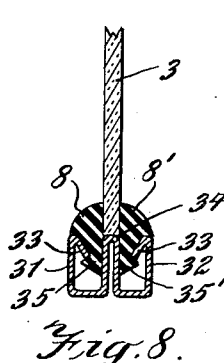
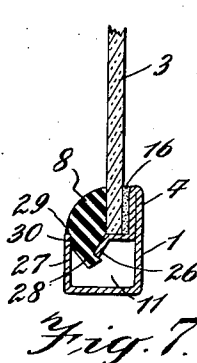
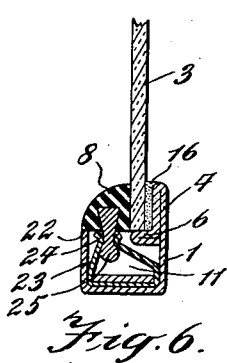
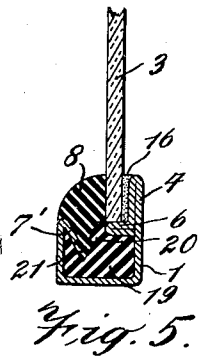
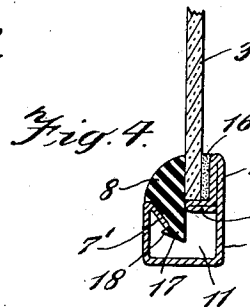
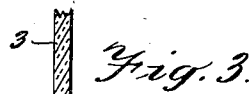
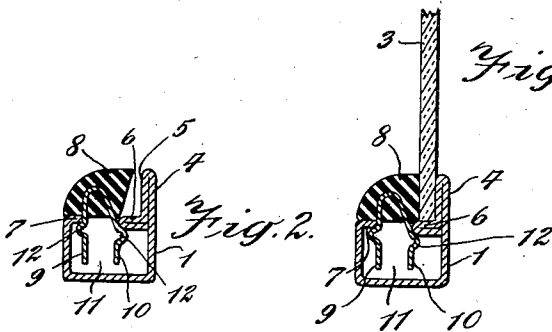
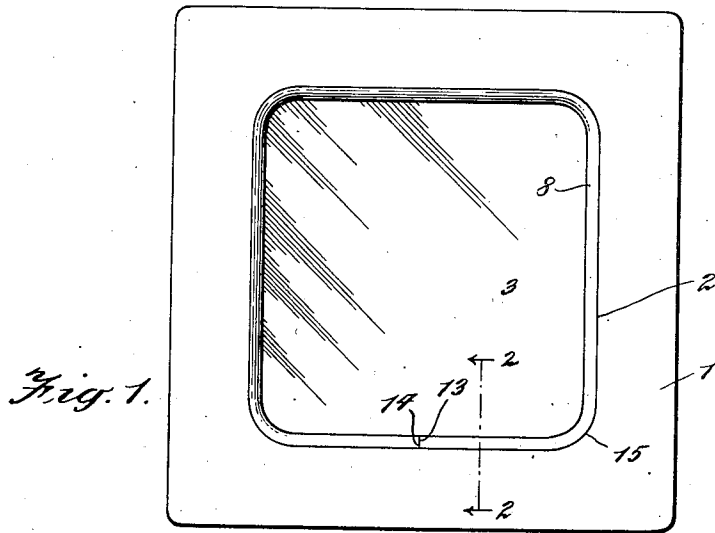


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L. G. HUNTER
MOUNTING FOR PANELS
Filed Feb. 20, 1932

1,892,104



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MOUNTING FOR PANELS

Application filed February 20, 1932. Serial No. 594,217.

This invention relates to a novel and improved mounting for panels, and more particularly to specific changes from the form of mounting shown in my copending application, Serial No. 557,295. The novel features of the invention will be best understood from the following description and the annexed drawing, in which I have shown selected embodiments of the invention, and in which:

Fig. 1 is a face view of a frame having a panel mounted therein according to this invention.

Fig. 2 is a section on the line 2—2 of Fig. 1, but with the panel removed.

Fig. 3 is a view on the same plane as Fig. 2, but with the panel in place.

Figs. 4, 5, 6, 7, and 8 are views taken on the same planes as Figs. 2 and 3, but showing different forms which the invention may take.

Referring first to Fig. 1, the invention is shown in connection with a frame 1, which may be of one piece of sheet metal having therein an opening 2 for the panel 3. With a one piece construction of frame, of course, the panel is of a smaller size than the opening, so that it may be inserted from one side of the frame which, for the sake of convenience, I shall refer to as the front. This side is that appearing at the left of Figs. 3 to 8, inclusive, and also for the sake of convenience, I shall refer to the various parts as disposed inwardly or outwardly with respect to the center of the opening 2.

The frame is shown as having a backing 4 against which the back of the panel may be placed. For the sake of illustration, the frame is shown as formed of sheet metal, and this backing may be formed of a fold in the sheet metal and the front portion 5 of the fold may be continued outwardly to form a shelf 6 against which the edge of the panel 3 may rest or which will limit outward movement of the panel. The forward edge of the

shelf 6 is spaced from the edge of a rearwardly extending flange 7, also shown as an integral part of the frame, and the edges of these two members thus spaced apart define a throat for a purpose which will be explained presently.

When a panel is placed in position against the backing 4 as indicated in Fig. 3, it may be held in place by a strip 8 of resilient material, preferably rubber or a rubber composition which will be compressible and likewise flexible. When in place, the strip has a face contacting with the front face of the panel 3, and has an outer face contacting with the flange 7. The strip is usually in compression, as will be seen from a comparison of Figs. 2 and 3. When there is no panel in place, the strip would have some such shape as indicated in Fig. 2, but it will be seen that when the panel is put in place, the strip is compressed as shown in Fig. 3, a force thus being exerted between the face of the panel and the flange 7.

The strip may be securely held in position by means of a narrow tongue extending outwardly through the throat, and in Figs. 2 and 3 this tongue is shown in the form of a resilient metal member, such as a sheet metal piece, having its middle portion embedded in the strip 8 and having its opposite ends 9 and 10 extending into a recess 11 disposed outwardly of the throat. Each leg 9 and 10 may be provided with bumps 12 which form small projections engaging the edges of the members forming the throat.

The strip may be placed in position in the manner more fully illustrated in my copending application referred to above or, in other words, it may be snapped into place by forcing the tongue through the throat. The strip is then held securely in place against displacement, and a watertight seal is provided between the panel and the front. The seal will also hold the panel against the back-

ing and thus prevent rattling due to looseness of the panel in its mounting.

Referring again to Fig. 1, it will be seen that the strip 8 is formed entirely in one piece with substantially abutting ends 13 and 14. By using a strip of resilient material, such as rubber or a rubber composition, it is possible to bend it around the corners of a panel opening, in actual practice it having been found that a strip can be bent to a radius of approximately one inch and still result in a tight construction. Therefore, according to one phase of my invention, I use a panel having an opening with corners 15 on short radii and cut the panel on corresponding radii. At this point, it may be well to emphasize the fact that the panel, while usually of glass, may be of any other material which it is found desirable to mount in a frame.

By making the strip 8 of one piece, it is seen that only one joint is necessary, thus materially cutting down the chances of water leaking through the mounting. This is of particular importance where the panel is used to cover a sign, as oftentimes, and in fact usually, signs are quite expensive and a small amount of water leaking through a faulty mounting may ruin an expensive sign. The chances of any such happening are very materially decreased by providing a form of mounting such as shown herein, which can be made of one piece of rubber or the like, and which can be formed around corners of practical radius while maintaining a tight joint with the frame at the corners as well as on the opposite sides thereof.

In Fig. 4 is shown a different embodiment of the invention, in which the frame is provided with the same form of backing and shelf as before. In this form, however, I have shown a layer of felt or the like forming a cushion 16 between the backing and the rear of the panel. It is of course understood that such material may be used or omitted as desired. In this form, the flange 7', instead of being shown as relatively short and extending in substantially the same plane as the shelf 6 as is shown in Figs. 2 and 3, is shown as extending outwardly and consequently is of greater length. The throat in this instance is formed between the edge of the shelf 6 and the edge of the flange 7'. In this form, the tongue is of different construction, but it is still a narrow outwardly extending tongue, in this case being made an integral part of the strip 8 as indicated at 17. At its lower edge, it is provided with an outwardly extending projection 18 to engage beneath the edge of the flange 7' to retain the strip in place.

In Fig. 5, the backing 4, shelf 6, and cushion 16 are the same as in Fig. 4, but here the recess 11 is filled with a packing 19 which may be made of rubber or a rubber composition, and which extends upwardly beneath

the flange 7' and beneath the shelf 6, as well as in front of the front edge of that shelf. The throat in this instance is formed of the rear edge of the flange 7' and a nose 20 on the packing 19 disposed opposite the edge of the flange. The tongue 21 is here shown as formed integral with the strip 8 and as having small laterally extending projections to engage the edge of the flange 7' and the nose 20. By this arrangement, a double resilient action is provided in that both the packing 19 and the tongue 21 are resilient, and therefore both will resist movement of the strip 8.

In Fig. 6 is shown a still different embodiment having the same general arrangement of frame as previously described, except that here there is no rearwardly extending flange 7 or 7', but instead the outer surface of the strip 8 is forced directly in contact with the edge 22 of the forward part of the frame. In the recess 11 is disposed a resilient clip 23, preferably of metal, and having oppositely disposed arms which are forced towards each other by the resiliency of the material from which the clip is made. These arms tend to contact with each other at 24, and at that point they define the throat between which passes a tongue 25, here shown as a rigid metal member embedded in the strip 8 and having a head extending outwardly from the throat.

In Fig. 7, the shelf 6 of Fig. 4 is modified in that the outer fold thereof is bent forwardly to form a flange 26 which cooperates with the front wall 27 of the recess 11 to form a throat receiving the tongue 28 of the strip 8. In this form, it will be seen also that the strip 8 is provided with a shoulder 29 engaging the top of the wall 27 and also with a flat surface 30 engaging the rear face of that wall. The tongue here is also provided with a projection as indicated, engaging the edge of the flange 26.

Fig. 8 shows a different form of the arrangement appearing in Fig. 4 in that the frame is provided with front and rear walls 31 and 32, each of which has an outwardly extending flange 33, and the central portion of the frame is bent inwardly to form a shelf 34 for the edge of the panel. This central portion of the frame cooperates with the flanges 33 to form throats on opposite sides of the panel to receive tongues 35 and 35' on strips 8 and 8', respectively.

In each form shown, it will be seen that there is provided a narrow tongue extending outwardly from the edge of the panel through a throat within which it is held by means of one or more projections, and in each case the holding is done by a resilient means, either in the form of a resilient tongue or a resilient member engaging a tongue on the strip. Preferably, the strip itself is formed of solid rubber or a rubber composition, and for the sake of convenience I shall refer to

this strip in some of the claims as formed of rubber, it being understood that by that term I do not intend to exclude rubber composition or other materials having the necessary properties to function in the manner described in this specification.

While I have shown the invention as embodied in certain specific forms, it is to be understood that various changes in details may be made without departing from the scope of the invention, and I therefore do not intend to limit myself except by the appended claims.

I claim:

1. A panel mounting comprising a frame surrounding an opening, a panel in the opening of smaller size than the opening, a single strip of resilient flexible material disposed against the face of the panel adjacent its edge and extending around the opening and having its ends substantially abutting each other, and interengaging elements on said strip and frame disposed outwardly from the edge of the panel and holding the strip in place.

2. A panel mounting comprising a frame surrounding an opening, a panel in the opening of smaller size than the opening, a single strip of resilient flexible material disposed against the face of the panel adjacent its edge and extending around the opening and having its ends substantially abutting each other, and interengaging elements on said strip and frame disposed outwardly from the edge of the panel and holding the strip in place, said opening having corners, said corners being rounded on a short radius and said strip being curved about the same centers as the corners.

3. In combination, a frame having an opening with a panel therein, a backing for said panel supported on the frame rearwardly of said panel adjacent its edge, spaced members on said frame forming a throat in front of said panel and beyond the edge thereof, a rubber strip engaging the face of said panel adjacent its edge and holding said panel against said backing, a metal tongue rigidly united to said strip and extending outwardly through said throat, said tongue being rigid and said members being resilient to thereby resiliently hold said strip in place.

4. In combination, a frame having an opening with a panel therein, a backing for said panel supported on the frame rearwardly of said panel adjacent its edge, spaced members on said frame forming a throat in front of said panel and beyond the edge thereof, a rubber strip engaging the face of said panel adjacent its edge and holding said panel against said backing, a narrow tongue integral with said strip and extending outwardly through said throat, said tongue being resilient, and the members forming said throat also being resilient.

5. In combination, a frame having an opening with a panel therein, a backing for said panel supported on the frame rearwardly of said panel adjacent its edge, a rubber strip engaging the face of said panel and holding it against said backing, a rubber packing disposed in a recess in the frame outwardly of the panel edge, said packing having a recess therein with a narrow throat, and said strip having a resilient outwardly extending tongue with projections received in said recess in the packing.

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