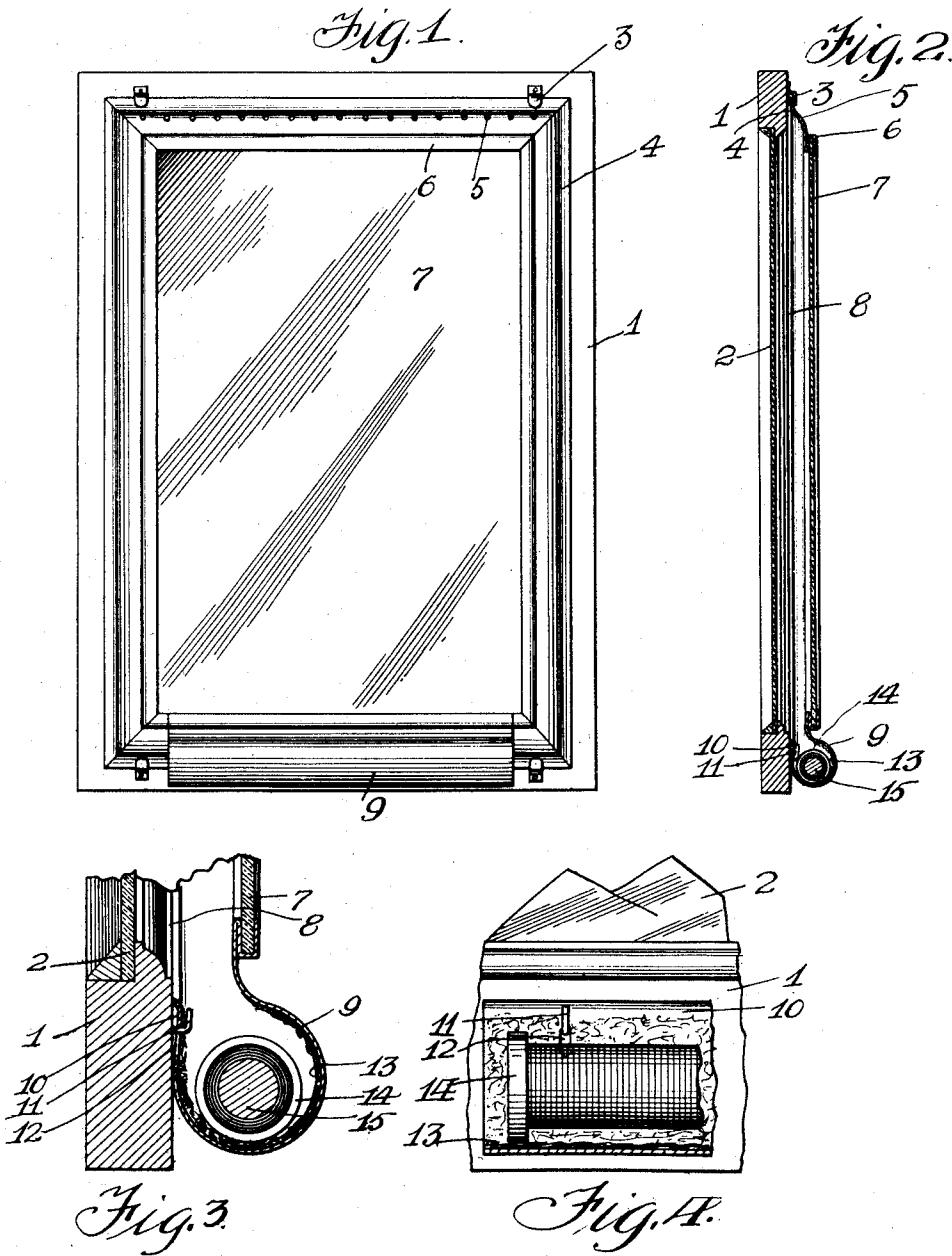


C. L. CHESTER.
WINDOW APPLIANCE.
APPLICATION FILED APR. 4, 1910.

977,930.

Patented Dec. 6, 1910.



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Specification of Letters Patent.

Patented Dec. 6, 1910.

Application filed April 4, 1910. Serial No. 553,345.

To all whom it may concern:

Be it known that I, CHRISTIAN L. CHESTER, a citizen of the United States of America, residing at Belle Vernon, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Window Appliances, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to window appliances, and the primary object of my invention is to provide a window with a novel appliance for preventing the window pane from frosting due to a different temperature between the outer side of the window pane and the inner side.

Another object of my invention is to provide an appliance that can be advantageously used in connection with the windows of street cars and similar vehicles, where the frost upon the window often obstructs the view of the motorman or occupants of the car.

A further object of this invention is to furnish a window frame with an appliance that will remove frost and snow, the appliance being simple in construction, applicable to window frames of electrically driven vehicles or vehicles provided with storage batteries, durable, and highly efficient for the purposes for which it is intended.

These and such other objects as may hereinafter appear are attained by the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing forming a part of this specification wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the structural elements thereof can be varied or changed without departing from the spirit and scope of the invention.

In the drawings: Figure 1 is a front elevation of a window frame provided with my improved appliance. Fig. 2 is a vertical sectional view of the same. Fig. 3 is an enlarged vertical sectional view of a portion of the window frame, and Fig. 4 is an enlarged longitudinal sectional view of a portion of the appliance.

In the accompanying drawings the reference numeral 1 denotes a window frame supporting a pane or plate of glass 2. The

frame 1 may represent a window sash and as either a sash or frame, the top and bottom rails thereof are provided with clips 3 adapted to support the upper and lower ends of a metallic frame 4, said frame being shaped as a molding with the upper end thereof provided with a plurality of vents or apertures 5. The frame 4 has the inner edges thereof bent to form channel-shaped holders 6 for an outer pane or plate of glass 7, this pane of glass being sufficiently removed from the pane of glass 2 to form a compartment 8 upon the outer side of the window frame or sash 1.

The lower end of the metallic frame 4 is shaped to form a cylindrical casing 9 approximately the length of the lower end of the frame 4, said casing having the rear wall 10 thereof attached to the frame or sash 1 through the medium of hooks 11 adapted to engage in slots 12 formed in the rear wall 10 of the casing 9. The inner sides of the casing 9 are lined with asbestos 13 or other non-conductive and non-fusible material. The casing 9 forms a compartment 14 at the lower edge of the frame 4 communicating with the compartment 8, and in the compartment 14 is located an electric heater, comprising a coil 15 adapted to be connected to a suitable source of electrical energy, whereby the coil will furnish the compartments 14 and 8 with sufficient heat units to heat the panes of glass 2 and 7 and prevent frost or snow from accumulating upon the outer side of the pane of glass 7. The electric heater is of a conventional form and the compartment 14 will accommodate various types of trays, and with this compartment in communication with the compartment 8, the temperature will be sufficient within the compartment 8 to prevent frost, snow or other matter freezing upon the outer side of the pane of glass 7. The vents or openings 5 allow sufficient air to enter the compartment 8 to be heated by the coil 15.

The frame 4 and the casing 9 are made of light and durable metal coated or otherwise finished to prevent corrosion, and the frame 4 is applicable to various types of window frames or sashes by making the same of various sizes.

What I claim, is:

1. In a window appliance, the combination with a window frame having a pane of glass mounted therein, of a frame connected to said window frame and having its lower

portion bent to provide a casing, means carried by the window frame and engaging the bent portion of said frame for connecting said bent portion in position, a pane of glass carried by said frame and forming in connection with the pane of glass carried by the window frame a compartment, and a heater arranged in said casing and adapted to heat the compartment formed by said panes of glass.

2. In a window appliance, the combination with a window frame having a pane of glass mounted therein, of a frame connected to said window frame and having its lower portion bent to provide a casing, means carried by the window frame and engaging the bent portion of said frame for connecting said bent portion in position, a pane of glass carried by said frame and forming in connection with the pane of glass carried by the window frame a compartment, a heater arranged in said casing and adapted to heat the compartment formed by said panes of glass, and said frame having its upper portion provided with means to constitute vent openings.

3. In a window appliance, the combination with a window frame having a pane of glass mounted therein, of a frame connected to said window frame and having its lower portion bent to provide a casing, means carried by the window frame and engaging the bent portion of said frame for connecting said bent portion in position, a pane of glass carried by said frame and forming in connection with the pane of glass carried by the window frame a compartment, a heater arranged in said casing and adapted to heat the compartment formed by said panes of glass, and a lining of non-conductive material for the inner face of said casing.

4. In a window appliance, the combination with a window frame having a pane of glass mounted therein, of a frame connected to said window frame and having its lower portion bent to provide a casing, means carried by the window frame and engaging the bent portion of said frame for connecting

said bent portion in position, a pane of glass carried by said frame and forming in connection with the pane of glass carried by the window frame a compartment, a heater arranged in said casing and adapted to heat the compartment formed by said panes of glass, a lining of non-conductive material for the inner face of said casing, and said frame provided at its upper portion with means to constitute vent openings.

5. In a window appliance, the combination with a window frame having a pane of glass mounted therein, of an auxiliary frame secured to said window frame and carrying a pane of glass, said panes of glass opposing each other and forming a compartment, said auxiliary frame having its lower portion bent to provide a casing having its interior thereof communicating with said compartment, hooks carried by the window frame for connecting the bent portion of the auxiliary frame thereto, and a heater arranged in said casing for heating the compartment formed by the pane of glass.

6. In a window appliance, the combination with a window frame having a pane of glass mounted therein, of an auxiliary frame secured to said window frame and carrying a pane of glass, said panes of glass opposing each other and forming a compartment, said auxiliary frame having its lower portion bent to provide a casing having its interior thereof communicating with said compartment, hooks carried by the window frame for connecting the bent portion of the auxiliary frame thereto, a heater arranged in said casing for heating the compartment formed by the pane of glass, and a lining of non-conductive material for the inner face of said casing and said auxiliary frame having its upper portion formed with means to constitute vent openings.

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

CHRISTIAN L. CHESTER.

Witnesses:

MAX H. SROLOVITZ,
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