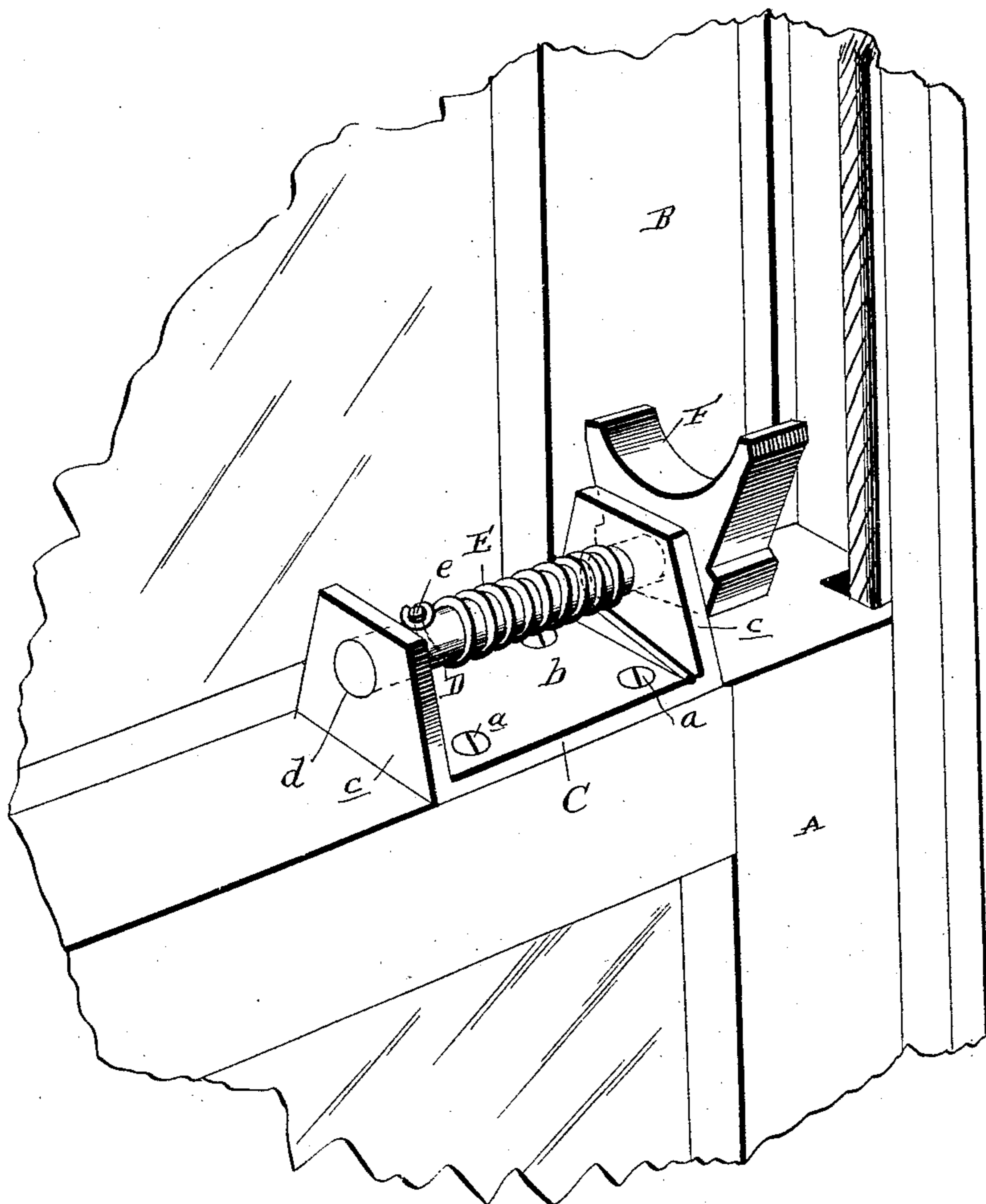


(No Model.)

L. R. SCHMALHAUSEN.
AUTOMATIC SASH LOCK.

No. 452,723.

Patented May 19, 1891.



Witnesses:

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LEWIS R. SCHMALHAUSEN, OF CHARLESTON, ILLINOIS.

AUTOMATIC SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 452,723, dated May 19, 1891.

Application filed March 5, 1891. Serial No. 383,839. (No model.)

To all whom it may concern:

Be it known that I, LEWIS R. SCHMALHAUSEN, a citizen of the United States, residing at Charleston, in the county of Coles and State of Illinois, have invented certain new and useful Improvements in Automatic Sash-Locks; and I do 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.

This invention has relation to improvements in automatic sash-locks; and it has for its prime object to provide a lock of an exceedingly cheap and simple construction whereby the upper and lower sashes of a window may be locked in a closed or partly-open position and may be freely adjusted by a person within the house.

A further object of the invention is to provide a construction whereby a person on the outside of the house may readily adjust the sashes to close the same, but is prevented from opening them to a greater extent than they were set.

To the accomplishment of the foregoing and other objects my invention consists in the construction, novel combination, and adaptation of parts hereinafter described, and particularly pointed out in the claim appended.

In the accompanying drawing the figure is a perspective view of a portion of two ordinary weighted sliding sashes with my improved automatic sash-lock in an operative position.

Referring by letter to the said drawing, A indicates the inner or lower sash, and B the upper or outer sash, of a window, both of which may be of any ordinary or approved construction. Secured in a suitable manner, as by screws *a*, to the upper edge of the sash A, adjacent to one side thereof, is the frame or casting C, upon which my improved lock is mounted. This casting C, which may be cast or otherwise formed of any suitable metal, comprises the securing-plate *b* and two vertically-disposed angular branches *c* at the respective ends thereof, which branches are provided with aligned journaled apertures *d*, designed to afford a bearing for the horizontal shaft D, which is journaled thereon.

At a suitable point upon the periphery of the shaft D, adjacent to one end thereof, I provide a screw or integral lug *e*, to which is attached one end of a coiled spring E, which surrounds the shaft and extends the distance between the branches *c*, and the opposite end of this spring E terminates in a straight portion, as illustrated, which bears against the upper side of the securing-plate or sash and serves to preserve the tension or resiliency of the coiled spring, which is designed for a purpose presently to be described.

Fixed upon the outer end of the shaft D, which is extended a slight distance beyond its bearing, is the sash-engaging block F, which, if desirable, may be cast or formed integral with the shaft D. This block F, which is of the approximate proportional size shown, has its front and rear walls tapered outwardly, as illustrated, and its upper side is depressed or recessed in a curvilinear manner to afford a better grasp for the fingers of the operator. The engaging edge of the block, which is indicated by *f*, is preferably beveled to enable it to readily bite into the face of the sash B; but it is obvious that instead of beveling the engaging edge or corner of the block it might be serrated or milled and the same end effected with less damage to the sash.

In operation the operator places his fingers upon the inner branch or portion of the friction-block F and disengages the biting-edge thereof from the outer sash. Then while holding the said friction-block out of engagement with the sash he may readily adjust both sashes to the desired position. When he releases it, the block, through the action of the coiled spring, will again engage the sash B, when both sashes will be locked in their adjusted positions. It will further be seen that while the sash A is prevented from being raised, yet it may be lowered with ease without disengaging the friction catch or block from the sash B, and the same is true with respect to the sash B, except that the latter sash may be raised when it is engaged by the friction-block, but cannot be lowered. It will further be seen that when it is tried to raise the sash A or lower the sash B when the block is in engagement the biting end of the said block will take deeper into the sash.

It is obvious that in practice, in order to

save the sash from being marred, a plate having transverse horizontal corrugations might be attached to the inner face of the upper sash and the biting end of the friction-block
5 might engage the corrugations of said plate to fix the sashes; but I do not desire to confine myself to the use of this corrugated plate, as the lock is effective in its absence.

Having described my invention, what I
10 claim, and desire to secure by Letters Patent is—

The combination, with the inner and outer sashes of a window, of a frame comprising a securing-plate and two vertical branches having aligned journaled apertures mounted on
15 the upper edges of the inner sash adjacent to one end side thereof, a horizontal shaft journaled in the vertical branches of said frame

and having its outer end extended beyond its bearing, a coiled spring surrounding the said
20 shaft and having one end secured thereto and terminating at its opposite end in a straight portion adapted to bear against the upper side of the securing-plate, and the friction-block fixed on the extended end of the horizontal shaft, said block having its inner and
25 outer sides tapered outwardly and having its upper side recessed in a curvilinear manner, substantially as and for the purpose specified.

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

LEWIS R. SCHMALHAUSEN.

Witnesses:

GEO. M. WATSON,
JOHN FAVORITE.