(No Model.)

J. SMITH.

SKYLIGHT OR ANALOGOUS STRUCTURE.

No. 540,821. Patented June 11, 1895.

Fig. 1.

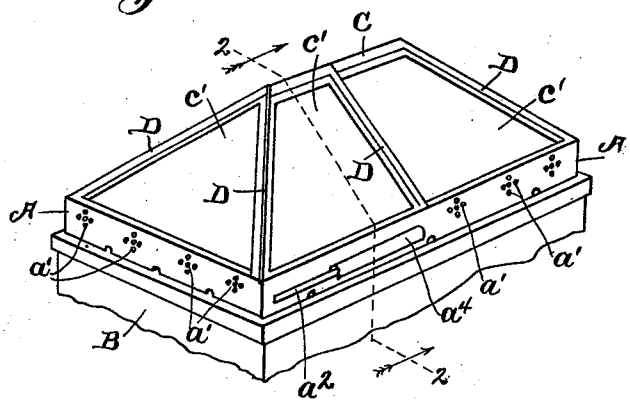


Fig. 3.

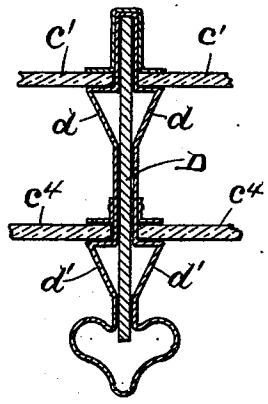
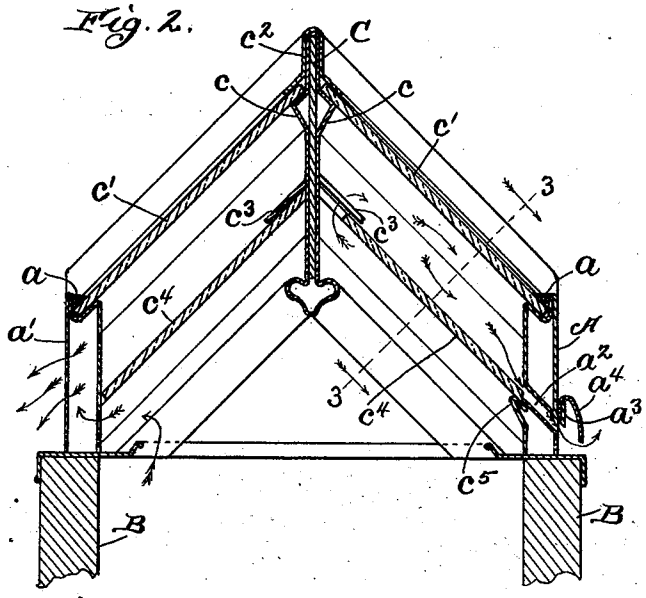


Fig. 2.



Witnesses:

R. J. Jacker,

C. A. Duggan.

Inventor:

John Smith

By Chas. C. Tillman Atty.

UNITED STATES PATENT OFFICE.

JOHN SMITH, OF CHICAGO, ILLINOIS.

SKYLIGHT OR ANALOGOUS STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 540,821, dated June 11, 1895.

Application filed February 9, 1895. Serial No. 537,807. (No model.)

To all whom it may concern:

Be it known that I, JOHN SMITH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Skylights or Analogous Structures, of which the following is a specification.

This invention relates to improvements in skylights and like structures; and it consists in certain peculiarities of the construction, novel arrangement and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The objects of my invention are, first, to provide a skylight or analogous structure, which shall be simple and inexpensive in construction, strong and durable, yet effective in operation; second, such a structure, which by reason of the peculiar arrangement of its various parts will prevent the condensation of moisture on the glass used in the skylight and will also prevent any drippings from the skylight, as is often the case in the skylights now in general use and is so objectionable, and, third, a skylight in which the glass may be readily removed from the frame or structure to be cleaned and again replaced.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of a skylight embodying my invention. Fig. 2 is a vertical sectional view taken on line 2 2 of Fig. 1, and Fig. 3 is a similar view taken on line 3 3 of Fig. 2.

Similar letters refer to like parts throughout the different views of the drawings.

A, represents the frame, which is made of any suitable size, form and material, and is mounted on a suitable foundation or structure B, or other support. Above the frame A, is provided a horizontal rib C, which is located at the apex of the roof of the skylight and is held in position by means of the ribs D, which connect at one of their ends with the rib C, and at their other ends with the frame A, of the structure. The rib C, is formed near its upper portion with brackets or ledges c, on each side thereof against which rest the upper portions of the top glass plates c', which plates are securely held on the ledges or brackets c, by means of the piece c^2, which is clamped over the upper portion of the rib C, as is clearly shown in Figs. 2 and 3 of the drawings. The lower edges of the top glass pieces c', rest on the upper surface of the frame A, which is provided around its perimeter with a trough or groove a, to conduct the water from the exterior of the glass plates. Below the ledges c, on each side of the rib C, are provided projections c^3, which rest on the upper surface of the inner or lower glass plates c^4, which plates are held in position at a suitable distance below the glass plates c', by means of the transverse ribs D, which ribs are of substantially the same construction as the rib C, just above described, and have two sets of ledges or brackets d, and d', upon which the upper plates of glass c', and lower ones c^4, rest respectively.

The frame A, is provided at suitable points with perforations or openings a', to admit of the passage of air between the upper and lower plates of glass, which is essential in order to prevent the accumulation of moisture on either of the said plates. As is clearly shown in Fig. 2 of the drawings, it will be seen that the upper edge of one of the glass plates c^4, is located at a little distance from the stem of the rib C, thus allowing an opening for the passage of air, which when it becomes heated from the room below will ascend and pass through said openings in the direction of the arrows, and thence out through the openings a', in the sides of the main frame.

In order to allow of the glass plates being cleaned and the lower ones c^4, being removed for said purpose I provide the frame A, with a longitudinal slot a^2, near the point where the plates c^4, of glass rest on said frame, so that they, the plates, may be slightly lifted from their rests c^5, on the inner portion of the frame, and then passed through the opening or slot a^2, as is obvious. When these slots are employed in the frame A, it is obvious that the openings a', for ventilation will not be required, as a sufficient quantity of air will be admitted through the slots or openings a^2.

In order to prevent snow and rain being driven into the slot a^2, I provide on the out-

side of the frame A, just above the slot, a flange or projection a^3, into which I fit a piece a^4, which is substantially semicircular in cross section and depends at its free edge somewhat below the opening or slot, as is clearly shown in Fig. 2 of the drawings.

While I have described the ribs C, and D, employed in the construction of my skylight, yet I do not desire to be limited to any particular form in the construction of said ribs or of the frame of my skylight, as the same may be varied according to the requirements of each individual case.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the frame A, provided with ventilating apertures and slots a^2, having the movable piece a^4, in its sides, with the exterior plates or covering c', secured to the frame, the inner plates or covering c^4, located at a slight distance from the outer covering and near the slots within the frame, substantially as described.

JOHN SMITH.

Witnesses:
CHAS. C. TILLMAN,
E. A. DUGGAN.