ABSTRACT OF THE DISCLOSURE

A skylight, cupola or the like has a fixed bottom header part, an opening top part and a controlling mechanism. Parallel edges of either the header part or the opening part have the shape of a trough closed at both ends. The controlling mechanism consists of two levers connected with the two parts and slidably mounted in the troughs so that they are completely enclosed when the top part is in its closed position.

The present invention concerns skylights, cupolas and similar constructions, and more particularly those of the opening type.

In general, the skylights and cupolas of the opening type rest on a fixed base, a part which might be called "header," between which and the front part is inserted the controlling mechanism for rotating aforesaid opening part about a horizontal axis.

The controlling mechanism sometimes causes certain difficulties, more particularly in modern constructions in which the opening part most of the time consists of at least one thickness of transparent plastics shaped in any appropriate way but without comprising a frame or other constructional part in which this mechanism could be fitted.

The object of the invention consists in improvements in the cupola or skylight, and more particularly in the header, and especially in cupolas made by shaping at least one thickness of transparent plastics, whereby the header may be made of any appropriate material.

These improvements substantially consist in shaping two parallel edges of one of the constituent parts of the cupola or skylight and more particularly in the header in the form of a trough preferably closed at both ends and the length of which, the width and the depth are determined according to the complete controlling mechanism of the opening part intended to be entirely enclosed therein when the skylight or cupola has been brought back into the closed position.

The controlling mechanism may be of any suitable type mounted in the trough and comprising at least one arm hinged at one end to said mechanism and at the other end to the opening part. This mechanism is such that the arms in question are strong enough to support said opening part in any intermediate position between both end positions which are respectively the position of opening and of total closure.

In one preferred form of embodiment, said housings in the form of a trough are mounted facing two upper parallel edges of the header assuming the general shape of a truncated pyramid.

These hollow parts can easily be molded together with the other constituent parts of aforesaid header of a material which is either the same as or different from that of the opening part.

Such housings will, for instance, be made in the form of deep moldings provided in two opposite sides of a frame edging the top part of aforesaid header, whereby this frame is substantially similar to that which forms the base of the opening part, in such way that in the closing position of the latter, when both frames are superposed, the corresponding parts of the base and of the opening part act as a lid or shutter of said housings and containing the controlling mechanism.

These improvements, object of the present invention, may of course be applied in an infinity of various forms according to the actual characteristics of the constituent parts of the cupolas and skylights and their fixed part.

By mere way of example and without implying any limiting features, a preferred form of embodiment is described in detail hereafter with reference to the appended drawings of which:

FIGURE 1 illustrates a perspective view of a seat or fixed part of a cupola or skylight to which have been applied the improvements according to the present invention;

FIGURE 2 is a perspective view of a skylight conforming to the present invention and shown in the open position;

FIGURE 3 illustrates the same skylight in the closed position.

In this embodiment, the header is indicated as 1 and the opening part as 2. Aforesaid header substantially consists of a body 3 shaped as a truncated pyramid having, at the bottom, a base 4 and, on top, a frame 5 parallel to this base piece. Two opposite edges 6–7 of said frame 5 are provided with deep moldings 8–9 respectively, which in the present instance form the characteristic feature of the present invention. These deep moldings, closed at both ends 10–11 and 12–13 respectively, act as troughs or housings for the controlling mechanism, which latter is of any appropriate type.

The opening part 2 is, in the present instance, formed by a body 14 with an outside bulge and fitted with a base 15 extended on all four sides by a throw 16. Said base 15 is preferably similar to the frame 5 on top of the fixed part 1. The opening part is connected to the controlling mechanism by arms 17–18 and is able to turn about the axis X-Y.

In another characteristic embodiment of the present invention, aforesaid housings 6–7 might also be provided against two opposite edges of the opening part. Such housings might even be provided simultaneously in the header and in the opening part so as to fit over each other in the closed position of the latter in order to form a totally closed recess in this position of the opening part. The body of the fixed and moving parts may of course assume any appropriate shape and dimensions.

The present invention concerns, in the capacity of a new industrial product, not only the header and the opening part but also the entire skylight or cupola applying such fixed part and/or such opening part.

What I claim is:

1. A skylight, cupola and similar device comprising a fixed header part, and an opening part, having a controlling mechanism, wherein two parallel edges of one of said parts have the shape of a trough closed at both ends, the
length, width and depth of which are determined according to said controlling mechanism of the opening part, said controlling mechanism being constituted by two levers the one and the other ends of each of which are pivoted to the other of said parts and slidably mounted in a respective one of said troughs respectively, and said controlling mechanism being completely enclosed when the device has been brought into its closing position.

2. A skylight, cupola and similar device according to claim 1 wherein said troughs are made in two opposite sides of the base of said opening part.

3. A skylight, cupola and similar device according to claim 1 wherein said troughs are made in two opposite sides of the top part of the header.

References Cited

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