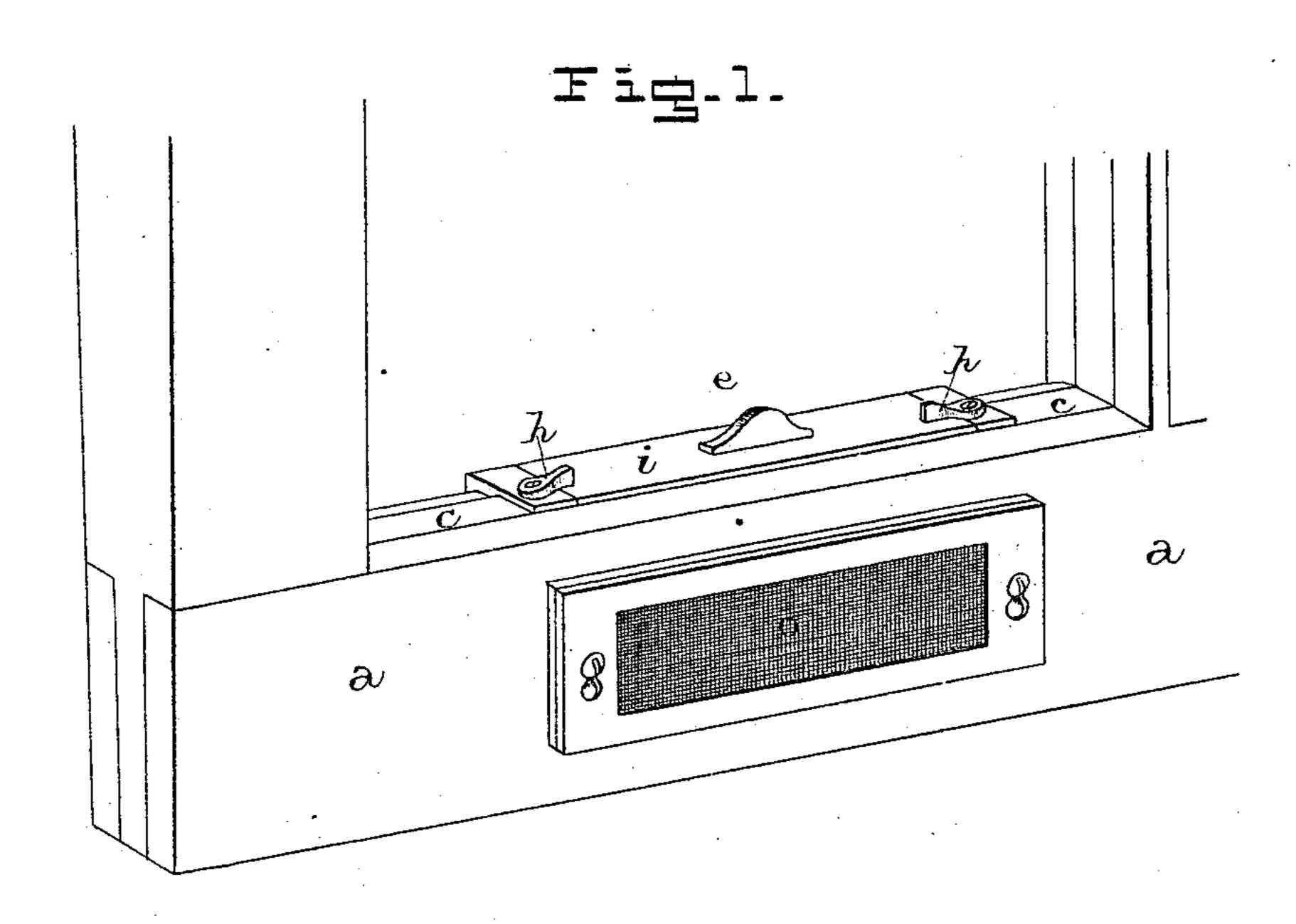
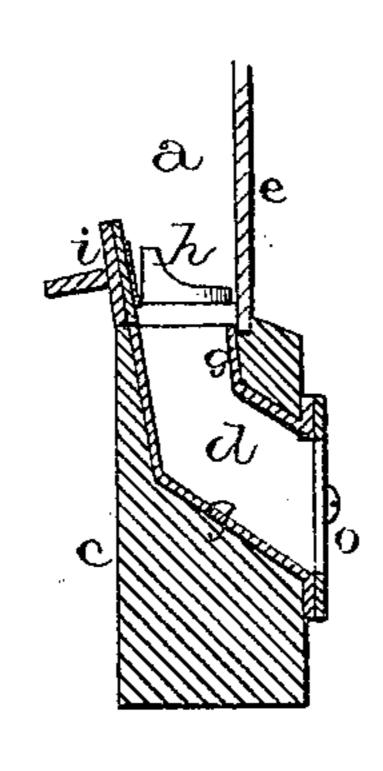
F. MAULL. Ventilator for Windows.

No. 217,630.

Patented July 15, 1879.



F1====.



WITNESSES:

Jas, J. Dustamel, Ad D. Maines INVENTOR: J. Spaull, per J. a. Lehmann, atty

UNITED STATES PATENT OFFICE.

FERDINAND MAULL, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN VENTILATORS FOR WINDOWS.

Specification forming part of Letters Patent No. 217,630, dated July 15, 1879; application filed June 3, 1879.

To all whom it may concern:

Be it known that I, FERDINAND MAULL, of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Ventilators for Windows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in ventilators for windows; and it consists in making an opening through the lower rail of the sash, beginning at the top of the inside edge and running diagonally down through, and covering the lower end with a removable screen, and the upper one with a hinged lid, the lid coming next to and on a level with the lower edge of the pane of glass, as will be more

fully described hereinafter.

Figure 1 is a vertical section of my invention, and Fig. 2 a side elevation taken from the outside.

a represents a window-sash, which may be of any desired construction. Cut through this sash, beginning from the top of the bottom rail, c, is an opening, d, which extends a suitable distance down below the lower edge of the glass e, and then out through the outer side of the sash, so as to let pure air pass into the room or compartment at the immediate base of the glass. Passed into this opening is a frame, g, which is made in two parts, of either cast or sheet metal. Pivoted or hinged to the upper part of this frame g, on the top of the bottom rail, c, is the lid i, which is lined with rubber on its under side, so as to form a tight joint, and which is held down

when closed by means of the buttons h. This cover, being placed on the inside top edge of the bottom rail, is scarcely noticeable when closed, and does not in any way disfigure the inner or out side of the sash. The great advantage of this location, however, consists in the fact that when the lid is open and the fresh air passing into the room it is directed upward, so as not to annoy the person sitting before the window, as is the case where the opening is made directly through the window. Over the lower end of the opening d, on the outside of the sash, is placed a wire screen, o, which is made removable, so as to clean out any obstructions that may get into the opening at any time. This screen serves to sift the air of dust, sparks, and other such impurities as may be floating in the air.

This ventilator is also applicable to top and

bottom rails of doors.

I am aware that openings have been made through both the upper and lower rails of the sash for the purpose of ventilation, and this I do not claim; but,

Having thus described my invention, I

claim—

A window-sash having an opening, d, made diagonally through it, the upper end of which passes through the inside bottom edge, c, in combination with the cover i, placed upon the edgec, and the screen o, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 26th day of May, 1879.

FERDINAND MAULL. [L. s.]

Witnesses:

CHARLES E. BROWN, CONRAD UBHAUS.