

No. 835,978.

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D. W. NUTTALL.

SASH HOLDER.

APPLICATION FILED OCT. 24, 1905.

Fig. 1.

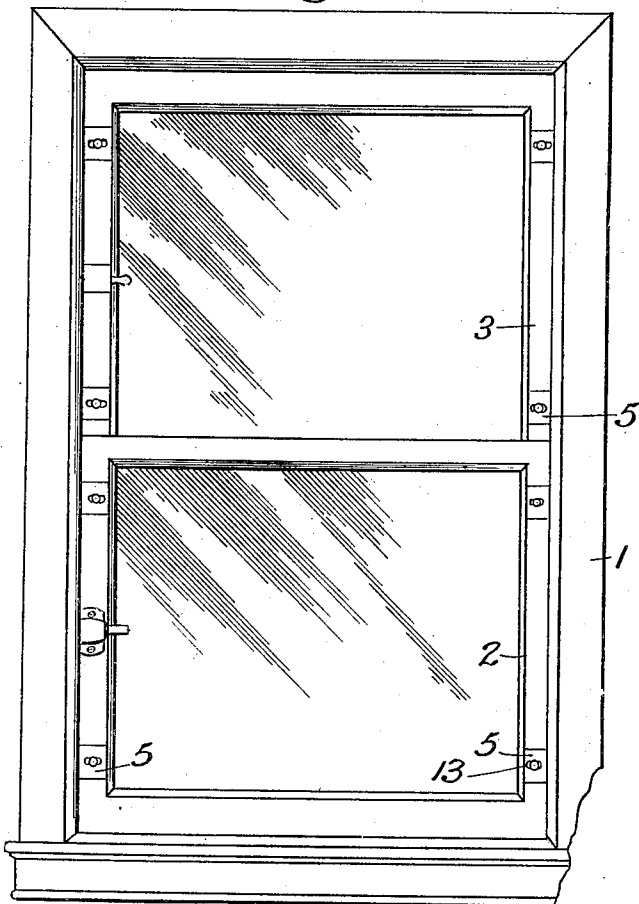


Fig. 2.

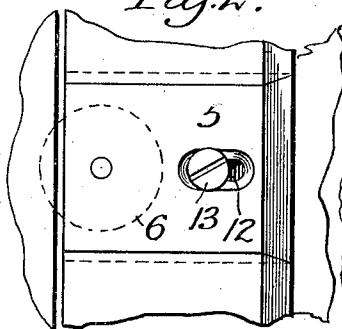


Fig. 3.

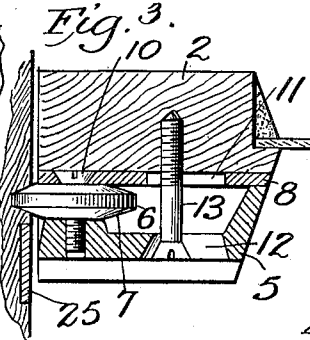
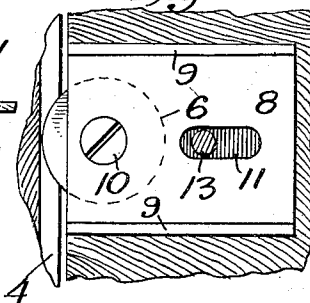


Fig. 4.



Witnesses

James F. Duhamel.
M. E. Laque.

Dana H. Nuttall
Inventor

By

Attorney

Victor J. Evans

UNITED STATES PATENT OFFICE.

DAVID W. NUTTALL, OF BAYONNE, NEW JERSEY.

SASH-HOLDER.

No. 835,978.

Specification of Letters Patent.

Patented Nov. 13, 1906.

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To all whom it may concern:

Be it known that I, DAVID W. NUTTALL, a citizen of the United States, residing at Bayonne, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Sash-Holders, of which the following is a specification.

This invention relates to window-sash attachments.

The objects of the invention are to improve and simplify the construction of such devices; furthermore, to increase their efficiency in operation and to decrease the expense attending their manufacture.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment thereof.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation showing a window equipped with the attachments of the present invention. Fig. 2 is a front elevation, partly broken away. Fig. 3 is a horizontal section through one of the roller-casings. Fig. 4 is a view showing the rear end of one of the roller-casings.

Like reference-numerals indicate corresponding parts in the different figures of the drawings.

The reference-numeral 1 indicates a window-frame such as can be placed in houses, buildings, steam or street railway cars, boats, and the like. The frame 1 is constructed without the guard-strips which are usually employed to hold the window-sashes in place. As substitute and improved means for holding the sashes 2 and 3 in place the side members of the frame 1 are formed with pairs of parallel vertical grooves 4, such as shown in the drawings. Each of the grooves 4 preferably is wedge shape in cross-section. It will be understood that four grooves, such as 4, are employed, two of said grooves serving for the upper sash and the remaining grooves serving for the lower sash. Each of the sashes 2 and 3 is formed, preferably, with four dovetail grooves or undercut portion, as shown in Fig. 2. Each of the dovetail grooves extends entirely through the sash-frame, so as to be open at both ends. Seated in each of the dovetail grooves is a casing, such as 5, in which is suitably journaled a

roller 6, having its periphery tapered into wedge shape, so as to fit closely into one of the vertical grooves 4 in the window-frame. The roller 6 preferably rests against an integral offset portion 7 on the front plate of the casing 5. The rear plate 8 of the casing preferably is removably fitted between flanges 9, formed on the front plate, and is held in position by a machine-screw 10, which extends into a threaded socket found in the offset 7 and serves as a journal for the roller 6, as well as a means of retaining the removable rear plate in position. The rear plate 8 is formed with a slot 11, and the front plate of the casing 5 is formed with a slot 12. The slot 12 preferably is countersunk, as indicated in Fig. 4.

Extending through the slots 11 and 12 and into the sash is a screw 13. Whenever the vertical grooves in the window-frame become worn, so that the rollers 6 fit too loosely therein, the screw 13 is loosened and the casing 5 is moved forward until the rollers 6 fit tightly into the grooves, after which the screw 13 of each casing 5 is again tightened. Each of the casings 5 is formed with slanting sides, so as to fit closely into the dovetail grooves in the sash. The slanting sides and the dovetail grooves therefore aid the screws 13 in holding the casings 5 securely in position.

A window equipped with the improved attachments of the present invention works easily and quickly without friction or rattle. The cumbersome guide-strips which are usually employed for holding the sashes in position and which render the removal of the sashes so difficult are dispensed with. The rollers 6 serve effectually to hold the sashes in position, and when it is desired to remove the sashes it is only necessary to loosen the screws 13 and slide the casings 5 backward until the rollers 6 are withdrawn from the wedge-shape grooves 4.

It will be understood that the improvements of this invention can be used as well upon screens, blinds, shades, and the like as upon windows. For this reason the expression "sliding member" used in the following claims is intended to cover any member which is slidable in the window-frame.

Changes in the precise embodiment of invention illustrated and described may be made within the following claims without departing from the spirit of the invention or sacrificing any of its advantages.

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

1. The combination with a window-casing provided with a vertically-arranged groove, of a window-frame slidably mounted in the casing, said frame being formed with a plurality of horizontally-arranged dovetailed recesses opening from one surface of the frame and extending therethrough from side to side, a case mounted within the recess and movable longitudinally thereof to adjust the same relative to the window-casing, a roller carried by said case and arranged to engage the groove in the casing, and means for securing the case in adjusted position in the recess relative to the casing.

2. The combination with a window-casing having a vertically-arranged groove therein, of a window-frame mounted for sliding move-

ment in the casing, said frame being formed with a dovetailed recess opening through one surface of the frame and extending therethrough from side to side, a case shaped to fit the recess and mounted for movement therein, a roller carried by the case and adapted to fit within the groove in the casing, the walls of the case being formed with elongated openings, and a screw engaging said openings and taking into the frame, whereby the case may be secured in adjusted position relative to the window-casing.

In testimony whereof I have affixed my signature in presence of two witnesses.

DAVID W. NUTTALL.

Witnesses:

W. H. CRICHTON-CLARKE,
MADELEINE MICHEL.