

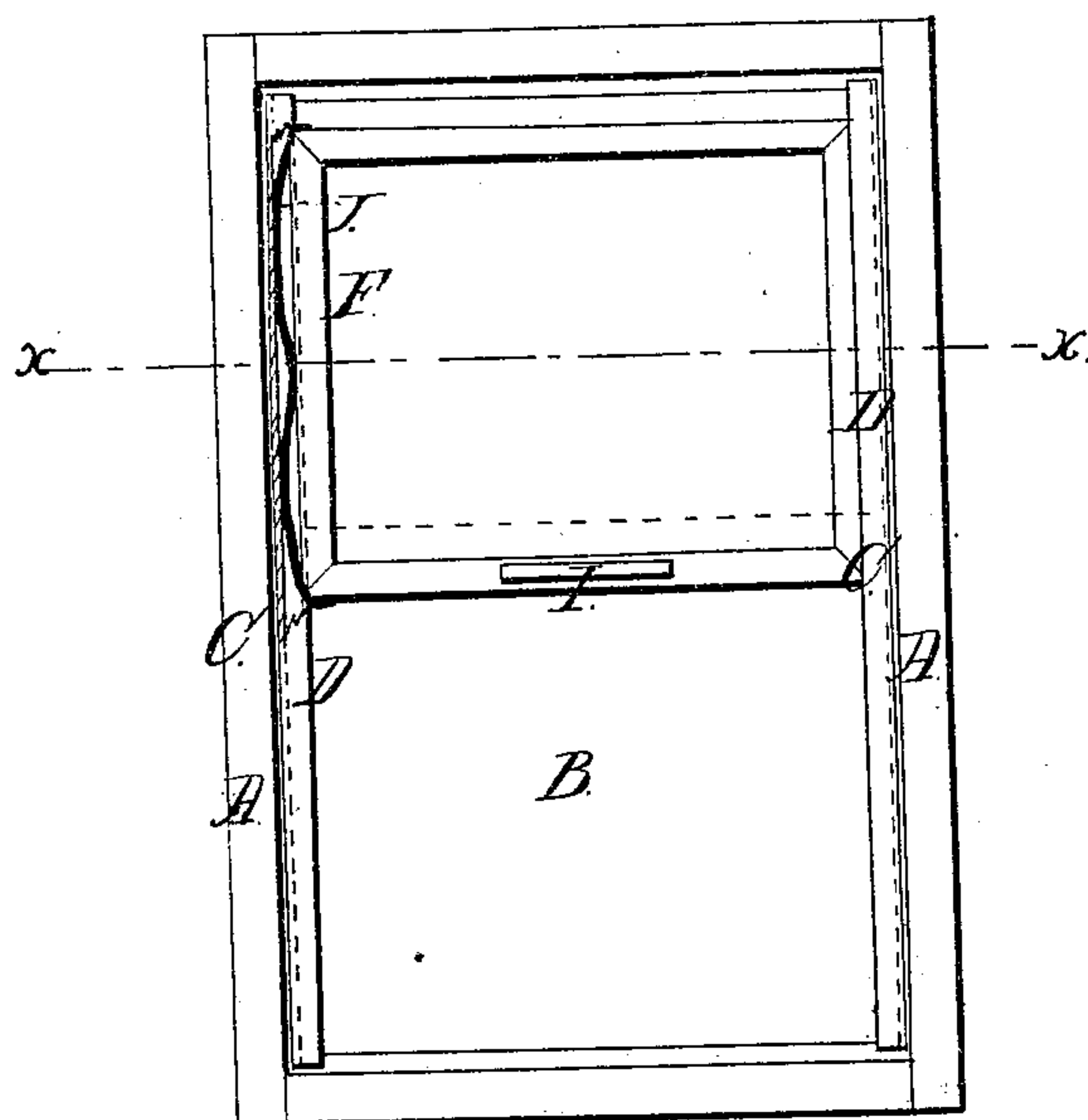
*R. H. Long,*

*Window Ventilator.*

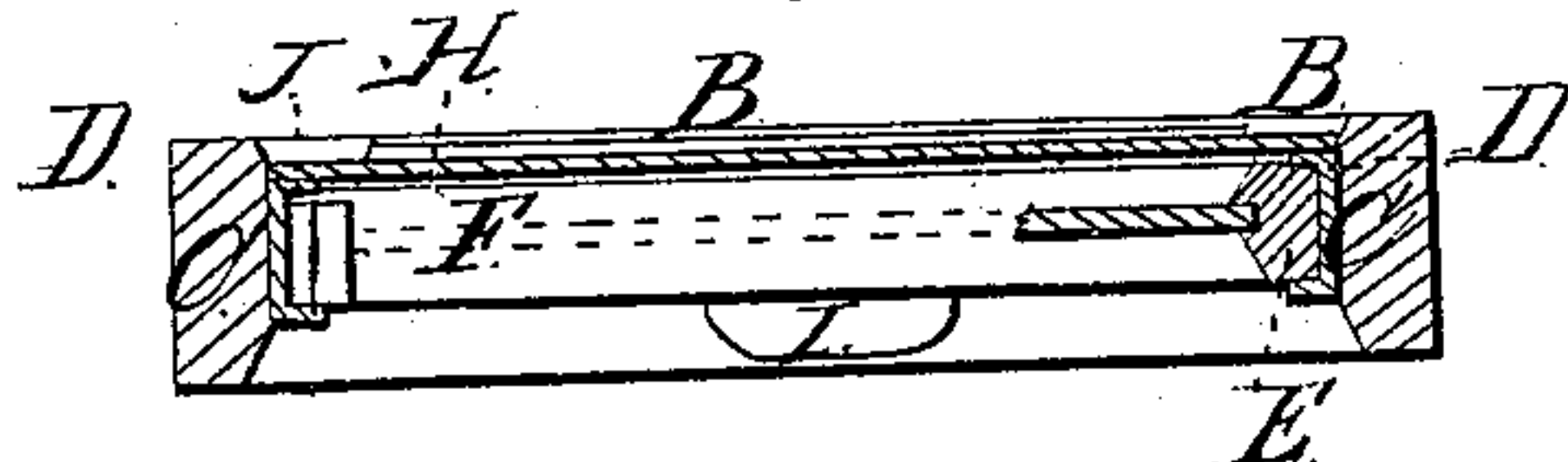
*No. 3,184.*

*Patented Aug 12. 1868.*

*Fig: 1*



*Fig: 2.*



*Witnesses;*  
*J. C. Kemmer*  
*A. M. Tamm*

*Inventor;*  
*R. H. Long*  
*By Munroe & Co*  
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# United States Patent Office.

R. H. LONG, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND R. T. TRALL,  
OF NEW YORK CITY.

*Letters Patent No. 81,184, dated August 18, 1868.*

## IMPROVEMENT IN WINDOW-VENTILATORS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, R. H. LONG, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented a new and useful Improvement in Window-Ventilators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has for its object the ventilation of rooms or buildings by cutting away a portion of one of the panes of glass in a window-sash, and inserting in the rails surrounding said pane of glass a supplementary frame containing a piece of glass of sufficient size to fill the opening formed by cutting away the fixed pane.

The supplementary frame is adapted to slide in metallic grooves set in the side rails of the sash, and is held in any desired position by means of a spring. To the outside of this frame, along its lower edge, a shelf is attached for shedding rain.

In the accompanying plate of drawings my improvements in window-ventilators are illustrated.

Figure 1 is a side elevation partly in section, and

Figure 2 a transverse section through the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings—

A represents a portion of a sash-frame to a window, containing a pane of glass, B, which is cut off across its width for one-half, or nearly so, of its length or height. The upper edge is shown in dotted lines, fig. 1.

In each side, C, of the sash-frame is secured a metallic frame, D, forming a groove or way, E, along its entire length.

The sides of the window-sash are cut away for the insertion of the metallic frame.

F is the supplementary frame, arranged to move within the grooves E, in which frame is secured a pane of glass.

J is a spring, upon one side of the supplementary frame, fitting in the grooves of the metallic guide-frame D. This spring is made of sufficient strength to hold the frame F in any desired position. This frame, F, is made of suitable size to entirely close the cut-out portion of the sash-frame when drawn or slid down, while, when up, it opens such portion to the admission or escape of air.

H, a shelf, applied to outside of frame F, along the lower rail, which shelf is inclined upon its upper side for shedding rain, &c.

I, a handle, on inside of frame F, for convenience of operating it.

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

1. The side grooves C, applied to a sash-frame surrounding a single pane of glass, in combination with the movable supplementary frame F, substantially as described for the purpose specified.

2. The shaft H, applied to the supplementary sash-frame F, substantially as described for the purpose specified.

R. H. LONG.

Witnesses:

BENJ. C. TRUE,

E. BARFOOT.