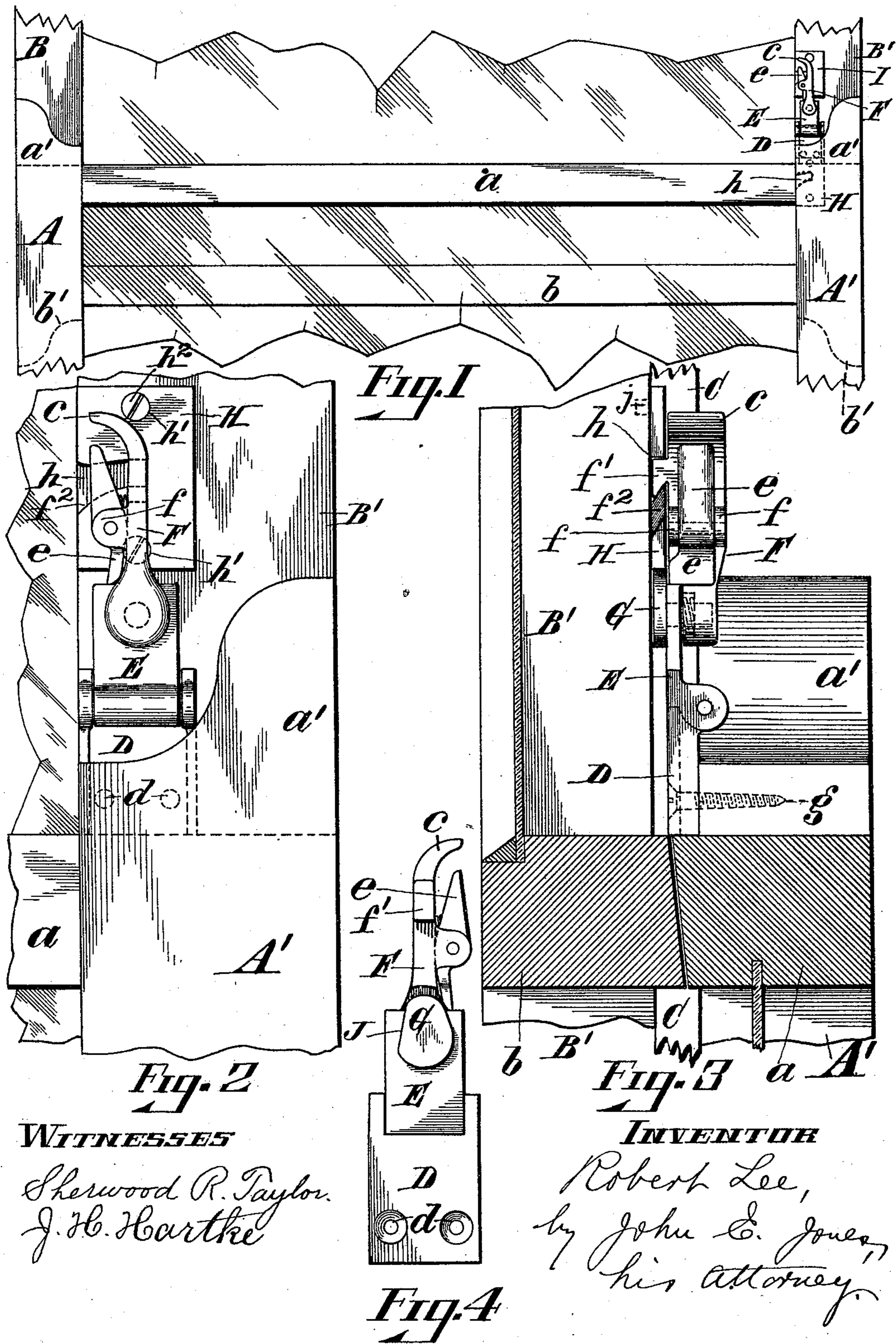


(No Model.)

R. LEE.
SASH FASTENER.

No. 585,110.

Patented June 22, 1897.



WITNESSES

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UNITED STATES PATENT OFFICE.

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SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 585,110, dated June 22, 1897.

Application filed February 11, 1897. Serial No. 622,976. (No model.)

To all whom it may concern:

Be it known that I, ROBERT LEE, a citizen of the United States, residing at Hartwell, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in a Combined Antirattler, Ventilator, and Locking Attachment for Windows, of which the following is a specification.

My invention relates to locking attachments for sliding window-sashes, or, more particularly speaking, to a combined antirattler, ventilator, and locking device whereby both window-sashes may be held firmly locked when closed against both surreptitious opening from the outside and rattling and either sash or both sashes held partly open for ventilation, but firmly locked in such partly open condition against further opening for intrusion or surreptitious entrance; and my invention, pursuant thereto, consists in the novel features of arrangement, construction, and operation, such as are hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a broken inside front elevation of a window, showing the two sliding sashes, with the upper one slightly lowered for ventilation and both of them locked together by means of my device against further intrusive opening and also from rattling; Fig. 2, a full-sized inside front elevation showing a broken-off meeting corner of a pair of sashes with my device applied thereto, said sashes being therein shown in their completely-closed locked position with their meeting-rails in line; Fig. 3, a broken sectional elevation of Fig. 2, looking from left to right; and Fig. 4, an elevation of the back of my locking device detached from the window, showing it in its locked position, same as in the preceding views.

A and A' represent the two customary stiles or vertical side bars of the lower sash, and B and B' those of the upper sash.

a is the upper horizontal cross-bar of the lower sash, and b the lower horizontal cross-bar of the upper sash, both bars (a and b) constituting the usual meeting-rails of the two sliding sashes.

a' represents the usual ogee upper extensions of the lower-sash stiles, and b' the pend-

ent extensions of the upper-sash stiles. Extensions a' are the upright integral continuations of the two side stiles of the lower sash, commonly constructed on sashes in general use, so as to project upward beyond the plane of the cross bar or rail a. The pendent extensions b' are corresponding formations on the upper sash, only vice versa.

C is the vertical strip in the jamb or window casing between the stiles of the two sashes and having the customary guideways at either side for the vertical movements of said sashes.

My locking device is attached partly to the upper extension of the lower-sash stile A' and partly to the stile B' and lies at its lower end in the space between the said stiles A' and B' and is composed of the following elements: a vertical base-plate D, having countersunk screw-holes d; a bar or plate E, hinged (preferably by a rule-joint) to the upper end of said base-plate D; a swinging lock-lever F, pivotally connected at its lower end to the upper end of hinged bar E; a cam G, mounted on the pivot-pin of lever F at the opposite side of bar E, contiguous to the latter; a spring pawl or latch e, pivotally mounted in lateral ears f on the lever F, with its lower end engaging the upper end of bar E when the locking engagement is effected, as seen in all the views; a downwardly-turned lug or hook f', constructed on the lever F near its upper end and on the rear side somewhat above the said cam, and a keeper-plate H, which has an open slot or notch h and a pair of countersunk screw-holes h'.

Base-plate D is attached to the lower portion of the upright integral extension a' of the side stile A' by means of horizontally-disposed screws g, which enter the holes d in said plate from the rear, and keeper-plate H is attached to the face of the stile B', near its lower end, by means of horizontally-disposed screws h² entering the holes h'.

I is a second keeper-plate (a duplicate of keeper-plate H) attached to the stile B' by means of horizontally-disposed screws about four inches (more or less) above the said keeper-plate H for purposes of ventilation from both top and bottom, or either, as seen in Fig. 1.

In the operation of my device the lock-le-

ver (comprising bars E and F) is swung upward from a horizontal position to a vertical one, the lever F not then being in latched engagement with the bar E, but swung to the left, so that hook f' may enter the open slot h and then engage the inclined beveled inner face f'' of the lower edge of the notch, as best seen in Figs. 2 and 3, when said lever F is swung to the right into a perpendicular position. The spring latch or pawl e positively prevents the lever F swinging sideways, either accidentally or by stealth, from the outside, and the cam G, which projects from beyond the vertical plane of the hinged plate E in line with the keeper-plate H, abuts the bottom of the latter (when the said lock-lever is in perpendicular position) and positively prevents either sash being moved or slid up or down, and also thrusts the two sashes vertically in opposite directions (the upper sash upward and the lower sash downward) against the top and bottom, respectively, of the window-casing, thus forming a very effective antirattler, as both sashes are rendered perfectly tight by their said pressing impingement at top and bottom.

In order to properly set the keeper-plate in place on the stile B', so as to make the anti-rattling operation effective, I first secure the lock-lever attachment in place on the lower sash; then I swing the lever F to the left in its horizontal position; then I lay the keeper-plate on the face of stile B', with its anchor-pins j (seen in dotted lines in Fig. 3) sunk into the wood and its lower end resting on the flat side J of the cam; then I raise or swing the lever F to the right, which brings the cam to forcibly bear against the lower end of plate H, causing the latter to rise vertically and its anchor-pins j to cut upwardly into the wood, which firmly sets it, and then I apply the screws into the keeper-plate H to secure it in place. Thus anchored and secured any great pressure brought by the cam on the keeper-plate will not cause the latter to give, and the two sashes must therefore have a natural tendency to be thrust in opposite directions against the top and bottom of the casing, as stated.

The hook f' is beveled on its under side to suit the inner bevel of the notched keeper-plate H, and thus the two sashes are drawn tightly together and clamped firmly on the jamb-strip C, (the stile A' on one side the jamb-strip and the stile B' on the other,) so that no rattling can possibly take place when the sashes are partly open for ventilation, especially at the joint between the two sashes. The hook engagement also prevents the lock-lever toppling forward from locking action.

It will be seen in Figs. 1, 2, and 3 that the upper end c of the lever F is bent or flared so as to cover the thumb end of the spring-latch e . This precaution is taken to form a guard over and protect said thumb-latch against surreptitious depression or releasing

from the outside or access from above and making it impossible for the intruder to pick the lock at that point, which is very essential.

By placing the device on the sash-stiles and using horizontally-disposed screws, the intruder cannot readily pick the lock, nor can he pry or pull the screws from position, as he can when they are entered vertically in a lock at the center of the meeting-rails. The screws must thus break before the window will give.

To open the window, all that is requisite is to depress the thumb-latch e so that the lever F may be rocked to the left and its hook f' released from the keeper-plate H, and then the hinged bar E (with said lever F thereon) swung forward toward the operator till they rest on the extension a' .

To make the window doubly secure against intrusion and rattling, a pair of my devices may be attached, one at either end the meeting-rails on both stiles of the sashes.

It is obvious (without showing it in the drawings) that the device may be used on plain sashes having no stile extensions a' by simply attaching the base-plate D horizontally on the upper end of the stile; but this of course would involve the use of perpendicular screws, which would not be as effective as if placed horizontal, for the reasons hereinbefore stated. The cam may be dispensed with, if desired, and the hook engagement with the keeper-plate be sufficient for locking, but the effect would not be so powerful and effective.

I claim—

1. A window-fastening device composed of a base-plate D; rock-bar E hinged at its lower end to plate D; lock-lever F having a hook f' constructed thereon and swung on said bar E; thumb-latch e on the lever F; and one or more notched keeper-plates H, h ; the whole being constructed and arranged on the stiles of the window-sashes, substantially as herein set forth.

2. A window-fastening device composed of a base-plate D; rock-bar E hinged at its lower end to plate D; a flared or elbowed lock-lever F having hook f' thereon and swung on said rock-bar E; cam G mounted on the pivot-pin at the opposite side of bar E, contiguous to the latter; spring thumb-latch or pawl e on the lever F; and one or more notched keeper-plates H, h ; the whole being attached to the stiles of the sashes, and constructed and adapted to operate whereby the sashes may be locked entirely closed; or locked partly open for ventilation; and also prevented from rattling, substantially as herein set forth.

In testimony of which invention I have hereunto set my hand.

ROBERT LEE.

Witnesses:

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JOHN ELIAS JONES.