

M. T. Lincoln

Lock.

N^o 42,954.

Patented May 31, 1864.

Fig. 2.

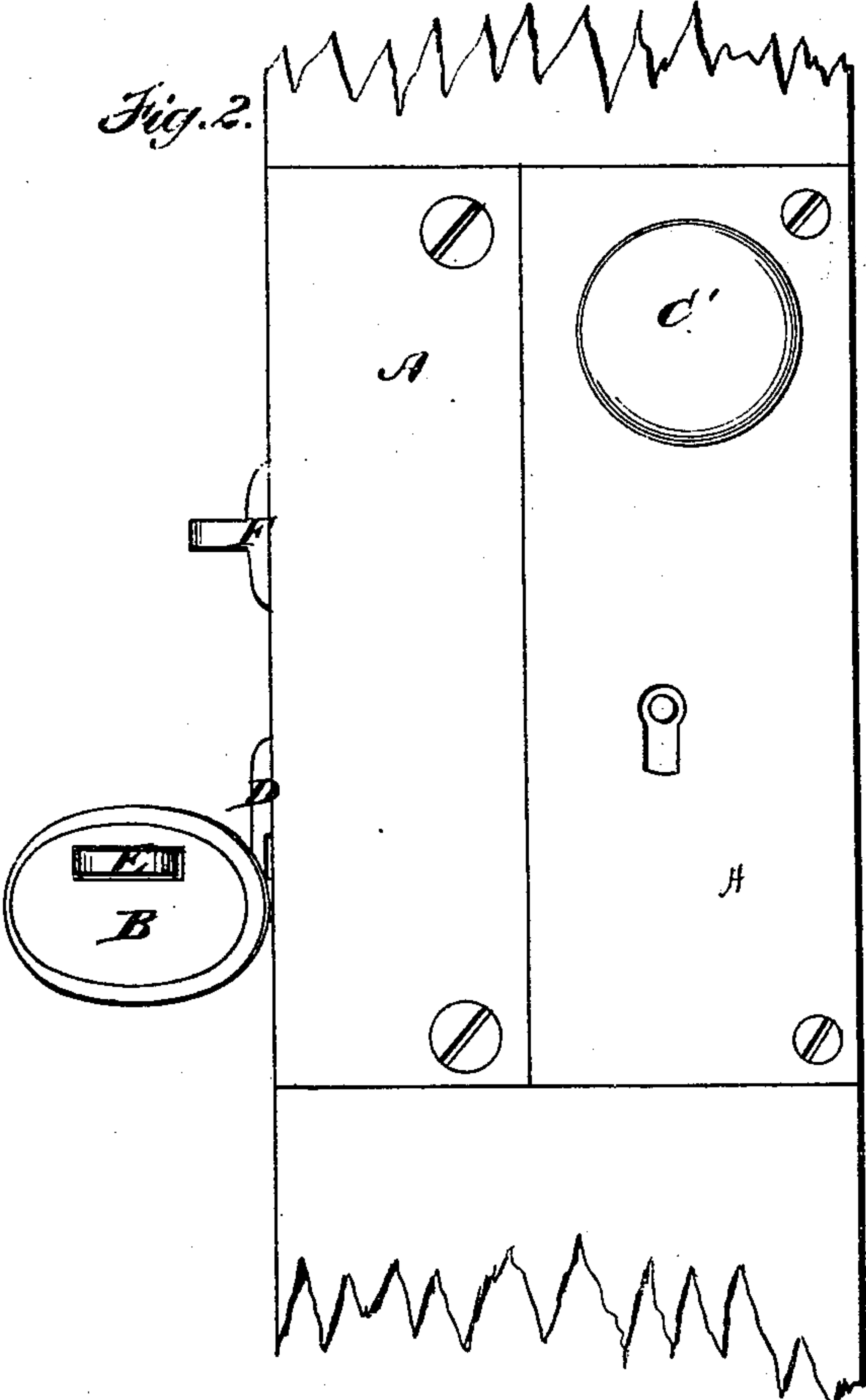


Fig. 1

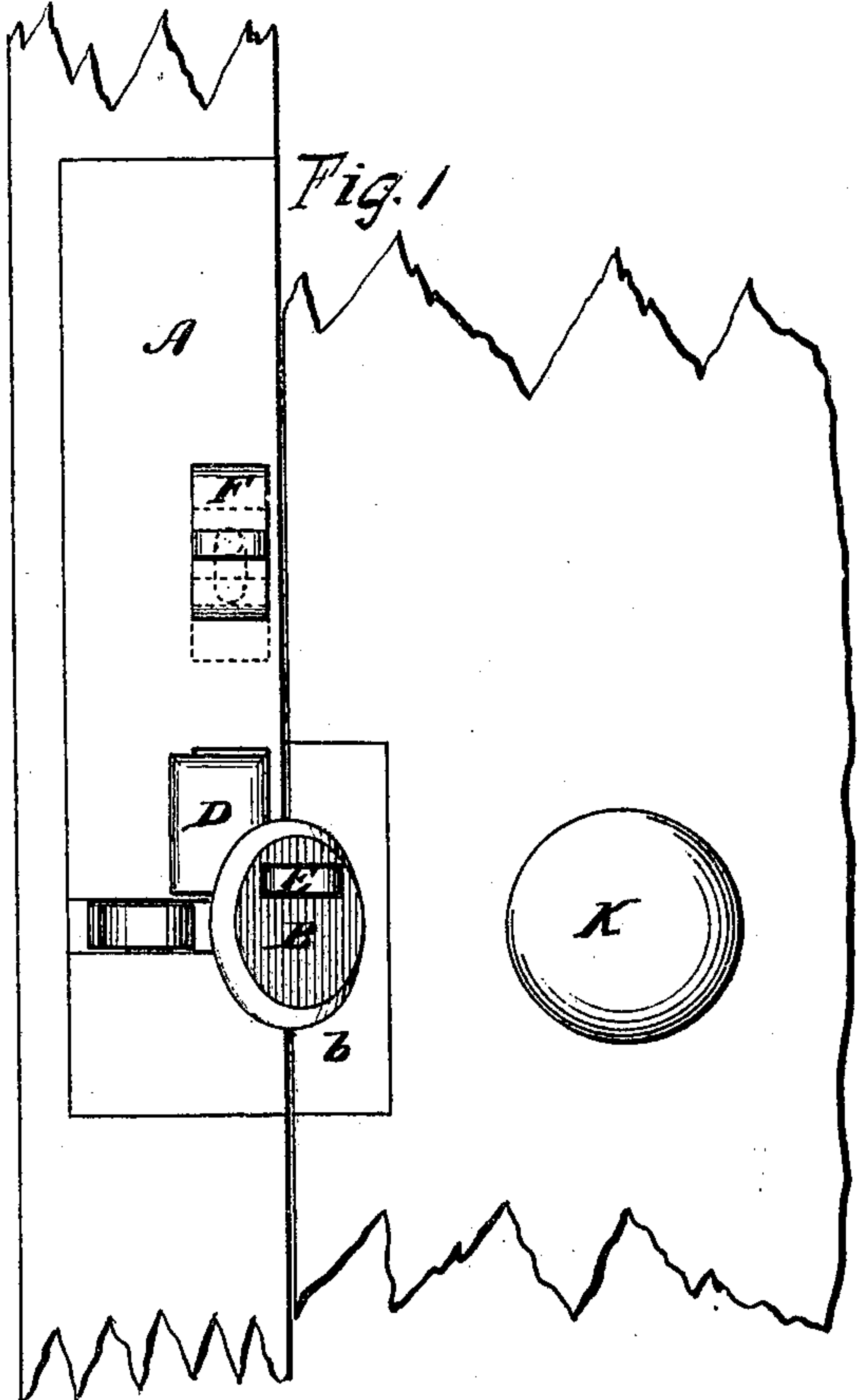
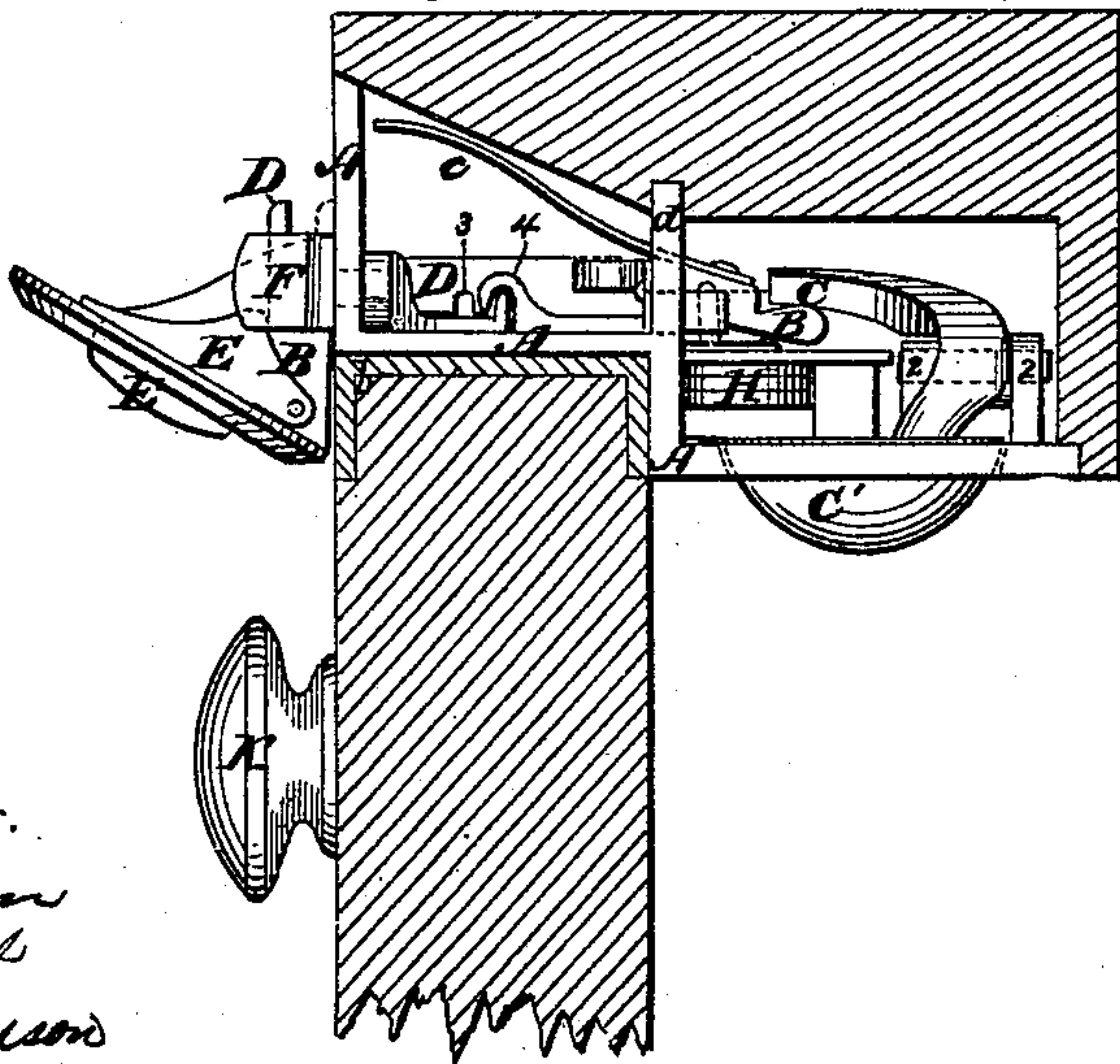


Fig. 3.



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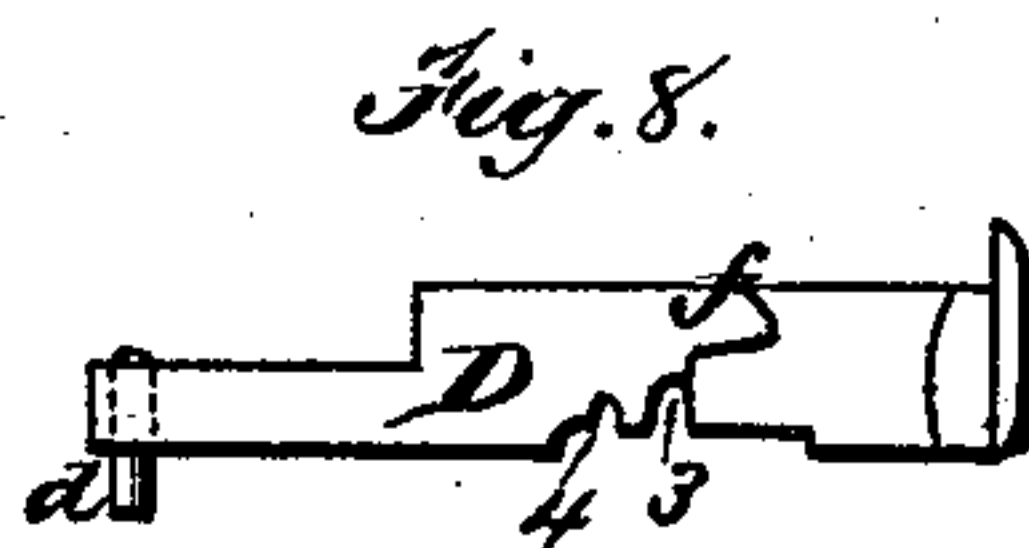
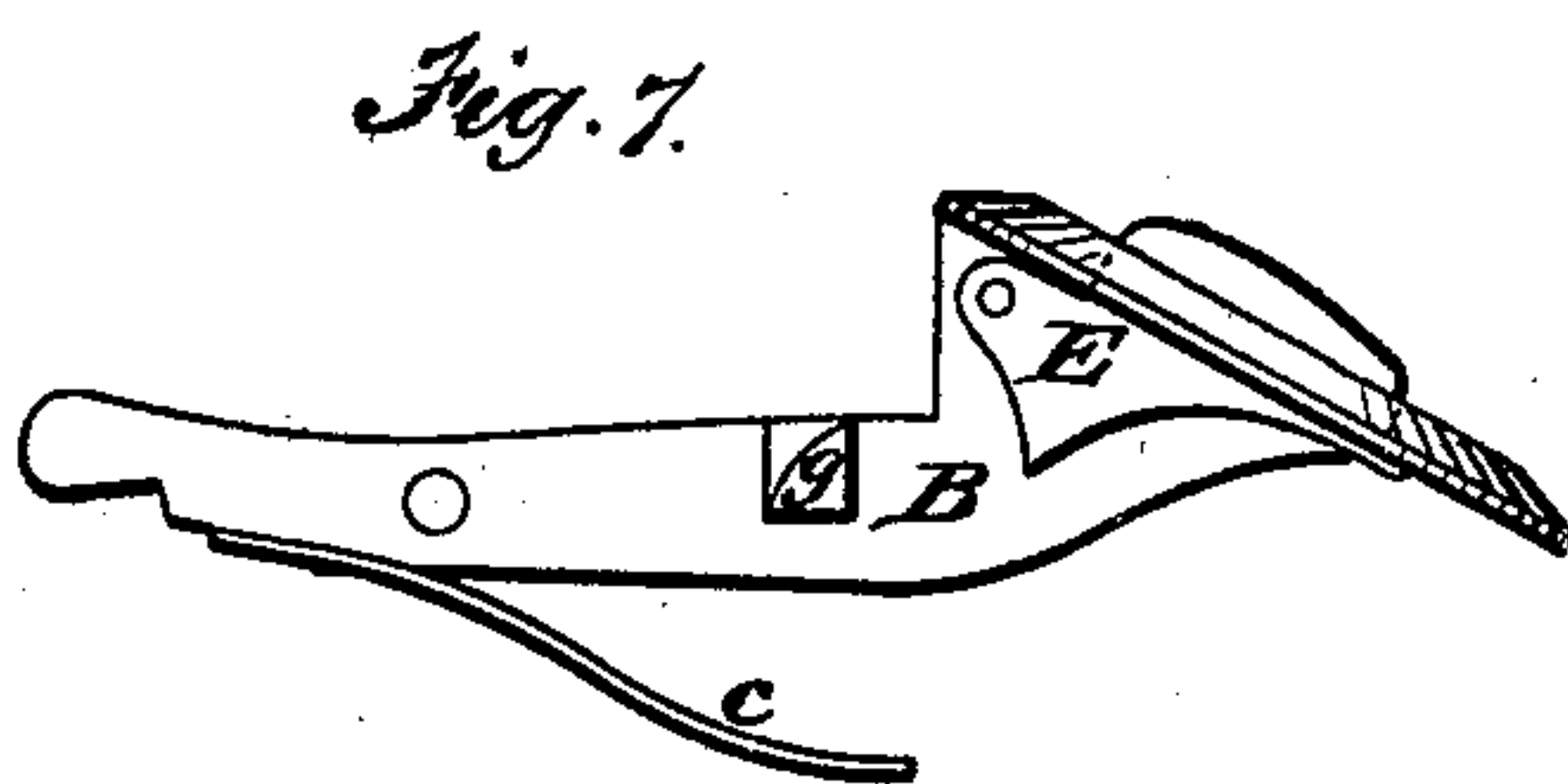
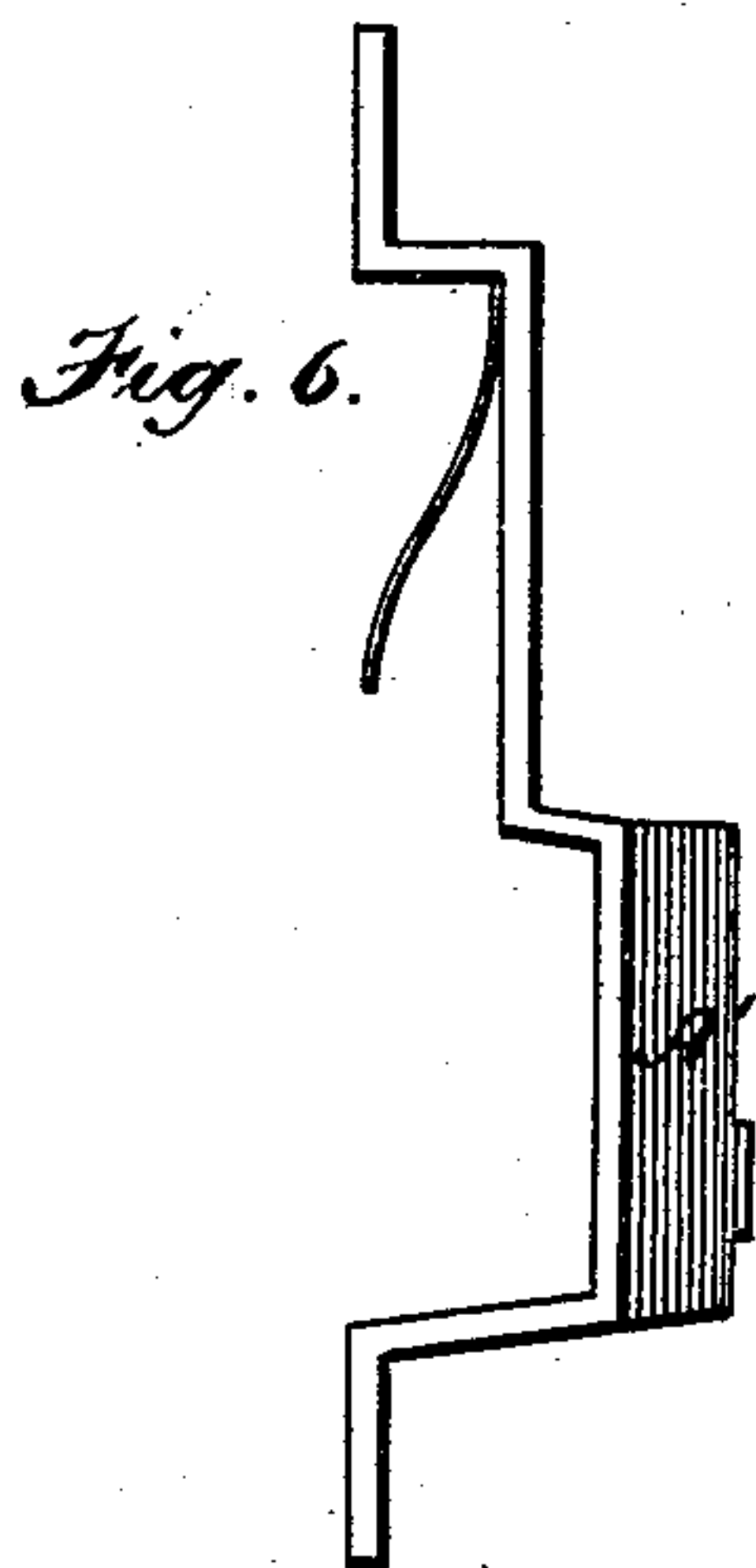
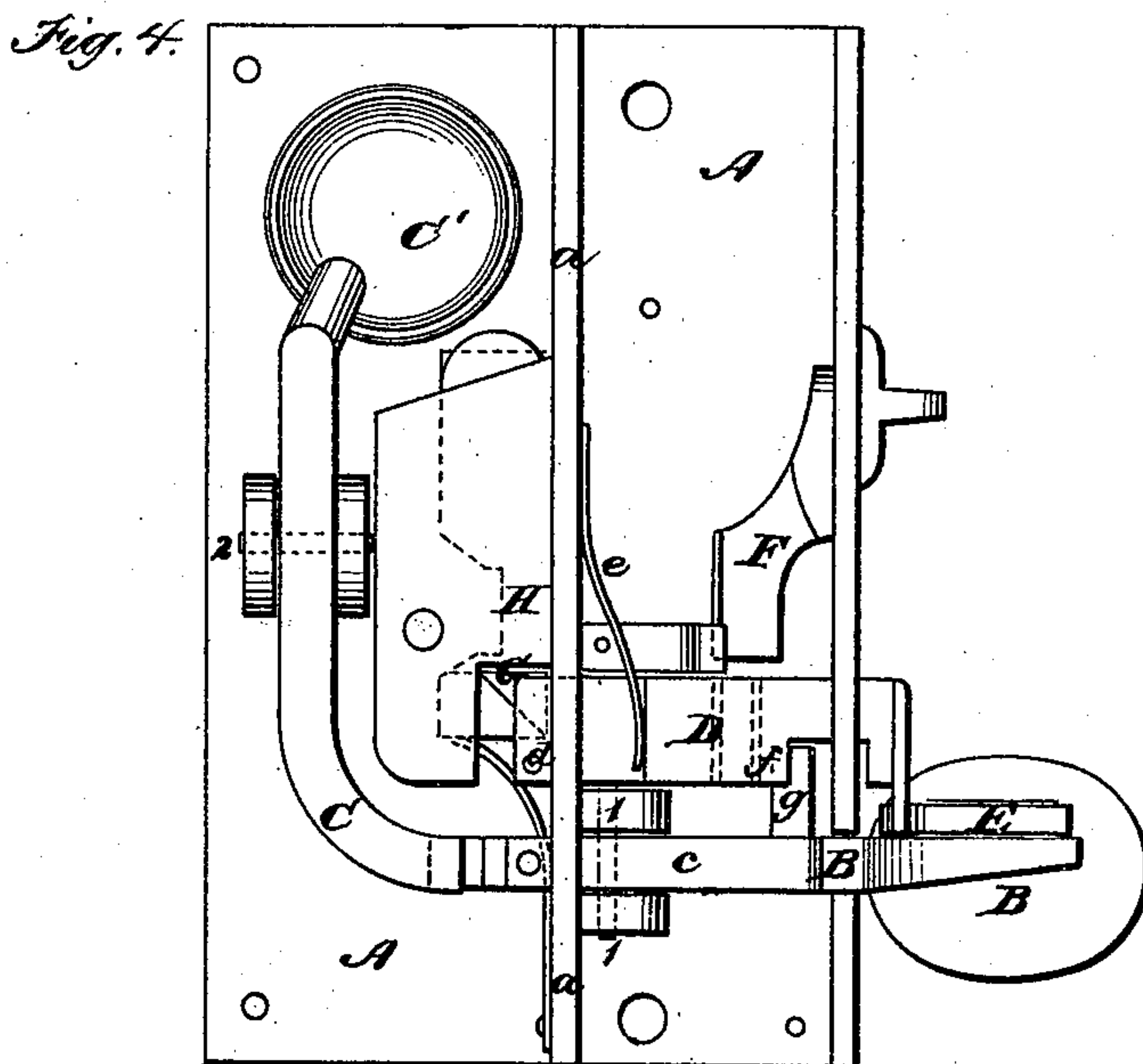
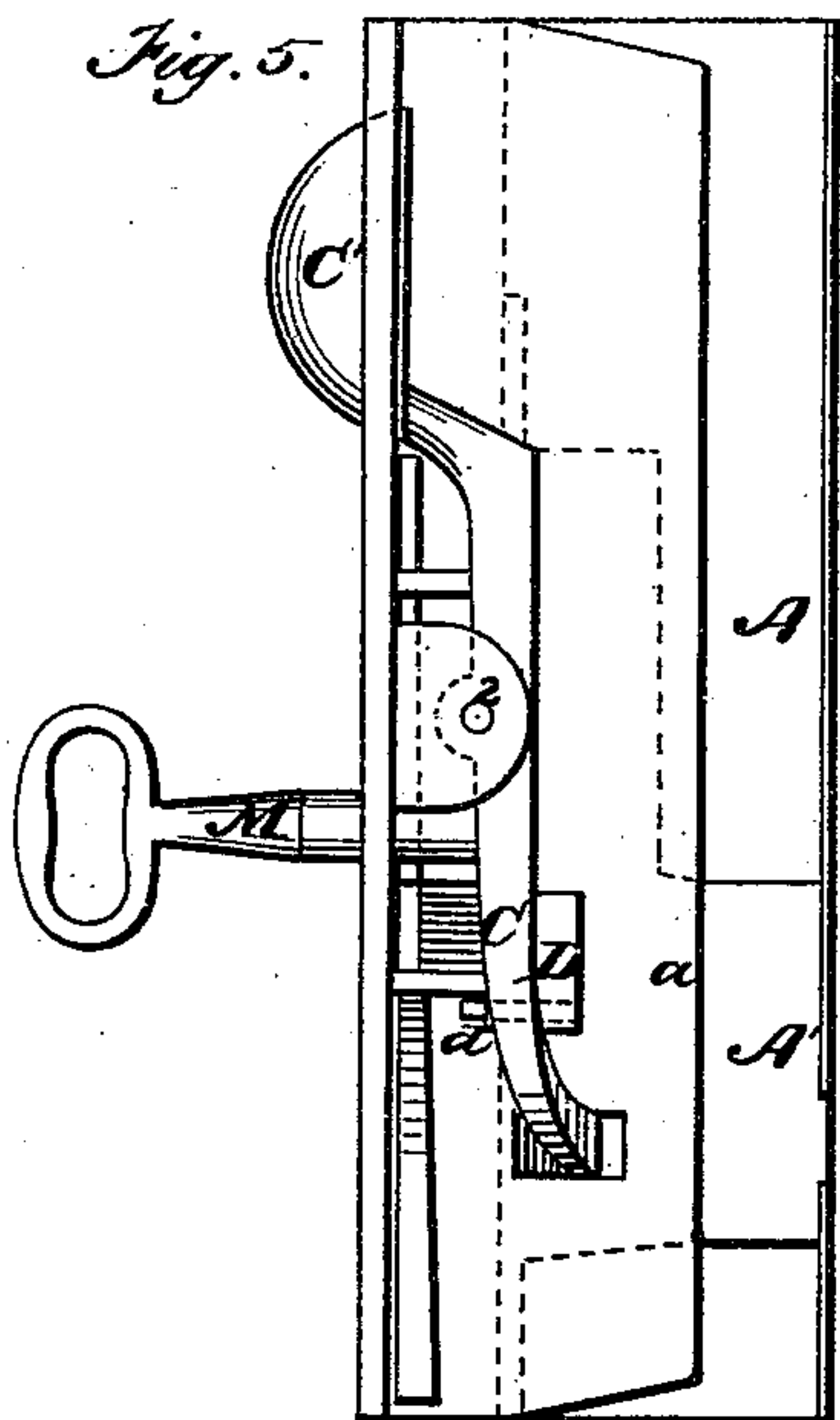
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UNITED STATES PATENT OFFICE.

MARSHALL T. LINCOLN, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN LOCKS.

Specification forming part of Letters Patent No. 42,954, dated May 31, 1864.

To all whom it may concern:

Be it known that I, MARSHALL T. LINCOLN, of Washington city and county, in the District of Columbia, have invented certain new and useful Improvements in Door-Locks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference thereon marked.

To enable others to make and use my invention, I will describe its construction and operation.

In the drawings, Figure 1 is a front view of the door jamb and lock, as seen from the inside of the room. Fig. 2 is a view of the face of the jamb, and shows the mode of fastening the lock-shell to the jamb. Fig. 3 is a cross-section through the door-jamb and lock-shell. Fig. 4 is a plan view of the lock, seen from the inside, a portion of the shell being removed. Fig. 5 is an edge view of the lock, as seen from the outside of the room, the jamb being removed. Fig. 6 shows the portion of the shell removed in Fig. 4, and shown by dotted lines in Fig. 5. Fig. 7 shows the main lever bolt or catch which locks the door. Fig. 8 shows the sliding bolt for regulating the lock, so as to make it answer the purpose of a simple "catch" or a "night-latch," or a "lock."

The nature of my invention consists, principally, in constructing a lock for the ordinary valve doors of dwellings in such a manner as to be attached to the jamb instead of to the door, as is the universal practice, as will hereinafter more fully appear.

In the drawings similar characters refer to like parts.

A is the cast-metal lock-shell, made in one piece, and provided with the necessary slots and bearings for the arrangement of the various parts of the lock, so as to require the least amount of boring and fitting. The manner in which the shell is let into and secured to the jamb is fully shown in Figs. 2 and 3. *a* is a vertical partition, running through the shell and forming a part of it, which serves as frame-work and at the same time makes it impossible to force the lock off from the outside when the outside screws have been removed. Fig. 3 shows how this is effected by letting the partition *a* take into a suitable recess of the jamb. A' is the back plate.

B is the latch-lever, having its fulcrum at

bearing 1. The profile of this latch is shown in Fig. 7, and its manner of securing the door when shut in Fig. 3. Its rectangular shoulder catches against the guard-plate *b* on the edge of the door, Fig. 3.

C is the outside operating-lever, having its fulcrum at bearing 2. The upper end of this lever is finished with an ornamental knob, which partially protrudes through the shell at a point outside of the door-line. The lower end of this lever has a rectangular bend, so that it may operate upon the inner end of lever B, which is at right angles with lever C. Lever B is provided with a spring, *c*, to retain it in the holding position, and at the same time, through its action upon lever B, to keep the knob-handle of lever C protruded through its orifice in the shell, as shown in Figs. 3 and 5. Pressure upon the knob-lever C operates upon latch-lever B so as to throw it back far enough to permit the door to escape it when swung open.

D is the regulating slide-bolt, sliding in slots in the shell, and its partition *a*, parallel to and a short distance from the lever-latch B. The inner end of this bolt is provided with a pin, *d*, to be operated upon by the key-bolt, so as to slide the bolt in inward. The bolt is forced outward (Fig. 4) by a flat spring, *e*. When the bolt D is in this position, its lug *f* passes over and rests upon the stud *g* of the lever B, so that it is impossible to force the said lever back so as to open the door without first sliding back the bolt D so as to release the stud *g* from the control of the lug *f*. The bolt D may be slid back either by the key-bolt acting upon pin *d* or by direct action upon its outer end by the cam E. Cam E passes through the thumb-guard upon the end of the latch B, and is operated by the thumb, the pressure of which causes it to slide the bolt in and release the stud of the latch B, so that it can be pushed back to permit the opening or closing of the door. When the door is shut forcibly, the guard-plate *b* strikes against the cam and produces the same result.

F is the sliding catch for fastening the slide-bolt in any desired position, and is, of course, operated solely from the inside of the room. When it is the wish to hold the slide-bolt in, it is pushed inward, and catch F is forced down into the slot 3 in the bolt, Fig. 8, so that the bolt is stationary until released by the

catch. When it is desired to hold the slide-bolt out—that is, to make a dead-lock—the catch F is forced into the slot 4 of the bolt.

G is the key-bolt, which acts against the pin *d* so as to draw the sliding bolt.

H are a set of tumblers attached to the key-bolt, for the purpose of increasing the difficulty of picking the lock.

I is the night-latch key for drawing the sliding bolt.

In the operation of my invention it will be perceived that it is capable of acting in three different modes and as three distinct mechanisms, although forming but one machine: first, as a simple latch; second, as a night-latch, and, third, as a burglar-proof lock.

When I wish to use my combination jamb-lock as a simple latch, in lieu of the common door-bolt, I push in the slide-bolt D and secure it by the catch F in this position. In order to open the door from the inside, I take hold of the door-knob K, and with the thumb of the same hand push back the lever-latch B and readily pull open the door. To open the door from the outside, I simply push in with the thumb the protruding knob of lever C and readily push open the door.

When the invention is to be used for a night-latch, the catch F is disengaged, and the bolt D slides out, as in Fig. 4. In order to open the door now from the inside, it is necessary that the pressure of the thumb should come upon cam E, pivoted to bolt B. This pressure forces in the slide-bolt D, and thus permits the latch to be forced back as before described.

In order to open the door from the outside, it is necessary to use the night-key, for the lever C has no connection either with the cam E or the slide-bolt D. The key, acting upon the tumblers, forces down the key-bolt G against pin *d*, thus drawing in the slide-bolt. At the same time the knob-lever C is depressed and the latch B withdrawn and the door pushed open as before.

If now it is desired to secure the door by using the invention as a burglar-proof lock, I have merely to force the catch F into the slot 4 in the sliding bolt. In this arrangement it is impossible to pick the lock from the outside with or without the key, for any picking-instrument, after entrance through the key-hole would have to bore through

partition in order to get to the catch, and then it would be impracticable to move the said catch vertically so as to release the bolt.

It is thus seen that I have produced a jamb-lock combining in one instrument a simple latch, a night-latch, and a burglar-proof lock which can be furnished at or about the cost of the ordinary door-lock without the night-latch. There are numerous and obvious advantages possessed by my invention—convenience, security, durability, appearance, and cheapness.

I am not aware of any lock hitherto constructed adapted to attachment to the jamb, and, having described a means of effectuating the principle of applying locks to the jamb, am desirous of broadly securing the right to make locks upon said principle.

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

1. Constructing locks for house (or other) doors so as to be attached to the door jamb, substantially in the manner and for the purposes specified.
2. The levers B and C, the one being operated from the inside and the other from the outside of the room, constructed and operating substantially as set forth.
3. The regulating slide-bolt D, constructed and operating substantially as herein set forth.
4. The combination and arrangement of latch B and slide-bolt D, as set forth.
5. The combination of a key-bolt, G, with the slide-bolt D, for the purposes herein set forth.
6. The combination and arrangement of the tumblers H, key-bolt G, and slide-bolt D, for the purposes specified.
7. The cam E, constructed and operating substantially as specified and for the purposes set forth.
8. The lock-shell A and partition *a*, constructed and operating substantially as specified and for the purposes herein set forth.

In testimony that I claim the above I hereunto set my hand.

MARSHALL T. LINCOLN.

Witnesses:

ASA L. CARRIER,
JO. C. CLAYTON.