May 15, 1956 W. F. WARNS 2,745,150

GLASS PANEL SUNSHIELD

Filed Nov. 23, 1954

Fig. 1.

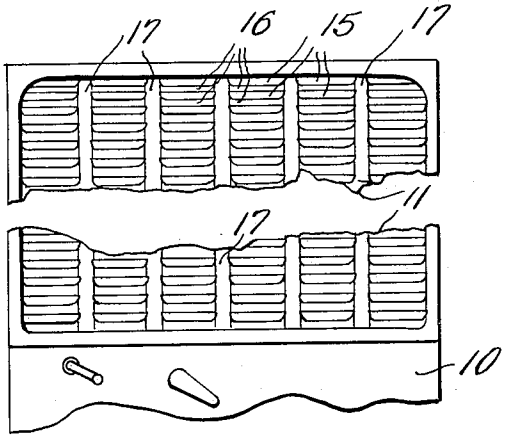


Fig. 2.

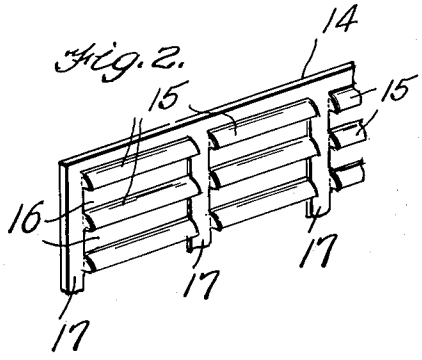


Fig. 4.

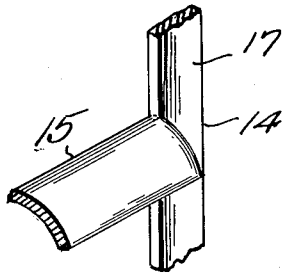


Fig. 3

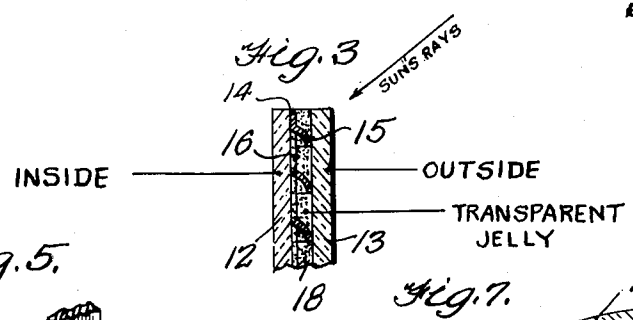


Fig. 6.

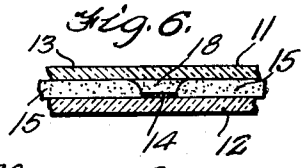


Fig. 5.

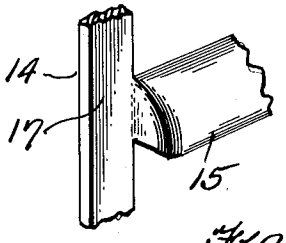


Fig. 8.

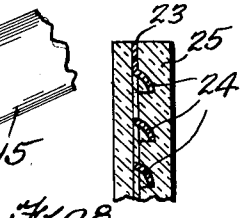
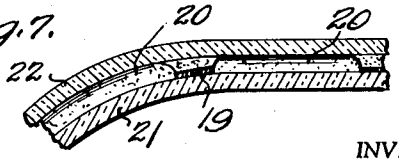


Fig. 7.



INVENTOR

WILLARD F. WARNS

BY Irving A. McCathran

HIS ATTORNEY

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GLASS PANEL SUNSHIELD

Willard F. Warns, Corpus Christi, Tex.

Application November 23, 1954, Serial No. 470,675

1 Claim. (Cl. 20—56.5)

This invention relates to a glass panel sunshield for motor vehicles, and the like, and has for one of its objects the production of a simple and efficient device for shielding the inner face of the glass panel from the heat of the sun's rays, particularly where the vehicle is air-conditioned.

A further object of this invention is the production of a simple and efficient glass or other transparent panel wherein the sunshield is interposed between an inner and outer sheet and within the transparent jelly or cement which holds the sheets together, the shield having fixed outwardly inclined louvers.

Other objects and advantages of the present invention will appear throughout the following specification and claim.

In the drawing:

Figure 1 is a fragmentary plan view of an automobile door showing the sunshield carried by the transparent panel of the door window;

Figure 2 is a fragmentary perspective view of the sunshield which is adapted to be interposed between the inner and outer sheets of the transparent panel;

Figure 3 is an enlarged fragmentary vertical sectional view of the panel;

Figure 4 is a fragmentary perspective view of a portion of the sunshield and showing one of the louvers;

Figure 5 is a fragmentary perspective view of another portion of the sunshield;

Figure 6 is a longitudinal sectional view;

Figure 7 is a fragmentary longitudinal sectional view of a curved panel; and

Figure 8 is a vertical sectional view of a further modified form of panel.

By referring to the drawing in detail, it will be seen that **10** designates an automobile door which is provided with a transparent panel **11**. The panel **11** comprises an inner transparent sheet **12** and an outer transparent sheet **13** between which is interposed a sunshield **14**, formed of sheet metal, plastic, or other suitable material. This sunshield **14** comprises a thin originally flat sheet, from which are pressed the integral louvers **15**. These louvers **15** extend horizontally and are vertically spaced to define intermediate slots **16** to provide view openings to facilitate vision outwardly through the panel

11. The louvers **15** are arranged in vertical rows of any desired number and the rows of louvers **15** are formed integral with the vertical reinforcing strips **17**, the louvers **15** and strips comprising the single unit sunshield **14**. The louvers **15** are inclined outwardly and downwardly from the inner sheet **12** toward the outer sheet **13**, as shown in Figure 3.

The sunshield **14** is placed or embedded in an adhesive transparent jelly film or cement **18**, between the inner sheet **12** and the outer sheet **13**, which jelly or cement **18** constitutes a binder to hold the sunshield **11** in position and to hold or bind the transparent inner and outer sheets **12** and **13** in assembled relation relative to the sunshield **14** as one transparent panel unit. This structure, while acting as an efficient sunshield, also provides a shatterproof panel. It is important that the louvers be vertically spaced to facilitate vision through the panel. It is also important that the louvers **15** be inclined outwardly and downwardly in a manner whereby the downwardly directed rays of the sun will be shielded from the inner sheet **13**.

The sunshield **14** by being formed of thin material from which the louvers **15** are punched, may bend to conform to the contour of a curved transparent panel. This type of structure is shown in Figure 7 wherein the sunshield **19**, which carries the louvers **20** similar to the louvers **15**, is interposed or sandwiched between the inner and outer transparent sheets **21** and **22**, respectively, and the parts are secured together by transparent adhesive jelly or cement.

As is shown in Figure 8, the sunshield **23** comprising the spaced horizontal louvers **24**, may be moulded directly within the glass or other transparent panel **25**. It is important that the louvers **24** be inclined outwardly and downwardly within the panel, as shown, to shield the inside face of the panel in the same manner as previously described.

It should be understood that certain detail changes may be employed without departing from the spirit of the invention, so long as such changes fall within the scope of the appended claim.

Having described the invention, what I claim as new is:

A screen of the class described comprising a plurality of horizontally extending louvers arranged in vertically spaced relation, said louvers being outwardly and downwardly inclined, an inner transparent sheet and an outer transparent sheet, and said screen being embedded in a transparent jelly securing substance in encasing relation between the inner and outer sheets, said transparent jelly binding said inner and outer sheets and the screen into one transparent panel.

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