(No Model.)

J. M. LUTZ.

Skylight.

No. 235,367. Patented Dec. 14, 1880.

Fig. 1.

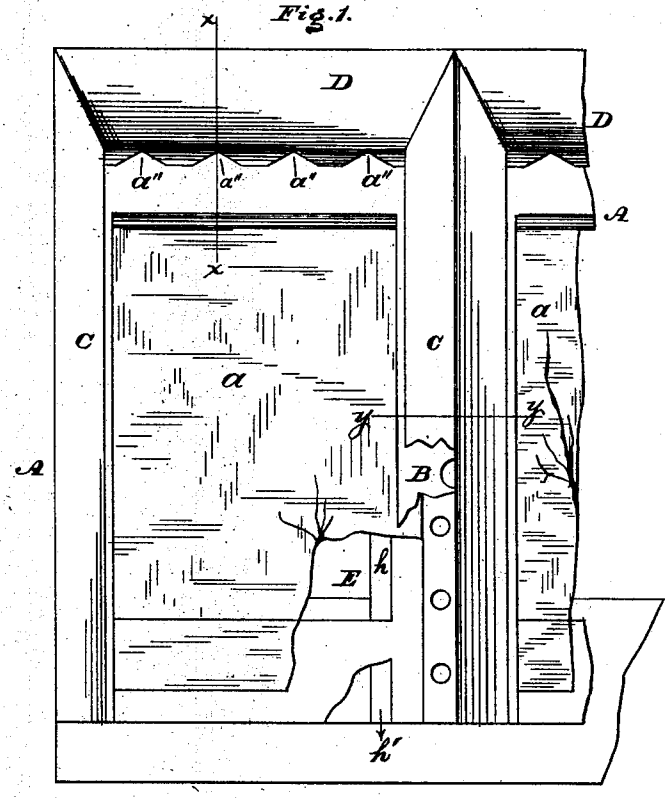


Fig. 2.

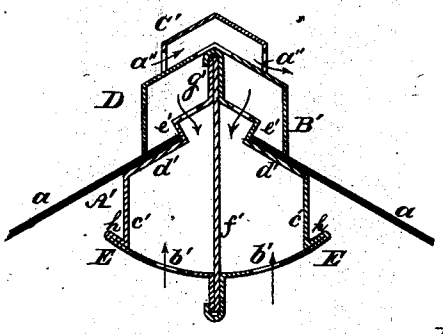


Fig. 3.

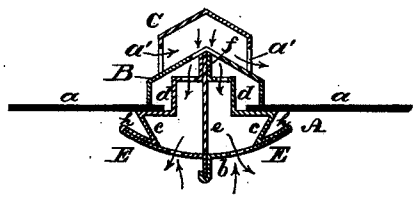
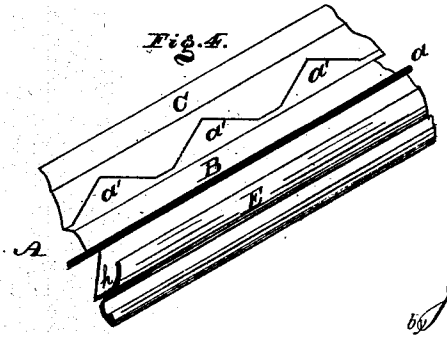


Fig. 4.



Witnesses:

A. P. Grant,

M. F. Kircher

Inventor:

John M. Lutz,

by John A. Wiedersheim

ATTORNEY.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN M. LUTZ, OF PHILADELPHIA, PENNSYLVANIA.

SKYLIGHT.

SPECIFICATION forming part of Letters Patent No. 235,367, dated December 14, 1880.

Application filed September 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. LUTZ, a citizen of the United States, residing in the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Skylights, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a plan view of the skylight embodying my invention. Fig. 2 is a vertical section in line *x x*, Fig. 1. Fig. 3 is a transverse section in line *y y*, Fig. 1. Fig. 4 is a side elevation of a portion thereof.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to skylight-frames constructed to admit air but exclude rain; and it consists in the peculiar construction and combination of parts hereinafter set forth, whereby the said result is more effectually accomplished.

Referring to the drawings, A represents a hollow metallic frame, to which panes of glass *a* are attached, properly located and supported on framing at the top of the apartment, entry, &c., after the manner of a skylight.

The side rails of the frame consist of a perforated base, *b*, from which rise the angular walls *c*, on the upper portion of which the glass *a* is supported, and another angular portion, *d*, the upper wall of which is perforated, the walls *c d* together being stair-shaped.

The top of the part *d* is extended upwardly, and to the extension is secured a brace or sustaining-standard, *e*, rising from the base *b*, or said standard may extend above the part *d*, in either case forming a peak, *f*. Where adjacent rails meet they are connected and the standard or brace *e* is central.

Suspended from the peaks *f* are inclined and perforated ledges B, which overhang the portions *d*, and have their lower edges extend to the glass *a;* and above the ledges are caps C, which rest on and are secured to the ledges, the sides of the caps being perforated, as at *a'*, and tops closed.

The operation is as follows: Fresh air may be admitted through the perforations *a'* of the caps C, pass through the perforations of the ledges B, those of the angular portions *d* and bases *b*, and thus reach the apartment, &c., below the skylight. The escape of the heated matters of the apartment, &c., is through the perforations of the base *b*, angular portions *d*, ledges B, and caps C.

Water is prevented reaching the openings or perforations of the ledges B by means of the caps C, which overhang and guard said openings, and also reaching the perforations of the angular portions *d* by means of the ledges B, which overhang and guard said latter perforations, the rain or water dropping from the closed tops of the caps to the sides of the ledges, and thence on the glass *a*, from whence it runs off.

The ridge-rail D consists of a hollow metallic frame, A', with a base, *b'*, upright pieces *c'*, inwardly-extending diagonal pieces *d'*, on which the upper ends of the glass are supported, and angular parts *e'*, the upper portion of the latter being perforated, the two sections forming the rail D uniting at top, where they are secured and sustained by a brace or standard, *f'*, rising from the base *b'*.

A perforated ledge, B', is suspended from the top or peak *g'* of the parts *e'*, and its sides reach the glass *a* at the upper ends thereof, and a cap, C', with perforated sides *a''*, surmounts the ledge B', being supported on and secured to the same.

It will be seen that the perforations of the ledges are covered by the overhanging cap C', and those of angular portions *e'* by the overhanging ledges B', whereby rain, &c., is prevented entering the several perforations and reaching the apartment, &c.; but the escape of warm or impure air from and entrance of fresh air to the apartment, &c., are readily accomplished by means of said perforations.

The back supporting-rails E for the glass of the frame A are crimped or depressed, thus forming channels *h* beneath or behind the glass. Should water escape between the joints of the glass and rails, it will fall into said channels, which communicate one with another, the side channels extending under the bottom rails as outlets *h'*, and thus the dripping water is permitted to pass off.

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

1. In the side rail of a skylight-frame, the combination of perforated base *b*, perforated stair-shaped part *c d*, central brace, *e*, and a perforated cap or caps for shedding rain, substantially as set forth.

2. The perforated frame A, in combination with a perforated ledge, B, and a covering-cap, C, substantially as and for the purpose set forth.

3. The perforated frame A′, in combination with the perforated ledge B′ and covering-cap C′, substantially as and for the purpose set forth.

JOHN M. LUTZ.

Witnesses:
JOHN A. WIEDERSHEIM,
A. P. GRANT.