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WINDOW AND LIKE FRAMES

Filed May 16, 1958

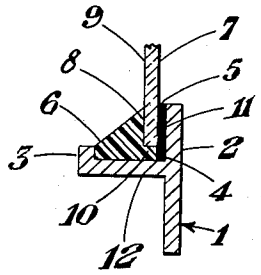


Fig.1.

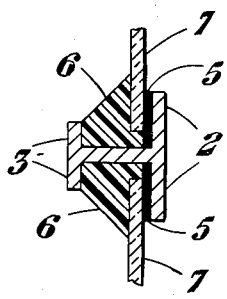


Fig.2.

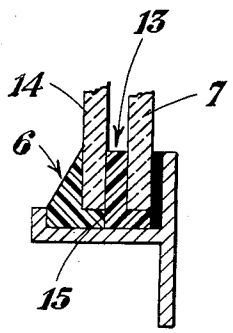


Fig.3.

Inventor:
Leonard Josiah Ellis
By his attorneys:
Baldwin & Wight

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WINDOW AND LIKE FRAMES

Leonard Josiah Ellis, 14 Clayfarm Road, New Eltham, London SE. 9, England

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3 Claims. (Cl. 20—56.4)

This invention relates to frames adapted to receive a sheet of glass or other sheet material; an example of such a frame is a window frame.

An object of the invention is to provide a frame in which a sheet of glass, or other sheet material (hereinafter referred to as glass), may be quickly and simply fitted into it. In the particular case of window frames the task of fitting a sheet of glass within the frame is somewhat lengthy and requires the use of putty or mastic material to hold the glass in position, and also to provide a neat looking finished article. Further in some instances screws, nails or clips are used to hold the glass in position. It is also the customary practice to place the glass within the window frame from the exterior of a building and this has a further complication that it is generally necessary to use some form of scaffolding so that the glazier can reach the window.

According to the present invention a frame adapted to receive a sheet of glass comprises a frame member including a channel section, one wall of the channel being of greater height than the other and faced on its inner surface with a resilient material, and a beading strip adapted to lie within the channel abutting against the other wall of the channel and to press the sheet of glass against the resilient material.

The facing of resilient material may comprise a strip of natural or synthetic rubber, of resilient plastic material, secured to the wall of the channel sectioned frame member. Further the resilient material may be formed with non-intercommunicating cells.

The beading strip may be formed with a first abutment facing adapted to bear against one surface of the glass and a second abutment facing adapted to bear against an edge of the sheet of glass and thus maintain said edge spaced from the base of the channel. A groove may be provided in the beading strip to receive a second sheet of glass in spaced relation to the first sheet. Further the beading strip may be longitudinally divided at the base of the groove.

The invention is illustrated by way of example in the accompanying drawing, in which:

Figure 1 is a section of one form of frame member;

Figure 2 is a section of a second form of frame member; and

Figure 3 is a section of a frame member incorporating an alternative form of beading strip.

Referring to the drawing, a frame member **1** of channel section is formed so that one wall **2** of said channel has a greater height than the other wall **3**. The wall **2** is faced on its inner surface **4** with a facing **5** of resilient material. The resilient material of the facing **5** may be a natural or synthetic rubber, or a resilient plastic material, but preferably is natural rubber formed with non-intercommunicating cells. A beading strip **6** lies within the channel of the frame member **1** abutting

against the wall **3** and pressing a sheet **7** of glass against the resilient facing **5**. This beading strip **6** is provided with one abutment surface **8** which bears against a surface **9** of the glass and a second abutment surface **10** which bears against an edge **11** of the sheet of glass and thus maintains said edge spaced from a base **12** of the channel.

Referring to Figure 2 this shows a frame member formed with two channels so that said frame member can be used to hold adjacent panes of glass in a window made up compositely of two or more panes of glass. The construction of the individual channels of this frame member is identical with the construction of the channel of the frame member illustrated in Figure 1.

In Figure 3 there is shown a modified form of beading strip **6** formed with a groove **13** to receive a second sheet **14** of glass in spaced relation to the first sheet **7**. The modified beading strip may, if desired, and as illustrated in Figure 3, be divided longitudinally as indicated at **15** on the base of the groove **13**.

The frame member and the beading strip may be made of a metal, wood or plastic and the frame may be of any desired configuration, for example trapezoidal or circular.

In use the wall **2** of the frame would be to the exterior and to mount a rectangular sheet of glass in a rectangular frame the sheet is placed in the frame and held against the resilient material **5** with its edges spaced from the bases of the channels of the side members of the frame. The dimensions of the sheet of glass are so chosen that they are slightly less than the corresponding distances between the tops of the opposite parallel walls **3**. With the glass held in position against the resilient material **5** the beading strips, there being one per each side of the frame, are then snapped into position. As the beading strips are pressed into position the resilient material is compressed so as to allow the second abutment **10** of the strip to slip under the edge of the glass. The dimensions of the beading strip should be such that, when in position, it presses the sheet of glass against the resilient material **5** which is maintained under slight compression.

Should it be necessary to replace the sheet of glass because, for example, of breakage, the broken glass is removed and then the beading strips gently pried out. A new sheet of glass is then inserted in the above described manner.

The frame hereinbefore described is not limited to use as a window frame but may be used as a picture frame, or in any instances where it is desired to mount or support a sheet of material such as, for example, a wall panel.

What is claimed is:

1. In combination, a frame including side frame members each formed with a channel having a base and two opposed walls, one wall of the channel being of greater height than the other wall, a facing of resiliently deformable material on each of said higher walls, a sheet of glass within the frame, its edges being received within said channels, and a substantially rigid and unyielding beading strip lying within each channel and abutting against the other wall thereof, said beading strip having a first abutment face bearing against one surface of the sheet of glass and pressing said sheet against the facing of resilient material and pressing the latter against said one wall and a second abutment face extending across an edge of the glass sheet and bearing against said edge and against said facing strip, whereby said edge is maintained spaced from the base of the channel.

2. A combination according to claim 1, wherein the beading strip is provided with a groove adapted to receive a second sheet of glass in spaced relation to the first sheet.

3. A combination according to claim 2, wherein the beading strip is longitudinally divided at the base of the groove.

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