

No. 827,217.

PATENTED JULY 31, 1906.

W. E. DAUGHERTY.  
WINDOW SASH.

APPLICATION FILED NOV. 23, 1905.

FIG. 1.

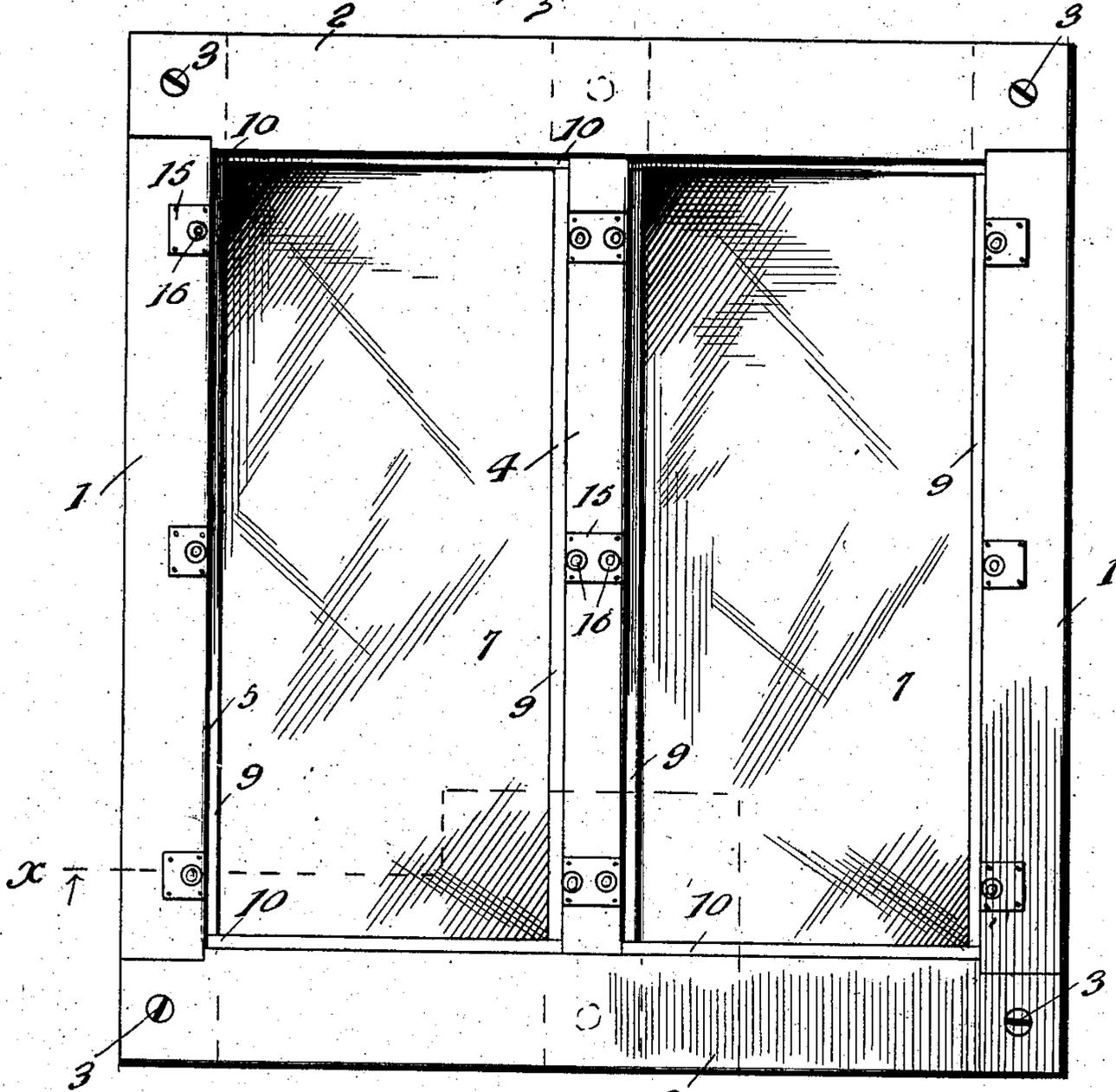


FIG. 2.

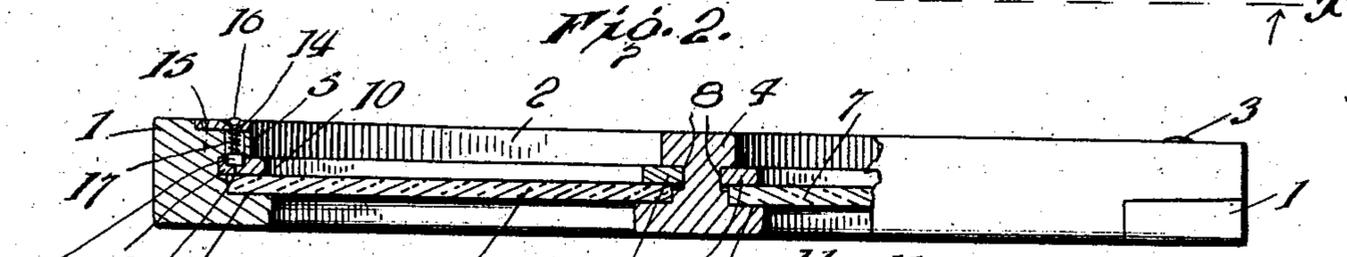
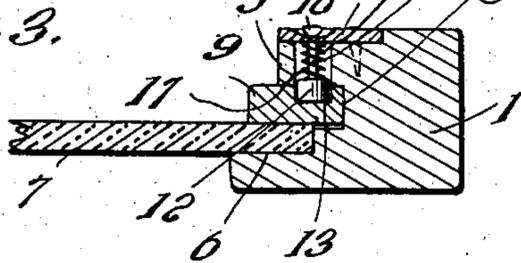


FIG. 3.



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Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM E. DAUGHERTY, OF CORPUS CHRISTI, TEXAS.

## WINDOW-SASH.

No. 827,217.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed November 23, 1905. Serial No. 288,799.

*To all whom it may concern:*

Be it known that I, WILLIAM E. DAUGHERTY, a citizen of the United States, residing at Corpus Christi, in the county of Nueces and State of Texas, have invented certain new and useful Improvements in Window-Sashes, of which the following is a specification.

The present invention has for its object to provide an improved form of sash construction whereby the window-glass is held securely in position without the use of putty or points and which is so designed as to enable a broken glass to be readily replaced by any person not skilled in the glazier's art.

To this end the invention consists, essentially, of a sash-frame, retaining-strips bearing against the glass, and means for holding the retaining-strips removably in position.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a side view of a sash constructed in accordance with my invention. Fig. 2 is a transverse sectional view showing the position of the retaining-strips, and Fig. 3 is a detail view of the spring-catch employed to hold the retaining-strips in position.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The sash-frame comprises the usual stiles 1 and end rails 2, which are connected by any suitable joint and are held together by any suitable securing means, such as screws 3, said securing means being preferably of such a nature as to enable the sash to be readily dismembered. The end rails 2 are connected by means of a mullion 4, and the openings thus formed are rabbeted around the edge at 5, one side of said rabbeted portion forming a shoulder 6, against which the glass 7 rests, while the opposite side is provided with a longitudinal groove 8 for the reception of the retaining-strips 9. These retaining-strips are preferably rectangular in cross-section and project outwardly over the edge of the glass, so as to hold same securely in position.

It will be observed that one pair of retaining-strips—in this instance the upper and lower ones—extend beyond the extremities of the opposite pair of strips, as seen at 10,

and hence cannot be removed while the latter are in position. These retaining-strips may be fastened in any suitable manner; but this is preferably accomplished by means of the spring-catch shown in Fig. 3. These catches are located in transverse openings 11, which are bored in the stiles and mullion, so as to enter the grooves 8 at points near the ends thereof. A plunger 10 operates in these openings and engages with a recess 13 in the retaining-strip to prevent any displacement of the latter. A stem 14 is connected to the plunger 12 and passes through an aperture in the plate 15, which is fitted over the opening 10 and is let into the surface of the wood, the extremity of said stem being formed with a head 16, which normally lies in a depression in the plate 15, but can be readily engaged by a claw or other suitable tool when it is desired to withdraw the plunger 12 and remove the retaining-strips 9.

In order to hold the plunger 12 normally in engagement with the retaining-strip and to cause the latter to bear against the glass and form a water-tight joint, a coil-spring 17 is interposed between the plate 15 and the plunger 12.

It will thus be apparent that in order to remove a broken glass from the sash it is simply necessary to withdraw the plunger 12 from engagement with the recess 13 and slip the pair of retaining-strips thus held out of position. The opposite pair of retaining-strips, whose ends project beyond the extremities of the retaining-strips thus removed, can then be readily taken away and free access had to the glass. The process of placing a pane of glass in position is the reverse of that just described.

It will thus be understood that by the use of my improved form of sash the glass can be readily placed in position or removed by the use of unskilled labor and that a tight joint will be obtained without the use of putty.

Having thus described the invention, what is claimed as new is—

1. The combination of a sash-frame having the glass-receiving opening rabbeted, one side of the rabbeted portion being provided with a longitudinal groove, retaining-strips fitting in said grooves, and spring-actuated plungers operating in the frame and engaging with recesses in the retaining-strips.

2. The combination of a sash-frame having the glass-receiving opening rabbeted, one side of the rabbeted portion being provided

with a longitudinal groove, said frame having  
outwardly-extending openings in communi-  
cation with said groove, retaining-strips fit-  
ting in said groove, a plate fitting over the  
5 opening in the frame, a plunger operating in  
said opening and engaging with the retaining-  
strips, said plunger being provided with a  
stem which passes through a perforation in  
the above-mentioned plate, and a spring in-

terposed between said plate and the plunger 10  
to hold the latter normally in engagement  
with the retaining-strips.

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

WILLIAM E. DAUGHERTY. [L. S.]

Witnesses:

E. E. FOSTER,

J. J. SCOGIN, Jr.