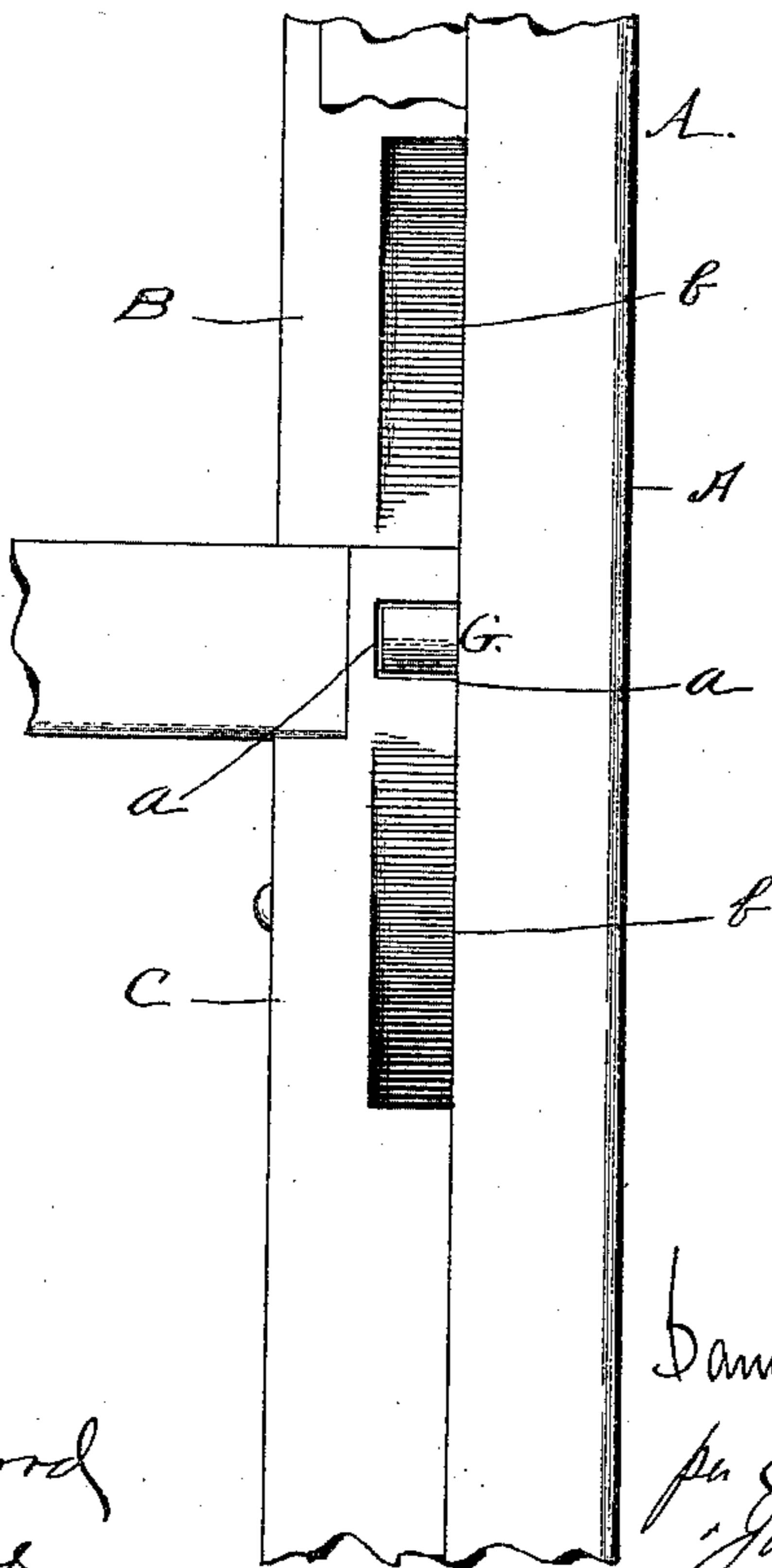
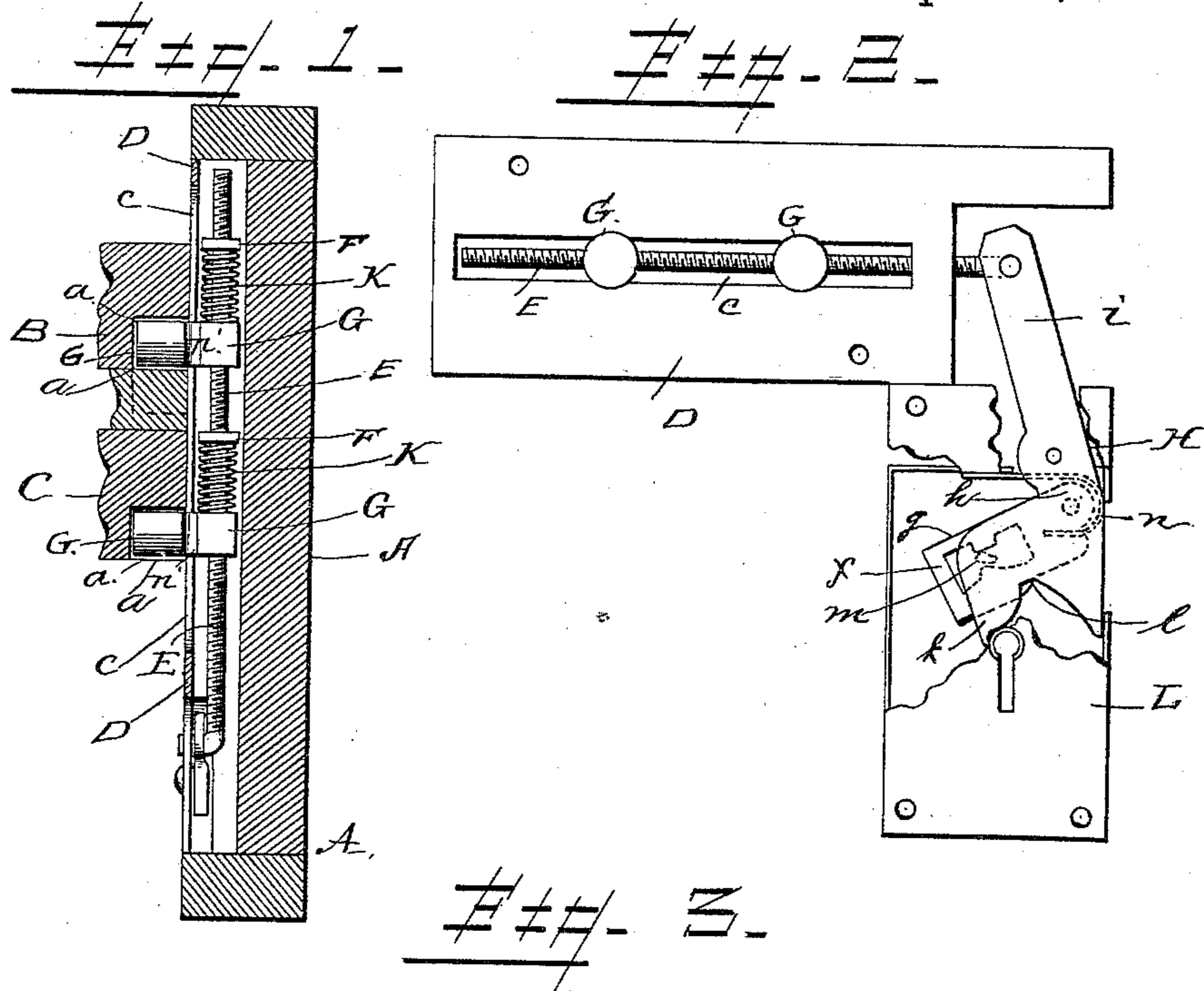


(No Model.)

S. E. HARRINGTON.
SASH FASTENER.

No. 436,707.

Patented Sept. 16, 1890.



Witnesses

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UNITED STATES PATENT OFFICE.

SAMUEL EMERSON HARRINGTON, OF NORTH AMHERST, MASSACHUSETTS.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 436,707, dated September 16, 1890.

Application filed May 21, 1890. Serial No. 352,640. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL E. HARRINGTON, a citizen of the United States, residing at North Amherst, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Holders and Locks for Window-Sashes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in sash holders and locks; and it consists, generally speaking, of a fastening to be located in one of the stiles of a window-frame, consisting, essentially, of a screw-threaded rod and bolts or catches connected therewith, which extend through a slotted metal plate secured to said window-stile and within reach of the sashes, to be made capable of engagement with notches in said sashes. Said bolts or catches, together with said notches, limit the upward or downward movement of said sashes or lock them to given positions. Screw-threaded nuts are provided in connection with the screw-threaded rod, arbitrarily spaced on the same to suit the distance separating the faces of the two sashes to be locked, and coiled springs secured to the bolts or catches surround the said rod and bear, respectively, against the said nuts, so that said bolts, after being moved laterally by inclined slots in the sashes as they (the latter) are lifted and lowered, will return by the force of said springs to normal position. The merit of my device is that the sashes may be held or secured to desired positions.

In the drawings illustrating my invention, Figure 1 is a horizontal section through a window-frame stile and the sashes. Fig. 2 is a view showing the sash holder and fastening without the springs to influence the catches. Fig. 3 is a view showing in part the window-frame and the sashes in position as when the said sashes are closed and locked.

Similar reference-letters indicate like parts in all of the figures.

Referring to the drawings, A is the window-frame provided with the usual stiles, strips, beads, &c.

B and C are the upper and lower sashes pro-

vided with rectangular slots *a* and oblique slots *b* in their edges to receive the bolts or catches of the sash holder and lock.

D is the metallic plate provided with a long slot *c* and holes for screws.

E is the screw-threaded rod turned hook-like at one end to form a hold for the lock-lever H.

Upon the rod E are nuts F F, arbitrarily placed to suit the sashes.

G G are the bolts or catches provided each with transverse grooves *n'* the thickness of the plate D, guided by which they move through the slot *c* longitudinally.

Springs K K surround the screw-threaded rod E, and they are secured to the bolts or catches G G and bear against the nuts F F.

The plate D, with its associate parts, is secured in a mortise or recess formed in one of the window-stiles, so that with the motion of the screw-threaded rod the bolts or catches may move horizontally. The bolts or catches G G are arranged to have motion independently of the screw-threaded rod; but after being so moved they are returned to normal position by the springs K K.

The nuts F F and the bolts or catches have a certain normal relation to each other dependent upon the springs K K, which is changed only when the tension of the springs is overcome by something pushing against one or the other of the bolts or catches.

It is not absolutely necessary to use the springs when the device is used simply as a lock, and when so used the springs are dispensed with and the bolts or catches G G are screw-threaded correspondingly with the screw-threads of the rod E and the nuts F dispensed with.

It may be observed that the parting-bead of the window-frame is provided with a slot to allow the bolt next to it to enter it when the bolts are withdrawn to unlock the device.

L is the lock placed conveniently to the sash-fastening, the parts of which are inclosed in a box. Attached to the back plate of the lock is a boss forming the center of motion for the tumblers. *f* and *g* are the tumblers of the lock, each provided with a spring to throw said tumblers downward. These tumblers are

of form shown in the drawings and provided with tongues *h* and springs *n* in common to both.

Pivoted to the face-plate of the lock L is a
5 rock-lever provided with a long arm *i*, extending within reach of the hook end of the screw-rod E, and a short arm *k* of certain form, as shown, provided with a notch *l*, into which the
10 the said lever to lock or unlock the sash-fastening.

In an arm *k* of the rock-lever is fixed a diamond-shaped stud *m*, which changes its position simultaneously with the tumblers when
15 the key of the lock is applied to lock or unlock the sash-fastening. When it is desirable to lock the sashes together to keep the window entirely closed, the lever, after the sashes are respectively down and up, is moved outward
20 and its bolts or catches enter the rectangular slots of the sashes, and thus secures them. When it is desirable to use the sash-holder simply as a sash-support, the lever is moved inward, the sash or sashes slightly raised or
25 lowered, and then said lever is moved outward to have the catches or bolts bear against the face or faces of the said sashes until by a continued upward or downward movement of said sashes they present their oblique slot or
30 slots to the said catches or bolts, in which the latter, under the influence of the springs K, slip in the inclined plane until they come into the bottom and bear against the shoulders presented. The sashes when released are held
35 to given open position.

It is obvious that more slots may be used in the sashes than shown in the drawings. When

the springs are dispensed with, as before stated, the fastening is to be used only as a lock; but by using a series of slots in the
40 sashes the latter may be locked to several positions.

The face and back of the lock is provided with holes for the key used in locking or unlocking the lock, &c.

45 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a window-frame and the sashes arranged to slide therein, provided with rectangular and inclined slots, as described, of the slotted plate D, the screw-threaded rod E, the catches *a*, arranged with openings through which said rod passes, and having grooves to fit over the edges of the
55 slot of said plate, the springs K, the nuts F, and the lever H, by which latter the rod and catches are operated, as set forth.

2. The combination, with the slotted plate secured in a stile of a window-frame, the rod
60 E, and catches on said rod, of the lock for operating the rod, composed of a suitable housing, the boss or stud attached to one of the plates of said housing, tumblers *f*, the springs to influence the tumblers, and the lever H, at-
65 tached to the rod E, provided with arms *i* and *k*, as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL EMERSON HARRINGTON.

Witnesses:

H. A. PARSONS,

F. W. HARRINGTON.