No. 887,105. PATENTED MAY 12, 1908.

A. Y. LEE.

WINDOW FRAME.

APPLICATION FILED JAN. 17, 1907.

Fig. 1.

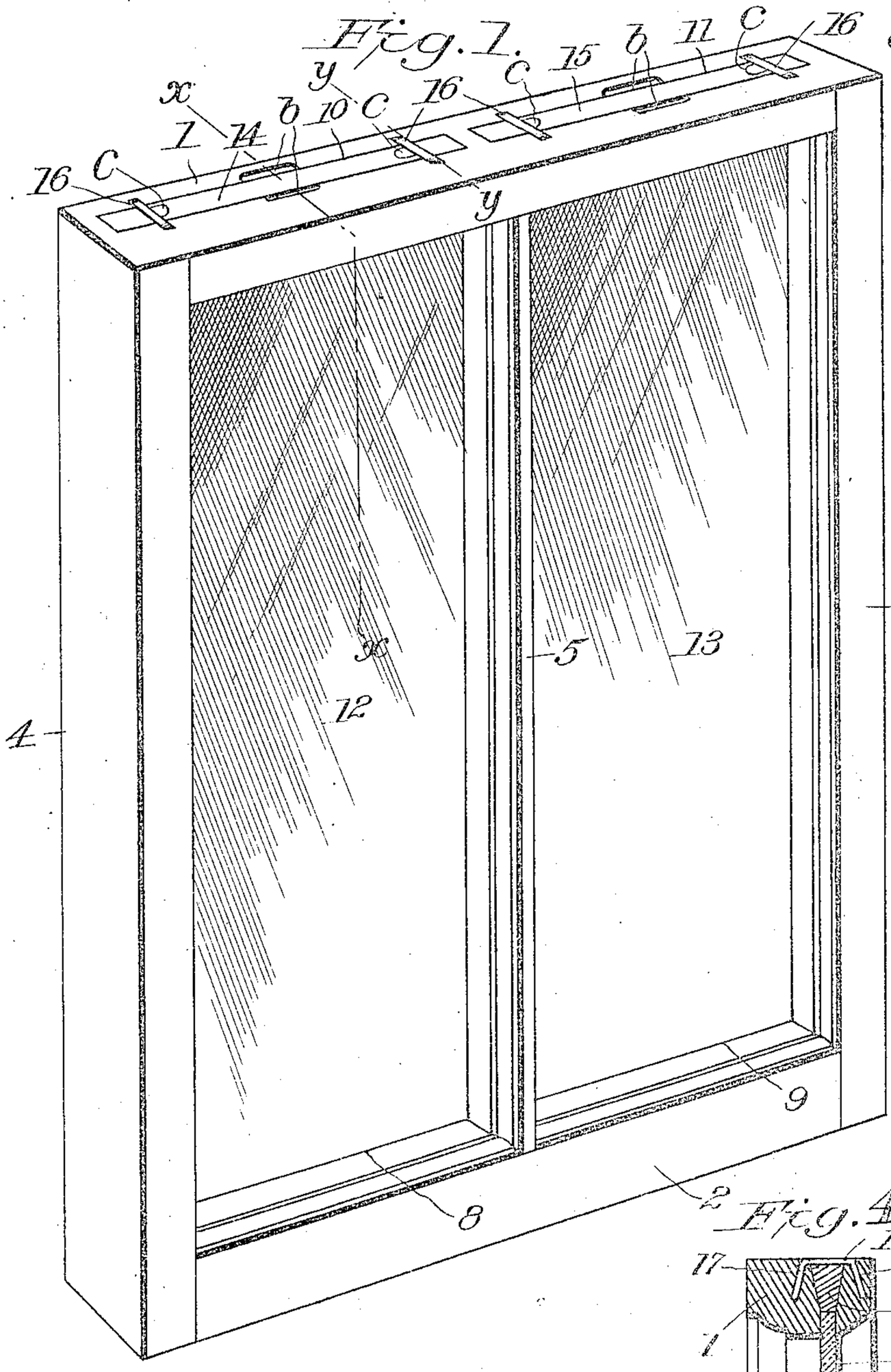


Fig. 2.

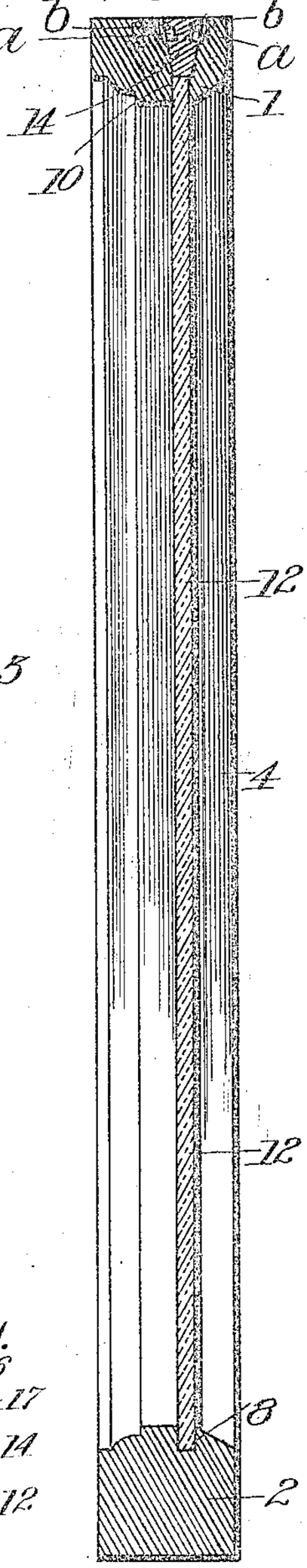
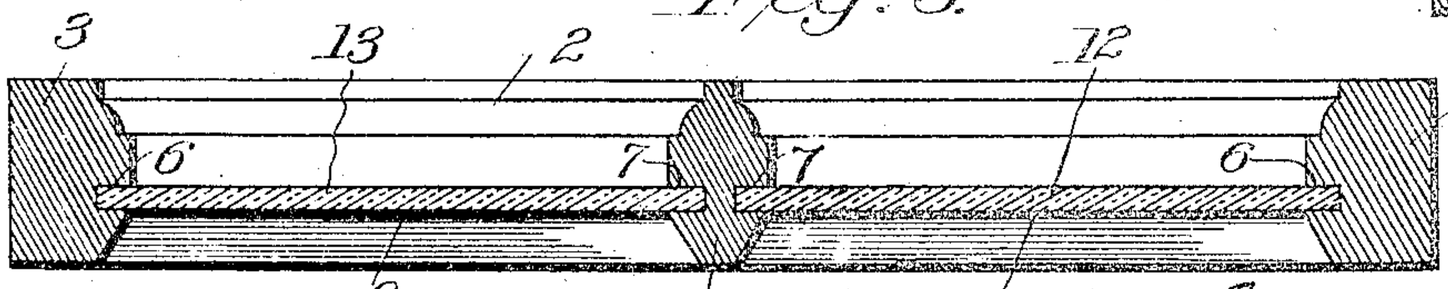


Fig. 4.

Fig. 3.



Witnesses

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WINDOW-FRAME.

No. 887,105. Specification of Letters Patent. Patented May 12, 1908.

Application filed January 17, 1907. Serial No. 352,807.

To all whom it may concern:

Be it known that I, AUBY Y. LEE, a citizen of the United States, residing at Enterprise, in the county of Coffee and State of Alabama, have invented certain new and useful Improvements in Window-Frames, of which the following is a specification.

This invention relates to window sashes, and particularly to means for holding the panes thereof in place without the use of putty.

One object is to provide means whereby a window pane may be mounted in its frame and held tightly therein by a wedging member, the latter being fastened in place without in any manner exerting longitudinal pressure upon the pane.

Another object resides in the provision of means whereby the different panes of a sectionized window may be removed independently of each other so that when one pane is being inserted or removed the other pane cannot become accidentally displaced.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings and particularly pointed out in the appended claims, it being understood that changes may be made in the form, proportion, size and minor details, without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of a window sash embodying my invention. Fig. 2 is a vertical, sectional view on the line *x*—*x* of Fig. 1. Fig. 3 is a transverse sectional view. Fig. 4 is an enlarged detail sectional view through the upper part of the sash, on the line *y*—*y* of Fig. 1.

Referring now more particularly to the accompanying drawings, the reference characters 1 and 2 indicate the top and bottom rails and 3 and 4 the side rails of the sash, the latter being divided by the center rail 5.

The inner face of each side rail is provided with a groove 6 to aline with the corresponding groove 7 of the center rail, there being a groove 7 upon each side of the center rail.

Formed in the upper sash of the bottom rail 2 are spaced grooves 8 and 9 arranged to coöperate with the aforesaid grooves 6 and 7 and to aline with the spaced slots 10 and 11 extending through the top rail 2.

The panes 12 and 13 are fitted in the frame upon opposite sides of the center rail by slipping them through the corresponding slots for engagement in said grooves. To insure a tight fit of the panes in the grooves of the sash, I provide the wedges 14 and 15, each preferably, although not necessarily, beveled from one to its opposite edge. The slots 10 and 11 may or may not be beveled according to whether the wedge members are beveled. In any event, the wedge members are designed to fit into the slots to close the openings formed by the latter and to prevent accidental displacement of the panes if the frame should be inverted. If desired, each wedge member may be provided with a cavity *a* upon each side adapted to aline with the cavities *b* upon opposite sides of the slots 10 and 11 to permit of the removal of the wedges by any suitable implement (not shown).

To secure the wedge members against accidental displacement, I provide substantially U-shaped fastenings 16 having their legs diverging, as shown. Each of these fastenings is of spring material and its legs are adapted to be sprung toward each other for insertion in the oppositely disposed inclined openings 17 in the top rail of the sash. As the fastenings 16 are forced into said openings their legs are spread apart by reason of the inclination of the openings 17, such spreading of the legs of the fastenings holding the latter tightly in place.

From the foregoing, it will be seen that I obviate the use of putty, and by virtue of a tight fit of the panes in the grooves of the sash, together with the coöperating wedges, I provide a substantially air tight window wherein rattling of the panes does not exist. It will also be seen that the legs of the fastenings are forced into the sash upon opposite sides of the slots 10 and 11, so that even if the wedges rest directly upon the top edge of the panes, the fastenings do not exert a force upon the wedges and consequently are positioned without causing longitudinal strain upon the panes, which strain would be liable to break the latter.

If desired I may form the cavities *c* in the top of each wedge to permit of the insertion of a suitable tool (not shown) under the bight portion of the fastenings to permit of their ready detachment from the sash.

What is claimed is:—

1. A window sash comprising window panes and a frame embodying top, bottom,

side and a center rail, the top rail having spaced slots one upon each side of the center rail, and the side, bottom and center rails having grooves for the reception of the window panes, the latter being inserted through said slots, a wedge member fitted in each slot, and spring fasteners bridging said slots and wedge members and sprung into engagement with the sash to prevent accidental displacement of the wedge members.

2. A window sash comprising a frame embodying top, bottom and side rails, the bottom and side rails having grooves to receive a window pane, the top rail having a slot to permit of the insertion of the window pane in said groove, a filling member fitted in said slot, and spring fasteners bridging said slot and filling members and sprung into engagement with the sash to prevent accidental displacement of the filling member.

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

AUBY Y. LEE.

Witnesses:
G. W. BROSON,
S. M. LEE.