June 26, 1951 H. E. KEENE 2,558,362

CANOPY

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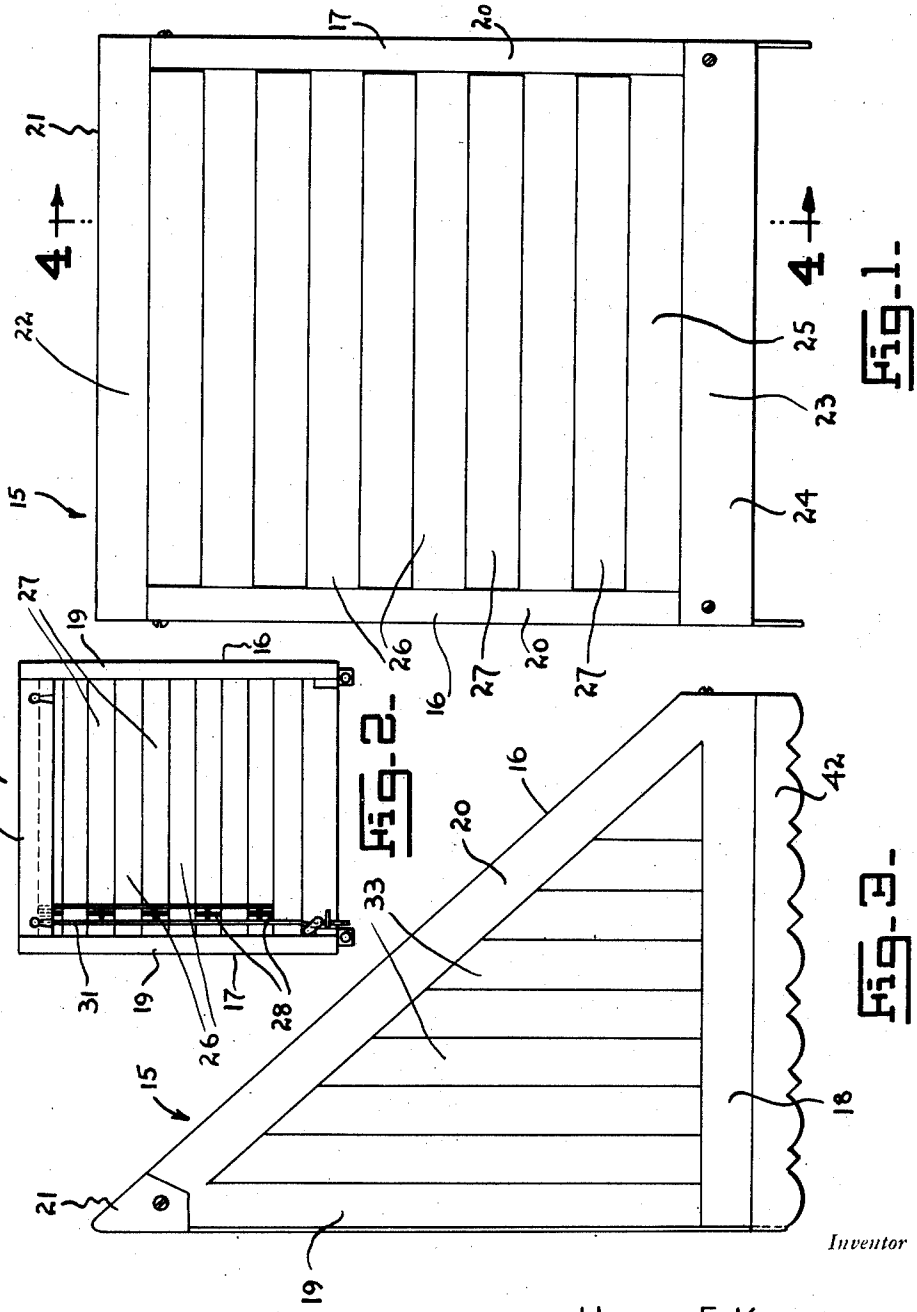


Fig-1-

Fig-2-

Fig-3-

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CANOPY

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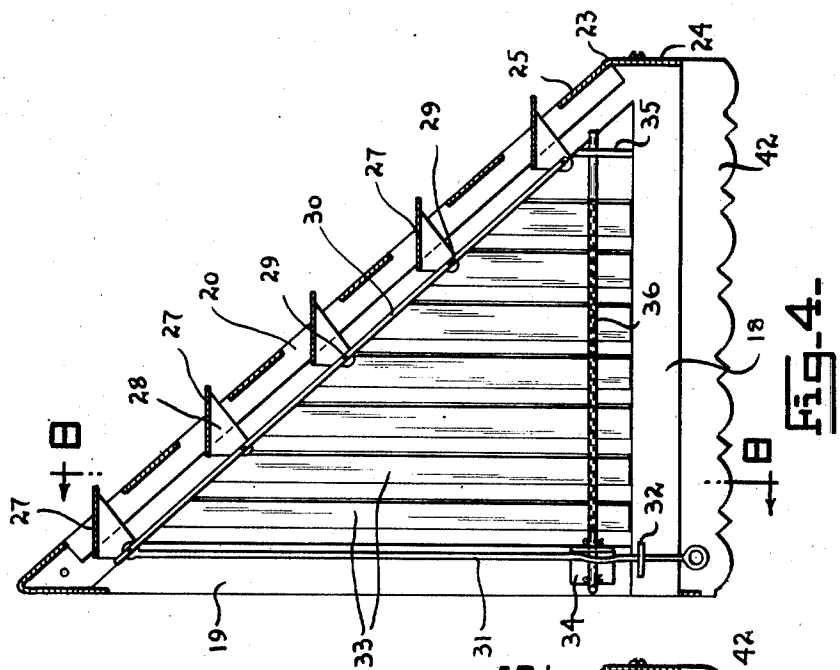


Fig. 4.

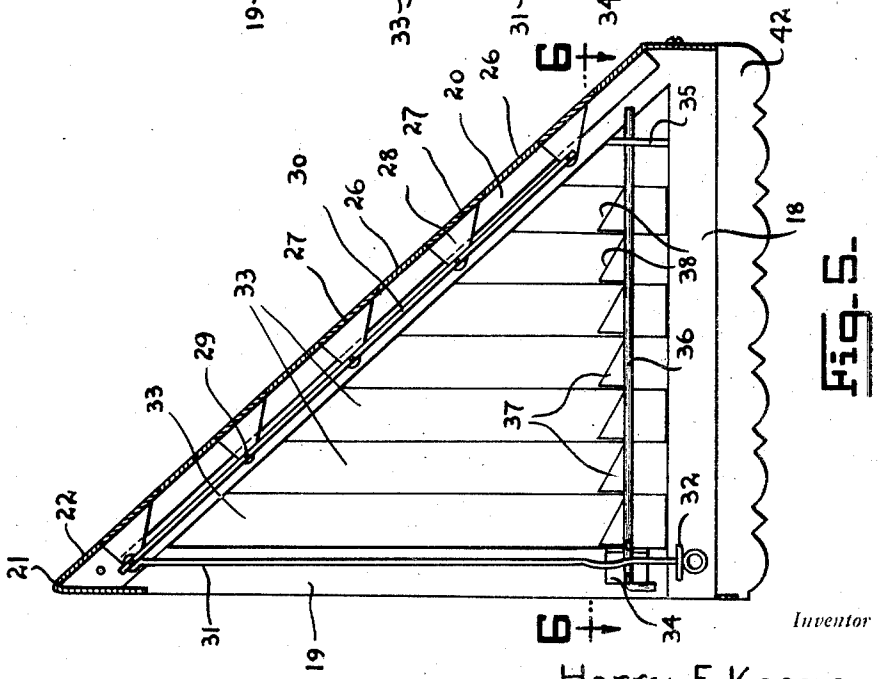


Fig. 5.

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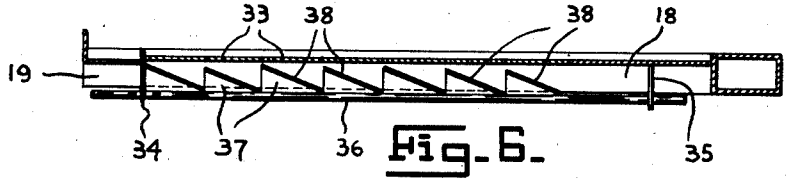


Fig. 6.

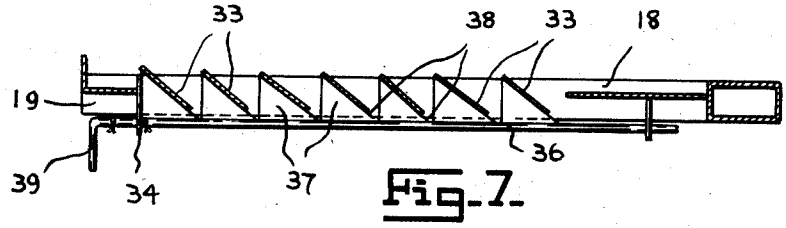


Fig. 7.

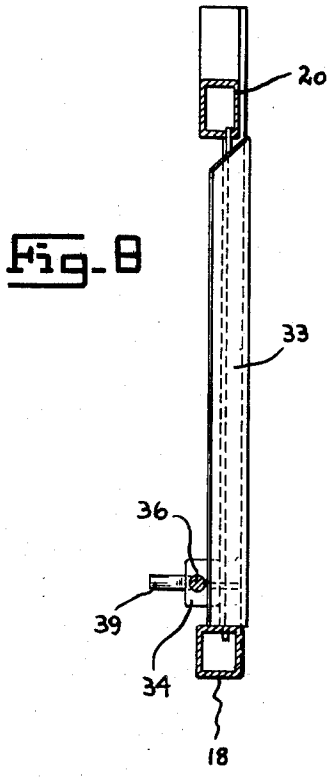


Fig. 8

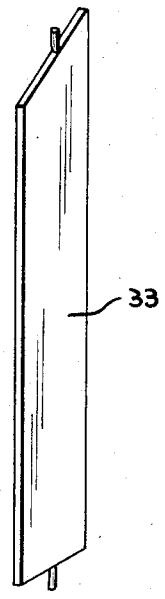


Fig. 9.

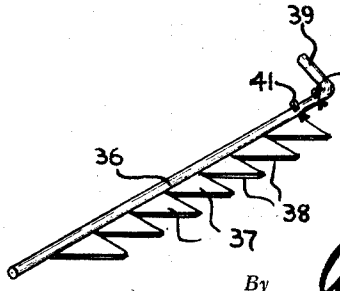


Fig. 10.

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UNITED STATES PATENT OFFICE

2,558,362

CANOPY

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Application August 25, 1945, Serial No. 612,636

5 Claims. (Cl. 20—57.5)

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This invention relates to a canopy, and more particularly to a canopy adapted for use over the window and door openings of a building.

The primary object of the invention is to shield the window or doorway from the direct rays of the sun or from the elements and yet provide for adequate ventilation when desired.

Another object of the invention is to regulate its ventilating features from a position within the window or doorway which position is convenient to reach and is wholly confined within the limits of the canopy itself so as to be wholly protected against injury by the elements.

Among its features, the invention embodies a pair of side frames adapted to be mounted in spaced parallel relation on the side of a building, which frames carry a plurality of equally spaced parallel slats fixed to the outer edges, and movable slats pivoted to the side frames to swing about spaced horizontal axes located midway between the fixed slats, the movable slats being of such a width that when closed the spaces between the fixed slats will be closed and sealed against the elements.

Other features include slats mounted in each side frame to rotate about vertically spaced axes whereby side ventilation may be achieved, and means for moving the vertically positioned slats of each frame in unison to an open or closed position.

Still other features include means for moving the horizontally pivoted slats in unison to a closed or an open position.

A still further feature of the invention is the location of the slat opening and closing control members wholly within the confines of the canopy and at points where they are readily accessible from the window or doorway over which the canopy is suspended.

In the drawings:

Figure 1 is a front view of a canopy embodying the features of this invention showing the same in closed position,

Figure 2 is a view similar to Figure 1, but from the opposite side thereof,

Figure 3 is a side view of Figure 1,

Figure 4 is a vertical sectional view taken substantially on the line 4—4 of Figure 1, but showing the ventilating slats in open position,

Figure 5 is a view similar to Figure 4 showing the ventilating slats in closed position,

Figure 6 is a horizontal sectional view taken substantially on the line 6—6 of Figure 5, and showing the vertically pivoted slats in one of the side frames closed,

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Figure 7 is a view similar to Figure 6 showing the vertically pivoted slats in open position,

Figure 8 is a vertical sectional view taken substantially on the line 8—8 of Figure 4,

Figure 9 is a perspective view of one of the vertically pivoted slats employed in the side frames, and

Figure 10 is a perspective view of the control means by which the vertically pivoted slats may be opened or closed.

Referring to the drawings in detail, the canopy, designated generally 15, comprises a pair of side frames 16 and 17, each of which comprises a bottom frame member 18, to one end of which is attached a standard 19 which extends perpendicularly to the bottom member 18, and extending between the upper end of the standard and the outer end of the bottom member is an inclined frame member 20 which forms, in conjunction with the member 18 and standard 19, the hypothenuse of a right-angled triangle.

Extending between the upper ends of the frames 16 and 17 is a substantially inverted V-shaped cap member 21, the outer leg 22 of which extends downwardly over the outer faces of the frame members 20, while the opposite leg 23 of the cap 21 extends downwardly along the outer rear faces of the standards 19.

Secured to the lower, forward ends of the frame members 16 and 17 at the junction of the bottom members 18 and the inclined members 20 is a bridge plate 23', one leg 24 of which extends downwardly against the front faces of the frame members while the other leg 25 extends upwardly along the member 20 in the direction of the leg 22 of the cap 21. It will be noted that the legs 22 and 25 form flanges which bridge the space between the parallel frames 16 and 17, and secured at equally spaced distances between the legs 22 and 25 are fixed slats 26 which extend horizontally between the frames and cooperate with the legs 22 and 25 in holding the frame members 20 in spaced parallel relation.

Pivotally mounted midway between each fixed slat 26 to the frame members 20 are movable slats 27, each of which is provided adjacent one end with a depending flange 28, and pivotally connected at 29 to each flange is a tie bar 30 so that when one of the slats 27 is moved, the others will move in unison therewith. Connected to the junction of the flange on the uppermost slats 27 with the tie bar 30 is an operating rod 31 which extends downwardly along the inside of one of the standards 19 to a point near its lower end. A pierced bracket 32 is secured adja-

cent the lower end of the standard 19 along which the operating rod 31 extends, and the lower end of the operating rod extends through the opening in the bracket so that the bracket, in conjunction with the pivotal connection of the upper end of the rod, forms a guide for holding the rod in proper position.

Pivotally mounted for rotation about spaced vertical axes in each side frame 16 and 17 are slats 33 which, when in one position, completely close the openings in the side frames, and when in another position, leave the openings in the side frames wholly unobstructed except for the thickness of the slats. Rotatably and slidably mounted in brackets 34 and 35, carried by each side frame, are control bars 36, each of which is provided with a plurality of triangular cam blades 37 which extend radially from the longitudinal axis of the bar 36 and are provided with cam faces 38 which are adapted to ride against the inner faces of the slats 33 to cause the latter to swing about their vertical axes, as will be more fully hereinafter explained. Each bar 36 is provided at one end with an operating handle or lever 39 and extending transversely through the bar 36 adjacent the handle 39 are spaced openings for the reception of cotter pins 40 and 41 which cooperate with the brackets 34 in limiting the longitudinal movement of the bar 36. When it is desired to open the slats 33, the bar is moved in the direction of the standards 19 until the cotter pins 41 contact the brackets 34, whereupon the bar may be turned so as to cause the cam members 37 to rotate into a horizontal position and such movement will cause the cam faces 38 to contact the faces of the slats 33 on the side of their pivot points toward the standards 19 and rotate the slats to open position. When it is desired to close the slats, the bar 36 is turned about its longitudinal axis so as to move the cam faces 38 away from contact with the slats 33 and by holding the bar in a position so that the cam members remain in contact with the slats and moving the bar in a direction away from the standards 19, the cam faces may be made to slide along the slats 33 and swing them about their vertical pivots to closed position.

It is to be understood that the movable slats 27 are of a width sufficient to completely close the space between their respective fixed slats 26 and are preferably of a width slightly in excess of the spaces so that when the canopy is closed, a weather-tight covering for the top thereof will be effected. The slats 33 also may be of slightly excess width than the spaces that they are to cover so that when they are closed, an overlap will result. Obviously, the slats 27 and 33 may be of slightly different contour so as to produce an ornamental effect if so desired. Also, a suitable ornamental edging 42 may be secured to the lower edge of the canopy should such ornamentation be found desirable.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that minor changes in the details of construction and combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having thus described the invention, what I claim is:

1. A canopy for windows and doorways comprising a pair of side frames adapted to be mounted in spaced parallel relation on the side of a building, a cover extending between the side frames, a plurality of vertically extending slats pivotally mounted in each side frame, and means operating with a partial sliding and partial rotary motion to move the slats to open or closed position.

2. A canopy for windows and doorways comprising a pair of side frames adapted to be mounted in spaced parallel relation on the side of a building, a cover extending between the side frames, a plurality of vertically extending slats pivotally mounted in each side frame, a shaft rotatably and slidably mounted adjacent the bottom of each side frame, and cam plates on the shaft for engaging the vertically pivoted slats and moving them into open or closed position.

3. A rigid awning including a sloping roof assembly and a side member secured thereto, said side member including a frame and a plurality of vertically extending slats pivotally mounted in said frame for movement about vertical axes extending longitudinally of said slats, operating means disposed beneath said awning for moving said slats from their open and closed position, said operating means being rotatable about an axis inclined to said vertical axes.

4. A rigid awning including a sloping roof assembly and a side member secured thereto, said side member including a frame and a plurality of vertically extending slats pivotally mounted in said frame for movement about vertical axes extending longitudinally of said slats, operating means disposed beneath said awning for moving said slats from their open and closed position, said operating means being rotatable about an axis inclined to said vertical axes, said operating means having longitudinally spaced cam surfaces thereon for engaging and rotating said slats upon rotation of said operating means.

5. A rigid awning including a sloping roof assembly and a side member secured thereto, said side member including a frame and a plurality of vertically extending slats pivotally mounted in said frame for movement about vertical axes extending longitudinally of said slats, operating means disposed beneath said awning for moving said slats from their open and closed position, said operating means being rotatable about an axis inclined to said vertical axes, said operating means having longitudinally spaced cam surfaces thereon for engaging and rotating said slats upon rotation of said operating means, said operating means being shiftable axially to render the cam surfaces selectively operable and inoperable.

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