

T. G. Harold,

Lock.

N^o 4,177.

Patented Jan. 5, 1864.

Fig: 1.

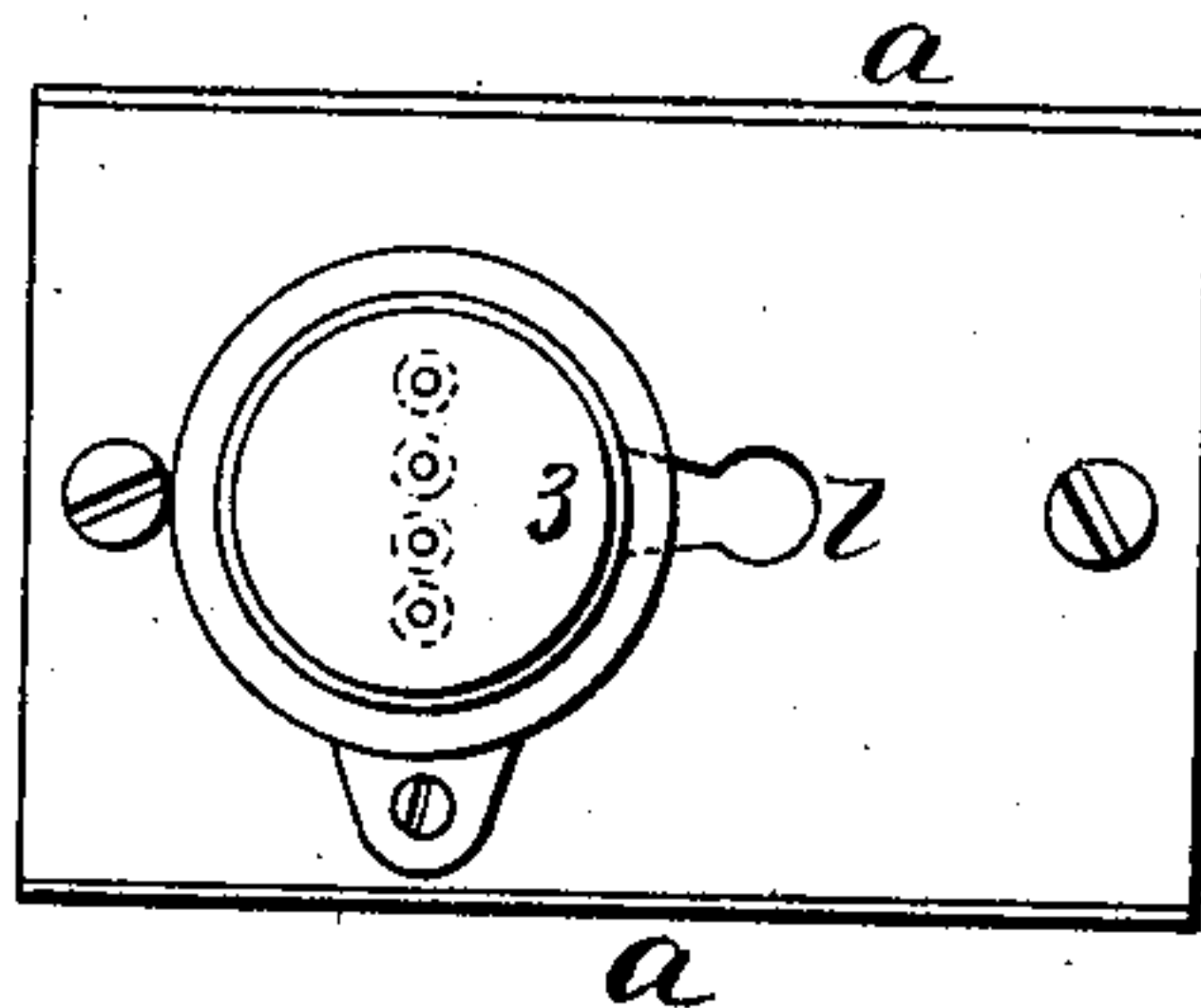


Fig: 4.

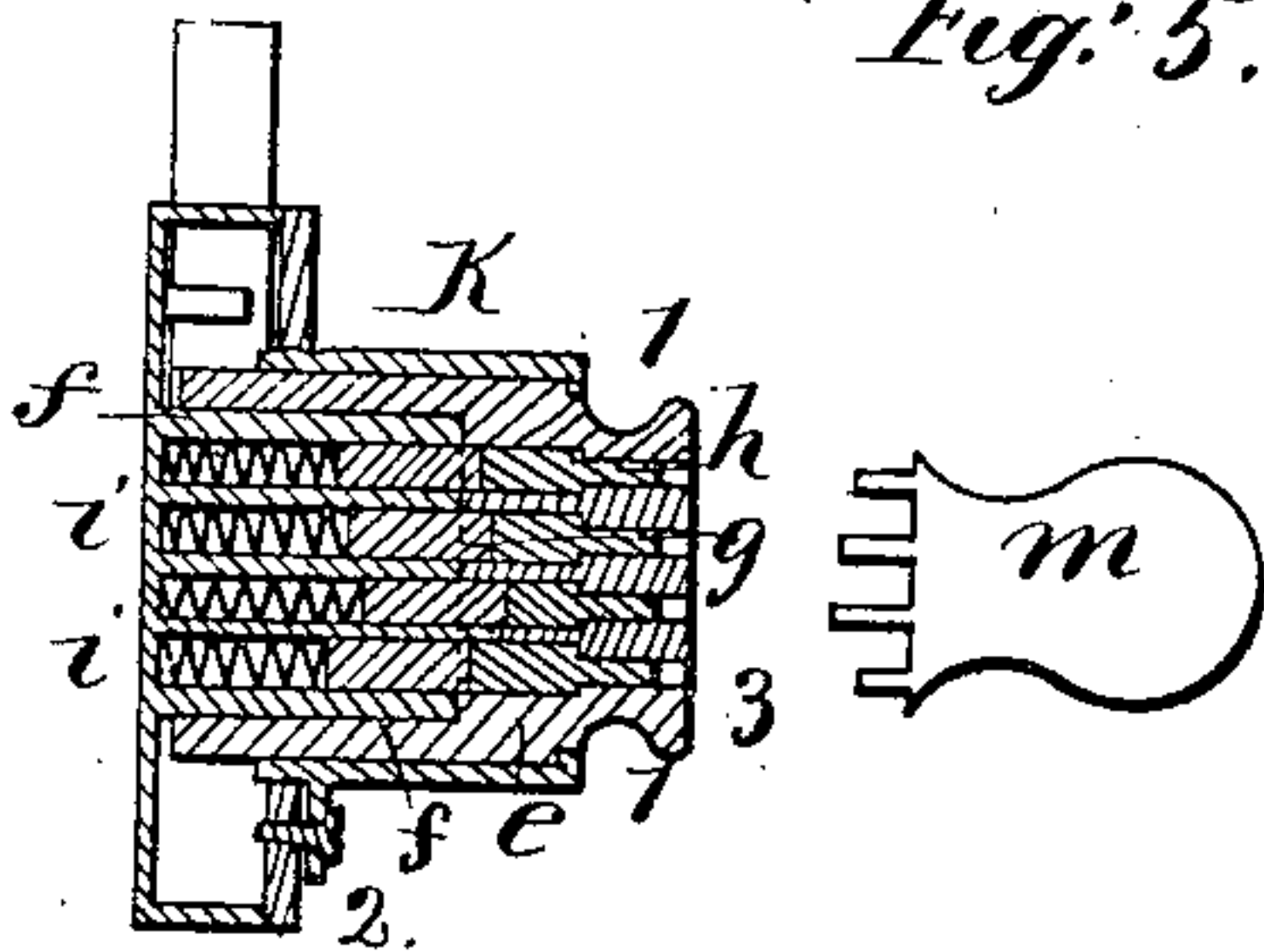


Fig: 5.

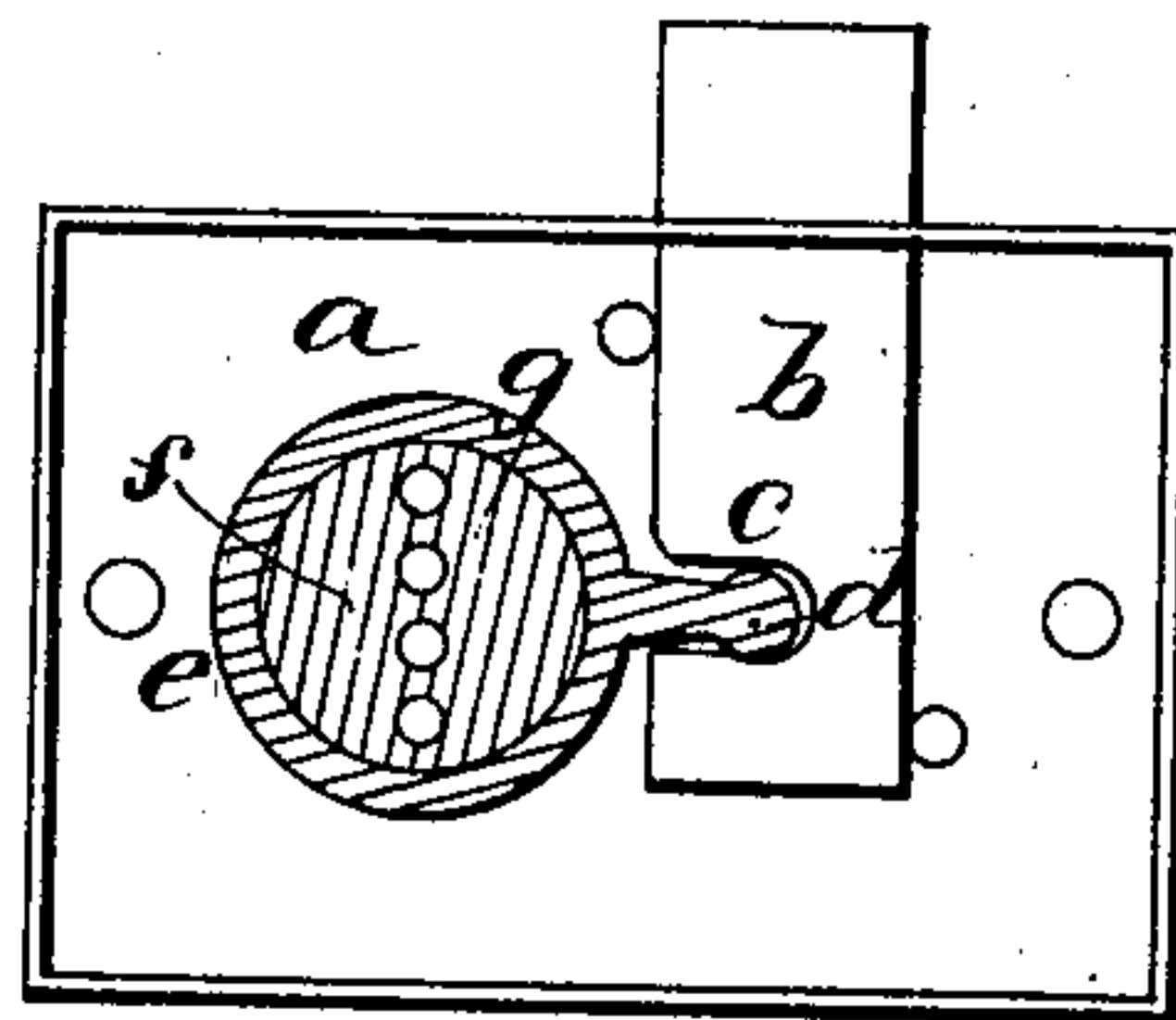


Fig: 2.

Fig: 6.

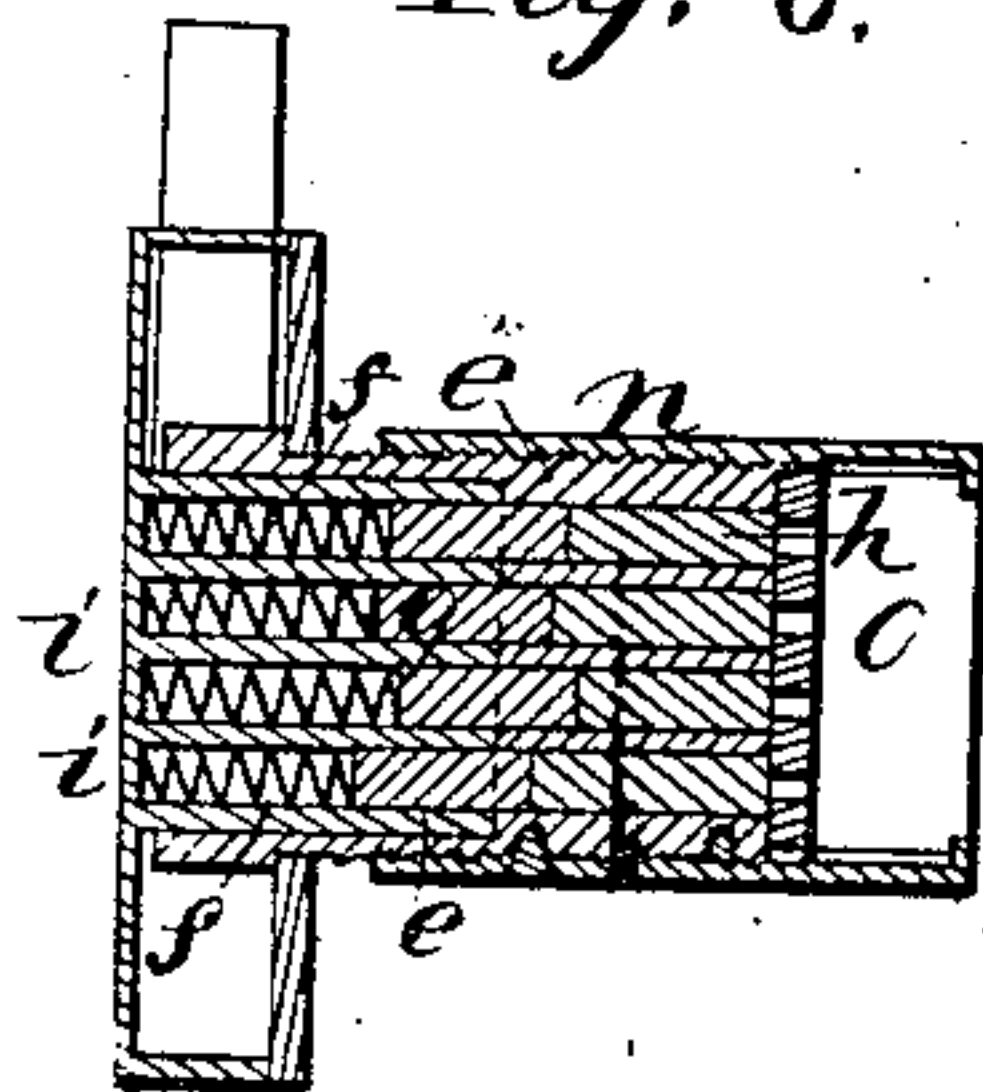


Fig: 7.

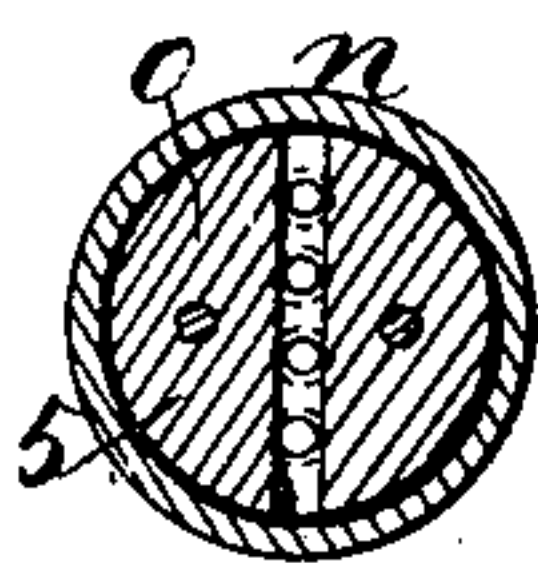
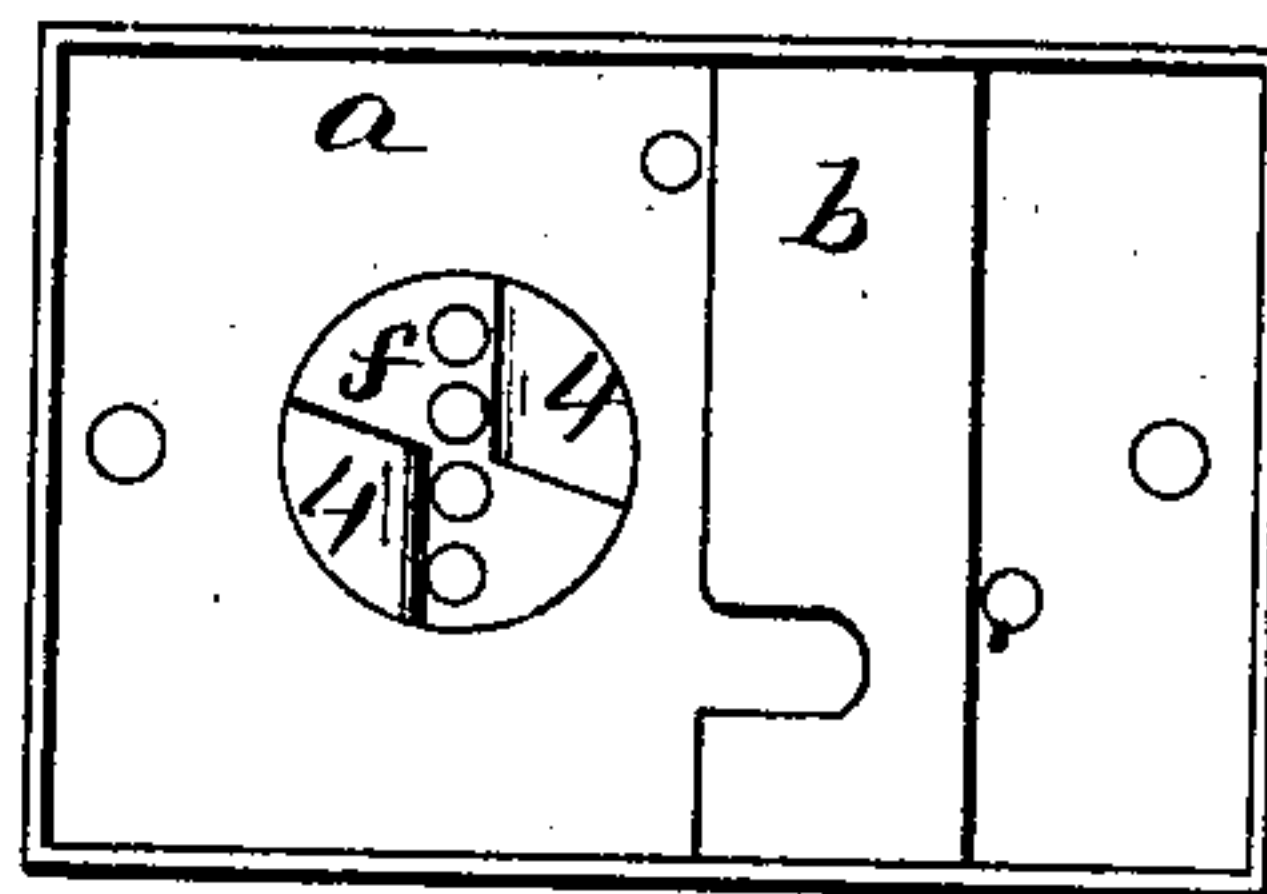


Fig: 3.



Witnesses;
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Chas. H. Smith

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UNITED STATES PATENT OFFICE.

THOS. GEO. HAROLD, OF BROOKLYN, NEW YORK, ASSIGNOR TO HIMSELF
AND JOHN W. KISSAM, OF SAME PLACE.

IMPROVEMENT IN LOCKS.

Specification forming part of Letters Patent No. 41,177, dated January 5, 1864.

To all whom it may concern:

Be it known that I, THOMAS GEORGE HAROLD, of Brooklyn, in the county of Kings and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Locks; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is an elevation of the lock. Fig. 2 is a view with the cap removed. Fig. 3 represents the lock with the rotating block that acts on the bolt removed. Fig. 4 is a section of the lock. Fig. 5 represents the key. Fig. 6 is a section longitudinally, and Fig. 7 is a cross-section, of a variation in the turning block, whereby the lock can be adapted to different thicknesses of doors or other articles to which it is attached.

Similar marks of reference denote the same parts.

The nature of my said invention consists in a turning block fitted with stop-pins and a projecting arm acting upon a sliding bolt, so that said bolt is kept in a projected position and cannot be pressed back in consequence of the direct action of the turning block and stop-pins, thereby adapting said lock to money-drawers, closets, &c., as distinguished from the spring-latches heretofore in use, which fasten every time the door or drawer is shut; and I introduce the turning block within a screw-tube by which the surfaces in contact of the turning and stationary block can be regulated so as to press together more or less closely, and by which screw-tube the turning block can be removed to change the position of the divided stop-pins without opening the other parts of the lock.

I make use of inclines on the end of the stationary block to prevent a measure being taken of the length of the stop-pins when the lock is unlocked.

In the drawings, *a* is the lock-case of any suitable size and shape. *b* is the bolt, with the talon *c* receiving the arm *d* upon the turning block *e*. This turning block *e* is formed as a pipe surrounding the stationary block *f*, and *g h* are the divided stop-pins, kept forward by the springs *i i*. The pins *h* are formed

with smaller bodies projecting toward the front into the holes through which the key-pins act, so that the pins themselves are much larger than the body or stem part, the object being to obtain as large stop-pins as possible, as the pins and springs work better when large, and at the same time to retain as much metal as possible at the end of the pins *h*, in the turning block *e*, to render drilling difficult and tedious and prevent the burglarious destruction of the lock.

The block *e* is retained by an annular flange, 1, on the screw-pipe *k*, that surrounds said block and enters an opening in the cap-plate *l* of the lock. By screwing in this pipe *k* the block *e* can be brought into the necessary proximity to the block *f* to prevent any end-wise motion of said block *e*, but not to press them together sufficiently to cause them to bind, and this screw-pipe *k* is held in place, when adjusted, by a screw or pin, 2.

The front end of the turning block *e* projects sufficiently to form a knob or turner, 3, the edge of which may be milled or roughened.

m is the key, having pin-bits that are of the proper length to press the divided stop-pins back the amount necessary to bring the divisions of said stop-pins at the division between the blocks *f* and *e*.

It will now be evident that the lock can be locked by turning the knob 3, and the stop-pins will by a direct action hold the bolt in its projected position, and it cannot be pressed back the same as ordinary latch-bolts, and does not require dogs or tumblers as heretofore employed with bolts that do not spring forward. When the key is introduced, the block *e* can be turned and the bolt withdrawn.

If the end of the block *f* was flat, a measure could be taken when the lock was unlocked, to determine how far the pins *h* had to be pressed in, and thereby a pick or false key could be made. I prevent this by removing the surface of the block *f* at the side of the stop-pin holes, as seen at 4 4, Fig. 3, to form inclines that will press the stop-pins *h* forward to place as the lock is locked, but which will prevent any impression being obtained of the key, as the stop-pins can be pressed back beyond the proper point when the lock is open.

The variation in this lock (shown in Figs.

and 7) consists in a tube, *u*, screwed upon the outside of the block *e*, and turning with which the end of said tube can be adjusted to stand flush with the surface of a door drawer, and the key itself is passed into a slot in a changeable block, *o*, that sets at the end of the block *e*, and turns therewith, being held by pins or dowels 5 and the screw-tube.

This block *o* is to be thicker or thinner, according to the thickness of the door or drawer.

What I claim, and desire to secure by Letters Patent, is—

1. A turning block provided with an arm making the notch or talon of a sliding bolt, as specified, in combination with the stationary lock and divided stop-pins, whereby the bolt will be projected by the arm and retained in that position by the stop-pins, as set forth.

2. The knob or turner 3 at the end of the turning block *e*, in combination with the di-

vided stop-pins, whereby the lock can be locked without using the key, as specified.

3. The tube *k*, screwed into the lock-case and acting to adjust the bearing of the block *e* against the block *f*, for the purposes and as specified.

4. Inclines formed on the end of the stationary block *f*, in combination with the divided stop-pins, for the purposes and as specified.

5. Divided stop-pins formed with shanks projecting into the holes that receive the key-bits when such shanks are smaller than the pins themselves, for the purposes specified.

In witness whereof I have hereunto set my signature this 9th day of November, A. D. 1863.

THOS. GEO. HAROLD.

Witnesses:

LEMUEL W. SERRELL,
CHAS. H. SMITH.