March 3, 1959 J. P. SOARES 2,875,825

MARQUEES AND SIMILAR DEVICES

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FIG. 1.

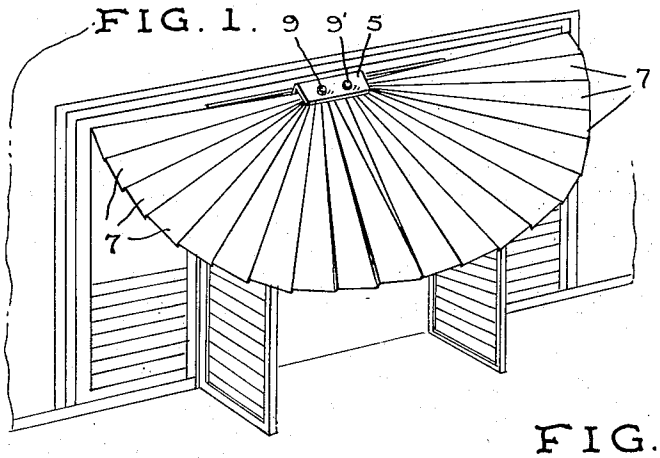


FIG. 2.

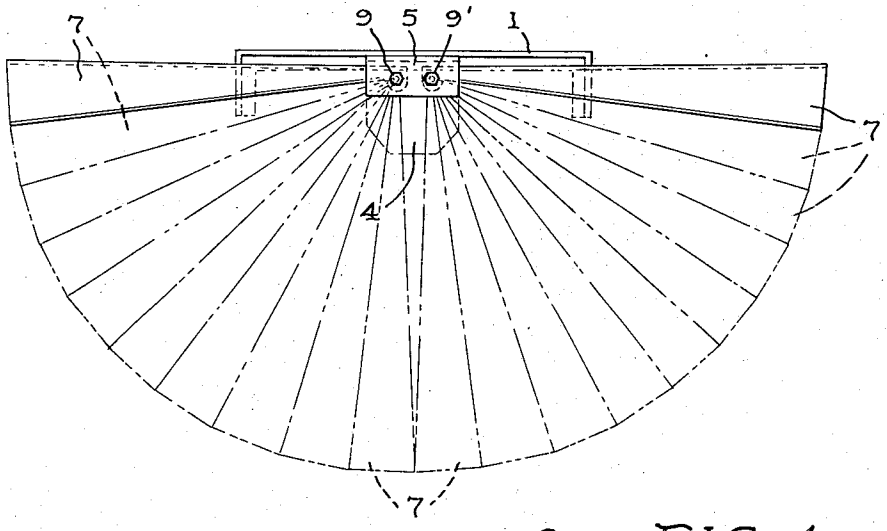


FIG. 3.

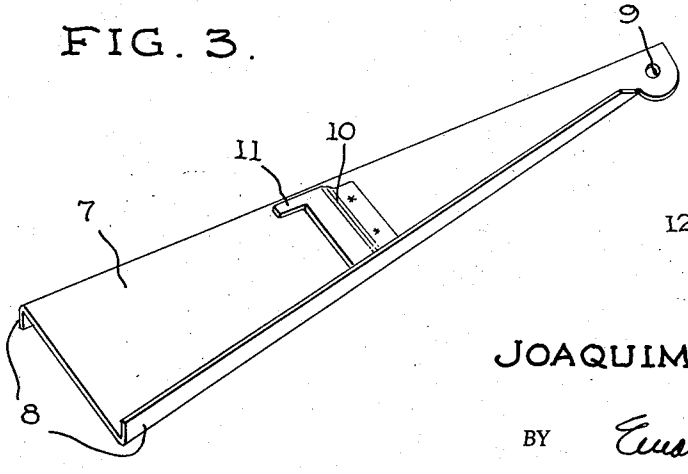
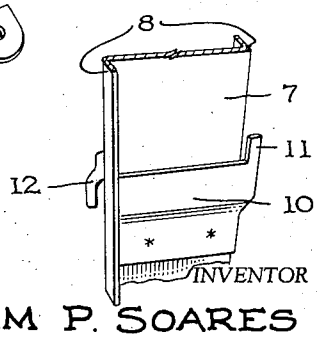


FIG. 4.



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FIG. 5.

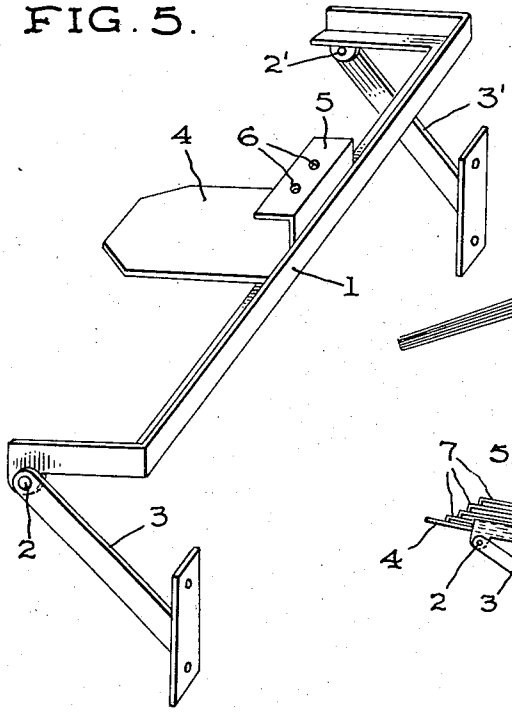


FIG. 6.

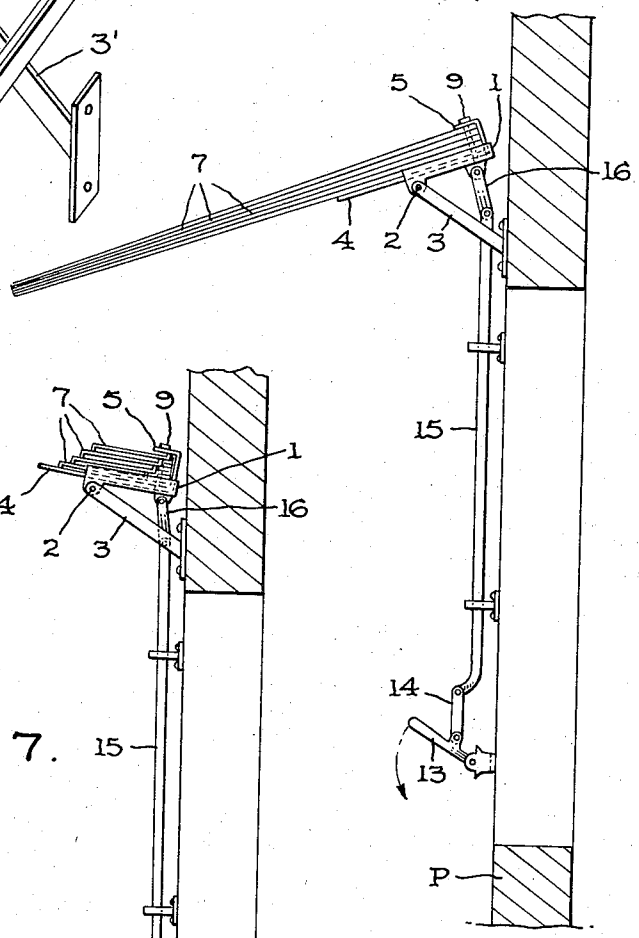


FIG. 7.

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2,875,825

MARQUEES AND SIMILAR DEVICES

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Application January 19, 1956, Serial No. 560,261
Claims priority, application Brazil March 12, 1955
6 Claims. (Cl. 160—62)

The present invention relates to improvements in marquees or similar protective structures and refers to a novel type of retractible or removable shelter capable of being used both in buildings and in other circumstances, f. i., on small push-carts, always in view of the protection of a window opening or of a street vendor against the rays of the sun and other climatic agents.

However, since the main object of the present invention is probably the protection of window openings, we shall now describe same in view of said aim, undoubtedly of very great interest in tropical climates in which, even though an open window should be one of the coolest points within a building, said points frequently become the hottest due to the strong incidence of the sun's rays.

The object of the present invention is exemplified in the attached drawings, wherein:

Fig. 1 is a perspective view of the novel marquee or protection installed above a window opening,

Fig. 2 is a plan view of another embodiment of same,

Fig. 3 is a perspective view of one of the retractible members of said marquee,

Fig. 4 is a partly broken view of the member illustrated in Fig. 3,

Fig. 5 is a perspective view of the structure supporting said retractible or movable members, and,

Figs. 6 and 7 illustrate, in side view, the marquee in its opened and closed positions, respectively, together with the corresponding control or operating means.

The drawings show that the novel and original marquee or protection comprises a U-shaped supporting structure made of steel angle-bars **1**, articulated at the ends, at **2, 2'**, to two brackets **3, 3'**, which are fixed to the building wall P in the manner clearly visible in Figs. 6 and 7.

The central lower part of angle-bar **1** has a substantially poly-hedrical or semicircular projection **4** and the other web of same has a central, also L-shaped projection provided with a pair of orifices **6** to which correspond two other similar orifices not visible in the drawing provided in the lower part of angle-bar **1** or in projection **4** of same.

The movable or retractible members **7** of the novel marquee claimed in the present invention, illustrated in detail in Figs. 3 and 4, are parts made of some thin and light raw material, such as aluminium, are substantially triangular in shape and have one or both longitudinal edges bent at right angles, in the form of ribs **8**, to ensure greater resistance and are moreover provided with a small orifice **9** at their narrowest end corresponding to the acute angle of the triangular configuration.

Said members or blades **7** are distributed in two superposed series comprising the same number of members and are pivoted around vertical shafts **9', 9'** which pass through said orifices **6, 6**, preferably with the interposition of washers (not shown in drawing).

Besides being mutually superposed said series of members **7** are interconnected by some adequate means or device capable of preventing their absolute separation

without hindering relative movement between same which should correspond to an angle substantially equal to that of the blades themselves.

In the embodiment shown in the drawing, said interconnecting means for said members **7** comprise a metal channel-like member **10** brazed or riveted unto one of the faces of each member **7**, said channel-like member being provided with an end projection **11**; within the former normally operates a projecting and upwardly directed point **12** brazed or otherwise attached to the opposite end of the other face of said blade **7**, preferably adjacent said ribs **8**.

In the embodiment of the invention illustrated in the figures of the attached drawing the novel marquee or shelter is actuated simply by the action of gravity and is therefore provided with a device similar to those used for the well-known swivelling window-frames, illustrated in Figs. 6 and 7, and which enables the operator, by means of handle **13** and pivoted or hinged bars **14, 15** and **16**, to incline supporting structure **1** at an angle of at least 15° to 25°, on either side of the horizontal, from an open downwardly sloping position, shown in Fig. 6, to a closed upwardly inclined position illustrated in Fig. 7.

The operation of our novel marquee or protection is very simple and efficient, as explained below, starting from the closed position of Fig. 7, wherein the blades are almost completely superposed and slope inwards within the supporting structure **1**, in the direction of wall P.

So, in order to open the marquee, to place same in an operating position, the operator will merely have to actuate handle **13** in an upward direction, thereby swivellling structure **1**; when this is done the blade **7** starts to slide on one another, as the members of a lady's fan, under the action of gravity, said movement being aided by the mutual engagement of the interconnecting means **10, 11, 12**, since displacement of one blade will necessarily ensure displacement of an adjacent one, as can be easily seen from the drawings.

When said blades are entirely projected, as shown in Figs. 1, 2 and 6, they are supported up to a certain point by metal plate **4** and the outer edge of the leading blade of a series, for instance, at the right in the drawing, surmounts or abuts the outer edge of the corresponding leading blade of the other series, thus efficiently preventing the passage of the sun's rays.

In order to close the marquee the operator will merely have to actuate handle **13** in the opposite direction, see Fig. 7; thus all said blades, on account of the mutual engagement of their respective ribs **8**, will retract and slide one over the other, until the final closed position, shown in Fig. 7 is reached.

The marquee may be held in either of said extreme positions or in any other intermediate position by means of any sort of well-known retaining device, capable of acting upon handle **13** and possibly similar to a brake lever in engagement with a toothed segment.

Another among various other embodiments of the present invention consists in providing a direct control for the opening and closing of the marquee, thus dispensing recourse to gravity. In such a case the supporting structure **1** should remain perfectly horizontal and the pivot shafts **9', 9'** of blades **7** should descend along the window masonry besides being lengthened and provided at their lower ends with a handle or crossbar accessible to the operator; the outer leading blade of each series should further be rendered unitary with its shaft by some adequate means; thus, a simple manual rotation of shafts **9', 9'** in the adequate direction would, by means of devices **10, 11** and **12** or ribs **8**, respectively, ensure the desired opening or closing of the marquee.

The object of the present invention, herein described and exemplified, may of course be embodied in various other forms, within the scope of the attached claims. Thus the arrangement of the blades in plan view may be polygonal, as illustrated in Fig. 1 or semicircular as shown in Fig. 2; the blade interconnecting device, illustrated in Figs. 3 and 4 may assume various other forms; the control or operating device may be different from that shown in Figs. 6 and 7, and so on.

I claim:

1. An awning or the like for the protection of a building opening from elements of the weather, comprising, brackets located at each side of said opening, a frame between said brackets and pivotally supported therein for tilting movement relative to a horizontal plane, spaced upper and lower plates carried by the medial portion of said frame, and two sets of substantially triangular vane members each set having their apical portions mounted in super-posed stacked relation for gravitational swinging movement in opposite directions on separate vertical pivots disposed between said plates, means for connecting medially adjacent vanes to provide a continuous shield when both sets are open, and an operator for tilting said frame, whereby when the frame is tilted downwardly and outwardly the vanes will move from a medial registering position toward the ends of the frame to shield said building opening, and when the frame is tilted upwardly and

inwardly, the vanes will return to the registering relation aforesaid.

2. An awning or the like according to claim 1, wherein, the frame is of substantially U-shape providing arms at the ends thereof and whose front ends are pivoted to said brackets, and the operator is pivotally connected to the rear end of one of said arms.

3. An awning or the like according to claim 1, wherein, at least one edge of each vane is provided with a marginal off-set flange.

4. An awning or the like according to claim 1, wherein, the vanes are provided at opposite edges with flanges disposed in opposite directions.

5. An awning or the like according to claim 1, wherein the vanes are provided with transverse medially disposed members having means at the ends thereof for interconnecting adjacent vanes.

6. An awning or the like according to claim 1, wherein each vane has at least one marginal offset flange and means located medially thereof for interconnecting adjacent vanes.

References Cited in the file of this patent

UNITED STATES PATENTS

612,871	Sander et al.	Oct. 25, 1898
2,050,178	Hite	Aug. 4, 1936
2,517,281	Brown	Aug. 1, 1950