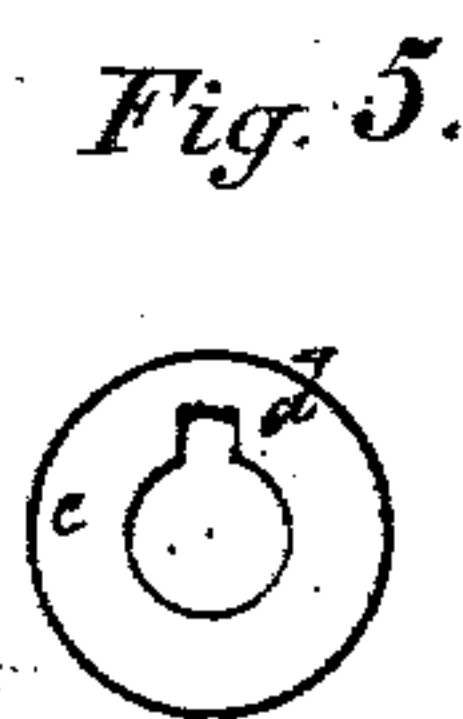
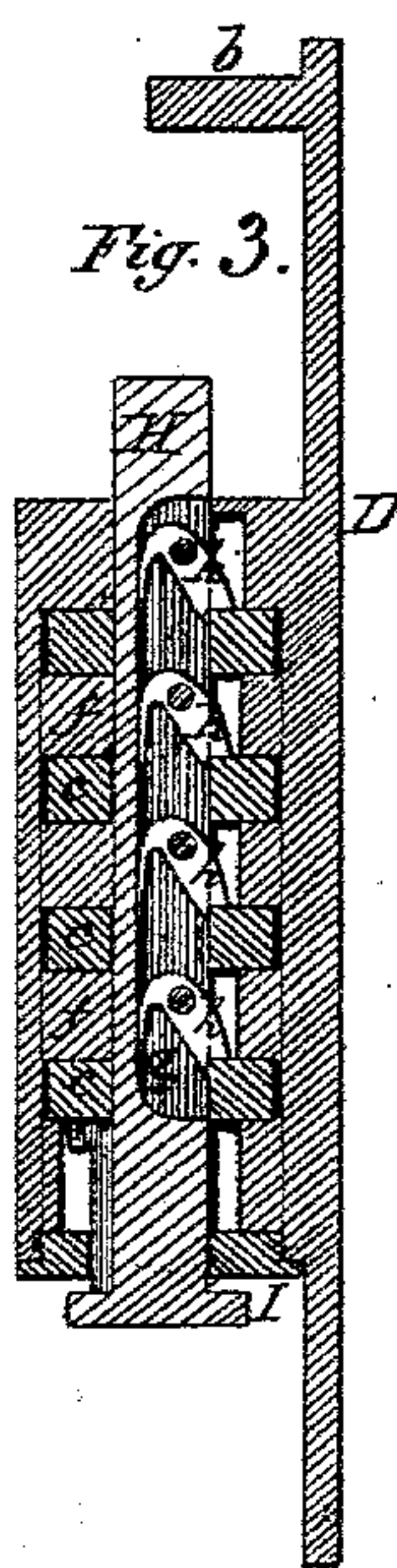
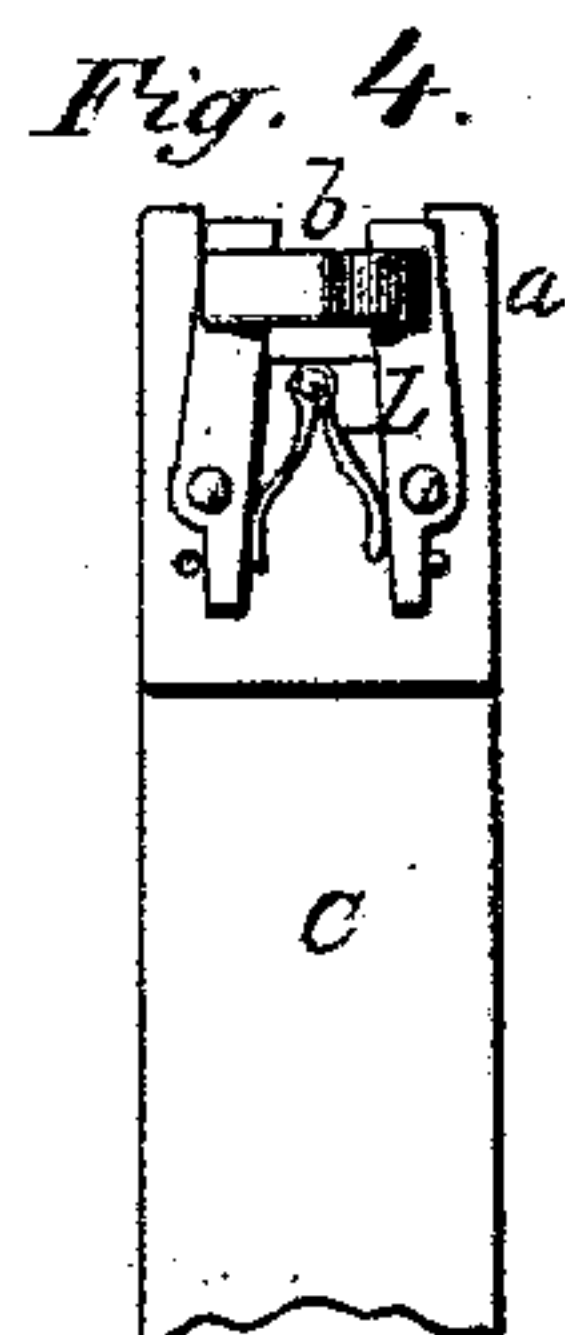
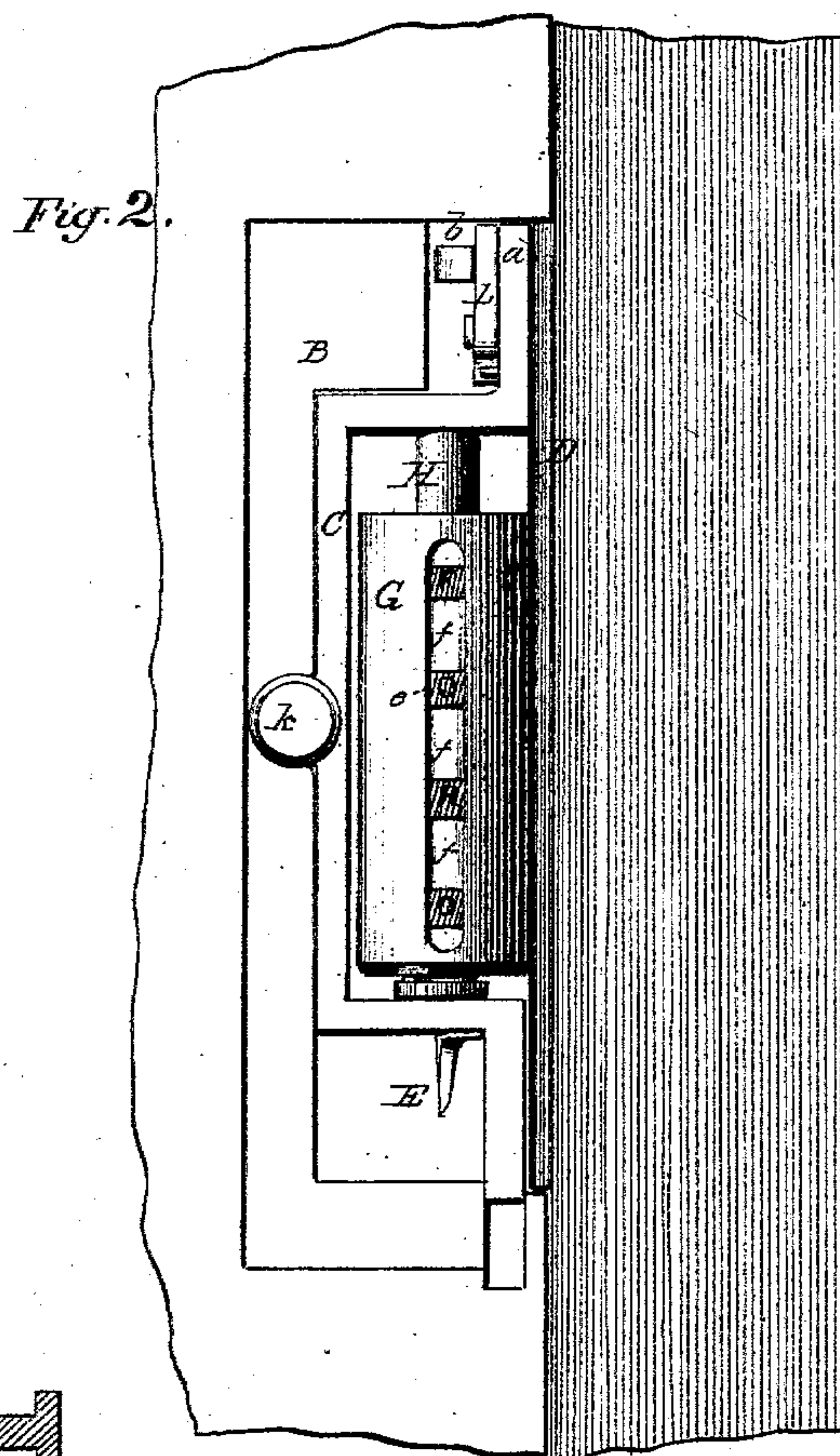
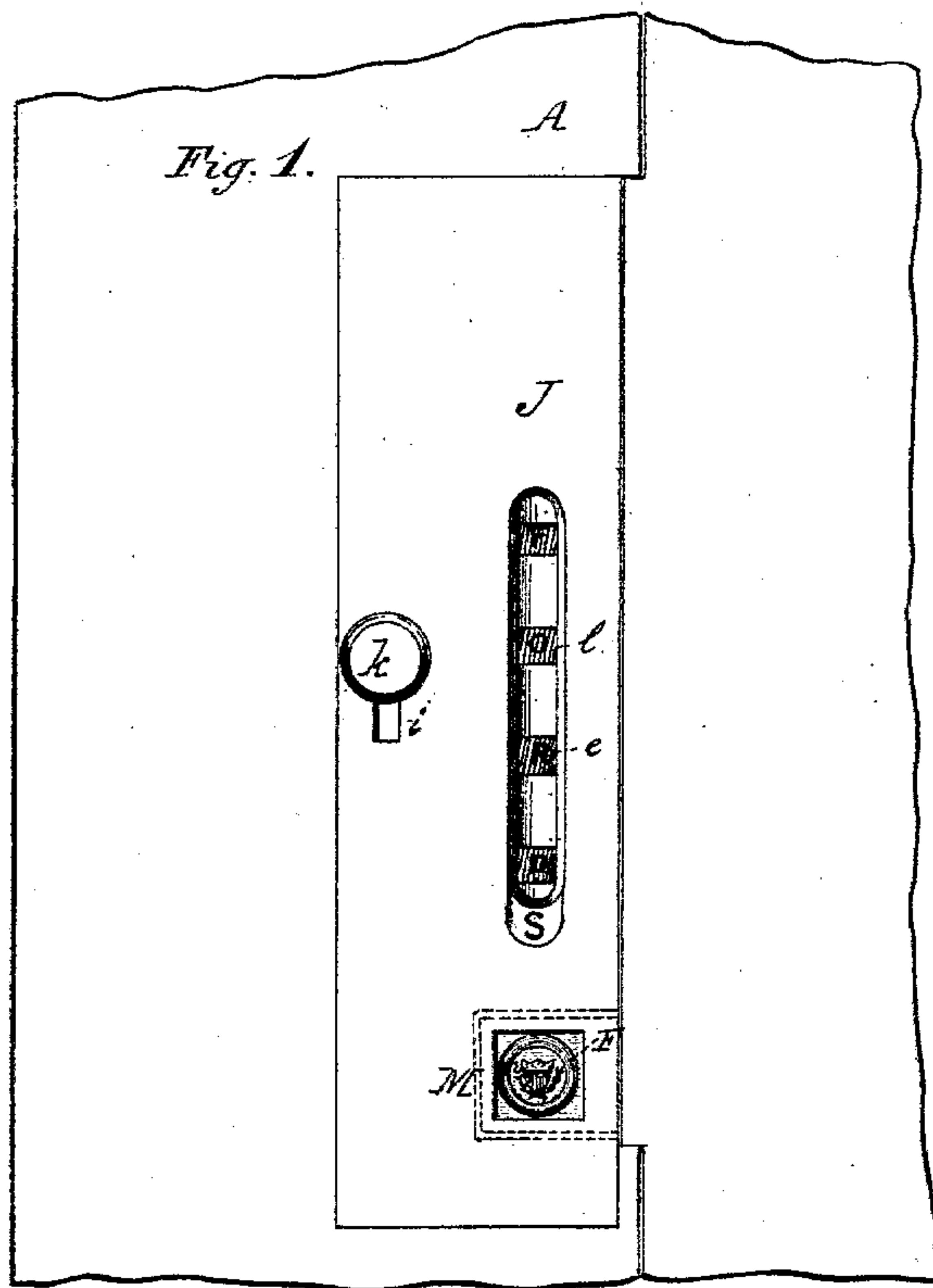


D. A. McNair,

Seal Lock:

No. 102696.

Patented May 3. 1870.



Witnesses:

L. Kailer
Phil. T. Dodge

Inventor
S. A. McNair
by Dodge & Munroe

United States Patent Office.

DAVID A. McNAIR, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 102,696, dated May 3, 1870.

IMPROVEMENT IN SEAL-LOCKS.

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, DAVID A. McNAIR, of the city of Washington, in the county of Washington and District of Columbia, have invented certain Improvements in Combination and Seal-Locks, of which the following is a specification, reference being had to the accompanying drawings:

My invention relates to combination and seal-locks, and consists in the novel construction and arrangement of an inner bolt, provided with spring catches or dogs, with a series of disks rotating loosely about it, and having one or more notches or gates in their interior sides or openings, so that, when the disks are gated in line with the catches or dogs, this bolt will permit the locking-bolt to move it, and the locking-bolt, in being moved, releases the catch of the lock, and cuts or pierces the seal, all as hereinafter explained.

In the drawings—

Figure 1 is a front view of my lock complete;

Figure 2 is a front view, with the outer plate removed;

Figure 3 is a longitudinal section of a part;

Figure 4 is a bottom plan view of a part detached; and

Figure 5 is a side view of one of the disks.

In constructing my lock, I make a case, A, of wood or other suitable material, provided with a recess, B, as clearly shown in fig. 2.

In this recess I arrange a locking-bolt, C, shaped as shown in the same figure, so that it may be moved longitudinally, when desired.

The locking end *a* of this bolt is forked, as shown in fig. 4, so as to engage over a T-headed catch, *b*, connected with a plate, D, which is to be attached to any article designed to be secured by the lock, as shown in fig. 2.

The opposite end of this bolt is provided with a cutting-blade, E, so arranged in relation to a seal, F, properly secured at the end of the recess B, as to cut and injure this seal, when the bolt is moved in that direction, as shown in the same figure.

To the plate D I attach a small cylinder, G, so as to form an integral part of it, or not, as desired.

Within this cylinder are arranged loosely a series of disks, *c*, with a hole through their centers, provided with one or more notches or gates, *d*, as shown in fig. 5, and having on their peripheries figures or letters *e*, as shown in figs. 1 and 2.

These disks are kept apart by projections *f* in the interior of the cylinder, as shown in fig. 3.

Through this cylinder, and the disks thus arranged therein, I place a sliding bolt, H, provided with a slot, *g* and having pivoted therein a series of spring catches or dogs *h*, as clearly shown in the same figure, and in

one of its ends screw or otherwise insert a head, I, with a suitable hole and notch or gate to allow the introduction of the bolt H, and in its opposite end a suitable hole to allow a longitudinal movement of the bolt, when desired.

The length of this bolt is about the same as the distance between the bent portion of the locking-bolt.

Instead of having the catch engage under the forked ends of the locking-bolt, when desired, I make the space between the forks wide enough to allow the catch to pass through and engage under a pair of spring jaws, L, constructed and arranged as shown in fig. 4. In this case, the end of the catch is made wedge shape, so as to spring or press the jaws apart in passing through them.

Whenever desired, it will be seen, that the catch, instead of being attached to a plate, D, may be connected separately and directly to the lid, cover, or door designed to be fastened, and that the cylinder, with its bolt and disks, may be placed within the bent portion of the locking-bolt, by being attached to any plate suitable for the purpose.

This cylinder, provided with its loose disks *c* and bolt H, is placed in the bent portion of the bolt C, and arranged in relation to it, as shown in fig. 2, and the whole is then covered by a front plate or outside plate, J. This plate is provided with a slot, *i*, so located as to permit a projection, *j*, connected with the bolt C, to pass to its outer side and receive a knob, *k*.

It is also provided with a series of openings, *l*, which are arranged to be immediately opposite the peripheries of the disks *c*, and also with an opening, *m*, directly opposite the seal F, which opening is provided with a strong transparent cover.

In a lock thus constructed, it will be seen that the locking-bolt can only be moved longitudinally when the bolt H is free to move; and the bolt H is free to move only when the disks *c* are gated, and that the disks *c* cannot be gated without a knowledge of their combinations.

If letters are placed on the face of the disks, the combination may be a word. If figures are used, then it will be a number. When the combination is known, the disks are turned until the letters spelling the word appear in line through the openings, and in like manner as to the number, when figures are used; then, by means of the knob *k*, the locking-bolt C is made to bear against the end of the bolt H, and both move on together, releasing the locking-bolt from its catch and puncturing the seal F.

When unlocked in this manner, the bolt C may be again set, a new seal inserted, and the catch fastened as before; then, by disturbing the combination, it is again secure.

It will be seen that a bolt, H, provided with spring

catches, as herein described, can be inserted through the disks, without their being gated for that purpose, but that, when once inserted, the least movement of either of the disks prevents its movement in an opposite direction.

My lock may be marked with a letter, S, fig. 1, or other sign, by which to refer to a record in cipher of its combination.

Having thus described my invention,

What I claim, is—

1. A lock, having a chamber or receptacle for the insertion of a stamp or similar seal, said chamber being so arranged that it shall be securely closed by the closing of the door or lid to which the catch is attached, to prevent access to the seal, and having its sliding bolt so constructed and arranged in relation to the seal, that the movement of the bolt in unfastening the

lock shall tear or otherwise cancel said seal, substantially as herein described.

2. The bolt H, having a series of spring catches, *h*, pivoted thereto, when constructed and arranged substantially as and for the purpose set forth.

3. The combination of the bolt H, having a series of spring catches, *h*, pivoted thereto, with loosely-rotating disks *c*, when constructed and arranged to operate substantially as and for the purpose set forth.

4. The combination of the catch *b* and the sliding locking-bolt C, pivoted with the spring jaws L, when constructed and arranged to operate substantially as and for the purpose set forth.

DAVID A. McNAIR.

Witnesses:

PHIL. T. DODGE,
H. B. MUNN.