

E. P. MASTERSON.
Sash-Holders.

No. 151,233.

Patented May 26, 1874.

Fig. 1.

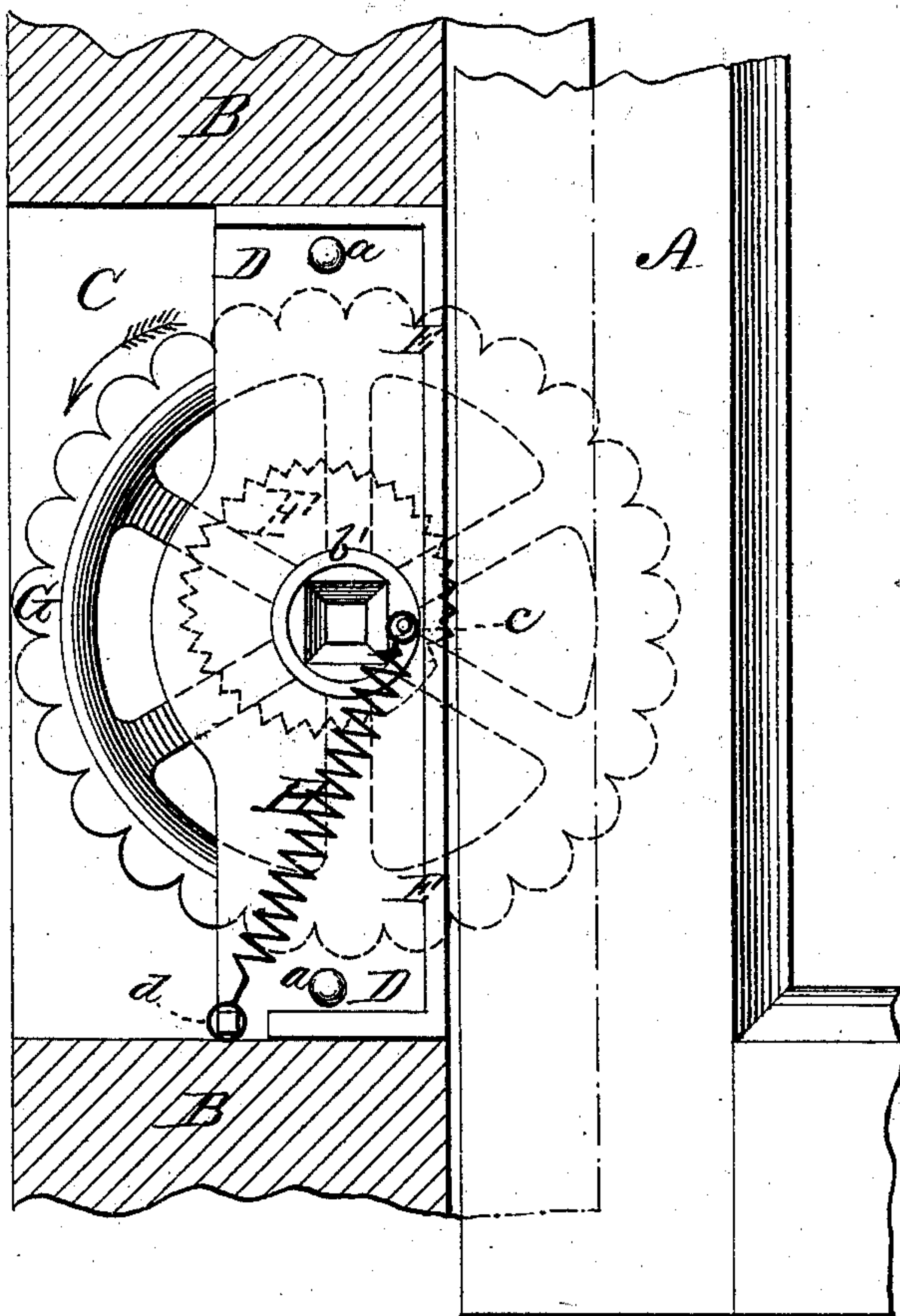
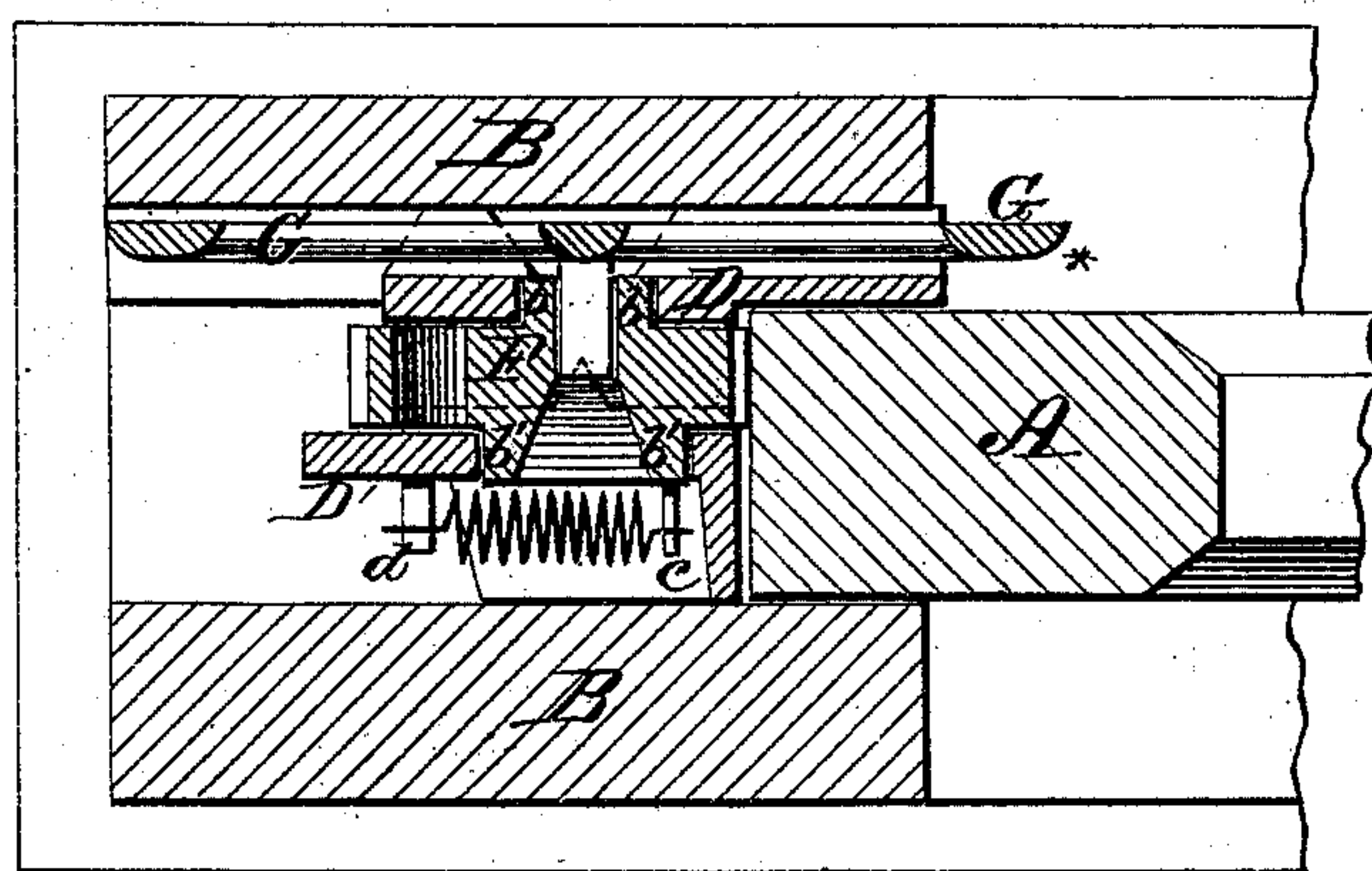


Fig. 2.



Witnesses.

John Tyler
F. O. Snow

Inventor.

Elias P. Masterson
By atty Wm C. W. Lintine.

UNITED STATES PATENT OFFICE.

ELIAS P. MASTERSON, OF PORT JERVIS, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO AUSTIN E. BENSON, OF SAME PLACE.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. **151,233**, dated May 26, 1874; application filed May 1, 1874.

CASE C.

To all whom it may concern:

Be it known that I, ELIAS P. MASTERSON, of Port Jervis, in the county of Orange and State of New York, have invented certain new and useful Improvements in Sash-Locks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings making a part of this specification.

My invention relates to that class of sash-holders known as eccentrics. It has for its object to provide for the retention of the sash at any altitude, and also to provide a perfect lock to prevent the elevation of the sash when it is undesirable. My invention consists of a reversible cam or eccentric, trunnioned to its frame, and adapted to make almost a complete revolution, held and actuated in either position by a single coiled spring, as will be hereinafter more fully set forth.

To enable those skilled to fully understand the same, I will proceed to describe the construction and operation, referring by letters to the accompanying drawings, in which—

Figure 1 is a detail elevation of a frame and sash with my improved lock attached, the frame being shown in vertical section, exposing the back side of the lock; and Fig. 2 is a horizontal section at the line *xx* of Fig. 1.

Similar letters indicate like parts in both views.

A is the sash, and B is the frame, the latter being rabbeted, as usual, to receive the sash. The frame is also cut away or mortised, as clearly shown in Fig. 1, at C, to receive the frame D, containing the eccentric, spring, and operating-disk, so that the cam or eccentric will project into the rabbet and impinge against the sash-edge. The frame is halved, as seen at D D, Fig. 2, each having a projecting ledge, E, so that when placed in position to be secured together by screws or rivets *a a*, a suitable space is formed to contain the eccentric F, which is provided with a suitable hub, *b b'*, journaled in the frame D D. This hub is adapted to receive a square spindle of the operating-disk G, located in a countersunk seat on the outside of one half

of the case. The opposite end of the hub, resting in the other half of the plate, is provided with a small teat, *c*, to which is secured loosely one end of a coiled spring, H, which has its other end secured to a similar teat, *d*, at the lower corner of the case, the location of the teat *c* and tendency of the spring H being to throw the eccentric into such position that its greatest diameter shall be transverse to the movement of the sash.

From the foregoing description of the parts, it will be readily understood that they may all (except the spring) be easily cast and quickly put together, the operating-disk being the only loose part, which may be put in position prior to introducing the lock to its place in the frame of the window.

The operation is as follows: The lock being in position and the sash down, as seen in Fig. 1, the tendency of the spring is to force the serrated periphery of the eccentric against the edge of the sash. The sash may now be raised, which forces the eccentric back into the case and out of the way; but as soon as the sash is released its weight causes the teeth of the eccentric to take hold, and the result is obvious, thus holding the sash firmly at such altitude as it was released. In order, therefore, to lower it, the eccentric must be held back out of the way. This is accomplished through the medium of the operating-disk, (which is slightly exposed, as seen at *, Fig. 2,) by turning it in the direction of the arrow, Fig. 1, when the sash may be dropped to any desired point, or all the way down. It now being desired to securely lock the sash down, the operating-disk is turned as before, except to a greater extent, or until the teat on the hub of the eccentric has passed the dead-point, or lies on the opposite side of the center to that shown in Fig. 1, the spring yielding for this movement. The teeth of the eccentric will now project below the center and impinge against the sash, so that any effort to raise the sash will produce the same effect as the lowering of the sash would when the eccentric is in the reverse position. It will also be observed that the eccentric is

enabled to make almost a complete revolution on its axis, which may be made substantial, to bear great strain, which is very important. I do not, however, claim this of itself; but

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

In combination with a suitable frame, the reversible eccentric F, secured therein by trunnion-bearings (adapted to receive a suitable key) and the single coiled spring H, all

adapted to operate substantially in the manner and for the purpose set forth.

Witness my hand and seal this 28th day of April, 1874.

E. P. MASTERSON. [L. S.]

Witnesses:

A. E. BENSON,

R. E. LEE,

E. C. MAPLEDORE.