(No Model.) 2 Sheets—Sheet 1.

S. K. ADDOMS.

VENTILATOR FOR WINDOWS.

No. 261,291. Patented July 18, 1882.

Fig. 1.

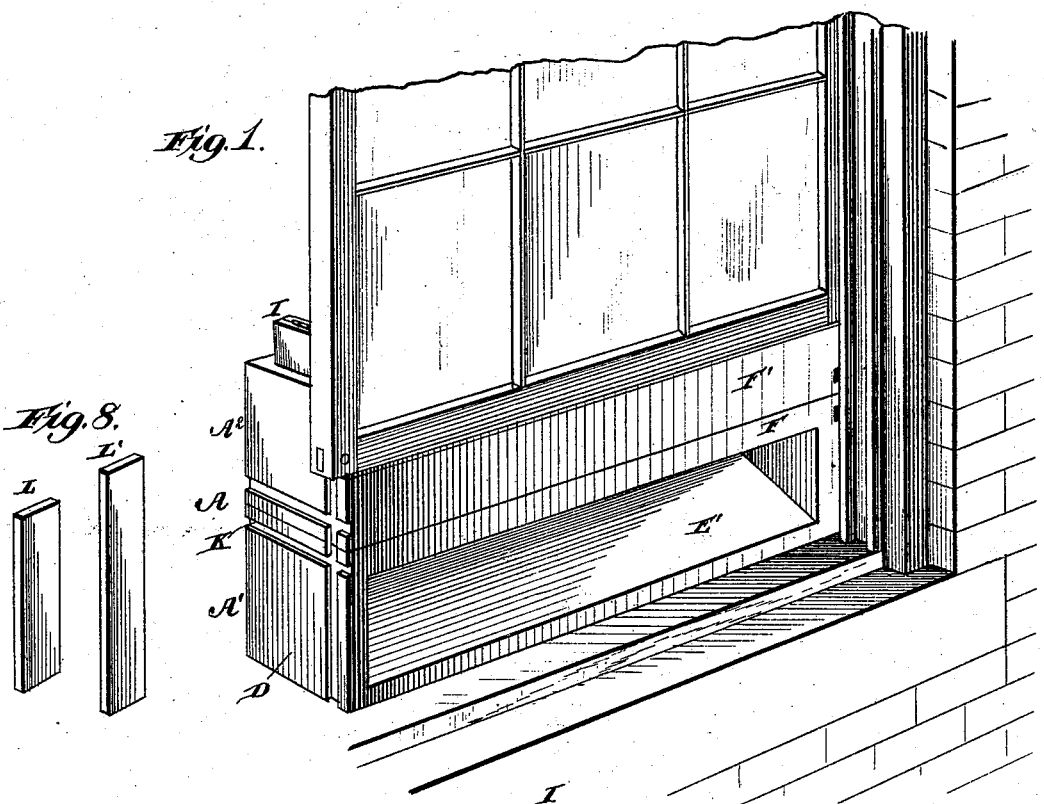


Fig. 8.

Fig. 2.

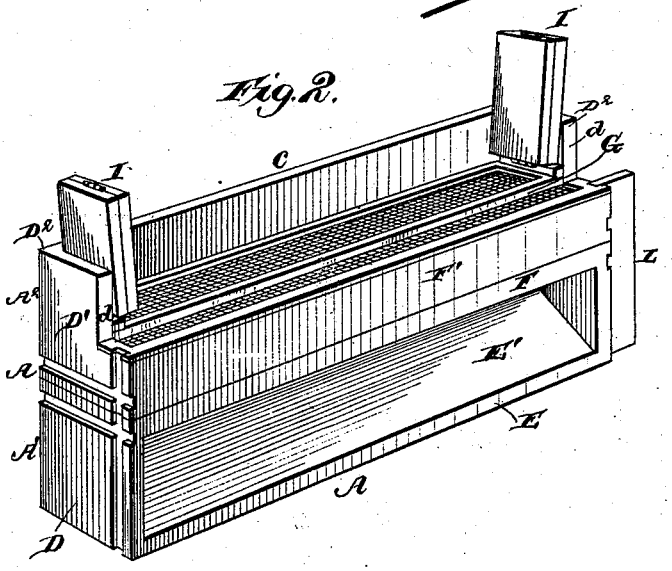
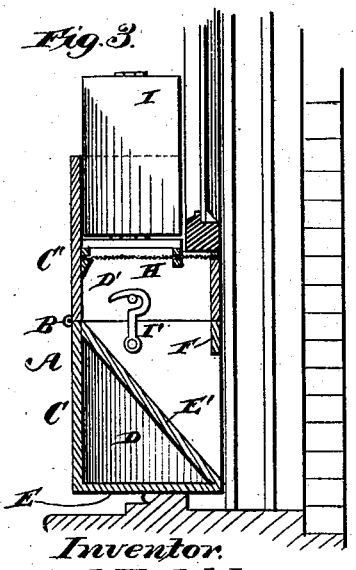


Fig. 3.



Witnesses.
Robert Everett.
J. A. Rutherford

Inventor.
Samuel K. Addoms.
By James L. Norris, Atty.

(No Model.) 2 Sheets—Sheet 2.

S. K. ADDOMS.

VENTILATOR FOR WINDOWS.

No. 261,291. Patented July 18, 1882.

Fig. 4.

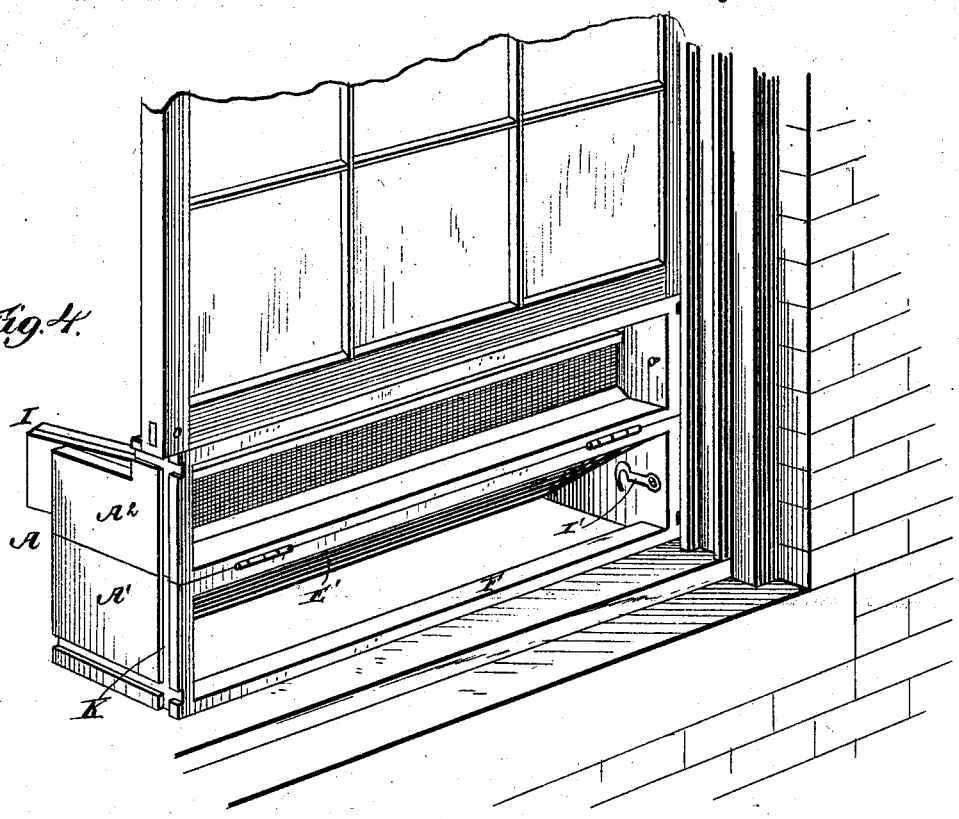


Fig. 5.

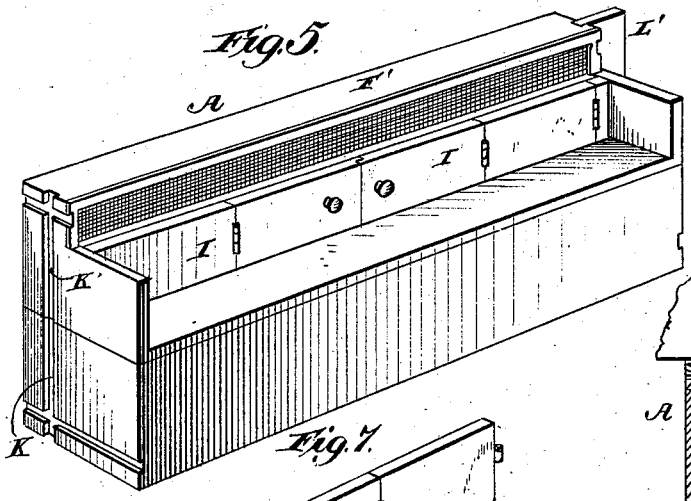


Fig. 6.

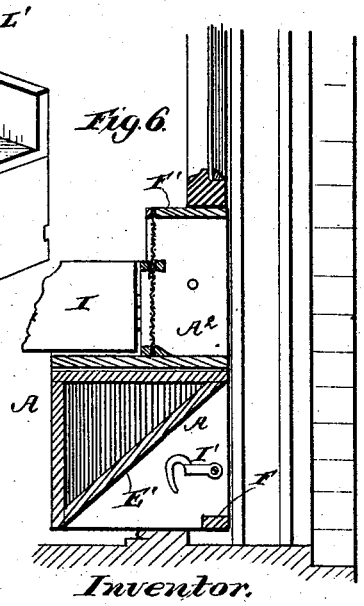
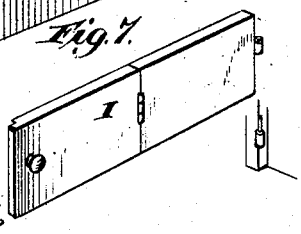


Fig. 7.



Witnesses.
Robert Everett.
J. A. Rutherford

Inventor.
Samuel K. Addoms.
By James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

SAMUEL K. ADDOMS, OF BROOKLYN, NEW YORK.

VENTILATOR FOR WINDOWS.

SPECIFICATION forming part of Letters Patent No. 261,291, dated July 18, 1882.

Application filed May 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL K. ADDOMS, a citizen of the United States, residing at Brooklyn, Kings county, New York, have invented new and useful Improvements in Ventilators for Windows, of which the following is a specification.

This invention relates to that class of ventilators which are adapted to be placed under the lower sash of a window for the purpose of allowing a free circulation of air between the apartment and the external atmosphere.

The objects of my invention are principally to construct the ventilator so that when employed for ventilating a sleeping-apartment during the night the inflowing current of air entering the apartment shall be directed upward toward the ceiling, and thereby avoid a direct draft upon the occupant of the room, and also so that when employed for day use its air-passage can be changed so as to allow a free direct inflow of air into the apartment; also, to provide improved means for directing the current of air toward the upper part of the room when the ventilator is adjusted for such purpose; also, to provide certain improved details of construction, all as hereinafter fully described, and illustrated in the drawings, in which—

Figure 1 shows the ventilator in place under the sash of a window and adjusted with special reference to ventilating an apartment during the night. Fig. 2 is a perspective view of said ventilator; Fig. 3, a transverse section. Fig. 4 shows the ventilator in place under the sash of a window and adjusted with reference to ventilating and admitting air into a room during the day. Fig. 5 shows in perspective the ventilator thus adjusted. Fig. 6 is a transverse section thereof. Fig. 7 shows one of the doors detached. Fig. 8 shows two removable end extension-boards.

The letter A indicates an oblong box or case adapted in length to the width of a window, and designed to be placed under the lower window-sash. This box or case is divided into two parts, A′ and A^2, hinged together at the back by suitable hinges, B, and constructed so that when brought together, as illustrated in the first three figures of the drawings, they shall form a case having an opening at the front for the admission of external air, and an opening in the top for the entrance of air into the apartment, with a passage for conducting the air through the case. The lower part or half of this case is composed of a vertical back, C, ends D, and a bottom, E, having an inclined deflecting-board, E′, with a strap, F, extending across its open front and secured to the upper corners of its ends. The upper part or half of this box or case is composed of a vertical back, C′, ends D′, a closed front, F′, and an open top divided by a longitudinal strip, G, and covered with wire or other gauze, so as to keep out insects. The vertical back of this part A^2 of the case is extended considerably above its top, as at *c*, and a portion of each end next to the said back is likewise extended, so as to form the end extensions, D^2.

I I indicate the doors, employed either for closing this opening H or for clearing the same, as may be desired. These doors are each composed of two sections hinged together, and they are hinged at their ends to suitable cleats secured at the ends D′, so that the said doors open toward the ends of the box, and when open rest upon the end extensions.

I′ indicates hooks pivoted to one part or half of the case for engaging eyes or pins upon the other part thereof, so as to hold the two parts together. When the parts are thus folded the ventilator is especially adapted for ventilating a sleeping-apartment during the night. The case is rested upon the sill or bed of the window-frame and the sash brought down upon the same alongside the vertical edges of the end extensions, D^2, of the case, the open front of the part A′ of said case being on the outside and the hinged backs of these said parts being on the inside of the window. One or both of the doors or covers will be raised, and hence the air will circulate freely to and from the apartment through the case. The inflowing current of air which passes through the wire screen is deflected and directed up toward the ceiling of the room by the vertical back extension, *c*, of the part B′ of the case, and also by the doors, which, when open, preferably lie in slightly-inclined planes, as shown. In this way the back and the doors form a passage and deflector which effectually prevent any direct draft of air upon the occupant of the apartment.

It will be seen that the screen covering the

open top of the part A^2 of the case is divided by the strip G. That portion of the screen between said strip and the vertical extension *c* of the back C′ is closed by the doors, or when used as in Fig. 1 the doors are opened, and hence the air passes through said part of the screen. The outer part of the screen, however, outside of said strip G will be partially closed by the lower edge of the sash, which rests on the top edges of the ends D′ of the box, the sash then being alongside of the vertical edges *d* of the extensions D^2 of said ends.

The remaining figures of the drawings illustrate the two parts of my improved ventilator folded together, so as to adapt it for day use. In this instance the back portions, C C′, of the case are folded together and the case then turned and placed under the sash, so that the front portion, F′, of the part A^2 of the case shall now be at the top and form the ledge or seat for the sash to rest upon. In this position the open top of the part A′ and the open bottom of the part A^2 of this part of the case will now be outside of the window, while the bottom of the part A′ and the part A^2 will be inside of the same. The doors open within the apartment, and by opening the same a direct draft is attained through the opening in the top part, A^2, which is covered by the sheet of wire-gauze, which now lies in a vertical plane, whereas in the former instance described it was maintained in a vertical position. As the bottom of the part A^2 of the case is open, it is evident that said direct draft is attained without any obstructing or deflecting walls, and hence that exceedingly free circulation is maintained. In this position it will be seen that the opening covered by the gauze constitutes a portion of the window, so that light will be admitted through the ventilator, and thereby avoid an objection to many of the window-ventilators now in use, which exclude the light altogether.

By opening one or both doors, or by partially closing either or both, it will be evident that the draft can be readily regulated, and, if desired, the doors can be provided with detachable hinges, so that they can be removed, although, as they fold and occupy but a limited space, such will not usually be found necessary. Whether the two parts of the case are folded for night use, as in the first three figures, or for day use, as in the remaining figures of the drawings, a complete symmetrical case will be formed, the draft in the first instance entering the lower portion at the front, then passing up through the casing and along the top extension, which direct it toward the ceiling, while in the second instance the draft enters the top part of the casing at its open bottom, which now constitutes a portion of the case, and passes directly into the room.

The case could be made of metal, although it is more simply and cheaply constructed of wood. When not in use it can be folded in small compass and placed in the room as an article of furniture.

In the ends of the two parts of the case I form grooves K and provide boards L′ L′ of different lengths, adapted to fit in said grooves, so as to fill up any space which may occur between the ends of the case and the sides of the window-frame. The longer boards will be used when the case is folded as in Fig. 2, and the shorter when it is folded as in Fig. 5.

What I claim is—

1. In a ventilator for windows, adapted to be held under a window-sash, and provided with an air-passage for the circulation of air and with hinged doors for opening and closing said passage, the box or case having its back and portions of its ends extended above the opening in its top, the doors for said opening being hinged at the ends of said case and opening against the end extensions, whereby when the doors are open the vertical extension of the back and the doors shall direct the air upwardly in the compartment, substantially as described.

2. A ventilator for windows, adapted to be held under a window-sash, and consisting of a two-part case having an air-passage extending through the casing and opening both at the front of its lower part and at the top of its upper part or half, said two parts being hinged together at the back, whereby the case can be either folded so as to admit air into the lower portion of its front and then up through the casing and out through its top, or be folded so as to bring the two portions of its back together and then adjusted under a window so that the air shall pass directly through the upper part of the case, substantially as described.

3. The combination, in a ventilator for windows, of the part A′ of a two-part case, having an open front and top, with the part A^2, having an open bottom and an opening in its top, and the vertical extensions of its back and ends and hinged doors for closing its said opening, the said two parts of the casing having their back portions hinged together, whereby the ventilator can be folded for either night or day use, substantially as described.

4. The combination, in a ventilator for windows, of the part A′ of a two-part casing, having a back, two ends, and an open front, with the remaining part, A^2, of the casing, having a closed part, a top with a gauze-covered opening in it, a back extended above the top ends having correspondingly-extended portions, and doors for closing the gauze-covered opening, hinged so as to open against the end extensions, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

SAMUEL K. ADDOMS.

Witnesses:
JAMES L. NORRIS,
J. A. RUTHERFORD.