

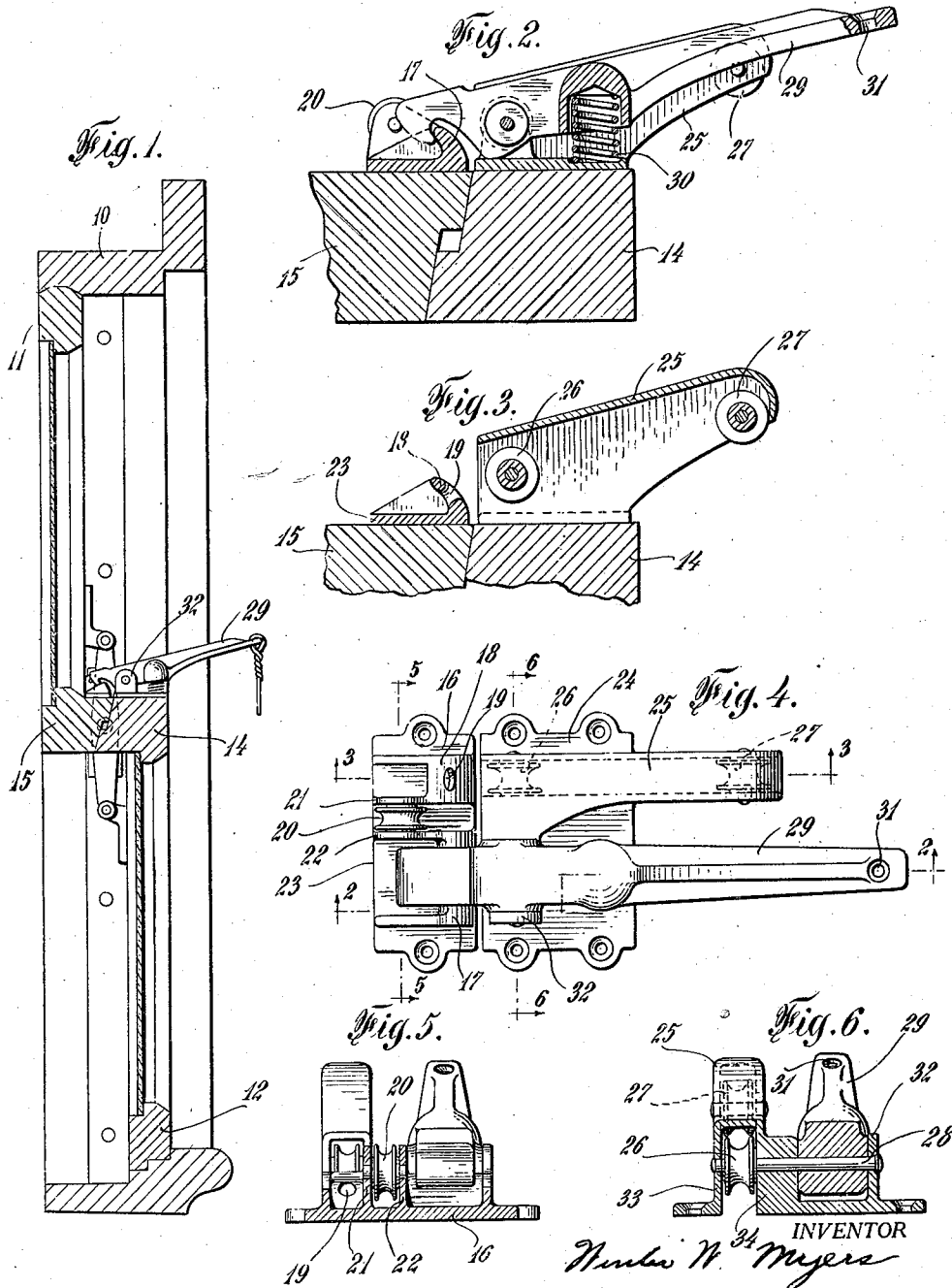
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LOCKING MECHANISM FOR WINDOW SASHES

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LOCKING MECHANISM FOR WINDOW SASHES.

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The invention which constitutes the subject matter of this application relates to an improved locking mechanism for window sashes, particularly applicable to balanced windows of the "Austral" type. The invention has to do with mechanism not only for latching the sashes in closed position, but also with means cooperating with the closing cord or rope to move the sashes into closed position after having been opened. Another feature of the invention is the provision of means whereby the shade for the upper sash may be drawn downwardly into contact with the upper surface of the meeting rail of the upper sash.

Other objects, advantages and features of construction and operation will more fully appear from the detailed description below taken in connection with the accompanying drawing in which:

Figure 1 is a vertical cross sectional view of an "Austral" window showing my invention applied thereto;

Figure 2 is an enlarged view of the meeting rails of the two sashes showing my improvements in cross section taken on the line 2—2 of Figure 4;

Figure 3 is a section taken on the line 3—3 of Figure 4;

Figure 4 is a top plan view of my invention;

Figure 5 is a section taken on the line 5—5 of Figure 4; and

Figure 6 is a section taken on the line 6—6 of Figure 4.

Referring to the drawings in detail, the reference numeral 10 designates a frame in which the two sashes 11 and 12 are mounted, the former being provided with sliding pivots at the top and the latter with sliding pivots at the bottom. These two sashes are pivotally connected by balanced arms 13 (only one being illustrated) so that when one of said sashes is moved the other is simultaneously moved with it. The reference numeral 14 designates the meeting rail of the lower sash and the reference numeral 15 the meeting rail of the upper sash. I make no claim per se, however, to the various parts just referred to as they are old and well known in the art.

Upon the meeting rail 15 of the upper sash is secured the keeper plate comprising a base 16, a latch engaging extension 17, a member 18 provided with a perforation 19

in which the window closing cord is detachably secured, and the shade guide pulley 20 journaled in the members 21 and 22 extending upwardly from the base plate 16. The base plate 16 and latch engaging means 17, the member 18 and journal members 21 and 22 are of unitary or integral construction. The outer peripheral surface of the pulley or guide 20 is located in proximity to the inner edge 23 of the base plate 16. Also the inner edges or surfaces of the journal members 21 and 22 are in a plane or substantially in a plane with said inner edge 23 in consequence of which the shade for the upper sash when pulled downwardly is enabled to contact with the upper surface of the meeting rail 15.

Upon the meeting rail 14 of the lower sash is secured a base member comprising a base plate 24 provided with an arm 25 extending from the inner edge thereof outwardly beyond the outer edge of the base plate but preferably made integral therewith. Adjacent the inner end of the arm 25 is a guide member 26, preferably a pulley, and adjacent its outer end a guide member 27 also preferably a pulley. Pivoted about a horizontal axis and preferably on the shaft 28 of the pulley 26 is a latch member 29 held in latching engagement with the latch engaging means 17 by means of a spring 30. This latch member extends outwardly beyond the base plate 24 and is provided adjacent its outer end with a perforation 31 adapted to receive a cord for disengaging the latch from the latch engaging means 17. Extending upwardly from the base plate 24 is a bearing member 32 for the shaft 28, the other end of said shaft being journaled in the walls of the outwardly extending arm 25.

It will of course be understood that the closing cord passes over the guide pulley 27 and over the guide pulley 26 and engages the member 18 of the keeper plate. When a sufficient pull is given to this cord it will be readily apparent that the window sashes will be drawn towards each other so as to enable the latch 29 to engage with the latch engaging member 17 to lock the sashes in closed position. When it is desired to open or separate the sashes for ventilation or other purposes a downward pull is exerted upon the outer end of the arm 29 against the tension of the spring 30 with

the result that said arm 29 is moved in a clockwise direction around the shaft 28 as an axis disengaging the same from the latch engaging member 17.

From the foregoing it will be seen that I have devised an improved opening, closing and latching mechanism for balanced windows, particularly useful where the window proper is located out of reach of the operator as in the case of windows in public schools, gymnasiums, etc.

What I claim and desire to secure by Letters Patent is:

1. In an improved window latching mechanism, a keeper secured to the meeting rail of one sash provided with means thereon for attaching a closing cord, a base plate secured to the meeting rail of the other sash, and means on said base plate for guiding said cord comprising an outwardly projecting arm, and guide members on said arm over which the said cord passes.

2. In an improved window latching mechanism, a keeper secured to the meeting rail of one sash provided with means thereon for attaching a window closing cord, a base plate secured to the meeting rail of the other sash, and means on said base plate for guiding said cord comprising an arm extending from the inner edge of said base plate outwardly beyond the plane of the sash to

which said base plate is secured, a cord guide member secured to the inner end of said arm and in juxtaposition to said keeper plate, and a cord guide member secured to the portion of said arm which projects beyond the plane of the sash to which it is attached.

3. In an improved window latching mechanism, a keeper secured to the meeting rail of one sash provided with means thereon for attaching a window closing cord, a base plate secured to the meeting rail of the other sash, and means on said base plate for guiding said cord comprising an arm extending from the inner edge of said base plate outwardly beyond the plane of the sash to which said base plate is secured said arm comprising a top and two side aprons integral with and projecting downwardly from said top, a cord guide pulley pivotally secured to the aprons at the inner end of said arm and in juxtaposition to said keeper plate, and a cord guide pulley pivotally secured to the aprons on the portion of said arm which projects beyond the plane of the sash to which it is attached, the distance between said aprons being substantially equal to the width of said pulleys.

In testimony whereof, I have hereunto set my hand this 22nd day of September, 1922.

WINTER W. MYERS.