C. HERRMANN.

WINDOW VENTILATOR.

APPLICATION FILED MAR. 7, 1910.

977,739.

Patented Dec. 6, 1910.

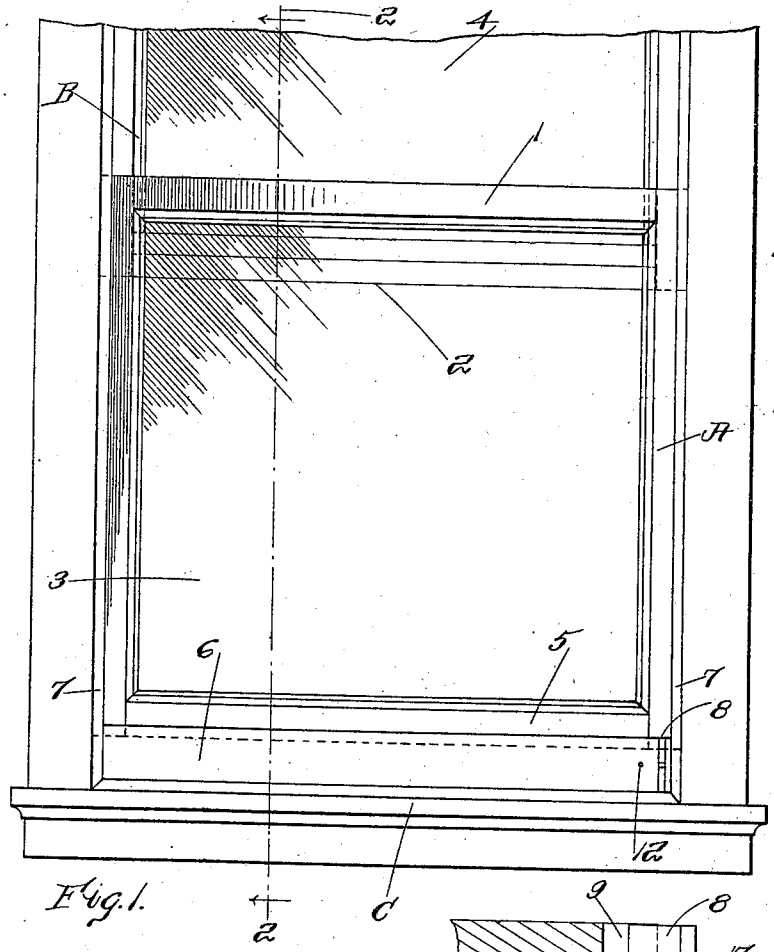


Fig. 1.

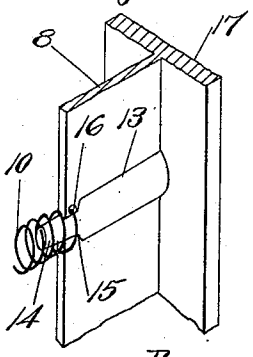


Fig. 6.

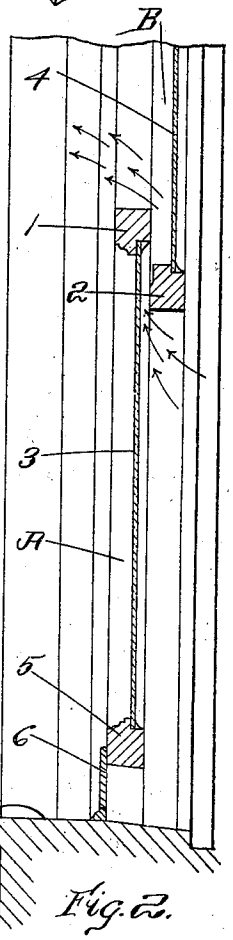


Fig. 2.

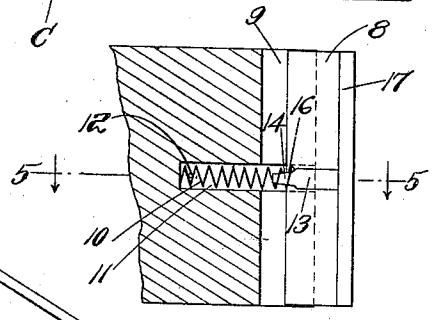


Fig. 4.

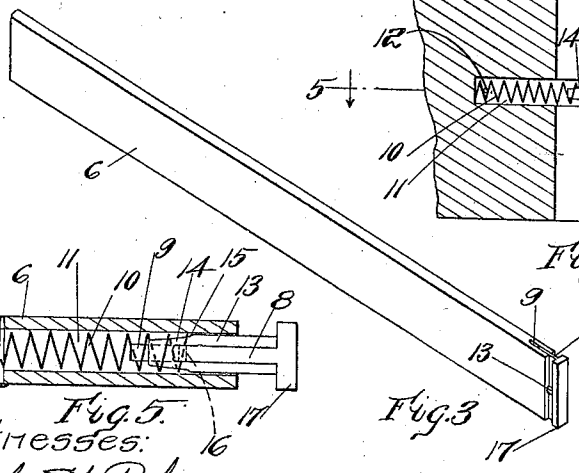


Fig. 3.

Fig. 5.

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WINDOW-VENTILATOR.

977,739. Specification of Letters Patent. Patented Dec. 6, 1910.

Application filed March 7, 1910. Serial No. 547,638.

To all whom it may concern:

Be it known that I, CHRISTIAN HERRMANN, a citizen of the United States, residing at Bristol, in the county of Bristol and State of Rhode Island, have invented a certain new and useful Improvement in Window-Ventilators, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to provide a device of simple construction whereby ventilation may be secured between the two sashes of the window in such manner as to avoid drafts at the bottom of the window.

The invention will be fully understood from the following description taken in connection with the accompanying drawings, and the novel features will be pointed out and clearly defined in the claim at the close of the specification.

In the drawings,—Figure 1 is a front elevation of a window equipped with my improved ventilator placed in connection with the lower sash, the upper portion of the upper sash being broken away. Fig. 2 is a vertical section on line 2—2 of Fig. 1. Fig. 3 is a perspective view in detail of the device removed from the window. Fig. 4 is an enlarged vertical longitudinal sectional view of a portion of the device at one end containing the extension grip. Fig. 5 is a horizontal section on line 5—5 of Fig. 4. Fig. 6 is a perspective of the extension grip detached.

Referring now to the drawings,—A represents the lower sash, B the upper sash and C the window seat of a window as ordinarily constructed, Figs. 1 and 2 showing the lower sash partially raised so that the upper rail 1 of the lower sash is raised above the bottom rail 2 of the upper sash. On account of the thickness of the rails 1 and 2 there will be, as is usually the case when the lower sash is raised, a space between the glass 3 of the lower sash and the glass 4 of the upper sash so that a current of air will come in from the outside between the two sashes and the two window panes, the direction of the current being as shown by the arrows in Fig. 2.

The object of the invention is to close the open space below the lower rail 5 of the lower sash by a device which may be placed in position inside of the window and does not interfere with the raising and lowering of the window and may be left there at all times and which may be also readily removed when desired.

The device comprises a strip or bar 6 of wood or other suitable material of a width equal to the height that may be desired to raise the window for ventilation and of a length nearly equal to the distance between the two side bars 7—7 of the window frame which form the guides for the lower sash on the inside of the window and having secured at one or both ends a spring seated extension piece which serves as a grip.

The spring seated extension piece is of the same height as the strip and is adapted to engage the side bar 7 of the window frame to hold the strip in place and may by compression of the spring be forced in to shorten the device so as to insert it in position. This extension piece comprises a tongue or blade portion 8 which enters a deep groove 9 in the end of the strip 6 from top to bottom thereof. The outer end of the blade 8 terminates in a flange head 17 which forms a bearing surface against the side bar 7 of the window frame. The inner edge of the blade 8 abuts against a spring 10 within the strip 6.

In the form of construction shown the spring 10 is a coiled spring and the strip 6 is formed with a cylindrical socket 11 leading from the groove 9 within which said spring is inclosed. Preferably the inner end of the spring is made fast within the socket by some means as for instance by a pin 12 passing through the side of the strip and through the coil of the spring as shown in Fig. 5. The blade 8 of the extension piece is formed with a lug 13 having a reduced tongue portion 14 which enters the outer end of the spring, the diminishing diameter of the lug at the base of the tongue forming a shoulder 15 against which the outer end of the spring abuts. The outer end of the spring is preferably made fast in some way to the extension piece 8 so that the spring being made fast at one end to the strip and at the other end to the extension piece, the extension piece will not become accidentally detached from connection with the strip 6. It is desirable however that the connection should be made in such a way that the extension piece may be detached when desired. The means by which I do this is as follows:—

The blade 8 of the extension piece is formed with a hole 16 (see Figs. 4 and 6)

near its edge and near the base of the tongue 14 of the lug 13, this hole being of sufficient size to permit the threading through it of the end of the spring 10. Before the spring 10 is introduced into the slot 11 of the strip, it is threaded through the hole 16 and by turning it a half revolution, after the manner of turning a screw, the end of the spring will be turned around until it strikes the unperforated face of the blade and thereby forms a firm connection of the spring with the extension piece so that it can be detached only by turning the spring in a reverse direction. The spring is then inserted in the socket 11 and the pin 12 is inserted in the manner before described. The tension of the spring 10 is such that it will normally hold the extension piece projecting somewhat beyond the end of the strip 6 with a space between the head 17 and the end of the strip as shown clearly in Fig. 5. The combined length of the strip 6 and the extension piece in their normal condition is slightly greater than the space between the two side bars 7, 7, of the window frame. In order therefore to set the device in position on the window seat the extension piece has to be pushed in slightly to shorten the combined device sufficiently for it to be admitted between the two side bars 7—7. It should rest on the window seat C and should be pushed up close against the front face of the lower rail 5 of the window sash and when the grasp upon the extension piece is released the spring 10 will press against the extension piece and hold with a yielding pressure against the side bar so that it will be kept firmly in place. Thus when the lower sash is raised to a height not exceeding the height of the strip 6, the space below the sash will be closed and the ventilation will be through the space between the lower rail of the upper sash and the upper rail of the lower sash, the current being deflected upward as shown in Fig. 2.

What I claim is:—

A device for closing the opening below a partially raised window comprising a bar adapted to be placed upon a window seat with one of its faces bearing against the front face of the lower rail of the window, said bar being formed with a groove slot in one end thereof and with a socket leading from the bottom of the said groove longitudinally into the bar, a coil spring within said socket and normally projecting beyond the end of the bar, the inner end being secured to the socket, an extension piece having a blade which enters said groove slot and is slidable therein, said extension piece being formed with a flanged head whose outer face is adapted to engage one of the sides of the window frame while the opposite end of the bar is adapted to engage the opposite side of the window frame, the blade of said extension piece being formed with a lug which is adapted to enter the outer end of said coiled spring, the blade being formed with a hole through which the end of the coiled spring may be passed by a screwing turn of the spring, thereby connecting the spring with the blade, said spring normally holding the extension piece with its head at some distance beyond the end of the bar while the blade is within the groove.

In testimony whereof I affix my signature, in presence of two witnesses.

CHRISTIAN HERRMANN.

Witnesses:

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LEAH B. YOUNG.