June 22, 1943. G. PICKERING ET AL 2,322,590

WINDOW VENTILATOR

Filed March 20, 1941 2 Sheets-Sheet 1

FIG. 1.

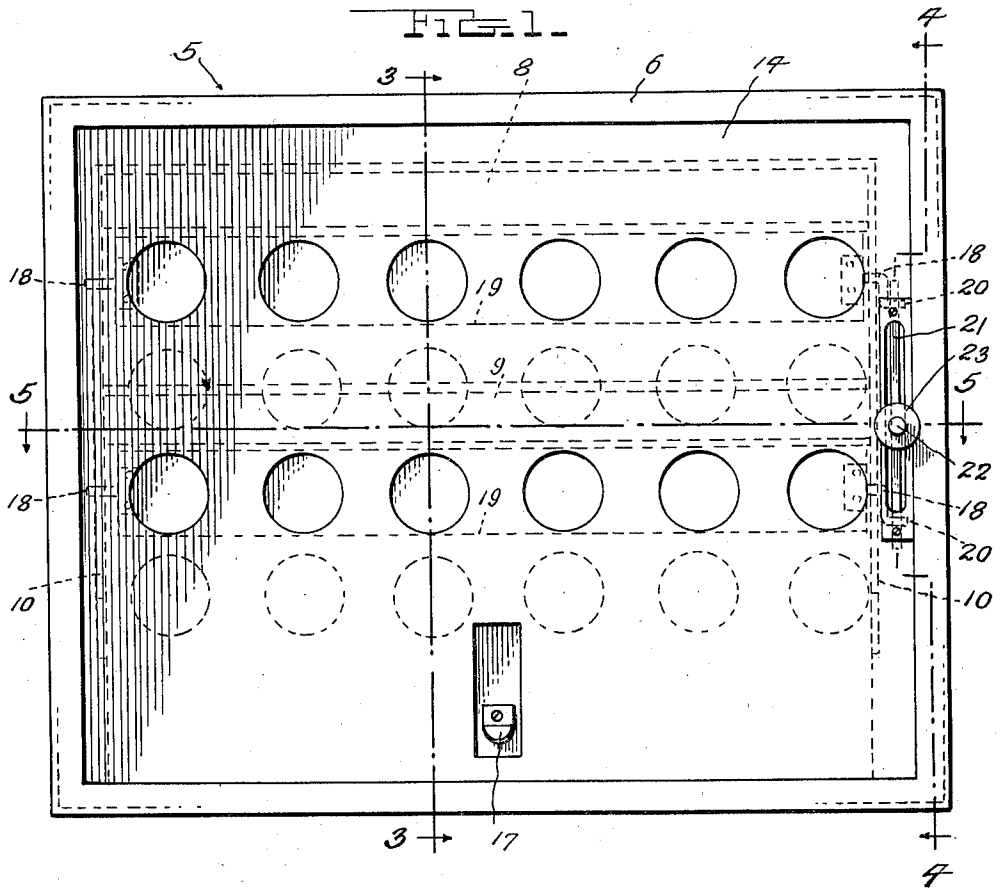
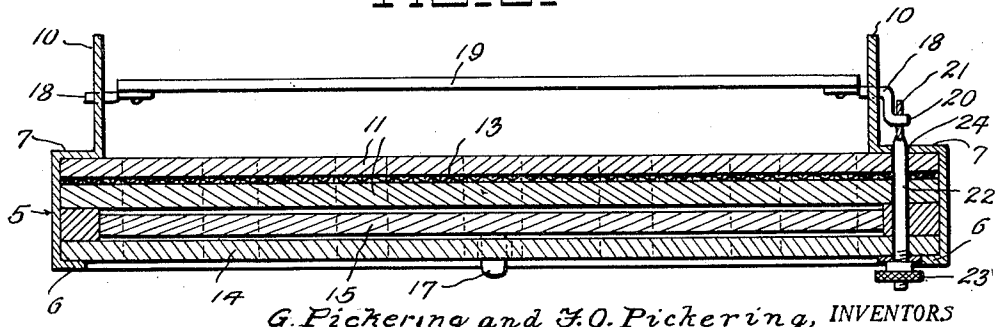


FIG. 5.



G. Pickering and T. O. Pickering, INVENTORS

BY Cushman & Co.

ATTORNEYS.

June 22, 1943. G. PICKERING ET AL 2,322,590

WINDOW VENTILATOR

Filed March 20, 1941 2 Sheets-Sheet 2

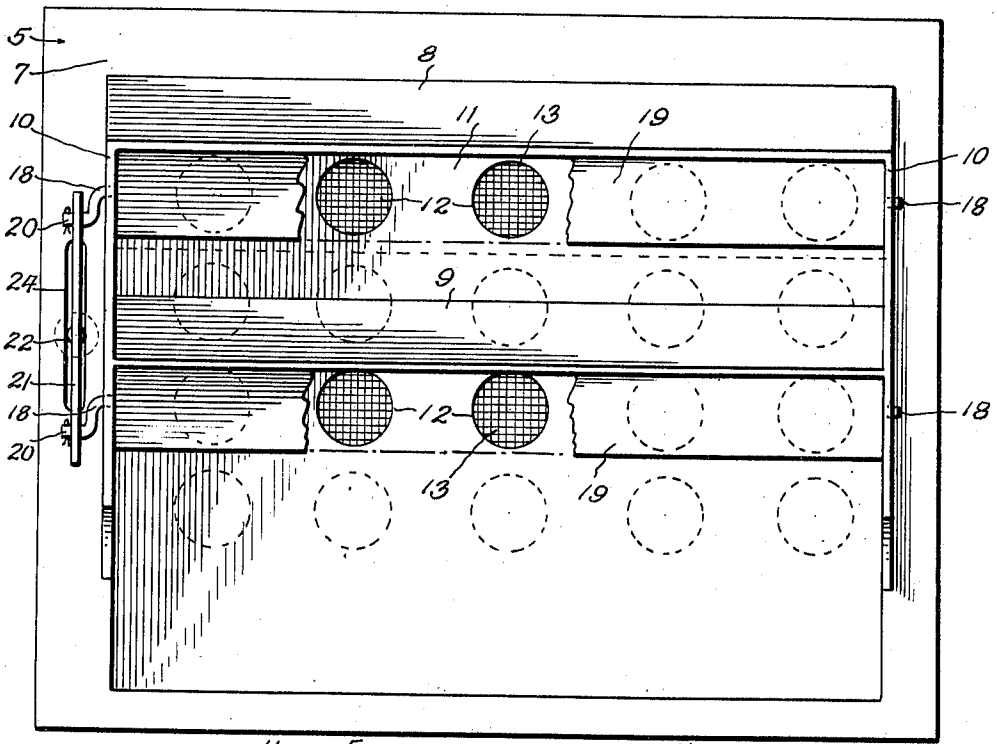


FIG. 2.

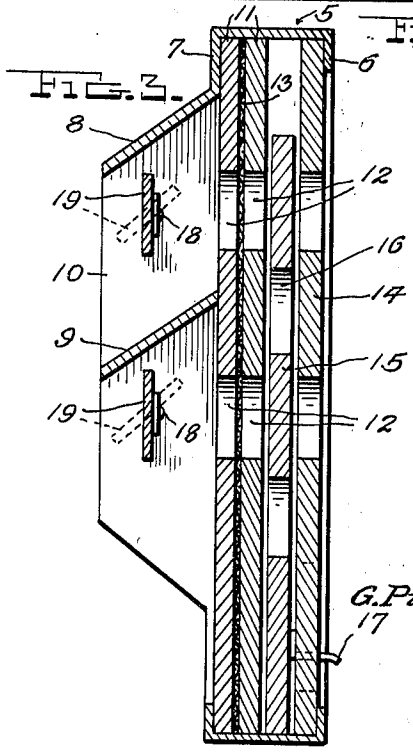
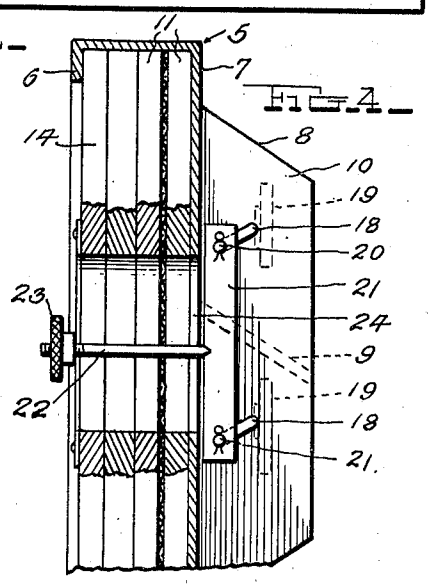


FIG. 4.



G. Pickering and F. O. Pickering INVENTORS

BY Albert Davis Co.

ATTORNEYS.

Patented June 22, 1943

2,322,590

UNITED STATES PATENT OFFICE

2,322,590

WINDOW VENTILATOR

Glenroy Pickering and Frank O. Pickering,
Marietta, Ohio

Application March 20, 1941, Serial No. 384,394

1 Claim. (Cl. 98—99)

This invention relates to window ventilators, and more particularly to window ventilators of the portable type.

An important object of the invention is to provide a ventilator which may be readily positioned within a window frame, and held in such position by contact with the window sash or other suitable means, not shown.

Another object of the invention is the provision of means to regulate the quantity of air passing through the ventilator, together with means for deflecting the air prior to its passage into the room ventilated, thereby providing an indirect draft ventilator.

Still another object of the invention is to provide means which will exclude rain, snow and sleet, and at the same time admit air in the desired quantities, eliminating direct drafts.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein described, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 is an elevational view of a window ventilator constructed in accordance with the invention.

Figure 2 is a front elevational view thereof.

Figure 3 is a sectional view taken on line 3—3 of Figure 1.

Figure 4 is a sectional view taken on line 4—4 of Figure 1.

Figure 5 is a sectional view taken on line 5—5 of Figure 1.

Referring to the drawings in detail, the ventilator comprises a substantially rectangular frame indicated generally by the reference character 5, the frame being preferably constructed of sheet metal material, so that it may be readily and easily stamped by a single stamping operation of a metal stamping machine.

As shown, the frame embodies spaced flanges 6 and 7, the flange 7 being formed with inwardly extended portions 8, the upper inwardly extended portion 8 being inclined downwardly, as clearly shown by Figure 3 of the drawings. A partitioning member 9 is positioned between the flanges 10 that form side members for the flanges 8, and divides the space between the flanges 10, into upper and lower passageways. Mounted within the frame 5, are members 11 that are formed with openings 12 that align, as shown by Figure 3. Between the members 11, is a wire mesh member 13 that acts as a screen to prevent inserts and other foreign matter, from passing through the openings 12. Disposed within the frame, and arranged at the opposite side thereof, is a member 14 which is also formed with openings that align with the openings 12. The space between the members 14 and 11 providing a guideway for the movable ventilator slide 15. As shown, the slide 15 is formed with openings 16 that are of diameters equal to the openings of the members 11 and 14, so that when the slide is moved upwardly to its limit, the openings 16 of the slide 15 will register with the opening of the members 11 and 14 providing passageways through which air passes into the room ventilated by the device. An operating arm indicated at 17 is secured to the ventilator slide 15, and is so disposed that it extends into the room where it will be readily accessible by persons desiring to operate the ventilator slide to adjust the sizes of the openings to regulate the quantity of air passing through the ventilator.

The reference character 18 designates rods that are mounted in openings formed in the flanges 19, the rods providing supports for the shutters 19 that are of lengths to extend between the flanges 10 at opposite ends of the ventilator frame. Offset ends 20 are formed on the rods 18, and these offset ends are connected by the link 21 so that the rods are operated simultaneously to adjust the shutters, at the will of the operator.

Secured to the link 21, at a point intermediate the ends thereof, is a rod 22 that is formed with a threaded end on which the nut 23 is mounted. This rod 22 moves through the elongated opening 24 formed in the frame of the ventilator, and by means of which the rods 18 may be rotated. It will of course be understood that as the rods are rotated, the shutters are moved to various angles with respect to the ventilator openings, to the end that air passing through the ventilator openings may be deflected, to meet various atmospherical conditions.

From the foregoing it will be seen that due to the construction shown and described, the ventilator slide 15 may be adjusted vertically to regulate the amount of air passing through the openings of the ventilator to insure the proper ventilation, according to the amount of wind pressure. In addition to the adjustment of the openings, the shutters may be adjusted to various angular positions to deflect the air passing

through the openings as a temporary adjustment in the control of the air passing through the ventilator.

It will of course be understood that after the shutters have been properly adjusted, the shutters may be held in their positions of adjustment, by tightening the nut 23.

What is claimed is:

A window ventilator comprising a frame adapted to be positioned between a window sash and its sill, spaced stationary members within the frame, said spaced stationary members having aligning openings, a movable member having openings, disposed within the space between the stationary members, the openings of the movable member adapted to align with the openings of the stationary members admitting air through the ventilator, wide downwardly inclined flanges extending forwardly from the frame and providing a hood, wide horizontally disposed shutter members pivotally mounted within the hood and disposed in spaced relation with the openings of the stationary members, said shutters being disposed in direct alignment with the openings of the ventilator, said shutters adapted to be adjusted to obstruct the passage of air through the aligning openings, and means for operating the shutters simultaneously.

GLENROY PICKERING.
FRANK O. PICKERING.