

No. 839,231.

PATENTED DEC. 25, 1906.

M. TOWNSEND.
VENTILATOR.

APPLICATION FILED JUNE 30, 1906.

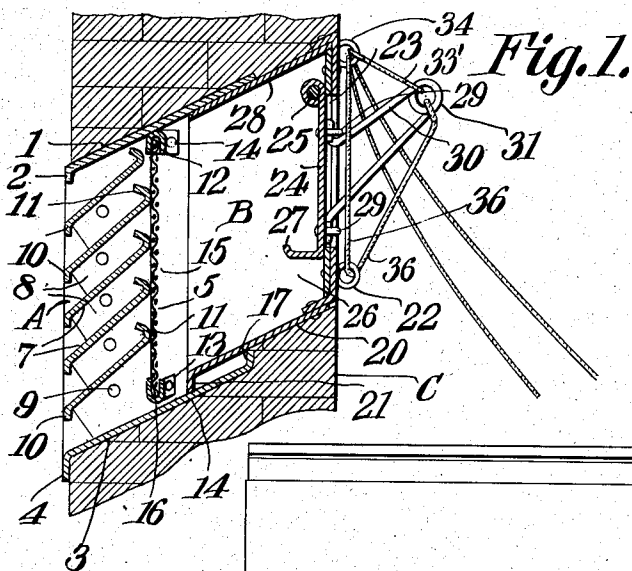


Fig. 1.

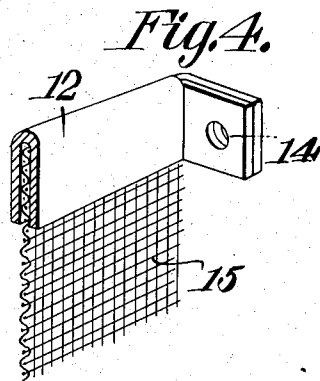


Fig. 4.

Fig. 2.

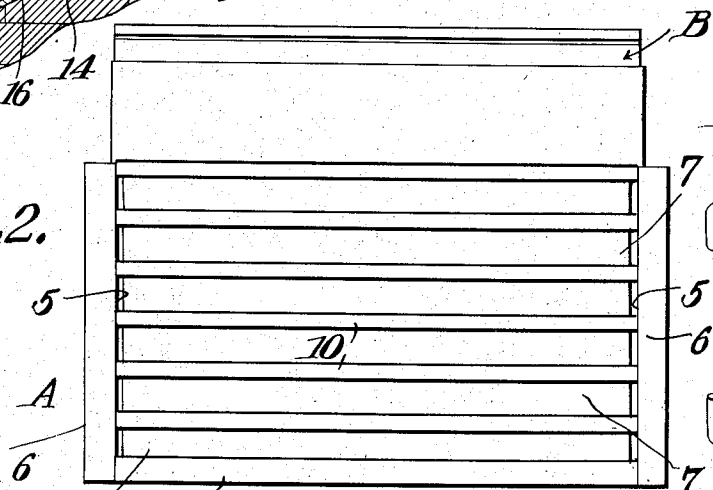


Fig. 5.

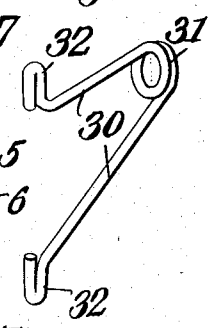
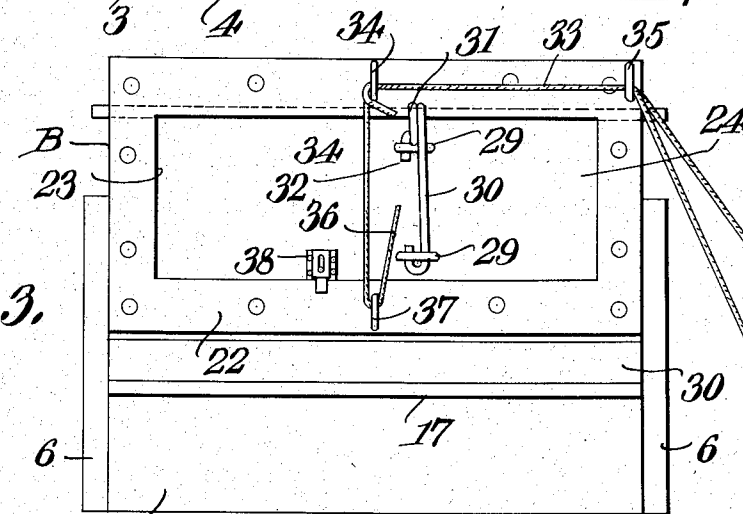


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

MILES TOWNSEND, OF MARSHALL, MICHIGAN.

VENTILATOR.

No. 839,231.

Specification of Letters Patent.

Patented Dec. 25, 1906.

Application filed June 30, 1906. Serial No. 324,239.

To all whom it may concern:

Be it known that I, MILES TOWNSEND, a citizen of the United States, residing at Marshall, in the county of Calhoun and State of Michigan, have invented a new and useful Ventilator, of which the following is a specification.

This invention relates to ventilators for buildings and other structures.

10 The object of the invention is to provide a strong, simple, durable, and inexpensive ventilator which is adapted to be applied to buildings having walls of different thickness and by means of which the structures can be
15 thoroughly ventilated in all kinds of weather without permitting the entrance of rain, leaves, insects, and the like.

20 With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes
25 in the precise embodiment of invention herein disclosed can be made within the scope of the following claims without departing from the spirit of the invention or sacrificing any of its advantages.

30 In the accompanying drawings, forming part of this specification, Figure 1 is a vertical section through a wall equipped with one of the ventilators of this invention. Fig. 2 is a front view of a ventilator. Fig. 3 is a rear view. Fig. 4 is a detailed sectional view
35 showing one of the screen-slats. Fig. 5 is a detailed perspective view of the spring-bracket.

40 Like reference characters indicate corresponding parts in the different figures of the drawings.

The improved ventilator of this invention preferably consists of an outer member A and an inner member B. The inner member B preferably is telescopically fitted into the
45 rear end of the outer member A, so that it can be suitably adjusted therein to fit walls of different thickness. Each of the members A and B preferably is parallelogrammatic in cross-section, as shown, so that when the
50 front and rear edges thereof are in vertical position, so as to be in parallelism with the wall or support C, the tops and bottoms of the members A and B will be upwardly and rearwardly inclined with respect to the front
55 face of the wall or support C.

The outer member A, which preferably is

constructed of sheet metal, is provided at the front edges of its top 1 with a depending storm-flange 2 and at the front edge of its bottom 3 with a depending storm-flange 4. 60 At the forward edges of its sides 5 the outer member A is formed with oppositely and laterally extending storm-flanges 6. As shown in the drawings, the inner and outer ends of the member A are open. Extending from
65 side to side of the member A in a horizontal direction is a plurality of storm-slats 7, each of which is provided at its opposite ends with depending ears 8, which serve the twofold function of resting against the top of the
70 next lower slat and spacing it properly therefrom and of also receiving a rivet or fastening device 9 for securing the slat in position. As shown in the drawings, the storm-slats 7 preferably are more inclined than the top and
75 bottom of the member A, so that when said member is in position the slats will incline rearwardly and upwardly.

Each of the storm-slats 7 at its forward edge is formed with a depending storm-flange 80 10, which is parallel with the laterally-extending storm-flanges 6 on the sides 5 of the member A. As shown in the drawings, all the storm-flanges 2, 4, 6, and 10 are in the same vertical plane at the forward end of the
85 member A. Each of the storm-slats 7 at its rear end is provided with a forwardly and upwardly directed storm-flange 11, which is disposed in a horizontal plane considerably above the lower edge of the depending storm-
90 flange 10 of the next higher slat 7. In rear of the storm-slats 7 and about midway between its front and rear ends the member A is provided with a vertically-disposed upper screen-slat 12 and a vertically-disposed lower
95 screen-slat 13, each of said slats being formed, preferably, with rearwardly-extending ears 14, which are riveted, soldered, or otherwise suitably secured to the sides 5 of the member A. Each of the screen-slats 12 and 13 pre-
100 ferably consists of a strip of metal folded longitudinally upon itself to form oppositely-extending slots into which are fitted the upper and lower edges of a screen 15. By folding the screen-slats 12 and 13 upon themselves in
105 the manner described the screen 15 is held securely in place in a strong, simple, and durable manner. The lower screen-slat 13 preferably is raised slightly above the bottom 3 of the member A to form a narrow slot 16,
110 which constitutes an escape-opening in the event that any water should by any chance

find its way into the outer member A. It will be observed that the lower screen-slat 13 acts as a storm-flange in the rear of the lowermost storm-slat 7. At its rear end the bottom 3 of the outer member A is provided with an upwardly-extending vertical guard-flange 17.

The inner member B preferably is provided at the forward end of its bottom 20 with a depending guard-flange 21, which when the member B is drawn rearwardly in the member A will contact with the vertical guard-flange 17, so as to limit the rearward movement of said member B and also act as a watershed whenever necessary to permit water to run downward from the bottom of the inner member B onto the bottom of the outer member A in the event that water should ever penetrate so far into the ventilator. The rear end 22 of the member B is provided with a centrally-disposed rectangular door-opening 23, which is adapted to be closed by a door 24, pivotally mounted upon a bar 25, extending along its upper end and suitably connected with the sides 26 of the member B. At its lower end the door 24 is provided with a forwardly-extending bracing-flange 27, which when the door is opened is adapted to contact with the top 28 of the member B and limit the upward movement of said door. As shown in the drawings, the door 24 is mounted entirely within the rear end of the member B, so that it can only swing in a forward and upward direction. On its rear face the door 24 is provided with a pair of securing devices or eyes 29, with which is detachably connected a spring-bracket comprising a pair of diverging arms 30, integrally connected at their rear ends by resilient coils 31. By forcing the diverging arms 30 toward each other their forward ends can be readily disengaged from the eyes 29. The upper arm 30 of the spring-bracket preferably is so shaped as to be approximately parallel with the top of the member B. At their forward ends the arms 30 are bent, as indicated at 32, to form broad bearing-shoes, which are fitted flat against the rear face of the door 24 and serve to prevent the bracket from swinging laterally within the securing devices 29. Suitably secured to the eyes formed by the spring-coils 31 is a flexible closing element or cord 33, which extends through a guide member or eye 34 at the central portion of the upper end of the inner member B, after which it extends through a similar guide member 35 at one side of said member B. Also secured to the eyes or coils 31 is a flexible opening element 36, which extends through a guide member 37 at the lower end of the member B and then through the guide members 34 and 35. By drawing upon the closing member 33 the rear end of the spring-bracket, consisting of the arms 30, will be drawn upward, thus closing the door,

and by loosening the closing element 33 and drawing upon the opening element 36 the door will be opened and held in raised position. It will be understood that whenever desired the door 24 can be provided with a suitable lock or latch 38 for securing it in closed position. It will be also understood that whenever it is desired to leave the ventilator permanently in closed or opened position the spring-bracket, consisting of the arms 30, can be detached from the door 24, together with the flexible elements 33 and 36. Furthermore, the spring-bracket can be detached from the door for convenience in shipping the ventilator.

By reason of the fact that the outer and inner parallelogrammatic members A and B are telescoped together the improved ventilator can be easily and quickly adjusted to the thickness of any wall in which it is desired to place the same. By reason of the peculiar shape of the members A and B their top and bottom portions will incline upward from their outer to their inner ends when they are properly secured in a wall, for which reason the penetration of water into a room through the ventilator will be impossible, and an upward current of fresh air will be induced.

The improved device of this invention is strong, simple, durable, and inexpensive in construction, as well as thoroughly efficient in operation.

What is claimed is—

1. A ventilator comprising an outer member having storm-flanges upon the edges thereof, storm-slats mounted in said outer member, and an inner member telescopically connected with said outer member.

2. A ventilator comprising an outer member, a plurality of screen-slats mounted in said outer member and folded upon themselves to form slots, a screen extending into the slots of said screen-slats and securely held therein, and an inner member telescopically engaged with said outer member.

3. A ventilator comprising an outer member having an upwardly-inclined bottom, an upstanding storm-flange at the upper rear end of said inclined bottom, and an inner member having an inclined bottom and a depending storm-flange at the forward edge thereof adapted to contact with the upstanding storm-flange of said outer member.

4. A ventilator comprising an outer member having a screen, an inner member telescopically engaged with the outer member and having a door, and a flexible element connected with said door for opening and closing the same.

5. A ventilator comprising an outer member having storm-slats, an inner member telescopically connected with said outer member, a door connected with said inner member, a spring-bracket detachably connected with said door, and a flexible element connect-

ed with said spring-bracket for opening and closing the door.

6. A ventilator comprising an outer member and an inner member, a door connected with the inner member, a plurality of securing devices upon said door, a spring-bracket comprising a plurality of diverging arms and integral spring-coils connecting said arms, the free ends of said arms being bent to form extended bearing-shoes adapted to be detachably engaged with said securing devices, and flexible elements connected with said spring-bracket for opening and closing the door.

7. A ventilator comprising outer and inner members which are parallelogrammatic in cross-section and adapted to be mounted in a support with their front and rear edges in vertical position, the outer member having depending storm-flanges secured to the front edges of its bottom and top and laterally-extending storm-flanges on its sides, a plurality of storm-slats mounted in the outer member on a steeper incline than the upper and lower ends thereof, each of said storm-slats having at its forward end a depending vertically-disposed storm-flange and at its rear end a forwardly and upwardly directed storm-flange, an upwardly-extending, vertically-disposed

flange on the rear edge of the bottom of the outer member, upper and lower vertically-disposed screen-slats secured to the sides of said forward member, a vertically-extending screen secured to said screen-slats in rear of said storm-flanges, and said inner member having its rear end formed with a centrally-disposed door-opening, a door hinged at its upper end and adapted to close said door-opening, a bracing-flange on the lower end of said door adapted to contact with the top of the inner member when the door is open, securing devices connected with said door, a spring-bracket detachably connected with said securing devices and comprising diverging arms connected by spring-coils at one end and having their other ends bent to form extended bearing-shoes, and flexible elements connected with the spring-coils of said bracket.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

MILES TOWNSEND.

Witnesses:

LOUIS C. MILLER,
F. I. COLEGROVE.