

No. 628,602.

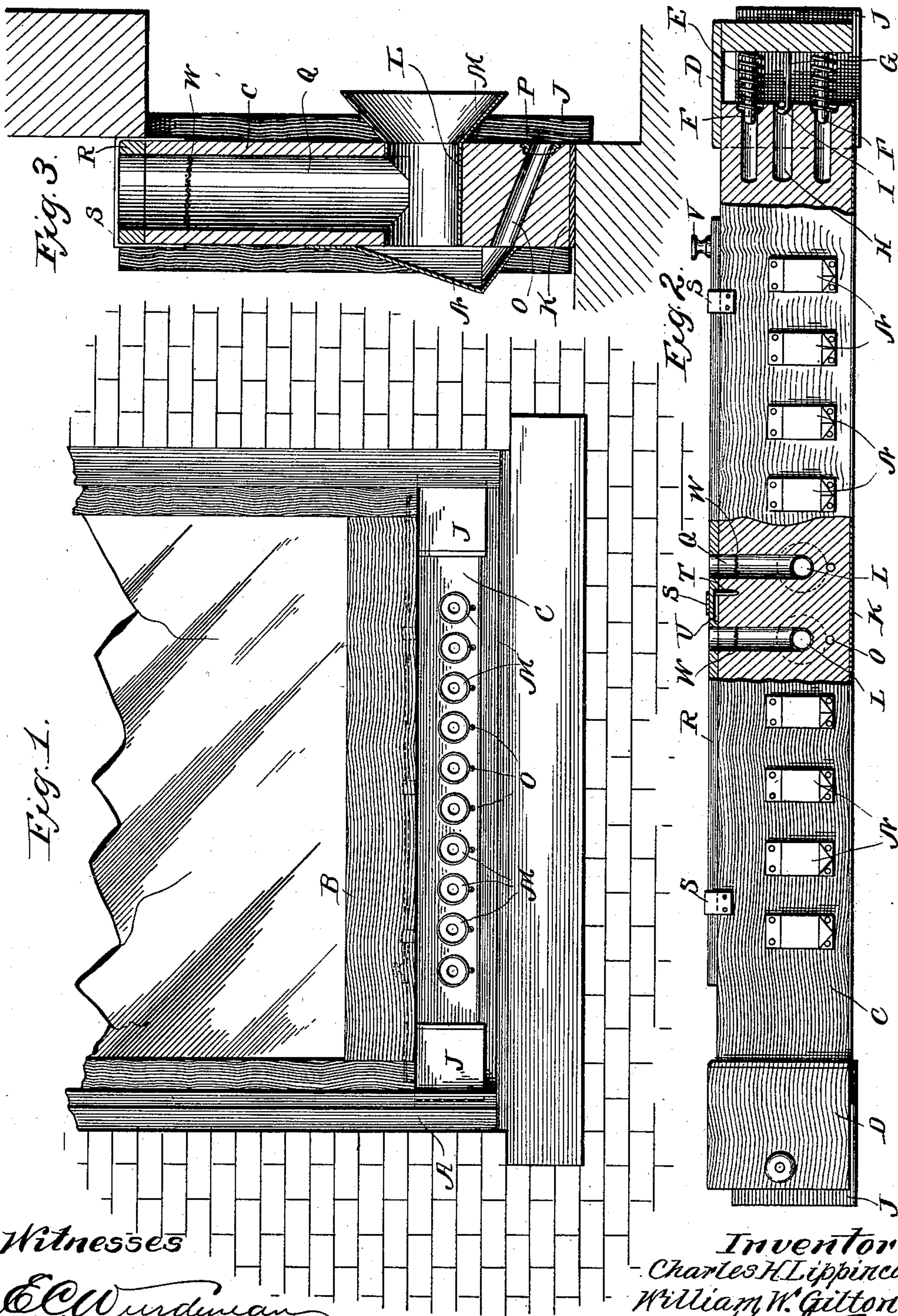
Patented July 11, 1899.

C. H. LIPPINCOTT & W. W. GILTON.

WINDOW VENTILATOR.

(Application filed Aug. 17, 1898.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

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WINDOW-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 628,602, dated July 11, 1899.

Application filed August 17, 1898. Serial No. 688,821. (No model.)

To all whom it may concern:

Be it known that we, CHARLES H. LIPPINCOTT and WILLIAM W. GILTON, citizens of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Window-Ventilators, of which the following is a specification.

Our invention relates to a new and useful improvement in window-ventilators, and has for its object to so construct such a device as to permit free ingress of air from the outside to the inside of a room without leaving the window open and to provide means for regulating this inflow of air and prevent it from forming a direct draft upon the occupants of the room.

A further object of our invention is to prevent accumulation of water, snow, or ice within the passages of the ventilator by providing a series of outlets leading from these passage-ways in such manner as to drain the water therefrom.

A still further object of this invention is to provide for the exclusion of insects through the ventilating-passages and also to adapt the ventilator to various sizes of window-frames within certain limits.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an elevation of a portion of a window, showing our improvement applied thereto; Fig. 2, an enlarged view of the ventilator, portions thereof being broken away and in section for more clearly illustrating the interior construction; and Fig. 3, a vertical section through one set of ventilating-passages.

In carrying out our invention as here embodied, A represents the window-frame, B the lower sash thereof, and C the ventilator, which consists of two narrow strips of wood or other

suitable material having the sliding sections D fitted to its ends and held outward by the springs E, coiled around the rods F. A rod G is secured to each of these sections and extends into the hole H and engages with the pin I, thereby serving as a stop for the sliding sections to prevent them from being forced beyond a certain limit by the springs E. The side J of each of the sections is of less width than the section and ventilator, so that when the ventilator is fitted within the window-frame and the lower rail of the sash B lowered into contact with these sides J the ventilator proper will lie inside of the window, the upper edge thereof being above the lower edge of the sash-rail, as shown in dotted lines in Fig. 1 and clearly illustrated in Fig. 3. The sides J also project downward below the edge of the ventilator, so that they may be fitted over the edge of the stop in the window-sill, and to further insure this result a strip K, of felt or other suitable material, is secured to the bottom edge of the ventilator, so as to be forced in contact with the sill when the sash is down upon the sides J.

Suitable holes are bored through the ventilator and have fitted therein a corresponding number of tubes L, the outer ends of which are flared in funnel shape, as shown at M, while their opposite ends are covered by the housings N. These housings are preferably of sheet metal and are triangular shape, as shown in Fig. 3, from the bottoms of which lead the drain-passages O, said passages being inclined downward and outward, so as to permit the escape of any water or other foreign matter which may gain access to the ventilating-passages, and the lower ends of these outlets may have fitted therein the eyelets P to give a finished appearance to the ventilator. A series of holes Q, corresponding in number to the tubes L, are bored downward in the ventilator and connect with said tubes, thus forming vertical passage-ways from the tubes in order that the air entering the tubes will flow upward, and thus gain access to the room. As the ventilator lies inside the sash, the openings are not obstructed, whereas if the sash fit on the upper edge of the ventilator the free passage of air would be hindered.

Provision is made for the regulation of the

air passing upward through the passage-ways Q by a sliding strip R, which is fitted upon the upper edge of the ventilator and guided by means of the strip S, and this strip has
 5 therein holes corresponding in number and size to the passage-ways Q, and when these holes register with the passage-ways the full capacity of said passage-ways will be utilized for the admission of air to the room, and when
 10 it is desired to reduce the amount of air thus admitted this slide is moved so as to carry the holes therein partially out of register with the passage-ways, and for entirely shutting off the flow of air the strip is further moved so
 15 as to carry the holes therein entirely out of register, and thus close these passage-ways.

For limiting the movement of the slide R a pin T is set in the ventilator, the upper end thereof projecting into a groove U, as clearly
 20 shown in Fig. 2, and to facilitate the movement of the slide to and fro, regulating the flow of air, a knob V is secured upon said slide.

Insects, such as flies and mosquitoes, are prevented from gaining access to the room when the passage-ways are open by a screen W, fitted in each of the passage-ways Q, as clearly shown in Figs. 2 and 3. It is obvious that a ventilator made in accordance with our im-
 30 provement will be exceedingly effective in accomplishing the result aimed at, while the cost thereof is comparatively small, and it may be fitted to any window and easily manipulated by any one without requiring experience.

Of course it will be understood that our improvement may be used in a variety of places, such as churches, hospitals, or other buildings in which ventilation is needed and in which it is essential that a draft is not directed against the occupants of the room, and it may also be used in trolley-cars, steam-railway cars, and the like, and we do not limit ourselves to any particular adaptation of our invention.

45 Having thus fully described our invention, what we claim as new and useful is—

1. A window-ventilator consisting of a suit-

able strip, spring-actuated sliding sections fitted upon the ends thereof, a series of funnel-shaped tubes passed through the strip, a
 50 series of passage-ways leading upward from the tubes, a slide fitted upon the upper edge of the strip, said slide having holes therein corresponding to the vertical passage-ways, and means for draining the passage-ways, as
 55 specified.

2. In combination, a ventilator consisting of a suitable strip, two sections fitted to the ends of the ventilator, springs so arranged as to force said sections outward, means for limiting the outward movement of the sections, a side section carried by each of the sections, said section being of less width than the section and its lower edge extending below the lower edge thereof, funnel-shaped tubes fitted
 65 in the ventilator, vertical passage-ways leading upward from the tubes, a slide fitted and guided upon the upper edge of the ventilator, said slide having holes therein corresponding in number and size to the vertical passage-ways, a pin for limiting the movement of the slide, a knob for facilitating the manipulation of the slide, housings secured to the ventilator over the inner ends of the tubes, drain-passages leading from the bottoms of the housings, and suitable eyelets fitted in the outer ends of these drain-passages, as specified.
 75

3. In an adjustable ventilator for houses, churches, cars and the like, a body consisting of a strip of wood having funnel-shaped
 80 tubes fitted therein, vertical passage-ways leading from said tubes, housings inclosing the inner ends of the tubes, said housings having inclined holes leading from the bottom, and spring-sections for adapting the ventilator
 85 for different widths of windows, as specified.

In testimony whereof we have hereunto affixed our signatures in the presence of two subscribing witnesses.

CHARLES H. LIPPINCOTT.

WILLIAM W. GILTON.

Witnesses:

JAMES MCCAREY,

THOMAS MCCAFFREY.