C. W. DUNN.

WINDOW SASH.

APPLICATION FILED MAY 13, 1918.

1,298,187.

Patented Mar. 25, 1919.

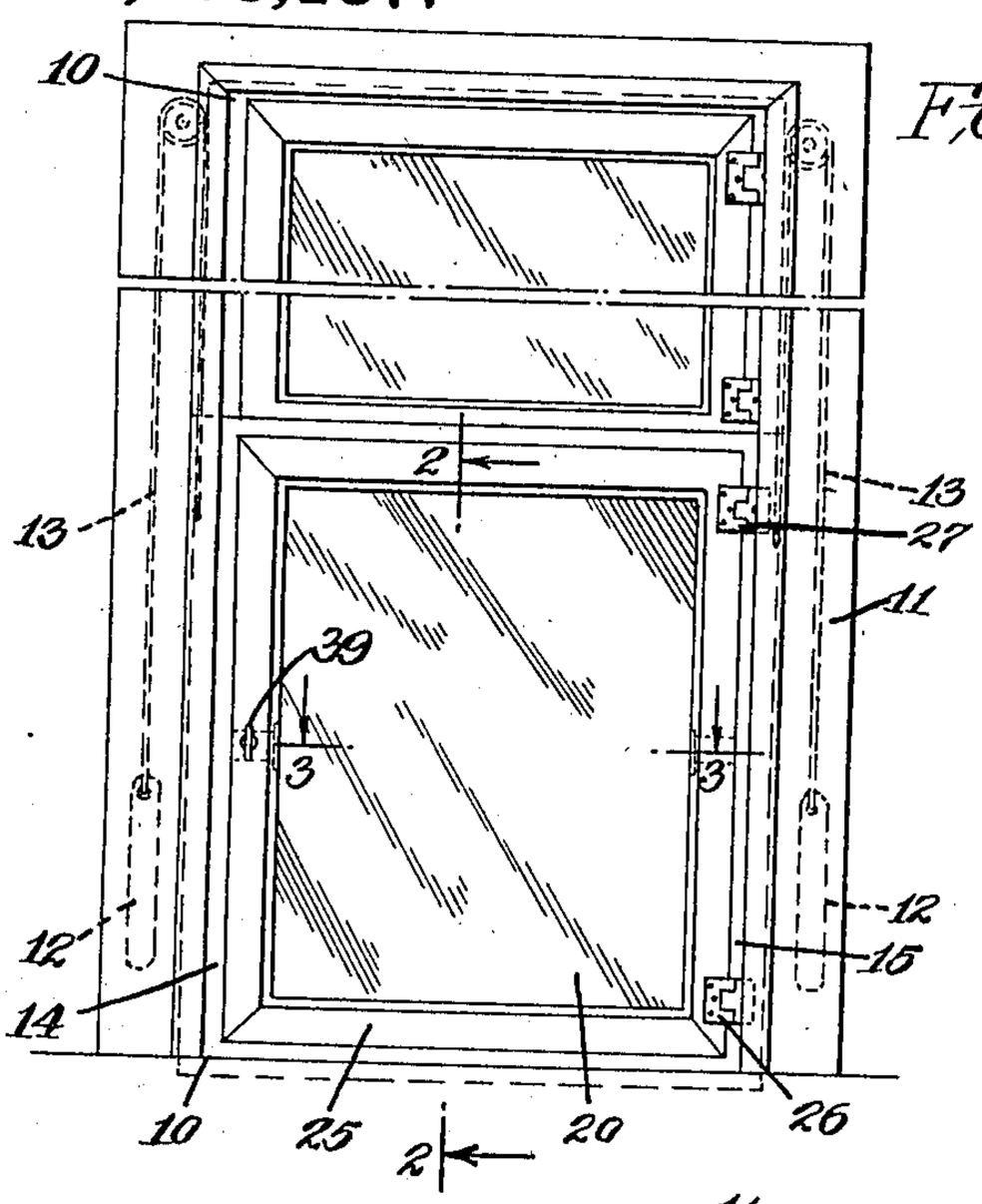

Fig. 1,

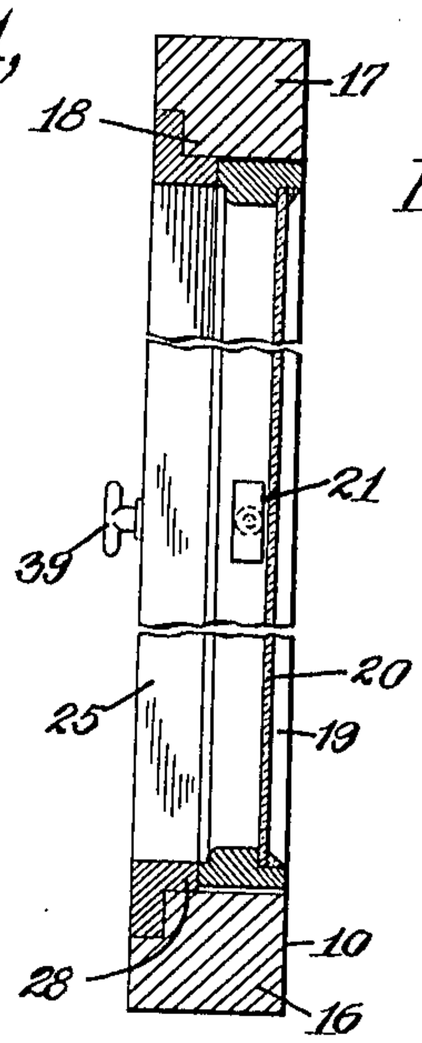

Fig. 2,

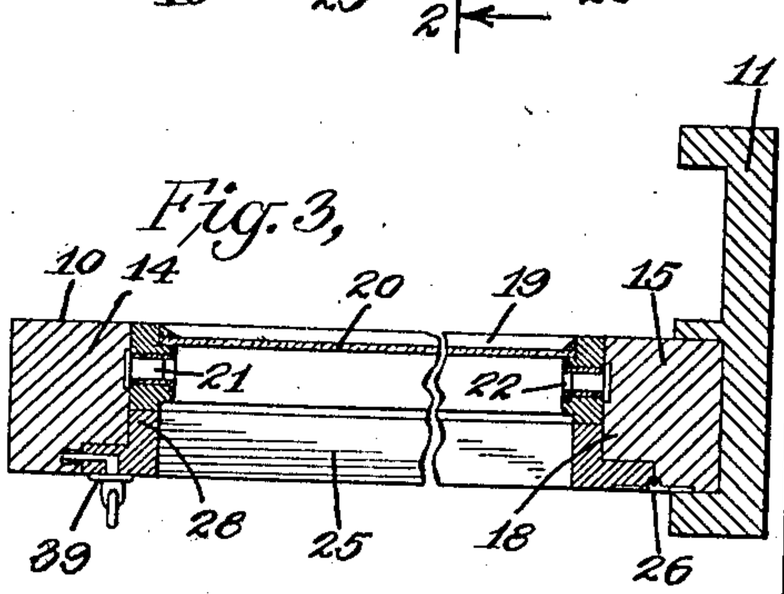

Fig. 3,

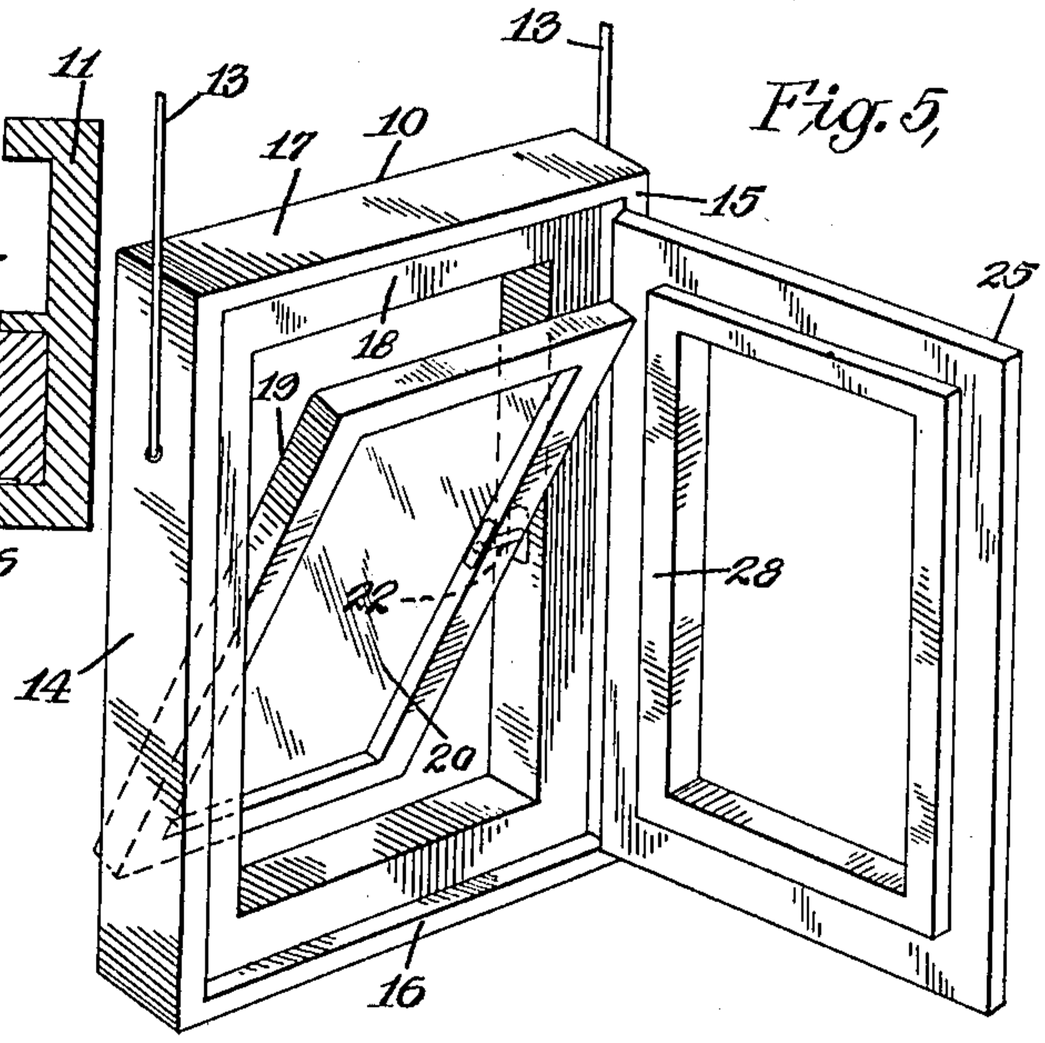

Fig. 5,

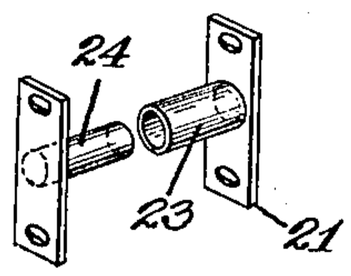

Fig. 4,

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WINDOW-SASH.

1,298,187. Specification of Letters Patent. Patented Mar. 25, 1919.

Application filed May 13, 1918. Serial No. 234,247.

To all whom it may concern:

Be it known that I, CHARLES W. DUNN, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Window-Sashes, of which the following is a full, clear, and exact specification.

This invention relates to a form of sash for the windows of building and the like.

My invention has for its object primarily to provide a sash designed to be employed in the windows of buildings and other structures, and which is of a form to allow the window pane to be easily cleaned by a person while on the inside of the structure, in order to overcome requiring the person to lean out of the window to clean the outside of the sash, thus avoiding the danger incident to the use of the ordinary types of sash. The invention consists essentially of an outer frame adapted to be arranged in the window of a building so as to be raised and lowered by suitable means in the usual fashion, and extending inwardly of this frame is a substantially rectangular flange. Pivoted to the flange is an inner frame with a transparent plate adapted to be rotatably swung in the flange, and to the outer frame is hinged a guard frame for being swung toward and from the transparent plate, while protruding from the guard frame is an approximately rectangular flange member of a size adapted to be moved within the flange of the outer frame into and out of contact with the inner frame of the transparent plate to serve as a weather protector.

A further object of the invention is to provide a window sash of a simple and efficient construction which is susceptible of being made in any suitable size and shape.

A practical embodiment of the invention is represented in the accompanying drawing forming a part of this specification in which similar characters of reference indicate corresponding parts in all the views, and will then be pointed out in the claims at the end of the description.

In the drawing, Figure 1 is a view, partly broken away, showing the front elevation of the window of a building with two of my improved sashes applied thereto.

Fig. 2 is an enlarged detail sectional view partly broken away, taken on the line 2—2 of Fig. 1.

Fig. 3 is an enlarged detail sectional view, partly broken away, taken on the line 3—3 of Fig. 1.

Fig. 4 shows a perspective of one of the pivots used in the sash, and

Fig. 5 is an enlarged perspective view of the window sash.

The window sash has an outer frame 10 which may be made of any required size for being movably fitted in a frame, as 11, of the window of a building or other structure so as to be raised and lowered in the usual fashion by employing in conjunction with the sash the customary counterbalances, as 12, with cables, as 13. The outer frame 10 of the sash is preferably substantially rectangular in shape, being composed of two spaced stiles 14, 15, a bottom crossbar 16, and a top crossbar 17, all of which are substantially rectangular in cross section as well as being relatively arranged so that one of their faces are in opposition.

The outer frame 10 is preferably of a size whereby two of the sashes may be used in a single window, as shown in Fig. 1, and extending inwardly of the outer frame from one of its edges is a substantially rectangular flange 18. This flange is of a width considerably less than the width of the outer frame, and within the flange is a swinging inner frame 19 carrying a plate or windowpane 20 of glass or other transparent material. The inner frame 19 is of a size to fit closely as well as allowing the frame with the windowpane to be swung to make a partial or complete revolution in the flange of the outer frame whereby all parts of both surfaces of the windowpane may be readily cleaned by a person from the interior of the building without the person being required to lean out of the window. To accomplish this the central parts of the sides of the inner frame 19 are pivoted, at 21 and 22, to the flange 18 and outer frame 10. The pivots 21 and 22 may be of any suitable types, besides being of similar formations, though each pivot is preferably composed of a sleeve, as 23, one of which is secured in an opening provided in each side of the flange 18 and in each side of the outer frame 10. Rotatably arranged in the sleeve 23 of each of the pivots is a short rod or stud, as 24, and both of these studs protrude in opposite lateral directions from the sides of the inner frame of the windowpane. In this manner the inner frame and windowpane may be swung

upwardly or downwardly and inwardly or outwardly of the window to allow being easily cleaned by a person from the interior of the building.

In order to serve as a weather protector against drafts of air passing through the space between the flange 18 and the inner frame 19 as well as serving to prevent the inner frame with the windowpane from being surreptitiously swung on its pivots, I provide a guard frame, as 25. This guard frame is approximately rectangular in shape, besides being of a size to movably fit closely within the outer frame 10. The guard frame 25 is hinged, at 26 and 27, to the outer frame so that the guard frame may be swung into and out of contact with the flange 18 of the outer frame, and this guard frame is of a width corresponding approximately to the combined widths of the flange of the outer frame and the frame 19 of the windowpane. Projecting from the inner edge part of the guard frame 25 toward the inner frame 19 of the windowpane is an approximately rectangular flange member 28 which is of a size so that the flange member removably fits within the flange 18 of the outer frame 10. The thickness of the inner frame 19 is such to permit the flange member 28 to be accommodated in the flange 18, and by arranging the guard frame 25 to function in this manner air will be prevented from entering the space between the inner frame 19 and the flange 18 of the outer frame. The guard frame also serves to prevent the inner frame with the windowpane from being accidentally or surreptitiously opened, and to releasably lock the guard frame 25 to the outer frame 10, I may employ any suitable form of catch, as 39, whereby the guard frame may be locked to the outer frame when closed therein. Thus a simple and efficient sash is provided for use in the windows of buildings and other structures whereby the pane may be easily cleaned by a person without being required to lean out of the window.

In the foregoing description, I have embodied the preferred form of my invention, but I do not wish to be understood as limiting myself thereto, as I am aware that modifications may be made therein without departing from the principle or sacrificing any of the advantages of this invention, therefore I reserve to myself the right to make such changes as fairly fall within the scope thereof.

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

1. A window sash, comprising an outer frame adapted to be movably arranged in a window so as to be raised and lowered, an inner frame with a transparent plate pivoted to the outer frame for being rotatably swung within the outer frame, a guard frame within the outer frame, hinged so as to be swung inwardly and outwardly of the outer frame toward and from the transparent plate, and means to releasably lock the guard frame to the outer frame.

2. A window sash, comprising an outer frame adapted to be movably arranged in a window so as to be raised and lowered, a substantially rectangular flange extending inwardly of the frame, an inner frame with a transparent plate pivoted to the rectangular flange for being rotatably swung within the flange, a guard frame within the outer frame, hinged so as to be swung toward and from the transparent plate, and a substantially rectangular flange member protruding from the guard frame, adapted to move within the flange of the outer frame into and out of contact with the frame of the transparent plate when the guard frame is swung accordingly.

3. A window sash, comprising an outer frame adapted to be movably arranged in a window so as to be raised and lowered, a substantially rectangular flange extending inwardly of the frame, an inner frame with a transparent plate pivoted to the rectangular flange for being rotatably swung within the flange, a guard frame within the outer frame, hinged so as to be swung toward and from the transparent plate, a substantially rectangular flange member protruding from the guard frame, adapted to move within the flange of the outer frame into and out of contact with the frame of the transparent plate when the guard frame is swung accordingly, and a catch to releasably lock the guard frame to the outer frame.

This specification signed and witnessed this eleventh day of May A. D. 1918.

CHARLES W. DUNN.

Witnesses:

GEORGE F. BENTLEY,

CELIA KAUFMAN.