

June 20, 1961

R. MIGNEAULT ET AL

2,988,787

GLASS PANEL DIVIDER FOR SASHLESS WINDOWS

Filed May 4, 1959

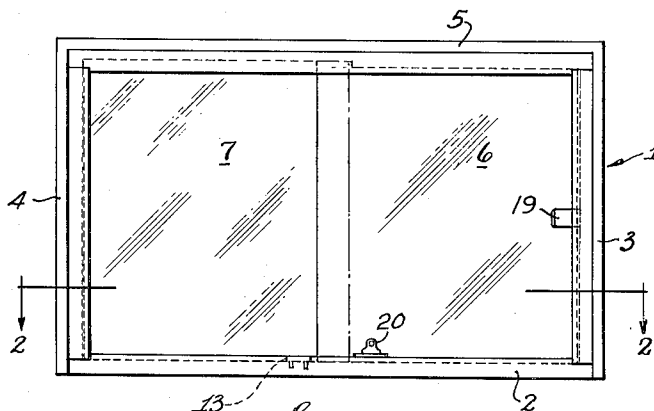


Fig. 1.

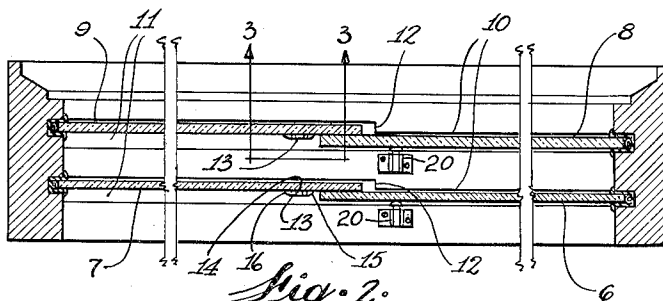


Fig. 2.

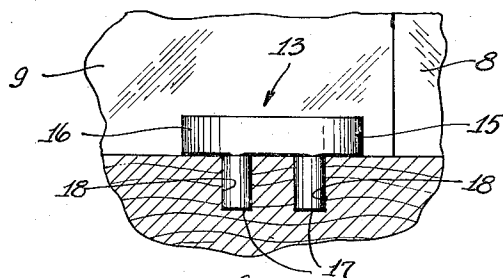


Fig. 3.

INVENTORS
Reneald Migneault
Sernand W. Migneault
BY *Alex. E. Mackae*
ATTORNEY

1

2,988,787

GLASS PANEL DIVIDER FOR SASHLESS WINDOWS

Romuald Migneault and Fernand W. Migneault, both of

332 St. Andre St., Gatineau, Quebec, Canada

Filed May 4, 1959, Ser. No. 810,785

6 Claims. (Cl. 20—52)

This invention relates to window structures of the sashless type.

In windows of this type, at least one pair of glass panels are provided in each window assembly. One of such panels is usually freely slidable into more or less fully overlapping relation with the other panel to provide for open condition of the window. In order to avoid frictional contact between the panels during the sliding movement of the one panel relatively to the other, it is frequent practice to provide means for separating or spacing the panels during such sliding movement. This means is sometimes difficult and costly to incorporate in the window structure.

It is an object of this invention to provide simple, effective and inexpensive means for separating the glass panels of a sashless window structure during movement of one panel relatively to the other.

The invention contemplates the provision, in a sashless window having a sill, a groove in the sill, and a pair of glass panels slidably mounted in the groove and having overlapping marginal portions in the closed position thereof, of a panel divider comprising a member mounted in the groove and anchored to the sill, said member being spaced from the side walls of the groove and having an edge disposed in opposed relation to one of said panels for engagement by an edge of the other of said panels during sliding movement thereof, said member occupying only a minor area of the bottom wall of said groove closely adjacent said overlapping marginal portions.

The invention will be described with reference to the accompanying drawing, in which

FIGURE 1 is a side elevation of a sashless window structure,

FIGURE 2 is a sectional plan view on line 2—2 of FIGURE 1, and

FIGURE 3 is a sectional view on line 3—3 of FIGURE 2.

In the drawing, the window assembly illustrated comprises a frame 1 having sill 2, jambs 3 and 4, and headpiece 5. Two pairs of sashless glass panels 6 and 7 and 8 and 9 are shown as mounted in the frame, one of such pairs of panels constituting the double or storm window portion of the structure.

The sill 2 has a pair of grooves or channels 10 for reception of the edge portions of the panels 6 and 8. Each groove 10 has a rearwardly offset portion 11 for reception of the edge portion of a panel 7 or 9.

It will be apparent that, in the normally closed position of each pair of panels, their meeting marginal portions will overlap as clearly shown in FIGURES 1 and 2.

Each panel 7 and 9 has limited sliding movement as defined by the shoulder 12 of the offset portion 11 of the groove, such panels when mounted in the window assembly having a substantially fixed position therein. Each panel 6 and 8 is adapted to slide in groove 10 into overlapping relation with panel 7 or 9 to open the window.

A panel divider 13 is mounted in each groove 10, such divider having a flat side surface 14 for contact with panel 7 or 9 and a bevelled or curved end edge 15 located closely adjoining the overlapped edge of panel 6 or 8 in the closed position thereof. The other end edge 16 of divider 13 may also be bevelled or curved as shown. The divider 13 comprises a relatively thin strip and it occupies but a very minor area of the groove closely adjacent to the overlapping marginal portions of the panels in closed position.

2

Thus the divider may have a length approximately of the order of one inch and need not be longer than two inches. Its thickness may be of the order of $\frac{1}{16}$ to $\frac{3}{16}$ inch. Preferably, the divider 13 is formed of any suitable material but preferably is formed of bonded glass fibers, styrene, polyethylene or other plastic composition.

The divider 13 is firmly anchored in the surface of the sill constituting the bottom wall of groove 10. For this purpose, studs 17 may be provided in the base of the divider for frictional driving fit in holes 18 in the sill.

It will be apparent that, in use, as panel 6 or 8 is moved to open position the inner edge thereof will engage the bevelled edge 15 of the divider to space it from panel 7 or 9 and that such divider will maintain the spacing between the panels for ease of opening movement.

The divider 13 may be of inexpensive manufacture. Obviously, it can be made of a few cents or fraction thereof. Since it is mounted in the sill (rather than on a glass panel) it may be installed with a minimum of cost.

In the window assembly illustrated a handle for imparting sliding movement to panel 6 or 8 is shown at 19, and suitable panel clamping means is indicated at 20.

We claim:

1. In a sashless window assembly having a sill, walls forming a groove in said sill, and a pair of glass panels slidably mounted in said groove and having overlapping marginal portions in the closed position thereof, a panel divider comprising a strip mounted in said groove and anchored to said sill, said strip having one flat side surface parallel to said groove-forming walls and engageable by the side surface of one of said panels and another flat side surface parallel to said groove-forming walls and engageable by the side surface of the other of said panels, and a bevelled end edge disposed in adjacent relation to the edge of said other panel when the latter is in closed position, said strip having a length which is but a minor part of the portion of the length of said groove occupied by one of said panels, each of said flat side surfaces of said strip being spaced from the facing one of said groove-forming walls a distance approximately equal to the thickness of one of said panels.

2. A panel divider as defined in claim 1, said strip having a length not exceeding two inches.

3. A panel divider as defined in claim 1, said anchoring means comprising at least one stud carried by said strip and depending therefrom, said sill having a socket for frictional reception of said stud.

4. A panel divider as defined in claim 1, said anchoring means comprising a pair of studs integral with said strip and depending therefrom, said sill having sockets for frictional reception of said studs.

5. A divider for the glass panels of a sashless window assembly having a sill and walls forming a groove in said sill for sliding reception of said panels which comprises: a strip having a length not substantially exceeding two inches, and a plane bottom surface for engagement with the bottom surface of said groove, and means carried by said strip for anchoring it to said sill, said strip having one flat side surface parallel to said groove-forming walls and engageable by the side surface of one of said panels and another flat side surface parallel to said groove-forming walls and engageable by the side surface of the other of said panels and a bevelled end edge arranged for disposition in adjacent relation to the edge of said other panel when the latter is in closed position, each of said flat side surfaces of said strip being spaced from the facing one of said groove-forming walls a distance approximately equal to the thickness of one of said panels.

6. A divider for the glass panels of a sashless window assembly having a sill and walls forming a groove in said sill for sliding reception of said panel which comprises a unitary plastic composition strip having a length not sub-

3

stantially exceeding two inches, a plane bottom surface for engagement with the bottom surface of said groove, at least one stud projecting from said bottom surface for anchoring said strip to said sill, said strip having one flat side surface parallel to said groove-forming walls and engageable by the side surface of one of said panels and another flat side surface parallel to said groove-forming walls and engageable by the side surface of the other of said panels and a bevelled end edge arranged for disposition in adjacent relation to the edge of said other panel when the latter is in closed position, each of said flat side surfaces of said strip being spaced from the facing one of

4

said groove-forming walls a distance approximately equal to the thickness of one of said panels.

References Cited in the file of this patent

UNITED STATES PATENTS

2,530,724	Pierson	Nov. 21, 1950
2,700,801	Pierson	Feb. 1, 1955
2,834,069	Perrone	May 13, 1958

FOREIGN PATENTS

69,503	Norway	Aug. 6, 1945
--------	--------	--------------