

(No Model.)

E. S. MORTON.
SASH FASTENER.

No. 560,320.

Patented May 19, 1896.

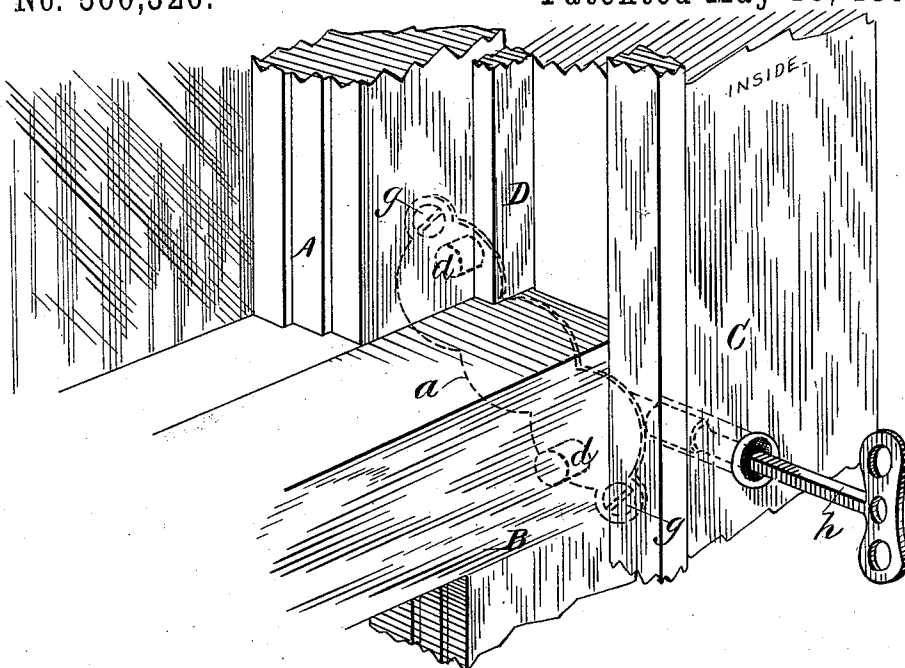


Fig. 1.

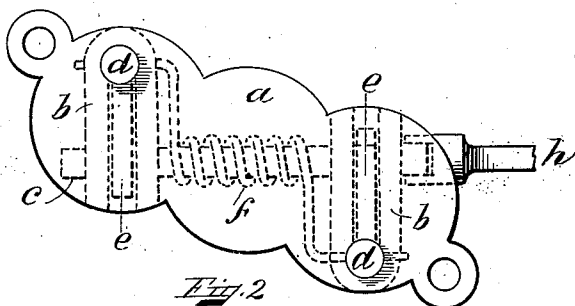


Fig. 2.

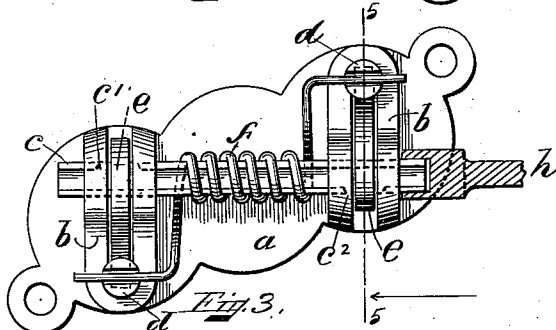


Fig. 3.

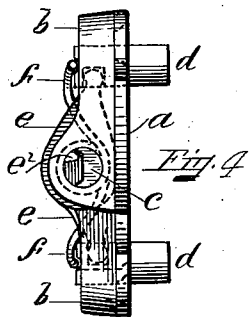


Fig. 4.

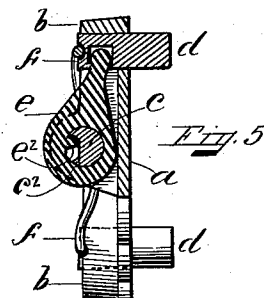


Fig. 5.

Witnesses:
Gilbert O. Burnham.
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UNITED STATES PATENT OFFICE.

EPHRAIM S. MORTON, OF PLYMOUTH, MASSACHUSETTS.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 560,320, dated May 19, 1896.

Application filed May 31, 1895. Serial No. 551,162. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM S. MORTON, of Plymouth, in the county of Plymouth and State of Massachusetts, have invented a new and useful Improvement in Sash-Locks, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to sash-locks or sash-latches, and more particularly to that class of locks or latches which are designed to secure sliding window-sashes in any desired position, either open or closed; and it is intended as an improvement on my sash-fastener previously invented and for which Letters Patent of the United States were granted me March 4, 1882, No. 255,003.

The objects of my invention are, first, to provide a simple lock for securing sliding window-sashes either open or closed; second, to provide means for securing both the upper and the lower sashes; third, to conceal said latch or lock so that it cannot be seen or detected from the outside; fourth, to operate said latch or lock with a single key, and, fifth, to provide a simple, convenient, and effective means of applying the device to any sliding window-sash. I attain these objects by the mechanism shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a section of an upper and lower window-sash with my lock applied. Fig. 2 is a front elevation of my lock with mechanism shown by dotted lines. Fig. 3 is a rear elevation of my lock. Fig. 4 is an end elevation of the device. Fig. 5 is a transverse section, line 5, Fig. 3.

Similar letters in the several figures of the drawings designate like parts, referring to which—

A is an upper window-sash frame.

B is a lower sash-frame.

C is the window-casing, and D the parting-bead.

a is the supporting-plate of my device, which for convenience in applying is made in the form of five intersecting circles.

b b are reinforcing-pieces thereon forming journals for the semirotating shaft C.

d d are sliding bolts which operate through plate a.

e e are pawls designed to operate bolts d d.

f is a spring wound upon shaft C and engaging bolts d d. The operation of spring f is to force both bolts d d outward.

g g are screws for securing the device in position, and h is the key for unlocking or retracting bolts d d.

Shaft c is provided with a groove its entire length, which groove is widened in opposite directions at pawls e e. Pawls e e are perforated for shaft c, said perforations being circular except for a small internal spline c², (see Figs. 4 and 5,) designed to engage in the groove in shaft c. Said groove having open spaces in opposite directions at c' and c², Fig. 3, the semirotating motion is transmitted to one pawl when shaft c is semirotated in one direction and to the other pawl when semirotated in the opposite direction; and the movements of pawls e e are transmitted to and operate bolts d d, retracting one bolt when shaft c is semirotated in one direction and retracting the opposite or remaining bolt when semirotated in the opposite direction.

There are grooves in the inner end of bolts d d, in which spring f engages, to prevent bolts d d from rotating out of engagement with pawls e e.

The device is applied to the window-frame by countersinking, and is placed in an oblique direction, so that one bolt will engage the upper sash-frame and the other the lower sash-frame. The bolts are retracted alternately by a key through an opening in the window-casing. This key is not visible from the outside and is removable, so that one key may be used for many windows.

Bolts d d engage in holes in the sash-frame. Said holes are made as near together in a vertical direction or as far apart as may be found convenient, and when the bolt is engaged in one of said holes the sash is locked, whatever position said sash may be in, up or down.

As the the bolts are constantly impelled outward by spring f, the sash will lock whenever moved, so as to bring the bolt opposite a hole in the sash, for which reason the window may be safely left in any position, unlocked and open, and any attempt to close or to open still farther will result in locking the sash, and its position can then only be changed by using key h. This device is an improvement over my previous invention,

above referred to, in that it is more simple and
equally effective. First, it dispenses with a
complicated safety-locking feature and the
necessity therefor by dispensing with the
5 permanent key, which was in full sight from
the outside; second, it dispenses entirely with
one of the keys, one key serving for both
bolts by turning in opposite directions. The
form of the supporting-plate, too, is a great
10 advantage in that the device can now be
readily applied with the aid of a one and
three-eighths inch and a one-half inch bit,
without the aid of chisel or other tools. It is
also superior to my prior invention in that
15 every part of the lock, when properly applied,
is concealed, thus giving no intimation of its
operation to intruders.

Having ascertained the construction and
operation of my invention, I desire to secure
20 it by Letters Patent of the United States.

I claim—

In a window-sash lock, the plate *a* of the

herein-described special form provided with
reinforcing-pieces upon its rearward face,
adapted to sustain a semirotating bolt in a 25
line diagonal to a line intercepting the cen-
ters of the triplicate semicircular forms com-
prising the body of the plate, in combination
therewith the pawls journaled on the shaft,
the shaft adapted to actuate said pawls to 30
operate the sash-bolts and means for semi-
rotating said shaft to enter and withdraw
said bolts alternately to secure one or the
other or both of the sashes substantially, in
the manner and for the purpose set forth. 35

In testimony whereof I have signed my
name to this specification, in the presence of
two subscribing witnesses, on this 28th day
of May, A. D. 1895.

EPHRAIM S. MORTON.

Witnesses:

FRED C. HANSCOM,
GILBERT O. BURNHAM.