(No Model.)

H. A. WAAS.

SASH HOLDER.

No. 590,797. Patented Sept. 28, 1897.

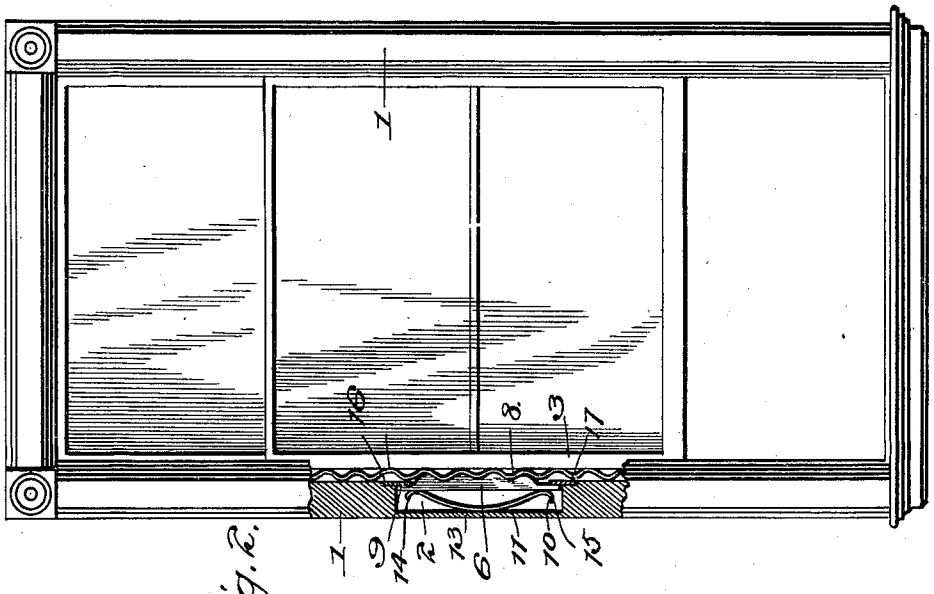


Fig. 2.

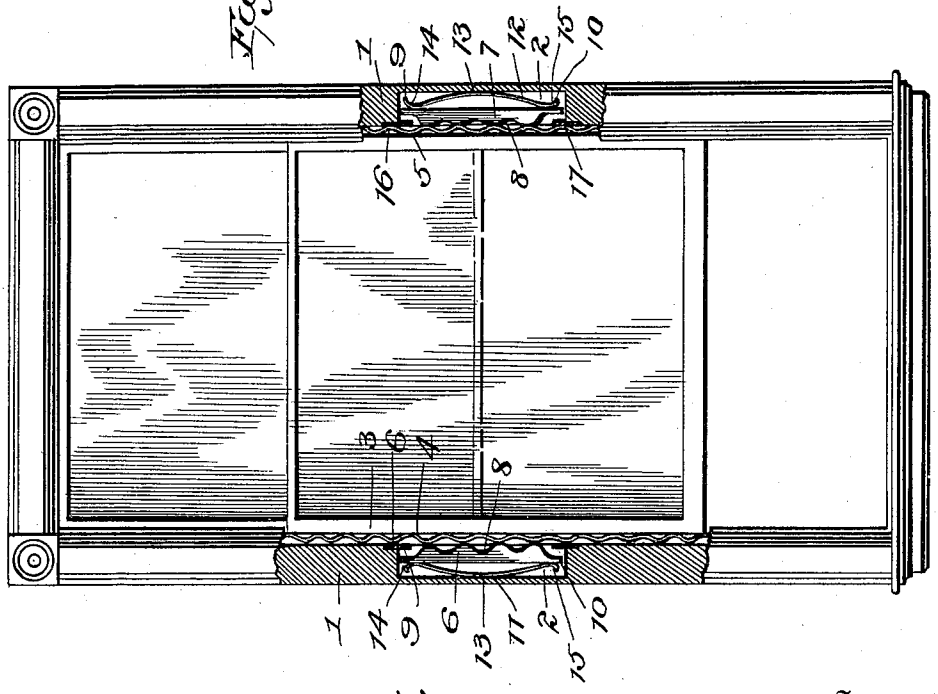


Fig. 1.

Witnesses
[illegible]
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UNITED STATES PATENT OFFICE.

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SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 590,797, dated September 28, 1897.

Application filed March 20, 1897. Serial No. 628,478. (No model.)

To all whom it may concern:

Be it known that I, HARRY A. WAAS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sash-Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in sash-holders, the improvements especially relating to that class wherein window-sashes are maintained in adjusted position by means of gear-and-rack mechanism.

In the drawings, Figure 1 represents a sectional elevation of a window having my improvement applied, this view showing the sash secured in adjusted and raised position. Fig. 2 is a sectional view representing the sash in position of adjustment.

1 represents the frame of a window. This has formed in each vertical side and at or about the center a recess 2, preferably extending the width of the frame, so as to allow of sufficient lateral play therein of the spring-cushioned blocks and springs, to be presently described, in the adjustment of the sashes.

3 represents a sash to the respective side edges of which and extending from top to bottom thereof are secured a pair of corrugated metal strips 4 5, the corrugations of which are curvilinear, as shown.

6 7 represent a pair of blocks of metal or other suitable material located in the respective recesses 2 in the window-frame and having curvilinear corrugated inner faces 8, as shown, to lockingly engage, as shown in Fig. 2, with the corrugated edges of the sash, or, as shown in Fig. 1, to impinge at their outer curved portions on the outer curved portions of the corrugated strips on the sash, and thereby force in said blocks to admit of the sash being readily raised or lowered. 9 10 represent top and bottom flanges extending from said corrugated blocks and which flanges serve as end bearings for said blocks, on which they have lateral slide-bearing in the frame-recesses, said flanges serving to secure steadiness of movement of said blocks in their operation, and also serving, in connection with other stops, to be presently described, as stops limiting the forward or inward movement of said blocks.

11 12 represent a pair of curved plate-springs located and loosely positioned within the respective recesses 2, the central curvature 13 of said springs impinging against the rear wall of said recessed portion of the frame, and the curved ends 14 15 of said springs also each impinging, respectively, against the upper and lower portions of the rear of said blocks and against the adjacent portions of the rear wall of the recessed portions of the window-frame. By this construction and arrangement each block has cushion-support at each end and center, which results in a uniformly steady and elastic support being afforded said blocks throughout their entire length.

16 17 represent a pair of guard or stop strips let into the inner edges of the frame and extending across the recessed portions thereof to, in conjunction with the flanged upper and lower portions of the spring-blocks, limit the inward movement of said spring-blocks and retain said blocks in position within the recesses 2, as shown in Fig. 2, where the flanged portions of said spring-blocks are shown as impinging against said stop-strips.

It will be apparent from the foregoing, and referring to the drawings, that window-sashes can be readily adjusted as desired, it being simply necessary, in order to adjust the sash, for vertical pressure upward or downward, as the case may be, to be exerted on the sash to cause the outer curved portions of the corrugated strips thereon to contact with and impinge against the outer curved portions of the spring-blocks and press said blocks inward and also compress the springs, as shown in Fig. 1, whereupon the sash can be readily either raised or lowered, as desired, while upon the release of the vertical pressure on the sash the springs will operate to project said blocks into engagement with the corrugated strips on the sash, as shown in Fig. 1, and thus securely hold the sash in adjusted position.

Having thus described my invention, what I claim is—

The combination with a window-frame having a recess in its side, and a window-sash

having a corrugated spring secured to its side edge, of a slidable block fitted in the said recess and having a corrugated face adapted to engage the corrugated spring and provided with flanges at its upper and lower ends, a spring secured in the recess and bearing on the back of the block, and guard-strips secured across the ends of the recess and adapted to be engaged by the flanges on the block to retain the block in the recess.

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

HARRY A. WAAS.

Witnesses:
JOHN L. VANDIVER,
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