(No Model.)

R. A. GRIFFIN.

SASH FASTENER.

No. 565,743. Patented Aug. 11, 1896.

Fig. 1.

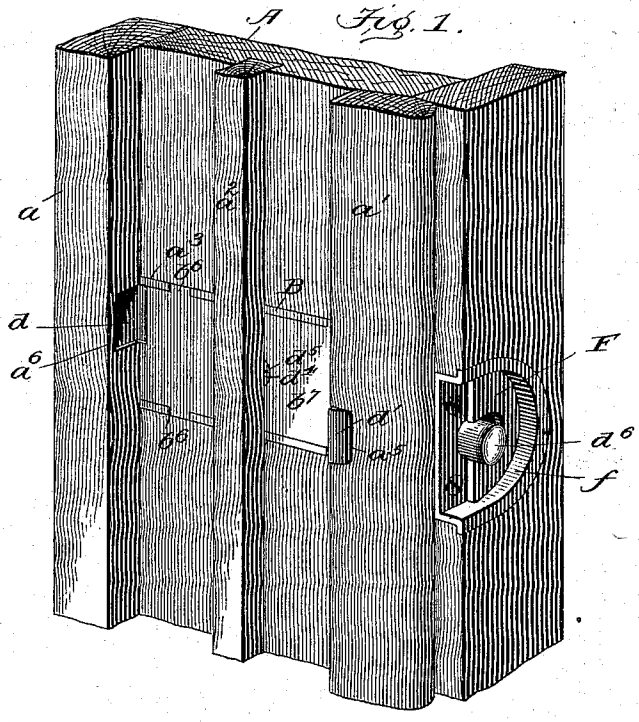


Fig. 2.

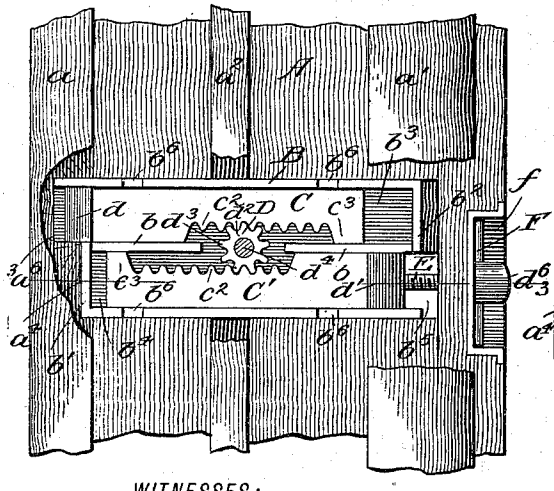
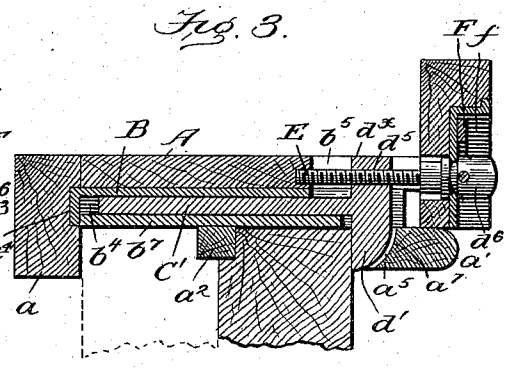


Fig. 3.



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SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 565,743, dated August 11, 1896.

Application filed May 4, 1896. Serial No. 590,149. (No model.)

To all whom it may concern:

Be it known that I, RICHARD AUGUSTUS GRIFFIN, residing at Nashville, Davidson county, State of Tennessee, have invented a new and useful Improvement in Sash-Locks, of which the following is a specification.

My invention has for its object the production of a sash-lock for windows which will be easy of operation and strong and durable in construction.

It consists of rack-bars arranged transversely of a window-frame on each side of a toothed wheel, each bar having an inner toothed edge designed to engage the said wheel, whereby the bars are moved in opposite directions, said bars being provided with clamps projecting therefrom for binding the outer and inner sides of the upper and lower sashes, respectively.

It further consists in improved means for operating the rack-bars and clamps, the said means being arranged so as not to interfere in any way with the curtains or drapery of the windows.

The invention will hereinafter be fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of a portion of a window-frame provided with my improvement. Fig. 2 is a front view of the box or casing of my device with the top removed. Fig. 3 is a horizontal section on line 3 3, Fig. 2.

Referring to the drawings, A designates a window-jamb of ordinary construction, having vertical guides a a' a^2 for the sashes. A transverse recess a^3 is cut in said jamb, extending entirely across the same, and the guides a and a' also contain cut-away portions a^4 a^5, respectively, as shown in Fig. 3. The recess a^4 is approximately rectangular with a horizontal additional recess a^6 formed therewith. The recess a^5 in the opposite inner guide a' has an inclined upper wall a^7. The said recesses are adapted to receive the ends of the box or casing B and the binding-clamps d and d', which will hereinafter be described in detail.

B is a box or casing, of brass or other durable material, nearly rectangular in shape and having sides formed integral therewith. Coincident raised portions b b extend longitudinally of said box or casing B from opposite sides b' b^2 to a point near the center thereof, forming with said sides practically upper and lower compartments b^3 and b^4. The side b' fits snugly in the lower portion of the recess a^4, while at its opposite end it is cut away, as at b^5, said cut-away portion being extended entirely through the jamb A. The side b^2 of the compartment b^4 fits against the guide a', its other side being open and projecting into the upper portion a^6 of the recess a^4. The top and bottom of the box or casing B are provided with recesses b^6, designed to receive lugs projecting from the lid b^7 to hold the same in position.

C C′ designate two rack-bars of special construction and arrangement.

Each bar is provided with teeth c^2 on one edge extending from a point near the center thereof to its outer end, where stops c^3 are formed, and further provided with forwardly-projecting clamps d d', formed integral therewith. The said bars are designed to be moved longitudinally in the compartments b^3 and b^4 in opposite directions through the agency of a cog-wheel D, and the clamps to work in and out of the recesses in the jamb and the guides. The said wheel D is pivoted at d^2 by a bolt d^4, inserted through coincident holes d^5 in the lid and back of the box or casing B at the space between the ends of the longitudinally-extending portions b b, so that the rack-bars C C′ are on each side of said wheel, and the teeth d^3 thereof intermesh with the teeth of the said bars. Thus a movement in one direction of the bar C will cause a movement in the opposite direction of the bar C′.

In addition to the clamp d' the bar C′ is provided with a rear block $d^\times$, forming with said clamp a continuous piece, and which is received in the recess b^5. Through said block is a transverse screw-hole d^5, which extends some distance into the jamb A, and also in an opposite direction through the side of said jamb adjacent the room. In said transverse hole d^5 is designed to work an operating-screw E, the end d^6 thereof being projected through the inner side of the jamb A, at which point a thumb-plate F is attached thereto. This thumb-plate folds down in a recess f, formed in the jamb, so that it is out of the way of curtains or other fixtures in the room.

The operation of my device is as follows: To lock the sashes at any desired point, the screw E is turned by the thumb-plate F, so that it works in the block $d^{\times}$ and forces forward the rack-bar C′ and the clamp d' thereof. This will result in a corresponding movement of the bar C and the clamp d in an opposite direction by means of the cog-wheel D, and both clamps will be forced into engagement with the sides of the sashes at the same time, securely locking them. The box or casing B is preferably placed in the jamb behind the meeting-rails of the sashes, so that it will be operative, no matter what the elevation of the same may be. When the upper and lower sashes are of thicknesses differing more than one-eighth of an inch, the sides of the casing are beveled, and the transverse recess in the jamb is cut of corresponding form, so as to do away with the necessity of fastening the casing and allow the device to accommodate itself to both the thick and the thin sashes.

It will be observed that I have provided a sash-fastener which is extremely simple in operation and durable in construction, and which can be adjusted to any style of window.

By means of the construction and arrangement of parts I have shown by operating the thumb-plate F both the sashes are locked simultaneously, and when not in use the said thumb-plate can be folded back out of the way.

I claim as my invention—

1. A sash-fastener, comprising a box or casing fitting in a transverse recess of the window-frame, rack-bars inclosed in said box or casing having clamps on their opposing ends, a cog-wheel pivotally secured in said box or casing between said rack-bars, arranged to move said bars simultaneously in opposite directions, and operating means connected to one of said bars, as set forth.

2. A sash-fastener, the same comprising a box or casing in the window-frame, rack-bars inclosed in said box or casing having clamps thereon, a cog-wheel adapted for engagement with said bars to move them in opposite directions, a block on one of said rack-bars in the rear of the clamp thereon, and an operating-screw working in a hole in said block, whereby movement of said bars and clamps is effected, substantially as set forth.

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Witnesses:
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