

*G. Hayes,
Skylight.*

No. 87,668.

Patented Mar. 2, 1869.

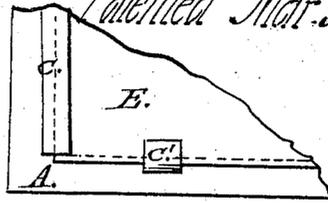


Fig. 1.

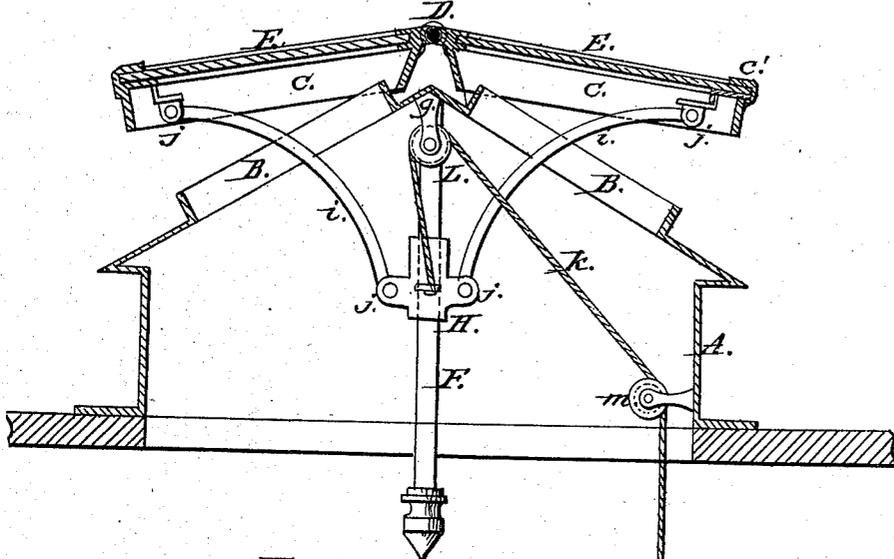
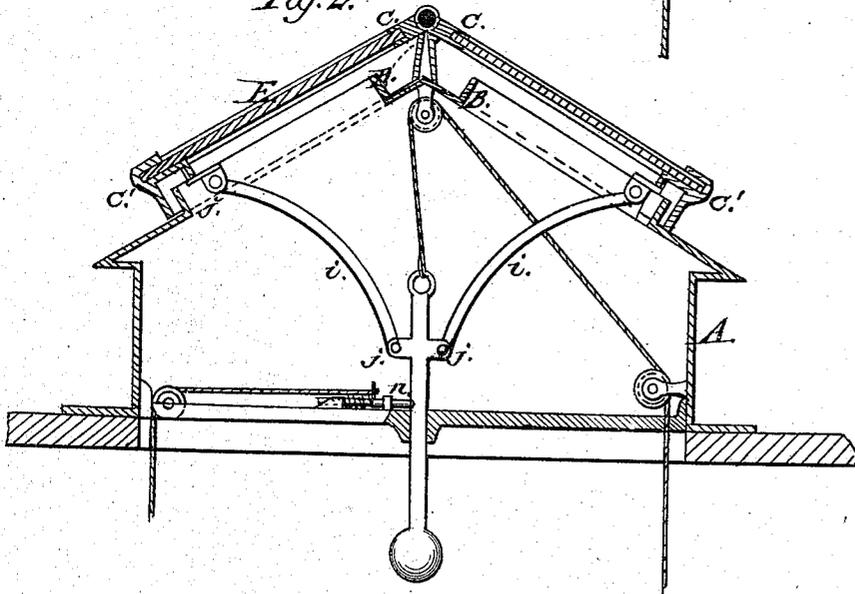


Fig. 2.



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United States Patent Office.

GEORGE HAYES, OF NEW YORK, N. Y.

Letters Patent No. 87,668, dated March 9, 1869.

IMPROVED SKY-LIGHT AND VENTILATOR.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE HAYES, of New York, in the county of New York, and State of New York, have invented a new and useful Improvement in Sky-Light and Ventilator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved method of constructing and arranging sky-lights and ventilators on dwelling-houses and other buildings, and consists in securing the glass of the sky-light in a metallic frame, without the use of putty or other equivalent material, and arranging it so that all leakage is avoided, and in the method of operating a series of sky-lights or ventilators, either in a cluster or range, as will be hereinafter more fully described.

In the accompanying drawings—

Figure 1 represents a vertical section of my arrangement, showing the frame and sky-light, with the method of raising and lowering the same, the latter being represented as open for ventilation.

Figure 2 is a vertical section of the sky-light, represented as closed, with the manner of operating the same somewhat modified.

Figure 3 is a detached plan view, showing the method of securing the glass in place.

Similar letters of reference indicate corresponding parts.

A represents the frame, which is made of metal and fastened to or placed over the scuttle-hole in the roof of the building.

This frame may be made with two or more sides, of any required form or size, as octagons, or a polygon of any number of sides.

B represents broad vertical flanges, over which the hinged sashes C close when down.

D represents the hinge of the glazed sashes C.

The glass E is confined in the sash by flanges, as seen in the drawing on all sides, except the bottom, where it is held by the hooks C'.

In this example of my invention, I fix a vertical rod or bar, F, to the apex g, upon which is a sliding sleeve, H. This sleeve is connected with the sashes by the rods i, which are connected by hinge-pins at each end, as seen at j.

It will be seen that by raising and lowering the

sleeve H, the sashes will be raised or lowered, as may be desired.

This is done by means of the cord k passing over the pulley L and guide-pulley m, and extending down to any desired or convenient point.

The modification, fig. 2, is arranged in a similar manner, but the sliding sleeve is not employed.

The bar to which the rods i are attached is not fixed, but rises and falls with the sashes.

This bar may be held in any desired position, by means of the spring-catch n, which is made to engage with notches in the bar, as seen in the drawing.

Where a cluster of sky-lights or ventilators is used, as, for instance, in the form of an octagon, each light may be connected with a central bar by the rods i, and the whole be operated simultaneously, the same as the two seen in the drawing.

When the sky-lights or ventilators are placed in a range or row, they may be constructed, as regards the frame and method of securing the glass, as already described, and operated by a horizontal bar provided with arms projecting therefrom, or in any other suitable manner.

By the use of the hooks C', the lower edge of the glass will readily permit the flow of water from the same, which would not be the case if a flange were bent over the entire lower edge. It also facilitates the application of pieces of glass having irregular lower edges.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The metallic frame A and the sash or hinged frame C, constructed and arranged substantially as shown and described, for the purposes set forth.
2. The bar F, or its equivalent, whereby two or more ventilators or sky-lights may be raised and lowered, by means of connecting-rods i, substantially as described.
3. In combination with a sky-light, the method of securing the glass in the frame or sash C, substantially as shown and described.

The above specification signed by me, this 24th day of December, 1868.

GEORGE HAYES.

Witnesses:

FRANK BLOCKLEY,
ALEX. F. ROBERTS.