

T. W. BRACHER.

VENTILATOR.

No. 171,345.

Patented Dec. 21, 1875.

Fig. 1.

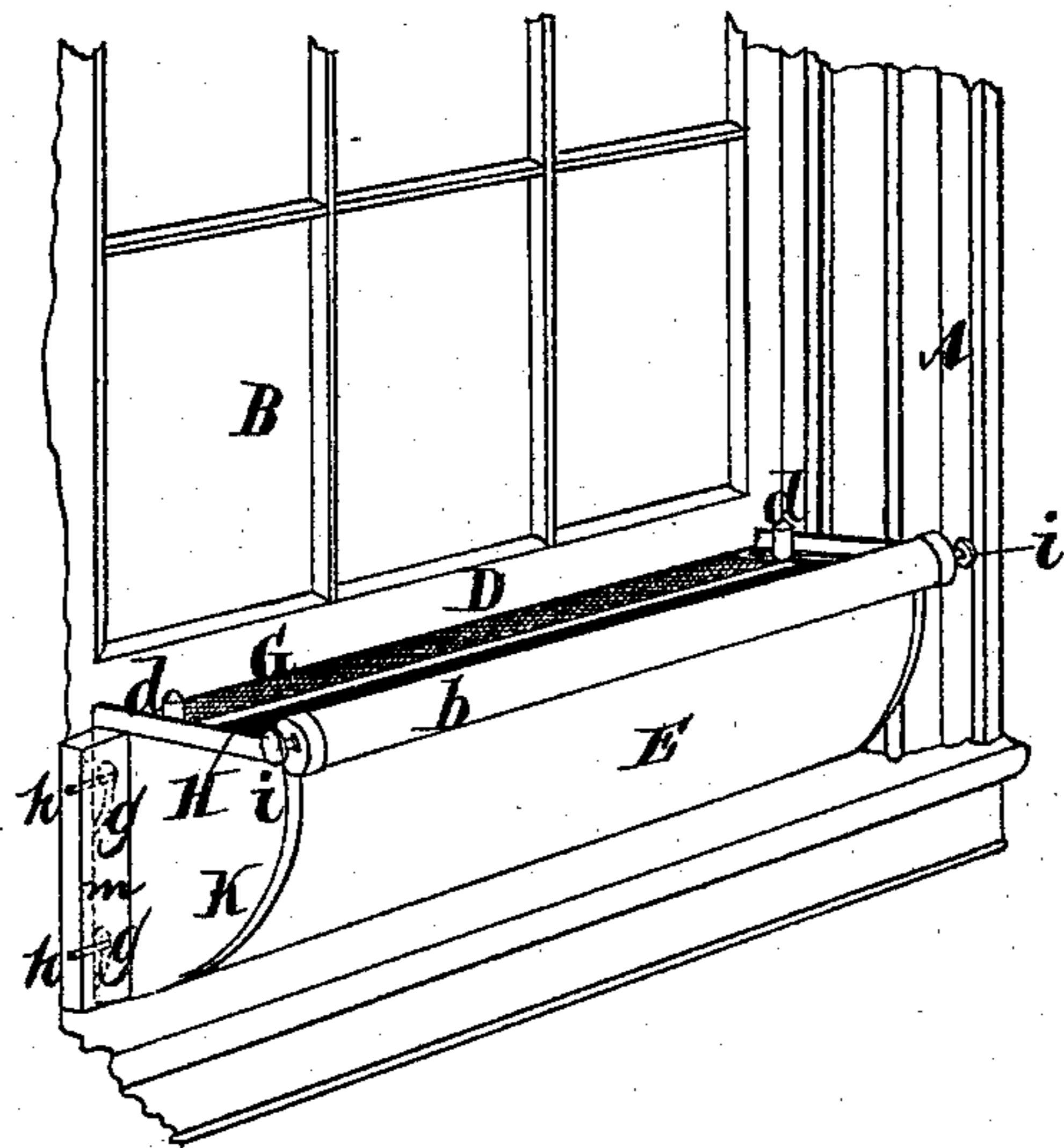
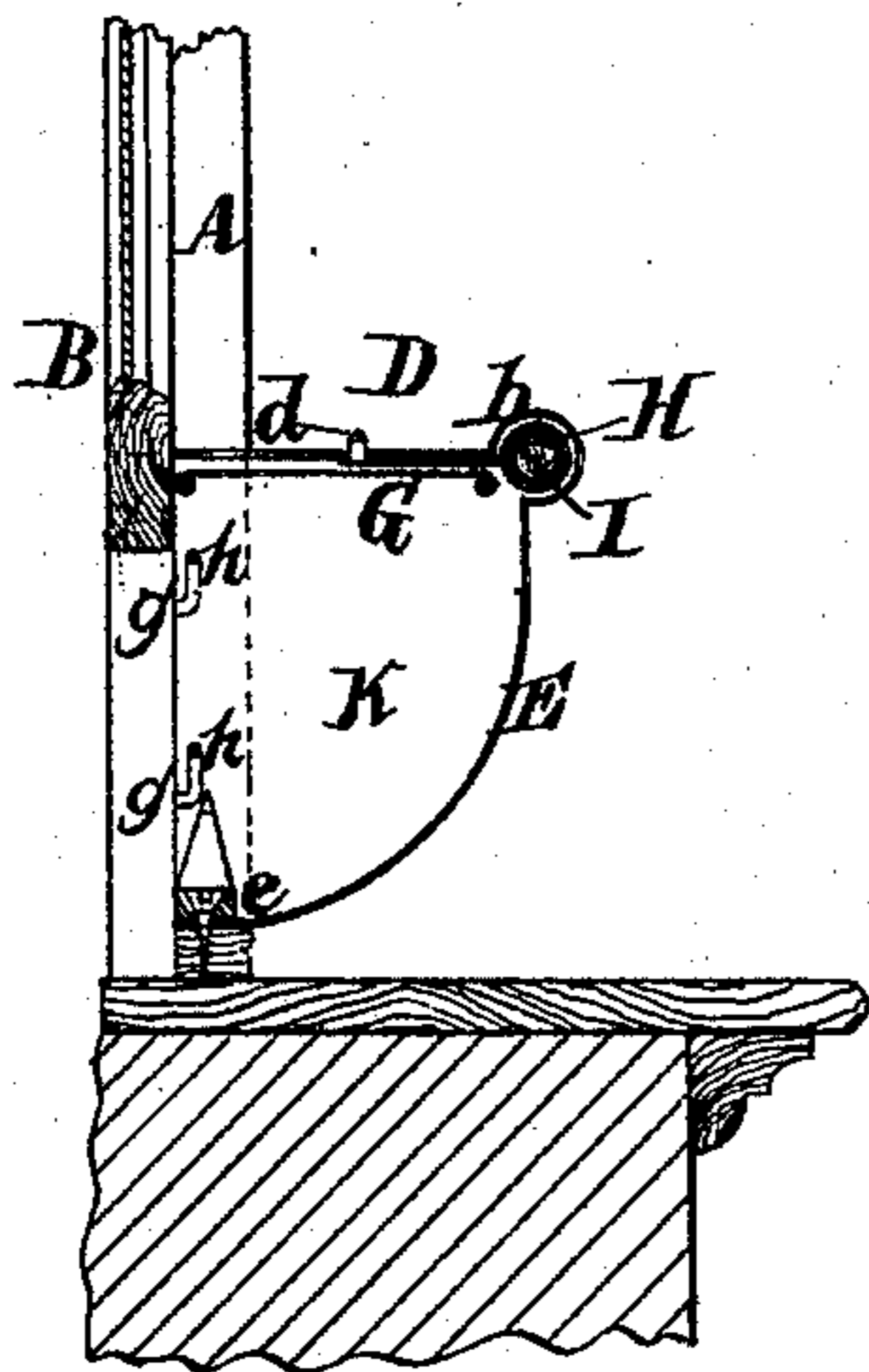


Fig. 2.



Witnesses.

Otto Aufhaand  
Chas. Wahlenz.

Inventor.

Thomas W. Bracher  
per  
Van Santvoord & Hauff.  
Attors.

# UNITED STATES PATENT OFFICE.

THOMAS W. BRACHER, OF NEW YORK, N. Y.

## IMPROVEMENT IN VENTILATORS.

Specification forming part of Letters Patent No. **171,345**, dated December 21, 1875; application filed September 23, 1875.

*To all whom it may concern:*

Be it known that I, THOMAS W. BRACHER, of the city, county, and State of New York, have invented a new and useful Improvement in Ventilators, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a perspective view, showing my improvement applied to a window. Fig. 2 is a cross-section thereof.

Similar letters indicate corresponding parts.

My invention relates to certain improvements in ventilators, and particularly those designed to be placed in windows.

My invention consists of a novel combination and arrangements of parts, which will be fully hereinafter described, and specifically pointed out in the claim, a preliminary description, therefore, being deemed unnecessary.

In the drawing, the letter A designates a window-frame, in which is fitted a sash, B, which, in the example shown, is partly raised, in order to permit of a circulation of air to and from the apartment to which the window may belong. In Figs. 1 and 2 the deflecting-piece E has an upward curve, and, consequently, the air entering by the ventilator has an upward tendency. Across the upper part of the deflector E extends a plate, G, of gauze, (wire-gauze being preferred,) with which is combined a curtain, H, of linen, muslin, or other fibrous or textile fabric having a loose texture. Instead of wire-gauze, a perforated plate may be used, and the plate is fixed in its position, while the curtain H is arranged to be pulled off or on the same by being wound on a roller, I, which is placed within a casing, b, attached to the deflector E, and which has finger-pieces *i* exterior of this casing, by means of which it may be turned in order to wind up the curtain. The curtain H is unwound from the roller I by being pulled to the desired position, and to facilitate this operation studs *d* are fastened to the stretcher of the curtain. The ends of the stretcher are guided in grooves formed in the end pieces K K of the ventilator.

It will be readily understood that when the curtain H is drawn over the wire-gauze or perforated plate G it tends to arrest the passage of dust through the ventilator, while but a very small hinderance of the ventilation had by the plate is thereby occasioned.

Another advantage of combining a textile curtain with the wire-gauze or perforated plate consists in that a greater or less amount of ventilation may be had; also, that the ventilator may be regulated for different kinds of weather, according to whether a greater or less ventilation is desired.

The deflector E is intended to be made shorter than the average width of a window, and the spaces between the ends of the deflector and the window-frame are filled up by strips of wood *m m*. These strips are furnished with the deflector, and they are of such thickness that they will fill up the spaces between the ends of the deflector and the widest window-frame to which said deflector may be applied.

For narrow window-frames the filling-strips *m* can be readily trimmed down, and by these means my ventilator can be made to fit windows of different width.

The end pieces K K are provided with slots *g g*, whose direction is inward and upward, (best seen in Fig. 2,) and if pins *h h* are attached to the sides of the window-frame A, and the slots *g g* are adjusted thereon in a proper manner, the ventilator is thereby firmly held in place.

With my ventilator are also combined plates *c*, which are affixed to the lower part of the deflector E, and are provided with screw-holes, in order that when it is desired to fasten the ventilator permanently to a window this purpose may be accomplished by screws driven through the plates into the window-sill.

I am aware of the patent to Lesperance, dated February 9, 1869, and numbered 86,766, and I disclaim the construction therein shown.

What I claim as new, and desire to secure by Letters Patent, is—

A ventilator in which is combined a curved deflector, E, a perforated plate, G, extending across the upper part of the deflector, a curtain, H, a casing, *b*, and a roller, I, arranged in said casing, and having finger-pieces *i*, the whole being constructed and arranged for operation substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 15th day of September, 1875.

T. W. BRACHER. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.