June 12, 1951 P. F. FOLEY 2,556,720

AUTOMATIC WINDOW LOCK

Filed June 21, 1950

Fig. 1.

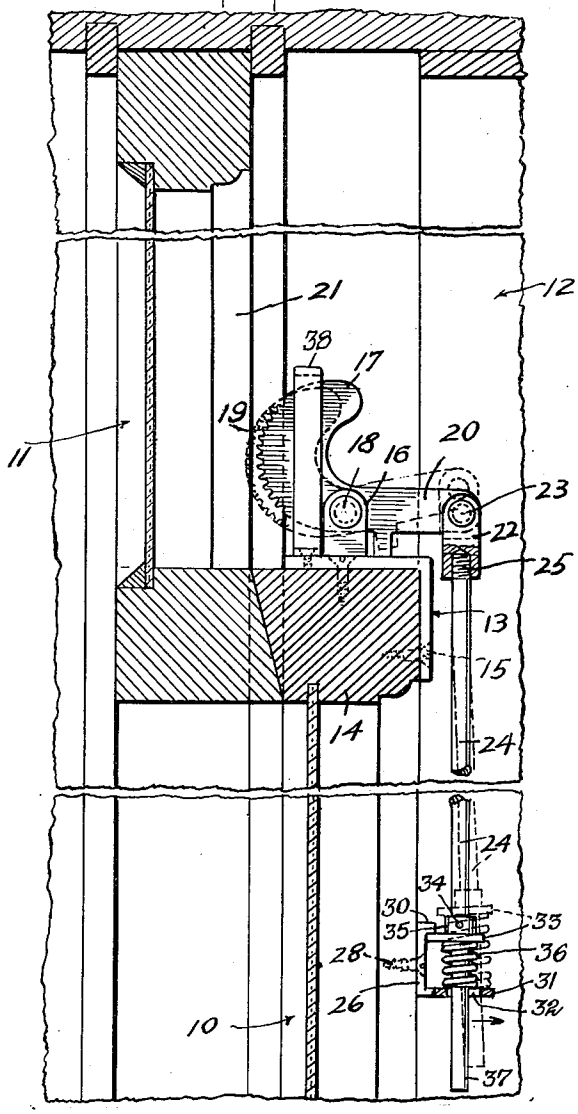


Fig. 2.

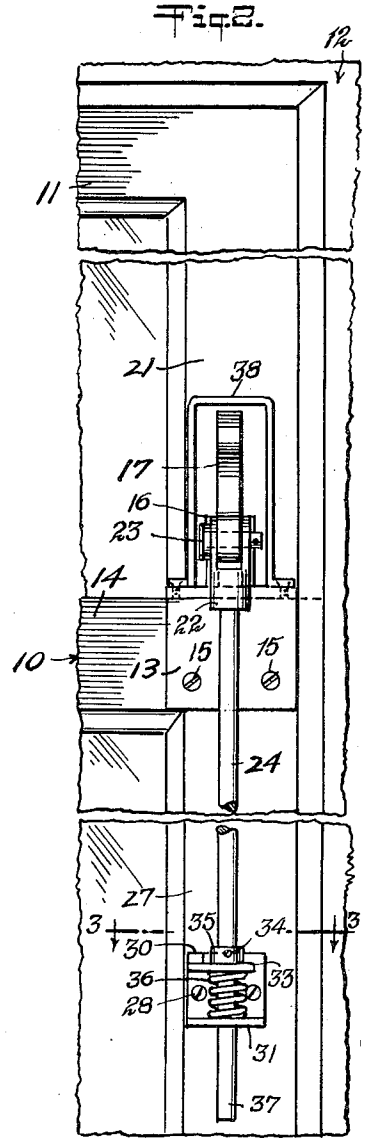
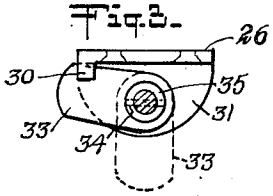


Fig. 3.



INVENTOR.
Patrick F. Foley
BY
Munn, Liddy & Glascum
Attorneys

Patented June 12, 1951 2,556,720

UNITED STATES PATENT OFFICE

2,556,720

AUTOMATIC WINDOW LOCK

Patrick F. Foley, New York, N. Y.

Application June 21, 1950, Serial No. 169,363

4 Claims. (Cl. 292—227)

1

This invention relates to a device which may be used for preventing the wrongful opening of a closure element, and which may be used advantageously in combination with window sashes or like sliding closure elements for the stated purpose.

The principal object of the invention is the provision of a device of the indicated character which enables a closure element such as a window sash or slidable door to be opened and closed in the usual manner, but which may be easily set to prevent opening of the closure element.

The invention also resides in the simpilicity of the device; the novel means for rendering the device active and inactive; and the effectiveness of the device for the intended purposes.

The nature of the invention and its distinguishing features and advantages will appear when the following specification is read in conjunction with the accompanying drawing in which

Fig. 1 is a vertical sectional view showing the device of the present invention applied to a lower window sash for the purpose of preventing the upper sash being moved from the closed to an open position, portions of certain parts being broken away.

Fig. 2 is a fragmentary side view of the parts shown in Fig. 1 looking at the same from the inside of the window.

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2.

In Figs. 1 and 2, the device of the present invention, by way of example, is employed for preventing the movement of lower and upper window sashes 10 and 11 in their frame 12, or for releasing the sashes, so that they may be moved into an open or closed position.

The device includes a bracket 13 fixed on the meeting rail 14 of the sash by screws or the like 15 at the inside of the sash. The bracket 13 has upstanding spaced lugs 16. An eccentric 17 is mounted for turning movement on an arbor 18 supported by the lugs 16, the eccentric being arranged between said lugs. The eccentric is made preferably of metal, but it may be made of any other suitable material. Teeth 19 formed on the eccentric provide a curved serrated gripping surface. The eccentric 17 has a tail 20.

The eccentric 17 is supported by the bracket 13 so that the gripping surface will impinge against the adjacent stile 21 of the upper sash 11 with the result that the eccentric 17 turns on its arbor 18, thereby forcing the sashes against the frame 12 with a wedging action, in response

2

to a force applied to either sash in an attempt to slide it from a closed to an open position. Thus either sash may be prevented from being wrongfully slid into an open position, or to be held against opening movement from a partly closed position.

In order to retain the eccentric 17 in an active position, or to move it out of such position, so that the sashes may have opening movement, there is provided means as follows: a link 22 is pivotally connected with the tail 20, as at 23. A rod 24 has its upper end screwed into the link, as at 25. A bracket 26 is fixed to the stile 27 of the lower sash by screws or the like 28. The bracket 26 has a laterally extending lug 30 at one side and at the top, and a flange 31 at the bottom thereof. The flange 31 has a slot 32 therein. A laterally extending abutment 33 is secured to the rod 24 by a pin 34 extending through the rod and a collar 35 on the abutment. The rod 24 is long enough to extend downwardly through the slot 32. A helical spring 36 surrounds the rod 24, and is disposed between the flange 31 and the abutment 33 with its opposite ends, respectively, bearing on these two parts.

By gripping the lower end portion 37 of the rod, the abutment 33 may be engaged with the underside of the lug 30, by pulling down on the rod and canting it at the same time. This will retain the eccentric 17 in an inactive position as shown in full lines in Fig. 1.

When the abutment 33 is disengaged from the lug 30 by canting the rod 24 due to the slot 32, the spring 36 acting on the flange 31 and the abutment 33, and through the intervention of the rod 24, link 22 and tail 20, constantly urges a torsional strain on the eccentric 17 disposed in an active or functioning position, as shown in dotted lines in Fig. 1.

It is to be understood that the abutment 33 may be engaged with and be disengaged from the lug 30 by pulling down on the rod and turning it as indicated in Fig. 3. The upper end of the rod being screwed into the link 22 enables the rod to be turned. A round hole may be provided in the flange 31 in lieu of the slot 32, if turning of the rod rather than canting it is desired.

An inverted U-shaped guard 38 is secured to the bracket 13 to protect the eccentric 17 from encountering the head rail of the frame 12.

While the device is shown to prevent wrongful opening movement of a sliding closure element, it may be reversed so as to prevent the closing movement of such closure element.

I claim:

1. A device for preventing the movement of a slidable element comprising a fixed bracket, an eccentric mounted on said bracket for turning movement, a rod having one end pivotally connected with said eccentric, a second fixed bracket, a laterally extending abutment on said rod, and a coil spring surrounding said rod with one end bearing on the abutment and its opposite end bearing on said second bracket, so that the spring through the intervention of the rod constantly urges a torsional strain on the eccentric and produces a gripping and wedging action of the eccentric on the slidable element preventing the movement thereof.

2. A device for preventing the movement of an element slidable in a guide comprising a fixed bracket, an eccentric mounted on said bracket for turning movement, said eccentric having a tail, a link pivotally connected with said tail, a rod having one end turnably connected with the link, a second fixed bracket, a laterally extending abutment on said rod, and a coil spring surrounding said rod with one end bearing on the abutment and its opposite end bearing on said second bracket, so that the spring through the intervention of the rod and link constantly

urges a torsional strain on the eccentric and produces a gripping and wedging action of the eccentric on the slidable element preventing the sliding movement thereof.

3. A device as set forth in claim 1, wherein said abutment is engageable with a lug on the second bracket, by pulling down on the rod and canting it, for the purpose of retaining the eccentric in an inactive position.

4. A device as set forth in claim 2, wherein said abutment is engageable with a lug on the second bracket, by pulling down on the rod and turning it, for the purpose of retaining the eccentric in an inactive position.

PATRICK F. FOLEY.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,398,174	Carlson	Nov. 22, 1941

FOREIGN PATENTS

Number	Country	Date
337,905	Germany	June 9, 1921