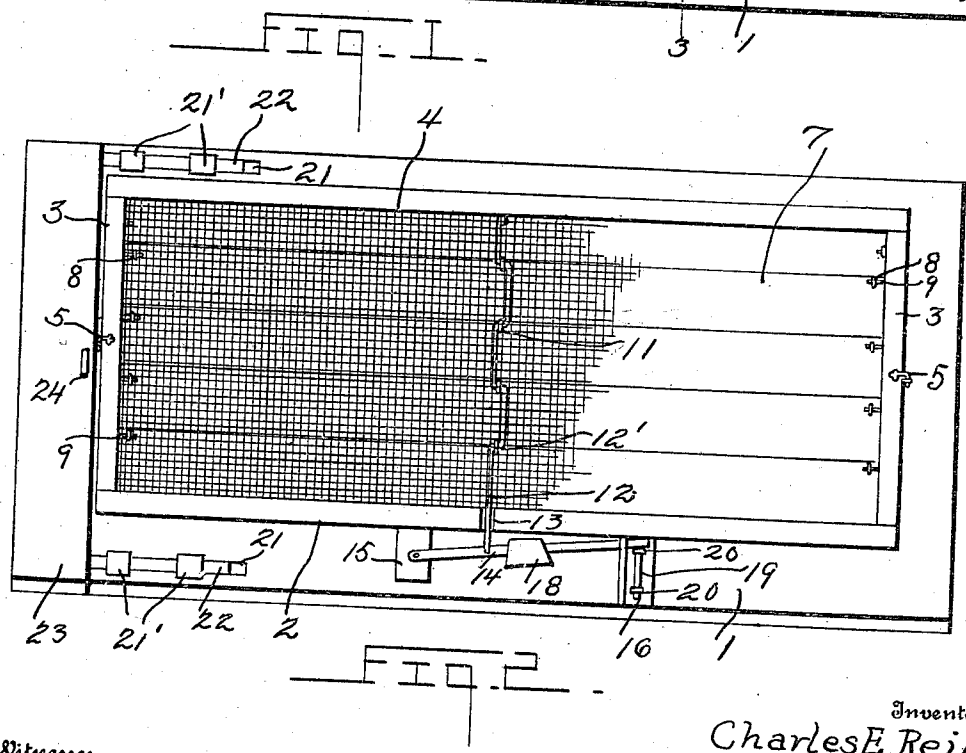
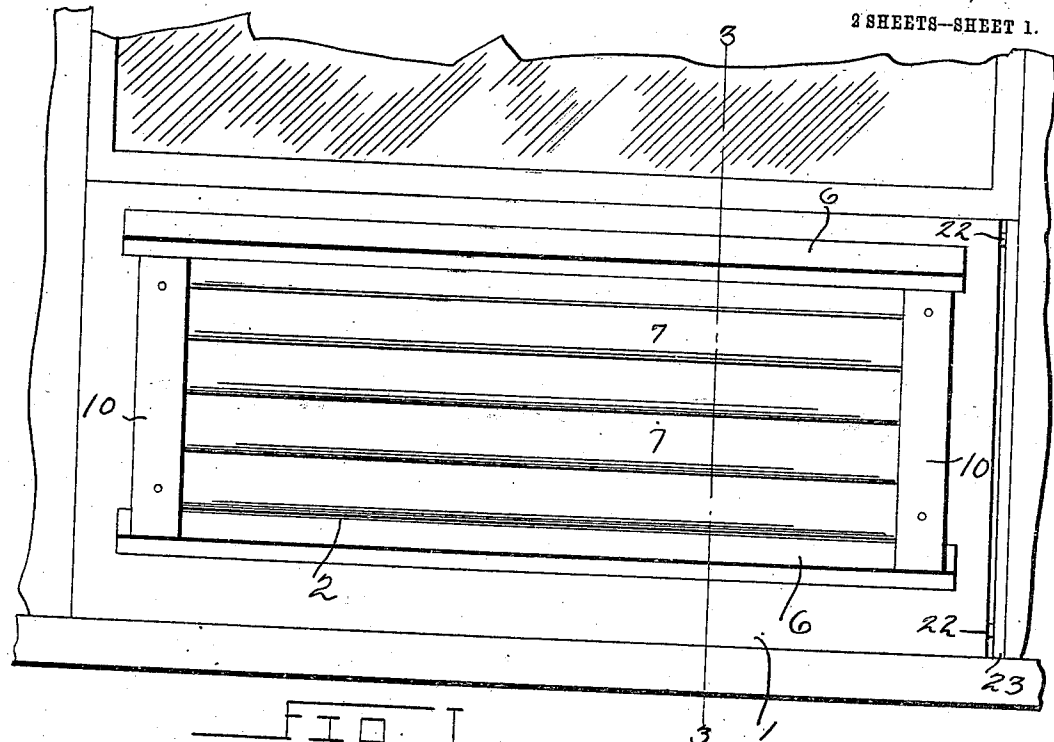


C. E. REITZ.  
 AUTOMATIC VENTILATOR.  
 APPLICATION FILED MAY 28, 1909.

961,016.

Patented June 7, 1910.

2 SHEETS—SHEET 1.



Witnesses  
 C. E. Johansen  
 C. L. Chandler

Inventor  
 Charles E. Reitz

By Woodward & Chandler

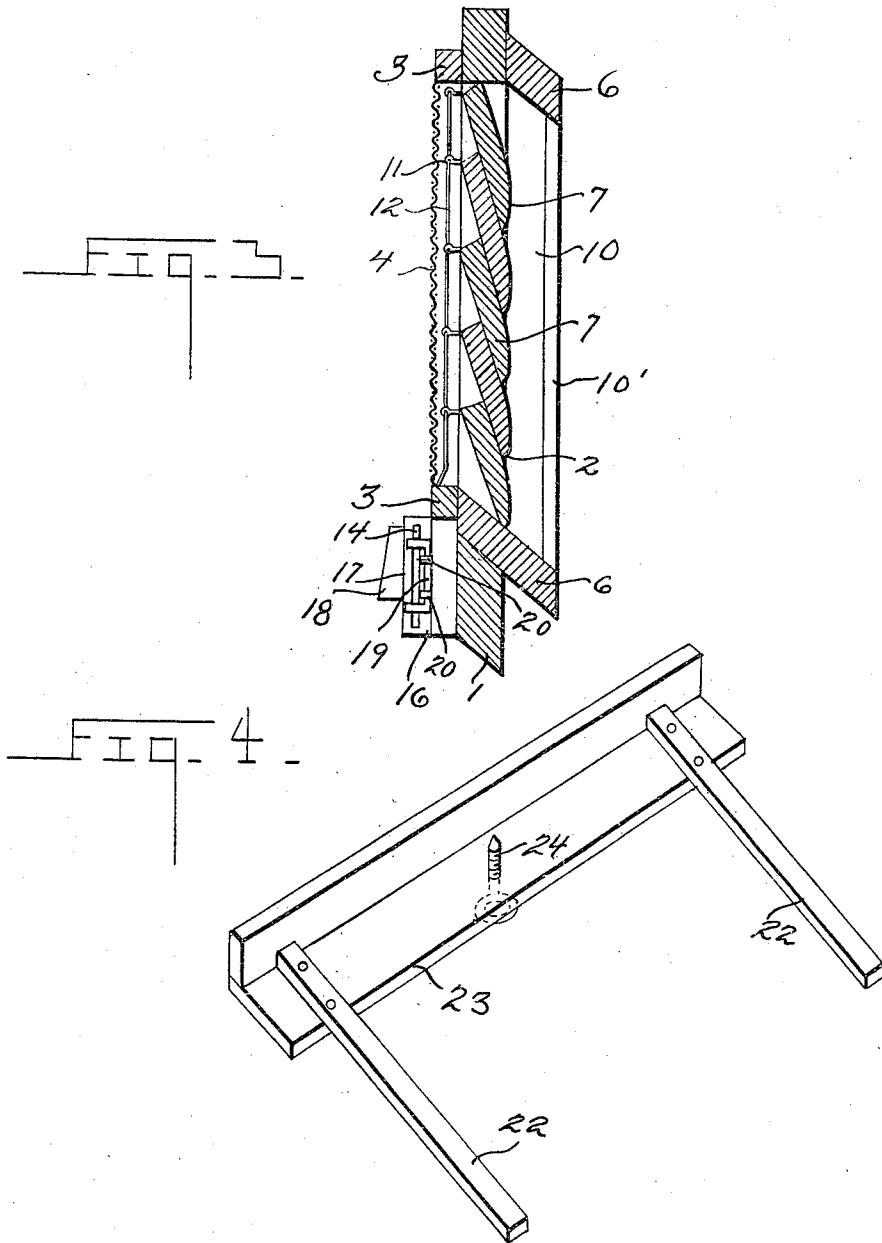
Attorney

C. E. REITZ.  
 AUTOMATIC VENTILATOR.  
 APPLICATION FILED MAY 28, 1909.

961,016.

Patented June 7, 1910.

2 SHEETS—SHEET 2.



Witnesses  
 E. E. Johansen  
 E. L. Chandler

Inventor  
 Charles E. Reitz.

By Woodward Chandler

Attorney

# UNITED STATES PATENT OFFICE.

CHARLES E. REITZ, OF REITZ, PENNSYLVANIA.

## AUTOMATIC VENTILATOR.

961,016.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed May 28, 1909. Serial No. 498,800.

*To all whom it may concern:*

Be it known that I, CHARLES E. REITZ, a citizen of the United States, residing at Reitz, in the county of Somerset and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Ventilators, of which the following is a specification.

This invention relates to new and useful improvements in window ventilators, and has for its object to provide a device of this character which is adapted to be held in the window frame beneath the lower edge of the window sash, and comprises a plurality of pivoted horizontal slats, suitably spaced from each other to admit the air currents.

Another object is to provide a ventilator, to the frame of which a screen may be detachably secured, said frame being so constructed that the same is adjustable to windows of various widths.

A further object is to provide a pivoted bar suitably connected to the horizontal slats and having a weight adjustable thereon by means of which the slats may be held at any desired inclination, and will be automatically returned to their adjusted positions upon being subjected to an unusually strong gust of wind.

A further object is to provide novel means for retaining the pivoted bar in such position that the proper amount of air will be admitted to the apartments according to the atmospheric temperature.

With these and other objects in view, the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described and particularly pointed out in the appended claims, it being understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a front elevation of my improved window ventilator showing the same secured in the window frame. Fig. 2 is a rear elevation thereof. Fig. 3 is a vertical section taken on the line 3—3 of Fig. 1, and Fig. 4 is a detail perspective

view of the extensible end member of the frame.

Referring to the drawings, 1 indicates a rectangular ventilator frame which is formed with the opening 2 therein. Upon the inner face of the ventilator frame and around the edges of the opening 2, the stiles 3 of a screen 4 may be removably attached to effectually prevent the entrance of flies or other insects. The stiles are secured to the frame by means of suitable hooks 5, and they may readily be removed together with the screen when desired. Secured to the outer surface of the frame and having their upper edges disposed in parallelism with the opening 2 are the horizontal bars 6, which are inclined downwardly so as to discharge the rainwater therefrom and prevent its entrance through the opening 2 of the frame. The lower bar 6 extends through the opening 2, the ends thereof being reduced in width and extending beyond the same upon either side. A plurality of slats 7 are pivotally secured to the ends of the frame within the opening 2. These slats are provided with eyes 8 at either end and upon their upper edges, which are adapted to receive the pintles 9 secured in either end of the frame and projecting inwardly therefrom. Vertical bars 10 are also secured to the outer surface of the frame and are formed with the bats 10' upon their inner edges, which are adapted to limit the outward movement of the slats 7. A screw eye 11 is secured to the upper edge of each of the slats at the centers thereof. A vertical operating rod 12 is pivoted in these eyes and is formed with the horizontally extending shoulder forming portions 12' which are disposed in the same. Between the eyes 11 the rod 12 is vertically disposed, each of the vertical portions of said rod being out of alinement with the next adjacent portion thereof. The lower end of the rod 12 extends through an opening 13 provided for the same in the lower stile 3, and has its end secured to a horizontal bar 14 forming a lever, one end of which is pivoted upon the block 15, the other end thereof being disposed in a keeper plate 16 which is secured to the ventilator frame. Between the block and plate 16 a weight 18 is slidably mounted upon the bar 14, and is adapted to be adjusted to any position thereon so that the amount of air which

is allowed to enter between the slats may be regulated to obtain the proper temperature within the apartment.

The keeper plate 16 is provided with a vertical slot 17 which receives the end of the horizontal bar 14. A U-shaped locking member 19 is pivoted in the eyes 20 secured in the keeper plate, and is adapted to lock the bar 14 to retain the horizontal slats in their open or closed position. The bar 14 is moved to the upper end of the vertical slot 17 and the locking member 19 turned outwardly into parallel relation with the slotted portion of the keeper plate 16, so that when in this position the upper angular extension of the locking member will be disposed beneath the end of the bar 14 and thus prevent any downward movement of the same. To lock the bar so that the slats will remain open, the bar is moved to the lower end of the vertical slot 17 and the lower angular extension of the locking member is disposed over the bar 14 to effectually prevent any upward movement of the same. Thus should a violent gust of wind strike the outer surface of the pivoted slats, the same would still be retained in their open positions by means of the locking member 19. They could also be securely closed at night to prevent the insertion of an instrument between the slats from the outside.

Parallel grooves 21 are provided in one end of the frame adjacent to the upper and lower edges thereof and receive the bars 22 which are secured to the under side of a substantially L-shaped plate 23. The transverse portion of this plate when in its normal position is adapted to contact with the end of the ventilator frame, but when it is desired to place the same in a window frame of more than the usual width, this end plate is pulled outwardly therefrom until the same contacts with the side of the window frame and is disposed within the rabbeted edge thereof, thus securely holding the ventilator in position beneath the lower edge of the sash. Suitable retaining plates 21' are disposed over the slots 21 and have their ends secured in the ventilator frame, and form a guide for the bars 22 to prevent the same leaving the slots.

It will be understood that a greater or less number of the pivoted slats may be employed in the construction of my improved ventilator, and that the same may also be made of wood, steel, or any other material which may be peculiarly adapted for the particular conditions under which the ventilator is to be used. For instance, in railroad car constructions, the ventilator would preferably be constructed entirely of steel, so that there is no possible danger of the same being ignited by sparks from locomotives. For ordinary household use, however, the ventilator could be very well made

of any suitable wood of a substantial and enduring quality.

From the foregoing, it will be seen that I have provided a very simple and easily operated form of window ventilator, and that the same may be readily adjusted so that the proper amount of air will be admitted to the apartment whereby an equable temperature may be secured therein. The device is absolutely positive in its action and all dust, dirt, snow and rain will be excluded from entrance therethrough. As before stated, the screen which is secured to the stiles 3 may be readily removed therefrom when its use may be no longer desired. The screen would however, be a permanent part of the ventilator when the same is designed for use upon railway car windows, so that the entrance of cinders between the slats will be absolutely prevented. Moreover the device requires but few parts and is extremely inexpensive in its manufacture. It is also highly durable and efficient in use.

A screw eye 24 is secured in the extension plate 23 adjacent to the inner edge thereof, and provides a suitable handle by means of which the same may be adjusted. When the device has been properly located in the window frame, this eye may be screwed into the end of the ventilator frame so that the extension plate will be securely held in its adjusted position to prevent the same from being moved inwardly from the outside, should an attempt be made to remove the frame from the window. Thus after the frame has been properly positioned beneath the window sash, the same may be securely locked whereby entrance to the premises will be effectually prevented, while at the same time the thorough ventilation of the apartment will be provided for.

What is claimed is:

1. In combination, a rectangular ventilator frame, an upper and a lower bar secured to the outer face of said frame in parallel and downwardly inclined relation, a plurality of slats pivotally held within said frame, vertically disposed battens secured to said bars to limit the movement of said slats in one direction, eyes secured to said slats, an operating rod having horizontal off-set portions engaging said eyes, a lever pivotally secured at one end in engagement with said operating rod, a weight slidably secured to said lever, a slotted keeper plate, the end of said lever working in said slot, and a U-shaped locking member pivotally secured to said slotted keeper plate, arranged to lock said lever against the upper or lower end of said slot.

2. The combination with a rectangular ventilator frame, of an upper and lower bar secured to the outer face of said frame in parallel and downwardly inclined relation, a plurality of slats pivotally held within said

frame, vertically disposed battens secured  
to said bars to limit the movement of said  
slats in one direction, eyes secured to said  
slats, an operating rod having horizontal  
5 off-set portions engaging said eyes, a lever  
pivotally held at one end in engagement  
with said operating rod, a weight slidably  
secured to said lever, and means to lock

said lever to hold said slats in an open or  
closed position.

In testimony whereof I affix my signa-  
ture, in presence of two witnesses.

10

CHARLES E. REITZ.

Witnesses:

A. H. KOONTZ,

W. H. REITZ.