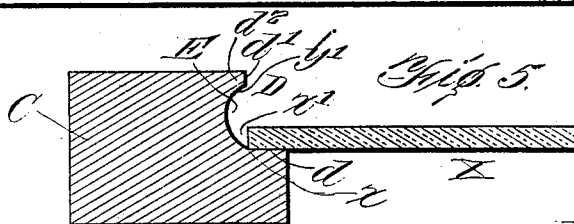
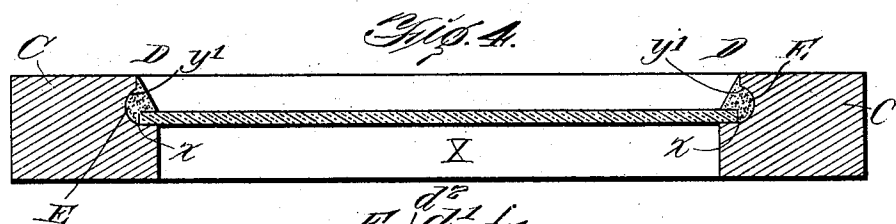
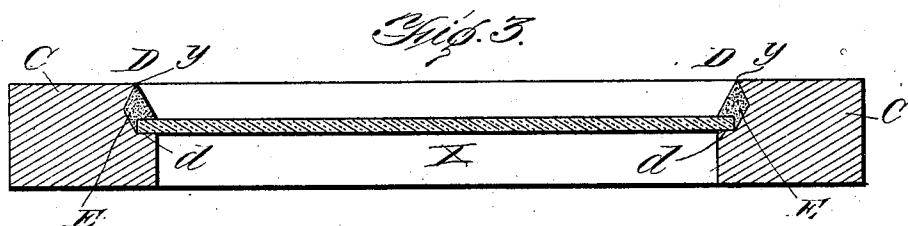
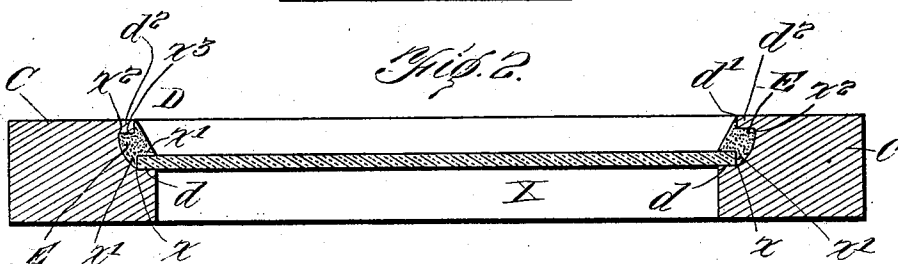
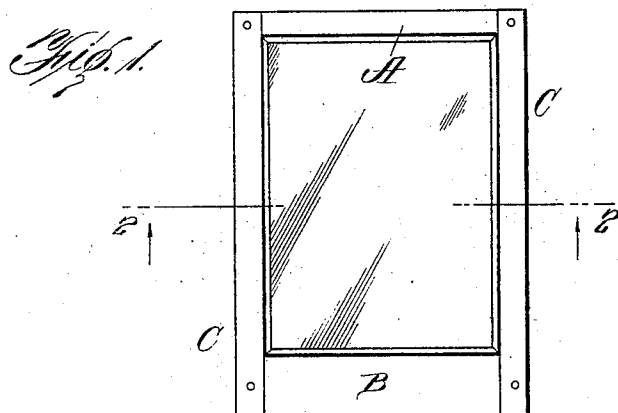


No. 852,604.

PATENTED MAY 7, 1907.

A. P. HARDEE.
WINDOW SASH.

APPLICATION FILED MAR. 9, 1907.



Witnesses:

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WINDOW-SASH.

No. 852,604.

Specification of Letters Patent.

Patented May 7, 1907.

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To all whom it may concern:

Be it known that I, ASBERRY PERTELL HARDEE, a citizen of the United States, residing in Milton, in the county of Santa Rosa and State of Florida, have invented certain new and useful Improvements in Window-Sashes, of which the following is a specification.

The object of my invention is to provide improved means for securing a glass in window sashes.

Commonly the top and bottom rails and the stiles of the sash are rabbeted to form a seat for the glass and putty is applied at the margin of the glass and extended outwardly in an inclined direction toward the outer edge of the rabbet. In such arrangements, it is necessary to employ several glaziers points to hold the glass in place as the putty, when soft, is not sufficient for this purpose. The adhesion of the putty to the glass and wooden frame is depended on to hold the putty in place, but this is often found to be insufficient and when the putty dries, it often separates and the glass becomes loose. It is also well-known that certain classes of wood cannot be used for making sashes inasmuch as no adhesion can be produced between the sash and the putty, which will be sufficient to retain the putty in place and hold the glass firmly. Sashes have also been made in which the sash is formed around the glass with a rabbet which is of such construction that putty is locked in place when applied. In this construction, however, the rabbet extended inwardly from the outside of the sash to the plane of the seat and the seat was made much wider than necessary to accommodate the glass, leaving a space between the edges of the glass and the walls of the groove to receive putty. While in this construction the putty was securely locked in place, care was necessarily taken in centering the glass in order to leave a clear space on the seat around the edges of the glass.

According to my invention I form a sash with a rabbet the inner wall of which provides a self-centering seat for the glass, while the side wall of the rabbet is provided with a groove of greater width than the thickness of the glass and which extends outwardly from the centering edge of the seat. The groove is adapted to receive putty and lock it in place but the seat for the glass which is the inner wall of the rabbet is made of sufficient dimensions only to receive the glass and does

not extend beyond the edges thereof. The bottom wall of the groove extends outwardly in an inclined direction from the edge of the seat or from the extreme edge of the glass when the latter is in place. In this way a space is left all around the edge of the glass in the groove to receive putty and to insure the locking of the putty in the groove but the glass can be easily centered and there is no danger of that portion of the groove at either edge of the glass being closed by an improper placing of the glass.

In the accompanying drawings, Figure 1 shows a front elevation of a window sash embodying my improvements. The remaining figures are on an enlarged scale. Fig. 2 shows a horizontal section on the line 2—2 of Fig. 1, of the sash embodying one form of my invention. Figs. 3 and 4 are similar views of modifications. Fig. 5 is a view on an enlarged scale and in horizontal section of the construction shown in Fig. 4.

The sash, consisting of the upper and lower rails, A and B, and the stiles, C, may be of any suitable construction and made of any suitable wood. It is formed with a rabbet, D, of the usual form its inner wall providing a seat, *d*, for the glass, X. The outer edge of the seat, *d*, registers approximately with the outer edge, *d'*, of the rabbet, but some clearance is provided in order that the glass may be easily inserted.

In Figs. 2 to 5 of the drawings, I have illustrated a groove, E, formed in the side wall of the rabbet around the glass. This groove is so formed that the putty may enter within the flange, *d*², and also may extend around the edge of the glass. By this construction, when the putty is set, it will be locked in place and even though there be no adhesion or only slight adhesion, it cannot separate. As thus far described, the construction of the sash is similar to one already in use, with the exception that in the prior construction the seat for the glass was much wider than that employed by me and the glass could be moved sidewise to a considerable extent and so could not always be conveniently centered.

It will be observed by reference to Fig. 2, that the wall of the groove E commences at the extreme edge, *x*, of the seat, *d*, and extends outwardly therefrom in an inclined direction. In this way, a stop or shoulder is formed at *x*, which prevents the glass from moving either sidewise or up and down and

yet a space, x' , is provided all around the edge of the glass to receive putty. Therefore, by my improvements, I am enabled to securely lock the glass and putty in place and yet I am enabled to easily and in fact automatically center the glass as it is being placed in position. In Fig. 2, the groove, E, in cross section is curved to the point, x^2 , joining a straight wall, x^3 . This form of groove can be easily made by ordinary machinery and is efficient.

In Fig. 3, the groove, E, in cross section is angular, while in Fig. 4, the groove in cross section is curved, but the groove terminates inside the outer edge of the rabbet. By this latter construction, some putty is saved but the locking operation is the same.

The construction may further be modified without departing from the novel feature of my invention, an essential feature of which is so forming the groove E as to provide a space between the edges of the glass and the walls of the groove as to receive putty while

at the same time centering the glass and preventing lateral movement thereof.

In Fig. 3 of the drawings, a thin, sharp edge is formed at y , which is apt to break, while in Figs. 4 and 5 the frame is braced at y' by reason of the curvature of the groove at that point and there is very little liability of breakage even when the sash is roughly handled.

I claim as my invention:

A window-sash formed with a rabbet, the inner wall of which provides a self-centering seat for the glass and the side wall of which has a groove of greater width than the thickness of the glass, extending outwardly from the centering edge of the seat.

In testimony whereof, I have hereunto subscribed my name.

ASBERRY P. HARDEE.

Witnesses:

LLOYD B. WIGHT,
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