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JALOUSIE LOUVER WEATHERSTRIPPING

2,805,453

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FIG. 2

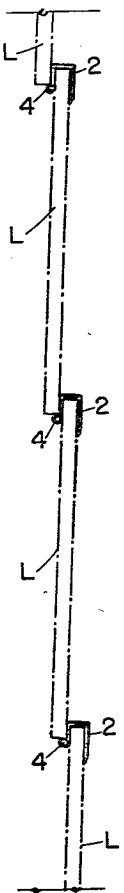


FIG. 3

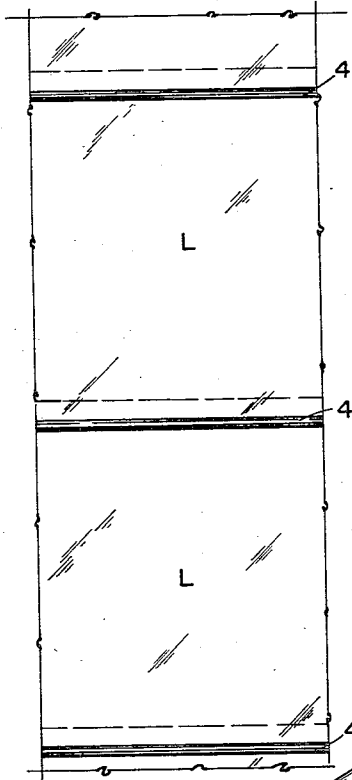


FIG. 4

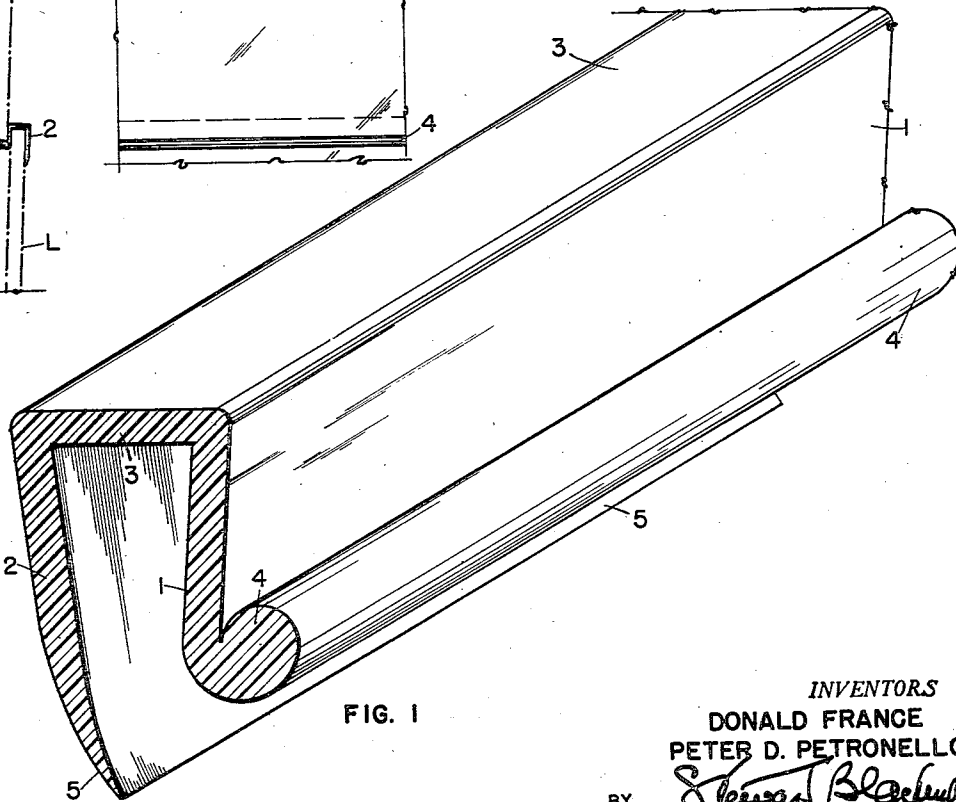
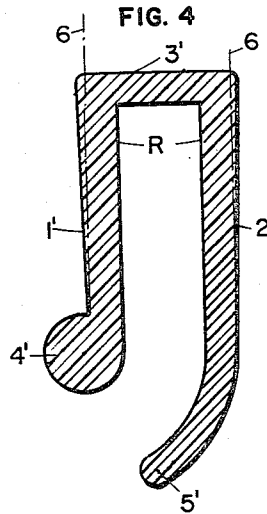


FIG. 1

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JALOUSIE LOUVER WEATHERSTRIPPING

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2 Claims. (Cl. 20—69)

This invention relates to weatherstrip structure for pivotal louver panels and, more particularly, to the lengthwise marginal edge type of resilient weatherseal interposed between adjacent louvers when in closed position in louvered panel openings.

An object of the invention is to provide a weather seal for pivotable louvers in louvered window or like openings, which will be efficient in operation, simple in construction and capable of ready and convenient installation or removal by relatively unskilled labor.

A further object is to provide weatherseal structure of the character described which may be readily fabricated by extrusion methods.

Yet another object is to provide weatherstripping for jalousie louvers which may be economically manufactured.

Still another object is the production of louver weatherstripping of pleasing and harmonious association with the louver assembly.

These and other advantages of the invention will be discernible from the detailed description thereof hereinafter set forth.

The invention is embodied in weatherstripping structure exemplified in the accompanying drawing, in which the views are as follows, like reference characters designating identical parts throughout the several views:

Fig. 1, an isometric elevation of one of the forms which the invention may take;

Fig. 2, a fractional end elevation of a closed louver panel assembly utilizing the invention, the usual end brackets being omitted for clarity;

Fig. 3, a partial front elevation of the view shown in Fig. 2; and

Fig. 4, a transverse vertical section through another form of our invention.

According to the invention, the weatherstrip structure defines an elongated, open-bottom sheath adapted to overlie the top marginal edge of a louver panel in the usual assembly of oscillatory louvers and engageable with the bottom marginal edge of the louver panel next adjacent thereto and thereabove when the louvers move from open to closed positions; the weatherstripping includes front and rear walls connected across the top thereof by a continuous web, the front wall terminating along the bottom thereof in an out-turned bead forming therewith a resilient seat to receive thereagainst the bottom edge of the louver panel thereabove whereby to provide a positive seal against the elements when the louvers are closed; the rear wall has a bottom downwardly and inwardly inclined extension forming a continuous flange which is disposed in parallel relation to the out-turned bead of the front wall and on a level substantially below this bead whereby to provide, with the front wall, a pair of positively firm jaws capable of gripping the marginal edge of the panel received therebetween, both walls being inclined, before mounting on the panel, in converging downwardly directed relation with each other.

The weatherstripping may be fabricated from any suit-

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able material having characteristics of elasticity and resistance to weathering such, for example, as polyethylene or like plastic substances, cork or rubber or the compositions thereof, wood or synthetic materials known in the art or adaptable thereto. Preferably, our invention may

be manufactured in transparent or translucent forms to impart a pleasing appearance to the finished installations, but our invention is not limited within the purview thereof to materials or any specific category or class.

Referring to the drawing, Fig. 1 depicts a weatherstrip structure having a front wall 1, a rear wall 2, and a continuous web 3 spanning both walls across the top thereof.

The front wall 1 terminates along its bottom edge in an out-turned bead 4 which, with the outer surface of the front wall 1, functions as a resilient seat engageable by the bottom marginal edge of the next adjacent louver panel L (Fig. 2) disposed above the panel having the weatherseal fitted thereon, as will be understood, a strip of the weatherseal being mounted as a sheath to overlie the top marginal edges of the panels L.

The walls 1 and 2 are formed before mounting on the panels so that they incline downwardly and inwardly thus providing a pair of opposed jaws adapted to grip therebetween the louver edge received thereby.

Along the bottom edge thereof, the rear wall 2 has a downwardly and inwardly extending flange or flap 5 disposed at a level substantially below that of the bead 4 of the front wall 1. By this construction, the weatherstrip sheath develops a relatively more positive grip upon the louver panel held therein.

It is a characteristic of prior marginal weatherstripping of which we are aware, that when the louver panels move to their closed positions the weatherstripping has a tendency to become tilted by engagement therewith of the bottom edge of the panel thereabove so that the seal becomes displaced in parts from its position on the panel. That is to say, by virtue of the weathering and continuous exposure to the elements as well as the fact that many jalousie assemblies are often out of true rectangular construction, the impingement of the bottom edges of the upper panels against the weatherstripping therebelow has a tendency to dislodge or disturb the alignment of the weatherseals on closure of the louver panels.

The form of the invention illustrated in Fig. 4, has the front and rear walls thereof, 1' and 2', connected by a top continuous web 3', the front wall terminating in a bottom bead 4' and the rear wall having a bottom inwardly directed flange 5'. The walls 1' and 2' are tapered downwardly whereby to provide an excess of material as indicated by the divergence of the reference lines 6. This excess material compensates for wastage of internal wall surfaces so as to permit the interior of the sheath, as in the region R, to be removed on these surfaces for the purpose of enlarging the sheath to accommodate louver panel sizes of relatively greater thicknesses, leaving, at the same time, wall thicknesses adequate dimensions. The trimming or removal of such internal areas may be accomplished as, for example, by any suitable abrasive methods.

It will be understood that weatherstrip structure fabricated in accordance with the principle of our invention may be in any size or capacity adjustable to louver or window panes of various thicknesses or gauges or slats functioning as such.

The invention is thus seen to provide a marginal weatherseal meeting the objectives thereof hereinbefore set forth and capable of sealing otherwise defective louvered or like openings against outside elements.

Of course, our invention is susceptible of various modifications without departing from the scope thereof, as hereinafter claimed.

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Having thus described the invention and the mode of its practice, what we claim as new and desire to secure by Letters Patent of the United States, is:

1. In a weatherstrip structure of elastic material of the character described, the combination of spaced apart front and rear walls and a web spanning the tops thereof to define an open-bottom sheath adapted to receive therein the upper marginal edge of a pivotable louver, an out-turned bead formed along the bottom edge of said front wall and forming therewith a seat engageable by the bottom edge of the louver next above said first mentioned louver to form a weather seal between said louvers when in closed positions, said bead having a thickness approximately the same as that of said front wall and substantially less than the distance between said front and rear walls, whereby said seat is not exposed to the weather when said louver is in closed position, said rear wall having a downwardly and inwardly directed marginal extension disposed substantially below the level of said bead, said marginal extension being arcuate in cross section with the terminal portion thereof extending almost completely across the space between said front and rear walls when said weatherstrip structure is unmounted, whereby the walls thereof incline inwardly and downwardly when unmounted on a louver but form a pair of opposed, tightly clamping jaws engageable therewith when mounted thereon.

2. In a weatherstrip structure for jalousie louvers which overlap on closing, said weatherstrip being formed of elastic material of the character described, the combination of spaced apart front and rear walls and a web spanning the tops thereof to define an open-bottom sheath

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adapted to receive therein the upper marginal edge of a pivotal louver, an out-turned bead formed along the bottom marginal edge portion of said front wall and forming therewith a seat engageable by the bottom edge of the louver next above said first mentioned louver to form a weather seal between said louvers when in closed positions, said bead having a thickness substantially less than the distance between said front and rear walls, whereby said seat is not exposed to the weather when said louver is in closed position, said rear wall extending downwardly and inwardly with a marginal extension thereof disposed substantially below the level of said bead, said marginal extension having a terminal portion that extends almost completely across the space between said front and rear walls when said weatherstrip structure is unmounted, whereby said rear wall inclines inwardly and downwardly when unmounted on a louver but with said front wall forms a pair of opposed, tightly clamping jaws engageable therewith when mounted thereon.

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