(No Model.)

J. SETON & W. CONOLLY.

SKYLIGHT.

No. 312,585. Patented Feb. 17, 1885.

Fig. 1.

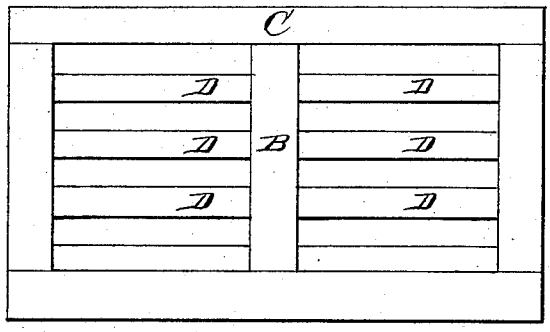


Fig. 3. Fig. 4. Fig. 5.

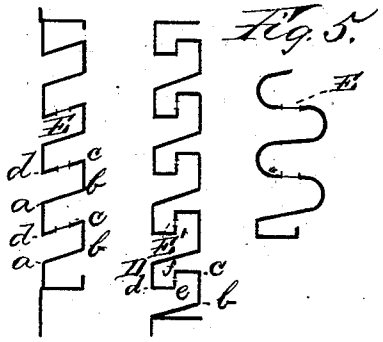


Fig. 2.



Fig. 8.

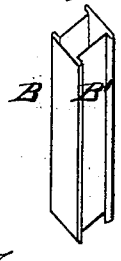


Fig. 6.

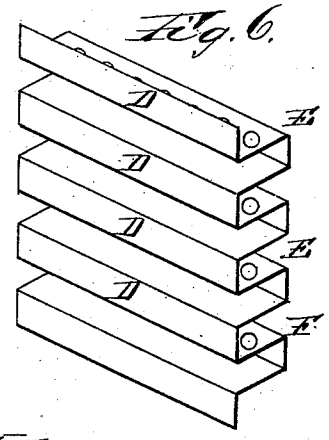


Fig. 7.

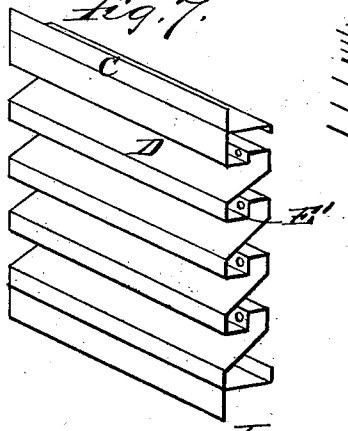
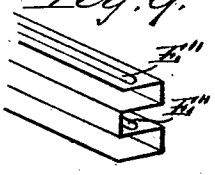


Fig. 9.



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UNITED STATES PATENT OFFICE.

JOHN SETON AND WILLIAM CONOLLY, OF BROOKLYN, NEW YORK.

SKYLIGHT.

SPECIFICATION forming part of Letters Patent No. 312,585, dated February 17, 1885.

Application filed May 7, 1884. (No model.)

To all whom it may concern:

Be it known that we, JOHN SETON and WILLIAM CONOLLY, both residents of the city of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Louvers for Turret-Skylights and other Structures, of which the following is such a full, clear, and exact description as will enable others skilled in the art to make and use the same when taken in connection with the accompanying drawings, in which—

Figure 1 is a front elevation of a turret usually surmounted by a skylight. Fig. 2 is a horizontal section of the same through the louvers. Fig. 3 is a vertical cross-section of the same through the louvers, base, and lintel. Fig. 4 is a vertical cross-section through louvers, showing a modification of the louver. Fig. 5 is a vertical cross-section through louvers, showing a modification of the louver. Fig. 6 is a perspective view of the louvers alone, as Fig. 3, showing the face and one end, the bends, and ventilating-aperatures. Fig. 7 is a similar view of the modification shown in section at Fig. 4. Fig. 8 is a view of the turret-posts, showing the grooves in the side or sides in which the louvers are to be placed. Fig. 9 is a perspective view of a portion of a modified louver.

The nature of our invention consists in the construction of a series of louvers in one continuous sheet so bent as to protect the ventilating-apertures therein, and to exclude rain, hail, or snow from the interior of the structure, in the combination of such louvers with recessed or grooved posts, so as to secure the louvers in position without rigid fastening, and the various combinations hereinafter specified and claimed.

The louvers are made by bending a sheet of metal in the form shown in Fig. 3. The sheet is of sufficient width to extend from one post to the next of the turret, and is bent so as to form an obtuse angle, as at *a*, and then another obtuse angle, as at *b*, on the opposite side of the sheet, and then an acute angle, as at *c*, on the same side of the sheet as *b*, and then an acute angle, as at *d*, on the opposite side of the sheet from *c*. The faces of the metal beyond the bends *a* and *d* are in the same plane and form the front of the louvers and between *b* and *c* in a parallel plane, while the faces of the metal between *a* and *b* and between *c* and *d* slope downward toward the plane of the front of the louvers depending upon the angles *a* and *d*. The series of bends may be repeated as often as desired, depending upon the number of louvers to be made. By this bending the metal is given a corrugated form, or so formed as to make pockets on each side thereof, one opening on the outside and the next on the inside of the sheet and structure.

In the metal between the angles *c* and *d* there are perforations, made as E in Fig. 6, through which the air has free circulation between the inside and outside of the structure, while any snow or rain which may be blown against the louvers is deflected by the bent sheet, and only the air finds its way through the openings, the snow or rain running off the inclined piece between *a* and *b*, being the lower side of the outside pocket.

The perforations may be made as a continuous slot from near one post to the next, so as to make a long opening, as shown at E″ in Fig. 9, thus allowing a freer circulation of air than when smaller holes are used. The openings made through the sheet connecting the inside and outside are thus made in the lower side of the inner pocket and the upper side of the outer pocket, or so near those sides that any rain or moisture on the inside of the louver may find its way out through the openings by gravity; but none can pass from the outside pockets to the inside.

The angles made in the sheet may be varied from those shown in Fig. 3, and other angles added, as shown in Fig. 4, wherein two additional angles are made in the piece between *c* and *d*, as at *e* and *f*, whereby a more circuitous course is made for the air, as the ventilation-perforations are made in the piece between *e* and *f*, as at E′ in Fig. 7.

Other modifications may be introduced, as making the pieces between *d* and *a* and between *b* and *c* cylindrical, as shown in Fig. 5.

We have generally made these louvers of galvanized sheet-iron; but any other suitable sheets will answer equally well. They may be made of a continuous sheet or of separate pieces, each having one, two, or more louvers, which may be placed together in the turret-frame.

The turret-frame in which we generally use

these louvers are made with posts B, having grooved sides, B′ B′, sufficiently wide to receive the louver-sheets, in which grooves the louvers are placed. The louvers may, however, be used with any forms of posts to which they can be fastened. When they are used with the grooved turret-post, the posts are set on the base so as to be the proper distance apart to receive the louvers within the grooves, and the louvers are placed therein, and the cap or lintel C is placed on and secured to the tops of the posts, securing the louvers within the grooved posts.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a louver, the sheet so bent as to form nearly horizontal pockets or corrugations in which are provided perforations in the upper side of the outer pocket and lower side of the inner pocket, substantially as specified.

2. In a louver, the sheet so bent as to form nearly horizontal pockets or corrugations, the lower side of the outer pockets being made to slope downward and outward, as specified and set forth.

3. The combination of the bent and perforated sheet-louvers with the turret-posts, as specified and set forth.

JOHN SETON.
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In presence of—
WM. C. SPRAGUE,
I. O. HORTON, Jr.