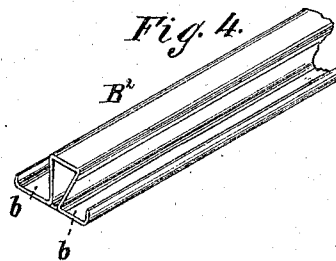
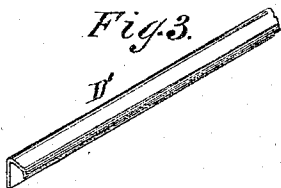
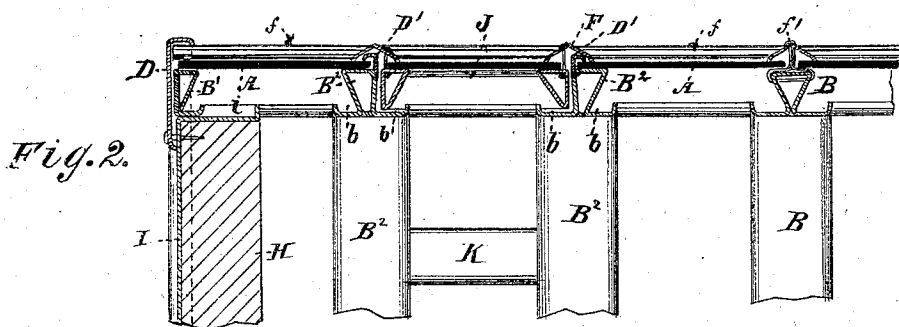
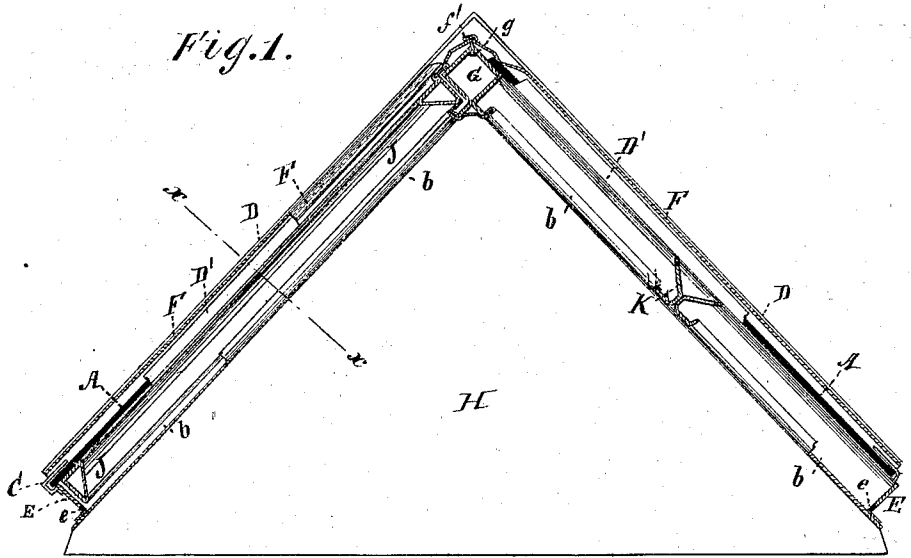


G. E. DAYTON.
Metallic Skylights.

No. 137,832.

Patented April 15, 1873.



Witnesses:
G. Marthys.
Solon Kemon

Inventor:
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PER *[Signature]*
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UNITED STATES PATENT OFFICE.

GEORGE E. DAYTON, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN METALLIC SKY-LIGHTS.

Specification forming part of Letters Patent No. **137,832**, dated April 15, 1873; application filed March 17, 1873.

To all whom it may concern:

Be it known that I, GEORGE E. DAYTON, of Baltimore city, in the State of Maryland, have invented a new and useful Improvement in Metallic Sky-Lights; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification.

The invention relates to metallic sky-lights; and consists in doing away entirely with the rabbet usually employed, and bedding the glass on top of a peculiarly-shaped bar, the subjacent gutter providing for water that comes through bedding, and also for condensation. It also consists in a cap of novel form, which admits of being simply fastened by wires passing from the top of the bar and through the cap, the ends being then turned down in order to make them fast. It also consists in a ridge-bar of a new shape and configuration, which enables me to dispense with the usual rabbet and allow the glass to rest on top, the bends varying in shape so as to form any pitch required. This saves the time and labor of mitering each of the down-bars, and allows the caps above indicated to be used and simply wired thereupon. It also consists in flashing the wooden curb on top, and turning up the edge to form a gutter on the inside of said curb. It also consists in an improved construction and application of the opening sash-bar, in connection with the ridge, side, and end bars. It also consists in abutting the glasses, where two lengths are used on top of a cross-bar, thereby avoiding the usual lap, which is inconvenient and objectionable where thick glass is used.

Figure 1 is a vertical cross-section. Fig. 2 is a longitudinal section through line *xx* of Fig. 1. Fig. 3 is a detail view of side clasp *D'*, and Fig. 4 is a detail view of bar *B*².

In the drawing, *A* represents a single-length glass bedded or resting upon the flat top of bar *B*, which has the two troughs or channels *b b* branching out therefrom at the bottom, so as to receive and carry off any rain which may beat through the joints, or any moisture which may be able to find its way therethrough. *B*¹ is the outermost bar, formed on the same principle, but in the shape of a half-bar, which dis-

penses with the ordinary framing. *C* is an end stop for the glass; and *D*, a side clasp covering the joint made where outer base rests on curb-flashing. *D'* is the same clasp shielding glass at inside of gutter-bar. This construction of bar-support for the glass thus not only obviates all necessity for a rabbet, but also provides for arresting all moisture and preventing the usual damage thereby produced. *E* represents the lower base, perforated at *ee*, so as to form an exit for the water that may reach the troughs *b b*. *F* is a cap, which covers the joint of two panes, and is formed with polygonal sides placed at an obtuse angle to each other, so that the metal receives no strain and is not weakened by being bent at sharp angles, while it is perforated to allow the wires *f' f'* to pass up from the bar below, and simply bend over at the end to fasten them. *G* is the ridge-bar, bent into a four-sided figure, one of whose faces, on each side of apex *g*, forms a flat surface, on which the edge of the glass rests, while the metal is turned from the vertex of the angle that is opposite said apex, and bent so as to meet and be soldered to the bars *B*, and form a connecting-trough therewith. Over this is fastened, by wires, one of my improved caps. By this construction all rabbeting and all mitering of the glass-supporting bars are rendered unnecessary, this ridge-bar being simply varied in the relative arrangement of its sides to suit any pitch. *H* represents the ordinary wooden curb, to which I apply the flashing *I*, which is turned upon the edge to form a gutter, *i*, on the inside. *J* represents the opening sash-bar, which has, to receive the glass on top, plane faces, which are bent around to form side pieces that fit against the bars *B*², end base *E*, and ridge-bar *G*, closing into and resting in trough *b* in side and top, and having roof-flashing *i* at base inside. It is also provided with my improved caps, which move with it. This construction prevents any of the parts which operate as a protection against the weather from being liable to derangement or displacement so as to result in leaks. *K* is a cross-bar, connecting the bars *B*² *B*², and shaped in a manner corresponding therewith so that each length of glass can abut against and be received on opposite sides. This construction relieves the

builder of the necessity of lapping the edges of the glass, which cannot be done without being open to serious objections in case of the thick glass now generally employed.

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

1. The glass-support bar B, made flat on top, as described, to avoid the necessity of a rabbet.

2. The fastening-wires applied to cap E, as and for the purpose set forth.

3. The ridge-bar G, constructed without rabbet and adapted to different pitch of roof, as specified.

4. The flashing I turned up on edge to form a gutter, i, and applied to the wooden curb H, as and for the purpose described.

5. The opening sash-bar J, constructed and applied, in connection with the glass-supporting bars, as and for the purpose set forth.

6. The cross-bar K, constructed, arranged, and applied between the bars B² B² and the two lengths of glass, as and for the purpose specified.

GEORGE E. DAYTON.

Witnesses :

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