J. HENRY.

SKYLIGHT.

No. 190,856. Patented May 15, 1877.

Fig. 1.

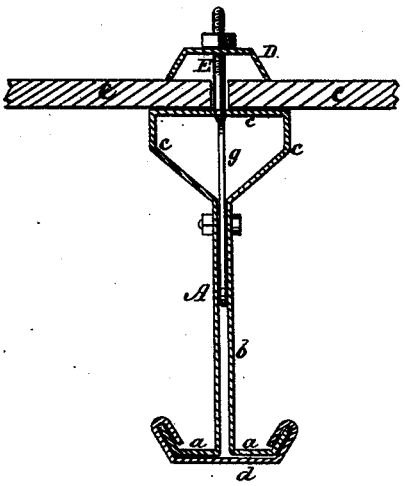


Fig. 2.

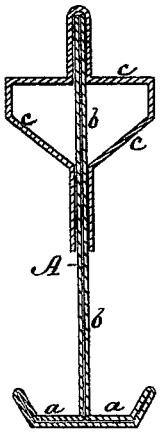


Fig. 3.

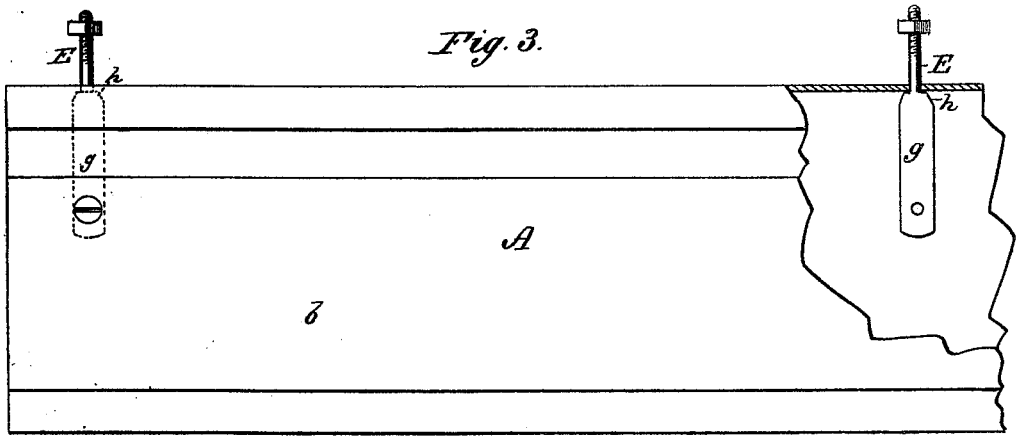
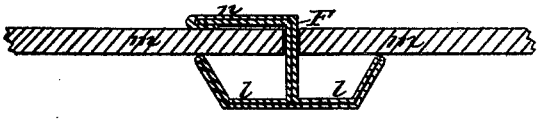


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH HENRY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SKYLIGHTS.

Specification forming part of Letters Patent No. **190,856**, dated May 15, 1877; application filed April 17, 1877.

To all whom it may concern:

Be it known that I, JOSEPH HENRY, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Skylights; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to a new construction of bars for supporting and securing the glass plates of a skylight, and is more particularly an improvement upon the bar for which I have received Letters Patent dated March 27, 1877, and reference is made to the latter to facilitate full understanding of this invention.

In the accompanying drawing, forming part of this specification, Figure 1 is a cross-section of my improved bar. Fig. 2 is a modification. Fig. 3 is a side view, part being broken away to show the construction and arrangement of parts. Fig. 4 is a cross-section of a double gutter-joint or cross-bar.

The bar A has approximately the form (in cross-section) of the ordinary I car-rail. It consists of gutter-beds *a*, the body or central vertical part *b*, and the glass-supporting portion *c*. As shown in Fig. 1, the head or top *c* of the bar is flat, and formed in one piece with the body *b* and gutters *a*, the latter being connected by a clasp or tie-piece, *d*; but, as shown in Fig. 2, the head or top *c* is made separate from the remaining parts *b a*, which are made in one piece, and the clasp *d* is dispensed with.

When head *c* is made separate and detachable from the body *b* a projection may be formed in the middle to receive the upper end of part *b*. The edges of the glass panes or plates *e* rest upon the flat top *c* of the bar, and a cap, D, is employed to cover the joint. The bar and cap are firmly united by means of screw-bolts E, which pass through the cap and the head *c* of the bar, and have flattened shanks *g* and shoulders *h*, whereby they are adapted to enter between the sides of the body *b*, and to support the flat top of the head *c*. The flat shanks of the bolts are secured to the bar A by means of cross-bolts or rivets, and the detachable head *c*, Fig. 2, of the bar is (in practice) likewise secured by the same device. F is a double gutter-joint, designed to serve as a cross-bar and auxiliary to the rafter or main bar A. It is formed of a single plate of sheet metal. The gutters *l l* lie under the adjacent edges of the glass panes *m m*, and the top flange *n* passes between them, and is bent or turned down upon one of said panes. The panes are thus supported, and all leakage prevented, the water which passes through the joint being collected in one or the other of the gutters *l l*, and conducted into one of the gutters *a* of the main bar or rafter A.

I am aware a single gutter-joint has been devised, and do not claim such device.

What I claim is—

1. The combination, with the heads of the skylight bar or rafter A—said heads being formed in one piece—of the bolts E having the shoulders *h*, all arranged as shown and described, whereby the latter abut the under side of the flat top of the heads, and support the same in the manner described.

2. The double gutter-joint, formed of a single plate of sheet metal, having the two gutters *l l* and bent-top flange *n*, as shown and described.

JOSEPH HENRY.

Witnesses:
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