

A. & G. BICKELHOUP.
 Skylight-Bar.

No. 219,063.

Patented Sept. 2, 1879.

Fig: 1

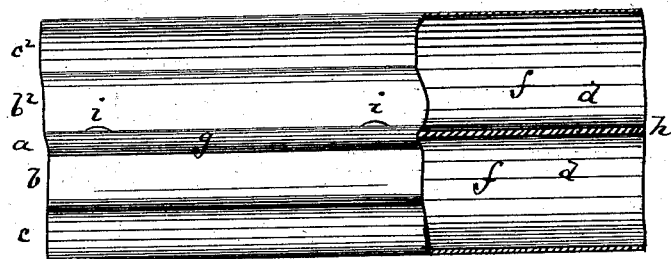
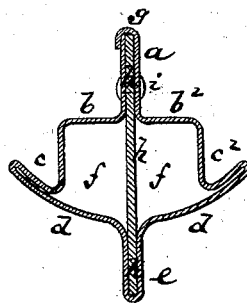


Fig: 2



Witnesses:

John C. Tunbridge
 James Turk

Inventors:

Adam Bickelhaupt
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 by their attorney
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UNITED STATES PATENT OFFICE.

ADAM BICKELHOPT AND GEORGE BICKELHOPT, OF NEW YORK, N. Y.

IMPROVEMENT IN SKYLIGHT-BARS.

Specification forming part of Letters Patent No. **219,063**, dated September 2, 1879; application filed March 25, 1879.

To all whom it may concern:

Be it known that we, ADAM BICKELHOPT and GEORGE BICKELHOPT, of New York, in the county and State of New York, have invented a new and Improved Skylight-Bar, of which the following is a specification.

Figure 1 is a plan or top view, partly in section, of our improved skylight-bar. Fig. 2 is a vertical cross-section of the same.

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

This invention relates to a new construction of metal bar for skylights and analogous structures; and it consists in a bar formed from a single strip of metal, bent to form certain shoulders and flanges, and to inclose a vertical side strip, all as hereinafter more fully described, whereby great strength and lightness, with freedom from joints, are secured.

In the drawings the improved skylight-bar is represented to form a central upwardly-projecting rib, *a*, two supporting-shoulders, *b b*², at each side thereof; troughs *c* and *c*² are at the outer side of and lower than each shoulder *b b*²; an arched convex bottom, *d*, and preferably, also, a central downwardly-projecting rib, *e*, all as clearly shown in Fig. 2.

The entire contour of this bar is made of one piece of sheet metal, bent to form a large interior cavity, *f*, between the shoulders *b b*² and the bottom *d*. We construct the bar by forming of one end thereof one thickness of the rib *a*; then bending the sheet outward to form one shoulder, *b*; then downward and then outward, but slightly upward, to form one trough, *c*; then downward and inward to form one-half of the bottom *d*; then downward to form one thickness of the rib *e*, if the same is desired; then upward to form the other thickness of the rib *e*; then upward and outward to form the second half of the bottom *d*; then downward and inward to form the second trough, *c*²; then upward and then inward to form the second shoulder, *b*²; then upward to form the second thickness of the rib *a*, and

then over the top edge of the first thickness of the rib *a* to form a top lap, *g*, all as clearly shown in Fig. 2.

By this means a very strong and simple, yet absolutely water-tight, skylight-bar is produced.

The shoulders *b b*² constitute supports for the glass. The troughs *c c*² receive the drippings from the glass and convey it to suitable outlets.

It will be seen that the troughs by our construction receive double bottoms, and that therefore, should the upper thickness become corroded or injured, to let the water through, the water can only enter the cavity *f*, and will not drip into the hall or room below.

The bar thus constructed may be made exceedingly strong by forming it around an upright metal brace, *h*, which enters between the two thicknesses of the ribs *a* and *e* and divides the chamber *f* into two parts, as shown. The lower rib, *e*, becomes particularly useful to grasp the lower end of the brace *h*.

Suitable rivets *i* may be passed through the two thicknesses of the upper rib, *a*, and through the brace *h*, as indicated, for the purpose of keeping the bar definitely in shape.

We claim—

The skylight-bar made of one single sheet of metal, which is first bent to form one-half of the upper rib, *a*; then outward to form the horizontal shoulders *b*; then downward to form vertical supports for said shoulders; then outward, but slightly upward, to form the trough *c*; then downward and inward to form one-half of the bottom *d*; then downward to form one-half of the rib *e*, and which is then bent upward correspondingly, substantially as specified.

ADAM BICKELHOPT.
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Witnesses:

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