

No. 854,033.

PATENTED MAY 21, 1907.

J. T. GLAZIER & C. C. PARKER.

WINDOW VENTILATOR.

APPLICATION FILED JULY 17, 1906.

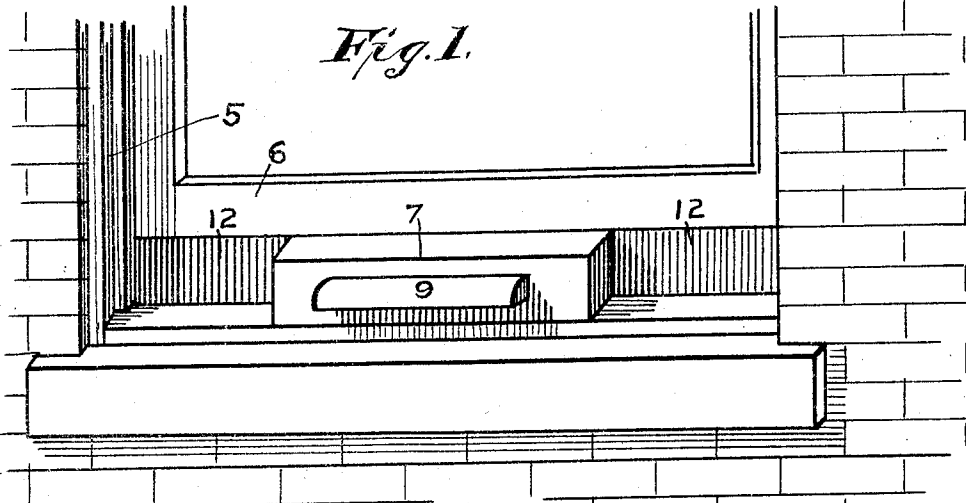


Fig. 2.

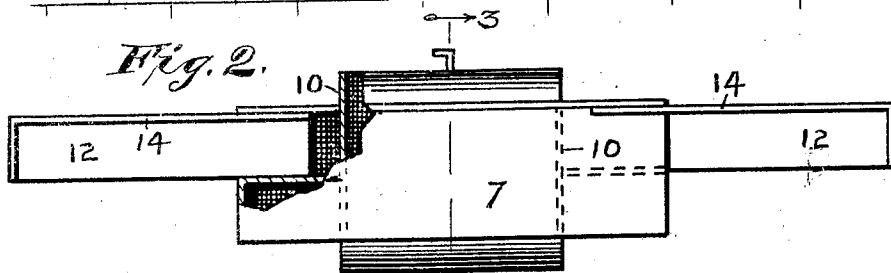


Fig. 3.

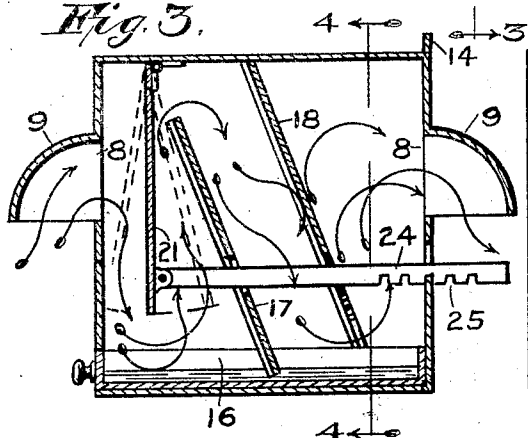
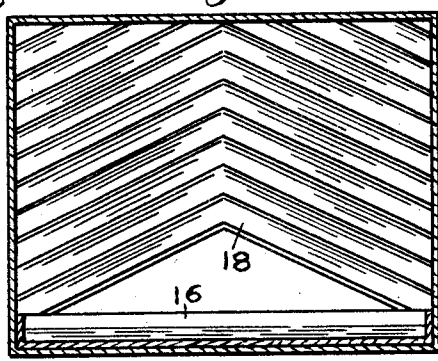


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN T. GLAZIER AND COLUMBUS C. PARKER, OF INDIANAPOLIS, INDIANA,
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WINDOW-VENTILATOR.

No. 854,033.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed July 17, 1906. Serial No. 326,533.

To all whom it may concern:

Be it known that we, JOHN T. GLAZIER and COLUMBUS C. PARKER, citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Window-Ventilators, of which the following is a specification.

The object of this invention is to provide a ventilator attachment for the windows of railway cars, residences and other buildings whereby the current of air passing there-through can be regulated.

Another object of the invention is to provide partitions for separating the air passage through the ventilator into compartments to compel the air current to take a circuitous course through the device and to so shape the partitions as to remove dust and other foreign substances from the air before it is admitted into the room.

A further object of the invention is to provide a water pan at the bottom of the air chamber and to provide conduits or ways in the partitions to conduct the dust and foreign particles into the water.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims.

In the drawings, Figure 1 is a perspective view of the lower part of a window viewed from the outside, with the ventilator in place. Fig. 2 is a top plan view of the improved ventilator showing parts of the latter broken away to illustrate the inside construction. Fig. 3 is a transverse vertical section on the line 3—3 of Fig. 2, and Fig. 4 is a section on the line 4—4 of Fig. 3.

Like characters of reference indicate like parts throughout the several views of the drawing.

5 is the window casing and 6 the window sash, both of usual construction. The sash is shown as partly raised to provide a space in which this improved ventilating device is placed. The ventilator comprises a rectangular box or case 7 with longitudinal slots 8 in two opposite vertical sides of the box. These slots or openings are protected by the hoods 9. Transverse partitions 10 are set off

a middle compartment through which the air current passes from the outside to the inside of the building. Slideways are formed in the ends of the box 7 outside of the partitions 10 to receive the ends of the sections 12 which are longitudinally adjustable in the slideways above mentioned, for the purpose of increasing or diminishing the length of the ventilator to suit the width of opening in which the ventilator is to be used. A flange 14 extends along the inner side of the upper face of the ventilator to make a better joint against the sash 6 which will be lowered upon the ventilator in close contact with said flange.

Referring to Fig. 3, 16 is a water pan at the bottom of the air chamber, and 17 and 18 are partitions for dividing the box into compartments. The partition 17 preferably terminates in the water of the pan 16 so as to form a seal to prevent the passage of air under this partition, but terminates sufficiently below the top of the box 7 to leave an air passage from one side of the partition 17 to the other. The partition 18 makes a close fit against the top of box 7 but does not extend to the bottom of the box and the space thus left at the bottom forms a passage-way for air under said partition. The partitions 17 and 18 are formed out of corrugated sheet metal, the corrugations extending from the side edges of the partitions in an oblique upward direction to the vertical midline of the plate, as shown in Fig. 4, and the partitions are set at an oblique angle, as shown in Fig. 3. The result of this construction is that air coming in from the outside of the building and loaded with dust and other impurities will beat against the corrugations on the oblique under sides of the plates causing much of the foreign matter to be removed, and this dust and other substances falling upon the corrugations of the upper sides of the partitions will be carried to the edges of the plates and thus removed from their middles, where the largest volume of the air passes. This is particularly true of the plate 18. In this, as shown in Fig. 4, the air passage is largest at the middle of the plate and most of the dust will be directed by the corrugations to the

sides of the partition out of the path of the air passing under the plate.

21 is a damper-plate hinged to the top of the box. It is adapted to be swung into the positions shown in dotted lines in Fig. 3, to partly or wholly close the inlet to the box. An operating bar 24 is attached to the damper 21 and extends through the box into the room into convenient reach for adjustment. It will preferably have the notches 25 for holding any given adjustment.

Having thus fully described my invention, what I claim as new and wish to secure by Letters Patent of the United States, is—

15 1. A ventilating device having an air box with an inlet through one of its vertical sides and an outlet through its opposite vertical side, a damper-plate swung from its upper edge from the top of the box adjacent to the inlet and extending nearly to the bottom of the box, a partition between the damper-plate and the box outlet having an air passage at its top, and a second partition between the last-named partition and the out-
25 let having an air opening at its bottom.

2. A ventilating device having an air box midway of its length, auxiliary box portions adjustable longitudinally in and out of said middle box to fit the width of a window, said
30 middle box having an inlet opening through its inner vertical wall and an outlet opening through its opposite vertical wall, a damper-plate hinged from its upper edge from the top of the box adjacent to the inlet opening and extending nearly to the bottom of the box, a
35 partition between the damper-plate and said outlet opening having an air passage at its top, and a second partition between the last-named partition and the outlet opening hav-
40 ing an air passage at its bottom.

3. A ventilating device having an air box midway of its length, auxiliary box portions adjustable longitudinally in and out of said middle box to fit the width of a window, said
45 middle box having an inlet opening through its inner vertical wall and an outlet opening through its opposite vertical wall, a damper-plate hinged from its upper edge from the top of the box adjacent to the inlet opening and extending nearly to the bottom of the box, a
50 partition between the damper-plate and said outlet opening having an air passage at its top, a second partition between the last-named partition and the outlet opening hav-
55 ing an air passage at its bottom and a water pan at the bottom of the air box.

4. A ventilating device having an air box with an inlet opening through its inner verti-
60 cal wall, and an outlet opening through its opposite vertical wall, a damper-plate hinged from its upper edge from the top of the box adjacent to the inlet opening and extending

nearly to the bottom of the box, a partition between the damper-plate and said outlet having an air passage at its top, and a second
65 partition between the last-named partition and the outlet opening having an air passage at its bottom and an operating bar attached to the damper and extending through the box into the room for the convenient adjust-
70 ment of the damper and means for holding a given position of the bar.

5. A ventilating device having an air box with an inlet opening through its inner verti-
75 cal wall, and an outlet opening through its outer opposite vertical wall, a damper-plate hinged from its upper edge from the top of the box adjacent to the inlet opening and extending nearly to the bottom of the box, a
80 partition between the damper-plate and said outlet opening having an air passage at its top and a second partition between the last-named partition and the outlet opening hav-
85 ing an air passage at its bottom, both of said partitions being oblique to a vertical plane and sloping upwardly toward the outer side of the box.

6. A ventilating device having an air box with an inlet opening through its inner verti-
90 cal wall, and an outlet opening through its opposite vertical wall, a damper-plate hinged from its upper edge adjacent to the inlet opening, a partition between the damper-plate and said outlet opening having an air
95 passage at its top and a second partition between the last-named partition and the out-
100 let opening having an air passage at its bottom, both of said partitions being oblique to the sides of the air box and being formed of obliquely corrugated material.

7. A ventilating device having an air box with an inlet opening through its inner verti-
105 cal wall, and an outlet opening through its outer opposite vertical wall, a damper-plate hinged from its upper edge adjacent to the inlet opening, a partition between the damper-plate and said outlet opening having an
110 air passage at its top, and a second partition between the last-named partition and the outlet opening having an air passage at its bottom, both of said partitions being oblique
115 and sloping down toward the inside of the box and having corrugations or channels extending obliquely both ways from the verti-
120 cal center of each plate.

8. A ventilating device having an air box with an inlet opening through its inner verti-
125 cal wall, and an outlet opening through its outer opposite vertical wall, a damper-plate hinged from its upper edge adjacent to the inlet opening, means extending outside of the air box for adjusting the damper-plate, a
130 partition between the damper-plate and said outlet opening having an air passage at its

top, a second partition between the last-named partition and the outlet opening having an air passage at its bottom, both of said partitions being oblique and sloping down toward the inside of the box and having corrugations or channels extending obliquely both ways from the vertical center of each plate and a water pan at the bottom of the air box.

In witness whereof, we have hereunto set our hands and seals at Indianapolis, Indiana, this 3rd day of July, A. D. one thousand nine hundred and six.

JOHN T. GLAZIER. [L. s.]

COLUMBUS C. PARKER. [L. s.]

Witnesses:

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C. J. CLARK.