

(No Model.)

G. B. COWLES.

LOCK.

No. 303,988.

Patented Aug. 26, 1884.

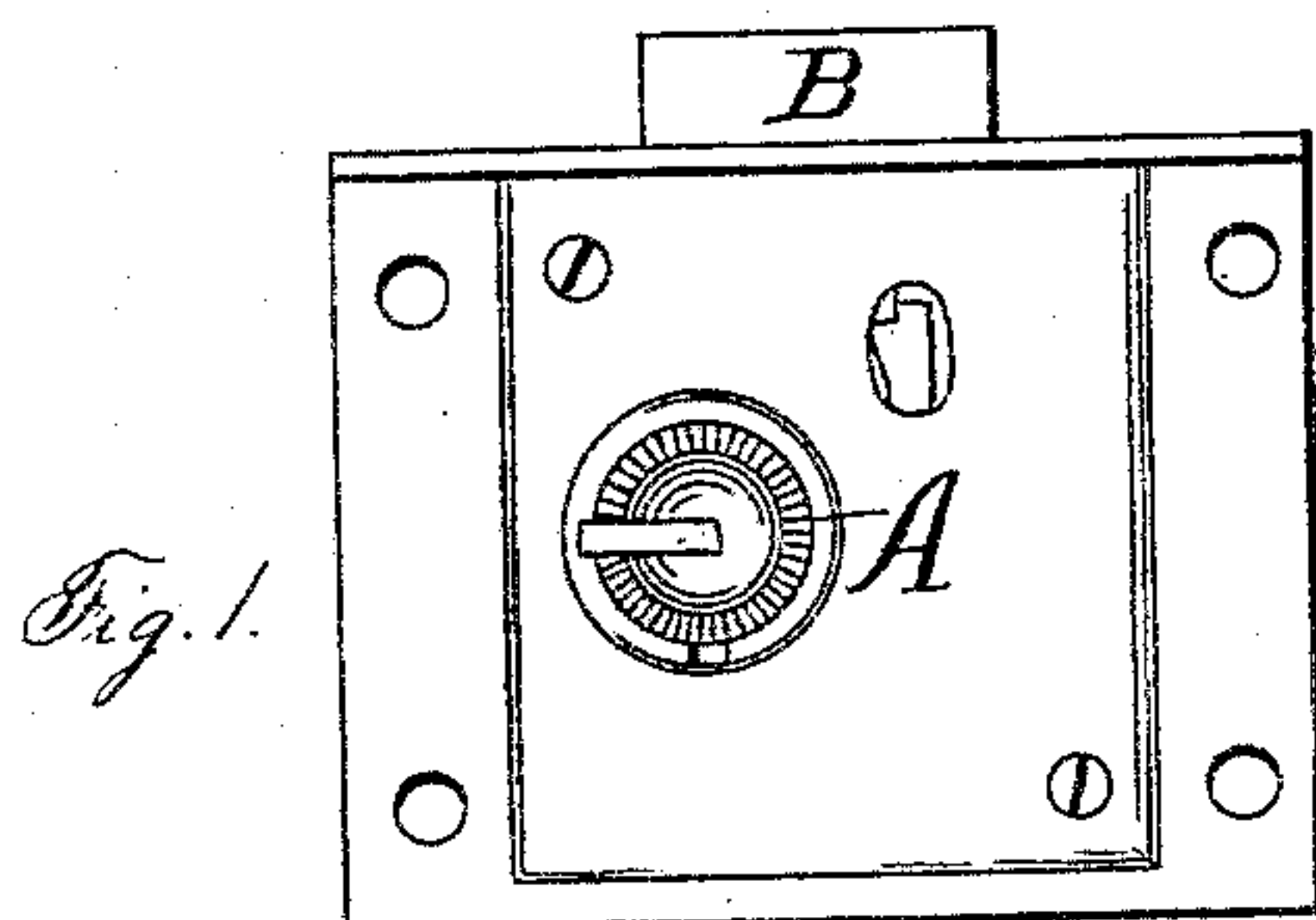


Fig. 2.

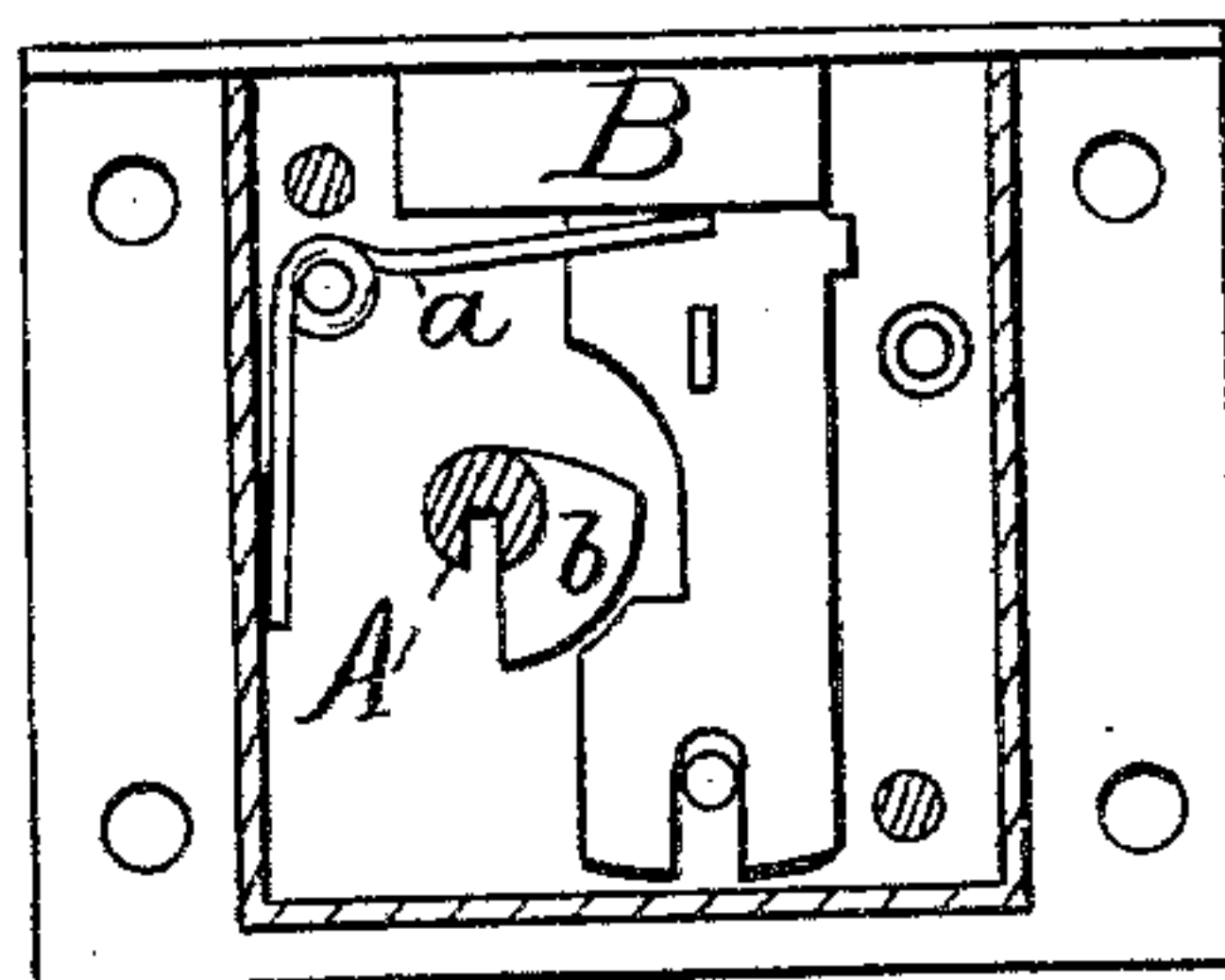
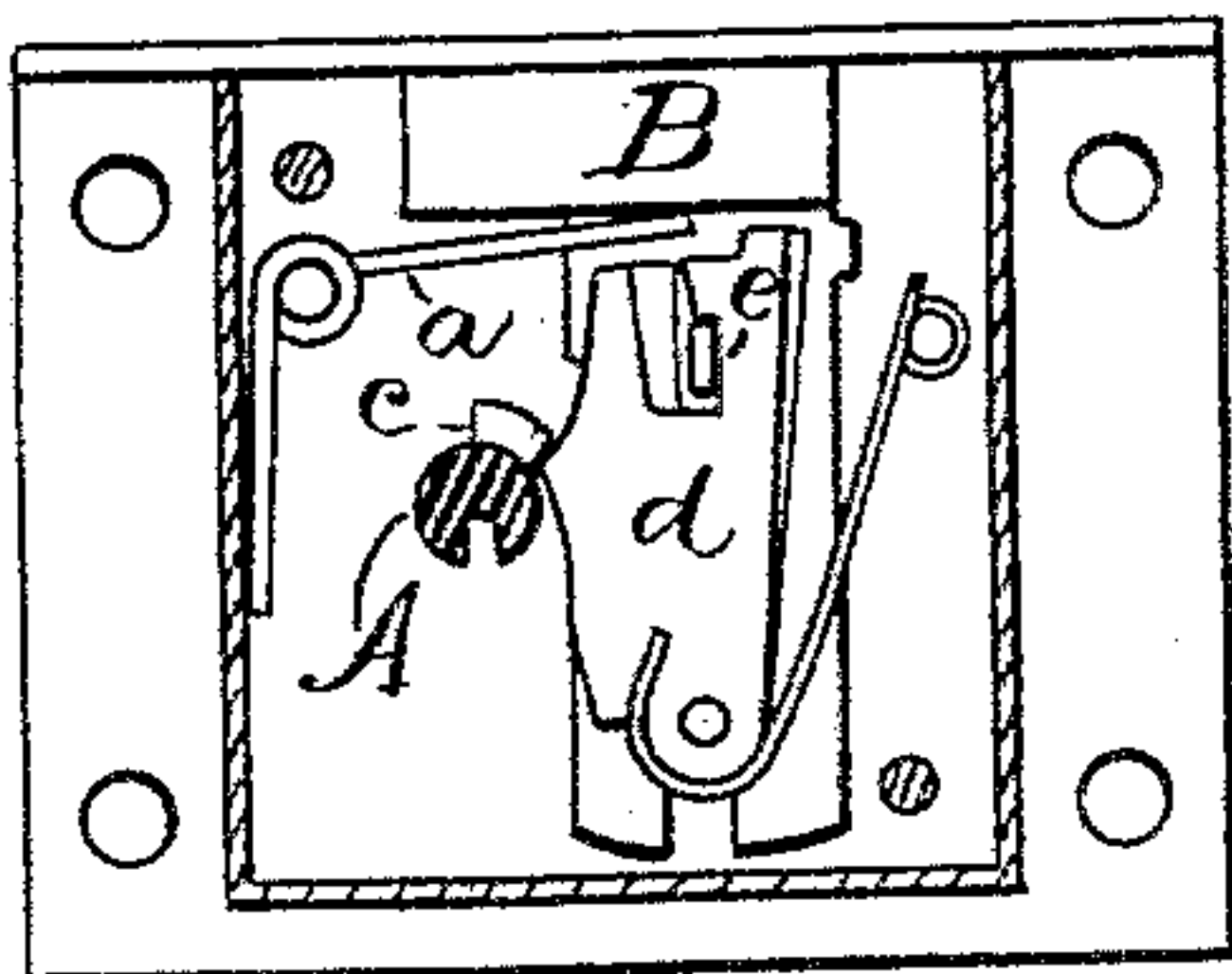


Fig. 3.



Witnesses:
John Edwards.
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UNITED STATES PATENT OFFICE.

GEORGE B. COWLES, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
CORBIN CABINET LOCK COMPANY, OF SAME PLACE.

LOCK.

SPECIFICATION forming part of Letters Patent No. 303,988, dated August 26, 1884.

Application filed November 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. COWLES, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain New and useful Improvements in Cabinet-Locks, of which the following is a specification.

My invention relates to improvements in cabinet and drawer locks of the class in which the bolt is projected under the influence of a spring, and so soon as the parts of the lock are in the proper position for withdrawing the key said bolt is held back by means of a catch which can be manipulated by one's finger to release the bolt without reapplying the key to the lock.

The object of my invention is to produce this class of locks by a very simple construction and in an inexpensive manner. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of my lock. Fig. 2 is a vertical section of the same, taken on the line just back of the front plate, and with the tumblers removed; and Fig. 3 is a like section showing a modified construction of the same, with the tumblers in place.

The general construction of the lock is substantially the same as in ordinary drawer-locks for flat keys.

A designates the slotted hub for the reception of the flat key, and which journals said key in the ordinary manner. The front outer end of this hub is roughened or knurled, as shown in Fig. 1, so that by pressing one's thumb or finger upon the front end of said hub it can be rotated, when free, by a twisting movement of the thumb or finger. If desired, this outer end of the hub may be made so as to project a little more than is ordinarily the case, so as to facilitate its being thus turned.

The bolt B is acted upon by the spring *a*, with a constant tendency to throw it outward into the position represented in Fig. 1. When tumblers are employed, as they generally will be, the key is bitted so as to properly operate said tumblers in the ordinary manner; but instead of biting the key so as to throw

the bolt back, I form a bolt-throwing bit, *b*, upon the slotted hub A, as shown in Fig. 2. I form the edge of this bit on the arc of a circle concentric to said hub, so that after it has thrown the bolt backward and the hub has rotated into position for the withdrawal of the key the concentric face of *b* acts as a stop or catch to hold the bolt within the case, as shown in Fig. 2, in which position the drawer to which the lock is applied is unlocked.

In order to lock the drawer, it is only necessary to apply one's thumb to the outer end of the slotted hub A and rotate said hub far enough to carry the part *b* out of contact with the bolt, when the spring *a* will cause the bolt B to project from the case. It should be noticed that when the hub A is in the position represented in Fig. 2 the further revolution of said hub does not act to compress the spring *a* and to throw the bolt, but only to release the bolt, and therefore all the resistance there is to such movement resides in the friction of the parts. It is for this reason, when in the position shown in Fig. 2, that said hub is free to be removed without a key.

The modification shown in Fig. 3 has no bolt-throwing bit attached to the hub A, and consequently the key is bitted so as to throw the bolt. Instead of holding the bolt backward by the part *b*, it is held back by means of the front tumbler, *d*, having a shoulder which takes over the fence *e*, as shown in Fig. 3. In order to trip the tumbler so as to release its hold upon the fence, and thereby liberate the bolt, I provide the hub A with a cam or projection, *c*, which acts only upon the front tumbler when the hub is partially revolved by hand, in the manner before described. Thus it will be seen that in both constructions I have combined with the bolt and its projecting spring a bolt-holding mechanism which holds the bolt back whenever the key is withdrawn, and a hand-manipulated mechanism for again releasing the bolt.

I am aware that prior locks have been made with a spring for projecting the bolt, a mechanism for holding the bolt back when the key was withdrawn, which was released by a longitudinal movement of the slotted hub;

also, that prior patents show locks provided with a spring for projecting the bolt, and a rotary cam and knob, separate and distinct from the lock proper, for holding the bolt back against the power of the projecting spring, said cam and knob having no operative connection with the key, and I hereby disclaim the same.

I also disclaim locks as shown in prior patents having a spring for projecting the bolt, a holding mechanism which snaps into engagement with the bolt, and holds it when it is drawn into the case in position for unlocking, and a rotary releasing device located in the lock apart from the key-hub or key-hole, and having no connection therewith or with the key.

I claim as my invention—

1. The combination of the lock-bolt, the spring for projecting the same, and the hub

A, having the throwing and holding bit *b*, and the key-slot, all combined and operating to hold the bolt back when the key is withdrawn, and to release the bolt by rotating the key-hub, substantially as described.

2. The combination of the lock-bolt, the projecting spring, holding mechanism for confining the bolt against the force of the spring, a key for drawing the lock-bolt into the case and at the same time to bring the parts into position for holding the bolt within the case, and the rotary slotted hub, which centers the key, the whole combined and operating to release the bolt upon turning said hub a little past its position for unlocking, substantially as described.

GEORGE B. COWLES.

Witnesses:

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