Sept. 27, 1927. 1,643,554

J. A. GLASS

VENTILATING WINDOW CONSTRUCTION

Filed May 2, 1925

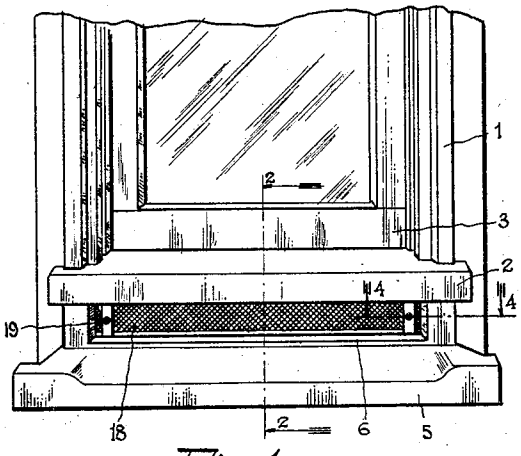


Fig. 1.

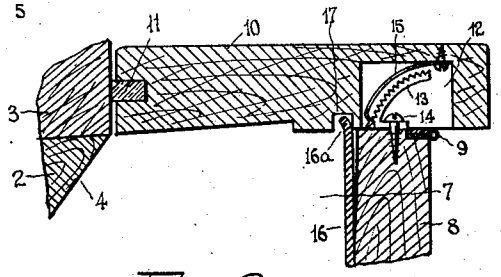


Fig. 3.

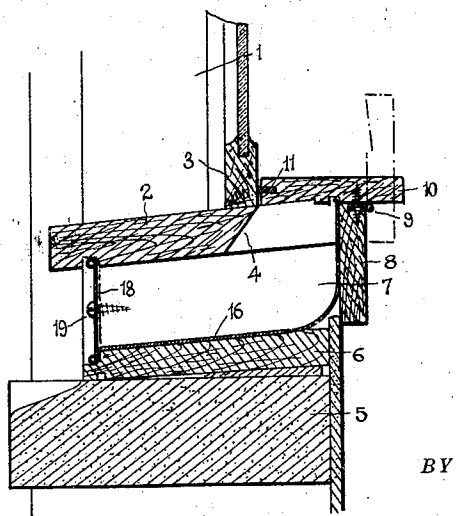


Fig. 2.

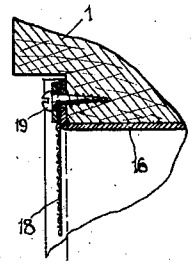


Fig 4

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UNITED STATES PATENT OFFICE.

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VENTILATING-WINDOW CONSTRUCTION.

Application filed May 2, 1925. Serial No. 27,367.

This invention relates to ventilating window construction and may be considered as an improvement upon the construction disclosed in my Patent Number 1,308,236, issued July 1, 1919.

It is an object of the invention to provide a ventilation passage beneath the sill of a window and to provide an improved control of said passage through a pivotal adjustment of the stool of the window frame.

Another object of the invention is to provide improved means for establishing a seal when said window stool is in its position wholly closing said passage.

These and various other objects the invention attains by the construction hereinafter described and illustrated in the accompanying drawings wherein:

In the drawings:

Figure 1 is an exterior view of the lower portion of a window, equipped with the improved ventilating feature.

Figure 2 is a vertical sectional view of the same taken on the line 2—2 of Figure 1.

Figure 3 is an enlarged sectional detail of the stool, disclosing primarily a provision for variably closing the ventilating passage.

Figure 4 is a horizontal cross section taken upon the line 4—4 of Figure 1 and disclosing an assembly feature.

In these views, the reference character 1 designates a window frame, which as disclosed is of wood but may be of any suitable material, said frame comprises the sill 2 upon which is adapted to seat, in its closed position, an ordinarily sliding sash 3. It is preferred to terminate said sill substantially in the plane of the inner face of said sash, the inner edge 4 of the sill being inclined outwardly from top to bottom of the sill as is best seen in Figure 2.

The frame 1 rests upon a masonry sub-sill 5 and comprises a bottom cross piece 6 close adjacent to said sub-sill. The frame sill 2 is spaced above the cross piece 6 to form a ventilating passage 7 which opens upwardly interiorly of the described window, between the edge 4 of the sill 2 and the lower casing member 8 of the frame.

To the upper edge of the casing member 8 there is hinged, as indicated at 9, a window stool 10 which is adapted to swing upon its hinges from the position shown in full lines in Figure 2, closing the passage 7 to the substantially vertical position indicated in dash lines in which said stool tends to deflect upwardly the current of air inflowing through said passage.

In the horizontal position of said stool a strip 11 of rubber or the like set into the outer edge of said stool is adapted to frictionally bear on the sash 3 to establish a weather seal.

The stool 10 is adapted to occupy not only the limiting positions, shown respectively in full lines and dash lines in Figure 2, but also any desired intermediate position. Thus, as is best seen in Figure 3, a recess 12 is formed in the under face of said stool above its hinged axis and into said recess there extends a ratchet toothed rack 13, which is secured by one or more screws 14 to the casing member 8, and which forms an arc centered in the hinged axis of said stool. Within the recess 12 there is secured to said stool a spring pawl 15 terminally engageable with the teeth of the rack 13 to yieldably retain the stool in a selective angular position.

16 designates a sheet-metal member lining, the bottom, sides, and back of the passage 7, and the back portion of said lining projecting upwardly against the casing member 8 and being curved slightly upward at its top edge as indicated at 16^a, said curved edge projecting slightly above the casing member 8. When the stool 10 is in its horizontal position, a groove 17 in the upper face of said stool receives said projecting end portion of the liner 16 stressing said edge portion slightly outward as is best seen in Figure 3, thereby establishing a weather seal, such as will insure against any air flow between the stool and the casing member.

The passage 7 at its outer end is obstructed by a wire mesh screen 18, extending the full width and heigth of said passage and secured at its ends to the frame 1 by suitable screws 19, which preferably serve additionally to hold the liner 16 in place, as is best seen in Figure 4.

In the use of the described invention when it is desired to ventilate a room lighted by the described window, the stool 10 is swung upwardly to admit the desired flow of air, the engagement of the pawl 15 and rack 13 retaining said stool in any desired position. The stool 10 serves not only to regulate the amount of ventilation, but further acts to direct the incoming air upwardly where it

may circulate without subjecting the occupants of a room to a draft.

When the stool 10 is in a horizontal position, the ventilating passage is not only wholly closed but is furthermore so sealed by the tongue 11, and the engagement of the liner 16 with the stool, as to completely cut off incoming air. The beveled inner edge 4 of the sill 2 facilitates the upper flow of air through the ventilating passage. The attachment to the frame 2 of the liner 16 and the screen 18 by the same screws 19 facilitates assembly.

The provision of the screen 18 prevents insects from entering a building through the ventilating passage 7 and further prevents said passage becoming obstructed from any large particles introduced from the outside.

From the foregoing it becomes evident that the device is very simple and efficient and provides a device which accomplishes the objects described.

While it will be apparent that the illustrated embodiment of my invention herein disclosed is well calculated to adequately fulfill the objects and advantages primarily stated, it is to be understood that the invention is susceptible to variation, modification and change within the spirit and scope of the subjoined claims.

Having thus described my invention, I claim:

1. In a ventilating window construction, the window frame having a sill and having a ventilating passage beneath said sill, a casing member interiorly secured to said frame, a stool pivoted upon said casing member and variably controlling said passage, and a sheet-metal liner for said passage having a yieldable portion upwardly extending adjacent to said casing member and having sealing engagement with said stool in the seated position of the latter.

2. In a ventilating window construction, a window frame comprising a sill and having a ventilating passage beneath said sill, a casing member inwardly offset from the frame proper, and forming an upwardly opening portion of said passage, a stool member hinged upon said casing member and formed with a pocket above said casing member, and members carried by the stool member and casing member received by said pocket in the lowered position of the stool member, co-acting to hold the stool member selectively angularly adjusted.

In testimony whereof I hereunto set my hand.

JAMES A. GLASS.