

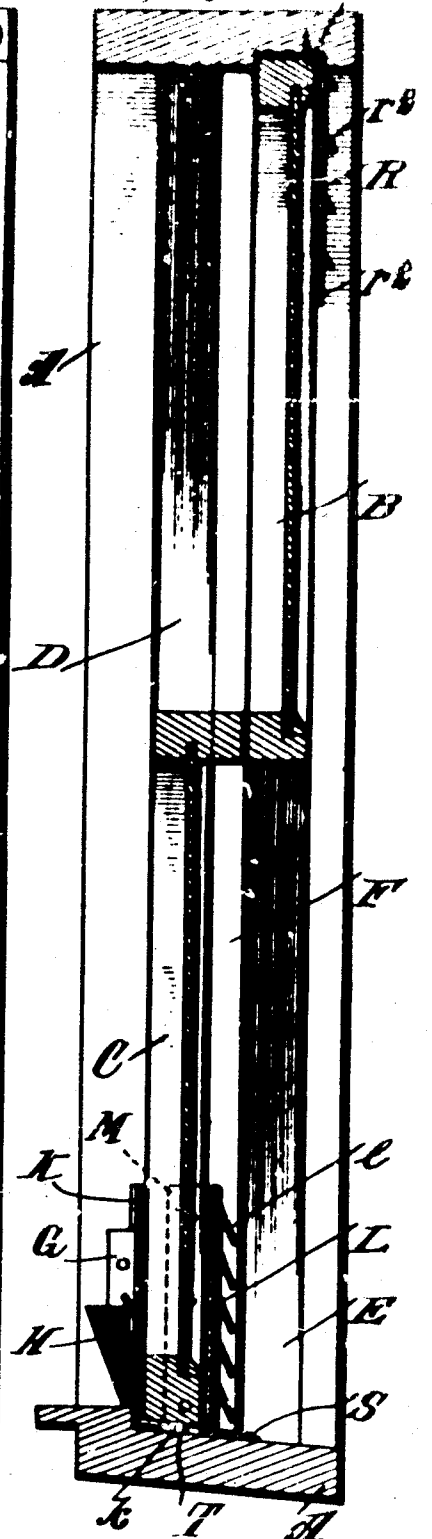
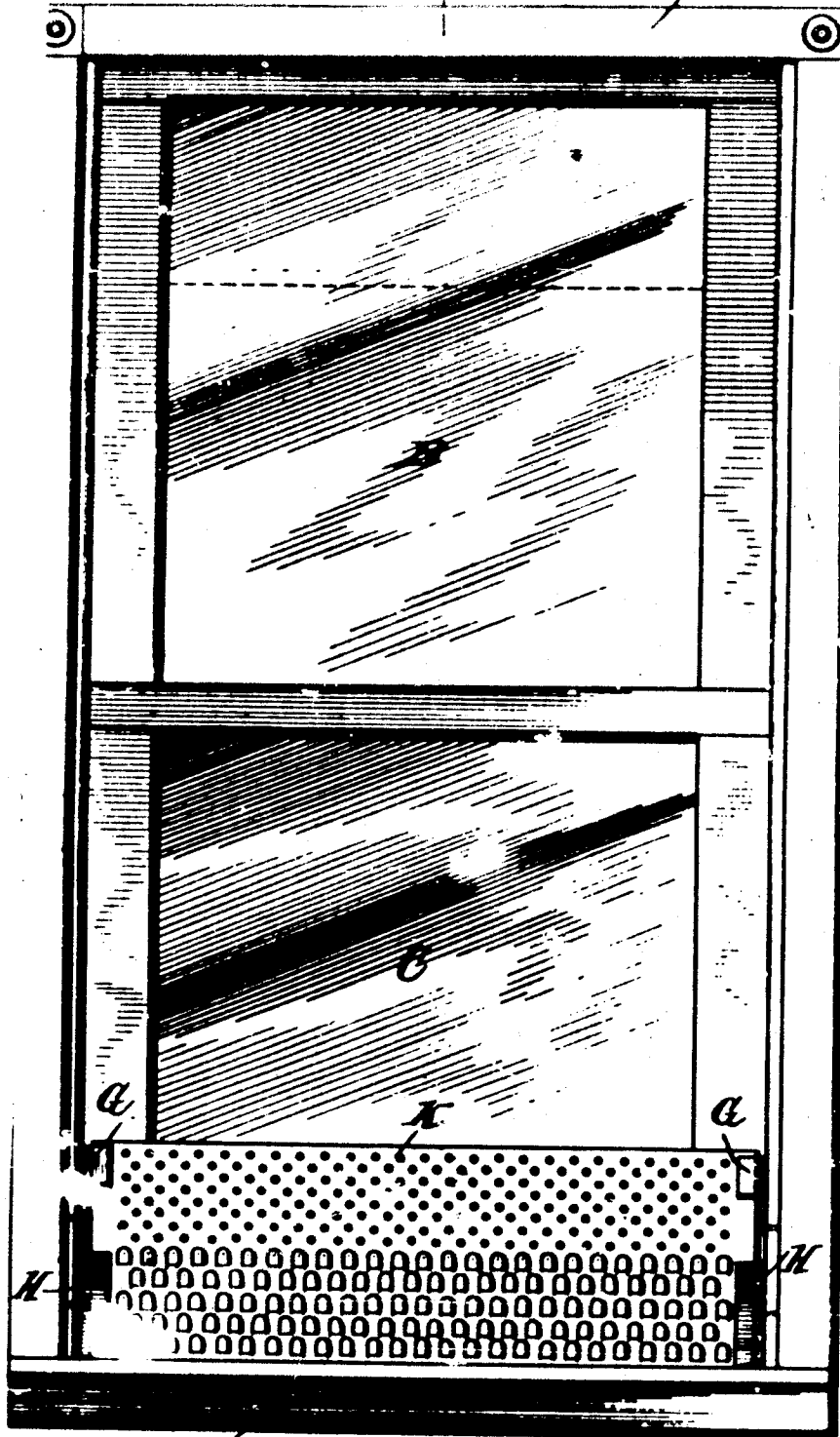
936,185.

Patented Oct 5, 1909.

SHEET NO. 1.

Fig. 1.

Fig. 2.



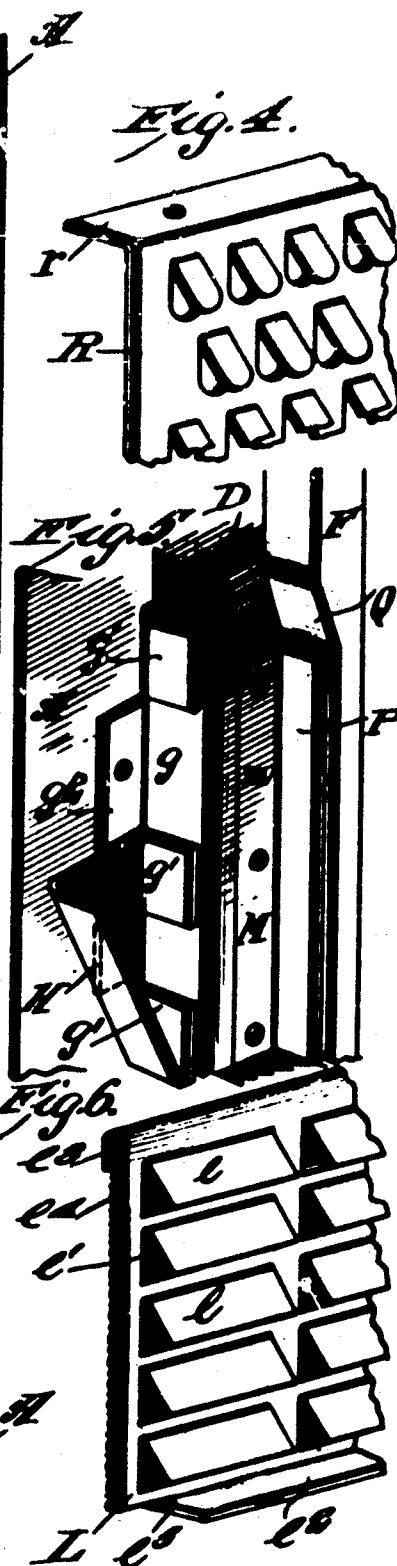
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UNITED STATES PATENT OFFICE.

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WINDOW-VENTILATOR.

930,183.

Specification of Letters Patent.

Patented Oct. 5, 1909.

Application filed April 26, 1909. Serial No. 492,147.

To all whom it may concern:

Be it known that I, GEORGE W. STEIN, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have made certain new and useful Improvements in Window-Ventilators, of which the following is a specification.

My invention relates to improvements in means for ventilating windows, and it consists in the combinations, constructions and arrangements herein described and claimed.

An object of my invention is to provide a device in which good ventilation is secured while at the same time the ventilating opening is shaded without the necessity of using a projecting awning or other similar device.

A further object of my invention is to provide a ventilating device which while permitting good ventilation prevents the rain or snow from entering while the device is in use.

A further object of my invention is to provide means for directing the incoming current of air so that it will be directed upwardly.

A further object of my invention is to provide a ventilator which may be readily detached or replaced when occasion requires.

A further object of my invention is to provide a ventilating device having retaining slides which act as spring sash holders thereby keeping the window sash from rattling or working loose.

Other objects and advantages will appear in the following specification and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings in which—

Figure 1 is an inside view of a window equipped with my improved ventilating device; Fig. 2 is a sectional view along the line 2-2 of Fig. 1; Fig. 3 is a side view of the outside of the window; Fig. 4 is a fragmentary detail view in perspective of the upper ventilating plate; Fig. 5 is a detail view in perspective showing the arrangement of the metal retaining strips; and Fig. 6 is a fragmentary view in perspective of the lower ventilating plate.

In Figs. 1 and 3 I have shown the inside and outside respectively of an ordinary window consisting of a window frame A and the upper and lower sashes B and C respectively. The window frame A is provided with the usual run-ways D and E for the sashes C

and B as shown in Fig. 2 and these run-ways are separated by the dividing strip F. To the lower part of the inner side of the frame A, I secure the retaining members G. These retaining members comprise a flat strip *g* having integral portions *g'* bent back parallel with the main portion *G* and laterally extending portions *g''* which are attached directly to the sides of the casing A as clearly shown in Fig. 5. Secured to the lower part of the retaining member *G* is an inclined supporting strip *H*. These retaining members constitute slides for holding the lower ventilating plate *K* as shown in Fig. 1, as will be hereinafter explained.

The means by which the lower outside ventilating plate *L* is secured is shown also in Fig. 5, it being understood that both the retaining members *G* and *M* shown in this figure are duplicated on the opposite side of the window so that a description of one set will suffice for both. The retaining member *M* consists of a flat portion *m* which is secured to the bottom of the run-way *D* and is provided with an integral lateral flange *P*. The flange *P* lies in a cut-away portion *Q* of the dividing strip *F*, which will permit the insertion of the ventilating plate *L* between the flange *P* and the edge of the dividing strip *F* as will be hereinafter explained.

The three ventilating plates *K*, *L* and *R* forming the main subject of this invention are clearly illustrated in the figures.

Referring now to Fig. 6, it will be seen that the plate *L*, which is intended for the outside of the window consists of a single sheet of metal from which are punched the rectangular portions *l*, these portions being bent outwardly to form projecting strips for the openings *l'*. At the bottom of the strip there is a lateral flange *l''* while the top is bent over at *l'''* to clamp the upper edge of a screen *l''''* secured thereto. The lower end of the screen is secured to the lower edge of the plate *L* by soldering or in any other suitable manner. The ends of the flange *l''* are cut away as shown at *l''''*.

The lower plate *K* and the upper strip *R* are somewhat similar in construction. These plates are provided with a series of portions which are relatively small in comparison with the strips *l* but which like the latter are punched from the plate and are bent in an angular direction as clearly shown in Fig. 1. The upper plate *R* is provided with a laterally extending flange *r* for at-

attachment to the window casing, while the lower plate is provided with a similar flange *k*, see Fig. 2 for attachment to the lower part of the window frame A.

5 From the foregoing description of the various parts of the device the operation thereof may be readily understood.

The upper strip R is preferably secured in the run-way *c*, the flange *r* being disposed in the run-way and secured to the top thereof by screws or nails as clearly shown in Fig. 2. The main portion of the plate R lies in a cut-away portion *r'* of the outside frame A so as to present a smooth surface to the window sash R.

10 The lower outside ventilating plate may be inserted in the slots Q between the opposed members P and F, and owing to the cut-away portion *l'* into which the flange P enters the plate may be lowered into the position shown in Fig. 2 and there secured by a pivoted catch S which hooks over the flange *l'* or it may be secured directly to the frame A by means of screws or nails.

25 The inner lower plate K may be inserted between the members *g* and *g'* of the retaining member G and it also may be secured by a pivoted retaining latch T or be permanently secured as described.

30 A window thus equipped has the following advantages: The lower sash may be raised and the window left up even during a rain storm without danger of injury to the interior of the room by the rain beating in through the window. The inclined strips *l* of the outer lower ventilating plate L prevent the entrance of the rain or snow while freely admitting air. The screen attached to the lower plate prevents the entrance of insects. Moreover, the inclined plate *l* shades the window so that the glaring sun light is prevented from entering. The inner plate K is perforated in such a manner as to permit the entrance of air but to deflect it upwardly at an angle so that a person sitting near the window is not in the direct draft. The upper outside plate R being provided with the downwardly projecting portions *r'* prevents the entrance of rain while permitting the escape of air.

50 It will be observed from the similarity of construction that the lower inner plate K may be used in lieu of the upper outer plate R by reversing the position of the lower plate and attaching it in the manner shown in Fig. 2 on the upper outside of the win-

dow in place of the plate R. The upwardly inclined punched portions of the plate K will then be downwardly inclined similar to the punched portions *r'* of the plate R and will consequently serve the same purpose.

I am aware that other forms of the device based upon the same general principle might be made but I consider as my own all such modifications as fairly fall within the spirit and scope of the invention.

I claim:

1. In a window ventilating device, an outside ventilating member comprising a single sheet of metal having rectangular portions punched therefrom to form ventilating openings, said portions forming shades for the openings in combination with an inside ventilating device arranged to deflect the air coming from the outside ventilator in an upward direction.

2. In a window ventilating device, the combination with a window frame, of retaining strips secured thereto, an outside ventilating plate slidably held by said retaining strips, said ventilating plate being provided with shaded openings and an inside ventilating plate provided with perforations and an individual air deflector for each perforation.

3. In a window ventilating device, the combination with a window frame, of retaining strips secured to said frame, a lower ventilating plate slidably held by said retaining strips and provided with a series of openings, each opening being shaded by an inclined protecting strip and a screen secured to said ventilating plate on the opposite side from said inclined protecting strips.

4. In a window ventilating device, a ventilating plate comprising a rectangular strip of a length approximating the width of the window, said strip being provided with a series of rectangular openings formed by punching portions from said strip, said portions being bent outwardly and disposed in angular relation to the main body portion, the upper edge of said strip being turned over and a screen secured to the side of the ventilating strip opposite the punched portions, said screen being held at its upper edge by said turned over portion.

GEORGE WILLIAM STEIN.

Witnesses:

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