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STRUCTURAL ADDITION MEMBER FOR CONVERTING SINGLE PANE WINDOW SASHES INTO DOUBLE PANE SASHES

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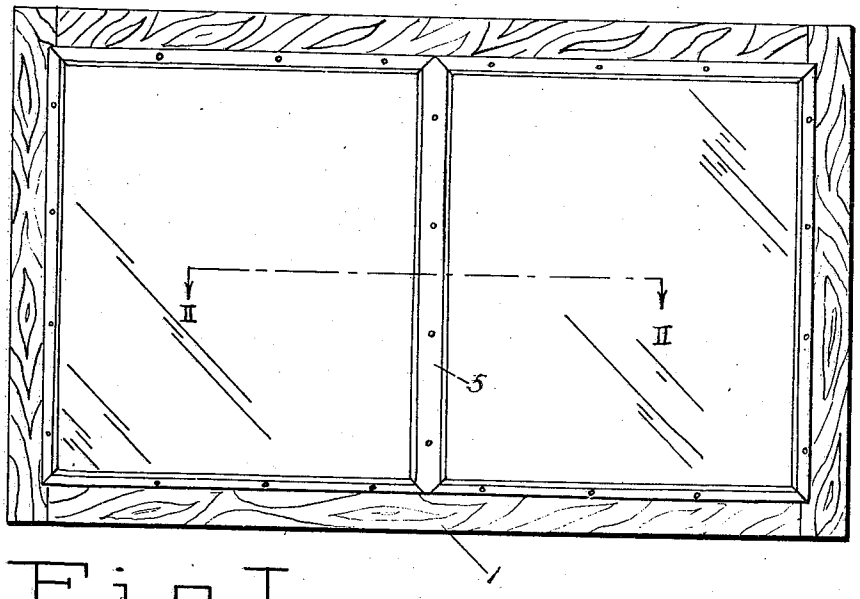


Fig. I

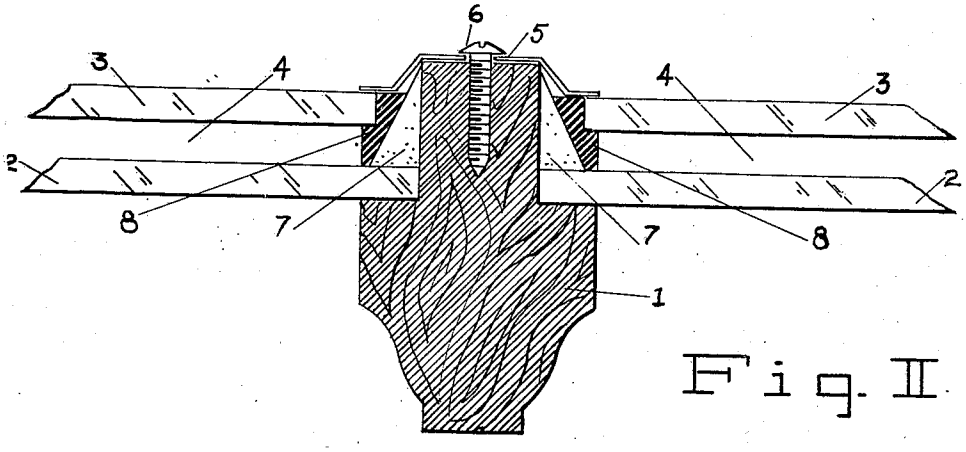


Fig. II

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STRUCTURAL ADDITION MEMBER FOR CONVERTING SINGLE PANE WINDOW SASH INTO DOUBLE PANE SASH

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3 Claims. (Cl. 20—56.4)

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This invention relates to structural addition members for converting a single pane window sash into a double pane sash, which will be especially desirable for windows above the ground floor of residences.

People have learned, during the war made fuel shortage, that they have heretofore wasted about half the heat bought and paid for and are insulating in every way possible.

It is an object of the present invention to provide structural members enabling the average unskilled householder to convert his single paned windows into double paned windows and turn out as good a job as an experienced glazier could do.

Another object is to conserve the very great investment in single paned windows, which are not in form adapted to conversion without something like the invention I have made, or which will equally serve the purpose.

I accomplish the stated objects and those that will be apparent from the following specification and claims, by the structure shown in the accompanying drawing, in which:

Fig. I shows an external view of what was a single glass window sash made over into double glass in each space that was single as the sash was made; and

Fig. II is a section at enlarged scale of Fig. I on the line II—II of that figure.

Further describing the drawing, 1 is a sash framing with conventional panes of glass 2, secured by putty 7, all of which represents a window sash before my invention has been applied to it. It is desired to add two outside panes 3, that define a space 4, with the panes 2. How to accomplish this with the edges hermetically sealed, without the drawing before one, is not readily apparent, as obviously the window sash is one of the millions of window sashes now in use. It will not be expedient to put the sash under a router and cut a new seat for the panes 3, in the putty 7; hence I provide a rubber gasket 8 in the form of a notched right triangle. This is a form readily extruded through a die and several of the new synthetic rubbers are ideal for the purpose as they will retain their shape and resiliency under varying outdoor temperatures indefinitely. They can be made with pigments to produce almost any desired color, cut in a small miter box to the correct length and beveled end and inserted in place as shown in the section, Fig. II. A small amount of suitable adhesive between the hypotenuse of the triangle

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and the putty will be of advantage in placing them.

The outside panes 3 are made smaller than the panes 2, as is shown and after thoroughly cleaning what will be the inside surfaces of the glass, the outer pane is placed in the notch as shown and the retainer 5 fastened down by the screw or other suitable fastening 6. The pane 3 and the notch that it fits into will be so proportioned that initial compression of the rubber gasket 8 is brought about as the screw 6 is screwed down to firm holding position, then there is a double glassed sash made out of a single glassed one without any machine work necessary on the original sash, the work being easily done without highly skilled labor and the result an hermetically sealed double glass window sash that is storm and dust proof with respect to the inner surfaces of the glass, yet easily capable of being dismantled and cleaned should dust accumulate between the panes due to careless installation in the first instance.

While synthetic rubber is preferred for the gasket, natural rubber or a substitute is not intended to be excluded if it will satisfactorily do the work.

Having fully explained my invention so that it is easily understood and can readily be made and used, what I claim as new and desire to secure by Letters Patent, is:

1. Structure for doubling a puttied in glass in a window sash comprising a rubber gasket so formed as to fit the putty with one of its sectional dimensions and being notched to receive a doubling glass and hold it spaced from said first named glass and means for holding said doubling glass in said notch and concurrently applying pressure to the gasket and the glass.

2. Structural addition members for making double glass window sashes from single glass puttied glass sashes, comprising a resilient gasket so formed that one of its cross sectional dimensions fits the angle of the putty, a notch formed in the side opposite said putty fitting side, a doubling pane of glass cut to fit said notch the whole way around over said first named glass and a retainer attachable to the sash to hold the doubling pane by applying compressive pressure thereto to seal the pane to the gasket and the gasket to the putty.

3. Means for doubling a single paned window sash without machining the same, comprising an inner pane with holding means therefor, a doubling pane of less breadth and length than the first named pane, a resilient gasket formed on

one side to lie in hermetically sealed relation to said holding means and provided with a notch on its side opposite to receive said doubling pane and a retainer so formed that when attached to the sash the doubling pane will be sealed to the gasket and the gasket sealed to the said holding means.

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