

M. W. PEHL.  
COMBINATION SKYLIGHT AND VENTILATOR.  
APPLICATION FILED DEC. 6, 1907.

913,556.

Patented Feb. 23, 1909.  
2 SHEETS—SHEET 1.

FIG. 1.

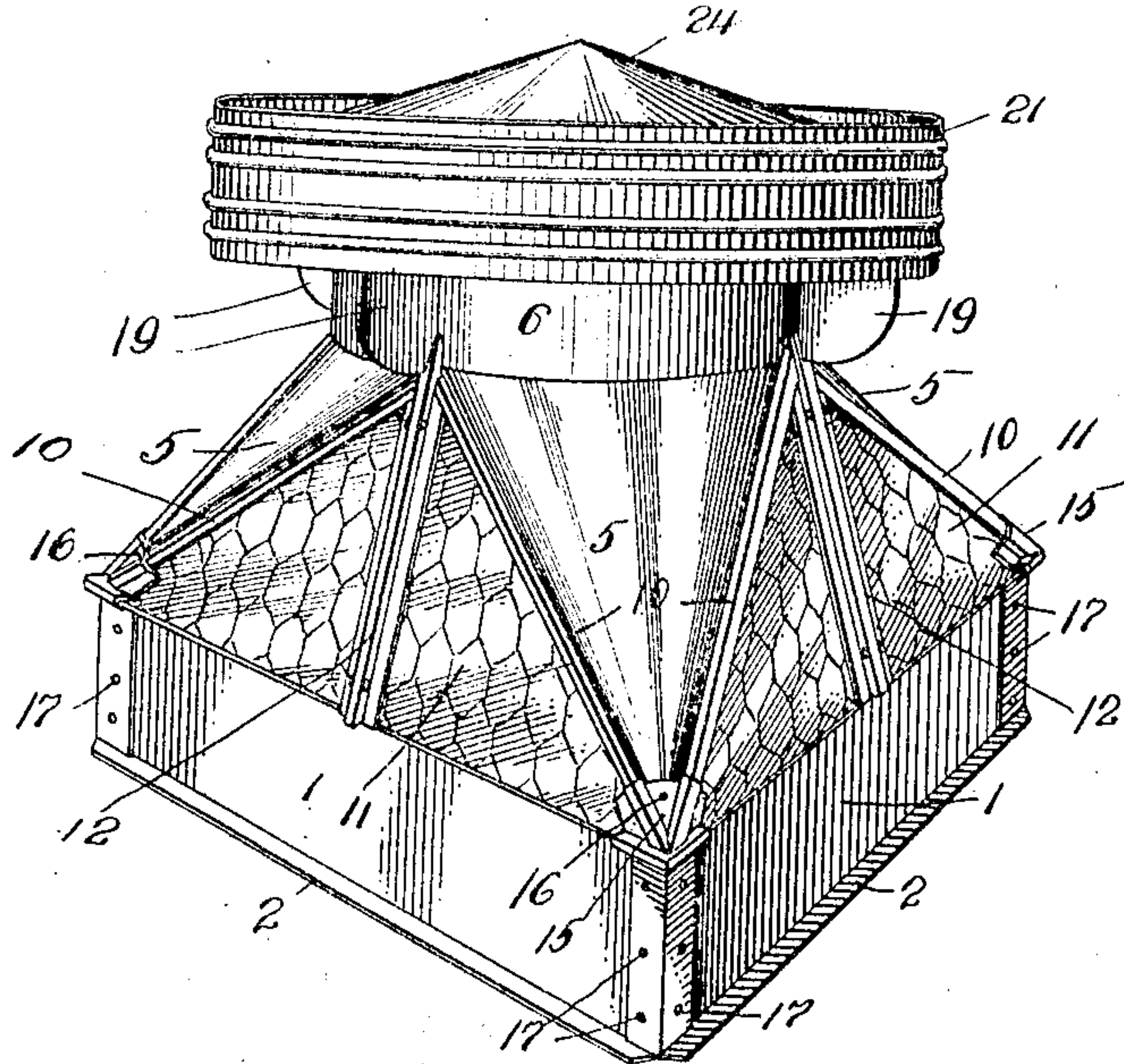
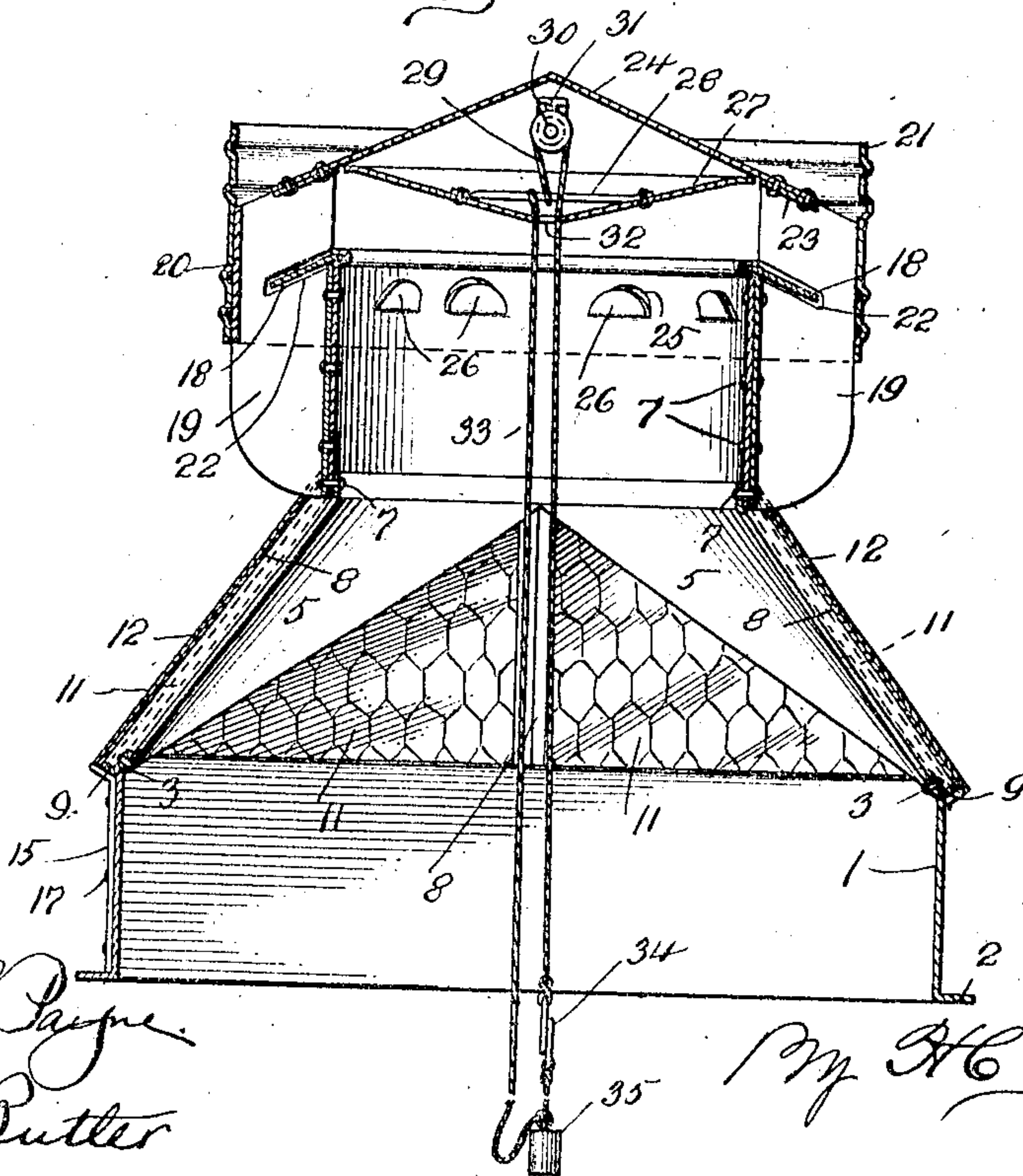


FIG. 2.



Witnesses

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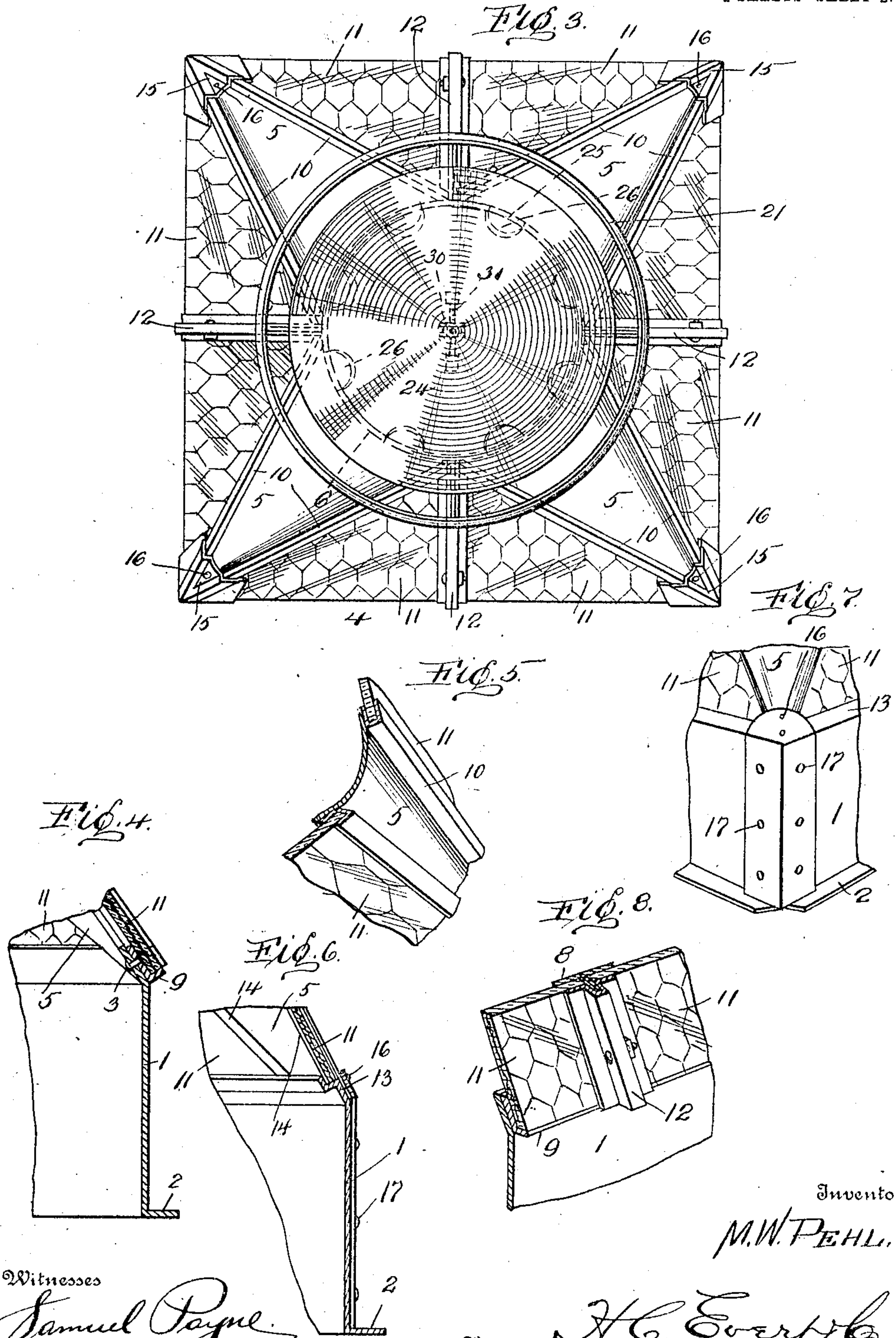
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Witnesses  
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# UNITED STATES PATENT OFFICE.

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## COMBINATION SKYLIGHT AND VENTILATOR.

No. 913,556.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed December 6, 1907. Serial No. 405,402.

*To all whom it may concern:*

Be it known that I, MAX W. PEHL, a citizen of the United States of America, residing at Bellevue, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Combination Skylights and Ventilators, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a skylight and the object thereof is to provide in a manner as hereinafter set forth a structure of such class which will be comparatively simple in its construction, strong, durable, efficient in its use, readily set up and conveniently connected to the roof of a building.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts hereinafter more particularly described and illustrated in the accompanying drawing wherein is shown the preferred embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In the drawings: Figure 1 is a perspective view of a skylight in accordance with this invention with a ventilator attached. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a plan. Fig. 4 is an enlarged vertical sectional view of a portion of the skylight illustrating one manner of securing the transparent member or glass frame in position. Fig. 5 is a fragmentary portion in perspective. Fig. 6 is a view similar to Fig. 4 illustrating a modified means of securing the transparent member or glass frame in position. Fig. 7 is a view in perspective broken away at one corner of the skylight, and Fig. 8 is a perspective view illustrating a portion of a pair of transparent members or glass supporting frame.

In the accompanying drawings, 1 designates an imperforate rectangular base or curb of a skylight, this base or curb being flanged as at 2, whereby it can be suitably secured to a roof or similar support. Attached to the upper edges of the skylight base by rivets 3 is a pyramidal structure, comprising eight triangular glass supporting frames, having their hypotenuse edges connected by V-shaped rounding plates 5. The apex of each triangular glass supporting frame, and the upper edges of the V-shaped plates 5 are connected to a cylindrical

ventilator head 6, this being accomplished by the use of rivets 7. The triangular glass supporting frames are subdivided by T-bars 8, corresponding to the altitude of two right angular triangles. In order to support glass in the triangular frames, I provide the upper edges of the skylight base with angle bars 9 and the edges of the V-shaped plates 5 with channel bars 10. The channel bars 9 and 10 can be placed upon the inner edges of the base and plates 5 if so desired. The glass 11 is then retained in engagement with the angle bars 9 and the channel bars 10 by caps 12 secured to the T-bars 8, said caps engaging the edges of the glass resting upon the flanges of said T-bars.

As illustrated in Figs. 6 and 7 of the drawings, the glass can be supported by the flanged edges 13 of the skylight base and the flanged edges 14 of the V-shaped plates 5, these flanged edges supporting the glass flush with the outer surface of the base 1 and the V-shaped plates 5, thereby preventing water from entering the flanges, freezing and breaking the glass. These flanged edges 14 serve functionally the same purpose as the angle channel bars 9 and 10.

The corners of the skylight base and the pyramidal structure are reinforced and braced by caps 15, these caps being riveted to the V-shaped plates 5, as at 16, and to the skylight base, as at 17.

I reserve the right to use wire glass or any suitable glass in connection with the frames 4.

Reference now being had to the cylindrical ventilator hood, the upper edges of this hood are provided with a peripheral outwardly extending flange 18 and the outer sides of said hood carry four radially disposed blades 19, these blades being flanged, as at 20, to permit of a cylindrical wind shield 21 being secured to said blades. The blades 19 are cut away, as at 22 to clear the peripheral flange 18 of the hood 6, and said blades are further flanged, as at 23, to permit of a cone-shaped cap 24 being riveted to the upper ends of said blades.

By referring to Fig. 2 of the drawings, it will be observed that the blades 19 are of a sufficient width and height to allow air to pass under the cap 24 into the wind shield, the blades tending to retard a current of air, deflect the same upwardly into the openings 25, or upwardly between the hood 6 and the wind shield 21, causing a suction or draft, which will tend to remove the foul air from



the building. In providing the openings 25 deflectors 26 are formed, these deflectors directing the fresh air towards the cap 24 and creating the suction heretofore mentioned.

5 Between the cap and the upper end of the hood 6 is located an inverted cone-shaped damper 27 to which is fastened a cross bar 28, and attached to this cross bar is a chain or cable 29. This cable passes over a sheave 10 30, journaled upon a bracket 31 fixed in the cap 24. The cable 29 extends downwardly through an opening 32 in the damper 27, and downward through the skylight, to such a point that it can be conveniently operated. 15 Another cable 33 is connected to the bar 28 of the damper, this cable passing through the opening 32 of said damper and extending downwardly parallel with the cable 29. The cable 29 is provided with a fusible or soft 20 metal link 34 and a weight 35, to which the cable 33 is connected, said weight normally maintaining the damper 27 in an elevated position, as illustrated in Fig. 2 of the drawings, while the fusible or soft metal link 34 is 25 employed to transfer the weight 35 to the cable 33, and close the damper 27 in case of fire. When the damper 27 is closed, the heated air within the ventilator hood can escape through the opening 25, and the draft 30 between said hood and the wind shield is sufficient to remove the air away from said wind shield.

I have aimed to provide a skylight wherein each and every part can be riveted together, thus insuring a durable and fire-proof structure, capable of withstanding the forces of nature, to which said structures are subjected.

Having now described my invention what 40 I claim as new, is:—

1. A skylight comprising a base, a series of inwardly extending inclined pairs of triangular-shaped transparent members supported at their base upon said base, T-shaped bars interposed between the members of each pair, 45 caps mounted upon the bars for connecting the members thereto, inwardly extending inclined V-shaped plates convexo-concave in cross section interposed between pairs of members, 50 said plates extending above said members and arranged in close proximity at their upper ends whereby the top of the skylight will be circular in contour, means carried by each of said plates for connecting opposing 55 members thereto, and means for connecting the tops of the plates and members together.

2. A skylight comprising a base, a series of inwardly extending inclined pairs of triangular-shaped inclined transparent members 60 supported at their base upon said base, T-shaped bars interposed between the members of each pair, caps mounted upon the bars for connecting the members thereto, inwardly extending inclined V-shaped plates convexo- 65 concave in cross section interposed between

pairs of members, said plates extending above said members and arranged in close proximity at their upper ends whereby the top of the skylight will be circular in contour, means carried by the plates for connecting the pairs 70 of members thereto, and means for connecting the tops of the plates and members together.

3. A skylight comprising a base, a series of inwardly extending inclined pairs of transparent members supported at their lower 75 edges upon said base, T-shaped bars interposed between the members of each pair, inwardly extending inclined plates convexo-concave in cross section interposed between each pair of members, means carried by each 80 plate for connecting opposing members, said plates extending above said members and arranged in close proximity at their upper ends whereby the top of the skylight will be circular in contour thereto, means 85 for connecting the tops of the plates and members together and securing caps arranged at the corners of the base and overlapping the members and plates for connecting the lower portion of the members and 90 plates to the base.

4. A skylight comprising a base, a series of inwardly extending inclined pairs of triangular shaped transparent members supported 95 at their base upon said base, T-shaped bars interposed between the members of each pair, caps mounted upon the bars for connecting the members thereto, inwardly extending inclined V-shaped plates convexo- 100 concave in cross section interposed between pairs of members, said plates extending above said members and arranged in close proximity at their upper ends whereby the top of the skylight will be circular in contour, 105 means carried by each of said plates for connecting opposing members thereto, means for connecting the tops of the plates and members together, and securing caps arranged at the corners of the base and overlapping the members and plates for connecting 110 the lower portion of the members and plates to the base.

5. A skylight comprising a base, a series of inwardly extending inclined pairs of triangular-shaped inclined transparent members 115 supported at their base upon said base, T-shaped bars interposed between the members of each pair, caps mounted upon the bars for connecting the members thereto, inwardly extending inclined V-shaped plates 120 convexo-concave in cross section interposed between pairs of members, said plates extending above said members and arranged in close proximity at their upper ends whereby the top of the skylight will be circular in 125 contour, means carried by the plates for connecting the pairs of members thereto, means for connecting the tops of the plates and members together, and securing caps arranged at the corners of the base and over- 130



lapping the members and plates for connecting the lower portion of the members and plates to the base.

6. A skylight comprising a base, a series of  
5 inwardly extending inclined pairs of inclined triangular shaped transparent members arranged above and supported by the base, means for connecting the members of each pair together, inwardly extending inclined  
10 V-shaped plates convexo-concave in cross section interposed between pairs of members, said plates extending above said members and arranged in close proximity at

their upper ends whereby the top of the skylight will be circular in contour, channel irons  
15 carried by said plates for connecting the pairs of members thereto, and securing caps secured to the corners of the base and overlapping and secured to the rounding plates.

In testimony whereof I affix my signature  
20 in the presence of two witnesses.

MAX W. PEHL.

Witnesses:

MAX H. SROLOVITZ,  
H. C. EVERT.