

UNITED STATES PATENT OFFICE.

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WINDOW LATCH.

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The invention relates to latches and has particular reference to means for attaching window screen frames in the window frame, and has for its principal object the provision of means by which the window screen frame may be held in the window frame securely but may be removed at any time it is desired to remove the window screen, said removal being quickly and expeditiously accomplished.

To this end the invention contemplates provision of beads secured to the window frame on the outside of the sash guide and providing the window screen frame with a groove in one of its edges to engage the rabbet, anti-rattler springs being located within the groove, and providing the other side of the window screen with a rabbet adapted to seat against the bead and a plurality of pivoted latch plates mounted to swing across the rabbet to engage the bead, a rod being provided to simultaneously move the latch plates, and the frame provided with a groove in which said rod operates.

The construction and operation and advantages of the invention will be described in detail hereinafter and the construction will be shown in the accompanying drawing, in which

Figure 1 is a side view in elevation of the window screen frame showing it mounted in the window frame,

Figure 2 a view of one edge of the screen frame,

Figure 3 is a view of the opposite side of the screen frame,

Figure 4 a horizontal sectional view of the window frame and screen on a plane indicated by the line 4—4 of Figure 1, and

Figure 5 a view in perspective of one of the latch plates.

In the drawings similar reference characters are used to designate corresponding parts throughout the several views.

As heretofore stated, the primary object of the invention is the provision of means by which the window screen frame may be securely mounted in a window frame to prevent casual removal thereof, and yet it is so constructed that the frame may be quickly re-

moved and replaced when necessary. In carrying forward my invention, the window frame A has secured to the bead B immediately outside of the sash guides, a bead 1.

The window screen frame has on one of its edges a groove 2 to engage the bead 1 on the corresponding side of the window frame, and mounted in said groove 2 are leaf springs 3 that serve to securely engage the bead 1 and prevent rattling of the window screen frame. The opposite side of the window screen frame is rabbeted as shown at 4 and is also provided with a longitudinal groove 5. 6 designates recesses cut into the material of the frame between the rabbet 4 and groove 5. Mounted in each of the recesses 6 is a substantially triangular latch plate 7 and pivotally mounted therein by means of a pivot pin 8 adjacent to one of its angles, the opposite edge of the plate being curved as shown at 9. 10 designates the rod connecting corresponding corners of the plate 7, said rod operating in the groove 5. The free corner of each of the plates is curved outwardly as shown at 11, thus forming each of the plates as a cam to securely engage the bead 1 and lock the frame in position in the window frame.

To provide easy means of handling the window screen frame, the walls of the groove 5 in the one stile of the frame is provided with oppositely disposed recesses 12 to admit of grasping the rod 10. The opposite stile of the screen frame is provided with a recess 13 and a bar 14 to be grasped by the hand of the operator.

It will be readily apparent from the above description and inspection of the drawing that a window screen frame made in accordance with the invention will provide means by which the entire window frame may be screened so that the upper sash and the lower sash may be open for better ventilation of the room and at the same time the disadvantage of the structures now in use requiring removal of the window screen material from the window frame if secured thereto, or the window screen frame as it is usually secured to the window frame is avoided, as in this invention the window screen frame may be quickly detached from the window frame

when its is desired to dispense with the window screen frame.

What is claimed is:—

A latching device for windows, comprising a latch plate adapted to be secured to a window frame, an operating rod pivoted to said plate, said frame having a groove ex-

tending longitudinally of one of its stiles in which said rod is disposed, and said stile on opposite side of the rod being cut away at the groove to provide a relatively large space to facilitate gripping of the rod. 10

In testimony whereof I affix my signature.

FRITZ S. HALL.