(No Model.)

O. D. REISINGER.

SASH HOLDER.

No. 563,983. Patented July 14, 1896.

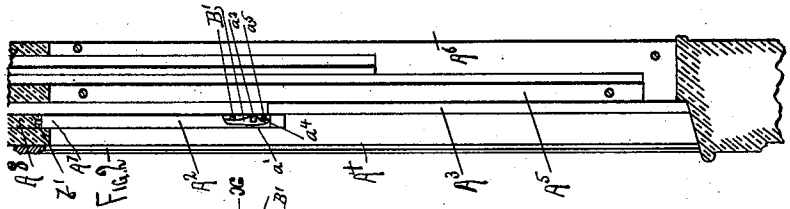

Fig. 2

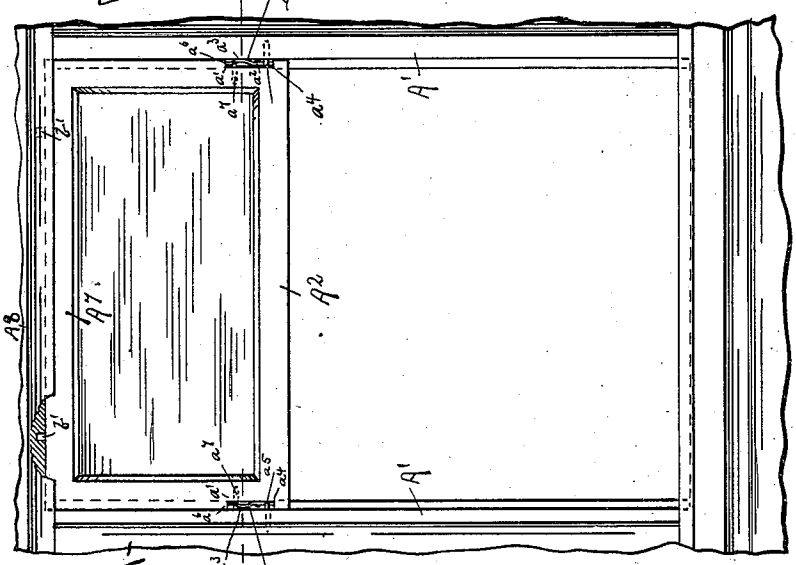

Fig. 1

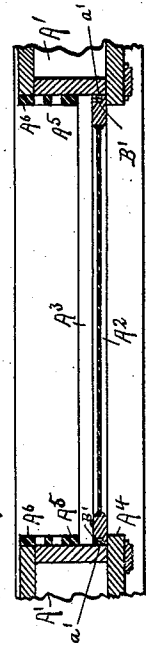

Fig. 3

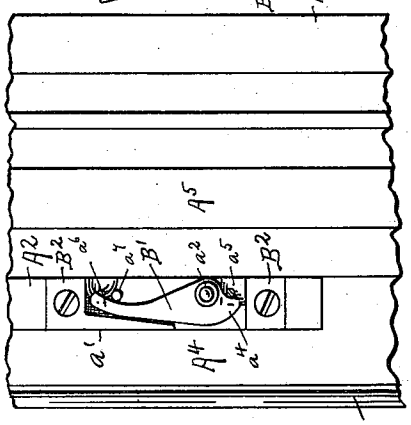

Fig. 5

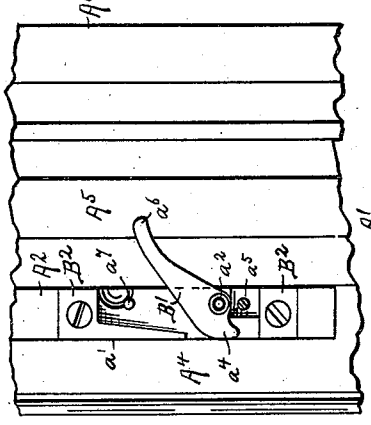

Fig. 6

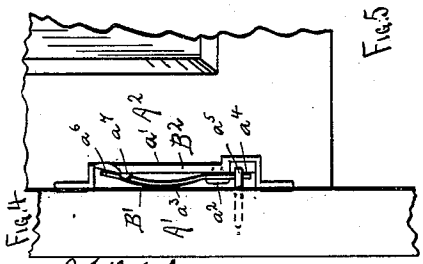

Fig. 4

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} WITNESSES.

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By Charles N. Woodward Atty.

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UNITED STATES PATENT OFFICE.

OBIED D. REISINGER, OF ST. PAUL, MINNESOTA.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 563,983, dated July 14, 1896.

Application filed December 21, 1895. Serial No. 572,884. (No model.)

To all whom it may concern:

Be it known that I, OBIED D. REISINGER, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have made certain new and useful Improvements in Window-Sash Holders, of which the following is a specification.

This invention relates to devices for holding a window-sash in place in its frame, while at the same time permitting it to be easily removed and replaced without injury to the window casing or frame, and the invention consists in the construction, combination, and arrangement of parts, as hereinafter shown and described, and specially pointed out in the claim.

This invention may be applied to many forms of window-sash, but is more particularly applicable to the upper or stationary sash of railway-passenger-coach windows, and for the purpose of illustration I have shown it in the drawings thus applied.

Figure 1 represents a railway-coach window-frame from the inside, with the stops and the lower sash removed, showing the location of my improved holders in place upon the upper or stationary sash. Fig. 2 is a longitudinal sectional view of the frame and casings with both sash in place therein. Fig. 3 is a cross-sectional view on the line X X of Fig. 1. Figs. 4, 5, and 6 are enlarged detail views of portions of the frame and sash, illustrating more fully the construction and operation of the sash-holder.

A′ represents the frame, A^2 the upper or stationary sash, A^3 the lower or movable sash, A^4 the outside stop, A^5 the stop which forms the guide for the movable sash, and A^6 the stop which forms the guide for the slatted blinds, all these parts being constructed in the usual manner.

In the ordinary construction of cars the upper stationary sash is secured in place by screws passing through its stiles into the side posts, but the constant jar of the rapidly-moving car frequently loosens these screws, and the frequent removal and replacing of the screws when the cars are repaired so wear the screw-holes that it is often necessary to replace them with larger screws. This often renders it necessary to replace or repair the sash, entailing a heavy bill of expense, and is a constant source of annoyance. The screws also frequently become so corroded as to break off.

Another and very common objection to sash secured in this way is that the screws when they work loose "back out" into the path of the movable sash A^3, which strikes them when raised, scratching and marring the sash badly.

The object of my invention is to construct an attachment which will firmly hold the sash in place and be unaffected by the motion of the car, and at the same time be easily disengaged to permit of the removal of the sash without interfering with the action of the movable sash or disfiguring the car in any way.

The invention consists in plates or levers, preferably formed with spring-bends and attached to the sash and adapted to engage with pins projecting from the frame, so that they hold the sash firmly in place when engaged with the stationary pins, but are easily detachable from the stationary pins when the sash is to be removed.

In practicing my invention recesses a' are formed in the edges of the side stiles of the sash near their bottoms, and in these recesses are pivoted at a^2 metal levers or bars B′, preferably with spring-bends a^3, causing them to press outward with some force against the side posts or frame to prevent the rattling of the sash, and also keeping the springs engaged. The lower ends a^4 of these levers B′ when they are turned up parallel with the sash, as shown in Figs. 2, 4, and 5, catch behind stationary pins a^5, projecting from the side posts or frame A′, while their upper ends a^6 spring behind lugs a^7 in the sash, as shown more clearly in Figs. 4 and 5.

In Figs. 2, 5, and 6 the stationary pin a^5 is shown in section, and it must be borne in mind that in these figures the pin a^5 is intended to be understood as projecting from the side post and is not attached to the plate B^2 or the sash A^2.

The upper member A^7 of the upper sash is provided with pins b', which project into sockets formed for them in the upper member A^8 of the frame, by which the top of the sash is held in place.

To remove the sash A′, it is only necessary to insert an instrument, such as a small screw-driver or a key made for the purpose,

behind the upper ends a^6 of the plates B′ and force them outward until they are free from the lugs a^7, when the upper ends can be drawn outward and turned downward on their pivots a^2, as shown in Fig. 6, releasing the lower ends a^4 from the pins a^5 and leaving the sash free to be drawn outward by its lower edge and removed.

To insert the sash, it is only necessary to turn the plates B′ downward, as in Fig. 6, insert the upper edge of the sash into its place first, and push it upward until the pins b' enter their sockets, then push the sash home against its stops, and then force the upper ends a^6 of the plates B′ back behind the stops a^7, as before, which will throw the lower ends a^4 behind the pins a^5 and again lock the sash in place, the springiness of the plates preventing their becoming loose again until forcibly removed by the insertion of an instrument behind their upper ends a^6, as before stated.

The plates B′ are each shown pivoted upon and working within metal casing or chamber B^2, which is sunken into the stiles of the sash, as shown; but the plate B′ may be pivoted directly to the wood of the sash, if preferred.

Having thus described my invention, what I claim as new is—

In a sash-fastener, a lever pivoted in the edge of the sash, a pin projecting from the window-frame into the path of one end of said lever and behind which said end engages when the lever is turned in a position parallel to the side of the sash, and a stud upon said sash behind which the other end of said lever engages, to lock said lever into engagement with said pin, whereby the sash is supported in the frame and removable only by releasing said lever, substantially as described and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

OBIED D. REISINGER.

In presence of—
C. N. WOODWARD,
THOS. D. O'BRIEN.