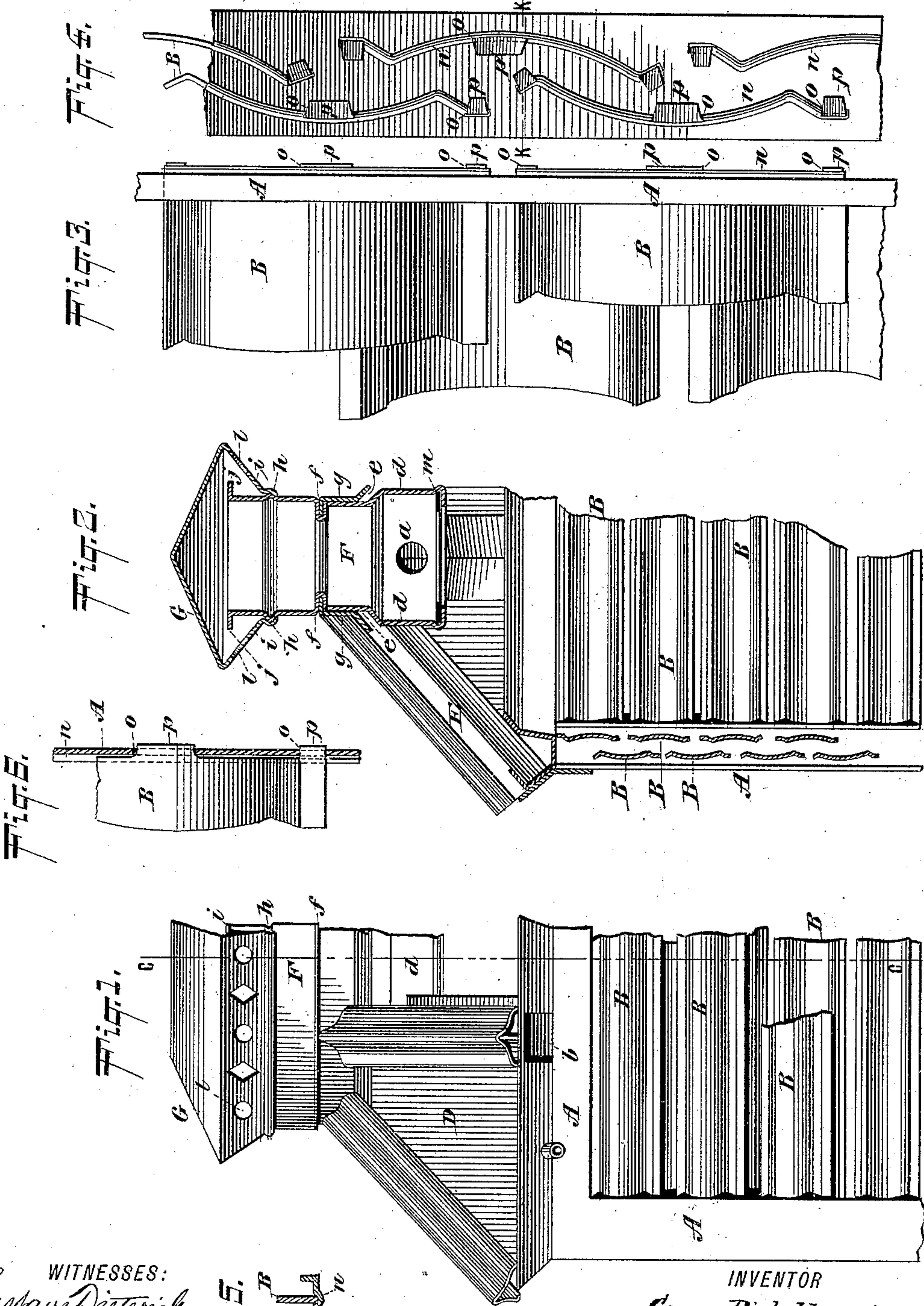


(No Model.)

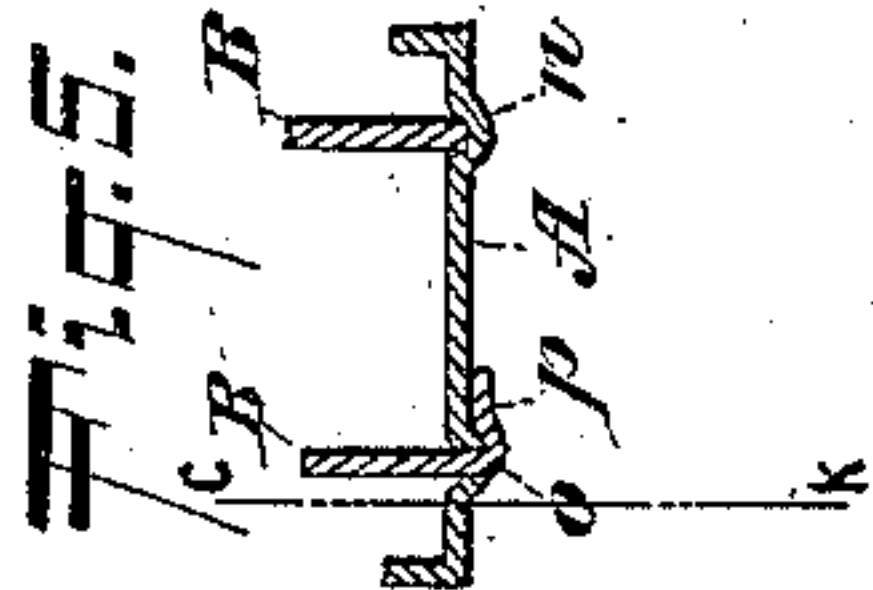
G. BICKELHAUPT.  
SKYLIGHT.

No. 445,685.

Patented Feb. 3, 1891.



WITNESSES:  
*Gustave Dietrich.*  
*William Goebel.*



INVENTOR  
*George Bickelhaupt.*  
BY  
*Brien & Mauck*  
his ATTORNEYS



# UNITED STATES PATENT OFFICE.

GEORGE BICKELHAUPT, OF NEW YORK, N. Y.

## SKYLIGHT.

SPECIFICATION forming part of Letters Patent No. 445,685, dated February 3, 1891.

Application filed June 21, 1890. Serial No. 356,245. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE BICKELHAUPT, a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Skylights, of which the following is a specification.

The object of my invention is to provide sundry improvements in skylights combining lightness of construction and the free circulation of air; and the invention is particularly designed as an improvement on Letters Patent No. 416,251, dated December 3, 1889, granted to me.

My invention consists in certain novel details of construction and in the combination of parts, which will be more fully set forth in a subsequent part of this specification, reference being had to the accompanying drawings, forming a part of the same, wherein—

Figure 1 is a side view, partly broken away, of a skylight embodying my invention. Fig. 2 is a vertical cross-section on the line *c c* of Fig. 1. Fig. 3 is an enlarged face view of the bars or slats forming the body of the skylight. Fig. 4 is a view of one end of Fig. 3, showing the fastening for the said bars or slats. Fig. 5 is a sectional view on the line *k k* of Fig. 4. Fig. 6 is a vertical section on the line *c k* of Fig. 5.

The main points of improvement over Patent No. 416,251 are the construction of the hood and support and the means of fastening the bars or slats forming the body of the turret of the skylight.

Referring to the accompanying drawings, A represents the frame of the turret; B, the bars or slats of the turret; D, its roof supported by the hollow rafters E, which also support the hood-support F and communicate with the external air through the opening *b*, Fig. 1, and with the interior of the hood-support F by openings *a*, thus allowing free circulation of air in the lower part of the hood-support F.

The hood-support F is formed of the upright sheets *d d*, and is constructed substantially as follows: The sheets *d* are bent inwardly to form rests *e* for the glass of the roof. Above the rests *e* the sides continue upward to *f*, where they are doubled inward to form a groove, in which a shield-piece *g* is clamped, whose outwardly-extending lower end is adapted to bear on the glass of the roof D.

Above this groove *f* the sides *d* are beaded at *h* to form a shoulder for helping sustain the converging sides *i* of the hood G. The sides *d* are then continued upward and bent outward at *j* to form a deflector. Below the rest *e* the hood-support F is carried straight down till it receives the ventilating-slide *m*. Hence no obstruction of light is caused by any outward extension of the lower part of the hood-support. The hood G has orifices *ll*, Fig. 1, to allow the escape of foul air when the ventilator *m* is open or to allow the escape of the air admitted through the hollow rafters E when the ventilator is closed.

The body of the turret is formed of bars or slats B, arranged in tiers, the one outside the other, the outer surface of the outer tier being preferably convex and that of the inner concave and placed behind the spaces formed between the bars of the outer tier.

Each bar B has end lugs or projections *p*. The bars B are secured to the frame A in the following manner: Corrugations or grooves *n*, exactly conforming with the ends of the bars, are formed in the frame, the said corrugations being perforated at *o* to allow the insertion of the projections *p* of the bars B. These projections are then turned down upon the frame A, thus securing the bars B in place. The ends of the bars B rest in the grooves *n* and make a very close joint at less expense than a soldered joint.

Having now described my invention, what I claim is—

1. The hood-support F, constructed with substantially vertical walls in its lower part and having the sides *d* above said lower part bent inwardly to form the rest *e*, also doubled inwardly to form the groove *f*, and beaded at *h* to form a hood-rest, and bent to form a deflector *j*, in combination with the hood G, rafters E, and shield *g*, substantially as described.

2. The frame A, having grooves *n*, shaped like the concavo-convex slats or bars B, and perforations *o*, in combination with the bars or slats B, having the projections *p*, as and for the purposes described.

GEORGE BICKELHAUPT.

Witnesses:

JAMES L. SUYDAM,  
LIVINGSTON EMERY.