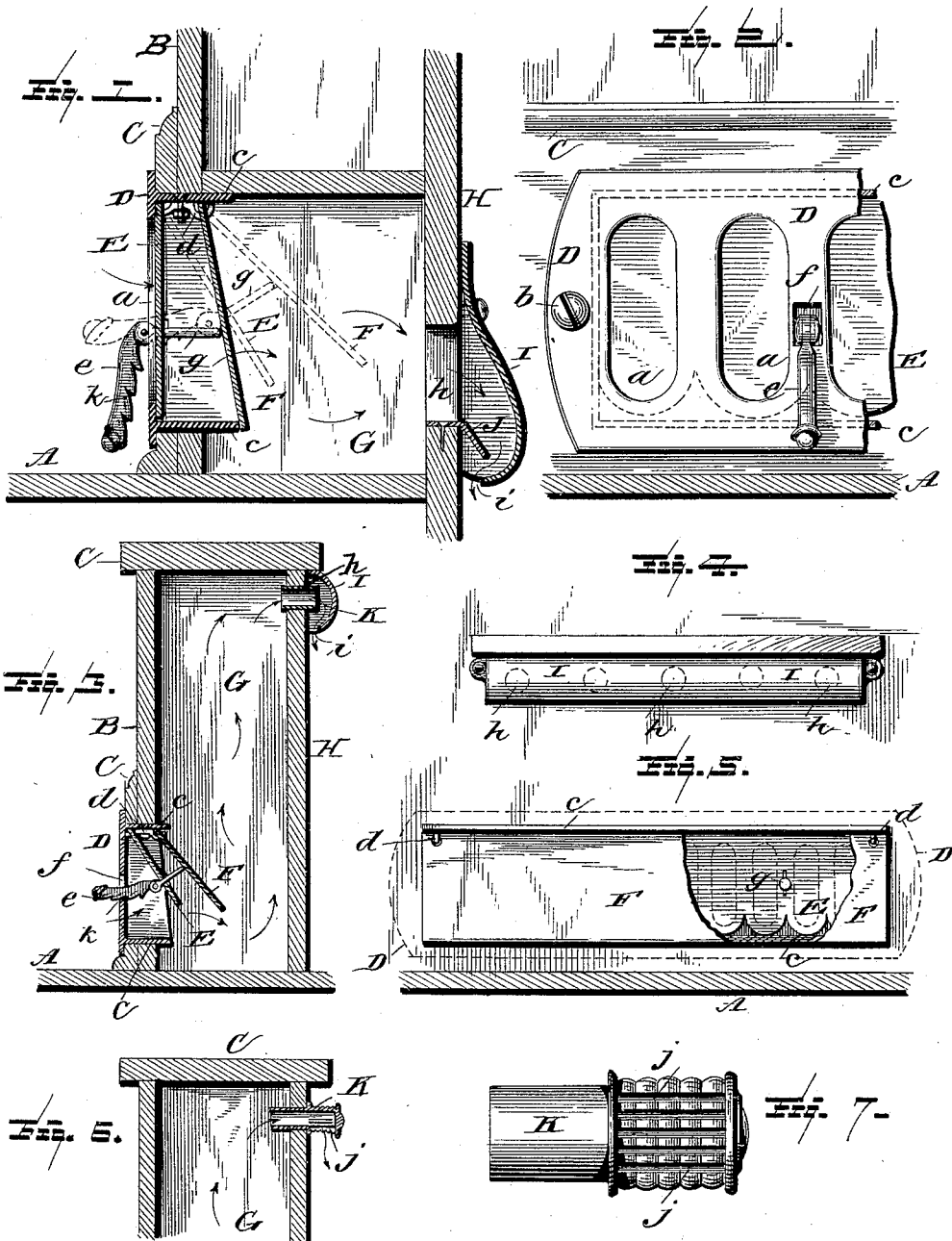


(No Model.)

M. G. TOUSLEY.
VENTILATOR.

No. 446,824.

Patented Feb. 17, 1891.



Witnesses
L. C. Hills.
E. H. Bond.

Inventor
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UNITED STATES PATENT OFFICE.

MIRON GRAHAM TOUSLEY, OF ENGLEWOOD, ILLINOIS, ASSIGNOR TO
ARMENA PATRICK, OF SAME PLACE.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 446,824, dated February 17, 1891.

Application filed August 14, 1890. Serial No. 361,985. (No model.)

To all whom it may concern:

Be it known that I, MIRON GRAHAM TOUSLEY, a citizen of the United States, residing at Englewood, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Ventilators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention has relation to certain new and useful improvements in house or car ventilators; and it has for its object among others to provide a simple, durable, and efficient device of this character, readily applied to any building new or old, easily controlled, the wall-cavity being utilized for the conduit and the window-sill for the cut-off. I provide a low escape for the foul air, taking the lowest, heaviest, and worst air from the room, combined with a short and easy line of escape. Back-draft is guarded against.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a vertical cross-section showing my improved device in position beneath a window-sill. Fig. 2 is a front view of a portion thereof. Fig. 3 is a vertical cross-section showing a modified form. Fig. 4 is a rear face view of the upper outlet-guard. Fig. 5 is a rear view of the lower portion shown in Fig. 3, with parts broken away. Fig. 6 is a sectional detail showing a different form of outlet-guard. Fig. 7 is a view looking at the bottom of the capped tube employed in the form shown in Fig. 6.

Like letters of reference indicate like parts throughout the several views.

The same principle is involved in all the forms shown, the same end being attained; but the different views show some of the various ways by which it may be accomplished.

Referring now to the details of the drawings by letter, A designates the floor-line, B

the inner wall, and C the window-sill, of a building beneath which sill my improved ventilator is applied.

In Fig. 1, D is a face-plate provided with a plurality of inlet-openings *a*, as seen best in Fig. 2, and designed to be secured in any suitable manner—as, for instance, by screws *b*—over an opening beneath the window-sill, as seen in Fig. 1. This plate has inwardly-extending flanges *c*, as seen in Fig. 1, which serve to keep the plate from movement within the opening in the wall, and to the upper flange are hinged the dampers E and F, as seen best in Fig. 1, wherein *d* is a double-hooked staple or the like suspended from the upper flange, and to the oppositely-extending hooks of which the said dampers are loosely hinged, so as to close by their own weight when not otherwise supported or prevented from so doing. The inner edge of the lower flange of the plate serves to limit the downward and outward movement of the inner damper, as seen in full lines in Fig. 1. The outer damper is designed to work between the upper and lower flanges and when closed lies flat against the inner face of the front plate and serves to effectually close the openings *a* therein, as seen in Figs. 1 and 2. The outer damper is provided with one or more pivoted handles *e*, by which it is operated, the said handle or handles working through an opening or openings *f* in the front plate, as seen in Fig. 2. The pivot or pin *g*, which serves to hold the handle is extended rearward, as seen in Fig. 1, a sufficient distance to just touch the inner damper, so that as the outer damper is moved inward the inner damper will be simultaneously moved by reason of engagement of the end of said pin against the said inner damper, as seen by dotted lines in Fig. 1. The wall-cavity G is utilized for the conduit and the window-sill serves the function of a cut-off, as will be understood from Fig. 1.

h is an opening in the outer wall H, which is protected by a plate or shield I, suitably secured to the outer face of the outer wall with an outlet or opening *i* at its under side, as seen in Fig. 1.

J is a deflector-plate secured to the upper face of the bottom wall of the said opening

and extended downward within the space between the outer wall and the shield at an angle of about forty-five degrees, extending for about one-half the distance, as clearly 5 seen in Fig. 1. The course of the foul air is indicated by arrows in Fig. 1. The deflector serves to prevent back-draft.

In Fig. 3 the same construction is shown upon the inner wall of the conduit; but instead of having the outlet in the outer wall 10 nearly on the same horizontal plane with the inlet I have shown the outlet-opening *h* as at the top of the conduit *G* and the shield as of a curved plate secured to the outer face of 15 the outer wall with the opening at the bottom; but in this instance pipes *K* are employed which extend outward about midway the distance between the shield and the outer wall. The direction of the foul air is indicated by the arrows in this figure. In Fig. 20 4 a face view of the outlet-opening and its shield is shown.

In Fig. 6 I have shown a modified form of outlet and shield in which the tubes are 25 capped or closed at the outer end and upon their under portions formed with openings or slits *j*, as seen in said figure as well as in Fig. 7. In this case the end or cap serves as a shield. The action is substantially the same as in the other forms. 30

The handle *e* is notched or serrated upon its inner or under face, as seen at *k* in Figs. 1 and 3, to engage the wall of the opening through which it works to hold the dampers 35 in their adjusted position.

What I claim as new is—

1. The face-plate combined with the hinged dampers hinged to swing in the same direction, and the handle on the outer damper provided with means for engaging the inner 40 damper, substantially as and for the purpose specified.

2. The face-plate provided with openings and inwardly-extending flanges, combined 45 with the hinged dampers, one working between the flanges and the other adapted to rest, when closed, against the inner edge of the lower flange, and both hinged at their upper ends to swing in the same direction, and means for operating both dampers simultaneously, 50 as set forth.

3. The combination, with the face-plate having flanges, of the double-hooked staple or hook depending from the upper flange, and the dampers hinged upon said hooks and arranged to swing inward in the same direction, as set forth. 55

4. The combination, with the face-plate and the dampers hinged thereto and means for simultaneously operating them, of the outlet 60 upon a higher plane than the inlet and provided with a shielded tube or tubes with outlet upon the lower side, substantially as specified.

In testimony that I claim the above I have 65 hereunto subscribed my name in the presence of two witnesses.

MIRON GRAHAM TOUSLEY.

Witnesses:

C. N. BRISCO,
EMIL NELSON.