(No Model.)

# W. SCHARNWEBER.

## WINDOW VENTILATOR.

No. 532,487. Patented Jan. 15, 1895.

Fig. 1.

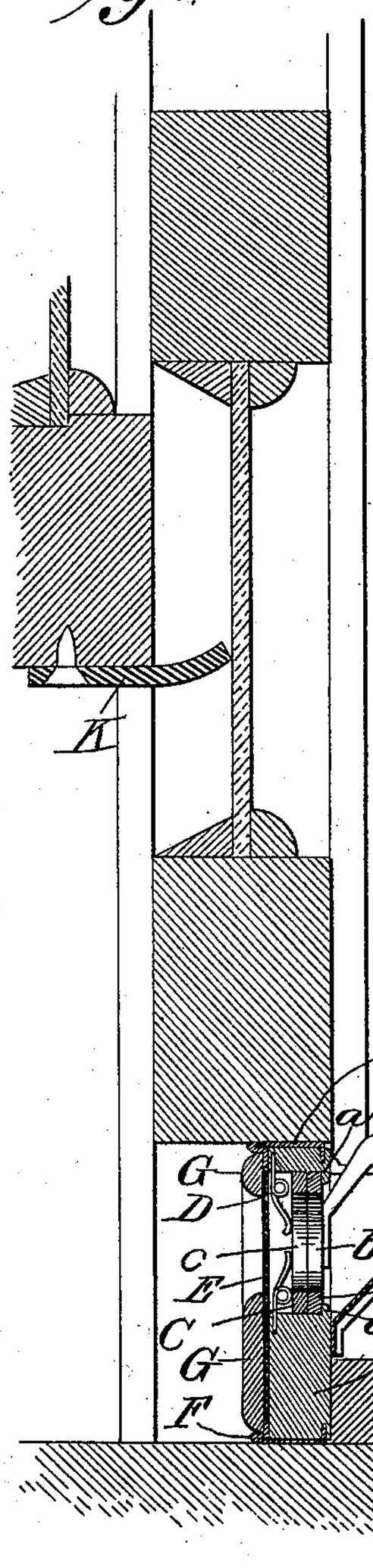



Fig. 2.

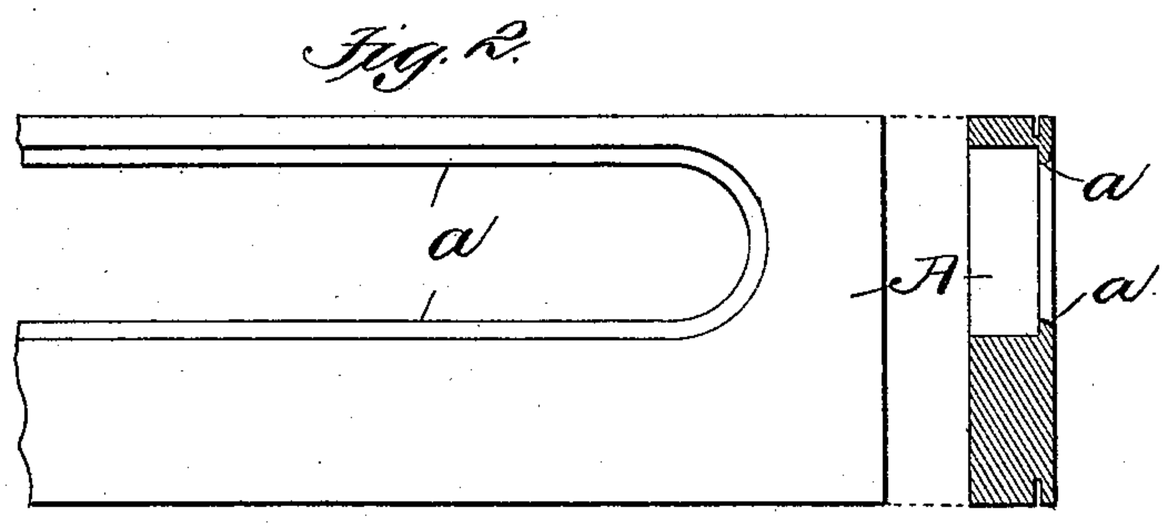



Fig. 3

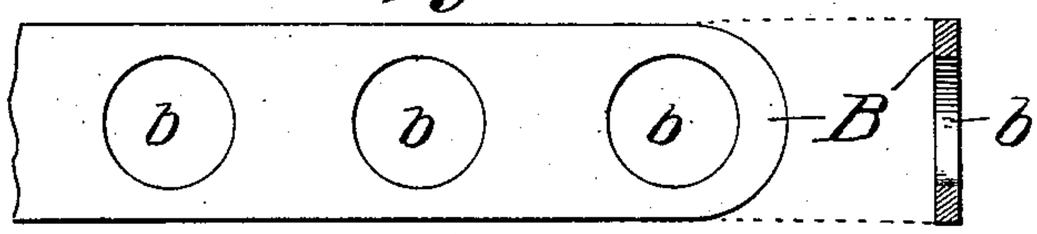



Fig. 4

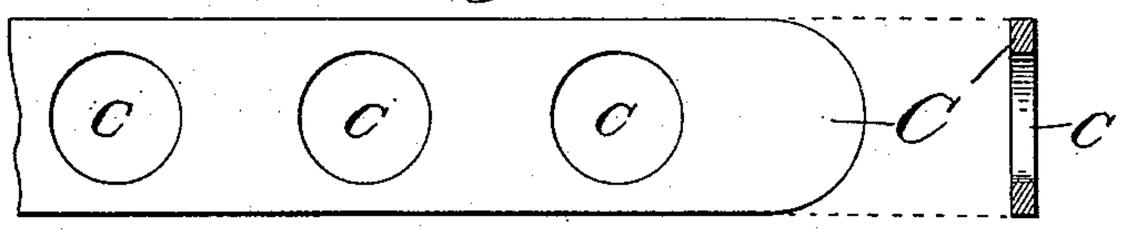



Fig. 5.

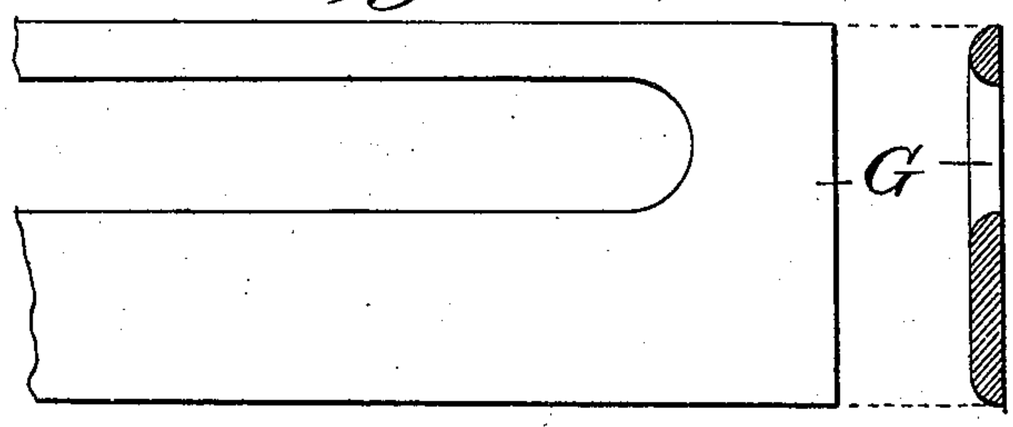



Fig. 7

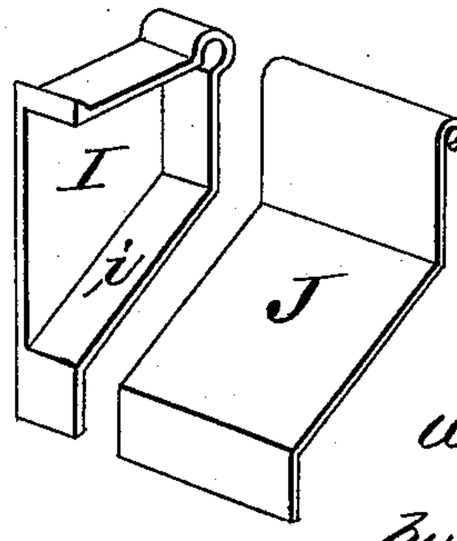
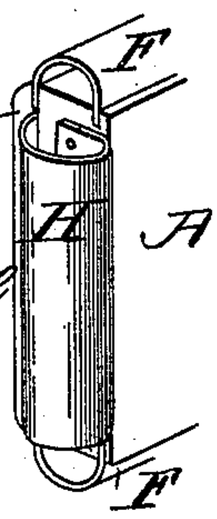



Fig. 8


Fig. 6




Witnesses:
J. P. Cornwall
Hugh K. Wagner.

Inventor:
Wm. Scharnweber
By
Paul Bakewell
his atty.

# UNITED STATES PATENT OFFICE.

WILLIAM SCHARNWEBER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO GEORGE BAKEWELL, OF QUINCY, ILLINOIS.

## WINDOW-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 532,487, dated January 15, 1895.

Application filed September 10, 1894. Serial No. 522,640. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM SCHARNWEBER, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Window-Ventilators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a sectional view through a window, showing the application of my improved ventilator thereto. Fig. 2 is a detailed view of the main frame of my ventilator. Fig. 3 is a detail view of the draft-regulating slide. Fig. 4 is a detail view of the draft-plate. Fig. 5 is a detail view of a frame which secures the weather-strips and wire-mesh to the main frame. Fig. 6 is a detail view of the manner of securing the weather-strip to the ventilator. Fig. 7 is a detail view of the deflector-plate bracket and a piece of the deflector-plate; and Fig. 8 is a detail of one of the springs.

This invention relates to a new and useful improvement in window-ventilators, of that class in which the draft-openings are formed in a suitable frame, which frame extends the width of the window and is held in place by the lower sash impinging thereupon.

Suitable means are provided on the frame to regulate the draft-openings, and in front of said openings is arranged a deflector-plate, which directs the incoming air upwardly, so that, should the ventilator be used when the weather is cold, the incoming cold air will create a circulation in the room.

In the drawings, A indicates the main frame, which is formed with a longitudinal opening or slot, which slot is surrounded by a projecting flange *a* on the inner face of the frame. Introduced in the slot, is the draft-regulator B, which bears against the flanges *a*, and which frame B is of a length sufficient to permit movement in the slot in the main-frame, so that its draft-opening *b* can be caused to register with similar openings *c* in a frame C, or said frame B may be moved longitudinally of the slot so as to entirely close the openings in the frame C. A suitable handle B′ is preferably placed upon the frame B, by which the same may be moved longitudinally. The frame C, before referred to, is longer than the frame B, and has no longitudinal movement in the slot of the frame A.

Springs D are mounted on the frame A in some suitable manner, and bear upon the frame C so as to hold it against the frame B, and press frame B against the flanges *a* surrounding the slot of the main frame. The object of these springs is to yieldingly hold the frame C against the frame B, so that if expansion should take place, due to dampness or other causes, neither of the frames would bind, and frame B could still be operated easily. Another function of springs D, by pressing against frame C, is to compensate for any irregularity between the two frames, which might be due to the warping of either of them.

The back of the frame A is faced with a wire-gauze E, which prevents foreign particles, such as soot, &c., from passing through the openings *b* and *c*, and which forms a chamber behind the frame C from which the air is drawn through the opening.

The main frame A is formed with a groove in its side edges, into which is received one side of a piece of weather-stripping F, which weather-stripping is turned back upon the main frame A, and secured in place by a frame G, which frame G also holds the wire gauze E in position. On the ends of the main frame A, I preferably attach a piece of weather-strip H, which forms a tight joint with the window-jambs.

On the front of the main frame, I secure two brackets I, which are formed with a laterally-projecting flange *i*, which flanges at the upper, outer corner form an eye, into which is received the rolled edge *j* of the deflector-plate J, said deflector-plate being held in position by the brackets.

In raising the lower sash, to locate my improved ventilator therebeneath, a space is formed between the top of the lower sash and the bottom of the upper sash, and, in order to prevent cold air from entering through this space, which might be objectionable in some instances, I arrange on the bottom of the top

sash a flexible strip K, which, when the lower sash is raised, will closely contact with the glass thereof, and make a tight joint.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a window-ventilator, the combination with a main frame, slotted longitudinally, of a yielding ventilator-plate located within the slot of the main frame, and a longitudinally movable ventilator plate, also located within the slot of the main frame, which longitudinally movable ventilator-plate regulates the passage of air through the yielding ventilator plate, substantially as described.

2. In a window-ventilator, the combination with a main frame, slotted longitudinally, of a flange along the inner edges of the slot, a movable ventilator-plate which rests against said flanges, a stationary ventilator plate, which is behind the movable ventilator plate and holds the same in position, and springs on the main frame for yieldingly retaining the stationary ventilator-plate in position, substantially as described.

3. In a window-ventilator, the combination with a main frame slotted longitudinally and formed with a flange along the inner edges of the slot, a longitudinally movable ventilator-plate, which rests against said flange, a yielding ventilator-plate mounted behind the longitudinally movable ventilator-plate, a wire gauze which covers the back of the slot, and weather-strips on the main frames, substantially as described.

4. In a window-ventilator, the combination with a main frame having a longitudinal slot formed therein, ventilator-plates which are yieldingly held in position in said slot, and a deflector-plate which is mounted upon the main frame in front of the slot, substantially as described.

In testimony whereof I hereunto affix my signature, in presence of two witnesses, this 31st day of August, 1894.

WILLIAM SCHARNWEBER.

Witnesses:
F. R. CORNWALL,
HUGH K. WAGNER.