

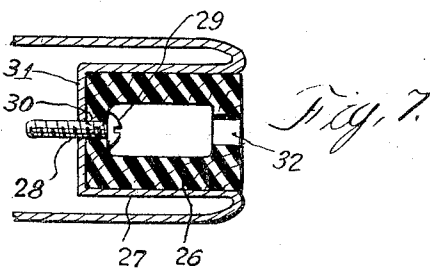
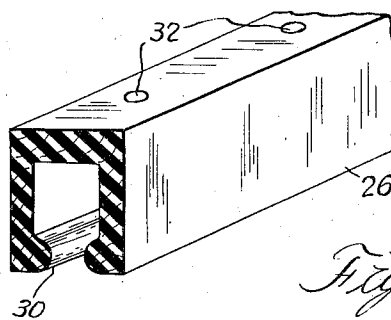
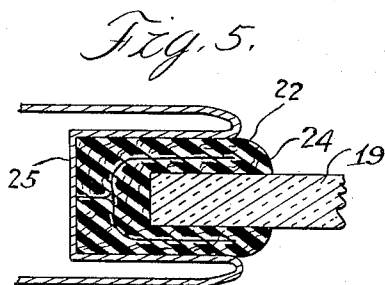
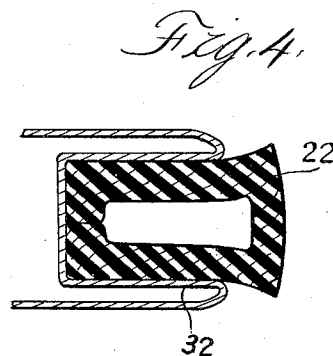
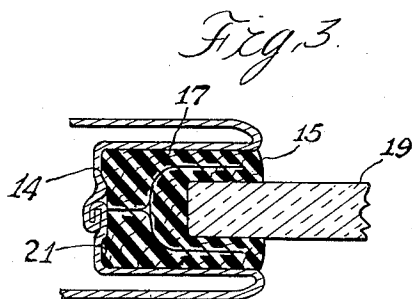
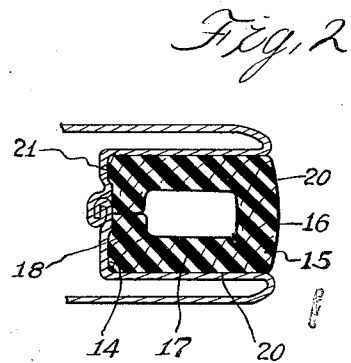
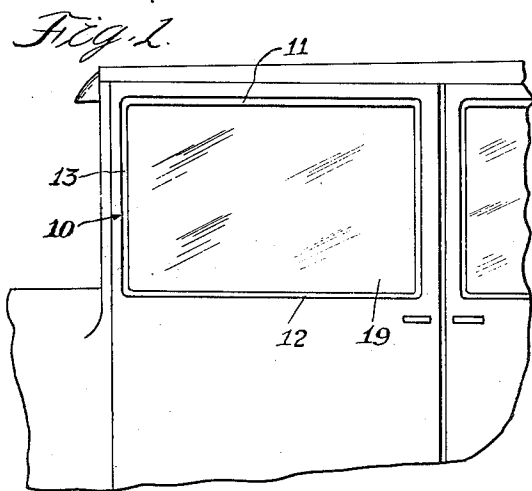
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WINDOW CUSHION

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WINDOW CUSHION

Application filed February 25, 1929. Serial No. 342,650.

This invention relates generally to window constructions and more particularly to means for simplifying, rendering more efficient and improving generally, the mounting of the glass panel within the window frame.

One of the primary objects of the present invention is to provide a resilient mounting for the glass panel capable of compensating for substantially greater variations in both the thickness and width of the glass panels than has heretofore been considered practical. An arrangement of this character offers the possibility of simplifying the assembly of the glass with the window frame and renders possible expeditious and economical production.

A further object of the present invention is to provide a flexible weatherstrip having a portion capable of being compressed by the glass panel and having another portion operable upon compressing the portion aforesaid to move into contact with the glass and form a tight seal between the latter and frame.

With the foregoing as well as other objects in view the invention resides in the peculiar construction and arrangements of parts to be more fully hereinafter set forth.

In the drawings:

Figure 1 is a side elevation of a window constructed in accordance with this invention;

Figure 2 is a cross sectional view showing the resilient strip prior to being engaged by the glass panel;

Figure 3 is a sectional view similar to Figure 2 showing the glass in engagement with the strip.

Figure 4 is a view similar to Figure 2 showing a slightly modified form of construction;

Figure 5 is a sectional view of the modification illustrated in Figure 4 showing the glass panel in engagement with the resilient strip;

Figure 6 is a perspective view partly in section of a still further modified form of construction;

Figure 7 is a cross sectional view showing the strip secured to window frame.

Referring now more in detail to the va-

rious constructions disclosed in the drawings and with special reference to the form illustrated in Figures 1 to 3 inclusive it will be noted that the reference character 10 designates a window frame formed of any suitable material such for example as steel or wood. The top, bottom and side bars 11, 12 and 13 respectively of the frame are each provided with inwardly opening substantially channel-shaped recesses 14 arranged to register with each other so as to be capable of receiving a continuous mounting strip 15 to be presently described.

The strip 15 is formed of some suitable non-metallic material such for example as sponge rubber, or rubber composition and is preferably, although not necessarily, substantially channel-shaped in cross section having a base portion 16 and leg portion 17. The latter preferably terminate at the ends thereof in inwardly extending flanges 18. The channel-shaped groove or recess 14 in the frame, is preferably of sufficient size to receive the entire strip 15 so that the latter is substantially concealed from view.

In assembling the strip with the frame, the former is placed within the groove 14 in such a manner that the channel of the strip opens downwardly toward the base of the channel 14. In other words the strip assumes a position wherein the inwardly extending flanges 18 thereof seat upon the base of the channel 14. The width of the base portion 16 of the strip 15 is substantially greater than the thickness of the glass panel 19 so that upon assembling the latter with the frame, the edge portions thereof engage the base portion 16 of the strip 15 intermediate the longitudinal edges thereof and as a consequence compress the central portions only of the base 16. The longitudinal edge portions 20 of the base 16 upon opposite sides of the glass are not positively engaged by the latter and accordingly upon compressing the central portions of the base 16, move inwardly to the position illustrated in Figure 3 wherein the portions 20 are shown in firm engagement with opposite sides of the glass. Upon compressing the central portions of the base 16 of the strip, the legs 17 of the latter will be forced laterally

into frictional engagement with the legs of the channel-shaped groove 14. The frictional contact between the strip and frame is sufficient to retain the strip within the groove 14.

5 If desired however, the base of the channel-shaped recess 14 may be formed with spaced grooves 21 adapted to receive the flanges 18 and frictionally engage the latter to insure an efficient contact between the strip and frame.

10 In the modified form of the invention illustrated in Figures 4 and 5 it will be noted that the particular construction of the strip and the manner in which the same functions to clamp the glass panel, is substantially the same as in the first described form of the invention. The only material difference between the two forms of the invention is that in the construction illustrated in Figures 4 and 5 the resilient strip 22 projects a substantial distance inwardly from the frame 23 so that when the glass is assembled upon the frame as shown in Figure 5, the rounded longitudinal edge portions 24, formed by compressing the central portions of the strip, will assume a position exteriorly of the channel 25 formed in the frame and as a consequence be visible.

The modification illustrated in Figures 6 and 7 also resembles the first described form of the invention, the only difference being that the strip 26 in the present instance is rigidly secured within the channel 27 of the frame. This is accomplished by means of a plurality of fastening elements 28 located within the channel of the strip 26 and having enlarged heads 29 adapted to engage the flanges 30 extending inwardly from the legs of the channel-shaped strip. The shank portions of the elements 28 may vary, as in the event the frame is formed of sheet metal the shank portions are threaded to engage the base of the channel 31 or in the event the frame is formed of wood, the shank portions are pointed so as to pierce the base of the channels. In either case however, the fastening elements are provided with enlarged heads and in order to permit these heads to be inserted within the channel of the strip, the base of the latter is formed with a plurality of apertures 32 corresponding in number to the number of fastening elements employed. These apertures are preferably considerably smaller than the heads of the fastening elements but owing to the fact that the strip is formed of elastic material, the openings may be temporarily enlarged sufficiently to receive the heads 29 by stretching the base of the strip. By virtue of the foregoing method of attaching the glass panel, as shown in Figure 7, it will be prevented from contacting with the securing means and thereby any tendency for water or air to leak past the glass, is eliminated.

Thus from the foregoing it will be apparent that I have provided a comparatively simple

and inexpensive mounting for glass panels which in addition to functioning as a seal for preventing outer impurities from leaking past the glass also compensates for any reasonable irregularities in the glass panels.

What I claim as my invention is:

1. In combination, a glass panel, a channel receiving an edge of said panel, and a cushion for the panel including a strip of resilient material having a base, leg portions projecting from the base and flanges inturned from said leg portions, the inturned flanges resting against the base of the channel, and the base of the strip being pressed inwardly between the leg portions thereof and constituting a channel-shaped seat for the glass panel.

2. In combination, a transparent panel, a channel receiving an edge of said panel, and a cushion for the panel including a strip of resilient material having a base, substantially parallel leg portions projecting from the base, and flanges projecting laterally from said leg portions, said flanges being seated upon the base of the channel, the base of the strip being pressed inwardly between the leg portions, and constituting a channel-shaped seat for the transparent panel, and the leg portions being compressed between the base of said strip and the side walls of the channel.

3. In combination, a glass panel, a channel receiving an edge of said panel, and a cushion for said panel including a strip of resilient material within said channel and having base and leg portions projecting from the base, the base of the strip being pressed inwardly between the leg portions and constituting a channel shaped seat for the glass panel, and the leg portions being compressed between said inwardly extending base and the side walls of the channel.

In testimony whereof I affix my signature.
FRANK A. BEST.