

(No Model.)

H. V. HERRMANN.
CAR WINDOW.

No. 548,544.

Patented Oct. 22, 1895.

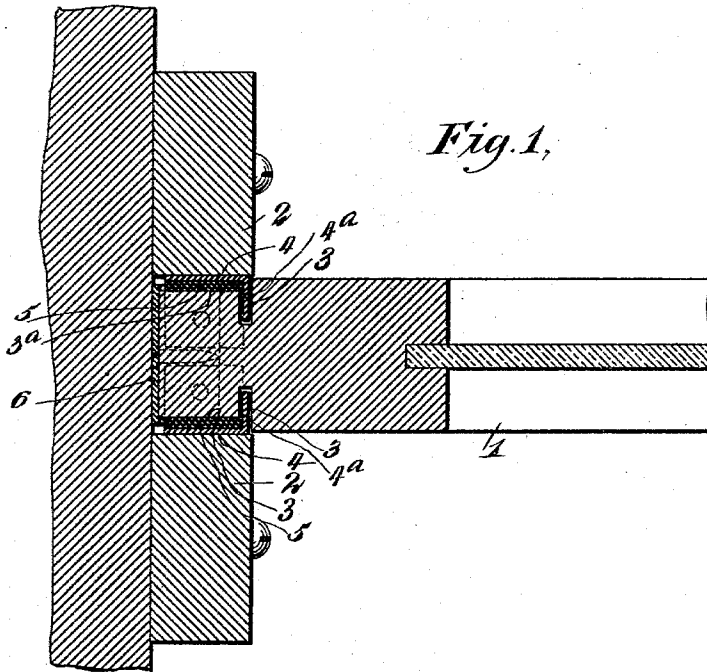


Fig. 2.

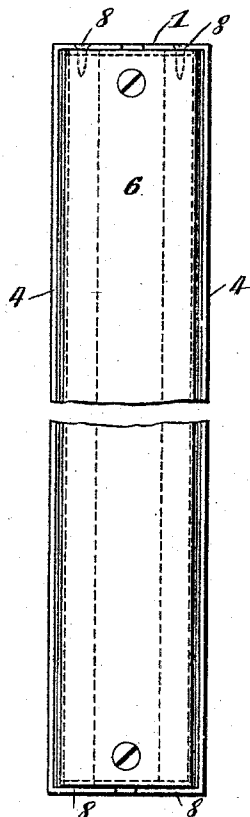
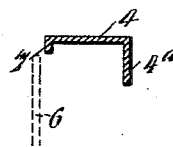


Fig. 3.



WITNESSES:

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CAR-WINDOW.

SPECIFICATION forming part of Letters Patent No. 548,544, dated October 22, 1895.

Application filed August 16, 1895. Serial No. 559,518. (No model.)

To all whom it may concern:

Be it known that I, HENRY V. HERRMANN, of New York city, in the county and State of New York, have invented a new and Improved Car-Window, of which the following is a full, clear, and exact description.

The object of the invention is to so construct a car-window that it may be easily moved in its beads or frame and also that it will be tight in its connection with the frame, so as not to permit the passage of wind or rain between the two parts.

The invention will be more fully described hereinafter, and finally embodied in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a section taken through one side of the window-sash and extending horizontally to the frame of the window. Fig. 2 is a fragmentary end elevation of the window-sash, and Fig. 3 is a sectional view of a modification.

The sash 1 is provided near each edge and at each side thereof with a groove, the same being L-shaped in form and comprising a part 3^a, extending parallel with the side of the sash, and a part 3, extending inwardly and transversely to said side. Fitted in each of these grooves is a metallic strip, which is also L-shaped in form and which comprises a part 4, lying in the part 3^a of its respective groove, and a part 4^a, lying in the part 3 of said groove. The metallic strips are movable transversely in their respective grooves. Interposed between the parts 3^a of the slots and the parts 4 of the strips are a series of soft-rubber strips 5, which are cemented or otherwise secured to each other and which operate to push the parts 4 of the strips outwardly, so as to cause them to bind against the window-beads 2 and thereby fill the space between the sash and beads. At the same time the metal composing the strips makes an easy and frictionless connection between the parts, and thereby the object of my invention is attained. The ends of the metallic strips are provided with flanges 8, which extend transversely with relation to the strips and which are seated in recesses formed in the respective upper and

lower edge of the sash 1. These strips are shown by dotted lines in Fig. 1 and by full lines in Fig. 2.

Rigidly secured by screws or otherwise to each vertical edge of the sash is a metallic strip or plate 6, which has its respective vertical edges projected beyond the parts 4 of the slots, so that when the rubber strips 5 are spread by compression they may engage with the projected edges of the strip if they are subjected to sufficient pressure, and by these means be prevented from contact with the wood of the wooden frame, which contact would result in undue sticking and would therefore be disadvantageous.

The upper and lower end of the strip 6 are each bent at right angles to the main portion and seated below the flanges 8 on the sash, the said flanges and the ends of the strips 6 being secured in place by nails or screws fastened in the adjacent portions of the sash. It will be understood that this securing of the flanges 8 will not prevent the necessary movement of the strips 4 4^a, since these are resilient and will bend intermediate of the flanges. The modified form of the invention (shown in Fig. 3) is provided to assist the strip or plate 6, and to this end the metallic strips having the parts 4 and 4^a are also formed with independently-extended flanges 7, which are adapted to lie directly adjacent to the outer edges of the rubber strips 5 and serve to further prevent said edges from engagement with the window-frame.

It will be seen that by means of the above-described construction the metallic strips are pressed firmly against the beads 2, and thus the sash is given a secure connection with the beads and the passage of wind and rain is prevented, and at the same time all friction is overcome and the connection made yielding enough to compensate for inaccuracies in the condition of the wood composing the sash and frame.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A window sash, provided at one edge with a groove, the same being L-shaped in cross section, a correspondingly shaped plate movable in said groove, a rubber strip interposed between the sash and strip, and a sec-

ond metallic plate or strip secured to the window sash and arranged to have the rubber spread against it, substantially as described.

2. A window sash having at the side of one edge a movable strip, a resilient strip interposed between the movable strip and sash, and means for preventing the resilient strip from engagement with the window frame, substantially as described.

10 3. A window sash having at the side of one edge a groove composed of a part 3 and a part 3^a, a strip movable within said groove and having parts 4 and 4^a respectively fitted in the parts of the groove, a resilient strip interposed between the part 4 of the first strip and the part 3^a of the slot, and a second strip secured to the edge of the sash and having one edge projected past the part 3^a of the slot so as to engage the resilient strip when spread
15 by more than ordinary compression, substantially as described.

20 4. A window sash having at each side of one edge a slot, the same being L-shaped in form, an L-shaped strip movable in each slot, a resilient strip interposed between the L-shaped

strips and the sash, and a strip secured to the edge of the sash and having its edges projected beyond the same so as to engage the edges of the resilient strip when spread by more than ordinary compression, substantially as described.

5. A window sash having at one side of one edge an L-shaped groove, an L-shaped strip movable in said groove and having at each end a transversely extended flange seated on the sash, and a resilient strip interposed between the L-shaped strip and the sash, substantially as described.

6. A window sash having at each side of one edge groove, a strip movable in each groove, a resilient strip interposed between each strip and the sash, the strips having each a flange 7 lying at one edge of each resilient strip and an additional strip secured to the edge of the sash and having its edge extended adjacent to the flanges 7, substantially as described.

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Witnesses:

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