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2,330,696

WINDOW

Filed July 2, 1942

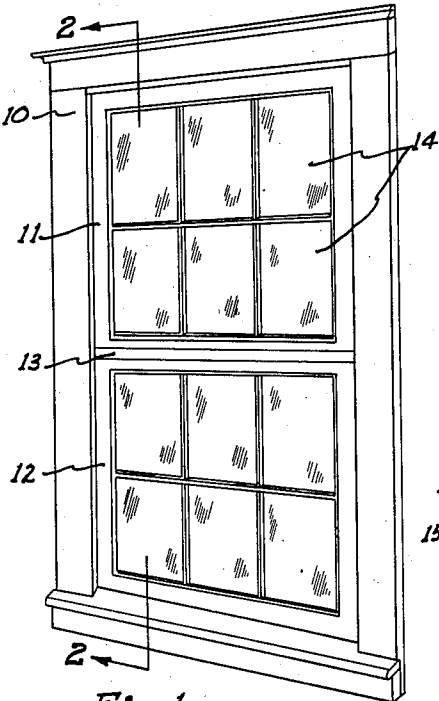


Fig. 1

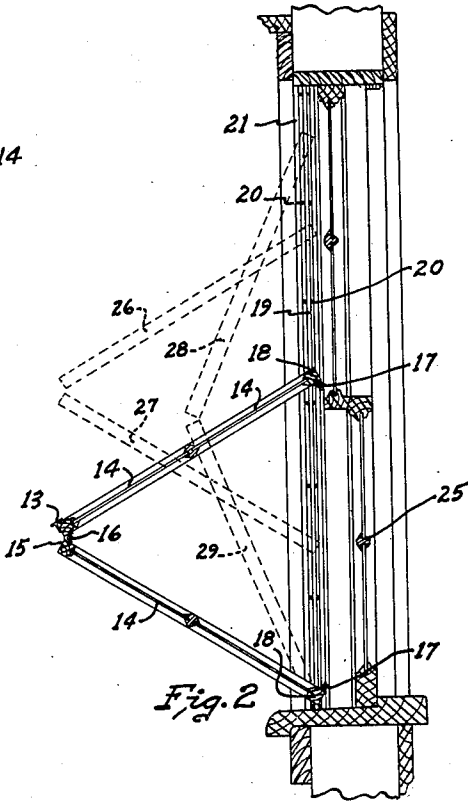


Fig. 2

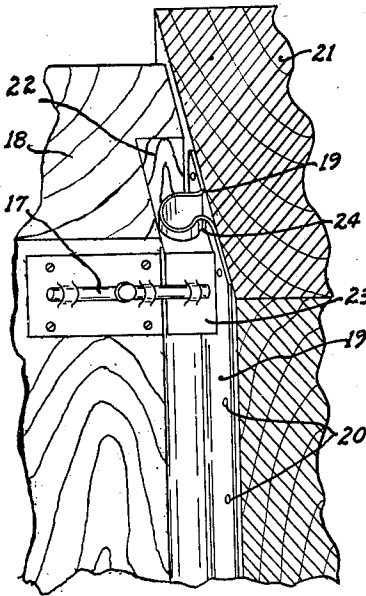


Fig. 3

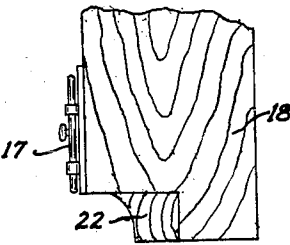


Fig. 4

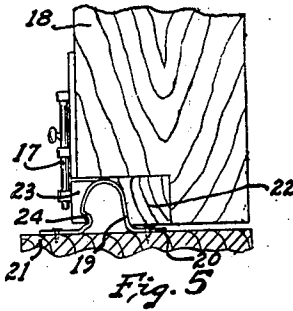


Fig. 5

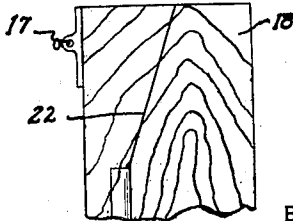


Fig. 6

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WINDOW

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5 Claims. (Cl. 160—187)

The invention relates to a novel form of window structure, and more particularly to a folding window, and/or storm window suitable for buildings.

One object of the invention is to permit cleaning of both the interior and exterior surfaces of my novel window from the inside of the room. This is possible due to the free sliding and hinging action of one or both component sash parts, in relation to the movement of the permanent window sash parts.

Another object of the invention is to reduce the heat flow through windows, from interiors to exteriors, thereby exercising more uniform temperature control.

A still further object is to provide in connection with my construction direct and indirect ventilation and at the same time avoid entrance of rain or snow.

With these and other equally important objects in view, which will become apparent from a perusal of the invention, the latter comprising the means described in the following specification and particularly pointed out in the claims forming a part thereof.

The invention will be more fully understood and the advantages thereof will become apparent when reference is made to the more detailed description thereof which is to follow and to the accompanying drawing, in which:

Figure 1 is an elevational view of one embodiment of the invention;

Figure 2 is a sectional side elevation of a window and foldable screen and/or storm window and in dotted lines is indicated varied positions which may be attained;

Figure 3 is a sectional view showing the assembly, track guide, slide and slide lock;

Figure 4 is a view showing track groove and slide lock;

Figure 5 is a partially end view assembly showing track guide, slide and slide lock; and

Figure 6 is a side view of the track, track groove and lock.

Referring to the drawing in detail 10 is a window frame which is adapted to be placed in the window opening of a building. My new window is applicable to all standard or special size openings and frames for double hung type windows, whether wood, metal or of manufactured synthetic or composition materials. The sash and all fittings of the invention for operation of the unit may be made of wood, metal and/or manufactured synthetic or composition materials.

In the embodiment selected to illustrate the

invention, there is employed two sash 11 and 12, of any desired or necessary dimensions so as to provide a substantially full coverage of the frame opening when the two sash are joined and in a vertical position. One sash and generally the upper may be and preferably is provided with weather sealing or joint covering member 13. It is to be understood that various styles of window frames and window sash may be employed and the number of glass light 14 per sash may be varied.

The two sash parts 11 and 12 may be of equal or varying overall dimensions, joined together by a suitable hinge or hinging device 16 to permit outward hinging action where joined, with the inside faces of both sash folding toward each other at the desired angle (see Figure 2). In a vertical plane, as shown in Figure 1, the entire unit gives effective coverage of frame opening and providing an air space between the storm window and the permanent window. The air space dimension is dependent upon the placing of the track guides 19.

The sliding action of one or both sash parts 11 and 12 in either direction is obtained by application to the window frame member 21 of two formed or molded track guides 19 secured in plane by suitable means 20. The guides face each other in a position parallel to the direction in which sliding action is desired. The opposite rails or stiles of the two sash parts have at two corners 18 adjacent the guide tracks a device 23 for co-operating with the guide tracks. The device 23 provides for free sliding and such device may be formed or molded to conform to the contour of the guide track.

The rails or stiles 19 of both sash parts 11 and 12 that are to be placed adjacent to the guide tracks are rabbeted, grooved or molded for the full length of their inside edge to provide space for and fitting to the guide tracks. The rails of both sash parts are free of the guide tracks thus permitting movement outward of both sash, when hinging action takes place through sliding action of the slides on the guide tracks. At the corners of the sash where slide 23 and slide locks 17 are suitably attached a space or groove in each sash is provided and is so shaped as to widen at its end on an angle toward the outside edge of the sash (see Figures 4 and 6). This arrangement permits a full and free inward action of the rails or stiles not adjacent to the guide tracks during the outward hinging action where the sash are joined together.

The movement of either or both sash parts 11

and 12 may be arrested and maintained at the desired place on the guide tracks, either by positive pressure action of the slide against the guide track or this may also be obtained by a mechanical locking device or devices on either rails or stiles or both. Action of the mechanical locking device should be positive on the guide tracks. In Figure 2 when the sash are in the position shown by 28 and 29 ventilation may be obtained by the bottom window part 25 and at the same time prevent the entrance of rain or snow. In the same figure, the upper and lower sash are shown in another position in dotted lines at 26 and 27.

It is to be understood that variations and modifications may be resorted to by those skilled in the art without departing from the spirit of the invention and the scope of the appended claims.

What I claim is:

1. A building construction including a window frame; a longitudinally disposed track secured to a side of the frame in the window opening, a two section foldable auxiliary window hingedly connected on a horizontal axis, rabbets along a longitudinal edge of the auxiliary window in which the track lies when the two sections are in alignment, guide means secured to an upper corner of one section and to a lower corner of the other section for cooperating with the track for facilitating sliding action of both sections of the auxiliary window.

2. A building construction including a window frame having a longitudinally disposed track secured to a side of said frame, a two section foldable storm window hingedly connected on a horizontal axis, rabbets along the longitudinal edge of the storm window in which the track lies when the two sections are in alignment, said rabbets being of greater depth at the free corner of the sections, and guide means secured to said storm

window adjacent to the area of greater depth of the rabbets, said guide means cooperating with the tracks to hold the storm window in place and facilitating sliding of the two sections of the storm window.

3. A foldable storm window comprising two sections hingedly connected on a horizontal axis, rabbets being along the full length of the longitudinal edges of the storm window, said rabbets being of greater depth at two corners of each section, and removable guide means secured to the storm window adjacent to the areas of greater depth of the rabbets, and rails secured to a side of a window frame in which the said storm window is employed said guide means adapted to cooperate with rails secured to the window frame for facilitating sliding action of both sections of the storm window.

4. In a building construction comprising a window frame having tracks secured thereon in a vertical position, two section storm sash hingedly connected on a horizontal axis and when in alignment covering the window opening defined by the window frame, rabbets along the longitudinal edges of the sash, removable secured guide means mounted on the sash adjacent to the free corners of the sash for cooperating with the tracks to hold the sash in position and facilitating sliding action of the two sections of the storm sash.

5. A two section foldable storm sash hingedly connected on a horizontal axis, rabbets extending the full length of the two sections along the longitudinal edges, said rabbets at the free corners of the sash being of greater depth, and removably secured guide means secured to the sash adjacent to the area of greater depth of the rabbets.

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