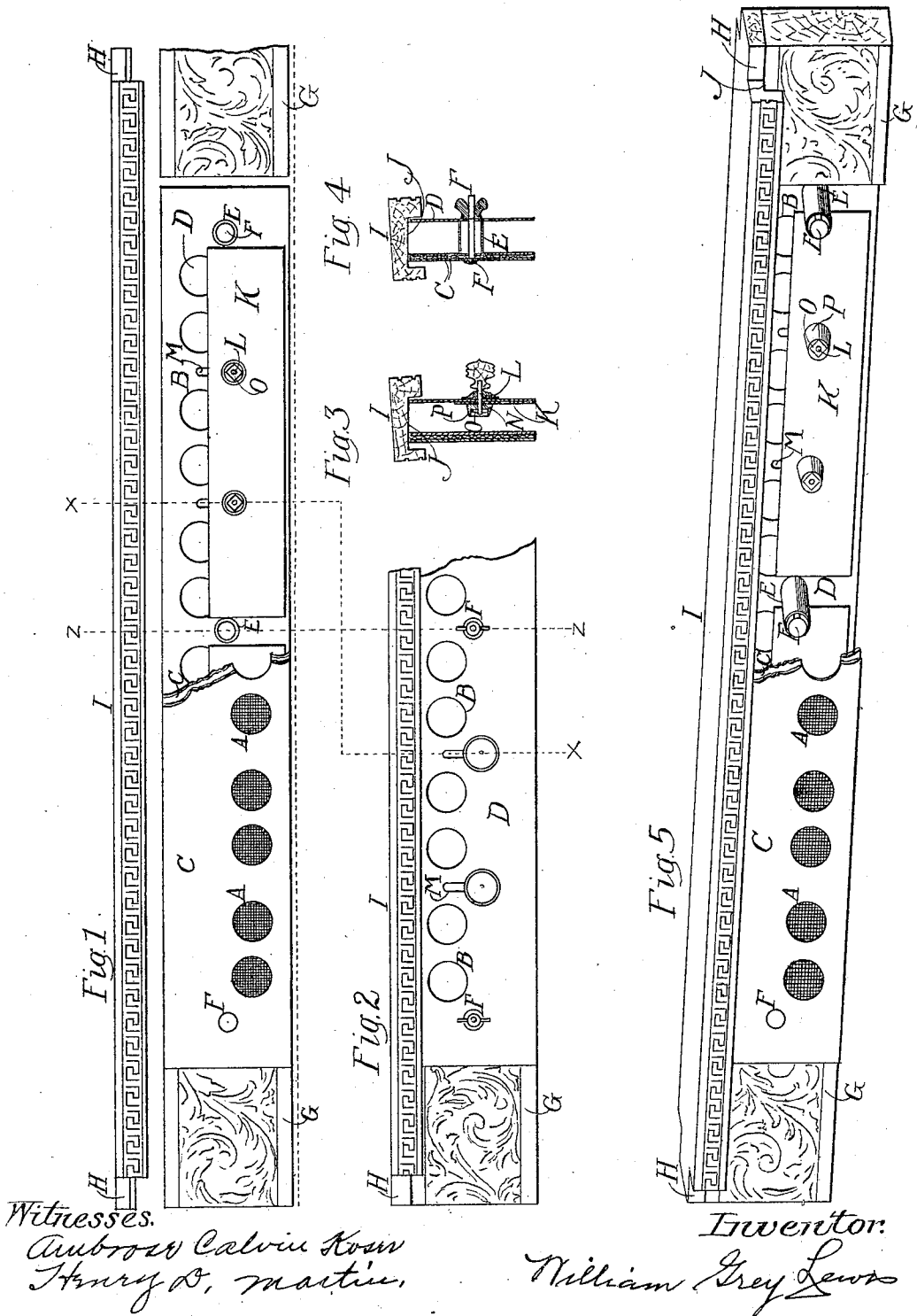


W. G. LEWIS.
WINDOW VENTILATOR.
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UNITED STATES PATENT OFFICE.

WILLIAM GREY LEWIS, OF CHICAGO, ILLINOIS.

WINDOW-VENTILATOR.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM GREY LEWIS, a citizen of Canada, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Window-Ventilators, of which the following is a specification.

The present invention relates to improvements in window ventilators of that type or class which are adapted to be readily inserted in or removed from a window frame, and when in use to be supported directly beneath the lower sash of the window.

The object of the invention is to provide a ventilator of this class which can be readily fitted to the window where it is to be employed, which will present an ornamental or attractive appearance, which will effectually exclude dust and rain and by means of which the amount of air entering the room may be easily regulated.

In the accompanying drawings,—Figure 1 is an elevation of a ventilator constructed in accordance with the present invention, part of one of the walls being broken away, and the detachable cap and one of the end pieces being shown as separated from the main body of the device; Fig. 2 is an elevation of a portion of the opposite face of the ventilator from that shown in Fig. 1; Fig. 3 is a sectional view on the line $x-x$ of Figs. 1 and 2; Fig. 4 is a similar view on the line $z-z$ of Figs. 1 and 2; Fig. 5 is a perspective view of the ventilator, a part of the outer wall being broken away.

Referring to the drawings it will be seen that the ventilator consists essentially of a body portion formed by two parallel walls C, D, which are preferably made of metal and so connected as to be separated or spaced apart sufficiently to permit of the insertion at the ends thereof of blocks or extension pieces G. The length of the pieces or blocks G is such that when the device is in use they will contact with opposite sides of the window frame. A plurality of apertures A are formed in the outer wall C and a similar set of apertures B in the inner wall D, said series of apertures A, B being preferably arranged in different horizontal planes as shown in the drawings. Preferably the outer wall C is formed by two plates arranged close together and clamping between them a screen which covers the apertures A. As shown the two walls C, D are connected by bolts F having at one end heads which

bear against the outer surface of the wall C and having their threaded ends projected beyond the face of the wall D. The openings in the wall C for the bolts F are made square in cross section and said bolts adjacent the heads thereon are of similar form so that they are prevented from turning while the nuts hereinafter referred to are being actuated. By means of suitable nuts engaging said projecting threaded ends of the bolts F said walls D, C are held in engagement with the ends of spacing sleeves E which are fitted about said bolts in the space separating the walls. The bolts F and nuts thereon also serve to hold the blocks G in close engagement with walls D, C. By reason of the adjustable connection between the walls C, D, blocks or end pieces G of different thicknesses may be employed, to adapt the ventilator to fit closely in the window where it is to be used.

Means are provided for closing the apertures B in the inner wall D to a greater or less extent, such closing means consisting in the embodiment of the invention illustrated of two slides K and suitable knobs, connected with said slides by screws L, which extend through vertical slots formed in the wall D. The screws L and the knobs thereon serve not only as means for adjusting the slides K vertically to close more or less of the apertures B, but in connection with nuts O act to clamp said slides closely against the adjacent face of the wall D so as to retain the slide in any desired adjusted position. The screw L extends through a suitable opening in the plate K and engages a nut O which is held within a socket piece P. This socket piece P is provided with a threaded hole adapted to engage the screw L and the socket therein is of the same cross sectional form as the nut O, so that the latter is prevented from rotating therein. When it is desired to adjust the plate K vertically the screws L connected therewith are adjusted to partially withdraw them from the nuts O, and after the plate has been raised or lowered to the desired extent, said screws are turned in the reverse direction to again draw the plate K close against the wall D.

A cap I having in its undersurface a groove or cutaway portion adapted to receive the upper edges of the walls C, D and the blocks G completes the device. As shown, the upper surface of the cap I is

beveled so that it will form a close contact with the lower side of the bottom rail of the lower sash of the window, when the latter is lowered on to the ventilator after the same has been placed in position in the window. It will be seen that the width of the groove in the lower surface of the cap I is greater than the length of the sleeves E so that it does not interfere with the adjustment of the walls C, D, to accommodate blocks G of greater thickness than can be fitted between said walls when both are in contact with the sleeves. At its ends the cap is preferably recessed as at J to provide two tenons H which will engage with the rabbets of the window frame, and thus assist in holding the ventilator in place.

From the foregoing description it will be seen that the ventilator herein described can be readily inserted in or removed from a window, and that when in use it effectually controls the admission of air, the quantity of which can be varied by adjusting the slides K. The screen closing the openings A prevents the passage of dust or insects.

As stated the walls C, D are preferably of metal which can be decorated as desired, while the blocks G and cap I are preferably ornamented so that the entire device is given an attractive appearance.

Having thus described the invention what is claimed is:—

1. The herein described window ventilator adapted to be placed in a window frame below the sash therein and comprising parallel inner and outer walls each having a plurality of apertures formed therein, adjustable means connecting said walls, end pieces detachably fitted between said walls and connected therewith by said adjustable connecting means, said end pieces being adapted to engage the sides of a window frame, and means for controlling the passage of air through the apertures in one of the walls.

2. The herein described window ventilator comprising parallel inner and outer walls, each having a plurality of apertures formed therein, and a detachable cap having in its lower face a groove adapted to receive the upper edges of said walls.

3. The herein described window ventilator comprising parallel inner and outer walls each having a plurality of apertures formed therein, and a detachable cap having in its lower face a groove adapted to receive the upper edges of said walls, and having its upper surface beveled or inclined to fit close against the lower face of a window sash.

4. The herein described window ventilator adapted to be placed in a window frame below the sash therein and comprising a plate having a plurality of apertures

formed therein, means for closing the apertures in said plate, a second apertured plate extending parallel to that aforesaid and connected therewith, and detachable spacing blocks in the spaces separating the ends of said plates and extending into engagement with opposite sides of a window frame when the ventilator is in use.

5. The herein described window ventilator adapted to be placed in a window frame below the sash therein and comprising two parallel, apertured plates, blocks arranged between said plates and projecting beyond the ends thereof, and adjustable means connecting the plates and holding the blocks in engagement therewith.

6. The herein described window ventilator comprising two parallel, apertured plates, means connecting said plates, a vertically movable slide arranged between the plates and adapted to be adjusted to extend across apertures in one of the plates, means for adjusting said slide and securing it in any adjusted position, and a cap fitted over the upper edges of said plates.

7. The herein described window ventilator comprising two parallel, apertured, metal plates, threaded bolts extending through said plates, sleeves supported on said bolts and having their ends bearing against the plates to limit the movement of said plates toward each other, nuts on said bolts bearing against one of the plates, a slide arranged between the plates, and means for adjusting said slide to close or open the apertures in one of the plates and maintain the slide in any adjusted position.

8. The herein described window ventilator adapted to be detachably fitted into a window frame and contact with opposite sides thereof, said ventilator comprising inner and outer walls, both provided with apertures and one of them formed by two parallel plates, a screen arranged between said plates and extending across the apertures therein, a slide arranged to open and close apertures in the other wall of the ventilator, and means for adjusting said slide and maintaining it in any adjusted position.

9. The herein described window ventilator comprising parallel inner and outer walls, a cap covering the space between said walls and permitting a relative movement of said walls to vary the width of the intervening space, adjustable means connecting the walls, and end pieces fitted into the space between said walls and projecting beyond the ends thereof.

10. The herein described window ventilator comprising parallel inner and outer walls provided with suitable apertures, one of said walls consisting of two plates and an intermediate screen extending across the openings in said walls, means connecting

said walls and permitting one to be moved to and from the other, and a slide adjustably connected with one of said walls and adapted to open or close the openings therein.

5 11. The herein described window ventilator comprising parallel inner and outer walls each having a plurality of apertures formed therein, end pieces detachably fitted between said walls and adapted to engage
10 opposite sides of a window frame, a cap extending over the space separating said walls and having its ends reduced and adapted to engage with the sides of a window frame, and means for controlling the passage of
15 air through the apertures in said walls.

12. The herein described window ventilator comprising separated inner and outer walls provided with suitable apertures, means connecting said walls, a screen held
20 in position across the apertures in one of the walls by the action of said connecting means, and a slide adjustably connected with one of the walls and adapted to open or close the openings therein.

25 13. The herein described window ventilator comprising separated inner and outer walls having suitable perforations, bolts extending across the space separating said walls and projecting beyond the outer faces
30 of both thereof, the apertures in one wall for said bolts and the sections of bolts therein being of polygonal form in cross section, and the portions of the bolts projecting beyond the other wall being threaded, spacing
35 means between the walls, nuts engaging the threaded sections of the bolts, a screen ex-

tending across the perforations in one of the walls, and a slide for closing the perforations in one of the walls.

14. The herein described window ventila- 40 tor comprising separated inner and outer walls having suitable perforations, bolts extending through apertures in both walls and having threaded portions beyond one wall, nuts on said threaded sections of the bolts, 45 a screen extending across the perforations in one wall, spacing means between the plates acting to retain the screen in place, and an adjustable slide for controlling the passage of air through the perforations in 50 one wall.

15. The herein described window ventilator comprising separated inner and outer walls having suitable perforations, one of said walls consisting of two parallel plates 55 and an intermediate screen that extends over the perforations in said plates, bolts extending through apertures in both walls and having the sections thereof beyond one wall threaded, spacing means between the 60 walls, nuts on the threaded sections of the bolts, and an adjustable slide for controlling the passage of air through the perforations in one wall.

In testimony whereof I have signed my 65 name to this specification in the presence of two subscribing witnesses, this fourteenth day of January 1909.

WILLIAM GREY LEWIS.

Witnesses:

AMBROSE CALVIN KOSER,
HENRY D. MARTIN.