I. POMERANTZ.

WINDOW VENTILATOR.

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992,055. **Patented May 9, 1911.**

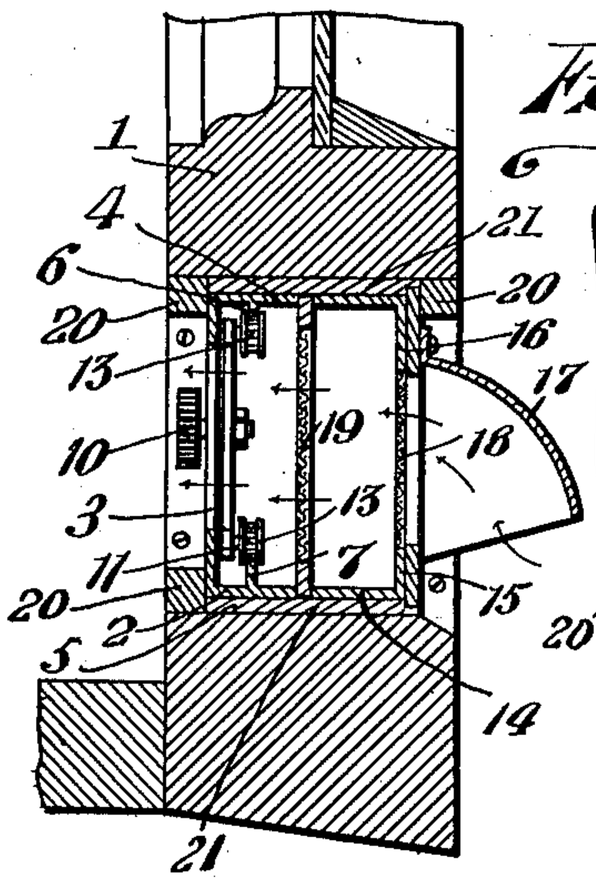

Fig. 1.

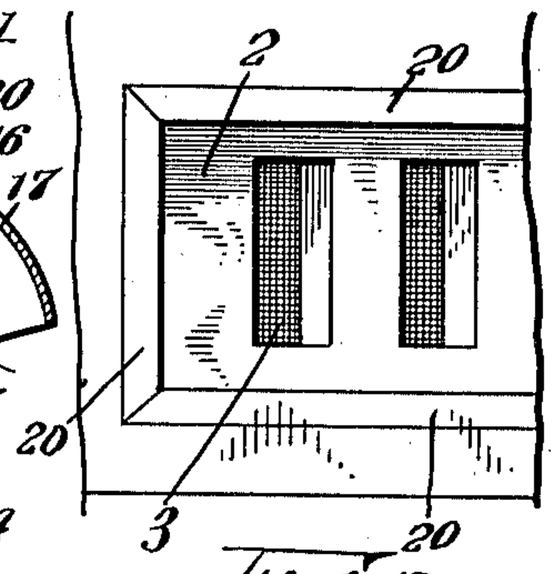

Fig. 2.

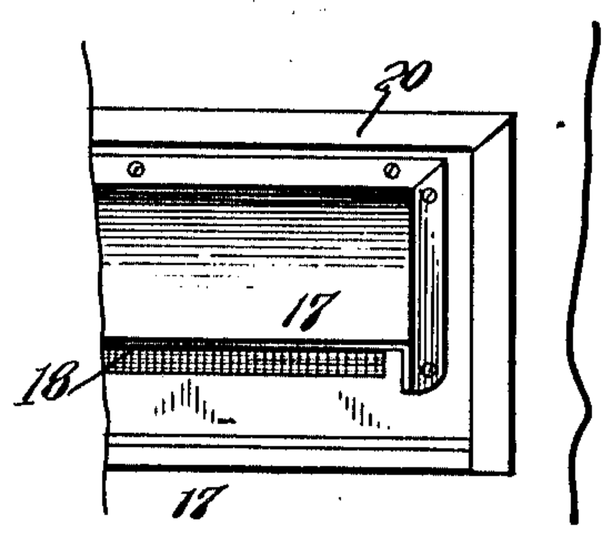

Fig. 3.

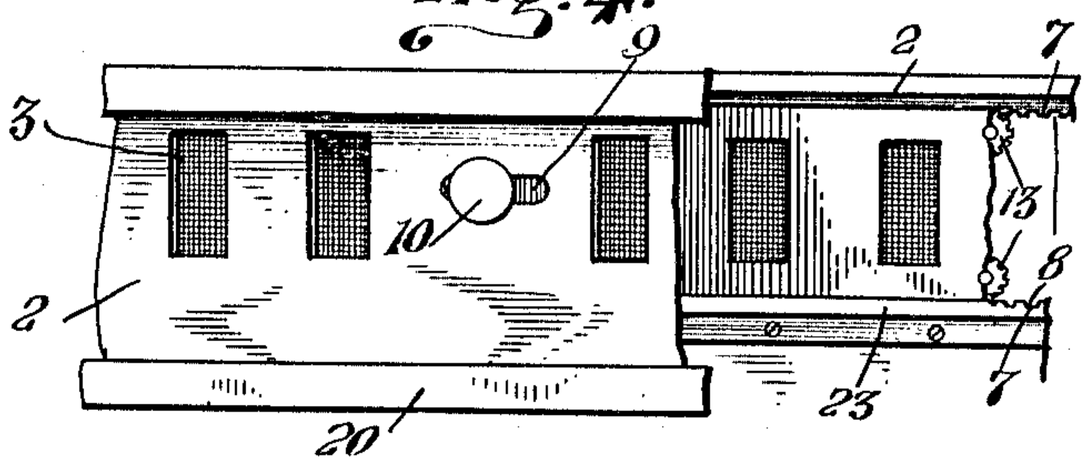

Fig. 4.

Witnesses

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WINDOW-VENTILATOR.

992,055. Specification of Letters Patent. Patented May 9, 1911.

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To all whom it may concern:

Be it known that I, ISIDOR POMERANTZ, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Window-Ventilators, of which the following is a specification.

This invention relates to window ventilators, and one of the principal objects of the same is to provide simple, reliable and efficient means to properly ventilate rooms in buildings without creating a draft and to provide means whereby the ventilating openings may be opened, closed or adjusted as to ventilating area.

Another object of the invention is to provide an adjustable ventilator for windows which will screen the air before it is admitted to the rooms and which can be adjusted to admit more or less filtered air.

Still another object of the invention is to provide a simple ventilating system to be applied to window sashes which will be entirely out of the way, which can be removed from the sash for cleaning purposes, and which will not permit a direct draft through the room.

These and other objects may be attained by means of the construction illustrated in the accompanying drawing, in which,

Figure 1 is a vertical sectional view through the bottom rail of a sash and showing a ventilator secured therein and made in accordance with my invention. Fig. 2 is a detail elevation looking at the inner side of the ventilator which is shown broken away at one end. Fig. 3 is a similar view looking at the ventilator from the outside. Fig. 4 is a detail elevation looking at the inside of the ventilator, portions being broken away.

Referring to Figs. 1, 2 and 3 of the drawing, the numeral 1 designates the lower sash rail, which is provided with an opening extending partially across the same to receive the ventilator. Mounted in the opening in the sash rail 1 is a metal frame 2 provided with a series of rectangular openings 3, said frame having horizontal upper and lower flanges 4 and 5. Projecting inward from the flanges 4 and 5 are bars 6 and 7 provided with rack teeth 8 on their inner edges. The frame 2 is provided with a slot 9 near the center therein and extending through this slot is the shank of a button or knob 10, said shank being connected to a sliding plate 11 provided with a series of rectangular openings 12, similar to the openings 3 in the frame 2. Connected to the plate 11 are small pinions 13 at the upper and lower edges thereof, said pinions engaging the teeth 8 of the rack bars 7. The frame 2 and the sliding plate 11 are located at the inner side of the sash rail, and a frame 14 is located at the outer side of the sash rail, said frame being provided with an upwardly extending flange 15 at the bottom and a downwardly extending flange 16 at the top. Secured to the flange 16 is a hood or shield 17 designed to prevent a direct shaft through the ventilator into the room, said hood being opened at the bottom to permit the air to enter from below, and to pass into the room. A fine wire screen 18 is secured to the flanges 15 and 16 to filter the air as it passes through the ventilator. A removable screen 19 is secured between the frames 2 and 14. This ventilator is removably held in place within the opening in the sash rail by means of cleats 20 and the frames 2 and 14 are mounted between upper and lower plates 21.

It will be understood that a ventilator similar to that already described is also secured to the upper sash rail and in use the sliding plate 11 may be adjusted in both the upper and lower ventilator to permit air to enter the lower ventilator and find an exit through the upper ventilator. The sliding plate 11 may be moved by means of the knob 10 to regulate the required amount of air to enter the room. As shown in Fig. 4 the frame 22 is substantially identical with the frame 2, excepting that the rack bar 23 is secured to the plate 22 instead of being formed integral therewith.

The sliding plate 24 is substantially identical with the plate 11 and is operated by means of the knob 25 in the same manner. The frame 26 is provided with an inclined portion 27 in which is secured a screen 28. Immediately back of the screen 28 is a deflector 29 which prevents a direct draft through the ventilator and serves the same purpose as the hood 17. Above the deflector 29 is a screen 30 which prevents small particles floating in the air from entering the room.

From the foregoing it will be obvious that a ventilator made in accordance with my

invention is of simple construction, can be readily applied to any window sash, can be adjusted to admit any required amount of air at the bottom and to permit the heated air to escape at the top without creating a draft in the room. It will also be obvious that the air is thoroughly screened and filtered before it is permitted to enter the room. While the openings 3 and 12 are shown of rectangular form it will be obvious that they may be made in different shapes without departing from the spirit or scope of my invention.

Having thus fully described the invention what is claimed as new is:

1. A window ventilator comprising in combination with a sash rail having an opening therein, frames removably mounted in said opening and having inturned flanges at their inner sides and provided with openings in their outer faces, a screen removably mounted between said frame and held in position by said flanges, a screen covering the opening in the outer frame, and a plate slidable back of the front face of the forward frame, for the purpose set forth.

2. A window ventilator comprising in combination with a sash rail having an opening therein, upper and lower plates fixed in said opening, an outer frame having inturned flanges engaging said plates and having a screened opening in its outer face, a plate, having a screened opening, fitting in said rail opening and engaging the upper and lower plates and abutting against the inner ends of said frame flanges, an inner frame also located between said plates and having flanges abutting thereagainst and against said screened plate, said last named frame having openings therein, a plate slidable back of said last named openings and having openings adapted for registration therewith, and means for actuating said plate from the exterior of the inner frame.

3. A window ventilator comprising in combination with a sash rail having an opening therein, upper and lower plates fixed in said opening, inner and outer frames having flanges seated against said plates and provided with openings, a removable plate seated between said frame flanges and provided with a screened opening, and a hood fixed on the outside of the ventilator and having a downwardly opening mouth, substantially as and for the purpose set forth.

4. A window ventilator comprising a frame mounted in an opening in a sash rail, said frame being provided with ventilating openings, a plate provided with openings and mounted to slide adjacent to the frame, rack bars and pinions on which the sliding plate is movable, a screen within the frame and a hood or deflector for preventing a direct draft through the ventilator.

5. A ventilator mounted in a sash rail and comprising a frame having ventilating openings therein, a plate carrying pinions, rack bars on the frame engaged by said pinions, means for moving the sliding plate laterally, a screen within the ventilator and a hood or deflector for preventing direct draft through the ventilator.

In testimony whereof I affix my signature in presence of two witnesses.

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Witnesses:
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