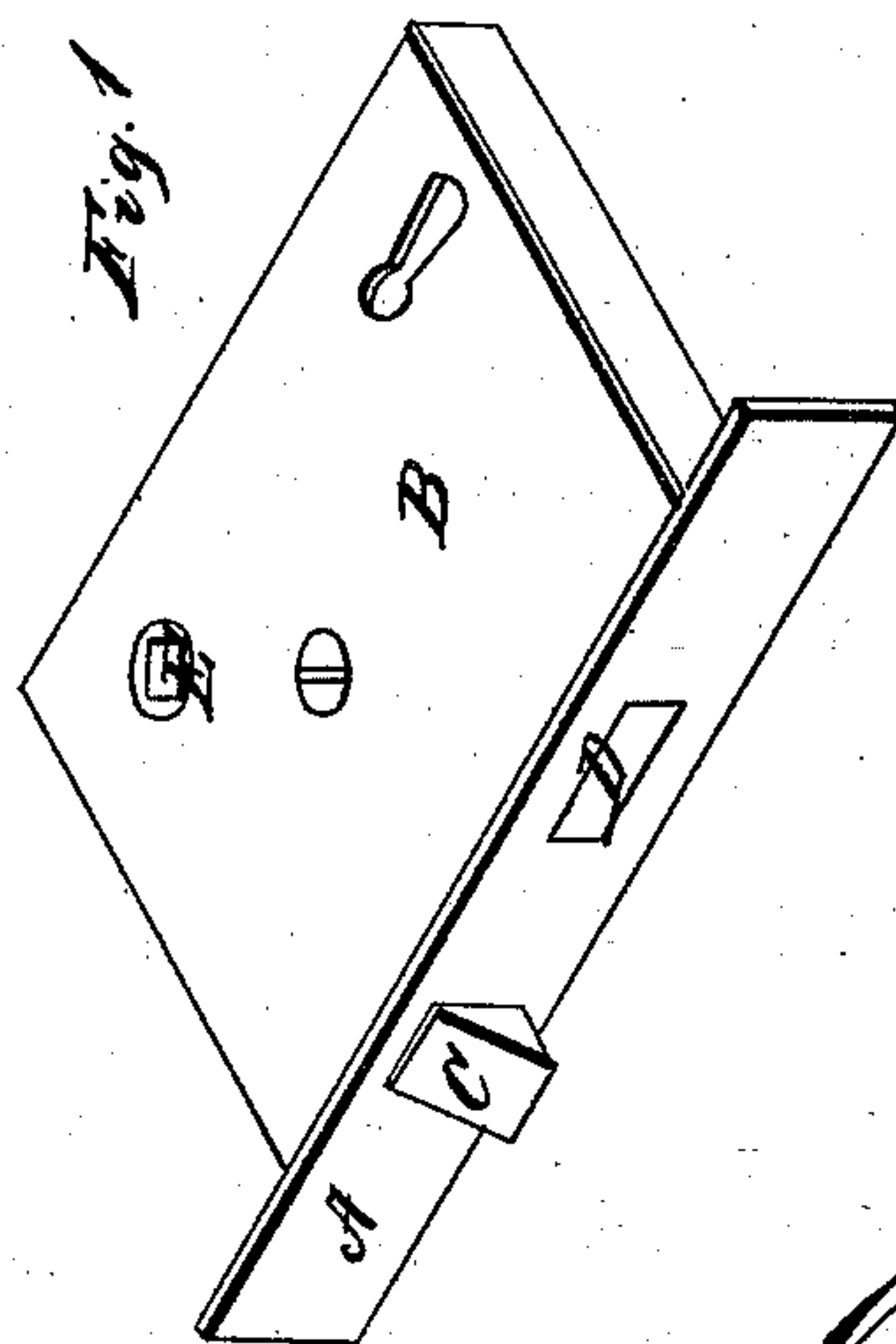
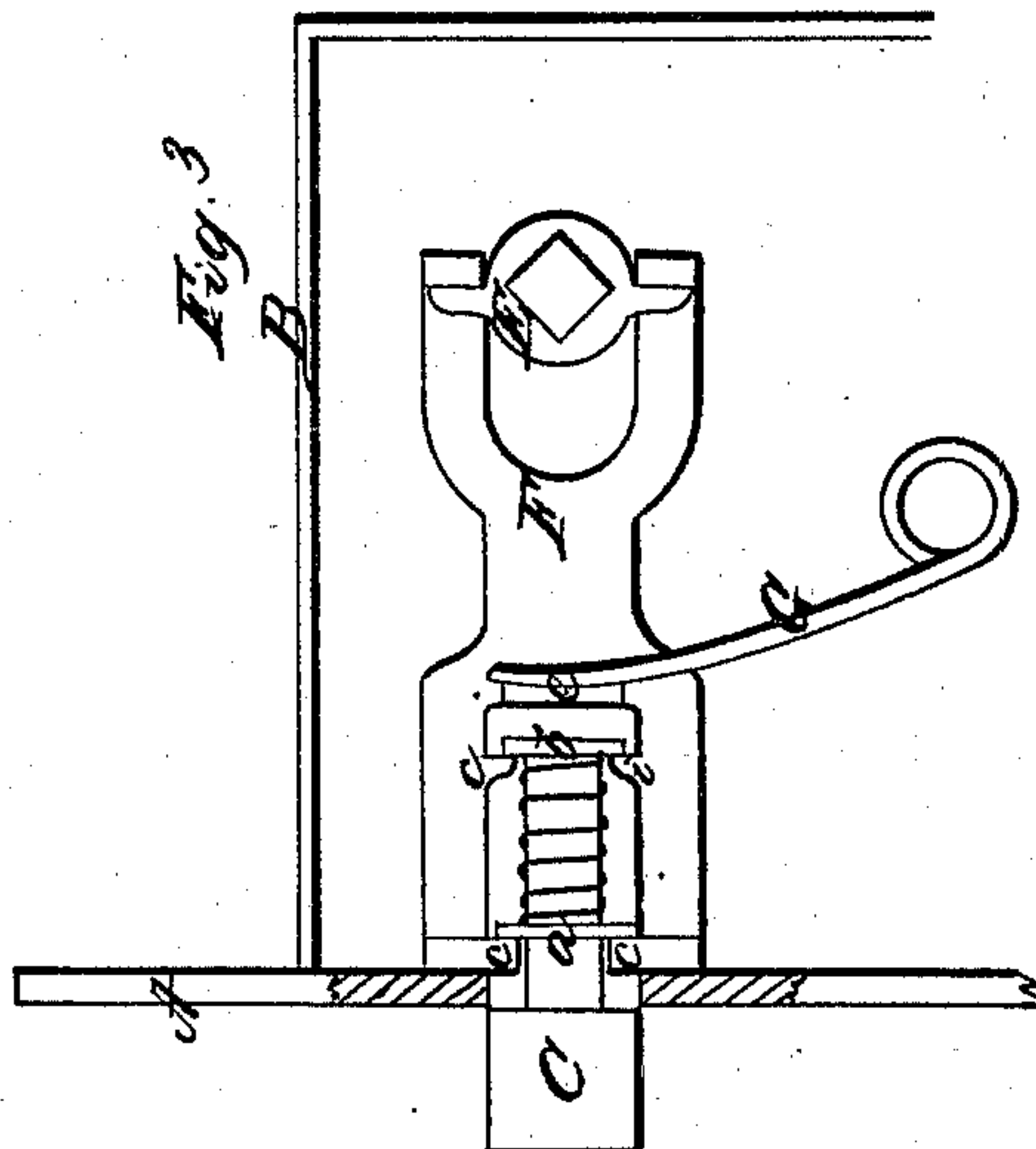
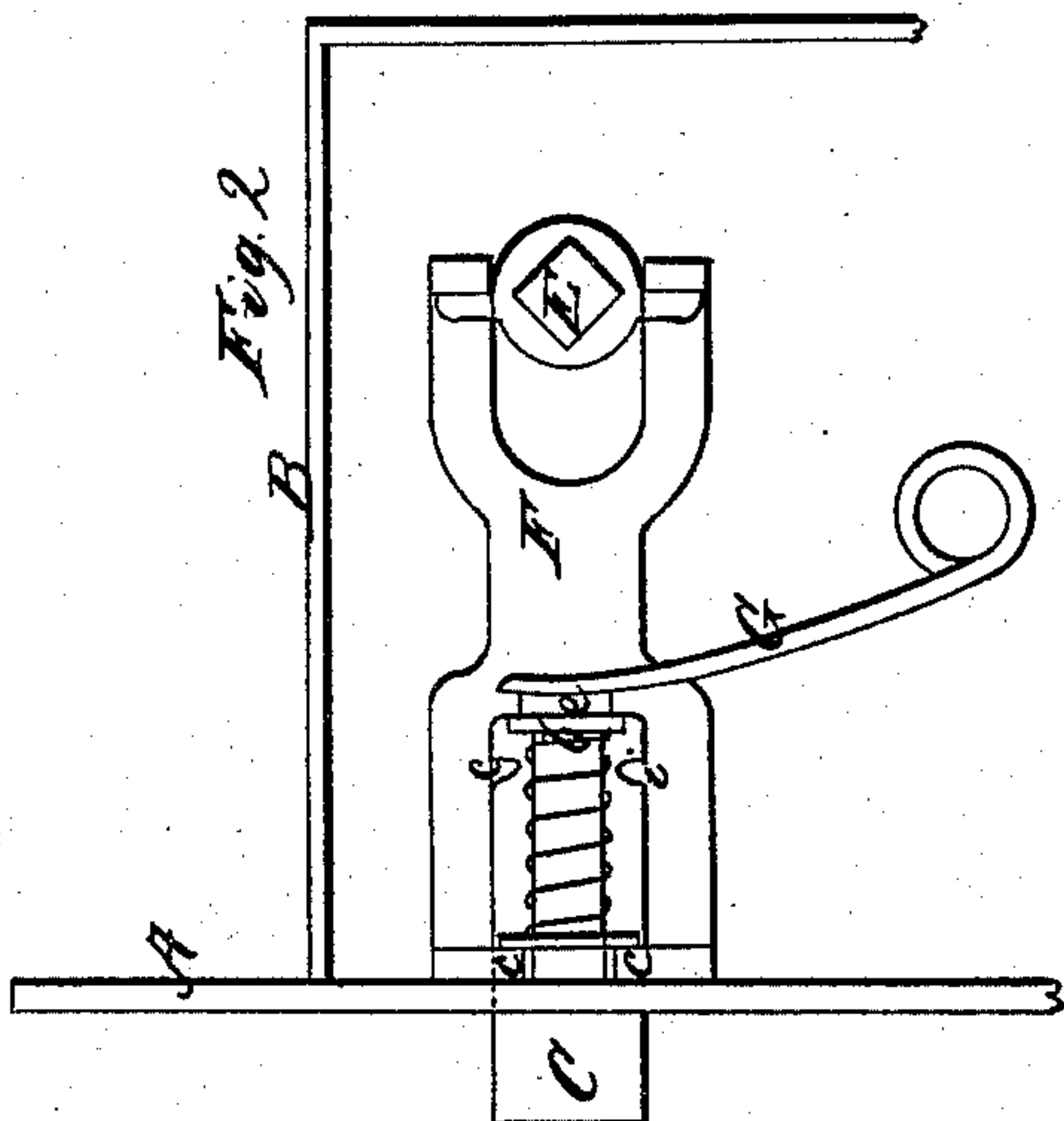


E. Halley,
Reversible Latch.
No 39,770. Patented Sep. 1, 1863.



Witnesses
Rufus Sanford
Hubbard Beebe

Inventor
Edward Halley
By his atty John E. Early

UNITED STATES PATENT OFFICE.

EDWARD HALLEY, OF BRANFORD, CONNECTICUT, ASSIGNOR TO PATRICK KENNEDY, OF SAME PLACE.

IMPROVED DOOR LOCK AND LATCH.

Specification forming part of Letters Patent No. 39,770, dated September 1, 1863.

To all whom it may concern:

Be it known that I, EDWARD HALLEY, of Branford, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Door Locks and Latches; and I do hereby declare the following to be a full, clear, and exact description of the same, when taken in connection with the accompanying drawings, which form a part of this specification, in which—

Figure 1 is a perspective view; Figs. 2 and 3, sectional views to fully illustrate the operation of my invention.

Same letters refer to like parts.

Door locks and latches are distinguishable by the title "right" and "left" hand, according as the door to which they are adapted is to swing to right or left. Until quite recently this has required two distinct locks and latches—one for right and one for left hand doors—and has always been a source of great annoyance to dealers as well as consumers, from the fact that what is properly termed a "left-hand" door is often, by those inexperienced, called a "right-hand" door, and vice versa, and thus he orders from the dealer quite the reverse of his desires; or, as is often the case, not aware of any distinction, orders simply a quantity of locks and latches. In such cases the trouble and annoyance may too easily be imagined to require description.

Various devices have been used without fully accomplishing the desired result, from the fact that in all cases some part of the lock must be removed to reverse from right to left, or vice versa, which, except in the hands of an expert, but adds to the difficulties already described.

My invention, suggested by this trouble, is designed to overcome the same; and it consists in constructing the latch-bolt independent of the horseshoe, which is moved by the follower, and so that it may be partially drawn out from the case and set either for right or left hand, and, thus set, be returned to the case by a spring or its equivalent.

To more fully illustrate, as also to enable others skilled to make and use my improved locks and latches, I will proceed to describe their construction and operation.

A is the face-plate, B the case, C the latch-bolt, D the lock-bolt, E the follower, to all appearance, when complete as in Fig. 1, the same as any common latch and lock.

In Figs. 2 and 3, F is the horseshoe, which, operated by the follower, serves to draw the latch-bolt in, while the spring G serves to force it out. The latch-bolt C is made with a spindle, around which is a collar, *a*, and upon its extreme end is made a head, *b*. Between the said head and collar I place a coil-spring or its equivalent. (Denoted in red.) The horseshoe is made with projections *c*, against which I place the collar *a*. The head *b* rests against another projection, *e*, from the horseshoe. To unlatch or to draw in the latch, turn the follower E in the ordinary manner, and the projection *c* will press against the collar *a* and draw the bolt in; but should there be a sufficient resistance offered to overcome the spiral spring, the horseshoe would simply contract the spring without moving the latch. To provide against this I make the other projections, *i*, from the horseshoe, which will catch upon the head *b* and force the latch back should resistance be offered. When it is desired to reverse the latch-bolt from left to right, draw the bolt from the case, as shown in Fig. 3, (the projections *i* must be placed far enough forward to allow of this;) turn the bolt to the required position, and when in that position release the bolt, and the spiral spring will force the bolt back into the case, as shown in Figs. 1 and 2.

No instruments are required, and no part or piece need be taken from the case to make the change. Thus the object of my invention is accomplished; and,

Having thus fully described and set forth the same, what I claim therein as new and useful, and desire to secure by Letters Patent, is—

The combination of the horseshoe and latch-bolt, when the same are constructed in the manner described, so as to allow a partial withdrawal of the latch-bolt independent of the horseshoe, for the purpose specified.

Witnesses: EDWARD HALLEY,
THOMAS KENNEDY,
JOHN E. EARLE,