

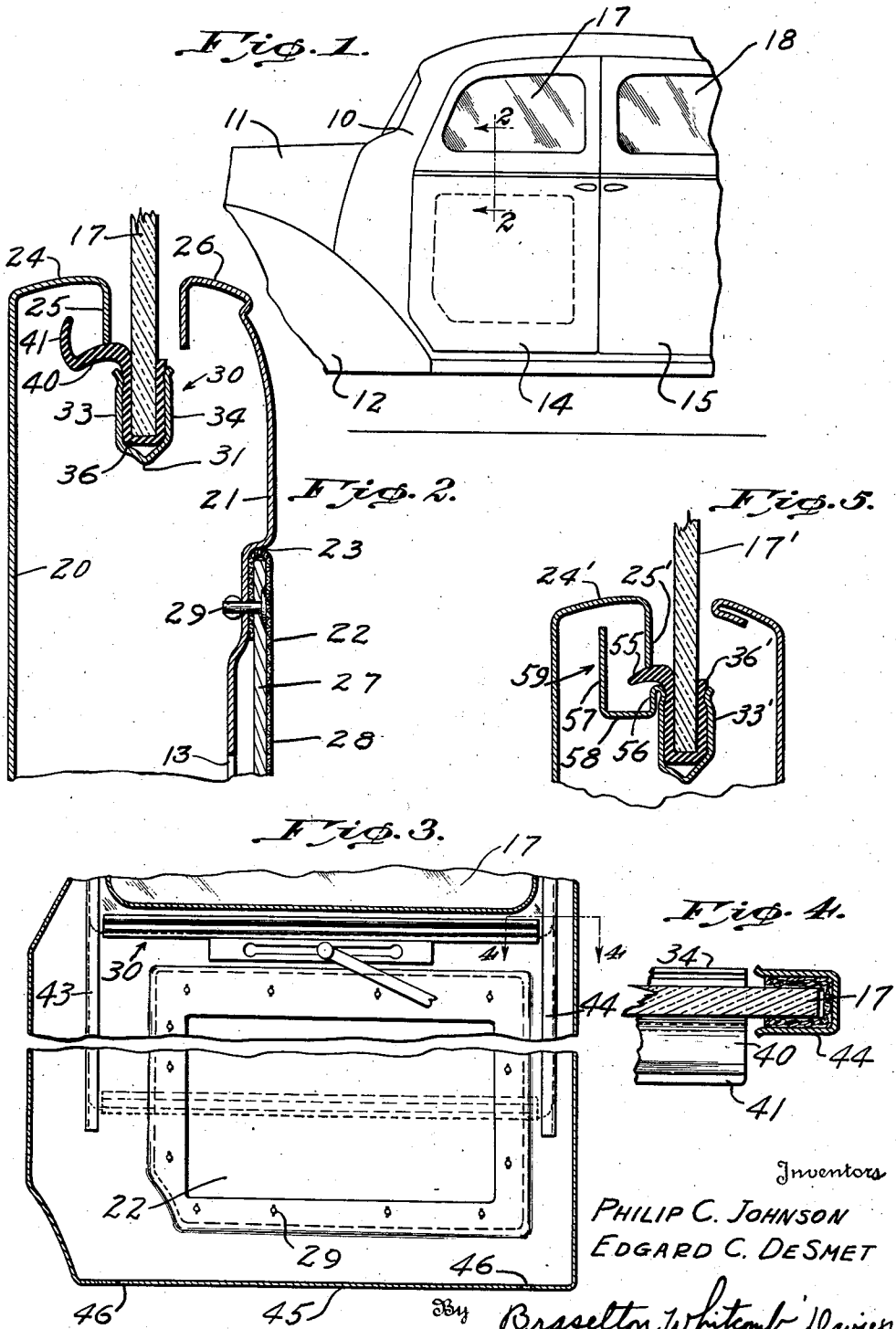
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COMBINED WINDOW WEATHER STRIP AND DRAIN

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## COMBINED WINDOW WEATHER STRIP AND DRAIN

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### 1 Claim. (Cl. 296—44)

This invention relates to window sash constructions particularly those of a character adaptable for use with slidable windows of enclosed vehicle bodies.

5 The invention embraces the provision of a suitable window sash structure arranged to resiliently yet firmly grip and support a window closure.

The invention contemplates the provision of a suitable window sash construction adapted to be supported by a skeleton frame construction provided with an upholstered panel, the window sash construction including means to prevent the ingress of water in order to avoid damaging the upholstery.

15 One of the objects of the invention is the provision of a simple yet effective means to divert rain or precipitation away from the vehicle body interior.

Another object of the invention is the provision of means associated with the sash construction for conveying water or other foreign matter to a point of disposal where the water or foreign matter may pass to the exterior of the vehicle body and prevent damage to the interior body upholstery.

Further objects and advantages are within the scope of this invention such as relate to the arrangement, operation and function of the related elements of the structure, to various details of construction and to combinations of parts, elements per se, and to economies of manufacture and numerous other features as will be apparent from a consideration of the specification and drawing of a form of the invention, which may be preferred, in which:

Figure 1 is a fragmentary side elevational view of a vehicle embodying my invention;

Figure 2 is an enlarged vertical sectional view taken substantially on the line 2—2 of Figure 1;

Figure 3 is a vertical sectional view through the vehicle door structure showing the arrangement of my invention;

Figure 4 is a fragmentary horizontal sectional view taken substantially on the line 4—4 of Figure 3;

Figure 5 is a fragmentary detail sectional view similar to Figure 2 showing a modified form of the invention.

While we have illustrated the arrangement of our invention as especially adapted for incorporation in a vehicle body construction, it is to be understood that we contemplate the use of our invention wherever the same may be found to have utility.

Referring to the drawing in detail and more

especially to Figure 1, there is illustrated a portion of a vehicle inclusive of a body 10, a forward hood construction 11 enclosing an engine or prime mover (not shown), front fender 12, doors 14 and 15, the doors having glazed windows or panels 17 and 18.

The glazed panels in the doors are mounted in a similar manner and therefore a description of one will suffice. The door construction consists generally of an outer and inner panel 20 and 21 fabricated of sheet metal and secured to the inner panel is an upholstered panel 22 which covers a portion of the inner metal panel, the latter having a central opening 13 to decrease the weight of the door structure. The inner metal panel 21 is provided with a depressed flange portion 23 which forms a support for the upholstered panel 22 and as illustrated in Figure 2. The upholstered panel illustrated is fabricated with a backing of fiber board 27 or the like covered with suitable upholstery cloth or material 28 glued, sewed, or otherwise secured to the fiber board, the upholstered panel so formed being held to the flange 23 by means of clips or fastening means 29 passing through openings in the metal panel flange. The outer door panel 20 has a horizontal sill portion 24 which terminates in a depending flange 25 as illustrated in Figure 2. The inner door panel 21 in the embodiment illustrated is also provided with a horizontal sill 26 preferably arranged with the metal bent so as to eliminate sharp edges and present a neat appearing arrangement.

The sills 24 and 26 are spaced apart to admit the glazed window panel or pane 17 which is vertically slidable into the space or well between the inner and outer door panels. The glazed window or panel 17 is supported along its horizontal lower edge portion by means of a sash structure 30 which includes a member 31 preferably formed of metal and particularly illustrated in Figure 2 having side wall portions 33 and 34 forming a channel in which the glass panel 17 is positioned. Interpositioned between the side walls 33 and 34 of the member 31 and the surfaces of the glazed panel is a cushion member 36 formed of rubber, felt or other suitable material to resiliently grip the bottom portion of the window glass, the side walls 33 and 34 serving to urge the member 36 into close frictional engagement with the glass to support and retain the latter.

In the form of the invention shown in Figures 2 and 3 the cushion member 36 is formed with a lateral extension 40 terminating in an upwardly extending flange 41, the latter extending sub-

stantially parallel to the plane of the glass window 17. As especially shown in Figure 2, the portions 40 and 41 together with the outermost surface of the glazed window forms a trough adapted to catch water which may strike the outer surface of the glazed window and prevent the dripping or flow of water down the central panel portion of the door immediately beneath the window glass. The ends of the trough preferably terminate adjacent the vertically positioned glass runs 43 and 44 which form a part of a window frame. When the glass window is in its uppermost position as illustrated in Figure 2, the downwardly extending flange 25 of the sill 24 is engaged by the extension 40 of the cushion thus diverting water or foreign matter to the side edges of the window and prevent damage to the upholstery panel. When the glass is lowered the member 40 and flange 25 are out of engagement, for example, as when the sash structure and window are moved to the position shown in dotted lines in Figure 3, the trough formed by portions 40 and 41 conveys water which may strike the outside surface of the window glass 17 to either end of the trough adjacent the window runs 43 and 44, the water then dropping by gravity to the lower edge portion 45 of the door structure, the latter being provided with openings 46 through which the water may pass to the exterior of the vehicle without damaging or soaking the upholstery panel 22 which is centrally positioned in the inner door panel. In this manner, any fluid injected against the outside surface of the window glass is conveyed to the exterior of the vehicle through the medium of the trough structure.

In the form of the invention illustrated in Figure 5, the window 17' is mounted in a sash structure comprising a member 33' preferably formed of sheet metal within which is positioned a cushion member 36' formed of rubber, felt, or suitable non-metallic material, the latter having a laterally extending projection 55 which, when the window is in its uppermost position, contacts with the lower edge of flange 25' of

sill structure 24'. In this form of the invention, the metal channel member 33' is integrally formed with an extension including vertically positioned wall portions 56 and 57 and a horizontal portion 58 connecting the vertical portions, the said portions forming a trough structure 59. In this form of the invention, the ends of the trough preferably terminate adjacent the window side runs or ways so as to convey any water striking the glass to points near the edge portions of the door structure. It is to be understood that the trough structure may be arranged with one end lower than the other to cause fluid or water to be discharged at the lower end of the trough structure away from the upholstery without departing from the spirit and scope of the invention.

It is apparent that within the scope of the invention, modifications and different arrangements may be made other than is herein disclosed, and the present disclosure is illustrative merely, the invention comprehending all variations thereof.

What we claim is:

In combination, a window frame; a glazed pane slidably mounted for vertical movement therein; said frame having a window sill portion including a downwardly extending flange; a sash for the lower edge of said pane comprising a channel shaped sheet metal member; a rubber cushion element having a portion of U-shaped cross section interposed between the metal channel member and said pane; said rubber cushion having a laterally extending horizontally arranged portion terminating in an upwardly projecting flange portion extending substantially parallel with the plane of said pane, said last mentioned flange and horizontal portions forming with said pane a trough-like configuration; said horizontally extending portion of said rubber cushion adapted to engage the downwardly extending flange of said sill when the pane is in closed position.

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