No. 852,622. PATENTED MAY 7, 1907.

J. G. ROSEBOOM.

WINDOW SASH.

APPLICATION FILED MAR. 6, 1907.

Fig. 1

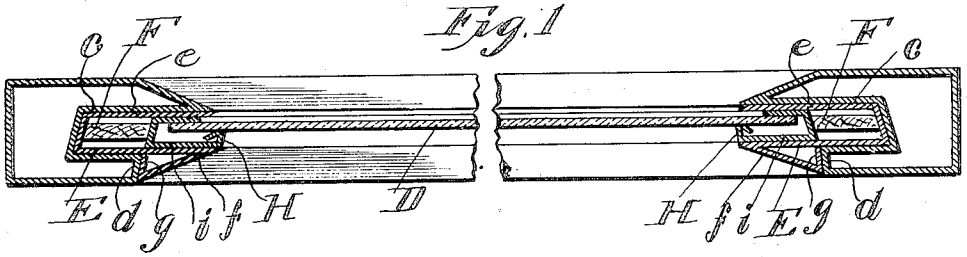



Fig. 2.

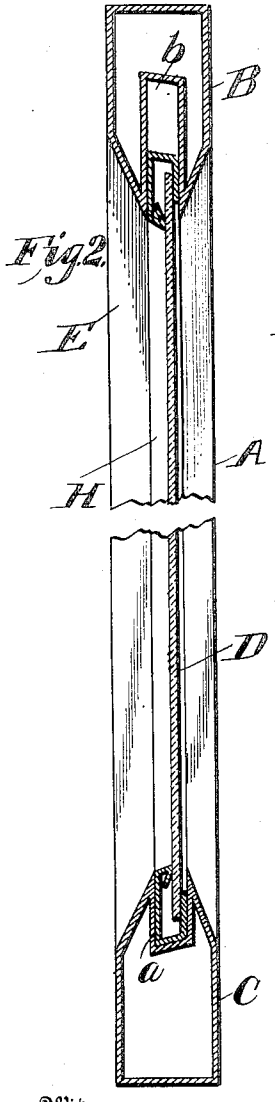



Fig. 3.

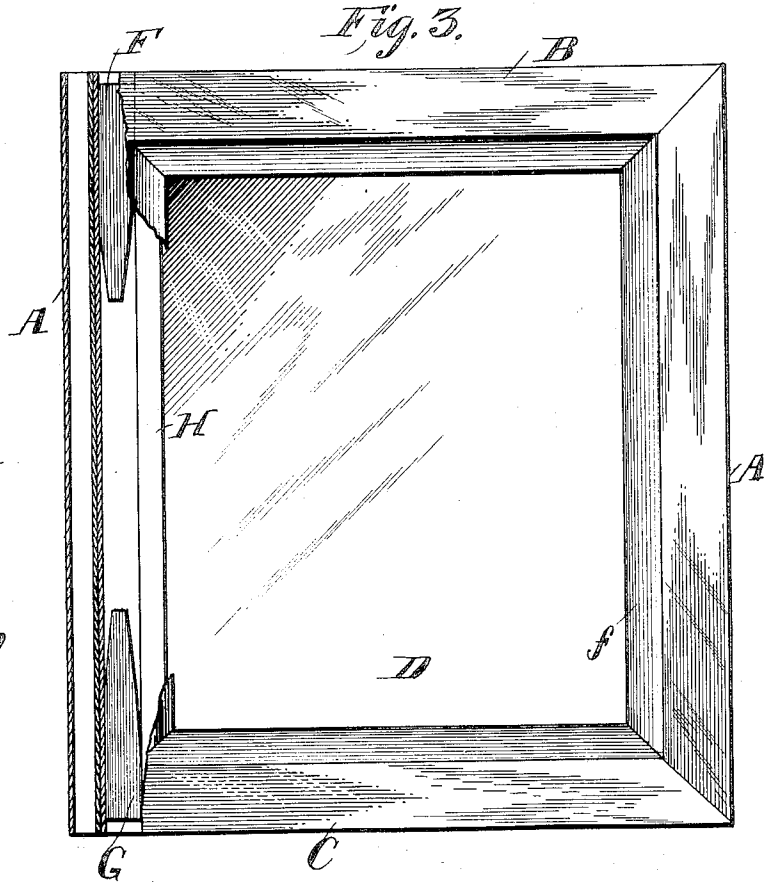
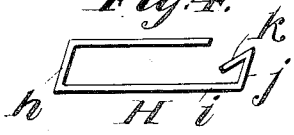



Fig. 4.




Witnesses
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# UNITED STATES PATENT OFFICE.

JESSE G. ROSEBOOM, OF CINCINNATI, OHIO.

## WINDOW-SASH.

No. 852,622. Specification of Letters Patent. Patented May 7, 1907.

Application filed March 6, 1907. Serial No. 360,981.

*To all whom it may concern:*

Be it known that I, JESSE G. ROSEBOOM, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented new and useful Improvements in Window-Sashes, of which the following is a specification.

My invention pertains to window sashes and more particularly to means for fastening lights in sashes; and it contemplates the provision of simple and inexpensive means through the medium of which lights or panes of glass thinner than the recesses in sash bars may be expeditiously and easily fastened in said recesses in such manner that the lights are securely held against displacement and are effectually prevented from shaking or rattling.

With the foregoing in mind the invention will be fully understood from the following description and claims when the same are read in connection with the accompanying drawings, forming part of this specification, in which:

Figure 1 is a broken horizontal section taken through a window sash constructed in accordance with my invention. Fig. 2 is a broken vertical section of the said sash. Fig. 3 is a front elevation of the sash, with parts broken away, and: Fig. 4 is an enlarged detail view of one of my novel clips for holding a light or pane of glass in a recess of greater thickness than the light or pane of glass.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which:

A A are the side bars.

B is the top bar, and C is the bottom bar of the window sash embodying my invention. The said bars may be made of wood, metal or other material in the discretion of the manufacturer and joined in the ordinary manner, and the bottom bar C is provided in its inner edge with a recess *a* of a less depth than a corresponding recess *b* provided in the top bar B, for a purpose which will be presently set forth. The side bars A are provided in their inner edges with recesses *c* and certain walls of these recesses *c*, preferably the inner walls thereof, are of a less length than the outer walls and are provided with square edges *d*, as best shown in Fig. 1.

D is a light or pane of glass comprised in the window, and as will be readily noted the said light or pane of glass is considerably thinner than the recesses *a*, *b* and *c*.

E E are guards, preferably of sheet-metal, arranged in the recesses *c* of the sash bars A, and having for their office to hold the light or pane of glass D against lateral displacement from the sash. As best shown in Fig. 1, the said guards E respectively comprise a portion *e*, of U-shape in cross-section, which extends throughout the height of one side bar A and is of a size to snugly occupy the recess *c* therein, and a beveled portion *f* on the inner wall of the portion *e*, which beveled portion *f* has a flat side *g* designed to be opposed to the square edge *d* of the inner wall of the recess *c*.

F and G are upper and lower wedges, preferably of wood, introduced through openings in the top and bottom bars B and C to positions between the vertical edges of the light or pane of glass D and the bights of the loop-shaped portions *e* of the guards E These wedges F and G are designed when positioned as described to crowd the guards E into the recesses *c* in the sash bars A so as to enable the said guards to hold the light or pane of glass D against lateral displacement from the sash.

When a light or pane of glass D of a thickness corresponding to the size of the recesses *c* in the side bars A is to be employed, the parts of my improvements are assembled in the following manner, viz: the guards E are placed on the vertical edges of the light or pane of glass, and the light or pane of glass thus equipped is then adjusted upward in the recess *b* in the top bar B, and is then permitted to drop into the comparatively shallow recess *a* in the bottom bar C. With this done it will be apparent that the guards E are alined with the recesses *c* in the side bars A, and then when the wedges F and G are introduced and pressed into position, the guards E will be shoved home in the recesses *c* and in consequence the light or pane of glass D will be securely fastened in the sash and held against displacement and also prevented from rattling or moving casually in the sash.

From the foregoing it will be understood that when the light or pane of glass corresponds in thickness to the thickness of the recesses *a*, *b* and *c*, my novel clips H need not be employed. When, however, the light or pane of glass D is comparatively thin, as in the embodiment illustrated, one of the clips H is arranged on the upper edge of the light or pane of glass, one on the lower edge of

said light or pane of glass and one on each of the vertical edges thereof. The said clips H are respectively formed of sheet-metal and respectively comprise a loop-shaped portion *h* one wall *i* of which is longer than the opposite wall, and a flange *j* extending inward from the free edge of the wall *i* and having an inturned lip *k*, whereby it is enabled to bear against a light or pane of glass without scratching or otherwise marring the same. The flanges *j* of the clips H serve to make up for the difference between the thickness of the light D and the thickness of the recess in which the clip and light are arranged, and from this it follows that clips having flanges *j* of different widths must be employed in connection with lights D of different thicknesses.

In assembling the parts when a comparatively thin light or pane of glass D is employed, the clips H are arranged on the four edges of the light or pane of glass D, and the light is then adjusted to position and secured in the sash in the manner before described. With this done it will be seen that the clips by compensating for the difference between the thickness of the light or pane of glass and the thickness of the several recesses in the sash bars, will assure the light or pane of glass being held in a secure manner in the sash and without liability of said light or pane of glass rattling.

The lips *k* on the flanges *j* of the clips H serve the purpose ascribed to them and are advantageous for such reason, but I desire it distinctly understood that when desired the lips *k* may be omitted from the flanges *j* without involving departure from the scope of my invention as claimed. I also desire it understood that in some cases one or more of the clips H may be employed in combination with a recessed sash bar or bars and a thin light or pane of glass D without the employment of the guards E and their complementary wedges. But one of the wedges G is illustrated, but this will suffice to impart a definite understanding of both wedges G inasmuch as they are identical in construction.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:

1. The combination of a sash bar having a recess in its inner edge, a light or pane of glass of a less thickness than the said recess arranged in the recess, and a metallic clip having a loop-shaped portion straddling the edge of the light or pane of glass and also having an inturned flange on one of the walls of said loop-shaped portion bearing against the light or pane of glass; the said clip being of a slightly less thickness than the said recess.

2. The combination of a sash frame having recesses in the inner edges of its bars, metallic guards of loop-shape in cross-section arranged in the recesses of the vertical bars of the sash and having beveled portions provided with flat sides opposed to the square edges of the comparatively shallow walls of the recesses, a comparatively thin light or pane of glass, metallic clips having loop-shaped portions of a slightly less thickness than the recesses arranged on and straddling the edges of the light or pane of glass and also having inturned flanges bearing against the light or pane of glass; the clips on the vertical edges of the light being positioned in the guards and the clips on the upper and lower edges of the light being positioned in the recesses in the upper and lower sash bars, and wedges arranged in the guards and interposed between the bights thereof and the adjacent clips.

3. The combination of a sash frame having recesses in the inner edges of its bars; the inner walls of the recesses in the side bars being shallower than the outer walls of said recesses and provided with square edges, sheet-metal guards having loop-shaped portions arranged in the recesses in the side bars and also having a beveled portion on one wall of each loop-shaped portion and provided with a flat side opposed to the adjacent square edge of a recess wall, a light or pane of glass arranged in the guards and also in the recesses in the upper and lower sash bars, and wedges arranged in the recesses of the side bars and the guards and interposed between the vertical edges of the light or pane of glass and the bights of the guards.

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

JESSE G. ROSEBOOM.

Witnesses:
T. W. MEYERHOEFFER,
H. W. BAKER.