

D. H. MOWEN.
VENTILATOR.

APPLICATION FILED APR. 25, 1910.

967,028.

Patented Aug. 9, 1910.

Fig. 1,

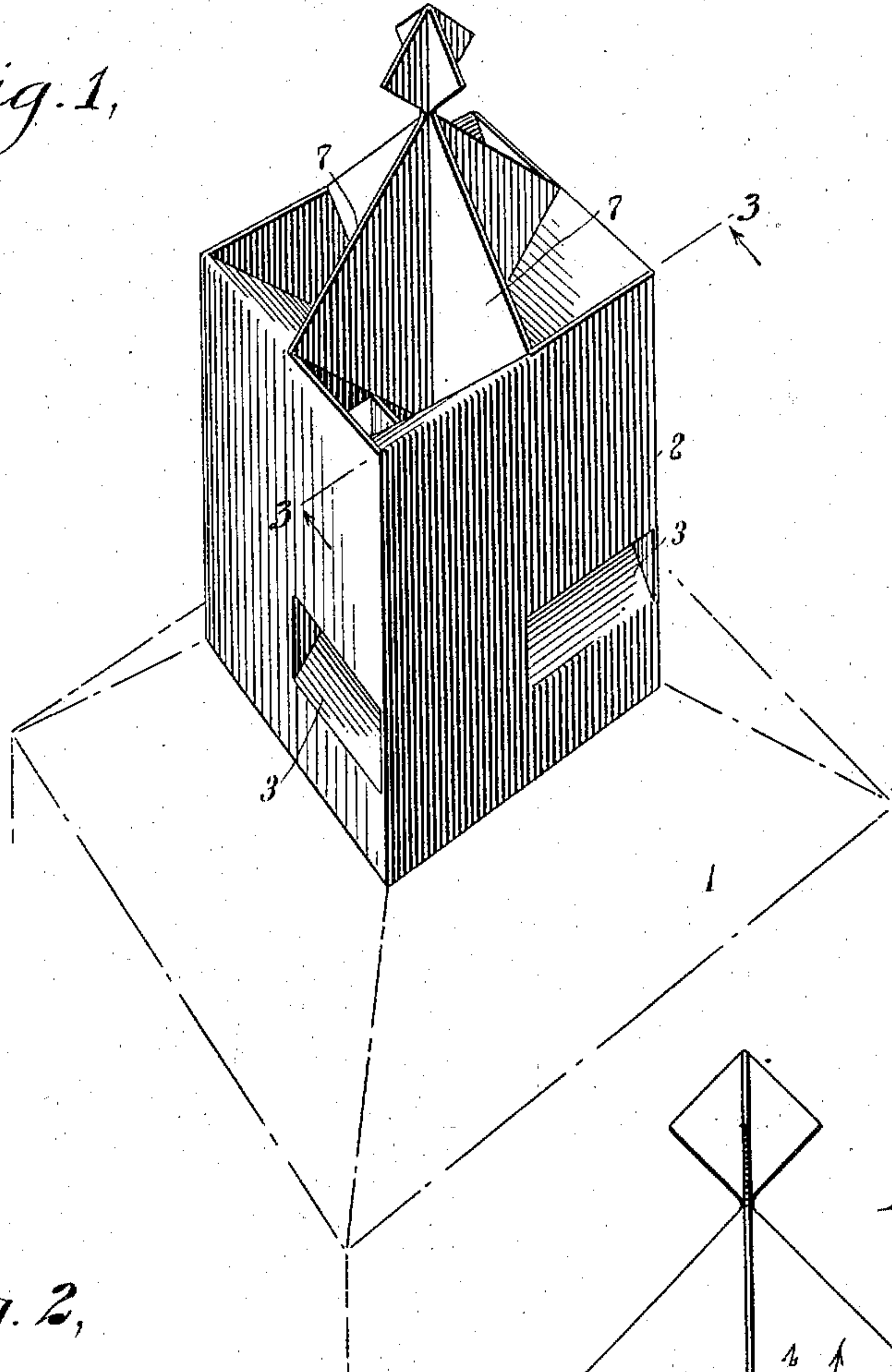


Fig. 2,

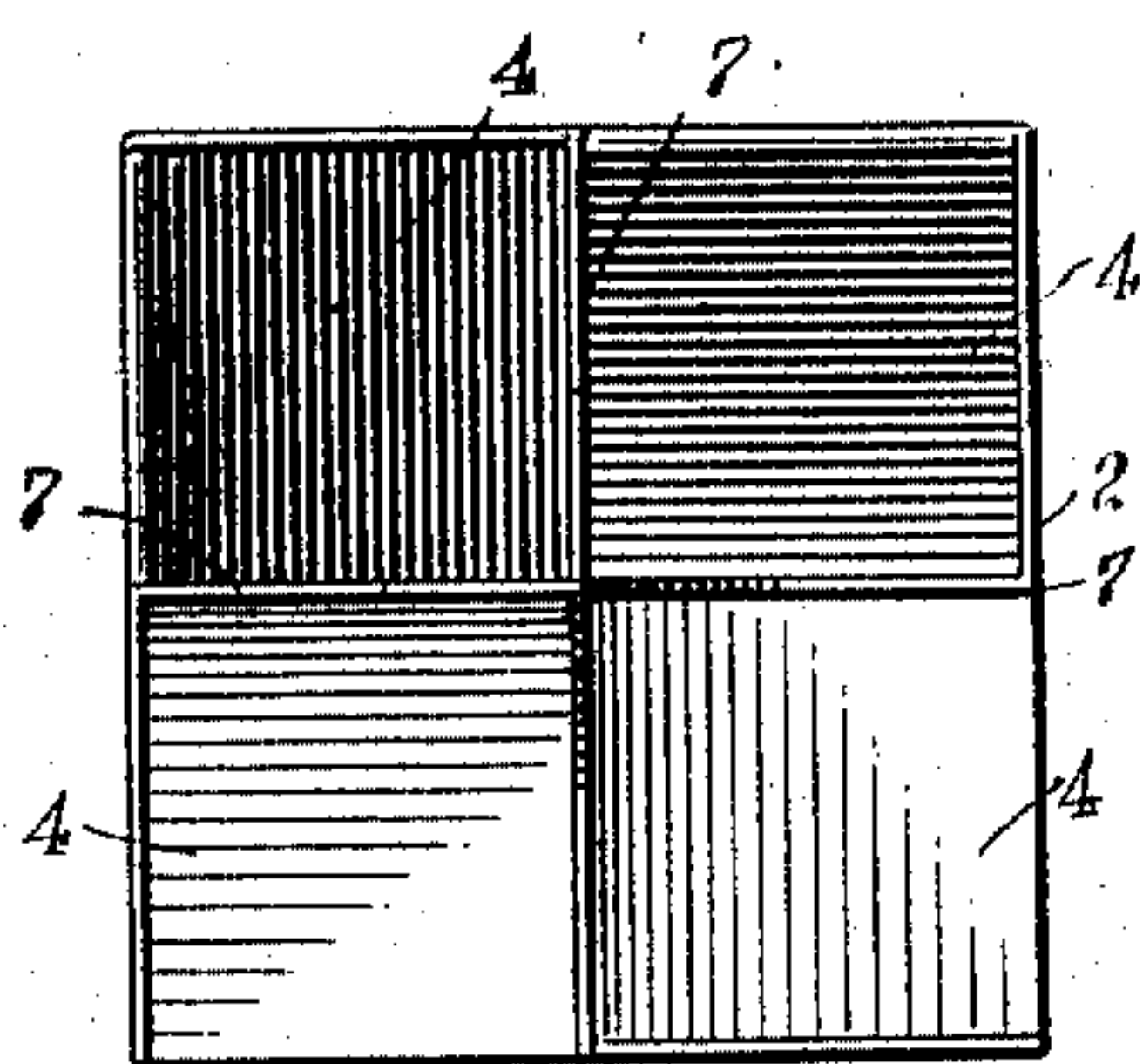
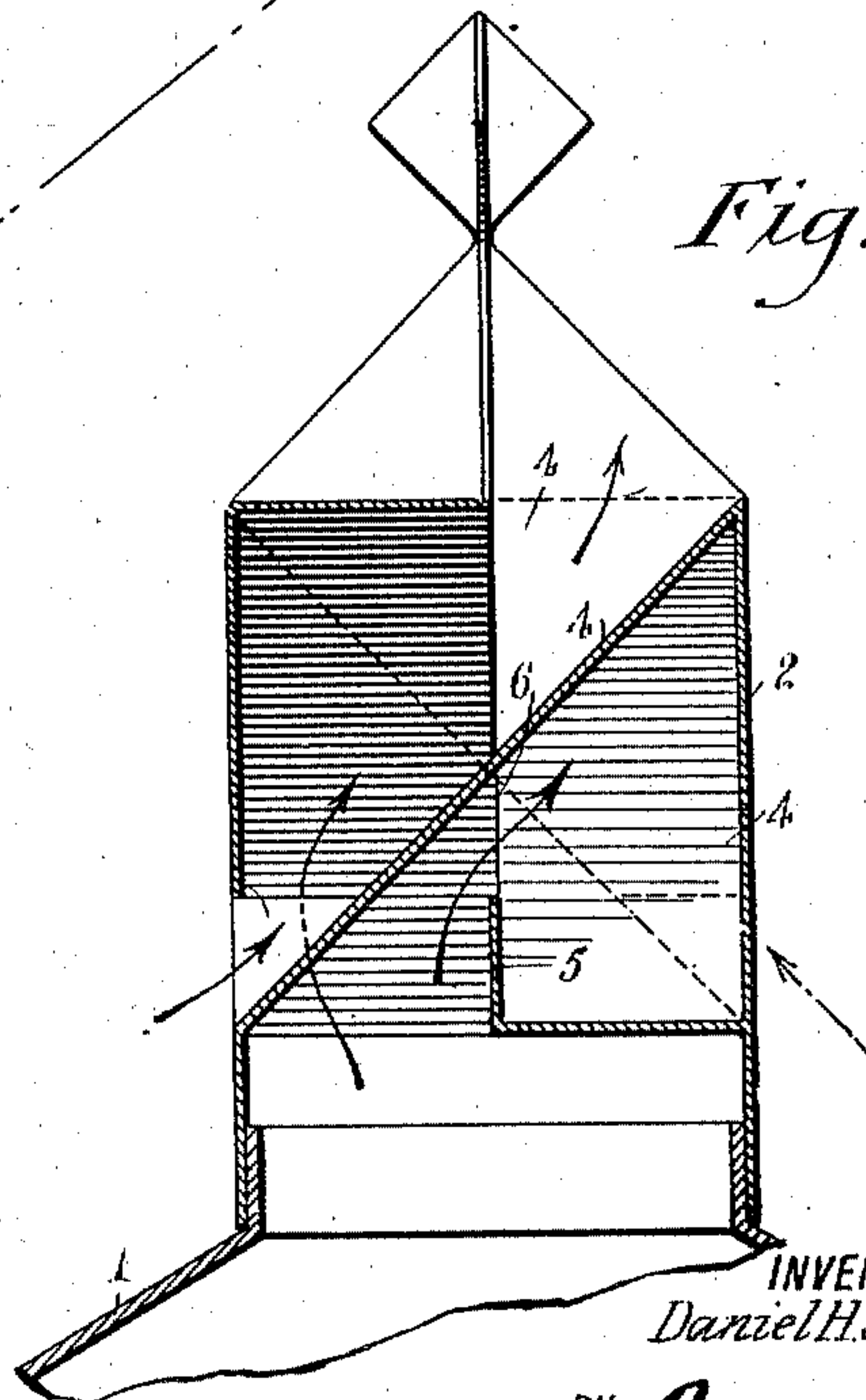


Fig. 3.



WITNESSES:

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DANIEL H. MOWEN, OF HAGERSTOWN, MARYLAND.

VENTILATOR.

967,028.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed April 25, 1910. Serial No. 557,371.

To all whom it may concern:

Be it known that I, DANIEL H. MOWEN, a citizen of the United States, and a resident of Hagerstown, in the county of Washington and State of Maryland, have invented a new and Improved Ventilator, of which the following is a full, clear, and exact description.

This invention relates to a new and improved ventilator, of a type adapted to be utilized in any place where it is desired to have a draft or change of air without the intrusion of rain or dust, no matter in which direction the wind is blowing, or the member to which it is attached is moving. This device may be attached to a building, a street or railroad car, or any other member where it is desired to produce an efficient circulation of air.

An object of this invention is to provide a device which will be simple in construction, inexpensive to manufacture, strong, durable, and efficient in its operation.

A further object of this invention is to provide a ventilator which will form an upward draft of air by providing an entering inlet or passage in all directions, so that a draft coming in any direction, either caused by wind or the movement of the ventilator, will produce an upward current of air in the ventilator.

These and further objects, together with the construction and combination of parts, will be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a perspective view; Fig. 2 is a top plan view; and Fig. 3 is a vertical section on the line 3—3 of Fig. 1.

Referring more particularly to the separate parts of the device, 1 indicates the member to which the ventilator 2 is secured in any well known manner. The ventilator 2 is tubular in form, and as illustrated, is provided with a plurality of sides, preferably four in number. In each of the sides there is provided, adjacent the lower end thereof an inlet or opening 3. Extending diagonally from each of these inlets, there is provided a partition 4, which reaches up to the opposite side, adjacent the top thereof. It will thus be seen that inasmuch as there are four sides to the ventilator, there will

be four partitions extending successively upward from one side to the opposite side, each successive partition overlapping the preceding partition for about half its length. It will further be seen that the projection of each partition extends at right-angles to the projection of the juxtaposed partitions, and that the alternate partitions extend directly at right-angles to each other. Each of the partitions 4 is provided adjacent its lower end with an upwardly-extending flange 5, which connects each of the inlets 3 to each of the partitions 4. These flanges, however, do not extend a sufficient distance to contact with the overlapping partitions, but are spaced apart therefrom, so as to form a passage 6 to permit the upward flow of air through the bottom opening of the ventilator 2. The upper ends of the partitions 4 are also provided with flanges 7, which preferably extend above the upper edges of the sides of the ventilator 2. These flanges 7 have sloping edges which converge to a common point, forming an ornamental top, which further acts to prevent back eddies into the passages in the ventilator. It will thus be seen that there is provided a plurality of partitions which contact at a common point and extend successively at right-angles to the juxtaposed partitions, so as to provide air passages connected with the inlet openings 3 to the top opening of the ventilator 2, which passages are also connected to the main lower entrance of the ventilator 2. The inlet openings 3 are located preferably to one side of the middle of each side, with one edge in close juxtaposition to the next adjacent side of the tubular member, so that the partitions 4 abut against the next adjacent side of the tubular member, forming therewith the passages above-mentioned. It will thus be seen that no matter in which way the wind blows, or in which way the ventilator is moving, a draft will be caused through one or more of the inlets 3 and thus upward through the ventilator 2. This upward draft will naturally draw the foul air through the lower opening of the ventilator 2 and expel it at the top opening of the ventilator 2.

The inclined position of the partitions in extending upwardly from the lower side of the openings 3, acts as a natural baffle plate, tending always to divert the incoming air in an upward direction, and at the same time preventing the rain and dirt from pass-

ing down through the ventilator into the car or building below.

While I have shown one embodiment of my invention, I do not wish to be limited to the specific details thereof, but desire to be protected in various changes, modifications and alterations which I may make within the scope of the appended claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. The combination with a tubular member having a plurality of inlet openings located below the top of said member, of a baffle plate extending upwardly from a point adjacent each of said inlet openings and adapted to form passages in said tubular member.

2. The combination with a tubular member having a plurality of inlet openings located below the top of said member, of a baffle plate extending upwardly from a point adjacent each of said inlet openings and adapted to form passages in said tubular member, and a flange secured to each of said baffle plates adjacent the lower end thereof and extending upwardly toward the adjacent baffle plate in spaced relation therefrom.

3. The combination with a tubular member having a plurality of inlet openings located below the top of said member, of a baffle plate extending upwardly from a point adjacent each of said inlet openings and adapted to form passages in said tubular member, a flange secured to each of said baffle plates, adjacent the lower end thereof and extending upwardly toward the adjacent baffle plate, in spaced relation therefrom, and a plurality of flanges connected together and secured to said baffle plates adjacent the top thereof.

4. The combination with a tubular member having a plurality of inlet openings located below the top of said member, of a baffle plate extending upwardly from a point adjacent each of said inlet openings and adapted to form passages in said tubular member, a flange secured to each of said baffle plates, adjacent the lower end thereof and extending upwardly toward the adjacent baffle plate in spaced relation therefrom, and a pair of flanges intersecting at right angles and secured to each of said baffle plates adjacent the top thereof.

5. The combination with a tubular member having a plurality of inlet openings adjacent the lower end thereof, of a plurality

of baffle plate partitions extending upwardly from adjacent the lower end of said openings to the opposite side of said tubular member, each of said partitions overlying one of the next adjacent partitions and underlying the other of the next adjacent partitions.

6. The combination with a tubular member having a plurality of inlets, of a baffle partition extending upwardly from adjacent the lower end of each of said inlets, said baffle partitions contacting at a common point and each partition overlying the partition next preceding, whereby air passages are formed in said member.

7. The combination with a tubular member having a plurality of inlet openings adjacent the lower end thereof, of a plurality of baffle plate partitions extending upwardly from adjacent the lower end of said openings to the opposite side of said tubular member, each of said partitions overlying one of the next adjacent partitions and underlying the other of the next adjacent partitions, and flanges extending upwardly from each of said partitions adjacent the top and bottom thereof.

8. The combination with a quadrilateral tubular member having an inlet in each side thereof, adjacent the bottom thereof, of a baffle partition extending upwardly from the bottom of each of said inlets to the opposite side of said tubular member, a flange connecting each of said inlets with each of said partitions on one side thereof, each of said partitions overlying one of the partitions next adjacent and underlying the other of said partitions next adjacent, said partitions contacting at a common point, and intersecting flanges extending upwardly from said common point along the side edges of said partitions.

9. The combination with a quadrilateral tubular member having an opening in each side thereof, each of said openings being located at one side of the middle of each side, and passages within said tubular member extending diagonally from each of said openings to the opposite side of said tubular member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL H. MOWEN.

Witnesses:

BENJAMIN F. HOOVER,
JOHN W. FUSS.