Dec. 26, 1950 O. KUBATZKY 2,535,933

WINDOW AND WALL VENTILATOR

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FIG. 1.

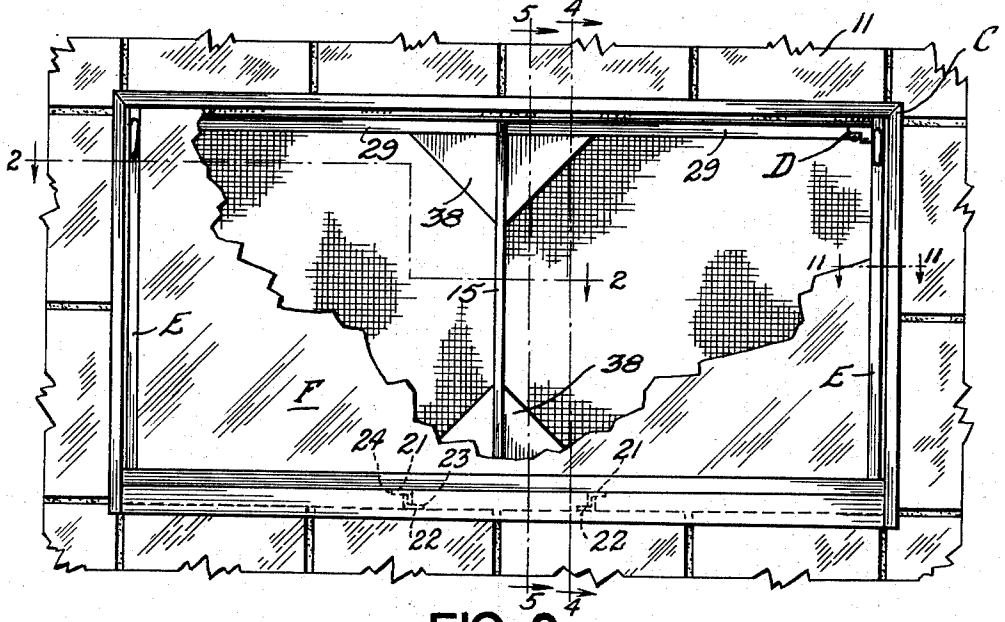


FIG. 2.

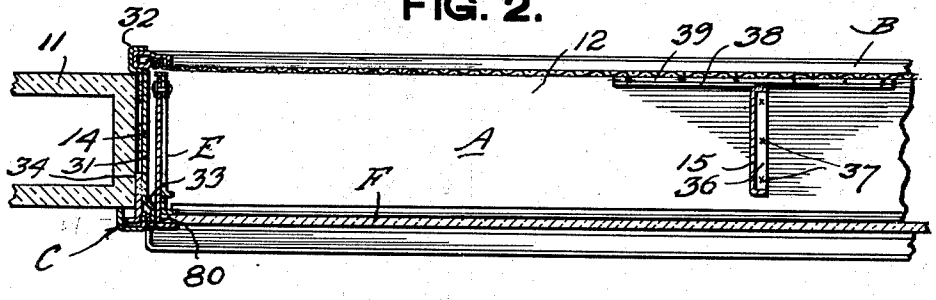


FIG. 3.

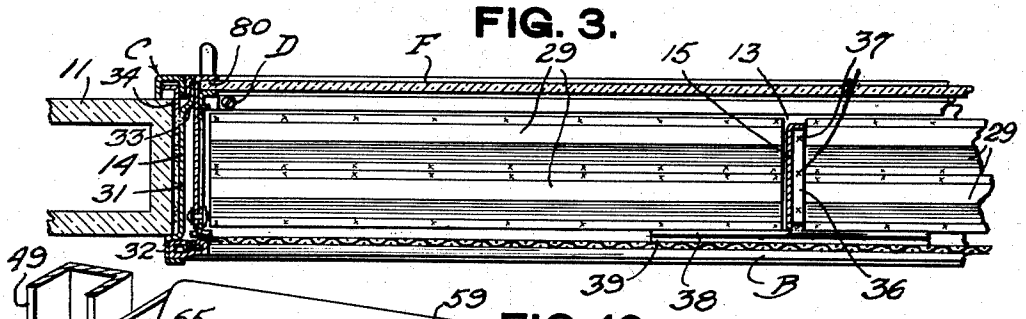
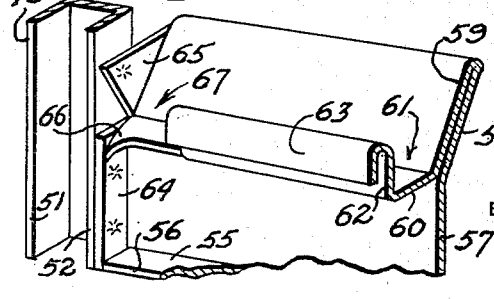


FIG. 10.



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FIG. 4.

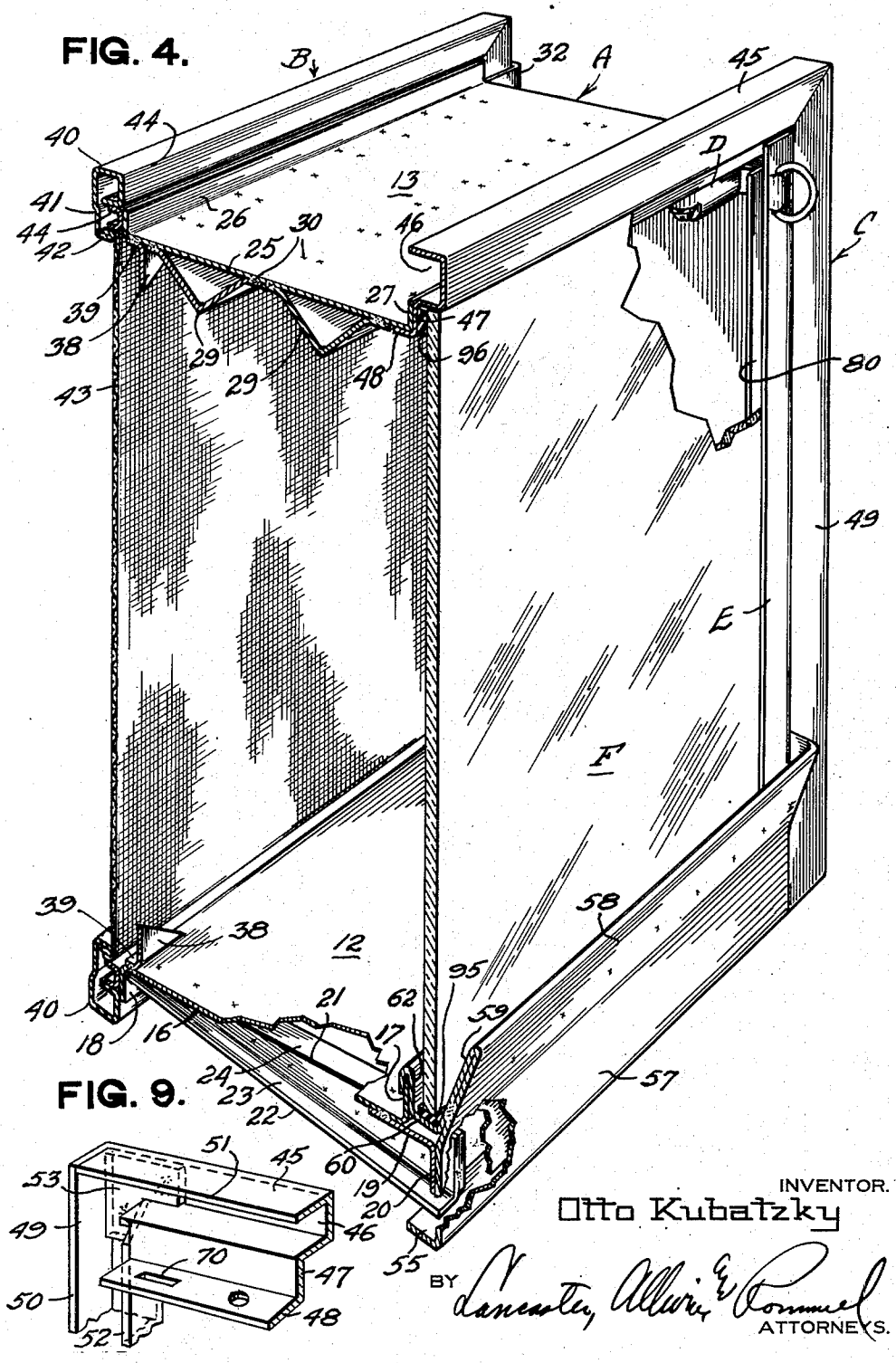


FIG. 9.

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WINDOW AND WALL VENTILATOR

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FIG. 5.

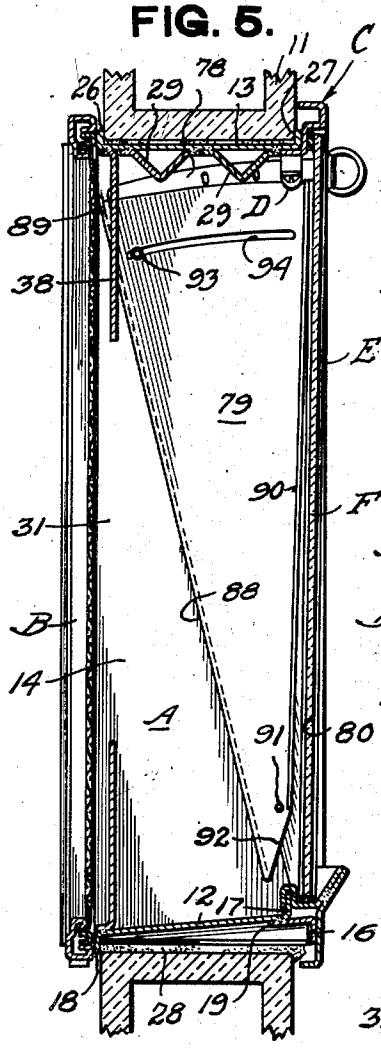


FIG. 6.

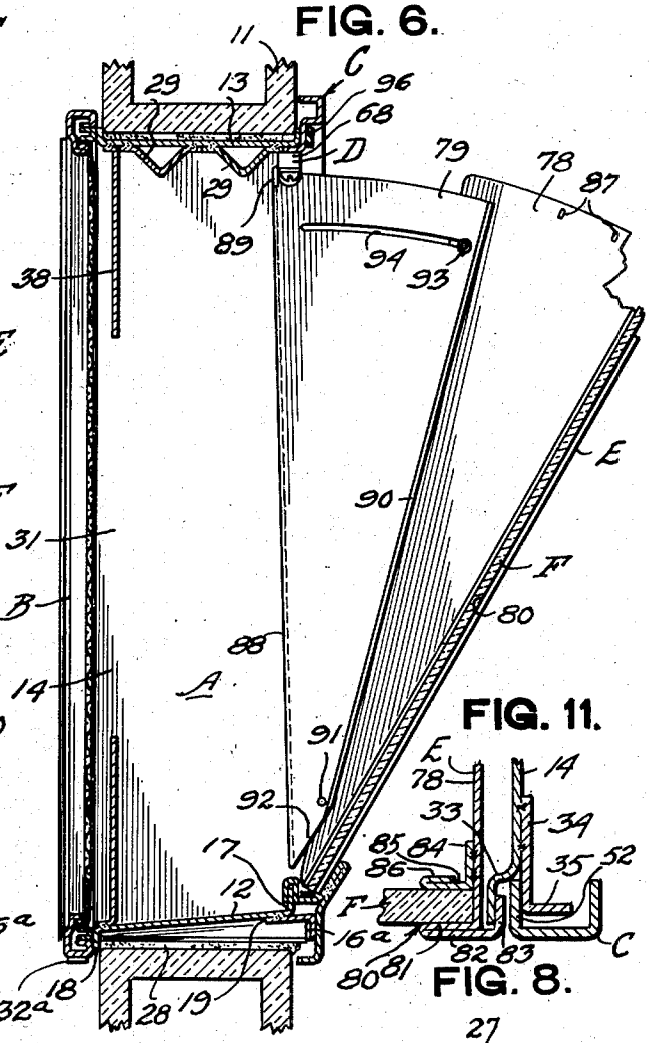


FIG. 11.

FIG. 8.

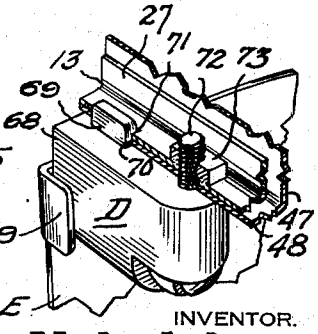
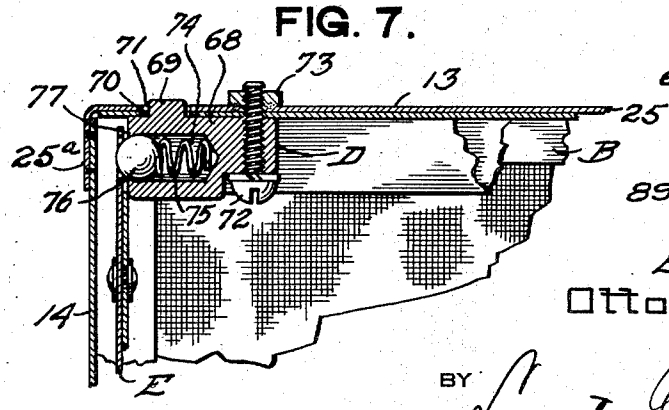


FIG. 7.



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Patented Dec. 26, 1950 2,535,933

UNITED STATES PATENT OFFICE

2,535,933

WINDOW AND WALL VENTILATOR

Otto Kubatzky, St. Louis, Mo., assignor to Winco Ventilator Company, St. Louis, Mo., a corporation of Missouri

Application September 30, 1946, Serial No. 700,308

10 Claims. (Cl. 98—88)

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The present invention relates to units for use in building construction and more particularly to improvements in windows and wall ventilators, of the general character shown in my patents, Nos. 1,809,518; 1,836,852; 2,351,522 and 2,273,758.

The principal objects of this invention are to provide a building unit of this character, susceptible of being incorporated in a wall at the time of erection thereof, or placed during a remodeling project, which is neat in appearance; possessing considerable strength so as to avoid the necessity of placing a separate lintel spanning the window opening to carry a superstructure; and capable of mass production so that the invention may be brought within the means of a vast number of builders and property owners.

Another object of the invention is to provide a combination window and ventilator comprising a main frame to fit the opening of the wall, and a detachable trim or architrave frame which may be quickly and firmly attached to the main frame after the latter has been properly fixed in place. This arrangement not only makes possible the economical coating, as by paint or enamel spraying, of the main frame and trim frame, in different colors, but also enables the builder to store the trim frame and other parts carried thereby in a protected place while erection or remodeling of the building is being carried on with the end in view that these stored parts may be installed only after danger to their being broken, damaged or the finish marred, has passed.

A further object is to provide a unit of this character, including end shields for a deflecting shield, (which spans and closes the window opening when such is desired or deflects currents of air in the desired direction when open) particularly well adapted for use with relatively narrow walls, such as glass block walls, and still providing for considerable ventilation when the end shields are in active shielding positions. The construction contemplates accommodating the end shields mainly in the window opening when the window is closed.

Other objects and advantages of the invention will appear in the following detailed description of the preferred embodiment of my invention, taken in connection with the accompanying drawings, forming a part of this specification and in which drawings:

Fig. 1 is an inside elevational view of a window and wall ventilator, and a portion of a wall in which it is located, a portion of the deflecting shield or window transparency being broken away and removed to disclose details.

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Fig. 2 is an enlarged horizontal sectional view on substantially the line 2—2 of Fig. 1, looking in the direction of the arrows.

Fig. 3 is a similar view looking in a direction counter to that in which the arrows of line 2—2 point.

Fig. 4 is a fragmentary view, on an enlarged scale, partly in perspective and partly in vertical section on the line 4—4 of Fig. 1.

Fig. 5 is an enlarged sectional view on the line 5—5 of Fig. 1, with the deflecting shield closed.

Fig. 6 is a view similar to Fig. 5, but showing the deflecting shield in a full open position.

Fig. 7 is an enlarged detail view partly in vertical section and partly in elevation showing the application of a combined latch and connector in use yieldably retaining an end shield in an adjusted position, and fixedly connecting the trim frame to the main frame of the window and wall ventilator.

Fig. 8 is a detail view partly in perspective and partly in section of the combined latch and connector shown in Fig. 7, and associated parts.

Fig. 9 is a fragmentary view, partly in perspective and partly in section, of the upper left hand corner portion, looking toward the outward facing side of the trim frame.

Fig. 10 is a view similar to Fig. 9 but looking toward the lower left hand corner of the trim frame.

Fig. 11 is an enlarged fragmentary sectional view taken on line 11—11 of Fig. 1 showing a modified preferred construction of the end shield formation and its relation in the architrave frame.

The preferred characteristics of the combined latch and connector are disclosed and claimed in my copending application for patent filed September 30, 1946, Serial No. 700,309, now Patent No. 2,518,992.

Referring to the drawings, in general a ventilator in accordance with my invention is shown in a glass block wall 11 particularly illustrated as in Fig. 1. The ventilator consists of several units including a main frame A which is particularly adapted to be installed in a masonry, frame or glass wall, as shown, during the erection of the wall, though its construction is such that it may be adapted to or inserted in a completed wall. Other units of the ventilator are installed in main frame A, preferably after the building construction work is completed, such units comprising an outer screen frame B, an inner detachable trim or architrave frame C which is held in place by a pair of combined latch and connector elements

D, a pair of end shields E cooperating with the opposite ends of trim frame C and the latch elements D and supporting together with frame C a deflecting shield F, preferably a pane of glass.

In detail, main frame A is of substantially rectangular construction comprising a bottom wall 12, top wall 13, end walls 14 and an intermediate vertical wall 15 in relatively long ventilators, all of fabricated sheet metal construction.

Bottom wall 12 of frame A, as best shown in Fig. 4, consists of a longitudinal strip 16 which is inclined outwardly from an upturned trim frame supporting edge strip 17 adjacent to the inner wall of the ventilator to a down turned edge strip 18 which is adapted to engage the exterior face of the wall construction 11. To the under surface of strip 16 a longitudinal angle strip 19 is secured preferably by spot welding so as to provide a narrow longitudinal vertical surface abutment for engagement with trim frame C. These strips 16 and 19 are rigidly supported in their inclined position, as a drainage sill for the ventilator, by means of several wedge shaped elements each formed of a pair of sheet metal angle strips 21 and 22 spot welded together along their upright walls providing a horizontal portion 23 for engagement with the underlying wall construction preferably arranged so as to engage the structural units between cement joints, and an inclined upper portion 24 which is secured to the under sides of strips 16 and 19 also by spot welding.

As also best illustrated in Fig. 4, top wall 13 includes a longitudinal substantially horizontal metallic strip 25 having lateral upturned edges 26 and 27 providing a channel formation with the edge elements for engaging the outer and inner surfaces of wall construction 11 and abutting surfaces for engagement by screen frame B and architrave or trim frame C respectively. As shown in Figs. 5 and 6, rather than resting in direct contact with the wall structure underlying and underlying cement, gasket strips or the like 28 may preferably be interposed and thus cushion as well as insulate the joint between the ventilator frame and wall structure; of course similar interposed material may be placed between the ends 14 and the wall structure.

Top wall 13 is constructed so as to support the masonry wall construction above it without having to supply additional reinforcing elements being supported at the ends by the two end walls 14 and for relatively long ventilators an intermediate wall 15. The intermediate sections of top wall 13 have longitudinal lintels 29 spot welded or otherwise suitably secured as indicated at 30 to the under surface of strip 25 between end walls 14 and the intermediate wall 15. These lintels each are formed of a metallic strip bent into a V longitudinally thereof and having upper portions bent outwardly so as to extend in a horizontal plane for engaging the surface of the top wall strip 25 where they are attached thereto in pairs, side by side and cover substantially the exposed under surface of the top wall strip, thus strengthening it to provide a substantially rigid top wall for supporting construction units of wall 11 as they are set in place in the process of erecting the wall. They also provide an attractive finish for the exposed surface of the ventilator top wall.

End walls 14 of main frame A, as shown in Figs. 2 and 3, each consist of a metallic strip 31 with one edge bent into a channel 32 to provide an upright screen frame support and guide, the inner shoulder of which channel being in line with the outer vertical edge elements 18 and 26 of the bottom and top wall strips respectively, for engagement with the exterior surface of wall construction 11. The inner edge of each end strip 31 is bent inwardly and then outwardly so as to provide an offset edge strip 33. A strip 34 is secured to strip 31 adjacent to said offset strip 33 and has its inner edge bent outwardly to provide an abutting surface strip 35 in line with surface abutment 20 on the bottom wall 12 for engagement with trim frame C. End walls 14 are secured by spot welding to the bottom and top walls by means of downwardly bent flaps 16^a and 25^a extending from the ends of strips 16 and 25 of said bottom and top wall structures; flap 16^a being positioned against the inner side of end wall strip 14 and flap 25^a overlying its end and outer side as illustrated in the fragmentary details in Fig. 7.

Intermediate wall 15 as shown in Figs. 1, 2, and 3 consists of a channel strip of sheet material having ends 36 thereof bent inwardly and secured by spot welds 37 to bottom and top wall strips 16 and 25 respectively. For further reinforcing the frame a pair of triangular sheet metal plates 38 are secured to the outer channel edge of wall 15 so as to extend to both sides of this wall top and bottom and the edges 39 of these plates, top and bottom, are bent into planes for engagement with the surfaces of the bottom and top wall strips 16 and 25 and there spot welded to these strips.

Screen frame B comprises a rectangular frame of fabricated metallic strip material to fit within channels 32 extending from end walls 14 of the main frame A, the channels each having an inwardly bent flap 32^a at its lower end to provide supporting means to maintain the screen in proper position over the outer face of the main frame. The metal strip for each side of the frame is formed with a substantially rectangular channel 40 with a portion of its outer face depressed as shown at 41 which functions as a stop or bottom abutment wall of a groove on the inner side of the frame with the edges 42 of the strip bent inwardly to form the side walls of the groove, as best shown in Fig. 4. The edges of the screen wire 43 are pressed into this groove and a rod, or as illustrated, a U shaped metal strip 44 is forced into the groove with the screen as a retaining means therefor. The formation of the groove by the metal channel strip and the retaining element 44 cooperate in providing a yieldable but secure fastening for screen wire 43 being held in place under constant spring tension of the members.

Trim or architrave frame C is of rectangular construction, being fabricated of sheet metal strips so as to provide a trim overlying the inner edges of main casing A and also cover the joint between this casing and the wall structure 11 as well as to support the ventilator deflecting shield F and related parts. As illustrated in Figs. 4 and 9 the top frame member 45 comprises a metallic strip fabricated into a channel formation 46 with a depending portion 47 for engagement with the upturned abutment strip 27 of the main frame top wall strip 25. The lower portion 48 of this strip is bent inwardly for engagement with the under surface of said top wall strip 25 extending so that its edge is adjacent to the inner edge of the inner lintel 29. The end frame members 49 comprise channel

formations of the strip material, the outer edge 50 of which and edge 51 of top frame member 45 being adapted for engagement with the finished wall surface 11 and the inner edge 52 of end channel 49 is inserted in the groove provided by the strip formation 33 and 34 at the inner side of the main frame end strip 31. As shown in Fig. 4 the upper corners of the top and end frame members are mitered and Fig. 9 illustrates an angle connector element 53 spot welded to these members for holding them in assembled relation.

The bottom frame member 54 and its connection with end frame members 49 are best illustrated in Figs. 4 and 10. As shown this bottom frame includes a lower strip 55, the outer edge 56 of which is adapted for engagement with the inner surface of wall 11 and the inner portion of the strip is bent upwardly to provide a vertical facing strip 57, thence a diagonally inward portion 58, a portion 59 bent back upon portion 58 and spot welded thereto. At the juncture of portions 57 and 58 the strip is bent inwardly from portion 59 to provide a substantially horizontal portion 60, as the base of a trough 61 and from portion 60 the strip is bent upwardly to provide an outer vertical wall 62 and the outer portion 63 is bent downwardly providing an inverted U shaped formation which is engageable over the main casing of bottom wall edge strip 17.

Bottom frame member 54 is secured to end frame member 49 by means of tabs 64 and 65 bent inwardly from the ends of portions 57 and 58 respectively and spot welded to the inner wall of frame member 49, as shown in Fig. 10. As shown, the ends of portions 59 and 60 abut these tabs, the corner 66 of portion 60 being bent downwardly and the portions 62 and 63 terminate a short distance from the end frame member, thus providing openings 67 at each end of the trough so that moisture accumulating therein will drain to the sill of the main casing and thence to the outside of the wall structure.

Frame C is shown in place on main casing A. This is accomplished by placing the frame C with its inverted U formation of lower frame member portions 62 and 63 over the edge of the edge strip 17 of the main casing bottom wall and then swinging the upper portions inwardly into the main frame into the positions as described.

In order to secure the trim or architrave frame C in position the two latch and connector elements D provide the sole fasteners therefor. These elements are more fully set forth in the copending application heretofore referred to, consist of a casting casing member 68 as shown in detail in Figs. 7 and 8, having a lug 69 which extends upwardly through apertures 70 and 71 in portion 40 of the top of frame C and main casing top strip 25 respectively. These apertures are directly in alignment when the architrave frame C is in its assembled position in main casing A and thus lug 69 holds it from displacement therefrom. The parts are secured in position by means of a single bolt 72 passing through aligned apertures through casing 68 and portion 40 and strip 25 just referred to, for each of the two latch and connector members D. A nut 73 or other threaded member forms a part of strip 25 for engagement by bolt 72; in case a nut is employed it is held in place as an integral part of strip 25 by spot welding or the like.

Each connector and latch casing 68 is provided with a longitudinal bore 74 from the outer end of the casing into which is positioned a spring 75 and ball 76 which projects outwardly, the end of casing surrounding bore 74 being crimped at 77 so as to retain the ball and spring therein in operative position so that apertures in end shields F will be yieldably engaged by the balls.

It is pointed out that outer screen frame B and inner detachable trim or architrave frame C, are separate elements of the ventilator, adapted to be mounted in the main frame A after the construction of the wall 11 and other finishing work are completed. Thus main frame A is separately painted or otherwise coated for protection in the wall as a finished product. Screen frame B is given its proper finishing coat, which may be the same as that on main frame A and the trim frame B may be otherwise finished, enameled or the like in any desired color which may be different from that of main frame A to provide a desirable interior finished appearance for the ventilator. Main frame A is illustrated as having a width or thickness conforming to the thickness of the wall structure 11, comparatively narrow for a narrow glass block wall construction and for such purpose the related parts for architrave frame C are constructed accordingly.

End shields E each comprise a pair of triangular plates or strip metal elements 78 and 79 each having a maximum width so that when the ventilator is closed as shown in Fig. 5 they will overlie each other and engage the end wall of main casing A between screen frame B and the deflecting shield F which is supported in grooves 80 at the outer edges of end shield elements 78 and will open a maximum amount as afforded by the extended elements 78 and 79 as shown in Fig. 6.

The construction of shield element 78 with groove 80 is similar to the arrangement shown in Fig. 4 of my Patent 2,273,758 but is preferably formed as illustrated in Fig. 11 of the present drawings. In accordance therewith shield element 78 along the inner portion thereof is bent at right angles forming a wall 81 of groove 80 thence it is bent upon itself providing a portion 82 extending back to and beyond the shield element and its edge 83 is bent in the direction of and parallel to the shield element. This edge, when the ventilator shield is in closed position, engages in the groove of the main frame A in close engagement with the edge 52 of architrave frame C. An angle strip 84 is spot welded to shield element 78 so that its extending side is parallel to wall 81 and provides an opposite wall 85 of groove 80 for receiving an end edge of the deflecting glass shield F. Preferably the extending side of strip 84 is bent back upon itself to provide an edge reinforcing portion 86 therefor.

As shown in Figs. 5 and 6 shield element 78 is formed into an arc shape at its upper end and adjacent thereto are a series of apertures 87 into which ball 76 of latch and connector elements D is projected for yieldably retaining the shield closed or in any one of a number of adjusted positions as provided for by the apertures 87. Thus the ventilator may be opened by small amounts in accordance with such varying positions of apertures 87 in shield element 78, the lower end thereof resting in the end of the trough in the lower frame structure of the architrave frame C and swing therein as a pivotal axis therefor.

In order to open the ventilator a maximum amount the extension shield element 79 is connected to shield element 78 which allows for an opening substantially double that permitted by shield element 78 alone. This shield element 79

is similar in shape to that of shield element 78; its outer edge 88 as is bent at right angles so as to overlie the outer edge of shield element 78 and closely follow the end wall of main casing A. At its upper end the edge portion 89 is bent outwardly and thereby provides a stop engageable with casing 68 of the latch and connector elements D as shown in Fig. 6.

The inner edge 90 of shield element 79 is flared inwardly so as to provide a smooth engagement with shield element 78 to a point adjacent to a pivot connection 91 with shield element 78. This pivotal connection 91 is well above the pivot axis of shield element 78, the primary segment and also laterally offset out into the main casing A, therefrom. Shield element 79, the secondary segment, has its lower end cut away along an angle line 92 from the height of the pivot connection 91 to the lower end of the secondary segment so that its lower end is well above the trough elements of architrave frame C and rides above it as primary segment 78 is swung outwardly. These primary and secondary segments 78 and 79 respectively are connected for limited movement with respect to each other by means of a rivet 93 carried by the former and engaging an arcuate slot 94 in the latter, the center of the arc of the slot being the axis of pivot connection 91.

This arrangement of the shield elements, primary and secondary segments 78 and 79 is particularly well adapted to use where the window or ventilator frame is narrow (as for glass block construction) yet permitting the glass deflector shield F to be widely swung for considerable ventilation. Before inserting the glass deflector shield F in grooves 80 of the primary segment 78 a flexible gasket strip 95 is placed in the trough of the architrave frame C for the lower edge of the glass to rest on in all positions thereof. A similar gasket strip 96 is secured along the portion 47 of the top of architrave frame C for engagement with the glass adjacent to its upper edge when the ventilator is closed. In such closed position gasket strips 95 and 96 and the edges 83 inserted in the groove of the end walls of main frame C provide efficient weather stripping insulation for the ventilator.

It is to be further observed that by the arrangement of the primary and secondary segments of the end shields E when the deflector shield F is inserted in the grooves 80 the parts are locked into their operating position. For insertion or detachment of the elements it is essential to first remove deflector shield F and the combined latch and connector elements D, then by closing the secondary sector 79 over primary sector 78 (as shown in Fig. 5) the former is lowered slightly, due to its offset pivot connection 91 so that the end shield may be swung freely away from the end wall of main casing A and lifted out of the architrave trough, or these end shields may be inserted in a similar manner when the various parts are assembled in the main casing A after completion of wall 11 and thereafter removed and reassembled as desired.

Changes in detail may be made to the form of the invention herein shown and described, without departing from the spirit of the invention or the scope of the following claims.

I claim:

1. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially rectangular main casing for engagement in an opening in the wall structure and having means for securing it in place with its interior and exterior edges extending substantially flush with the corresponding wall surfaces, an architrave or trim frame secured to the inner edge of the main frame, covering the same and immediately adjoining wall surface, the lower portion of said architrave frame having a longitudinal trough along its upper edge, end shield members comprising primary and secondary segments in overlapping relationship and overlying the surface of the ends of the main casing when the shields are in ventilator closed position and adapted to be extended with respect to each other and outward of the main casing structure, said shields being supported by said architrave frame trough with the lower end of the primary segments engaging the ends of the trough as an axis about which they swing, pivotal means connecting said secondary segment to the primary segment above the lower end of the primary segment and outward from its swinging axis, a pin and arcuate slot connection between said segments adjacent to their upper ends, means on the casing and architrave frame for latching said primary segments in a plurality of adjusted positions and for limiting the movement of the secondary segment for a maximum ventilator open position of the shields, and a deflecting shield carried by the free edges of said primary segments.

2. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially rectangular main casing for engagement in an opening in the wall structure and having means for securing it in place with its interior and exterior edges extending substantially flush with the corresponding wall surfaces, a separate trim or architrave frame adapted to engage the inner edges of the main casing and immediately adjoining wall surface, said frame having a longitudinal drain trough along its lower portion terminating with an inverted U-shaped groove along its edge, said main casing having an upwardly extending flange on its lower portion adjacent to the inner wall surfaces onto which said inverted U shaped groove is engageable as its supporting and lower holding means for the architrave frame, and connector elements secured to the upper part of said frame and top wall of the casing for detachably securing the frame in its casing and wall engaging position.

3. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially rectangular frame including fabricated metal strips joined together and forming the top, bottom and end walls thereof, the top strip, provided with an upstanding flange and the end wall strips provided with lateral outstanding flanges for engaging the interior and exterior surfaces of the walls surrounding the frame, the bottom wall strip having a downwardly extending flange for engaging the exterior surface of the wall and the main body portion inclined upwardly from said last mentioned flange and provided with an upwardly extending flange substantially in line with the interior surface of the wall, an intermediate vertical wall midway between said end walls comprising a fabricated metal strip formation with a flange along its outer edge having its upper and lower ends integrally connected with the top and bottom walls of the frame, and triangular plates secured to said outer edge flange of said intermediate wall at its upper and lower ends and respectively to the top and bottom frame member strips.

4. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially

rectangular main frame including fabricated metal strips joined together and forming the top, bottom and end walls thereof, the top strip provided with an upstanding flange and the end wall strips provided with lateral outstanding flanges for engaging the interior and exterior surfaces of the walls surrounding the frame, the bottom wall strip having a downwardly extending flange for engaging the exterior surface of the wall and the main body portion inclined upwardly from said last mentioned flange and provided with an upwardly extending flange substantially in line with the interior surface of the wall, spaced fabricated wedge shaped metal elements of channel formation integrally connected with the bottom surface of the bottom wall strip to support it on the wall structure, and lintels of sheet metal having longitudinal reinforcing bends secured to the under surface of the top wall strip and extending lengthwise thereof so that the ventilator will carry the superstructure of the wall thereabove during the construction of the wall.

5. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially rectangular main frame including fabricated metal strips joined together and forming the top, bottom and end walls thereof, the top strip provided with an upstanding flange and the end wall strips provided with lateral outstanding flanges for engaging the interior and exterior surfaces of the walls surrounding the frame, the bottom wall strip having a downwardly extending flange for engaging the exterior surface of the wall and the main body portion inclined upwardly from said last mentioned flange and provided with an upwardly extending flange substantially in line with the interior surface of the wall, said outer flanges of the end walls having integral extensions formed into vertical channel members the lower ends of said channels having portions bent inwardly to provide screen frame supporting stops, and a screened frame slidably supported in said frame channels and resting upon said stops so as to overlie the opening through the frame.

6. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially rectangular main frame including fabricated metal strips joined together and forming the top, bottom and end walls thereof, the top strip provided with an upstanding flange and the end wall strips provided with lateral outstanding flanges for engaging the interior and exterior surfaces of the walls surrounding the frame, the bottom wall strip having a downwardly extending flange for engaging the exterior surface of the wall and the main body portion inclined upwardly from said last mentioned flange and provided with an upwardly extending flange substantially in line with the interior surface of the wall, spaced fabricated wedge shaped metal elements of channel formation integrally connected with the bottom surface of the bottom wall strip to support it on the wall structure, lintels of sheet metal having longitudinally reinforcing bends secured to the under surface of the top wall strip so that the ventilator will carry the superstructure of the wall thereabove during the construction of the wall, and an intermediate vertical wall midway between said end walls comprising a sheet metal fabricated channel formation integrally connected with the top and bottom walls of the frame.

7. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially rectangular frame including fabricated metal strips joined together and forming the top, bottom and end walls thereof, the top strip provided with an upstanding flange and the end wall strips provided with lateral outstanding flanges for engaging the interior and exterior surfaces of the walls surrounding the frame, the bottom wall strip having a downwardly extending flange for engaging the exterior surface of the wall and the main body portion inclined upwardly from said last mentioned flange, and provided with an upwardly extending flange substantially in line with the interior surface of the wall, spaced fabricated wedge shaped metal elements of channel formation integrally connected with the bottom surface of the bottom wall strip to support it on the wall structure, lintels of sheet metal having longitudinal reinforcing bends secured to the under surface of the top wall strip so that the ventilator will carry the superstructure of the wall thereabove during the construction of the wall, an intermediate vertical wall midway between said end walls comprising a sheet metal fabricated channel formation integrally connected with the top and bottom walls of the frame and triangular plates secured to the outer edge at the upper and lower ends of said intermediate wall and respectively to the top and bottom frame member strips.

8. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially rectangular main frame including fabricated metal strips joined together and forming the top, bottom and end walls thereof, the top strip provided with an upstanding flange and the end wall strips provided with lateral outstanding flanges for engaging the interior and exterior surfaces of the walls surrounding the frame, the bottom wall strip having a downwardly extending flange for engaging the exterior surface of the wall and the main body portion inclined upwardly from the said last mentioned flange and provided with an upwardly extending flange substantially in line with the interior surface of the wall, spaced fabricated wedge shaped metal elements of channel formation integrally connected with the bottom surface of the main body of said bottom wall to support it on the wall structure, lintels of sheet metal having longitudinal reinforcing bends secured to the under surface of the top wall strip so that the ventilator will carry the superstructure of the wall thereabove during the construction of the wall said outer flanges of the end walls having integral extensions formed into vertical channel members the lower ends of said channels having portions bent inwardly to provide screen frame supporting stops, a screen frame adapted to slide into said frame channels and supported by said stops so as to overlie the opening through the frame, a substantially rectangular architrave frame structure adapted to be secured to the inner portion of said main frame structure, said architrave frame including a drain trough along its lower side having means thereon for engaging over said upwardly extending flange on the bottom wall of the main frame, and means for detachably securing the upper side of said architrave frame to the upper wall of the main frame.

9. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially rectangular main frame including fabricated metal strips joined together and forming the top, bottom and end walls thereof, the top strip provided with an upstanding flange and

the end wall strips provided with lateral outstanding flanges for engaging the interior and exterior surfaces of the walls surrounding the frame, the bottom wall strip having a downwardly extending flange for engaging the exterior surface of the wall and the main body portion inclined upwardly from said last mentioned flange, and provided with an upwardly extending flange substantially in line with the interior surface of the wall, spaced fabricated wedge shaped metal elements of channel formation integrally connected with the bottom surface thereof to support it on the wall structure, lintels of sheet metal having longitudinal reinforcing bends secured to the under surface of the top wall strip so that the ventilator will carry the superstructure of the wall during the construction thereof said outer flanges of the end walls having integral extensions formed into vertical channel members the lower ends of said channels having portions bent inwardly to provide screen frame supporting stops, a screen frame adapted to slide into said frame channels and supported by said stops so as to overlie the opening through the frame, a substantially rectangular architrave frame structure adapted to be secured to the inner portion of said main frame structure, said architrave frame including a drain trough along its lower side having means thereon for engaging over said upwardly extending flange on the bottom wall of the main frame, means for detachably securing the upper side of said architrave frame to the upper wall of the main frame, an end shield supported in each end of the architrave frame drain trough and cooperating with said securing means for holding it in a plurality of adjustable positions, and a deflector shield spanning said end shields and supported in said drain trough.

10. In a ventilator for wall structures including masonry, glass blocks or the like, a substantially rectangular main frame including fabricated metal strips joined together and forming the top, bottom and end walls thereof, the top strip provided with an upstanding flange and the end wall strips provided with lateral outstanding flanges for engaging the interior and exterior surfaces of the walls surrounding the frame, the bottom wall strip having a downwardly extending flange for engaging the exterior surface of the wall and the main body portion inclined upwardly from said last mentioned flange and provided with an upwardly extending flange substantially in line with the interior surface of the wall, spaced fabricated wedge shaped metal elements of channel formation integrally connected with the bottom surface of the main body of said bottom wall to support it on the wall structure, lintels of sheet metal having longitudinal reinforcing bends secured to the under surface of the top wall strip so that the ventilator will carry the superstructure of the wall thereabove during the construction of the wall said outer flanges of the end walls having integral extensions formed into vertical channel members the lower ends of said channels having portions bent inwardly to provide screen frame supporting stops, a screen frame adapted to slide into said frame channels and supported by said stops so as to overlie the opening through the frame, a substantially rectangular architrave frame structure adapted to be secured to the inner portion of said main frame structure, said architrave frame including a drain trough along its lower side having means thereon for engaging over said upwardly extending flange on the bottom wall of the main frame, means for detachably securing the upper side of said architrave frame to the upper wall of the main frame comprising a pair of combined connector and latch elements and bolts cooperating therewith to hold them in place, an end shield supported in each end of the architrave frame drain trough and cooperating with the latch and connector element at its upper end for securing it in a plurality of adjustable positions, and a deflector shield spanning said end shields and supported in said drain trough.

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