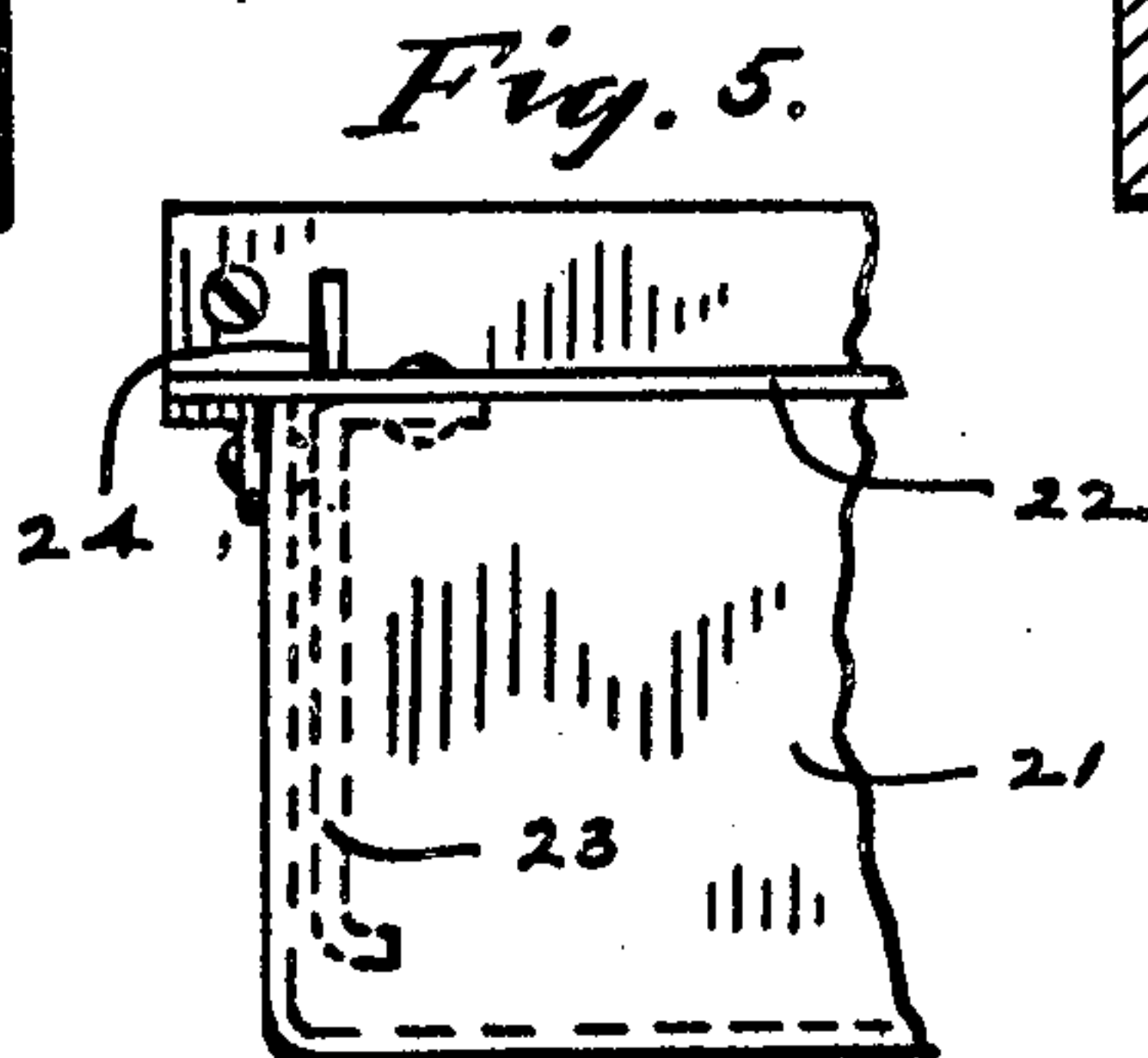
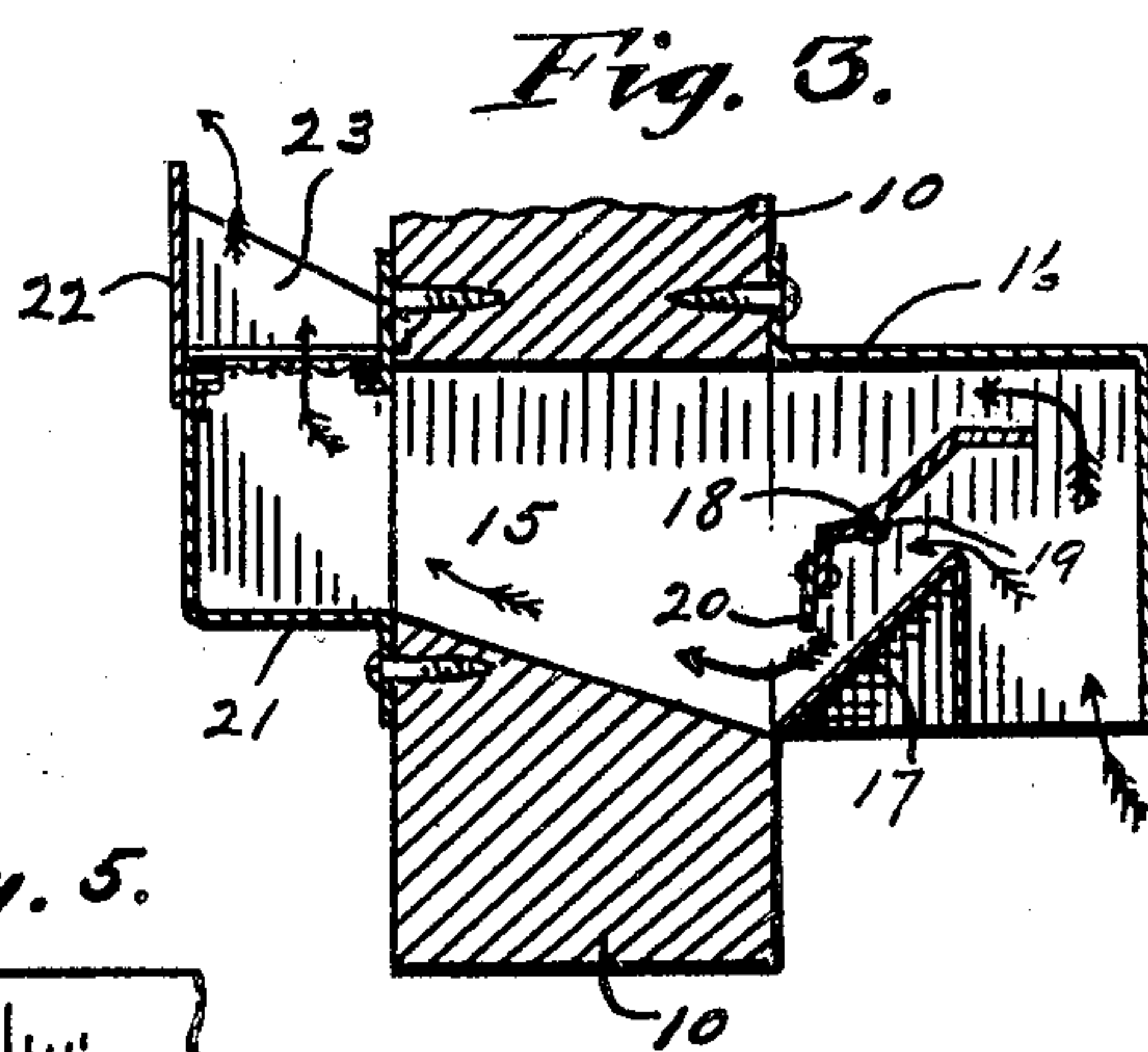
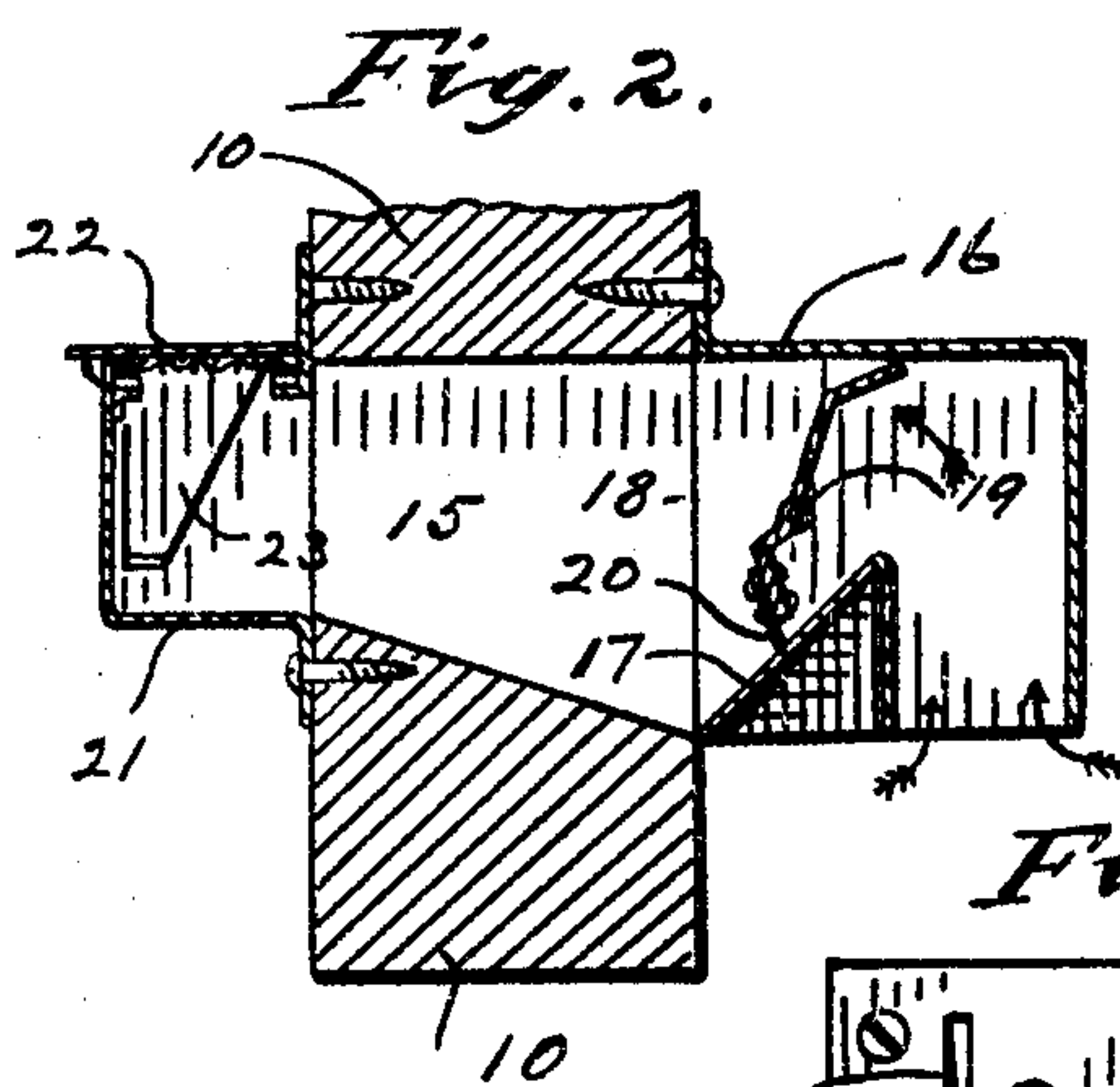
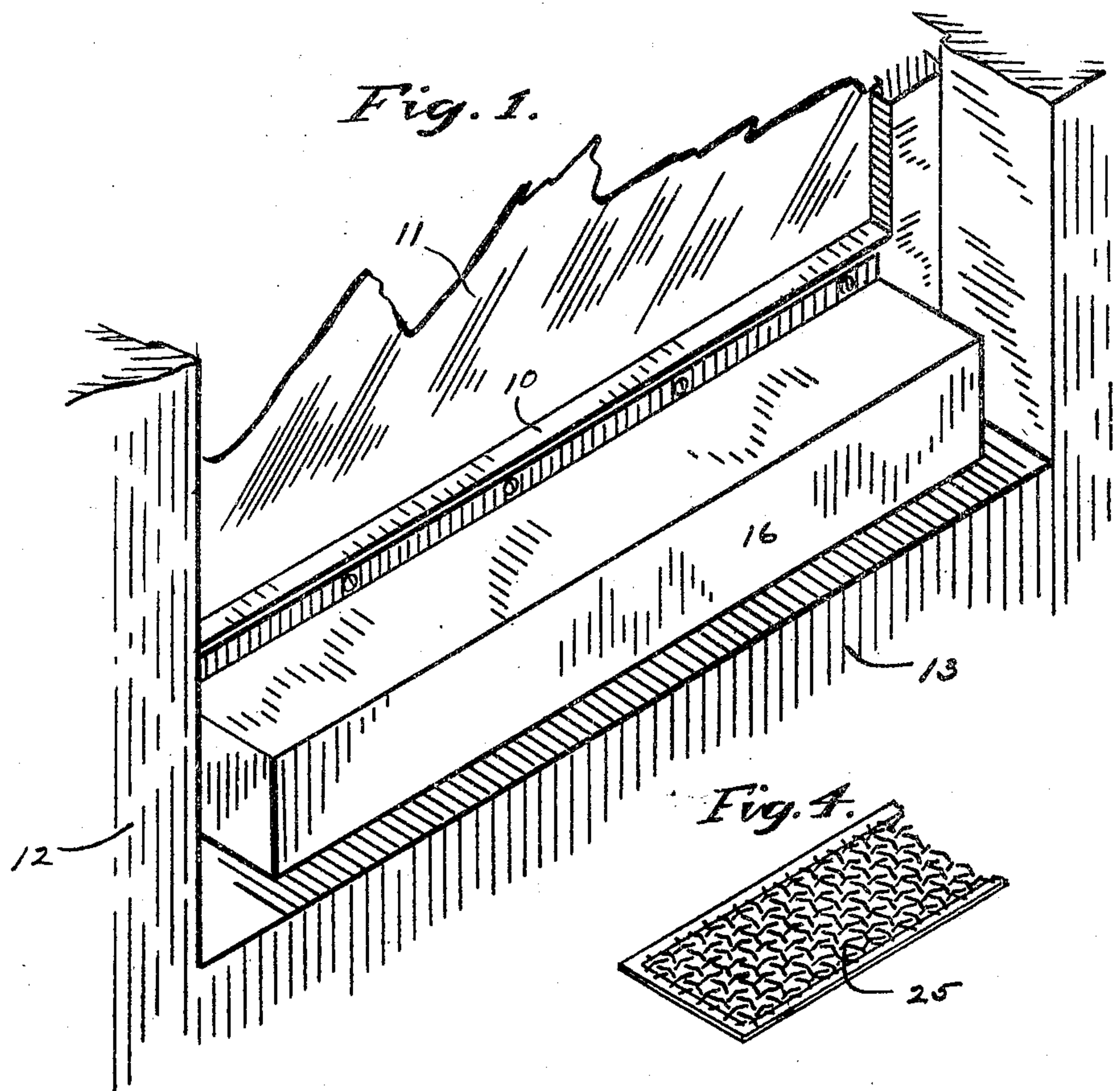


No. 798,158.

PATENTED AUG. 29, 1905.

P. F. BLUE, DEC'D.
F. M. BLUE, ADMINISTRATRIX.
VENTILATOR.
APPLICATION FILED APR. 12, 1904.



Witnesses

R. P. King.
Chas. Brown.

Inventor

Peter F. Blue
By
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His Attorney

UNITED STATES PATENT OFFICE.

PETER F. BLUE, OF INDIANAPOLIS, INDIANA; FLORENCE M. BLUE
ADMINISTRATRIX OF THE ESTATE OF PETER F. BLUE, DECEASED;
SAID ADMINISTRATRIX ASSIGNOR TO SAID FLORENCE M. BLUE.

VENTILATOR.

No. 798,158.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed April 12, 1904. Serial No. 202,777.

To all whom it may concern:

Be it known that I, PETER F. BLUE, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Ventilator; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

The object of this invention is to provide a ventilator attachment for windows which will permit a normal ventilation, but will prevent any breeze passing forcibly through the ventilator. It is adapted for railway-cars, as well as residences and other buildings. It is so arranged that it will automatically close against the wind or a forcible current of air. Furthermore, the inlet is protected by a cover that shields it from ordinary winds.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims.

In the drawings, Figure 1 is a perspective view of the lower part of a window on the outside with my ventilator in place, the upper parts of the window being broken away. Fig. 2 is a transverse section through the lower part of the window and ventilator with the ventilator closed. Fig. 3 is the same section with the ventilator open. Fig. 4 is a perspective view of a portion of the screen. Fig. 5 is an elevation of one end of the ventilator on the inside of the window, the right-hand end being broken away.

The device is attached to the lower end of the window-sash.

11 is the glass, and 12 is the side of the window-casing, and 13 the bottom of the window-casing. A longitudinal opening 15 is made in the lower part of the window-sash, as shown in Fig. 2. This may extend for any length, and the lower part of the opening is inclined downwardly, so that the opening is wider at the outside than at the inside. A casing 16 is secured to the outside of the window-sash over and closing said opening 15. Said casing is preferably rectangular and made of metal or other suitable material and is open along the under side thereof, the ends, back, and top being closed. This casing has secured within it a longitudinally-extending partition 17, preferably formed of a vertical portion and an inclined portion, as shown in Fig. 2.

The inclined portion extends from the window-sash or inner edge of the main casing 16 to a point about central of said casing, and the vertical portion of said partition extends downward from the upper part of said partition to the lower edge of the main casing. The purpose of this partition is to prevent the entrance of dust and soot and limit the inlet passage-way to the part of the casing shown and also to cooperate with the damper 18, as will be explained. The damper 18 extends longitudinally through the casing 16 and is fulcrumed at 19 between its two lateral edges, so that it will substantially balance thereon. In the closing position one lateral edge engages the top of the casing 16 at the same time that the other edge of the damper engages the inclined portion of the casing 17, as seen in Fig. 2. Then the air cannot pass through said ventilator. An adjustable plate 20 is secured along one lateral edge of the damper in order to adjust the width of the damper and to weight such lateral edge to suit it to its work. The damper is normally balanced on its fulcrum; but the lower part is slightly heavier than the upper part, and the two sides are formed so that normally and when not interfered with by a strong current of air it will balance and rest substantially in the position shown in Fig. 3—that is, in the open position—but if an appreciable current of air enters the casing 16 it will strike the upper part of the damper and move it into the position shown in Fig. 6. When said current ceases, the damper by gravity drops back into the balancing position shown in Fig. 3. Consequently it is seen that a wind blowing downward would not affect this ventilator or enter the room, nor could a wind blowing horizontally against the window affect or enter the ventilator, nor if such device were on a railway-car would the movement of the car in either direction affect the ventilator. It would not catch the current caused by the movement of the train. This is because the inlet is from the bottom. The only time when there would be a tendency for a blast of air to enter the ventilator would be the result of a fitful gust of wind. A horizontal wind against the lower part of the window-sash would not affect the ventilator because the portion of it which would be turned upward would enter the space under and be-

tween the two parts of the partition 17, and the straight vertical portion of said partition would prevent the violent portion of such a gust ever entering the ventilator at all. Consequently this ventilator would breathe or permit air to pass through it with great uniformity, only such quantity of air passing through it as would be caused by the condition and amount of air within the room.

10 On the inside of the window-casing there is a casing 21, extending longitudinally and covering the inner part of the opening 15 through the window-sash. This casing is open at the top and closed at the bottom, side, and
15 ends. The top is closed by an imperforate lid 22, which has a guide flange or plate 23 at each end that passes through a slot 24 in the portion of the casing secured to the sash above the opening 15. This will appear in
20 Figs. 3 and 5. These end flanges or plates 23 fit with frictional engagement against the adjacent parts of the device, so that they will hold the lid 22 at any angle in the position of adjustment. There is also a screen 25 removably
25 placed over the top of the casing 21 under the lid 22. Hence when the lid 22 is closed no air can enter the room through this ventilator. If it is partially open, air can enter, but in a relatively small amount, and it will be deflected against the window above. When it
30 is entirely open, the air will pass upward. Such arrangement effectively prevents direct gusts of air from entering the room, as the air cannot move from the ventilator in a horizontal direction.
35

What I claim to be new and my invention, and desire to secure by Letters Patent, is—

1. A ventilating device having a casing which is open for the admission of air only
40 along its under side, so that the incoming cur-

rent of air will pass upward, and a balanced damper within said casing having two wings with one of said wings being out of the direct path of the current of air as it enters said opening and the other wing in the path of said
45 current, whereby said damper may be actuated by the current when too strong.

2. A ventilating device having a casing which has a vertically-extending opening for the admission of air only along its under side,
50 so that the incoming current of air will pass upward, a horizontally-extending balanced damper fulcrumed at each end about midway between its lateral edges in said casing with one end extending over said opening so as to
55 be actuated by a strong current of air, one wing of said damper being adapted to engage the upper part of the ventilating device when actuated and the other wing adapted to engage the lower part of said device and close
60 the same.

3. The combination with a ventilating-opening, of a casing surrounding said opening that is open only on its under side, a longitudinally-extending partition in said casing which
65 extends from the lower inner edge toward the center of said casing and has a vertically-extending portion from near the center of said casing to the bottom thereof, and a damper horizontally fulcrumed in said casing with
70 one edge in engagement with said partition and the other edge in engagement with the top of the casing when the damper is closed.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses
75 herein named.

PETER F. BLUE.

Witnesses:

V. H. LOCKWOOD,
N. ALLEMONG.