

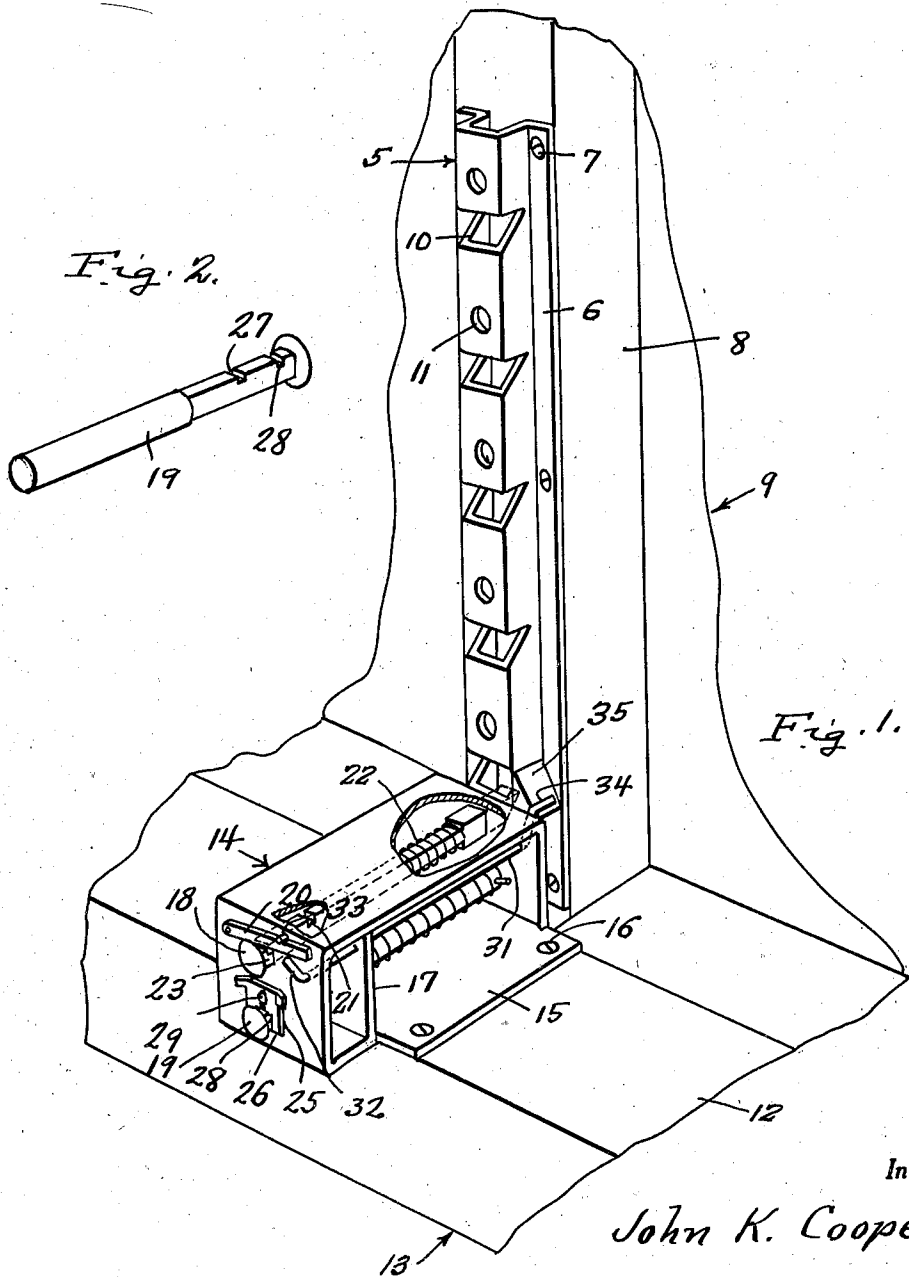
Feb. 21, 1939.

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2,147,966

WINDOW-SASH LOCK

Filed March 25, 1938



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UNITED STATES PATENT OFFICE

2,147,966

WINDOW-SASH LOCK

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Application March 25, 1938, Serial No. 198,118

1 Claim. (Cl. 292—335)

This invention relates to closure fasteners and more particularly to locks for use in conjunction with window sashes for locking the top and bottom sashes of a window at the desired position of adjustment.

An object of the invention is to generally improve upon window sash locks of this general type; and the invention together with its objects and advantages will be best understood from a study of the following description taken in connection with the accompanying drawing wherein:—

Figure 1 is a perspective view illustrating the invention, partly broken away, and

Figure 2 is a perspective view of a bolt.

Referring to the drawing by reference numerals it will be seen that in accordance with the present invention there is provided a keeper plate 5. The plate 5 is substantially channel-shaped and has the sides thereof provided with outstanding apertured attaching flanges 6 through the medium of which and screws or other fastening elements 7 said plate is secured to one of the members, 8, of the top window sash 9.

Plate 5, as shown, is provided with a vertical series of notches 10, the lower sides of which are on an incline as shown in Figure 1, and a series of apertures 11 arranged in alternation to the notches 10 and properly positioned with respect thereto.

Carried on the top member 12 of the lower sash 13 is a bolt casing 14 which may be of any suitable construction and which in the present instance is shown as being opened at opposite sides thereof and at said sides provided with outstanding base flanges 15 through the medium of which and screws or other fastening elements 16 the casing is suitably secured to the frame of the lower sash.

Adjacent one end thereof the casing 14 is provided with a transverse partition 17 as shown.

The opposite end walls, and partition 17 of the casing are apertured to slidably accommodate an upper keeper bolt 18 and a lower locking bolt 19.

The bolt 18 is provided at one end thereof with a conventional bolt head 20 that is engageable with a selected notch 10 in a manner to positively preclude raising of the lower sash 12 relative to the upper sash 9, and a lowering of the upper sash 9 relative to the lower sash 12; while at the same time permitting sash 12 to be lowered relative to the sash 9 as found desirable.

The locking bolt 19 is engageable with a selected one of the openings 11 for positively securing the sashes 9 and 13 against being raised or lowered relative to one another and thereby positively

securing the said sashes at the desired position of adjustment.

For locking the bolt 18 in either of two positions there is pivotally mounted on one end wall of the casing 14 a locking dog 20, and the knob-equipped end of the bolt 18 is provided with a notch 21 with which the dog 20 is engageable to lock the bolt 18 in retracted position against the action of spring 22; while the bolt 18 is also provided with a notch 23 with which the dog 20 is engageable for locking the bolt 18 in projected position.

For locking the bolt 19 in retracted position against the action of spring 24, there is slidably mounted on the aforementioned end wall of the casing 14 a locking plate 25 that in its lower edge is provided with a notch 26 adapted to accommodate the head-equipped end of the bolt 19 with the upper edge of the notch engaging in a transverse notch 27 provided in the bolt 19.

To lock the bolt 19 in projected position said bolt is provided with a transverse notch 28 with which the upper edge of the aforementioned notch 26 in plate 25 is engageable as shown in Figure 1.

Plate 25 is slidably mounted on the aforementioned end wall of the casing 14 through the medium of a headed stud 29 mounted on said wall and engaging a vertical slot 30 in plate 25 as clearly shown in Figure 1.

For automatically releasing the bolt 18 when the latter is in a retracted position, and the sashes 9 and 13 are in extreme closed positions, there is provided a trip rod 31 that is rotatably supported by the partition 17 and end walls of the casing 14 and this rod 31 at one end thereof is provided with an arm 32 engageable with the dog 20 to swing the latter upwardly out of engagement with the bolt 18, upward movement of the dog 20 being limited by a suitably provided stop pin 33. At the relatively opposite end thereof trip rod 31 is provided with a crank arm 34 that, as the sashes 9 and 13 move into extreme closed positions, engages a trip lug 35 provided on one side of the bar 5 adjacent the lower end of the bar and in a manner clearly shown in Figure 1 whereby to rock the rod 31 in a direction to cause the arm 32 of said rod to engage the dog 20 to lift the latter upwardly out of engagement with the bolt 18 thereby releasing the bolt and permitting the latter, in response to the action of spring 22, to be projected in a manner to engage the head 20 thereof with the lowermost notch 10 for positively locking, in conjunction with the bolt 19, the sashes in this extreme closed position.

From the foregoing it will be seen that I have provided a window sash lock which will operate efficiently for locking two sashes at the desired position of adjustment relative to one another so that the sashes may be locked in either fully closed position or in partially open position as found desirable.

It is thought that a clear understanding of the construction, utility, operation and advantages of an invention of this character will be had without a more detailed description.

Having thus described the invention what is claimed as new is:—

A sash lock of the class described comprising a bolt casing, a spring pressed bolt slidably arranged in the casing for engaging a keeper mem-

ber when projected, said bolt having an end, opposite the keeper engaging end, projecting from the casing, a knob on the projecting end, said projecting end having spaced notches in its upper edge, a latch lever pivoted to the casing and dropping by gravity into engagement with a notch when the bolt is in position with a notch under the latch lever, a rod passing through the casing and having one end bent for engaging with the latch lever and its opposite end cranked to engage a stationary cam when the sash is in lowered position and causes the rod to partly rotate whereby the bent end of the rod will lift the latch lever out of a notch.

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