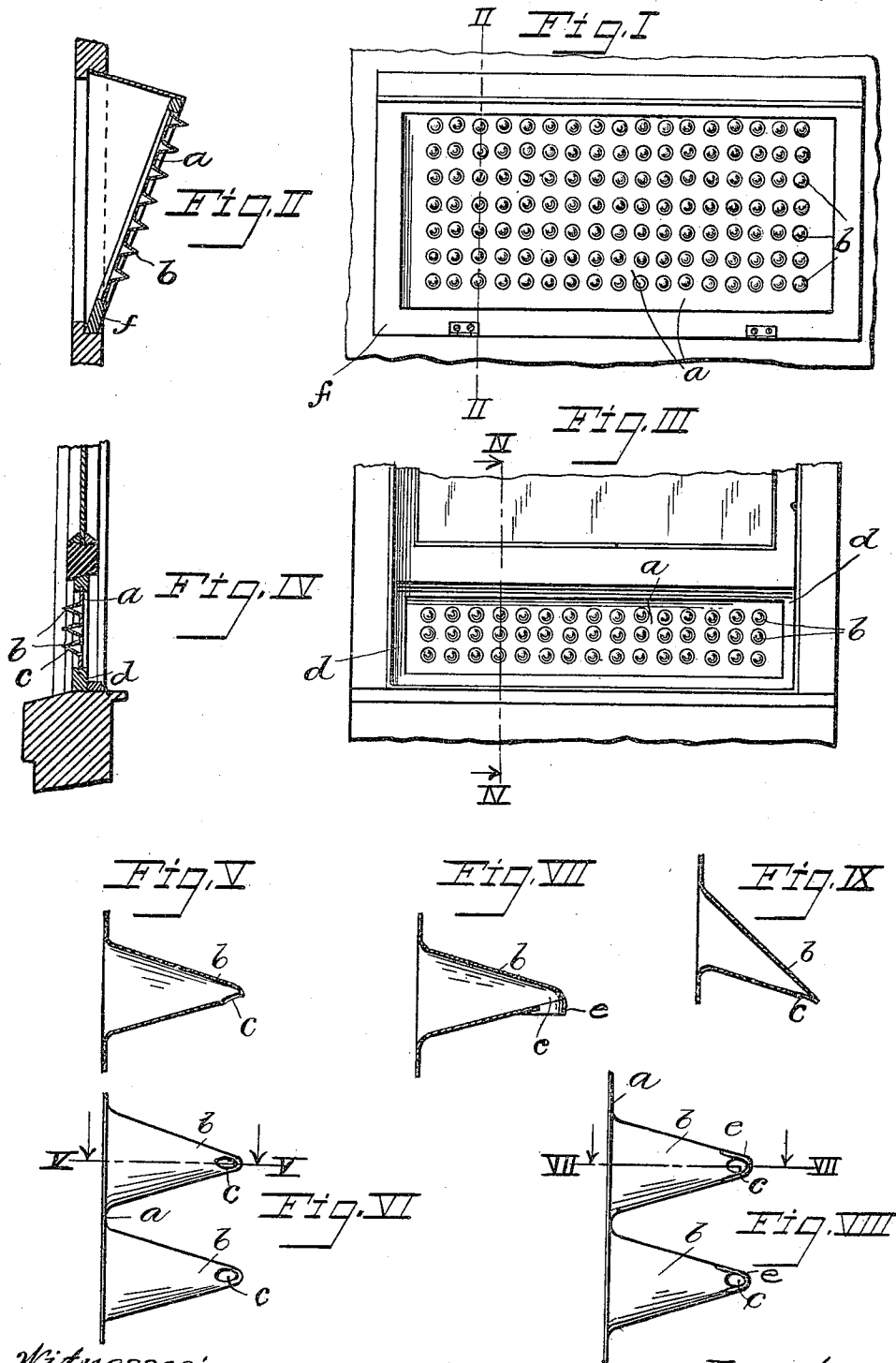


W. LINTERN.
VENTILATOR.

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UNITED STATES PATENT OFFICE.

WILLIAM LINTERN, OF CLEVELAND, OHIO.

VENTILATOR.

952,747.

Specification of Letters Patent. Patented Mar. 22, 1910.

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To all whom it may concern:

Be it known that I, WILLIAM LINTERN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Ventilators, of which the following is a specification.

This invention relates to ventilating means; and its object is, primarily, to provide a simple device which may be readily inserted in the side openings, or windows, of houses or vehicles, and having small apertures through which air is induced to pass without creating perceptible drafts in the apartment ventilated. In the ventilation of cars it has been found that air should enter and leave a car through as many points as possible, so as to give proper distribution and to prevent drafts, which is a standard of efficiency my invention is adapted to attain.

A further object is to provide for excluding rain and snow, while at the same time inducing currents of air to pass through the ventilating apertures.

To these ends my invention consists in the novel features and combinations hereinafter described and claimed, embodiments thereof being illustrated in the accompanying drawings in which—

Figure I is an elevation of the outside of the ventilator fitted into a window frame, and Fig. II is a sectional view taken on line II—II of Fig. I. Fig. III is an elevation of a ventilator removably fitted under the raised sash of a window, and Fig. IV is a section taken on line IV—IV of Fig. III. Fig. V is a section taken on line V—V of Fig. VI, and Fig. VI is a detailed view of a portion of the plate showing the bottoms of the hollow projections. Figs. VII and VIII illustrate a modified form of the conical projections, the last named figure being a bottom view, and Fig. VII being a section taken on line VII—VII of Fig. VIII. Fig. IX shows a conical projection downwardly inclined.

The reference letter *a* indicates a plate which may be of metal, glass, or other suitable material, having hollow pointed projections *b* formed in it. The projections *b* are preferably conical, and each one has a small aperture *c* at its pointed end for the admission or egress of air. The plate *a* may be set in a frame *d* so that the ventilator is self-contained and removable from the

window, or other opening into an apartment to be ventilated, or it may be otherwise secured in said opening.

The hollow cones *b* may project either inward or outward according to the system of ventilation desired, since under certain conditions they induce air to enter, while under other conditions they facilitate the escape of air. But usually, and especially when the ventilator is used in cars and moving vehicles, the cones will project outward, and if some are placed near the floor and others near the roof of the car effective ventilation will be accomplished.

When the cones *b* project outward the apertures *c* are preferably made in the under side of the cone adjacent to its point, as shown in Figs. V and VI. As a further protection from the entrance of rain or snow small depending fins *e* may be formed into a hood about the apertures *c*, as in Figs. VII and VIII. It may be better under some conditions to set the plate *a* in a frame *f* somewhat outwardly inclined at its top, as in Figs. I and II, so as to further avoid the entrance of rain; but for ordinary service the plate *a* may be set vertically, as in Figs. III and IV. It may sometimes be advisable to incline downward the hollow projections *b*, as in Fig. IX, so that the apertures *c* are lower down than the inner base edge of the hollow cones, in which case the plate *a* may be set vertically. But in either of the above described forms, ventilation will be secured without direct or noticeable drafts.

I further point out and distinctly claim as my invention—

1. A ventilator comprising a plate having hollow pointed projections therein, said projections having apertures at or near their points, substantially as set forth.

2. In a ventilator, the combination of a plate, a plurality of hollow conical projections thereon, and apertures beneath the points of said projections, substantially as set forth.

3. In a ventilator, the combination of a plate, and hollow conical projections thereon downwardly inclined and having apertures beneath their points, substantially as set forth.

4. In a ventilator, the combination of a plate, a plurality of hollow conical projections thereon, apertures beneath the points of said projections, and depending fins

forming hoods about said apertures, substantially as set forth.

5 5. In a ventilator, the combination of a plate, a frame about said plate, and a plurality of hollow conical projections on said plate having apertures adjacent to their points, substantially as set forth.

In testimony whereof I affix my signature

in the presence of two subscribing witnesses at Cleveland, Ohio, this 9th day of June, 10 1909.

WILLIAM LINTERN.

Witnesses:

JOHN H. GREER,
GAYTON M. JEWETT.