M. MARCHALONIS.

ANTIVAPOR DEVICE FOR WINDOWS.

APPLICATION FILED SEPT. 18, 1919.

1,403,335. Patented Jan. 10, 1922.

FIG. 1

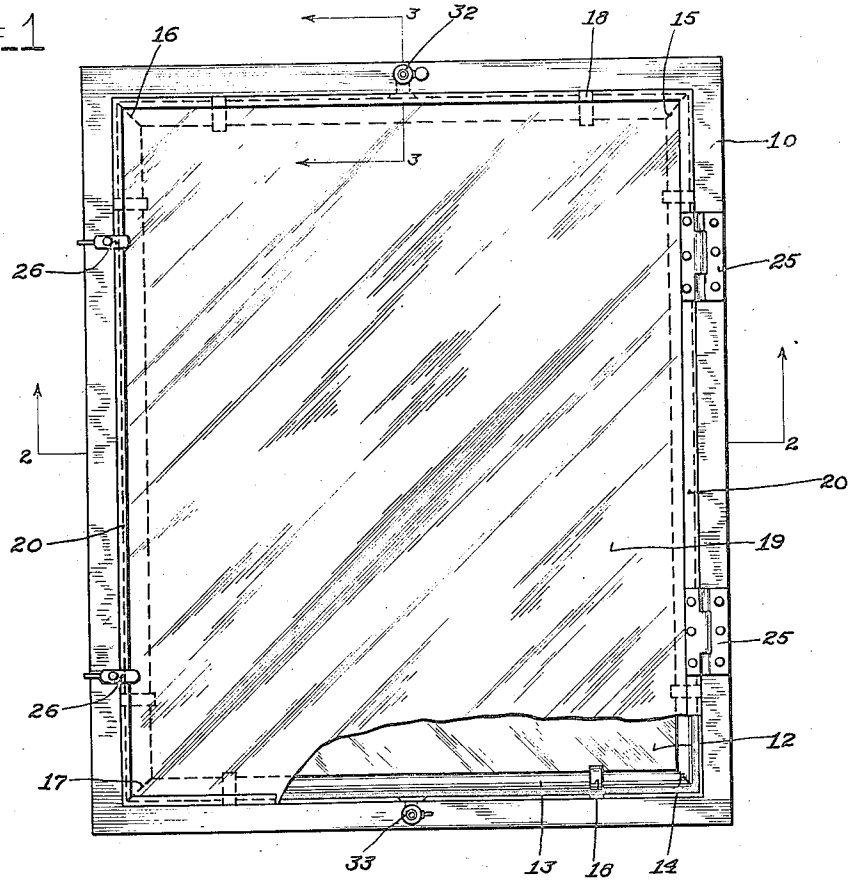


FIG. 2

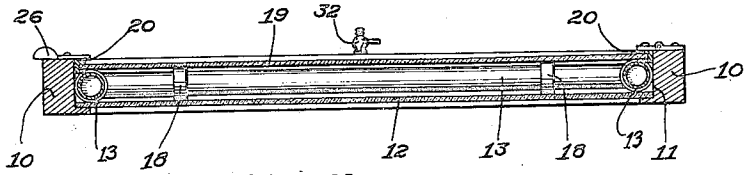
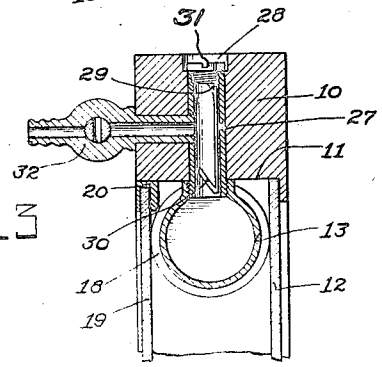


FIG. 3



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ANTIVAPOR DEVICE FOR WINDOWS.

1,403,335. Specification of Letters Patent. Patented Jan. 10, 1922.

Application filed September 18, 1919. Serial No. 324,519.

To all whom it may concern:

Be it known that I, MIKE MARCHALONIS, a citizen of Russia, residing at Mahanoy City, county of Schuylkill and State of Pennsylvania, have invented certain new and useful Improvements in Antivapor Devices for Windows, of which the following is a specification.

This invention relates to improvements in anti-vapor devices for windows, in which a specially constructed window sash carries a tubular frame designed to be filled with hot water or steam, and interposed between two lights of glass, or panes, thereby providing means for preventing the formation of frost or the accumulation of snow on the window.

The object of this invention is attained by the novel construction and combination of parts hereinafter described and shown in the accompanying drawings forming a material part of this disclosure, and in which:—

Figure 1 is a vertical front view of a window made in accord with the invention, broken away at one corner to show the construction.

Figure 2 is a transverse sectional view of the same taken on line 2—2 of Figure 1, and Figure 3 is a transverse sectional view taken on line 3—3 of Figure 1, and drawn to an enlarged scale.

Referring to the drawings in detail, the numeral 10 designates a window frame or sash having a deeply cut rabbet 11 around the four inner sides of the structure, and an outer sheet of glass 12 is glazed within the opening so formed.

A tube 13, is made continuous by the four mitered joints 14, 15, 16, and 17, these joints being suitably brazed or soldered. Spacing rings 18 are provided to properly space the tube 13 from the glass panes.

A sheet of glass 19 is glazed within an auxiliary frame 20, connected to the frame 10, by means of the hinges 25, and secured in a closed position by the turn buttons 26.

A metal tubular valve connection 27, passing through a cylindrical hole 28, in the upper portion of frame 10, and having a threaded lower section engageable with a threaded hole in the tube 13, provides means of securing connection with the tube.

The connection 27 is closed on top by a screw-threaded clean-out plug 31, to the lower face of which the upper end of a hook element 30 is attached as indicated at 29, the lower end of which hook extends to approximately the lower end of connection 27. It will be clear that any foreign matter in the path of the moving fluids will collect at the hook element before entering tube 13 and can easily be removed by unscrewing the plug 31. A pet cock 32, of usual design, passes through a drilled hole in the side of frame 10, and is connected to the valve tube 27, as shown by Figure 3, and attached to the lower element of the frame 10, and the lower member of the tubular frame 13 is a trap and pet cock 33 of the same design.

In operation, the pet cock 32 being adapted to connect with any external supply of hot water or steam, provides means for filling and heating the tubular frame 13 and the frame, by radiation, raises the temperature of the strata of air within the enclosed limits of the glass plates 12 and 19, to a higher degree than that of the outside air, thereby preventing the formation of frost or the accumulation of snow upon the window.

The pet cocks 32 and 33, are suited to the pipe connection and designed to effect the removal of the contents of the tubular frame 13. By the hinge elements 25, the frame 20 may be easily opened, thereby presenting means for efficiently cleaning the interior.

From the foregoing it will be seen that an efficient and practical device for the purpose has been disclosed of simple construction and apparent practicability.

Having thus disclosed my invention, what I claim as new and desire to secure by Letters Patent is:—

In a device of the character described, including two window panes, spaced from each other and a frame having a cylindrical hole or bore, a tube in said bore, a pipe conduit for a heating medium arranged within the space between the two panes, a pet cock adapted to be connected with a supply source of the heating medium, said tube connecting said cock and said pipe conduit, a screw-threaded clean-out plug removably secured in the upper end of said tube and a hook secured to said clean-out plug and extending into said tube, substantially as described and for the purpose set forth.

In testimony whereof I have affixed my signature.

MIKE MARCHALONIS.