

H. R. RITCHIE.
WINDOW SASH LATCHING DEVICE.
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1,429,256.

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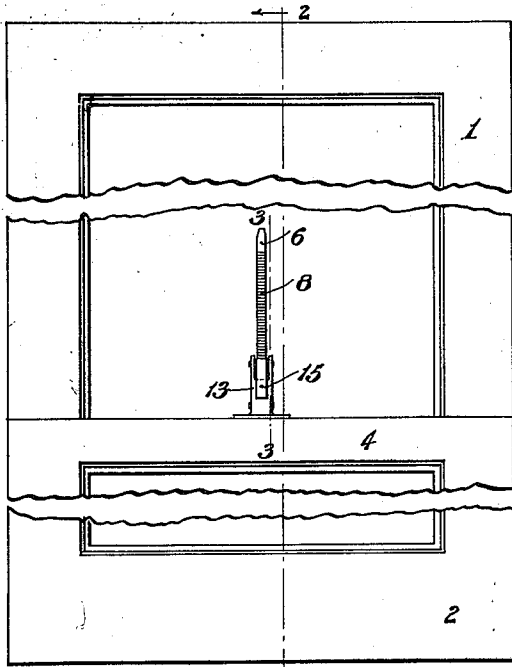


Fig. 1.

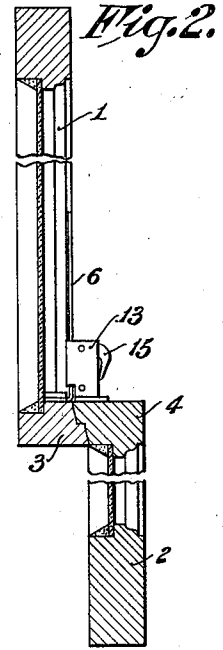


Fig. 2.

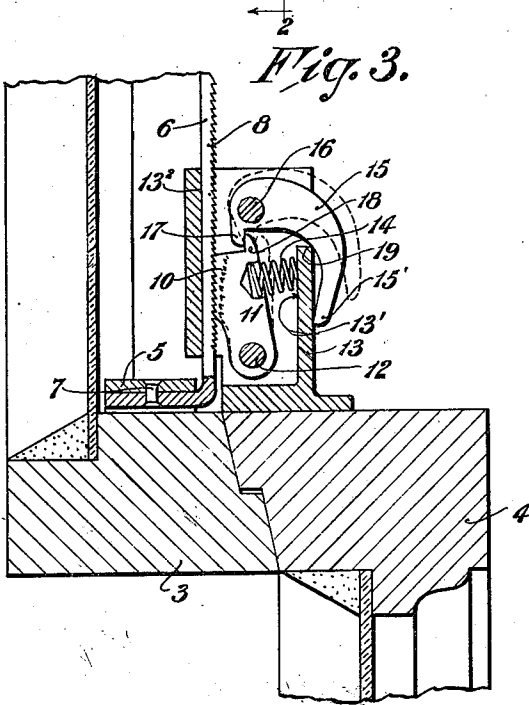


Fig. 3.

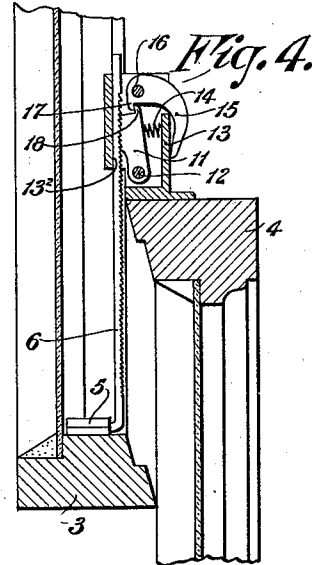


Fig. 4.

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WINDOW-SASH-LATCHING DEVICE.

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To all whom it may concern:

Be it known that I, HARRY R. RITCHIE, a citizen of the United States of America, residing at Springfield, in the county of Hampden and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Window-Sash-Latching Devices, of which the following is a specification.

10 This invention relates to improvements in window sash latching or securing devices. An object of the invention is to provide a device which can be readily attached to the meeting rails of the upper and lower sashes

15 so as to permit the same to be automatically latched together at all times, and at the same time permit them to be readily unlatched so that either one of the sashes may be raised or lowered independently of the other.

20 A further object is to provide a device which will prevent the same from being operated from the outside of the window by an intruder.

Further objects and nature of the invention will appear in the body of the specification and will be particularly pointed out in the claims.

Referring to the drawings:

Fig. 1 is an elevational view of the upper and lower sashes showing the device installed thereon.

Fig. 2 is a vertical sectional view on the line 2—2 of Fig. 1 showing the device in side elevation.

Fig. 3 is a vertical sectional view on an enlarged scale and on a plane indicated by the line 3—3 of Fig. 1, just inside one of the side plates of the device, and showing the latch in position when unlocked.

Fig. 4 is an enlarged view of the interior, showing the latch in its latching position.

Referring to the drawings in detail: 1 and 2 designate the upper and lower sashes, and 3 and 4 the meeting rails of the upper and lower sashes, respectively. 5 designates a foot plate which is suitably secured to the rail 3 of the upper sash; 6 a rod or bar attached thereto by means of the rivet 7. This rod 6 is formed with teeth, or serrations, 8 that point downward, as shown. The horizontal shoulders 9 of these teeth are designed to engage correspondingly shaped shoulders on the teeth 10 of a latch 11 which is pivotally mounted at 12 within the housing or casing 13. A coiled spring 14, normally under compression, is interposed between the

inner side 13' of the housing and the latch 11, whereby this latch is automatically and normally forced forward into latching engagement with the rod 6. An operating lever 15 is also pivotally mounted within the casing 13 on the pivot pin 16. This lever is formed with a downwardly extending lip or projection 17 which engages and passes behind the lip or projection 18 on the latching latch 11, as shown. The lever 15 extends outward from the casing 13 through a recess or opening 19 at the top. The spring 14 normally forces the lower end of the lever 15 against the casing 13, as shown in Fig. 3, at 15'.

Its operation may be described as follows: Consider the upper and lower sashes in the positions shown in Fig. 3. The operator lifts the lever 15 into the dotted line position, this unlatches the latch 11 from the bar 6, permitting either the upper or lower sash to be raised or lowered independently of the other. If the upper sash is lowered (see Fig. 4), and the unlatching lever 15 is released by the operator permitting the spring 14 to again move the latch 11 into engagement with the rod 6, the two sashes are then latched together. The upper sash can now be raised or closed, since the teeth 8 will idly slip along the teeth of the latch lever 11. The upper sash cannot be moved downward since the teeth are locked against movement in this direction. The lower sash can now be lowered when the teeth are in engagement, as shown in Fig. 4. The construction therefore permits the upper sash to be raised and the lower sash lowered when the teeth are in engagement. It also permits both to be moved upward when the lower sash is lifted upward.

An important feature is the provision of automatically drawing the two midrails together by means of the spring 14. The bar 6 is forced back against the rearmost wall 13² of the casing.

What I claim is:

1. A window latching device, comprising in combination, a serrated bar, a casing secured to the meeting rail of the lower sash, a pivotally mounted serrated latch in the casing for engaging the bar and having a notched end to form a lip or projection, a pivotally mounted lever in the casing and having a lip or projection normally in engagement with the lip of the latch, a spring located between a wall of the casing and the

latch for normally forcing the latch into locking engagement with the bar and the lever into engagement with the outer surface of the casing, for the purpose described.

- 5 2. In a window latching device, the combination with the upper and lower sash, of a serrated bar secured to the upper sash, a casing secured to the lower sash, said bar

extending through the casing, a pivotally mounted latch in the casing, a spring for 10 normally forcing the latch against the bar, and in turn the bar against the outer or rear wall of the casing, and a lever for disengaging the bar and latch, as described.

HARRY R. RITCHIE.