L. S. GRAEBING.

VENTILATING DEVICE.

APPLICATION FILED MAR. 16, 1908.

924,658. **Patented June 15, 1909.**

Fig. 1.

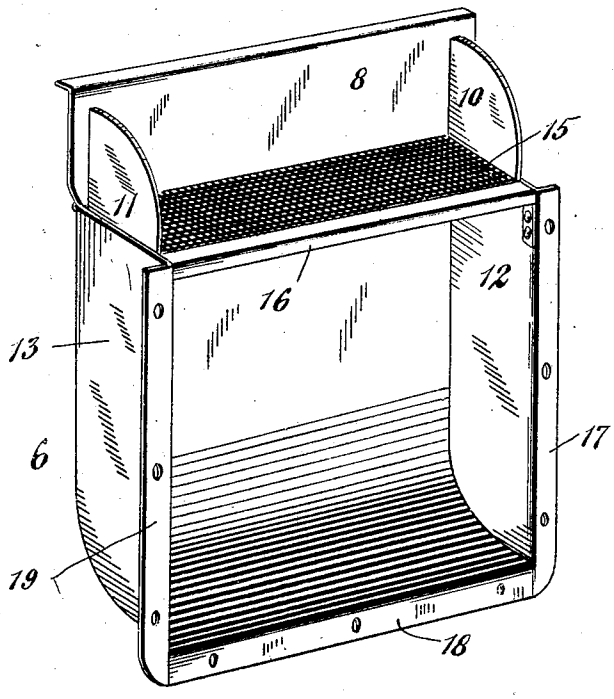


Fig. 3.

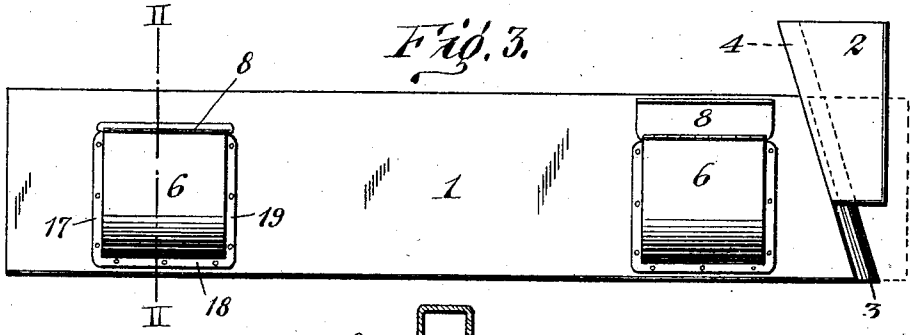


Fig. 2.

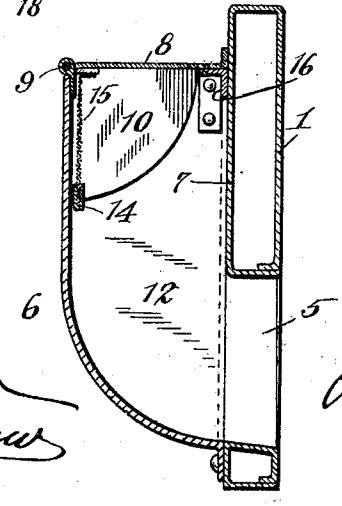
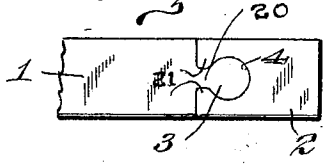


Fig. 4.



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UNITED STATES PATENT OFFICE.

LAWRENCE S. GRAEBING, OF YONKERS PARK, NEW YORK.

VENTILATING DEVICE.

No. 924,658. Specification of Letters Patent. Patented June 15, 1909.

Application filed March 16, 1908. Serial No. 421,391.

To all whom it may concern:

Be it known that I, LAWRENCE S. GRAEBING, a citizen of the United States, and a resident of Yonkers Park, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Ventilating Devices.

This invention relates generally to ventilating devices and particularly to that type known as window ventilators.

An object of the invention is to render a ventilator of this type more efficient in character and particularly to provide for the ready automatic or semi-automatic clearing of the screens for ventilating hoods.

Further objects of the invention will be clear from the following description and claims taken in connection with the accompanying drawings, which form part of this application, in which like numerals designate corresponding parts, and in which—

Figure 1 is a perspective view of an interior ventilating hood when unattached to the window board and embodying the invention; Fig. 2 is an enlarged cross section through line II—II of Fig. 3; Fig. 3 is a front elevation of the window board with two interior ventilating hoods attached thereto; and Fig. 4 is a detail plan view, showing the dovetail locking joint for the window board.

Referring now more in detail to the drawings: 1 designates a window board, which comprises the body section shown at the left of Fig. 3 and the keying section 2, which may vary in size relatively to the body section, although the proportion shown in the figure has been found to be satisfactory. The body section of the board should be short enough so as to be capable of insertion within the window-frame, while by sliding the keying section 2 down to the position shown by dotted lines in Fig. 3, the entire board may be locked or keyed in a window frame. The joint for connecting the keying section 2 to the body section of the window frame is preferably a sliding joint as shown and is disposed in an inclined direction to the length of the window board. A male dovetail locking tenon 3 is formed along the inclined or beveled edge of one section as, for example, the body section and takes into the complementary female portion or slot 4 formed along the inclined or beveled edge of the keying section 2. The male tenon 3 is shown as an enlarged flange which may conveniently be circular in cross-section. This enlarged flange 3 is secured to one window board section by a narrow web 20. The slot 4 may be complementary to the tenon 3 and ribs 21 provide a constricted slot in the beveled or inclined edge of section 2 for the passage of the web 20 of the first section. Thus the ribs 21 coöperate with tenon 3 and web 20 to prevent relative movement of sections 1 and 2, except a sliding movement along their beveled edges. This mode of interlocking the sections provides sufficient friction between the parts to prevent their sliding apart accidentially when not in use in a window frame and also permits the ready substitution of keying sections 2 of selected sizes to fit the assembled board to windows of various sizes and without the trouble of removing and reassembling any pins or screws. It has been found that both wood and sheet metal window boards may be readily formed in beveled edge sections secured in sliding relation along their beveled edges and interlocked against movement in all other directions solely by the interlocking tenon and groove construction described.

The window board 1 may be provided with one or more ventilating apertures 5, which lead from the outer atmosphere and may be suitably protected, if desired, on the exterior of the board 1 by any suitable exterior ventilating device, as for instance, that shown in my prior patent 860,366.

The interior ventilating hood 6 is designed to cover the ventilating aperture 5 and deflect incoming air supply through the ventilating opening shown at the top of the hood 6. The hood 6 may be formed according to any suitable pattern and is box-like in character. When used with the window board 1, the portion of the window board indicated by the numeral 7 coöperates with the hood 6 in forming an upwardly directed duct, although it is to be understood that, for some purposes, the hood 6 may have its own integral closure at this locality.

A cover 8 is provided for closing the ventilating opening of the hood 6 when desired. This cover is shown secured to a wall of the hood 6 by the hinge 9, although the hinge may be otherwise located if desired. Guiding segmental lips 10 and 11 are secured to the cover 8 and swing down within and preferably in frictional engagement with the sides 12 and 13 of the hood 6. In the construction illustrated a cross bar 14 extends traversely across from lower corner of the

lips 10 and 11, completing a rectangular inclosure with the lips 10 and 11 and the cover 8. Across this inclosure and secured respectively to the cover 8, cross bar 14 and lips 10 and 11, is a screen 15. It is thus seen in the embodiment illustrated that the screen 15 is fixed relatively to the cover member and is angularly disposed thereto, the angular opening being the plan of the screen and of the cover, is substantially at right angles. However, this arrangement may be varied.

A cross bar 16 suitably secured to the sides 12 and 13, by rivets, as shown, or soldering, brazing, etc., may be provided.

The cover 8 may be swung open so as to leave an air passage through the hood 6 and as shown in Fig. 1. When the cover is opened the screen 15 is swung up so as to extend across the ventilating opening of the hood. When cover 8 is closed across this opening the screen 15 is swung down into the hood, whereby the jar caused by closing the cover will effectually disengage any particles of dust, etc., that may have adhered to the screen, this dust, etc., dropping down and being cleared out of the ventilating aperture without being discharged into the room or apartment to be ventilated.

Suitable flanges 17, 18 and 19 may be formed on the hood 6 to attach the same, as by the securing means shown, to any structure providing a ventilating aperture, as for instance, the window board 1.

In the construction shown, the window board 1 may be formed of sheet metal, as also may the ventilating hood 6. However, it is to be understood that any suitable material may be employed in an embodiment of my invention.

Although I have shown and described a preferred embodiment of my invention, it is to be understood that many modifications thereof are contemplated within the scope of the following claims, as I consider myself to be the first to provide an interior ventilating hood with a movable screw for the ventilating opening, which will clear itself of dust and the like, in an automatic or semi-automatic manner, and especially such a screen in combination with a cover for the ventilating opening.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. In ventilating apparatus, a ventilating hood for covering a ventilating aperture, said hood providing a ventilating opening and having a movable screen mounted to extend across said opening and mounted to swing from across said opening into dust discharging position.

2. In ventilating apparatus, a ventilating hood for covering a ventilating aperture, said hood providing a ventilating opening and having a screen for extending across said opening, a hinged mounting for said screen for moving the same from across said opening into dust discharging position within said hood.

3. In ventilating apparatus, a ventilating hood for covering a ventilating aperture, said hood providing a ventilating opening; a hinged cover member for closing said opening and a screen secured to said cover member and angularly disposed thereto, so as to extend across said ventilating opening when the cover member is opened and to swing clear so as to move into dust discharging position when the cover member is closed across said opening.

4. In ventilating apparatus, a ventilating hood for covering a ventilating aperture, said hood providing a ventilating opening at its top; a cover member hinged to said hood; a screen disposed substantially at right angles to said cover member and fixed relatively thereto so as to move with the cover member into and out of screening position and dust discharging position.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

LAWRENCE S. GRAEBING.

Witnesses:

PAUL H. MORROW,

HELEN MONTGOMERY.