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FRAME CORNER BEAD

Filed March 28, 1929

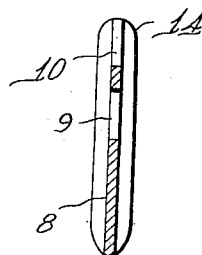
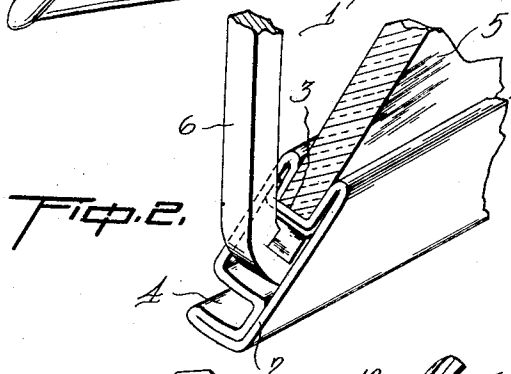
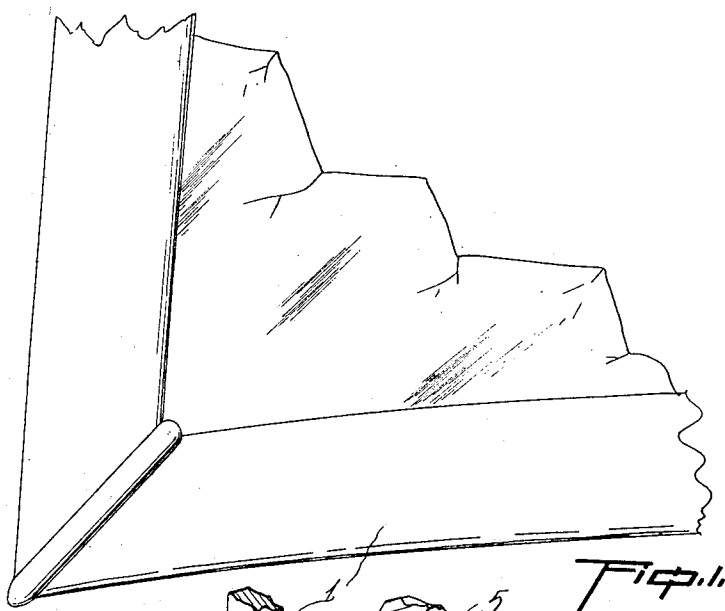


Fig. 5.

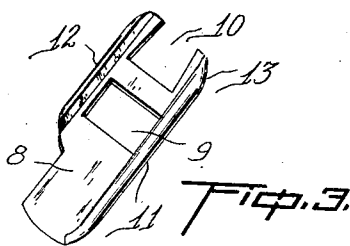


Fig. 3.

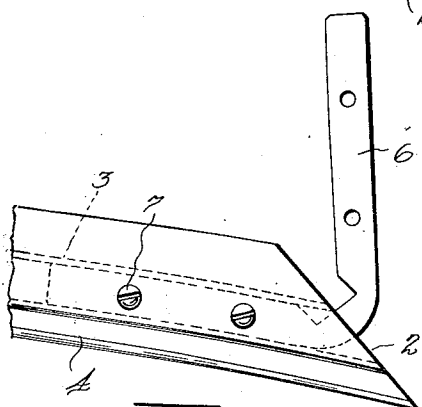


Fig. 4.

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FRAME CORNER BEAD

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The present invention pertains to a novel construction in the assembly of frames such as the frame of an automobile windshield. The rails or members of which such frames are composed usually have their ends cut at 45° angles in order to provide miter joints. Considerable skill and care is required in assembling the joints in order to make them smooth and the ends well fitted. Even when a joint is properly assembled, there is the possibility of wind and moisture blowing therethrough to the interior of the vehicle, particularly if the joint has become somewhat loosened by the vibrations of the vehicle.

The present invention provides a finishing member for the joint, in the nature of a bead which covers the joint proper. Accordingly, less accuracy in assembling the joint is necessary than heretofore. Moreover, the bead is a considerable improvement in appearance over the usual butted ends, and finally provides a means for keeping wind and moisture out of the joint.

The bead member is in the nature of a blank receivable between the angular ends of the frame members and apertured to slip over the usual corner plug. Where the butting edges of the members are to be covered in the manner outlined, the edges of the corner bead member are headed.

The invention is fully disclosed by way of example in the following description and in the accompanying drawings in which

Figure 1 is a fragmentary elevation of the forward face of the windshield, showing one of the corners thereof;

Fig. 2 is a perspective view of one of the members of the joint, showing the corner plug inserted therein;

Fig. 3 is a perspective view of the corner bead;

Fig. 4 is a fragmentary elevation of the rear face of the windshield frame, showing a corner thereof; and

Fig. 5 is a longitudinal section of the bead. Reference to these views will now be had by use of like characters which are employed to designate corresponding parts throughout.

In Fig. 1 is illustrated a portion of the windshield frame consisting of rims or members 1 having their ends cut at 45° to the axis as indicated by the numeral 2, whereby miter joints are formed by these ends when the frame is assembled. The members 1 are of a tubular construction and formed each with a channel 3 at the inner edge and another channel 4 in the inner face as illustrated more clearly in Fig. 2. The channels 3 receive the glass 5, while the channels 4 engage weather-strip material fitted in the windshield opening in a manner already well-known in the art and therefore not required to be illustrated here.

In assembling the joint, a corner plug 6 bent to the angle of the corner has one leg inserted in one of the members 1 as shown in Fig. 4. This leg and the rear face of the member 1 are tapped to receive screws 7 which hold the parts together. The other member 1 is slipped over the remaining leg of the plug and fastened thereto by similar screws.

Before attaching the latter member 1, however, a corner bead member 8 is slipped over the projecting leg of the plug 6. The member 8 is in the nature of a blank having an aperture 9 to receive the plug. One end of the blank is recessed at 10 to avoid breaking the continuity of the channels 3 around the inner margin of the completed frame.

The forward faces of the members 1 are unbroken, and the edge of the member 8 at these faces is headed at 11 along its entire length to conceal the joint at this face. It will be evident that, at the rear face, the member 8 stands as a partition dividing the channel 4. Beyond the channel, the corresponding edge of the member 8 is headed at 12 to cover the joint along the unbroken portion of the rear face of the frame.

Each head is crowned longitudinally at 13 and also transversely at 14 to provide a well finished appearance.

It will be apparent that any discrepancies in matching the joint are concealed by the heads 11 and 12, so that great care in assembling the joint need not be exercised. The

appearance of the joint is considerably improved, and as another practical advantage, the heads 11 and 12 prevent wind and moisture from passing into and through the joint.

5 Although a specific embodiment of the invention has been illustrated and described, it will be understood that various alterations in the details of construction may be made without departing from the spirit of the invention as indicated by the appended claims.

10 What I claim is:

1. In a frame construction comprising a pair of frame members with ends prepared for a miter joint, a corner plug receivable in
15 said ends to connect said members, and a corner bead consisting of a member slidable on said plug and receivable between said ends and having one of its ends headed to cover the prepared ends of said frame members at one face of said frame.

2. In a frame construction comprising a pair of frame members with ends prepared for a miter joint, a corner plug receivable in
20 said ends to connect said members, and a corner bead consisting of a member slidable on said plug and receivable between said ends and having one of its ends headed to cover the prepared ends of said frame members at one face of said frame, said headed
25 portion being crowned transversely.

3. In a frame construction comprising a pair of frame members with ends prepared for a miter joint, a corner plug receivable in
30 said ends to connect said members, and a corner bead consisting of a member on said plug and receivable between said ends and having one of its ends headed to cover the prepared ends of said frame members at one face of said frame, said headed portion being
35 crowned transversely and longitudinally.

In testimony whereof I affix my signature.

LEONARD A. MULLIGAN.

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