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Dochnahl

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[54] **SUPPORT FOR DECORATIVE MOLDINGS ON DOOR OR WINDOW FRAMES PROVIDED WITH RUBBER OR PLASTIC SEALSTRIPS**

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[52] **U.S. Cl.** **49/441,** 49/491, 52/397

[51] **Int. Cl.** **E06b 7/22**

[58] **Field of Search** 49/441, 440, 460, 49/462, 490, 491, 436; 52/716–718, 347–400, 208

[56] **References Cited**

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[57] **ABSTRACT**

A support for decorative strips for window and door frames is disclosed. The support comprises a U-shaped sealing strip of rubber or plastic. One leg of the sealing strip is provided with an inner groove with two holding lips, and with a outer groove with another pair of holding lips. The end portions of the decorative strip are shaped into a S-like form and are inserted between the respective holding lips of the inner and outer grooves.

6 Claims, 2 Drawing Figures

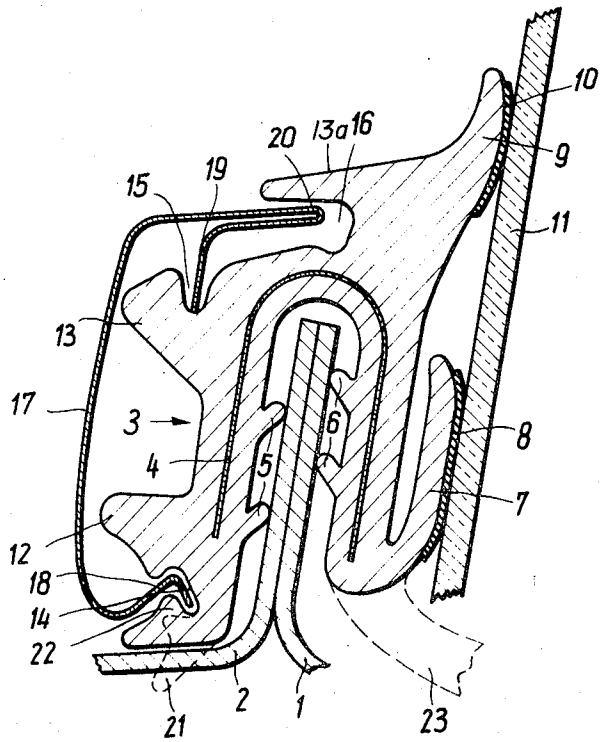


Fig. 1

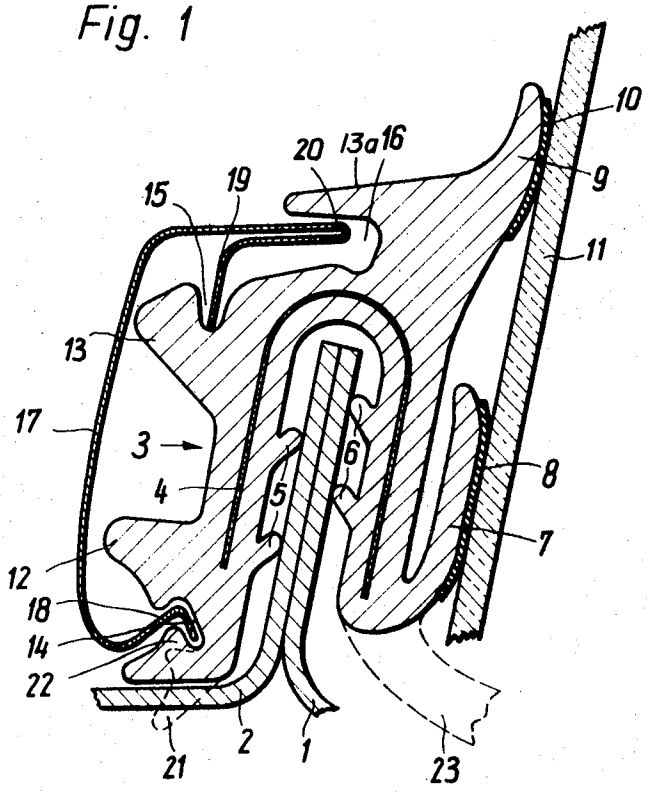
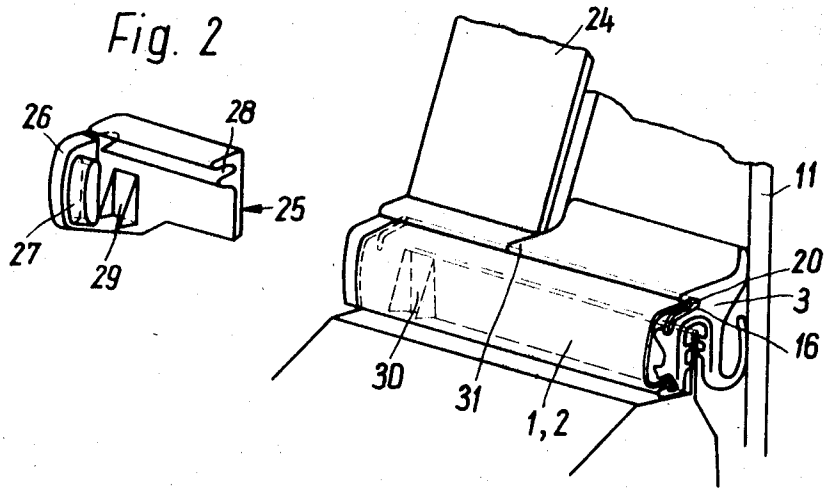


Fig. 2



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SUPPORT FOR DECORATIVE MOLDINGS ON DOOR OR WINDOW FRAMES PROVIDED WITH RUBBER OR PLASTIC SEALSTRIPS

BACKGROUND OF THE INVENTION

This invention relates generally to supports for ornamental moldings. More particularly, this invention relates to supports for decorative strips for frames of windows and doors provided with sealing strips of rubber or plastics, especially in motor cars.

Hitherto, the decorative moldings of the above kind have been mounted to the outer sheet of the car body usually by means of holding clips and, at the same time, they have been employed as supports for window and door wall seals. The disadvantage of such prior art supports resides in the fact that the metal decorative strip is in contact with varnished outer sheet surfaces and thus causes scratches, especially at vibrations. In addition, it may cause the formation of rust spots.

The object of this invention is, therefore, to remove the above described disadvantages of prior art and to provide supports for decorative moldings which are neat in appearance, protect the adjacent surface material and can be easily installed.

The above objects are attained by providing a sealing strip suitably shaped in a conventional manner for being clamped on a supporting flange; according to this invention, the outwardly directed leg of the sealing strip is profiled to form an inner holding groove with two lips, and a outer holding groove with another pair of lips, whereby the inner and outer edge portions of the decorative strip are bent substantially at the right angle and, preferably, shaped into a S-like form. The S-shaped edges of the decorative strip are inserted into respective inner and outer grooves and hold in position by the projecting pairs of lips.

In a preferred embodiment of this invention, the sealing strip is of a U-shaped profile and is seated on a rigid supporting flange having a step-like bent bottom portion directed away from the window or door to be sealed. The outer leg of the sealing strip, facing the bottom portion, is increased in its cross-section and is profiled in such a manner as to form an inner holding groove with an inner pair of lips, and a outer holding groove with a further pair of clamping lips. The outer holding groove has, preferably, a triangular or a semicircular cross-section as to receive the S-shaped inner edge portion of the decorative strip and to clamp the same when abutting the bottom bent portion of the supporting flange. The inner holding groove, on the other hand, has preferably a projecting outer lip and an arresting notch which is perpendicularly directed to the axis of the inner lip. The inner edge portion of the decorative strip is bent into the form of a hairpin which abuts against the inner lip and terminates by its free end in the notch of the outer lip of the inner holding groove.

If the sealing- and decorative strip is to be arranged both on the outer and on the inner side of a motor car, as it is usual in many cases, it is possible to unite the two outside and inside sealing strips, as far as they do not obstruct the window pane into a single piece surrounding the periphery of the latter. More particularly, this double sealing can be made of a single-piece rubber or plastic strip.

A further object of this invention is to provide improved fastening means for the decorative strip at such places where the length of the sealing strip does not correspond with the length of the decorative strip, such as, for instance, in the area of frame corners.

BRIEF DESCRIPTION OF THE DRAWING

For a better understanding of this invention, together with other objects thereof, reference is made to the following detailed description of the accompanying drawing, wherein

FIG. 1 is an elevational view of a section of the sealing strip with a supported decorative molding thereupon;

FIG. 2 is an exploded perspective view, shown on a reduced scale, of an end portion of the sealing strip with fastening means for the decorative strip on places where the sealing strip cannot be installed.

DETAILED DESCRIPTION

In FIG. 1, there is illustrated a conventional supporting flange assembled of two mating sheets 1 and 2. The bottom part of the outer sheet 2 is bent at the right angle for supporting a resilient lip 22 of a U-shaped sealing strip 3, as it will be explained in more detail below.

The sealing strip 3 is, in a known manner, provided with an embedded metal insert 4 and with retaining ribs 5 and 6 disposed at opposite inside walls of the clamping legs to insure reliable clamping contact with the supporting flange 1, 2. The leg of the sealing strip 3 facing the window or door pane is provided with two inwardly projecting sealing tongues 7 and 9 which resiliently abut against the window pane 11. The contact surfaces of the tongues 7 and 9 are with advantage provided with coatings 8 and 10.

According to this invention, the legs and the apex of the sealing strip 3 are profiled in such a manner as to produce an inner holding groove 16 with a horizontally directed inner lip 13*a* and with a projecting outer lip 13 having a perpendicularly directed retaining notch 15 on the one hand, and an outer holding groove 14 with an inner lip 12 and a outer lip 22.

The terms "outer holding groove" and "outer lip" refer to those members of the sealing strip which are situated closer to the periphery of the sealed pane, whereas the terms "inner holding groove" and "inner lip" refer to similar members located closer to the center of the pane.

The decorative molding or strip 17 to be mounted on the sealing strip 3 is shaped in such a manner as to produce an S-like undulation on its bottom end portion which is to be inserted into the outer holding groove 14 and clamped by lips 22 and 12 of the sealing strip 3. The top end portion of the decorative strip 17 is shaped into a hairpin form having its uppermost edge portion 19 bent at the right angle for being retained in the perpendicular notch 15 of the outer lip 13. The apex 20 of the hairpin-like undulation rests on the inner wall of the inner lip 13*a* and the loop extends along the entire length of the inner holding groove 16 of the sealing strip 3.

To facilitate the mounting of the decorative strip 17 on the supporting sealing strip 3, the outer lip 22 of the outer groove 14 is first bent downwardly, as indicated by position 21, prior to the deposition of the strip 3 on the supporting flange 1 and 2. Subsequently, the S-shaped outer edge portion of the decorative strip 17 is inserted into the open outer groove 14 and the sealing strip 3 is clamped to the flange 1,2 as low as to the bot-

tom bent portion of the sheet 2. By this action, the outer lip 22 clamps the S-shaped bottom edge 18 of the decorative strip 17. The uppermost bent edge portion 19 of the decorative strip 17 is then inserted into the holding notch 15 of the lip 13. This edge portion 19 can be placed into the notch 15 also before the mounting of the sealing strip 3 on the flange 1,2. Dotted lines 23 indicate that the sealing strip 3 can be extended around the periphery of the window pane 9 to seal the latter also from the opposite side. In this case, the sealing strip 3 of this invention can be made as a single piece.

With reference to FIG. 2, the length of the sealing strip 3 of this invention extends to the corner of a frame column 24, only whereas the frame column 24 remains uncovered by the sealing strip and by the supported decorative strip. To insure sufficient support for the decorative strip 17 even over the width of the frame column 24, there is provided an additional detachable supporting piece 25 having clamping means 29 and corresponding in its height to the supporting flange 1,2, which in the area below the frame column 24 is also provided with corresponding clamping means 30. The upper part of the supporting piece 25 has a longitudinal groove 28 corresponding in shape to the inner groove 16 of the sealing strip 3. The circumference of the end plate 26 coincides with the curvature of the upper surface of the decorative strip 17 whereas the embossed piece 27 corresponds to the inner curvature of the strip 17 and serves for arresting the uppermost edge portion 19 when the apex 20 of the decorative strip 17 is inserted into the groove 28. The rear wall of the supporting piece 25 abuts against the flange 1,2 and is clamped thereto by the aforementioned clamping means 29, 30 which may be in the form of springy projecting blades which, upon the insertion of the piece 25 against the flange 1,2, held together by friction. These resilient side blades 29, 30 can be, of course, replaced by another suitable holding means, such as a snap-button fastener, for example.

The mounting of the supporting piece 25 as shown in FIG. 2 is effected prior to the installation of the decorative strip 17. The piece 25 is first placed into its position on flange 1,2 in the area below the frame 24 by clamping means 29, 30, and the decorative strip 17 is then attached as far as to the end plate 26 of the piece 25; the hairpin apex 20 is inserted into the groove 28 and the uppermost edge portion 19 rests against the rear wall of the embossed piece 27.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

Having thus described the invention, what I claim as new and desire to be secured by Letters Patent, is as follows:

1. Supporting means for a decorative molding for door or window frames sealed by sealing strips, preferably at motor cars, comprising

supporting rigid flange means,

sealing strip means disposed on said supporting rigid flange means, the outer side of said sealing strip means being provided with an inner holding groove having a first pair of retaining lips, and with an outer holding groove having a second pair of retaining lips;

decorative strip means having S-shaped inner and outer edge portions thereof bent at an angle and inserted into said inner and outer holding grooves, respectively,

said sealing strip means having a U-shaped profile, said supporting rigid flange means being provided with an outwardly bent bottom portion upon which seats the outer retaining lip of said outer holding groove, said S-shaped edge portions of said decorative strip being inserted in said holding grooves and resiliently clamped by said retaining lips, and

the outer lip of said inner holding groove being provided with an arresting notch directed perpendicularly to the axis of the outer lip thereof, the end of said inner edge of said decorative strip being inserted into said arresting notch, and the other side of said sealing strip means facing the door or window pane being provided with a plurality of sealing, upwardly directed tongues.

2. Supporting means according to claim 1 wherein contact surfaces of said sealing tongues are covered by soft coatings.

3. Supporting means according to claim 1 further comprising a detachable supporting piece for extending support of said decorative strip means to places where said sealing strip means cannot be installed, said detachable supporting piece being profiled according to the profile of said decorative strip means, and shaped for attachment to said supporting flange means.

4. Supporting means according to claim 3 wherein said detachable fastening piece comprises an end plate with an embossed piece adjusted to the inner profile of said decorative strip and clamping means for detachably fastening said supporting piece to the end of said flange means.

5. Supporting means according to claim 4 wherein said clamping means comprise first pair of projecting resilient blades disposed on said supporting piece and a second pair of projecting blades disposed on said flange means.

6. Supporting means according to claim 4, said detachable supporting piece further comprising a longitudinal groove corresponding in shape to the upper holding groove of said sealing strip means for receiving the apex of said upper S-shaped edge portion of said decorative strip.

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