

J. F. CAMERON.
VENTILATING BUILDINGS.

No. 186,078.

Patented Jan. 9, 1877.

Fig: 1.

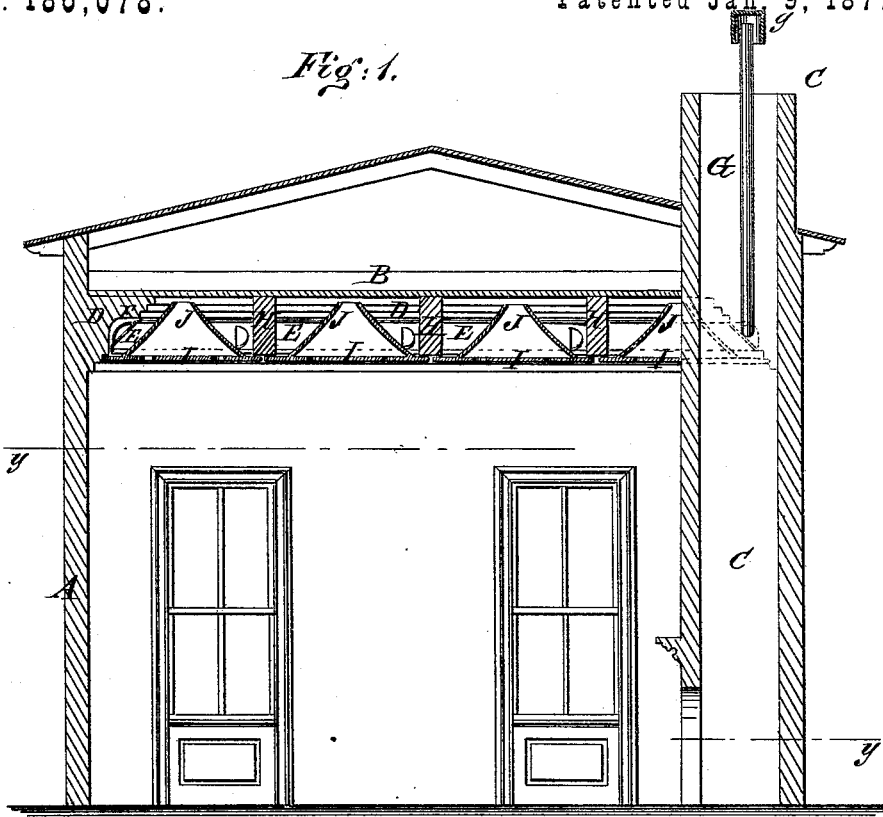


Fig: 2.

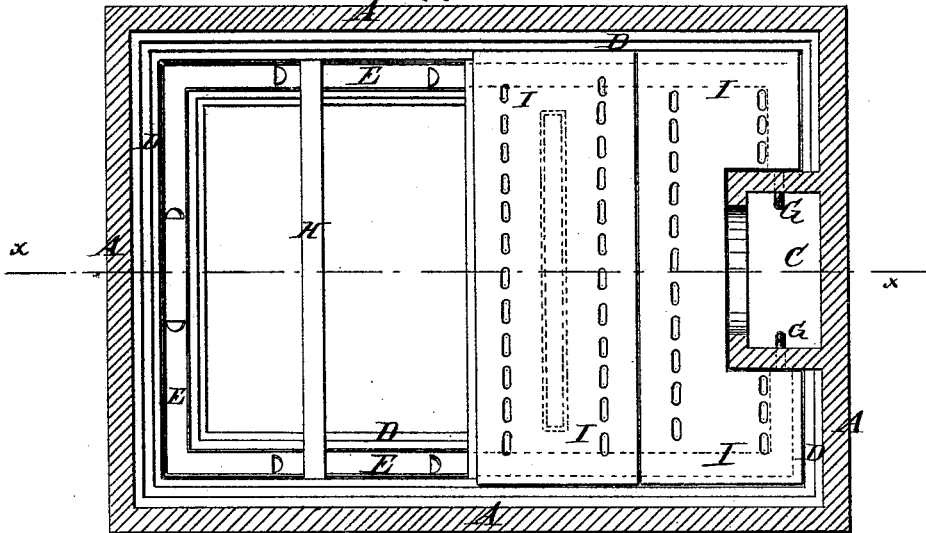


Fig: 3.

WITNESSES:

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JOHN F. CAMERON, OF SOUTH BROOKLYN, ASSIGNOR TO ELIZABETH W. M. CAMERON, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN VENTILATING BUILDINGS.

Specification forming part of Letters Patent No. 186,078, dated January 9, 1877; application filed December 11, 1876.

To all whom it may concern:

Be it known that I, JOHN F. CAMERON, of South Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Ventilating Buildings, of which the following is a specification:

Figure 1 is a vertical section of a building to which my improvement has been applied, taken through the line *x x*, Fig. 2. Fig. 2 is a horizontal section of the same, taken through the line *y y*, Fig. 1. Fig. 3 is a detail longitudinal section of a portion of the cornice.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved means for removing the foul air from the rooms of dwelling-houses and other buildings.

The invention consists in the combination of the tapering guide-spouts with the perforated plates that cover the cavities of the hollow ventilating-cornices; in the combination of the pipes with the hollow ventilating-cornices and with the chimney-flue; and in the combination of the cross-bars, the perforated plates, and the hopper-shaped spouts with the ceiling, and with the hollow ventilating-cornices, as hereinafter fully described.

A represents the walls, B represents the ceiling, and C the chimney-flue, of a building, about the construction of which parts there is nothing new. D is the cornice, which is made hollow, and the hollow or cavity of which is covered with a plate, E. In the plate E are formed a number of perforations, to allow the air to pass through them into the cavity of the cornice D. To the inner side of the plate E are attached tapering semi-tubular guides F, in such position as to cover the holes through said plate E, and direct the current of air in the proper direction.

The guide-plates F prevent the current of air that may be passing through the cavity of the cornice D from passing through any of the openings in the plate E back into the room.

G are pipes, that lead from the hollow of

the cornice D into the chimney-flue C, and up through said chimney-flue. The upper ends of the pipes G are covered with caps *g'*, to prevent wind and rain from entering them.

By this construction the smoke and other products of combustion passing up the chimney-flue will warm the pipes G, and thus form a draft through them.

In the case of kitchens, and other rooms from which steam and odors are to be removed, cross-bars H are attached to the ceiling B, to receive and support plates I, which thus form a false ceiling.

To the upper side of the plates I are attached hopper-shaped plates or spouts J, which extend up nearly to the ceiling B, and the upper opening of which is made long and narrow. In the plates I, within the edges of the hopper-shaped spout J, are formed holes for the impure air to pass through.

By this construction the impure air that rises to the top of the room will pass through the plates I and spouts J into the space between the true and false ceilings, and will pass thence into the cavities of the cornices D, and out through the pipes G, the spouts J preventing its return into the room.

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

1. The combination of the tapering guide-spouts F with the perforated plates E, that cover the cavities of the hollow ventilating-cornices D, substantially as herein shown and described.

2. The combination of the pipes G with the hollow ventilating-cornices D E F, and with the chimney-flue C, substantially as herein shown and described.

3. The combination of the cross-bars H, the perforated plates I, and the hopper-shaped spouts J with the ceiling B, and with the hollow ventilating-cornice D E F, substantially as herein shown and described.

JOHN F. CAMERON.

Witnesses:

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