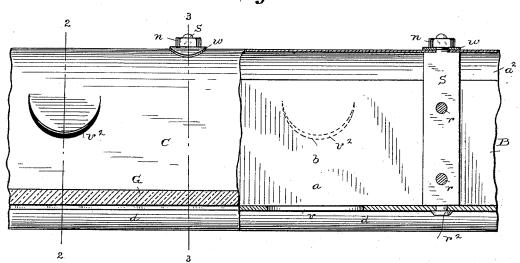
(No Model.)

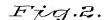
## J. M. CORNELL. SKYLIGHT VENTILATING SASH BAR.

No. 418,169.

Patented Dec. 31, 1889.

Fig.1.





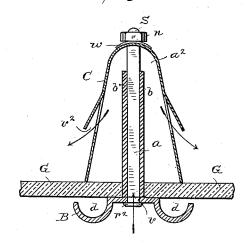
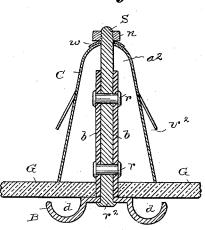


Fig.3.



Witnesses

H. A. Lamby J. M. Copenhaver Inventor

JOHN MILTON CORNELL

By his attorney

as Lumi

## UNITED STATES PATENT OFFICE.

JOHN M. CORNELL, OF NEW YORK, N. Y.

## SKYLIGHT VENTILATING SASH-BAR.

SPECIFICATION forming part of Letters Patent No. 418,169, dated December 31, 1889.

Application filed August 2, 1889. Serial No. 319,487. (No model.)

To all whom it may concern:

Be it known that I, JOHN MILTON CORNELL, a citizen of the United States, and a resident of New York, in the Scate of New York, have invented a new and useful Improvement in Skylight Ventilating Sash-Bars, of which the following is a specification.

This invention relates to those fire-proof skylights in which plates of glass are sup-10 ported and fastened by metallic "bars;" and it consists in such a skylight-bar provided with air-vents, and in the combination therewith of a combined ventilating - cap and keeper above the glass, and combined spac-15 ing-stude and fastening-bolts provided with screw-nuts and washers above the crown of the cap, as hereinafter set forth and claimed.

A sheet of drawings accompanies this

specification as part thereof.

Figure 1 of these drawings represents vertical sections through a skylight in two parallel longitudinal planes, and Figs. 2 and 3 represent cross-sections on the lines 2 2 and 3 3, Fig. 1, respectively.

Like letters of reference indicate corre-

sponding parts in the several figures.

My skylight-bars be are arranged in customary manner, so as to support the adjoining edges of plates G of suitable glass upon 30 longitudinal shoulders s, provided for this purpose. Immediately below the plane of the latter the customary drip-gutters dd provide for carrying off any drip of water due to leakage or condensation. The central up-35 right web of the bar is composed of parallel sub-bars b b with an air-space a between, into which vent-holes v in the bottom of the bar open at suitable intervals for the escape of air upward into and through said space a, as 40 indicated in Figs. 1 and 2. Λ combined ventilating-cap and keeper C, of arched shape, rests upon the glass on each side of the bars bb and extends over their upper edges, so as to leave a clear air-space  $a^2$  above and outside 45 of them, and this "cap," as it is hereinafter termed, is provided at suitable intervals with

hooded lateral vent-openings  $v^2$ , which are

conveniently formed by punching out semicircular portions of the sheet metal with the curve downward and displacing outward the 50 partly-severed metal to the required extent. The sub-bars which constitute each skylightbar B are rigidly united, and the cap C is attached thereto and fastened down upon the glass G, as shown at the right in Fig. 1 and 5 by Fig. 3, by means of studs S with the aid of rivets r, nuts n, and washers w, said studs being riveted endwise to the bottom bar, as shown at  $r^2$ , between the vent-holes v and at suitable distances apart. One stud every twelve inches is considered sufficient.

Having thus described the said skylight ventilating sash-bars, I claim as my invention and desire to patent under this specifi-

cation-

1. A skylight-bar having laterally-projecting glass-supporting shoulders and drip-gutters and provided at bottom with vent-holes between said gutters and with an air-space in its vertical web communicating with said vent-holes and with the outer air, substantially as hereinbefore specified.

2. A skylight-bar having vent-holes in its bottom and an air-space in its vertical web communicating therewith, in combination with a ventilating-cap and glass-holder of arched shape, forming an air-space in communication with the air-space of the bar and provided with hooded lateral vent-openings, substantially as hereinbefore specified.

3. A skylight-bar composed of a bottom bar provided with vent-holes and a pair of vertical bars with a space between, in combination with a superposed ventilating-cap and glass-holder having lateral vent-openings, and vertical studs within said space to which the several parts of the bar and said cap are attached, substantially as hereinbefore speci-

J. M. CORNELL.

Witnesses:

II. C. Tunis, H. A. CARROLL.