(No Model.)

G. HAYES.

METALLIC SKYLIGHT.

No. 248,858. Patented Nov. 1, 1881.

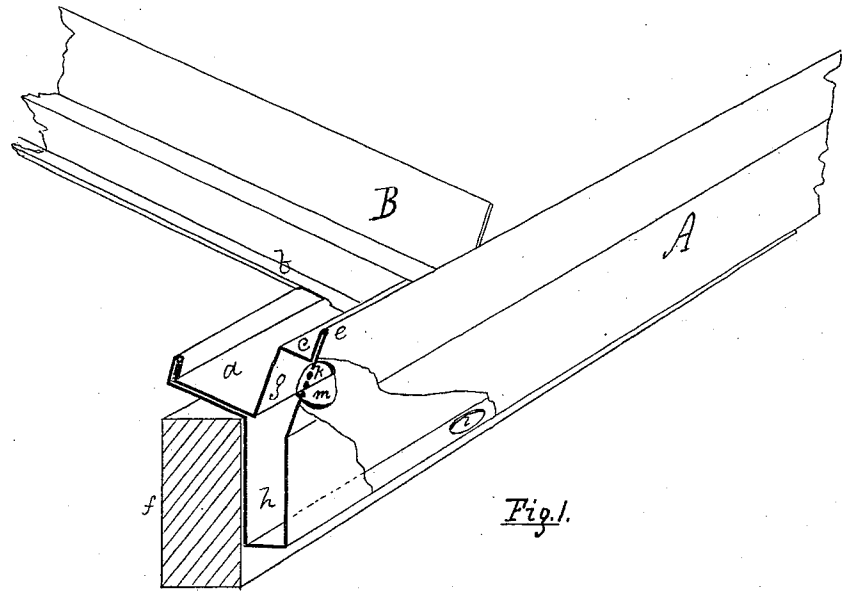

Fig. 1.

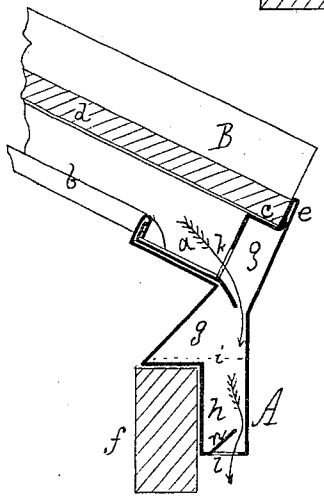

Fig. 2.

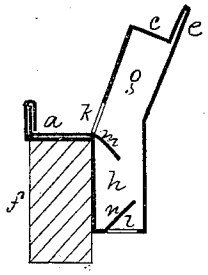

Fig. 3

Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE HAYES, OF NEW YORK, N. Y.

METALLIC SKYLIGHT.

SPECIFICATION forming part of Letters Patent No. 248,858, dated November 1, 1881.

Application filed March 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HAYES, a resident of the city, county, and State of New York, and a citizen of the United States, have invented a new and useful Improvement in Metallic Skylights, of which the following is a specification.

My invention relates to the frame forming the base against or upon which the lower ends of the bars or rafters rest; and my improvement consists in providing the said base-frame with an outside or supplemental gutter inclosed within a chamber, the chamber with gutter being partially or wholly beyond the outer line of the roof-curb at opening and beyond the usual base (interior) gutter of the frame.

It further consists of the combination of apertures leading from interior gutter of frame into said chamber, and outlet-apertures leading from supplemental gutter to the roof, affording exit for water resulting from leakage or condensation. The arrangement of the said apertures is such that they—that is, the inlet to chamber and outlet therefrom—break joint vertically, the object being to prevent the blowing in of snow, rain, or dust in storms, and also to keep out as much as possible the wind itself, although admitting of air for ventilation. The chamber also allows greater space for the escape of water, and freer passage than could be obtained by tubes or the chamber heretofore used, which more effectually prevents the freezing of the escaping condensed vapor from within.

I usually provide guards to each aperture, as hereinafter described, to break up the wind and to assist in keeping back the snow or dust.

The supplemental gutter may be left open at the extreme ends, and thus avoid the necessity of openings at any other point, the end openings being protected by valves or guards.

In the drawings accompanying, Figure 1 shows a piece of the base-frame of a skylight improved with a piece of a bar or rafter to show the connection therewith—the end of frame in section, the remainder in perspective. Fig. 2 shows a modification, being merely another manner of folding the metal to obtain the same result. Fig. 3 is also a modification.

A represents the base-frame, and B the rafter or bar.

a represents the inner base-gutter taking the water from the bar-gutters *b*.

c shows the step or rabbet forming the rest for the lower ends of the glass plates *d*. The usual stop is shown at *e*.

At *f* is shown the usual curb around the opening in roof.

At *g* is shown the upper section of my new chamber, and at *h* is shown the lower section of the chamber, or the two parts may be considered as two chambers, and a division is shown at *i*, which may be used or not, as desired.

At *k* is shown the apertures leading from base-gutter *a* to interior of chamber, and at *l* is shown outlet-apertures leading from interior of chamber to the outer air or roof. These outlets are not placed immediately in line, but break joint vertically. I usually provide these outlets with guards, as at *m* and at *n*, to more effectually break up the currents; but these may be dispensed with, if desired.

I usually form the entire frame of one piece of sheet metal, including the inner base-gutter.

The bottom of chamber *h* forms the supplemental gutter, and it is wholly inclosed, except the outlets *l*, and receives the water of leakage or condensation from gutter *a* through apertures *k*. The said apertures *k* and *l* are not located in vertical line, but break joint to prevent the too violent entrance of wind, &c.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In the base-frame of a metallic skylight, the combination of inside gutter, *a*, inclosed chamber *g*, and lower or supplemental gutter or guttered chamber, *h*, substantially as described and set forth.

2. In the base-frame of a metallic skylight, wherein a chamber is formed outside the outer line of the curb, the combination of outlet-apertures *k* and *l*, arranged to break joint vertically, substantially as described and set forth.

3. In the base-frame of a metallic skylight, the chamber or hollow space *g h*, having for the top thereof the ledge step or rabbet *c*, supporting ends of glass plates, the said chamber arranged at its bottom to form a supplemental gutter, and having inlet-apertures *k* and outlet-apertures *l*, substantially as and for the purpose described.

GEORGE HAYES.

Witnesses:
JOHN H. GIBSON,
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