Oct. 27, 1925. 1,559,376

A. L. RIKER

VENTILATOR

Filed March 10, 1923 2 Sheets-Sheet 1

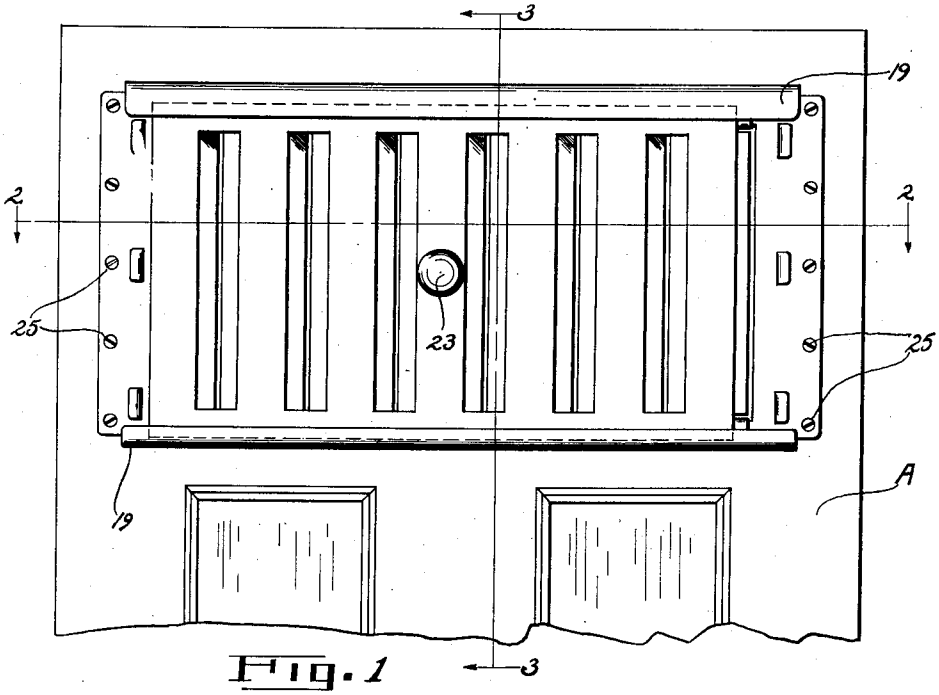



Fig. 1

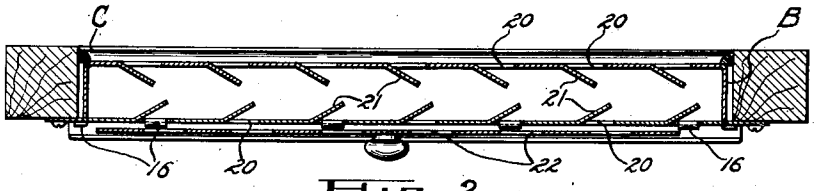



Fig. 2

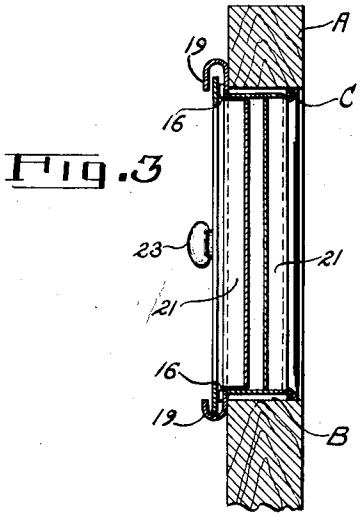



Fig. 3

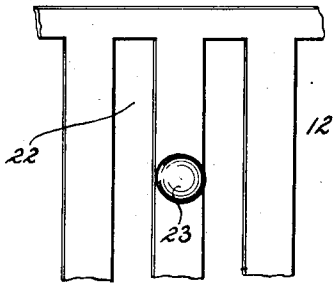



Fig. 4

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A. L. RIKER

VENTILATOR

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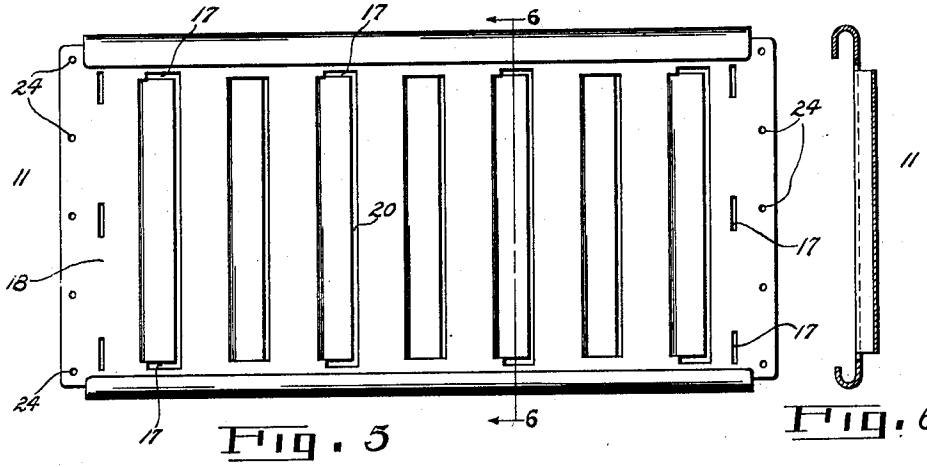



Fig. 5

Fig. 6

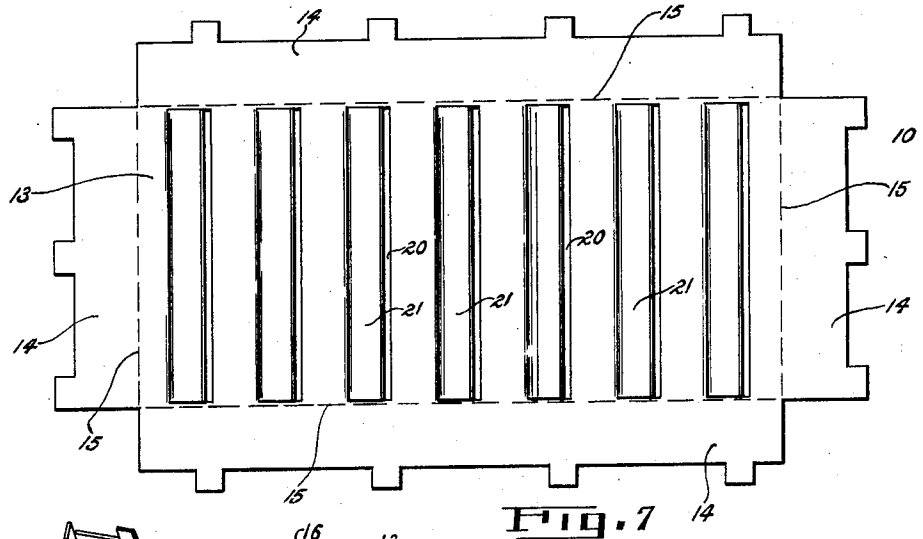



Fig. 7

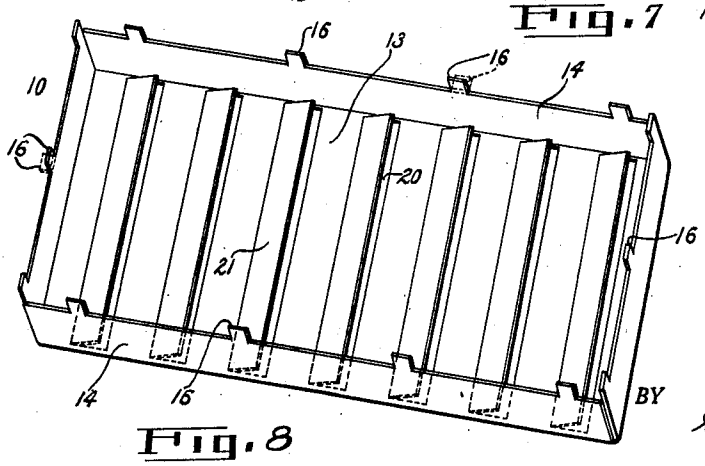



Fig. 8

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Patented Oct. 27, 1925. 1,559,376

# UNITED STATES PATENT OFFICE.

ANDREW L. RIKER, OF FAIRFIELD, CONNECTICUT.

## VENTILATOR.

Application filed March 10, 1923. Serial No. 624,127.

*To all whom it may concern:*

Be it known that ANDREW L. RIKER, a citizen of the United States, and resident of Fairfield, in the county of Fairfield and State of Connecticut, has invented certain new and useful Improvements in Ventilators, of which the following is a specification.

This invention relates to a ventilator more especially adapted for use as a closure for doors and the like.

The invention aims to provide a ventilator of simple construction adapted to serve as a closure for doors or the like to prevent a direct view through the ventilator from one side to the other of the door and to prevent the direct passage of air currents through the closure.

An object of the invention is to provide a ventilating closure including spaced apart louvers capable of being incorporated in an opening in a door or the like to close the same without the necessity of fitting the ventilating closure to said opening, the closure constituting an article of manufacture which can be furnished to the trade as a unit to be installed by unskilled workmen.

A further object is to provide a ventilator which can be installed in openings of variable size, within limits, in doors or the like without altering the elements of the ventilator or fitting them to the opening.

And a still further object is to provide an improved article of manufacture consisting of spaced apart louvers and an apertured slide, associated with each other in novel manner and adapted to be incorporated in an opening in a door or the like in unique fashion.

With the above and other objects in view, the invention comprises the construction, arrangement and combination of parts as now to be fully described and as hereinafter to be specifically claimed, it being understood that the disclosure herein is merely illustrative of the principles of the invention and meant in no way in a limiting sense, changes in details of construction and arrangement of parts being permissible so long as within the scope of the appended claim.

In the accompanying drawing forming a part of this specification,

Fig. 1 is an elevational view of a door or the like as seen from the inside of a building, showing the improved ventilator applied to use;

Fig. 2 is a sectional view on line 2—2 in Fig. 1, looking in the direction of the arrows;

Fig. 3 is a sectional view on line 3—3 in Fig. 1, looking in the direction of the arrows;

Fig. 4 is an elevational view of a fragment of the slotted or apertured slide of the ventilator;

Fig. 5 is an elevational view of the inner louver of Figs. 1, 2 and 3.

Fig. 6 is a sectional view on line 6—6 in Fig. 5, looking in the direction of the arrows.

Fig. 7 is a plan view of a piece of material from which the outer louver of Figs. 1, 2 and 3 can be made; and

Fig. 8 is a perspective view of said outer louver.

With respect to the drawing and the characters and numerals of reference indicated thereon, A represents a door or the like with opening B to receive a ventilating closure, the closure, naturally, being of the general configuration of said opening, rectangular as shown.

Of the novel closure, 10 denotes an outer louver, 11 an inner louver associated therewith, and 12 denotes a slotted or apertured slide associated with the inner louver.

As disclosed, the outer louver 10 consists of a single piece of sheet metal suitably shaped for its purpose. See Figs. 7 and 8. That is to say, the outer louver may consist of a desirably flat, rectangular plate or body 13 having a continuous flange or extension 14 adapted to be secured to the inner louver 11. Numeral 15 (Fig. 7) denotes lines of fold for producing the continuous flange or extension 14 which is desirably perpendicular to the plate or body 12, and 16 represents lugs spaced about the free edge of the continuous flange or extension.

The inner louver 11 has openings as denoted at 17, to receive lugs 16, and may consist of a desirably flat rectangular plate or body 18. To secure the inner and outer louvers to each other the lugs 16 may be passed through the openings and fastened down against the face of the plate or body 18 as more clearly shown in Figs. 2 and 3.

The continuous flange or extension 14 of the outer louver is preferably arranged centrally of the plate or body 18 of the inner louver 11 and the marginal portions of said

plate or body 18 desirably extend for some considerable distance beyond said continuous flange or extension.

The slotted or apertured slide is associated with the inner louver 11. As disclosed, the upper and lower marginal portions of said plate or body 18 are preferably bent on a curved line, away from the louver 10, and toward each other, as denoted at 19 in Figs. 1, 3 and 5, to provide guide ways for the slide.

The plates or bodies 13, 18 of the louvers 10, 11 are provided with slots or apertures 20 for the passage of air through the ventilator, and adjacent each slot or aperture 20 is a preferably obliquely disposed flange 21, the flanges 21 of the different plates or bodies 13, 18, projecting toward each other. As shown, the oblique flanges extend approximately the width of the plates or bodies 13, 18 and are constituted by metal struck from said plates or bodies to produce the slots or apertures 20.

In order that there can be no direct line of vision through the louvers when the elements of the ventilator are assembled, the slots or apertures 20 of the different louvers are arranged in staggered relation, and all of the oblique flanges 21 extend toward the same side of the ventilating closure, toward the right as disclosed in the drawing.

The slide 12 has apertures or slots 22 extending the greater part of the width thereof and arranged to correspond with the apertures or slots in the plate or body 18 of the louver 11. A manipulating handle 23 desirably arranged centrally of the slide allows for ready adjustment of the slide to open or close the apertures or slots through the louver 11. Obviously, any suitable means may be employed for limiting the sidewise movements of the slotted or apertured slide.

To install the ventilator in the opening B, all that is necessary is to insert the louver 10 in said opening in such manner that the marginal portions of the plate or body 18 can rest against the surface of the door or the like adjacent said opening. Numeral 24 denotes holes in said marginal portions to receive screws 25 adapted to enter the door or the like to insure the set position of the ventilator. Evidently, no fitting of the ventilator in the opening is required, the plate or body 18 itself covering the opening and the louver 10 with continuous flange being capable of being spaced a greater or less distance from the wall of the opening. See Figs. 2 and 3. C denotes strips, which may be of a size to suit the condition, incorporated in the opening B to fill the space between the continuous flange or extension 14 and the wall of the opening. The continuous flange or extension 14 of the outer louver 10 constitutes a spacing element between the plates 13, 18 and the lugs 16 constitute means insuring the fixed relation of the louvers. It will be apparent that the louvers can be assembled in a different manner.

Having thus fully described the invention, what I claim as new and desire to secure by Letters Patent is:—

In combination with a structure having an opening, a ventilating closure comprising an apertured plate to cover said opening, the complete margin of said plate being adapted to engage said structure beyond said opening, means for securing said plate to said structure, an apertured plate having a continuous, integral flange secured to the plate first mentioned and spacing said plates apart, the apertured plate with continuous, integral flange being adapted to lie wholly within said opening at greater or less distance from the wall thereof, and the apertured plate with margin including integral guide ways constituting the border of said margin, and a slotted slide in said guide ways.

Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 8th day of March, A. D. 1923.

ANDREW L. RIKER.