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1,013,090.



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UNITED STATES PATENT OFFICE.

WILLIAM JOHNSTON AND WILLIAM HIRONS, OF WINNIPEG, MANITOBA, CANADA.

STORM-WINDOW.

1,013,090.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, WILLIAM JOHNSTON and WILLIAM HIRONS, both of the city of Winnipeg, in the Province of Manitoba, Canada, have invented certain new and useful Improvements in Storm-Windows, of which the following is the specification.

Our invention relates to storm windows, and particularly to the manner in which they are fastened to the window frame, and the object of the invention is to provide an attachment to a storm window whereby it can be swung inwardly or outwardly for ventilating or cleaning purposes, the arrangements being constructed so that various heights of windows can be swung by it.

The invention consists essentially in a rod pivotally secured to the storm window, means suspending the rod pivotally from the window frame, and means allowing the storm window to pass through the frame, the parts being arranged and constructed as hereinafter more particularly described.

Figure 1 represents an outside view of a portion of a window and frame provided with our invention. Fig. 2 represents a vertical sectional view of our window, the section being taken in the plane denoted by the line X X', Fig. 1. Fig. 3 is a horizontal sectional view through the frame. Fig. 4 is a large perspective view of the brackets secured to the window frame. Fig. 5 is an enlarged detailed horizontal sectional view through the storm window, the section being taken in the plane denoted by the line Y Y', Fig. 1. Fig. 6 is an enlarged detailed vertical sectional view through the top of the storm window. Fig. 7 is an enlarged detailed vertical sectional view through the bottom of the storm window and the adjoining portion of the sash.*

In the drawing like characters of reference indicate corresponding parts in each figure.

1 represents the exterior wall of a building in which is located the usual window frame 2 of which 3 is the sill, 4 and 5 side members and 6 the upper cross member. The window sashes are omitted from the drawing as they form no part of the invention, but it will be understood that they are slidable vertically between the battens 7, 8 and 9 carried by the frame.

10 represents the storm window which is adapted to fit within the window frame in the usual manner resting against the battens

9 carried thereby. To the storm window we have secured a rod 11 by means of straps 12 which pass around the rod and are secured to one of the inner corners of the storm window. The frame of the window is rabbeted away to receive the rod and the rod has its ends bent at right angles to the body portion at 11' and 11², the extremities being formed into offset eyes 11^a.

13 are brackets which we secure firmly to the window frame by wood screws 14, the body of the bracket being countersunk in the side of the frame. Each bracket is formed with an offset end 13' that rests against the side of the frame and is provided with opposing lips 13², said lips being provided with openings 15 for the reception of bolts 16.

The ends 11' and 11² of the rod 11 are countersunk in the edge of the storm window 10'.

In order that the storm window can be swung into the room we have made it slightly shorter than the length of the opening in the frame and have rabbeted away the inner corner thereof at 17 and have hinged a cross strip 18 to such corner so that the strip can swing inwardly after the window has been swung outwardly slightly. When the storm window is closed the strip is swung up to the position shown in the drawing and closes the opening which would otherwise appear between the end of the window and the frame. The strip bears in this position against the cross piece 19 carried by the frame.

The sill 3, instead of slanting downwardly as is usual is formed with its upper edge horizontal and a longitudinal groove 3' is made in it with an inclined base which will drain any water collecting, to the ducts 20 which pass through the sill to the outer edge thereof. A lower strip 21 is hinged to the sill and is designed to swing up against the inner side of the storm window when the window is closed, fitting snugly between the opposing battens 9.

In equipping a window frame with our attachment for holding storm windows, the rod 11 is first secured pivotally to the storm window by the straps 12. After the window has been rabbeted away at the inner corner the two brackets 13 are firmly fastened to the frame so as to receive the eyes 11^a of the rod.

When it is desired to swing the storm

window into the room for cleaning or other such purposes, it is only necessary to turn the free end outwardly slightly and then swing down both of the strips 18 and 21. 5 When the window has cleared the frame it is brought to the position shown in dotted outline Fig. 3 when it can be turned well into the room.

What we claim as our invention is:

10 The combination with a window frame and storm window, of a vertically directed rod swingably secured to an edge of a window adjoining the frame, and having its ends bent at right angles to the body por-

tion and directed outwardly, said window 15 being rabbeted away to receive the rod and having the ends of the rod countersunk therein, and brackets secured to the frame and adapted to receive the extremities of the rod, and pins securing the rod to the 20 brackets, as and for the purpose specified.

Signed at Winnipeg, in the Province of Manitoba, this 28th day of June, 1910.

WILLIAM JOHNSTON.

WILLIAM HIRONS.

In the presence of—

G. S. ROXBURGH,

J. K. ELKIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."